
RADIOLOGICAL EXPOSURE CONTROL

FIGURE 10-5
HEALTH EFFECTS ASSOCIATED WITH WHOLE-BODY DOSES

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

PROTECTIVE RESPONSE

I. **General**

The purpose of this chapter is to establish the range of protective actions that are available to state and local governments for the protection of the public in the plume exposure and Ingestion Pathway Zones (IPZ) in the event of an accidental release of radioactive material from a nuclear power plant.

II. **Protective Measures**

A. **Plume Exposure Pathway**

The primary risk for the Plume Exposure Pathway may include external whole body or internal inhalation exposure from the passing radioactive plume. Protective actions to reduce the general public's risk of exposure include evacuation or shelter in place. Potassium Iodide may be used to reduce the risk from the thyroid's absorption of radioactive iodine. Each of these protective actions is addressed in greater detail in each respective site plan.

B. **Ingestion Pathway Zone**

The primary risk for the ingestion pathway is from the ingestion of contaminated water or foods. The Bureau of Radiation Control (BRC) has adopted protective action guides that are consistent with federal guidance provided by the Food and Drug Administration. Lists and maps for monitoring and assessment data, land use data, dairies, food processing plants, water sheds, water supply intake and treatment plants and reservoirs will be provided to the risk and ingestion counties. The Florida Division of Emergency Management (FDEM) will coordinate with the appropriate state and local agencies to ensure that the Division has best data available.

III. **Concept of Operations**

Offsite response to a radiological incident at a nuclear power plant is divided into three phases: the early emergency response phase, the intermediate phase, and the recovery phase.

A. **Early Emergency Response Phase (Plume)**

1. Emergency Plans

- a. The State of Florida Comprehensive Emergency Management Plan (CEMP) outlines State agencies that have a lead or support role during a declared emergency. These roles are shared by many State agencies: The Department of Health is the lead State agency for exposure pathway responses and the FDEM is responsible for overall state coordination of non-technical radiological resources under this Annex. Other State agencies may also be involved in implementing protective actions to reduce the public's risk of exposure.
- b. Federal agencies may provide assistance as outlined in the National Response Framework Nuclear/Radiological Incident Annex.

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2. Field Monitoring

- a. The Bureau of Radiation Control (BRC) Operations Officer at the licensee Emergency Offsite Facility (EOF) will be responsible for the coordination and implementation of all field monitoring and sampling activities. Decisions as to where sampling will occur will be made jointly involving staff from the Department of Health, the Florida Department of Agriculture and Consumer Services and the Florida Department of Environmental Protection.
- b. Once the Federal Radiological Monitoring and Assessment Center is operational, the BRC will dispatch a representative along with the Mobile Emergency Radiological Laboratory and field teams to the center. State and federal monitoring teams will be integrated and analytical data from field sampling and monitoring will be sent to the emergency operations facility or other field emergency operations centers as the situation warrants.
- c. State and local staff rosters are maintained by each respective agency.

3. Protective Actions

- a. To protect the public from exposure to or inhalation of radioactive materials, protective actions will be developed and implemented according to the protective action decision process given in Chapter 4 of this Annex. These protective action decisions are then implemented through county emergency response agencies and public alert and notification systems.
- b. Early phase protective action recommendations are generally based on conditions at the plant and projected (calculated) doses. Field measurements (i.e., the analysis of field air samples and beta/gamma measurements) within the emergency planning zone are compared with calculated doses to verify plume location and plant conditions and to confirm the presence or absence of particulates and/or iodines.

B. Intermediate Phase

The intermediate phase begins when the nuclear power plant situation has stabilized, there is no further radioactive release offsite, and reliable environmental measurements are available for use as a basis for decisions on additional protective actions, especially those involving ingestion. It extends until these additional protective actions are terminated. This phase may overlap the early and late phases and may last from weeks to many months.

- 1. Any precautionary ingestion protective actions implemented during the early phase will still be in effect at the beginning of the intermediate phase. Additional responsibilities include but are not limited to:
 - a. Citizen decontamination, registration, and evacuee monitoring points shall be established in the affected counties in accordance with

PROTECTIVE RESPONSE

procedures spelled out in the site plans (Appendices I-IV of this Annex).

- b. Environmental sampling within the 10-mile EPZ and the 50-mile Ingestion Pathway Zone (IPZ) will be directed by staff at the Federal Radiological Monitoring and Assessment Center to define the limits of the area of radiological deposition and levels of radioactive contamination in agricultural and dairy products, and water sources. Additional information about sampling procedures and priorities are available in the BRC's standard operating procedures. The BRC, The Department of Agriculture and Consumer Services, and the United States Department of Energy will assist.
- c. The FDEM compiles data in reference to the location of major food producers, processors, distributors, dairies, and surface water systems within the ingestion pathway zone. The Department of Agriculture and Consumer Services, in conjunction with the BRC, is responsible for the development of procedures for utilizing this information to keep affected food producers, processors, and distributors informed about protective actions and required post-incident response actions.
- d. Maps for recording information on the status of the emergency and for monitoring key land use and other ingestion-related data will be developed and maintained by the county emergency management.
- e. Initiating or continuing the investigation of long-term agricultural land management practices (e.g., soil removal, crop rotation, tillage, etc.) which reduce future contamination of feed and food crops.

2. Re-entry

- a. Re-entry operations will be coordinated from the emergency operations facility by the State Coordinating Officer or designee.
- b. Limited non-emergency worker entries into access-controlled areas (restricted zones) will be permitted for the performance of emergency services, and to provide food and water to livestock within the area.
- c. Decisions to relax protective measures and allow recovery and re-entry into an evacuated area require a continuous assessment of the radiological situation. The assessment is accomplished by the analysis of radiological monitoring data from air samples, milk, water, and direct radiation measurements. The BRC will determine the feasibility of re-entry into evacuated areas and recommend the appropriate actions to the State Coordinating Officer or designee.
- d. Access control points will be established and enforced by the counties. They will be used to control all movement into or within a restricted zone. Normally, they will be established in uncontaminated areas.
- e. Agriculture control points will be established by the Department of Agriculture and Consumer Services and co-located with the access control points. They will be used to restrict the flow of all food-stuffs and commercial products from a restricted zone. Food control staff will perform direct radiation surveys of all items leaving the restricted zone to ensure all non-consumable items (personnel, pets,

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household items, etc.) leaving the restricted zone meets the acceptable contamination limits.

- f. Individuals entering the access-controlled area will be issued personal dosimetry (direct reading and dosimeter badges) at the appropriate county emergency operations center prior to entry. They must be given a brief explanation of the hazards within the area and, if practical, escorted within the area by an emergency worker provided by the Department of Health.

Actions to protect the public from the ingestion of radioactively contaminated food or water (e.g., embargo and/or disposal of contaminated food or animals, shut down of surface water intakes for public water supply systems, curtailment of hunting or fishing) will be determined and recommended by the BRC and jointly reviewed by appropriate state and county representatives before presentation to the State Coordinating Officer or designee for final approval.

C. Late Phase (Recovery Phase)

The recovery phase begins when recovery actions designed to reduce radiation levels in the environment to acceptable levels for unrestricted use are commenced, and ends when all recovery actions have been completed. This period may extend from months to years. Some restricted zones may remain because of long-term or permanently uncorrectable contamination at levels hazardous to public health. Humanitarian relief, short-term recovery efforts, and long-term recovery efforts will be conducted in accordance with the CEMP.

1. Radiological Assessment
 - a. The investigation of long-term agricultural land management practices (e.g., soil removal, crop rotation, tillage, etc.) that reduce future contamination of feed and food crops will be continued during this phase.
 - b. The identification of long-term impacts on indigenous and migratory wildlife.
 - c. The determination of human doses due to ingestion, living on contaminated land, etc.
2. Decontamination
 - a. A Decontamination and Restoration Plan will be established with coordination from affected counties, the BRC, the Department of Agriculture and Consumer Services, and federal response resources. The Decontamination and Restoration Plan will address citizen decontamination points, decontamination of buildings and structures, decontamination of agricultural properties, and disposal of contaminated materials.
 - b. The decontamination and restoration of buildings and structures will be conducted with priority given to essential basic services (i.e., general government, fire, law enforcement, utilities, etc.)

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- c. Evaluation of decontamination activities will be conducted by the Department of Health with assistance from federal response agencies.
- 4. Return
 - a. Relaxation of protective action decisions will be recommended jointly by county, state, and federal agencies and authorized by the State Coordinating Officer.
 - b. Human services assistance and financial assistance for individuals and businesses will be conducted in accordance with the CEMP.
- 5. Relocation
 - a. Recommendations for restricted zones will be jointly developed by county, state, and federal agencies and authorized by the State Coordinating Officer.
 - b. Human services assistance and financial assistance for individuals and businesses will be conducted in accordance with the CEMP.

IV. Protective Action Guides

- A. The decision to implement protective actions will be based on the comparison of numerous accident parameters (e.g., release duration and magnitude, weather conditions, etc.) to established protective action guides. Protective action guides for decision-making during the early phase, intermediate phase, and for ingestion of contaminated agricultural products are identified in Figures 11-1 through 11-3 respectively.
- B. In coordination with the licensee, counties and federal agencies present, the BRC Operations Officer located at the licensee's EOF will recommend protective actions to the impacted counties and the State Coordinating Officer or designee based on dose projections to the public. The State Coordinating Officer or designee and the impacted counties will then make and implement joint protective action decisions.
- C. In circumstances where there is an immediate release of radioactive material, the State Emergency Response Team Chief present in the State Emergency Operations Center, or the senior government official in the county EOC, can implement protective action decisions. Prior to the time when the Department of Health Operations Officer arrives at the licensee's EOF, the licensee will be responsible for making protective action recommendations directly to the counties and advising the State Emergency Operation Center.

V. Evacuation

- A. Evacuation of the general public normally will be initiated if doses greater than or equal to 1 rem whole body or 5 rem to the thyroid are projected. The public is required to be evacuated if doses greater than or equal to 5 rem or above to the whole body, or 25 rem or above to the thyroid are projected.

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Evacuation is the primary protective action for the general public, unless there are circumstances where the evacuation would involve a greater risk than the radiation exposure.

- B. Maps showing evacuation routes, evacuation areas, pre-selected monitoring and sampling points, reception centers and shelters in designated host areas and population distribution around each facility are included in each respective site plan. Each site plan includes means for the notification, protection and relocation of all segments of the resident and transient population including mobility-impaired persons. Each site plan also includes evacuation time estimates. Each county will use the existing day-to-day means for dealing with potential impediments to evacuation and means for controlling access to evacuation areas.
- C. The affected power plant will order the evacuation of non-essential personnel from the site upon declaration of a Site Area Emergency or higher, however, this evacuation may occur at lesser emergency levels.

VI. In-place Sheltering

In-place sheltering of the general public can be recommended if projected doses are not anticipated to exceed 5 rem whole body or 25 rem to the thyroid. In-place sheltering may be used for short term releases or if there impediments to evacuations that pose a greater risk of exposure. In-place sheltering also enables a population to be positioned so that communications can be carried out in a timely manner.

VII. Potassium Iodide (KI)

Potassium Iodide can be used in those situations where evacuation is not an acceptable protective action for populations that are difficult to move such as prison inmates, hospital and nursing home patients, or others with impaired mobility.

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**FIGURE 11-1
RECOMMENDED PROTECTIVE ACTION GUIDANCE FOR THE EARLY
PHASE OF AN INCIDENT^a**

Protective Action Guide (projected dose ^b)	Protective Actions	Comments
TEDE 1 to 5 rem Thyroid CDE 5 to 25 rem Skin SDE 50 to 250	Evacuation or Sheltering	Evacuation (or, for some situations, sheltering ^c) should normally be initiated at a TEDE of 1 rem.

^a Adapted from Environmental Protection Agency Manual of Protective Action Guides and Protective Actions for Nuclear Accidents, May 1992, page 2-6.

^b TEDE: total effective dose equivalent, CDE: committed dose equivalent, SDE: shallow dose equivalent.

^c Sheltering may be the preferred Protection Action Guide when it will provide protection equal to or greater than evacuation, based on factors such as source term characteristics, and other temporal and site specific factors.

PROTECTIVE RESPONSE

FIGURE 11-2
PROTECTIVE ACTION GUIDES FOR EXPOSURE TO DEPOSITED RADIOACTIVITY
DURING THE INTERMEDIATE PHASE OF A NUCLEAR INCIDENT^a

Projected dose in rem	Protective Action	Comments
greater than or equal to 2	Relocate the general population ^c .	Beta dose to skin may be up to 50 times higher.
less than 2	Apply simple dose reduction techniques ^d .	These protective actions should be taken to reduce doses to as low as practicable levels.

- ^a Environmental Protection Agency Manual of Protective Action Guides and Protective Actions for Nuclear Accidents, 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 Protective Action Guides 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 Protective Action Guide may return to occupy their residences. Cases involving relocation of persons at high risk from such action such as 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 11-3
PROTECTIVE ACTION GUIDES FOR INGESTION OF CONTAMINATED FOODS^a

Type of Dose ^b	Organ of Interest	Projected Dose
Committed effective dose equivalent	Whole Body	5 mSV / 0.5 rem
Committed dose equivalent	Individual tissue or organ	50 mSV / 5 rem

^a FDA document Accidental Contamination of Human Food and Animal Feeds; Recommendations for State and Local Agencies dated August 13, 1998

^b Whichever is more limiting.

MEDICAL AND PUBLIC HEALTH SUPPORT

I. General

This chapter describes the arrangements that have been made for medical services for radiologically contaminated individuals. This chapter includes provisions for emergency care and transportation of victims of accidents, sudden illness and medically incapacitated persons among the population affected by evacuation and relocation during a radiological emergency.

Personnel from the Department of Health will coordinate the delivery of medical support services to victims of radiological accidents. The Department of Health Emergency Coordinating Officer will be notified by the Florida Division of Emergency Management (FDEM) and will in turn activate the proper Department of Health personnel.

II. Medical Support

A radiological emergency at a nuclear power plant can present actual or potential radiological health hazards to individuals within the affected area. It is imperative that capabilities exist for treating contaminated or acutely irradiated individuals. An ongoing 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 service for victims of radiological emergencies is the responsibility of the Department of Health as the lead agency for Emergency Support Function (ESF) 8. The Department of Health Emergency Coordinating Officer is designated by the Secretary of the Department for the response and recovery efforts associated with a disaster. The Department of Health will coordinate with medical and health facilities, and emergency transport services in those areas of the state potentially affected by radiological emergencies. Communications between local hospitals and ambulance services will be performed via local emergency medical services communication systems.

The Department of Health will annually update the list of medical and health facilities that have the capability to treat radiologically contaminated or acutely exposed individuals (refer to Figure 12-1). These lists will be coordinated with the FDEM and will include the name, location, type of facility, capacity, and any special radiological capabilities.

III. Hospitals and Ambulance Service

Hospitals and other emergency medical service facilities that are capable of providing medical support for any injured individual and which have provided a letter of agreement with the licensee are identified in Figure 12-1. However, there are no agreements directly with the Department of Health. Ambulance services are listed in Figure 12-2.

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**FIGURE 12-1
EMERGENCY MEDICAL SUPPORT FACILITIES WITH LICENSEE AGREEMENT**

HOSPITALS & ADDRESS	TYPE	CAPACITY	SPECIAL SERVICES	LICENSEE AGREEMENT
CRYSTAL RIVER AREA				
<i>Citrus County</i>				
Citrus Memorial Health System 502 W. Highland Boulevard Inverness, FL 34452	County	198	General Medical & Surgical	Yes
Seven Rivers Regional Medical Center 6201 N. Suncoast Boulevard Crystal River, FL 34428	Corporate For Profit	128	General Medical & Surgical (Excluding Obstetrics)	Yes
TURKEY POINT AREA				
<i>Miami-Dade County</i>				
Baptist Hospital of Miami 8900 South West 88th Street Miami, FL 33176	Corporate Non Profit	513	General Medical & Surgical	Yes
Mercy Hospital 3663 South Miami Avenue Miami, FL 33134	Church Operated Non Profit	391	General Medical & Surgical	Yes
ST. LUCIE AREA				
<i>St. Lucie County</i>				
HCA Lawnwood Medical Center 1700 S. 23 rd Street Ft. Pierce, FL 34950	Corporate For Profit	335	General Medical & Surgical	Yes
<i>Martin County</i>				
Martin Memorial Hospital 300 Hospital Drive Stuart, FL 34995	Corporate Non Profit	336	General Medical & Surgical	Yes

MEDICAL AND PUBLIC HEALTH SUPPORT

**FIGURE 12-2
AGREEMENTS FOR AMBULANCE SERVICE SUPPORT**

AMBULANCE SERVICE	DEPARTMENT OF HEALTH AGREEMENT
Citrus County Nature Coast Emergency Medical Service	YES
St. Lucie County St. Lucie County - Fire District	YES
Martin County Martin County Emergency Medical Service	YES
Miami-Dade County Miami-Dade County Fire/Rescue Department	YES

RECOVERY AND RETURN

I. General

This chapter establishes guidelines for recovery and return operations when a radiological emergency has been brought under control and no further significant releases are anticipated. Decisions to relax protective measures which have been implemented in a nuclear power plant emergency will be based on an evaluation of radioactive exposure levels which exist at the time of consideration and on the projected long-term exposure which may result in dose commitments to residents and transients in the affected area. An example recovery and return plan is outlined in Figure 13-1. The protective action guides for the intermediate phase are listed in Chapter 11 (Protective Response) of this Annex.

II. Recovery

All recovery operations will be coordinated and directed from the licensee's Emergency Offsite Facility (EOF) by the State Coordinating Officer or designee. The State Coordinating Officer, the impacted counties, Bureau of Radiation Control (BRC), federal agencies (including the Nuclear Regulatory Commission, Department of Energy and Environmental Protection Agency), and the licensee 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 BRC 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 affected areas to the interior.

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

In the event the licensee must release limited amounts of radioactive gases to proceed with their recovery efforts, the releases shall be coordinated with the State Coordinating Officer or designee, BRC, and local authorities.

III. Return

Return operations will be coordinated from the licensee EOF by the State Coordinating Officer or designee.

When environmental conditions in the affected areas are safe for public access, the BRC Operations Officer will recommend to the State Coordinating Officer or designee that protective actions can be relaxed and return operations can begin. No return will be authorized without the concurrence of the State Coordinating Officer or designee. Risk counties will coordinate local return activities from their emergency operation centers, and will keep the State Emergency Operations Center (SEOC) informed. Cleared areas will be opened when clearly definable geographic boundaries are available such as highways, streets and waterways.

IV. Estimates of Population Exposure

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

FIGURE 13-1
SAMPLE RECOVERY AND RETURN PLAN

I. CURRENT STATUS

A. Plant Conditions

1. As of (local time) , (current date) a condition exists at Nuclear Power Plant.
2. A release of occurred as a result of damage to .

B. Recommended Protective Actions

1. A radius of 2 miles around the plant has been evacuated. This affects the following:

Areas / Zones:
2. Coastal waterways have been evacuated a distance of miles from the plant.
3. The following areas/zones have been evacuated within a 10-mile radius of the plant:

Areas / Zones:
4. In place sheltering has been recommended for the following:

Areas / Zones:
5. Potassium Iodide (KI) has been issued to all emergency personnel within a 10-mile radius of the plant.

C. Offsite Conditions

1. The plume extends to a distance of approximately miles from the plant within the following areas/zones:

Areas / Zones:
2. The State Emergency Operation Center, County Emergency Operation Center, County Emergency Operation Center, the Emergency Operation Facility, and the Emergency News Center are operational. Overall management of the emergency is being coordinated through the Emergency Operation Facility and the State Emergency Operation Center.
3. Roadblocks to limit ingress and egress into the area have been established by State and local officials. Local law enforcement agencies, State Emergency Support Function 16 (Law Enforcement) and State Emergency Support Function 1 (Transportation) are maintaining these roadblocks at the following locations:

RECOVERY AND RETURN

4. State Emergency Support Function 13 (Military Support) and State Emergency Support Function 16 helicopters have been dispatched to assist recovery operations.

RECOVERY AND RETURN

FIGURE 13-1 continued

5. State Emergency Support Function 8 (Health and Medical Services) has restricted transportation of agricultural and dairy products within a 10-mile radius of the plant.
6. Radiological monitoring assistance has been requested from Alabama, Georgia, Mississippi, and South Carolina. Additional monitoring, sampling and laboratory assistance has been requested from United States Environmental Protection Agency-Montgomery, and United States Department of Energy-Savannah River Operations.

II. RECOVERY OPERATIONS

All recovery and return operations will be directed from the EOF by the State Coordinating Officer or designee. The Department of Health personnel will remain in the EOF to coordinate recovery and return operations. The coordination and direction of other State agency personnel will emanate from the SEOC.

A. Recovery - In-Place Sheltering Areas/Zones

1. As requested by _____ and _____ counties to relax protective action recommendations in those areas/zones where in-place sheltering has been implemented, the areas/zones listed below will be screened beginning at their farthest distance from plant and working inward toward the plant boundary.

Areas / Zones:

2. Samples will be collected from water systems, soil, dairies and milk processors, and edible foodstuffs within the areas/zones listed below. State Emergency Support Function 8 personnel will assist in this effort. State Emergency Support Functions 13 & 16 helicopters and State law enforcement vehicles are available to transport personnel and samples.

Areas / Zones:

3. In-state laboratory analysis of collected samples will be performed by the Florida Department of Health's health physics laboratory in Orlando and the Florida Department of Health's Mobile Emergency Radiological Laboratory. Additional laboratory support has been requested, and is available, from the Department of Energy-Savannah River Operations Lab & Mobile Lab. Transportation of samples to these labs will be coordinated by the State Emergency Operation Center.

B. Recovery - Evacuated Areas/Zones

1. The areas/zones listed below will be screened beginning at their farthest distance from plant and working inward toward the plant boundary.

Areas / Zones:

All other sectors will be screened from a distance of 0-2 miles beginning at 2 miles and working inward. Aerial and land survey teams comprised of State agency personnel, and those additional monitors requested through mutual aid (local, State

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FIGURE 13-1 continued

and federal) will screen each area/zone in detail by reviewing sections of land no larger than one square mile. State Emergency Support Functions 13 and 16 helicopters and vehicles will assist local agencies with the transport of personnel and samples.

2. Samples will be collected of water systems, soil, dairies and milk processors, and edible foodstuffs within plume exposure pathway and surrounding area. The Department of Agriculture and Consumer Services will assist in this effort as a support agency to State Emergency Support Function 8.
3. In support of State Emergency Support Function 16 the Florida Fish and Wildlife Conservation Commission will assist in the collection of shellfish and other marine samples within a 2-mile radius of the plant.
4. State Emergency Support Function 16, with assistance from the U.S. Coast Guard, will maintain security along the marine blockade until protective actions have been relaxed and return allowed.
5. Any "hot spots" identified by survey teams will be marked off and secured by local and State law enforcement personnel.
6. Transportation of samples to available laboratories for analysis will be coordinated through the State Emergency Operation Center.
7. The Emergency Operation Facility will maintain maps identifying areas/zones that are priority screening regions as well as those areas that have been screened. The Emergency Operation Facility will also ensure that exposure records are maintained for all emergency personnel involved in screening or sample collecting activities.

III. **RETURN OPERATIONS**

A. **Procedures**

1. Upon determination by survey/monitoring teams that an area is safe, the Department of Health and the County Health Department will make recommendations to the State Coordinating Officer and the respective Board of County Commissioners or their designees to relax the protective actions for that area.
2. No return will be authorized without concurrence of the State Coordinating Officer. Cleared areas will be opened only when clearly definable boundaries are available.
3. The dosimeters and exposure records of those emergency workers within relaxed areas will be collected and transported to the Radiation Safety Officer. Exposure records will be maintained for each emergency worker.
4. As areas are opened for return, roadblocks and other means for restricting access to the area will be relocated to prohibit return beyond that point. As a region is relaxed, normal crime prevention policies and procedures will be re-

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enacted. Local and State law enforcement personnel will coordinate and assist the return of evacuees into the clear areas. Identification of evacuees should be checked.

FIGURE 13-1 continued

5. As a general rule, evacuees from hospitals, nursing homes, and other special needs facilities will be returned after the return of the general population. State Emergency Support Function 8 and State Emergency Support Function 6 will accommodate these persons needs and provide any additional support.

EXERCISES AND DRILLS

I. General

Exercises and drills must be conducted periodically to evaluate the adequacy of this Annex and to ensure the skills of offsite emergency response organizations are maintained. Results of drills and exercises provide a basis for changes in the response plans, implementing procedures and training focuses.

II. Exercises

An exercise is an event that tests the integrated capability and a major portion of the basic elements existing within emergency preparedness plans and organizations. The emergency preparedness exercise will simulate an emergency that may result in offsite radiological releases that would require response by offsite authorities. Exercises will be conducted as set forth in the Nuclear Regulatory Commission and the Federal Emergency Management Agency rules and will be evaluated by federal observers.

Florida is required to participate in a joint exercise at some site on a rotational basis at least every two years. When not fully participating in an exercise at a site, the State will partially participate at that site to support the full participation of appropriate local governments.

A. Full Participation Exercise

A full participation exercise is a joint exercise designed to fully demonstrate the emergency preparedness and response capabilities of the state and respective county governments. This exercise will include mobilization of state and county response organizations identified in this plan, and will be conducted jointly with the licensee's required exercise. The site for this exercise will alternate so that it will be conducted at a different facility every two years.

B. Partial Participation Exercise

A partial participation exercise is designed to fully demonstrate the emergency preparedness and response capabilities of county governments surrounding a nuclear power plant site. This exercise allows for partial State participation to support mobilization of county response organizations identified in the specific site appendix and will be conducted jointly with the licensee's annual exercise at least every two years.

Partial participation by the State is acceptable when the State is participating in a full participation exercise at a different site that year. The State may choose, for the purpose of cross-training emergency personnel, to support this exercise through the partial activation of emergency operations centers and mobilization of the State Management Team.

C. Ingestion Pathway Exercise

An ingestion pathway exercise will be conducted by each site at least once every six years on a rotational basis as set forth in Federal Emergency Management Agency (FEMA) and Nuclear Regulatory Commission rules and guidelines. An ingestion pathway exercise is designed to demonstrate the emergency preparedness and response capabilities of counties within 50 miles of a commercial nuclear power plant.

EXERCISES AND DRILLS

D. Non-Required Exercise

Non-required exercises are not mandated by federal regulation. However, a training exercise may be conducted for the benefit of participating agencies, organizations, the State Emergency Response Team and State Management Team.

E. Remedial Exercise

1. A remedial exercise may be required if, during a nuclear power plant federally evaluated exercise, specific portions of the exercise demonstrate inadequacies, deficiencies and/or items requiring corrective actions.
2. A deficiency is an observed or identified inadequacy of organizational performance in an exercise that could cause a finding that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken to protect the health and safety of the public living in the vicinity of a nuclear power plant in the event of a radiological emergency. Because of the potential impact of deficiencies on emergency preparedness, they are required to be promptly corrected through appropriate remedial actions including remedial exercises, drills or other actions.
3. An area requiring corrective action is an observed or identified inadequacy of organizational performance in an exercise that is not considered, by itself, to adversely impact public health or safety. Correction of any areas requiring corrective action should be verified before or during the next biennial exercise.

F. Scheduling and Scenario Development

1. Exercises will be scheduled jointly by the licensees, the Florida Division of Emergency Management (FDEM), the Bureau of Radiation Control (BRC), Risk and Host counties and, if appropriate, the ingestion counties. Exercise objectives and the scenarios for the exercises will be developed and prepared jointly by the licensees, the FDEM and Risk and Host counties.
2. Scenarios will be varied from year to year so all major elements of the plan, and preparedness organizations, are tested within a six-year period. The scenarios will include but not be limited to the following:
 - a. Objectives of the exercise and appropriate evaluation criteria
 - b. Dates, time period, places, and participating organizations
 - c. Simulated events
 - d. Time schedule of simulated and initiating events
 - e. Narrative summary describing the conduct of the exercise
 - f. Description of arrangements for advance materials to be provided to observers
3. The combined exercise scenario, with the exception of non-required exercises, will be submitted by the FDEM State Exercise Officer to the FEMA for approval no later than 60 days prior to the exercise date. A briefing will be scheduled for participating personnel immediately prior to the exercise.

EXERCISES AND DRILLS

Exercise objectives are due to the FEMA Agency 90 days prior to an evaluated exercise.

G. Critique and Reports

1. A critique will be conducted after each exercise to evaluate the capability of participating state and local governments to implement emergency preparedness plans and procedures in response to a nuclear power plant emergency. Observers from the FDEM, the BRC or other non-participating Risk counties will observe, evaluate and critique off-site response during each annual exercise.
2. Participating agencies will 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 weaknesses and strengths noted and will be grouped according to operational area. The report will then be forwarded to the appropriate operational section for implementation and correction.

III. Drills

A drill is a supervised instruction period aimed at developing, testing and monitoring technical skills necessary to perform emergency response operations. A drill may be a component of an exercise. Each drill will be evaluated by the coordinator for that particular drill.

In addition to the required exercise, radiological drills will be conducted annually as indicated.

A. Communications Drills

Communications between the licensees, State and Risk counties will be tested monthly. Communications with federal emergency response organizations will be tested quarterly. Communications between the nuclear power plants, State and local emergency operations centers and field assessment teams will be tested annually. The test of communications with field assessment teams will be incorporated into the exercises.

B. Medical Drills

Emergency medical service drills involving a simulated radiologically contaminated individual(s) will be conducted annually for each site. Participation by local emergency medical services and contract hospitals will be required for evaluation by the FEMA biennially because of each site having two hospitals.

C. Radiological Monitoring Drills

Radiological monitoring drills for state and appropriate county radiological monitors will be conducted as part of the required exercises. These drills will include collection and analysis of sampling media, provisions for communications, and record keeping.

EXERCISES AND DRILLS

D. Health Physics Drill

Health physics drills for state emergency response personnel will be conducted semi-annually involving response to and analysis of simulated elevated airborne and liquid samples and direct radiation measurements in the environment. One drill will be conducted in conjunction with the scheduled exercise the other will be conducted in conjunction with annual training.

RADIOLOGICAL EMERGENCY RESPONSE TRAINING

I. General

The purpose of this chapter is to establish a training program that will ensure that the radiological emergency response training mandated in NUREG-0654 is provided for emergency response personnel for decision making, planning, and response. A radiological emergency response training program has been developed. As part of this program the Statewide Radiological Training Task Force has been developed. The Task Force is comprised of various county, licensee and state personnel. The task force meets annually to oversee training needs and address training policy recommendations.

II. Training Levels

The state is responsible for ensuring that the State Emergency Response Team personnel receive adequate training annually. Each county is responsible for ensuring that county emergency personnel receive adequate training annually.

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 emergency preparedness program. It can be used as an orientation to new state and county employees or presented to such citizen groups as churches, homeowner associations or any type of public awareness program.

B. Level II

Level II training is designed to give State and county agencies a **basic understanding** of emergency response plans and procedures.

C. Level III

Level III training will give **specific training** to each agency according to their role as outlined in the state's Radiological Emergency Management Plan. Training time will vary according to the specific training requirements.

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:

1. Radiological Emergency Response Operations
2. Radiological Emergency Preparedness Planning
3. Radiological Emergency Management
4. Decontamination and Dose Assessment
5. Handling of Radiation Accidents by Emergency Personnel
6. Fundamentals Course for Radiological Monitors
7. Fundamentals Course for Radiological Response Team

RADIOLOGICAL EMERGENCY RESPONSE TRAINING

8. Hospital Emergency Department Management of Radiation Accidents

III. 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 each state and local governmental entity. Formal refresher training will be provided on an annual basis. Radiological emergency planners, at all levels, shall receive continuous radiological planning course specific training that consists of industry, event, or other activity courses deemed appropriate to enhance their skills.

IV. Organizations Requiring Training

The state and local organizations which require radiological emergency response training and the required levels of training are shown in Figures 15-1 through 15-3.

Specific tasks and responsibilities of each State and local agency are listed in the radiological emergency training standard operating procedures according to the appropriate site involved.

Additional state agency training will be provided based on local governments' resource short falls. Risk, Host, and Ingestion Pathway counties will identify the type and amount of personnel resources required of the state to supplement their local response organizations operations.

V. Training Schedule

Training will be conducted as required or a minimum of once per year. Each State and local agency listed in Figures 15-1 through 15-3 will receive Level I, II or III training annually. State and local trainers will determine the appropriate 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 will receive training within one year of assignment.

RADIOLOGICAL EMERGENCY RESPONSE TRAINING

FIGURE 15-1
LEVELS OF INSTRUCTION NEEDED FOR RISK & HOST COUNTY PERSONNEL

PERSONNEL	LEVEL I	LEVEL II	LEVEL III									
			PUBLIC INFORMATION	INGESTION PATHWAY	PUBLIC HEALTH AND MEDICAL	RADIATION EXPOSURE CONTROL	MONITORING AND	RECEPTION AND CARE	TRANSPORTATION	ACCIDENT ASSESSMENT	ALERT NOTIFICATION AND COMMUNICATIONS	DIRECTION AND CONTROL
Fire	X	X					X				X	
Ambulance & Emergency Medical Sevices	X	X			X	X	X					
Sheriff & Police	X	X				X					X	
County Commission *	X											
American Red Cross Chapter *	X						X					
Hospital(s) *	X				X	X	X					
County Emergency Management	X	X	X	X	X	X	X			X	X	X
County Health Department *	X				X	X	X					
County Agriculture Agent(s) *	X				X							X
Public Works *	X				X	X						
County/City Marine Law Enforcement *	X	X			X							
County Public Information Officer *	X	X										X
County Engineer *	X											
Emergency Operations Center Staff	X	X										
City Council(s) *	X											
School Administration *	X	X							X		X	

* These groups will receive training if a training opportunity is identified and available. The training program will then be tailored to the specific needs of the group.

RADIOLOGICAL EMERGENCY RESPONSE TRAINING

FIGURE 15-2
LEVELS OF INSTRUCTION NEEDED FOR STATE PERSONNEL

PERSONNEL	LEVEL I	LEVEL II	LEVEL III									
			PUBLIC INFORMATION	INGESTION PATHWAY	PUBLIC HEALTH AND MEDICAL	RADIATION EXPOSURE CONTROL	MONITORING AND	RECEPTION AND CARE	TRANSPORTATION	ACCIDENT ASSESSMENT	ALERT NOTIFICATION AND COMMUNICATIONS	DIRECTION AND CONTROL
FL Department of Health (ESF-8) Headquarters	X	X										
Bureau of Radiation Control	X	X	X	X	X	X	X			X	X	X
DOH District Offices	X	X										
FL Department of Law Enforcement (ESF 16)	X	X		X		X					X	
Florida Highway Patrol (ESF 16)	X	X		X		X					X	
Florida Fish and Wildlife Conservation Commission (ESF 16)	X	X		X		X					X	
FL Department of Environmental Protection (ESF 10)	X	X				X					X	
FL Department of Agriculture and Consumer Services (ESF 11 and 17)	X	X				X						X
FL Department of Transportation (ESF 1 and 3)	X	X				X			X			
FL Division of Emergency Management	X	X	X	X								X
FL ESF Emergency Coordinating Officers	X											
American Red Cross (ESF 6)	X	X					X					
Civil Air Patrol (ESF 1)	X											
Florida National Guard *	X											
United States Coast Guard *	X											

* These groups will receive training if a training opportunity is identified and available. The training program will then be tailored to the specific needs of the group.

RADIOLOGICAL EMERGENCY RESPONSE TRAINING

FIGURE 15-3
LEVELS OF INSTRUCTION NEEDED FOR INGESTION COUNTY PERSONNEL

	Plant & Plan Orientation	Radiological Orientation
County Emergency Management *	X	X
County / Regional Agriculture Agent(s) *	X	X
Emergency Operation Center Staff *	X	X
Fire **	X	X
Ambulance / Emergency Medical **	X	X
Sheriff / Police *	X	X
Hospital(s) **	X	X
County Commission **	X	
County Health Department **	X	
County Public Information Officer **	X	
American Red Cross Chapter **	X	
Public Works **	X	

* Curriculum will be tailored to the need of the agency/personnel being trained

** These groups will receive training if a training opportunity is identified and available. The training program will then be tailored to the specific needs of the group.

Supplemental Information 6

**The State of Florida Radiological Emergency
Preparedness Annex (Annex to the State
Comprehensive Emergency Management Plan)
— w/o Appendices**

**THE STATE OF FLORIDA
RADIOLOGICAL EMERGENCY PREPAREDNESS ANNEX**



**Annex to the
State Comprehensive Emergency Management Plan**



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EXECUTIVE SUMMARY

The State of Florida Radiological Emergency Management Annex, identifies the actions to be taken by the State and local governments in preparing for, responding to, and recovering from a radiological emergency. This Annex addresses the Crystal River Nuclear Power Plant (operated by Progress Energy), the Turkey Point Nuclear Power Plant (operated by the Florida Power and Light Company), the St. Lucie Nuclear Power Plant (operated by the Florida Power and Light Company), the Farley Nuclear Power Plant (operated by the Southern Nuclear Operating Company), and the launch of radioisotope thermoelectric generators from the Kennedy Space Center/Cape Canaveral Air Station. This Annex establishes the planning and operational concepts for responses to radiological emergencies at these locations. The details of the implementation of these concepts are contained in state and county implementing procedures.

The Division of Emergency Management has overall responsibility for coordination of federal, state and local response to emergencies. The Division also has the overall authority and responsibility for updating and coordinating the plans with other response organizations. Within the Division, the Bureau of Preparedness has the responsibility for coordinating state planning for a radiological emergency.

The State Annex is divided into fifteen chapters and five appendices as follows:

Chapter 1 - Introduction - provides a discussion of the purpose, scope, and planning assumptions on which the Plan was developed.

Chapter 2 - The Radiological Emergency Response Organization - identifies the various state, county, and federal response organizations and describes their responsibilities in the event of a radiological emergency.

Chapter 3 - Command and Control - describes the management of the emergency response efforts at the state and county levels.

Chapter 4 - Emergency Classification System - describes the four classes of emergency for a fixed nuclear facility and explains the general actions to be taken in response to each classification.

Chapter 5 - Notification and Activation - identifies the responsibilities and systems for alert of emergency personnel; activating emergency plans; obtaining assistance from other agencies; and warning the public.

Chapter 6 - Emergency Communications - describes the primary and backup communications systems used by the licensee and the state and local agencies.

Chapter 7 - Public Information and Education - provides guidance for the timely and accurate collection, coordination, and dissemination of information to keep the public informed of potential hazards and emergency responses.

Chapter 8 - Emergency Facilities and Equipment - identifies the state, local and licensee emergency response facilities and equipment that would be used to effectively manage a radiological emergency.

EXECUTIVE SUMMARY

Chapter 9 - Accident Assessment - establishes the procedures to be used during an emergency at a nuclear power plant to assess the health and safety hazard to citizens. This chapter also identifies the organizations responsible for assessing and recommending necessary protective actions. This chapter also describes the federal assistance available to support state emergency operations and procedures for obtaining this assistance.

Chapter 10 - Radiological Exposure Control - establishes the means for controlling radiological exposure of emergency workers.

Chapter 11 - Protective Response - provides guidelines for actions that can be taken to protect the public from significant releases of radioactive materials.

Chapter 12 - Medical and Public Health Support - describes arrangements for emergency hospital and medical services and for transporting victims of radiological emergencies to medical support facilities.

Chapter 13 - Recovery and Reentry - outlines the general procedures to be used after a radiological emergency has been brought under control to assure that persons are not allowed to return to a contaminated area until it is safe.

Chapter 14 - Exercises and Drills - outlines the requirements for periodic radiological exercises and drills to evaluate the plan and the basic skills of emergency response personnel.

Chapter 15 - Radiological Emergency Response Training - provides assurances that emergency personnel are adequately trained to respond to a radiological emergency.

Appendix I - Crystal River Nuclear Power Plant Site Plan - establishes site-specific procedures and protective actions to ensure the health, safety and welfare of persons affected by a radiological emergency at this plant.

Appendix II - Turkey Point Nuclear Power Plant Site Plan - establishes site-specific procedures and protective actions to ensure the health, safety and welfare of persons affected by a radiological emergency at this plant.

Appendix III - St. Lucie Nuclear Power Plant Site Plan - establishes site-specific procedures and protective actions to ensure the health, safety and welfare of persons affected by a radiological emergency at this plant.

Appendix IV - Farley Nuclear Power Plant Site Plan - establishes procedures and protective actions to ensure the health, safety and welfare of persons in the ingestion pathway that may be affected by a radiological emergency at this plant.

Appendix V - Kennedy Space Center/Cape Canaveral Air Force Station Major Radiological Source Launches - establishes operational guidance for effectively managing state resources in response to an emergency during or immediately following a launch of a radioisotope thermoelectric generator at the Kennedy Space Center or Cape Canaveral Air Force Station.

LOCAL AUTHORITIES

The development and implementation of Florida's Radiological Emergency Management Plan is consistent with and pursuant to the applicable state and federal authorities and references that are listed in Section VII (References and Authorities) of the State of Florida Comprehensive Emergency Management Plan. In addition, the Florida Department of Health's Bureau of Radiation Control Standard Operating Procedure numbers 1 through 20 for Radiological Emergencies and the following local authorities and references are applicable to this Plan

- 1) Citrus County Administrative Regulations
- 2) Citrus County Board of County Commissioners current Resolution on Disaster Preparedness
- 3) Monroe County Board of County Commissioners current Resolution on Civil Defense
- 4) Levy County Board of County Commissioners current Resolution on Disaster Preparedness
- 5) Martin County Board of County Commissioners current Resolution on Emergency Management
- 6) St. Lucie County Board of County Commissioners current Resolution on Emergency Management
- 7) Miami-Dade County Administrative Order 9-2
- 8) Miami-Dade County Administrative Order 9-5
- 9) Miami-Dade County Administrative Order 9-12
- 10) Miami-Dade County Administrative Order 9-19
- 11) Code of Metropolitan Dade County Chapter 8B
- 12) Existing Mutual Aid Agreements

State of Florida Radiological Emergency Preparedness Annex
DEFINITIONS

Alpha Radiation	Emission of positively charged particles from nucleus of an atom.
Beta Radiation	Emission of negatively charged particles (electrons) from the nucleus of an atom.
Contamination	The deposition of radioactive materials levels on the surface of structures, areas, objects, or personnel.
Curie (Ci)	A unit of radioactivity equal to 3.7×10^{10} disintegrations per second.
Decontamination	The reduction or removal of contamination from structures, areas, objects or personnel.
Direct Read Dosimeter	<p>An instrument that allows the wearer to determine the level of gamma radiation exposure that they have received; can be read directly in the field.</p> <p>Examples:</p> <p style="padding-left: 40px;">CDV - 138 B Measures gamma only (0-200mR)</p> <p style="padding-left: 40px;">CDV B 730 B Measures gamma only (0-20R)</p> <p style="padding-left: 40px;">CDV B 742 B Measures gamma only (0-200R)</p>
Dose	A general term denoting the quantity of radiation or energy absorbed.
Dose Commitment	The radiation dose equivalent received by an exposed individual to the organ cited over a lifetime from a single event.
Dose Equivalent	The quantity that expresses all radiation on the common scale for calculating the effective adsorbed dose. It is defined as the product of the absorbed dose in rads and certain modifying factors. The unit of dose equivalent is the Roentgen Equivalent Man.
Dose Rate	The radiation dose delivered per unit of time (measured, for example, in Roentgen Equivalent Man per hour).
Dosimeter	An instrument that measures an individual's cumulative external exposure to radiation.
Dosimeter Badge	A badge device that provides the official dose of record (such as film or thermoluminescent).
Emergency Classification	Any event or condition which is classified into one of the four event categories (Unusual Event, Alert, Site Area Emergency, and General Emergency).

State of Florida Radiological Emergency Preparedness Annex
DEFINITIONS

Emergency Planning Zone	The area around a nuclear power plant for which planning efforts are made. There are two zones, the 10-mile plume exposure zone and the 50-mile ingestion pathway zone.
Gamma Radiation	A form of electromagnetic, high energy radiation emitted from a nucleus. Gamma radiation is essentially the same as x-rays and requires heavy shielding.
Host County	A county designated to receive and care for evacuees from a risk county.
Ingestion Pathway Zone	The ingestion pathway zone extends for a radius of approximately 50 miles from the plant site. The principal exposure source from this pathway would be from ingestion of contaminated water or foods such as milk, fresh vegetables, or aquatic food stuffs.
Licensee	A utility licensed by the Nuclear Regulatory Commission to operate a nuclear power plant.
Megawatt	One million watts.
Microcurie	1/1,000,000 of a curie.
Millirem	1/1,000 of a Roentgen Equivalent Man.
Noble Gases	Gases that do not react chemically with other materials and are not absorbed by plants or animals. The noble gases are helium, neon, argon, krypton, xenon, and radon.
Offsite	All land and water areas outside the owner controlled area.
Onsite	All land and water areas inside the owner controlled area.
Plume	Radioactive cloud driven by wind and other environmental and topographical features.
Plume Exposure Pathway	The plume exposure pathway extends outward to a radius of approximately 10 miles from the plant site. The principal exposure sources are direct external exposure to beta and gamma radiation from the plume and deposited material, and internal exposure resulting from the inhalation of radioactive material in the plume.
Potassium Iodide	A blocking agent for radioiodine which prevents the thyroid from absorbing radioactive iodine by saturating the thyroid with stable iodine. Also known by its chemical symbol: KI.
Pressurized Water Reactor	Reactor in which the primary closed coolant system is kept under enough pressure so that it does not boil. Steam formed in a secondary closed system by heat transfer is used to turn turbines to generate electricity. These reactor types are used in Florida's nuclear power plants.

State of Florida Radiological Emergency Preparedness Annex
DEFINITIONS

Protective Action	An action taken to avoid or reduce a projected dose (sometimes referred to as a protective measure).
Protective Action Guide	The projected dose commitment to individuals in the general population from a release of radioactive material that warrants consideration of protective actions to avoid that dose. The protective action guide does not include the dose that has unavoidably occurred before the assessment.
Radiation Absorbed Dose (RAD)	The basic unit of dose of ionizing radiation.
Risk County	A county within the 10-mile plume exposure pathway emergency planning zone.
Roentgen (R)	A measure of the total amount of ionization that a quantity of gamma or x-ray radiation would produce in air.
Roentgen Equivalent Man (REM)	The dose of ionizing radiation that will cause the same biological effect as one roentgen of x-ray or one gamma-ray exposure.
State Emergency Response Team	A team comprised of state agency representatives, volunteer groups, and business sector representatives grouped together to assist the State in preparation for, response to, recovery from, and mitigation of the impacts of an emergency or disaster event.
Survey Meters	Meters that detect and read radiation exposure in units of time. Examples: CDV-700 - Detects beta (counts per minute); measures gamma only (0-50 millirem per hour) CDV-715 - Measures gamma only (0 - 500 rem per hour) CDV-718 - Detects beta (0 - 5 rem per hour); measures gamma (0 - 10,000 rem per hour)

State of Florida Radiological Emergency Preparedness Annex

Cross Reference to Nuclear Regulation – 0654/Federal Emergency Management Agency Radiological Emergency Preparedness Revision #1

Criterion	State	Crystal River Local	Turkey Point Local	St Lucie Local
A.1.a.	2-1 Sect II-VII	I-1 Sect II	II-1 Sect II	III-1 Sect II
A.1.b.	2-1 Sect I-VII 3-1 Sect II	I-1 Sect II I-14 Sect III	II-1 Sect II II-10 Sect III	III-1 Sect II III-17 Sect III
A.1.c.	Fig 2-1 & 2-2	Fig I-4 & I-6	Fig II-4 & II-6	Fig III-4, III-6, III-8, III-10, & III-12
A.1.d.	2-1 Sect I 3-1 Sect II	I-1 Sect II I-14 Sect III	II-1 Sect II II-10 Sect III	III-1 Sect II
A.1.e.	2-1 Sect I 5-1 Sect I 6-1 Sect II & III SCEMP Sect III.A	I-17 Sect VII.A-B	II-17 Sect VIII.A II-18 Sect VIII.B	III-23 Sect VII
A.2.a.	2-1 Sect II Fig 2-2	I-1 Sect II Fig I-3 & I-5	II-1 Sect II Fig II-3 & II-5	III-1 Sect II Fig III-3, III-5, III-7, III-9, & III-11
A.2.b.	2-1 Sect I SCEMP Sect I	SCEMP Sect I	SCEMP Sect I	SCEMP Sect I
A.3.	2-1 Sect I SCEMP Sect I	2-1 Sect I	2-1 Sect I	2-1 Sect I
A.4.	2-1 Sect I 6-1 Sect III SCEMP Sect IV.B.7 SCEMP Sect III.A	I-1 Sect II I-17 Sect VII	II-1 Sect II.A II-5 Sect II.B	III-1 Sect II
B.1-9.	NA	NA	NA	NA
C.1.a.	9-2 Sect IV.B SCEMP Sect III.C.3 SCEMP Sect III.B	NA	NA	NA
C.1.b.	9-2 Sect IV.B	NA	NA	NA
C.1.c.	6-1 Sect II & III Fig 6-1 CH 8	I-23 Sect IX.G I-16 Sect VI I-20 Sect IX I-37 Sect XIII Fig I-8, I-9, & I-18	II-13 Sect VI II-21 Sect IX.G II-18 Sect IX II-31 Sect XIII Fig II-12 & II-20	III-31 Sect IX.G III-21 Sect VI III-41 Sect XIII III-26 Sect IX Fig III-14, III-15, & III-26
C.2.a.	5-2 Sect II.B 5-3 Sect II.C 8-2 Sect III	I-22 Sect IX.C Fig I-7	II-19 Sect IX.C Fig II-7 & II-8	III-28 Sect IX.C Fig III-13
C.2.b.	NA	NA	NA	NA
C.3.	8-2 Sect V 9-1 Sect III 9-2 Sect IV Fig 8-1, 8-2, & 8-3	NA	NA	NA
C.4.	9-1 Sect III 9-2 Sect IV 12-1 Sect I & II Fig 12-1 & 12-2	I-1 Sect II I-37 Sect XIII I-14 Sect III	II-1 Sect II II-31 Sect XIII II-20 Sect IX.F	III-1 Sect II III-29 Sect IX.F III-41 Sect XIII
D.1-2.	NA	NA	NA	NA

State of Florida Radiological Emergency Preparedness Annex

Cross Reference to Nuclear Regulation – 0654/Federal Emergency Management Agency Radiological Emergency Preparedness Revision #1

Criterion	State	Crystal River Local	Turkey Point Local	St Lucie Local
D.3.	4-3 Sect II & III 5-1 Sect I & II Fig 5-1	I-15 Sect IV 4-1 Sect I 5-1 Sect I	II-11 Sect IV 4-1 Sect I 5-1 Sect I	III-19 Sect IV 4-1 Sect I 5-1 Sect I
D.4.	4-3 Sect III Fig 4-1	I-15 Sect V	II-11 Sect V	III-19 Sect V
E.1.	5-1 Sect I & II	I-15 Sect V	II-11 Sect V	III-19 Sect V
E.2.	5-1 Sect I & II	I-15 Sect V	II-11 Sect V	III-19 Sect V
E.3-4.	NA	NA	NA	NA
E.5.	5-5 Sect III CH 7	I-16 Sect VI	II-13 Sect VI	III-21 Sect VI
E.6.	5-5 Sect III CH 7	I-16 Sect VI	II-13 Sect VI	III-21 Sect VI
E.7.	Fig 7-1 thru 7-8	I-19 Sect VII.C Fig 7-1 thru 7-8	II-17 Sect VII.C Fig 7-1 thru 7-8	III-25 Sect VII.C Fig 7-1 thru 7-8
F.1.a.	5-1 Sect I 6-1 Sect II	I-17 Sect VII.A I-18 Sect VII.B	II-15 Sect VII.A II-16 Sect VII.B	III-23 Sect VII.A III-24 Sect VII.B
F.1.b.	6-1 Sect III	I-17 Sect VII.A I-18 Sect VII.B	II-15 Sect VII.A II-16 Sect VII.B	III-23 Sect VII.A III-24 Sect VII.B
F.1.c.	6-1 Sect III.B	I-17 Sect VII.A I-18 Sect VII.B	II-15 Sect VII.A II-16 Sect VII.B	III-23 Sect VII.A III-24 Sect VII.B
F.1.d.	6-1 Sect III.A Fig 6-1	I-17 Sect VII.A I-18 Sect VII.B Fig 6-1	II-15 Sect VII.A II-16 Sect VII.B Fig 6-1	III-23 Sect VII.A III-24 Sect VII.B Fig 6-1
F.1.e.	6-1 Sect III	I-15 Sect V	II-11 Sect V	III-19 Sect V
F.1.f.	NA	NA	NA	NA
F.2.	6-2 Sect III.H	I-17 Sect VII.A I-18 Sect VII.B	II-15 Sect VII.A II-16 Sect VII.B	III-23 Sect VII.A III-24 Sect VII.B
F.3.	6-3 Sect IV Fig 6-2	I-19 Sect VII.C Fig 6-2	II-17 Sect VII.C Fig 6-2	III-25 Sect VII.C Fig 6-2
G.1.	7-4 Sect VII	I-19 Sect VIII.A	II-17 Sect VIII.A	III-25 Sect VIII.A
G.2.	7-4 Sect VII	I-19 Sect VIII.A	II-17 Sect VIII.A	III-25 Sect VIII.A
G.3.a.	7-2 Sect IV.B	I-20 Sect IX	II-18 Sect IX	III-26 Sect IX
G.3.b.	NA	NA	NA	NA
G.4.a.	7-1 Sect II & III	I-22 Sect IX.D	II-18 Sect VIII.D	III-28 Sect IX.D
G.4.b.	7-3 Sect V	I-20 Sect VIII.D I-22 Sect IX.D	II-18 Sect VIII.B II-19 Sect IX.D	III-26 Sect VIII.C III-28 Sect IX.D
G.4.c.	7-4 Sect VI	I-20 Sect VIII.D	II-18 Sect VIII.D	III-26 Sect VIII.D
G.5.	7-4 Sect VII	I-20 Sect VIII.B	II-18 Sect VIII.B	III-25 Sect VIII.B
H.1-2.	NA	NA	NA	NA
H.3.	8-1 Sect II	I-20 Sect IX.A-C Fig I-7	II-18 Sect IX.A-B Fig II-7 & II-8	III-26 Sect IX.A-C Fig III-13
H.4.	8-1 Sect II.A SCEMP Sect IV.D.3 SCEMP Sect IV.A.2	I-20 Sect IX.A-C	II-18 Sect IX.A-B	III-26 Sect IX.A-C
H.5-6.	NA	NA	NA	NA

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Criterion	State	Crystal River Local	Turkey Point Local	St Lucie Local
H.7.	8-3 Sect V.B Fig 8-1 thru 8-3 DOH, SOP #18	I-23 Sect IX.F I-35 Sect XII.H	II-20 Sect IX.F II-30 Sect XII.H	III-29 Sect IX.F III-40 Sect XII.H
H.8-9.	NA	NA	NA	NA
H.10.	8-3 Sect V.B	I-23 Sect IX.F	II-20 Sect IX.F	III-29 Sect IX.F
H.11.	Fig 8-1 thru 8-3	Fig I-8 & I-9	Fig II-12	Fig III-14 & III-15
H.12.	8-2 Sect V Fig 8-1 thru 8-3 DOH, SOPs 1-20	I-24 Sect X 9-1 Sect III.A	II-21 Sect X 9-1 Sect III.A	III-31 Sect X 9-1 Sect III.A
I.1-6.	NA	NA	NA	NA
I.7.	9-1 Sect III.A CH 8 Fig 8-1 thru 8-3	I-24 Sect X & XI I-35 Sect XII.H	II-21 Sect X-XI II-29 Sect XII.F	III-31 Sect X III-32 Sect XI III-39 Sect XII.F
I.8.	9-1 Sect III 9-2 Sect IV	I-24 Sect X & XI I-35 Sect XII.H	II-21 Sect X-XI II-29 Sect XII.F	III-31 Sect X III-32 Sect XI III-39 Sect XII.F
I.9.	9-1 Sect III.A 9-2 Sect IV	NA	NA	NA
I.10	9-1 Sect III.A DOH, SOPs 1-20	NA	NA	NA
I.11.	9-2 Sect IV	NA	NA	NA
J.1.	NA	NA	NA	NA
J.2.	11-5 Sect V	I-27 Sect XII.E, F, I, J 11-5 Sect V	II-24 Sect XII.E 11-5 Sect V	III-35 Sect XII.E 11-5 Sect V
J.3-8.	NA	NA	NA	NA
J.9.	11-5 Sect IV Fig 11-1 thru 11-3	I-26 Sect XII.A	II-23 Sect XII.A	III-34 Sect XII.A
J.10.a.	11-5 Sect V	Fig I-10 thru I-17	Fig II-9 thru II-19	Fig III-16 thru III-25
J.10.b.	11-5 Sect V	Fig I-13	Fig II-14	Fig III-20 & III-21
J.10.c.	5-5 Sect III 7-4 Sect VII	I-16 Sect VI	II-13 Sect VI	III-21 Sect VI
J.10.d.	11-5 Sect V 10-2 Sect IV 11-6 Sect VII	I-34 Sect XII.G	II-27 Sect XII.E.2	III-35 Sect XII.E
J.10.e.	10-2 Sect IV 11-6 Sect VII	I-26 Sect XII.B	II-24 Sect XII.B	III-34 Sect XII.B
J.10.f.	10-2 Sect IV 11-6 Sect VII	I-26 Sect XII.B 11-6 Sect VII	II-24 Sect XII.B 11-6 Sect VII	III-34 Sect XII.B 11-6 Sect VII
J.10.g.	11-4 Sect III.C	I-27 Sect XII.E-F	II-24 Sect XII.E	III-35 Sect XII.E
J.10.h.	11-5 Sect V	I-22 Sect IX.E I-36 Sect XII.J	II-19 Sect IX.E II-30 Sect XII.H	III-28 Sect IX.E III-40 Sect XII.H
J.10.i.	11-5 Sect V	Fig I-15	Fig II-16	Fig III-22
J.10.j.	11-5 Sect V 2-7 Sect II.C Fig 2-1	I-27 Sect XII.C Fig I-3 & I-5	II-24 Sect XII.C Fig II-3 & II-5	III-35 Sect XII.C Fig III-3 & III-5
J.10.k.	11-5 Sect V	I-27 Sect XII.E 11-5 Sect V	II-24 Sect XII.E 11-5 Sect V	III-35 Sect XII.E 11-5 Sect V

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Criterion	State	Crystal River Local	Turkey Point Local	St Lucie Local
J.10.l.	11-5 Sect V	Fig I-15	Fig II-16	Fig III-22
J.10.m	11-1 Sect II.A	NA	NA	NA
J.11.	11-1 Sect II.B Fig 11-1 & 11-2	NA	NA	NA
J.12.	11-2 Sect III.B	I-28 Sect XII.F I-36 Sect XII.I	II-29 Sect XII.F II-29 Sect XII.G	III-39 Sect XII.F III-39 Sect XII.G
K.1-2.	NA	NA	NA	NA
K.3.a.	10-1 Sect II	I-24 Sect XI	II-21 Sect XI	III-32 Sect XI
K.3.b.	10-1 Sect II Fig 10-1 & 10-2	I-24 Sect XI	II-21 Sect XI	III-32 Sect XI
K.4.	10-2 Sect III	I-1 Sect II.A.1 I-6 Sect II.B.1 I-24 Sect XI	II-1 Sect II.A.1 II-5 Sect II.B.1 II-21 Sect XI	III-1 Sect II.A.1 III-5 Sect II.B.1 III-32 Sect XI
K.5.a.	10-3 Sect V Fig 10-2	I-35 Sect XII.H	II-29 Sect XII.F	III-39 Sect XII.F
K.5.b.	10-3 Sect V	I-35 Sect XII.H	II-29 Sect XII.F	III-39 Sect XII.F
K.6-7.	NA	NA	NA	NA
L.1.	12-1 Sect I & II Fig 12-1 & 12-2	I-37 Sect XIII	II-31 Sect XIII	III-41 Sect XIII
L.2.	NA	NA	NA	NA
L.3.	12-1 Sect II Fig 12-1 & 12-2	NA	NA	NA
L.4.	12-1 Sect II Fig 12-1 & 12-2	I-37 Sect XIII	II-31 Sect XIII	III-41 Sect XIII
M.1.	13-1 Sect I thru III	I-38 Sect XIV	II-32 Sect XIV	III-42 Sect XIV
M.2.	NA	NA	NA	NA
M.3.	13-1 Sect II	NA	NA	NA
M.4.	13-2 Sect IV	NA	NA	NA
N.1.a.	14-1 Sect II	I-38 Sect XV 14-1 Sect II	II-32 Sect XIV 14-1 Sect II	III-42 Sect XV 14-1 Sect II
N.1.b.	14-1 Sect II	I-38 Sect XV 14-3 Sect II.G	II-32 Sect XIV 14-3 Sect II.G	III-42 Sect XV 14-3 Sect II.G
N.2.a.	14-3 Sect III.A	I-38 Sect XV 14-3 Sect III.A	II-32 Sect XIV 14-3 Sect III.A	III-42 Sect XV 14-3 Sect III.A
N.2.b.	NA	NA	NA	NA
N.2.c.	NA	I-38 Sect XV 14-3 Sect III.B	II-32 Sect XV 14-3 Sect III.B	III-42 Sect XV 14-3 Sect III.B
N.2.d.	14-3 Sect III.C	I-38 Sect XV 14-3 Sect III.C	II-32 Sect XV 14-3 Sect III.C	III-42 Sect XV 14-3 Sect III.C
N.2.e.	14-3 Sect III	I-38 Sect XV 14-4 Sect III.D	II-32 Sect XV 14-4 Sect III.D	III-42 Sect XV 14-4 Sect III.D
N.3.a.	14-2 Sect II.F	I-38 Sect XV 14-2 Sect II.F	II-32 Sect XV 14-2 Sect II.F	III-42 Sect XV 14-2 Sect II.F
N.3.b.	14-2 Sect II.F	I-38 Sect XV 14-2 Sect II.F	II-32 Sect XV 14-2 Sect II.F	III-42 Sect XV 14-2 Sect II.F
N.3.c.	14-2 Sect II.F	I-38 Sect XV 14-2 Sect II.F	II-32 Sect XV 14-2 Sect II.F	III-42 Sect XV 14-2 Sect II.F

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Criterion	State	Crystal River Local	Turkey Point Local	St Lucie Local
N.3.d.	14-2 Sect II.F	I-38 Sect XV 14-2 Sect II.F	II-32 Sect XV 14-2 Sect II.F	III-42 Sect XV 14-2 Sect II.F
N.3.e.	14-2 Sect II.F	I-38 Sect XV 14-2 Sect II.F	II-32 Sect XV 14-2 Sect II.F	III-42 Sect XV 14-2 Sect II.F
N.3.f.	14-2 Sect II.F	I-38 Sect XV 14-2 Sect II.F	II-32 Sect XV 14-2 Sect II.F	III-42 Sect XV 14-2 Sect II.F
N.4.	14-3 Sect II.G	I-38 Sect XV 14-3 Sect II.G	II-32 Sect XV 14-3 Sect II.G	III-42 Sect XV 14-3 Sect II.G
N.5.	14-3 Sect II.G	I-38 Sect XV 14-3 Sect II.G	II-32 Sect XV 14-3 Sect II.G	III-42 Sect XV 14-3 Sect II.G
O.1.	15-1 Sect II	NA	NA	NA
O.1.a.	NA	NA	NA	NA
O.1.b.	15-1 Sect III 15-2 Sect IV	I-38 Sect XVI 15-1 Sect III	II-32 Sect XVI 15-1 Sect III	III-42 Sect XVI 15-1 Sect III
O.2-3.	NA	NA	NA	NA
O.4.a.	Fig 15-1 thru 15-3	I-38 Sect XVI 15-1 Sect II	II-32 Sect XVI 15-1 Sect II	III-42 Sect XVI 15-1 Sect II
O.4.b.	Fig 15-1 thru 15-3	I-38 Sect XVI 15-1 Sect II	II-32 Sect XVI 15-1 Sect II	III-42 Sect XVI 15-1 Sect II
O.4.c.	Fig 15-1 thru 15-3	I-38 Sect XVI 15-1 Sect II	II-32 Sect XVI 15-1 Sect II	III-42 Sect XVI 15-1 Sect II
O.4.d.	Fig 15-1 thru 15-3	I-38 Sect XVI 15-1 Sect II	II-32 Sect XVI 15-1 Sect II	III-42 Sect XVI 15-1 Sect II
O.4.e.	NA	NA	NA	NA
O.4.f.	Fig 15-1 thru 15-3	I-38 Sect XVI 15-1 Sect II	II-32 Sect XVI 15-1 Sect II	III-42 Sect XVI 15-1 Sect II
O.4.g.	NA	I-38 Sect XVI 15-1 Sect II	II-32 Sect XVI 15-1 Sect II	III-42 Sect XVI 15-1 Sect II
O.4.h.	Fig 15-1 thru 15-3	I-38 Sect XVI 15-1 Sect II	II-32 Sect XVI 15-1 Sect II	III-42 Sect XVI 15-1 Sect II
O.4.i.	NA	NA	NA	NA
O.4.j.	Fig 15-1 thru 15-3	I-38 Sect XVI 15-1 Sect II	II-32 Sect XVI 15-1 Sect II	III-42 Sect XVI 15-1 Sect II
O.5.	15-1 Sect III 15-2 Sect V	I-38 Sect XVI 15-1 Sect III 15-2 Sect IV	II-32 Sect XVI 15-1 Sect III 15-2 Sect IV	III-42 Sect XVI 15-1 Sect III 15-2 Sect IV
P.1.	15-1 Sect III	I-38 Sect XVI 15-1 Sect III	II-32 Sect XVI 15-1 Sect III	III-42 Sect XVI 15-1 Sect III
P.2.	SCEMP Sect IV.C.1	I-1 Sect II	II-1 Sect II	III-1 Sect II
P.3.	SCEMP Sect IV.C.1	I-1 Sect II	II-1 Sect I	III-1 Sect II
P.4.	1-1 Sect I SCEMP Sect IV.C.1	1-1 Sect I	1-1 Sect I	1-1 Sect I
P.5.	2-1 Sect II SCEMP Sect IV.C.1	I-1 Sect II SCEMP Sect IV.C.1	II-1 Sect II SCEMP Sect IV.C.1	III-1 Sect II SCEMP Sect IV.C.1
P.6.	SCEMP Sect VII SCEMP Sect IV.C	SCEMP Sect VII	SCEMP Sect VII	SCEMP Sect VII

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Criterion	State	Crystal River Local	Turkey Point Local	St Lucie Local
P.7.	The procurement of such documents stipulated by this criterion does not enhance the integrity of this plan. Operating Procedures are available upon request.			
P.8.	Table of Contents	Table of Contents	Table of Contents	Table of Contents
P.9.	NA	NA	NA	NA
P.10.	5-1 Sect I	5-1 Sect I	5-1 Sect I	5-1 Sect I

I. Purpose and Scope

The State of Florida Radiological Emergency Preparedness Annex to the State of Florida Comprehensive Emergency Management Plan (CEMP) addresses radiological emergencies for nuclear power plants and is based upon guidance criteria developed by the U. S. Nuclear Regulatory Commission and the Federal Emergency Management Agency (Nuclear Regulation-0654, Revision I). This Annex supports the (CEMP) and is operations oriented. It addresses the ability of state and local government to respond to radiological emergencies and defines responsibilities of state agencies with regard to the emergency support function approach to planning and operations. This Annex is also based upon certain assumptions, the existence of specific resources and capabilities that may be subject to frequent change.

To facilitate effective intergovernmental operations, this Plan adopts a functional approach that groups the types of assistance provided under Emergency Support Functions (ESFs) to address needs at the state and county level. Each ESF is coordinated by a lead agency, which has been selected based on its authorities, resources, and capabilities in the functional area. The ESFs serve as the primary conduit through which State assistance is provided to local governments in an affected area. State assistance will be provided to affected counties under the overall authority of the State Coordinating Officer or designee, who acts on behalf of the Governor.

The Florida Division of Emergency Management (FDEM) Director, who functions as the State Coordinating Officer, will annually certify this Plan to be current. Appendices I through VII (Site Plans) will be approved by the appropriate officials in accordance with procedures governing local adoption.

II. Assumptions

Radiological emergencies can range from a minor emergency with no offsite effects to a major emergency that may result in an offsite release of radioactive materials.

The overall objective of radiological emergency response planning and preparedness is to minimize radiation exposure for a variety of emergencies that could produce offsite radiation doses in excess of protective action guides established by the Environmental Protection Agency. Minimizing radiation exposure will reduce the consequences of an emergency to persons in the affected area.

No specific emergency sequence can be used as the model for which to plan because each emergency could have different consequences, both in nature and degree. As an alternative to defining a specific emergency, this Plan identifies various parameters for planning that are based upon knowledge of the possible consequences, timing and release characteristics of a range of emergencies. This Plan will establish the appropriate response for each emergency class.

The licensees will notify State and local governments of an emergency in sufficient time to implement warning and protective actions.

The licensees will provide sufficient funding to state and local governments to assure compliance with federal, State, and local radiological emergency preparedness requirements.

INTRODUCTION

III. Emergency Planning Zones

Emergency Planning Zones (EPZs) are defined as the areas for which detailed planning is needed to ensure that prompt and effective actions can be taken to protect the public in the event of a radiological emergency. In a particular emergency, protective actions may be restricted to a small area of the emergency planning zone. Although the radius of the EPZs implies a circular area, the actual shape will depend on local conditions such as defined boundaries, topography, land use characteristics, access routes, and jurisdictional boundaries.

A. Plume Exposure Pathway

The Plume Exposure Pathway (PEP) extends outward to a radius of approximately 10 miles from the plant site. The principal exposure sources are direct external exposure to beta and gamma radiation from the plume and deposited material, and internal exposure resulting from the inhalation of radioactive material in the plume. Appropriate response actions will be determined by the ability to best reduce potential exposure under the specific conditions occurring during a radiological emergency.

B. Ingestion Pathway Emergency Planning Zone

The Ingestion Pathway Zone (IPZ) extends for a radius of approximately 50 miles from the plant site. The principal exposure sources are from the ingestion of contaminated agricultural products such as milk, fresh fruits and vegetables, aquatic foods or from contaminated surface water sources. For this pathway, the planning effort involves the identification of potentially contaminated food and water. Following identification, control measures will be used to minimize danger to the public.

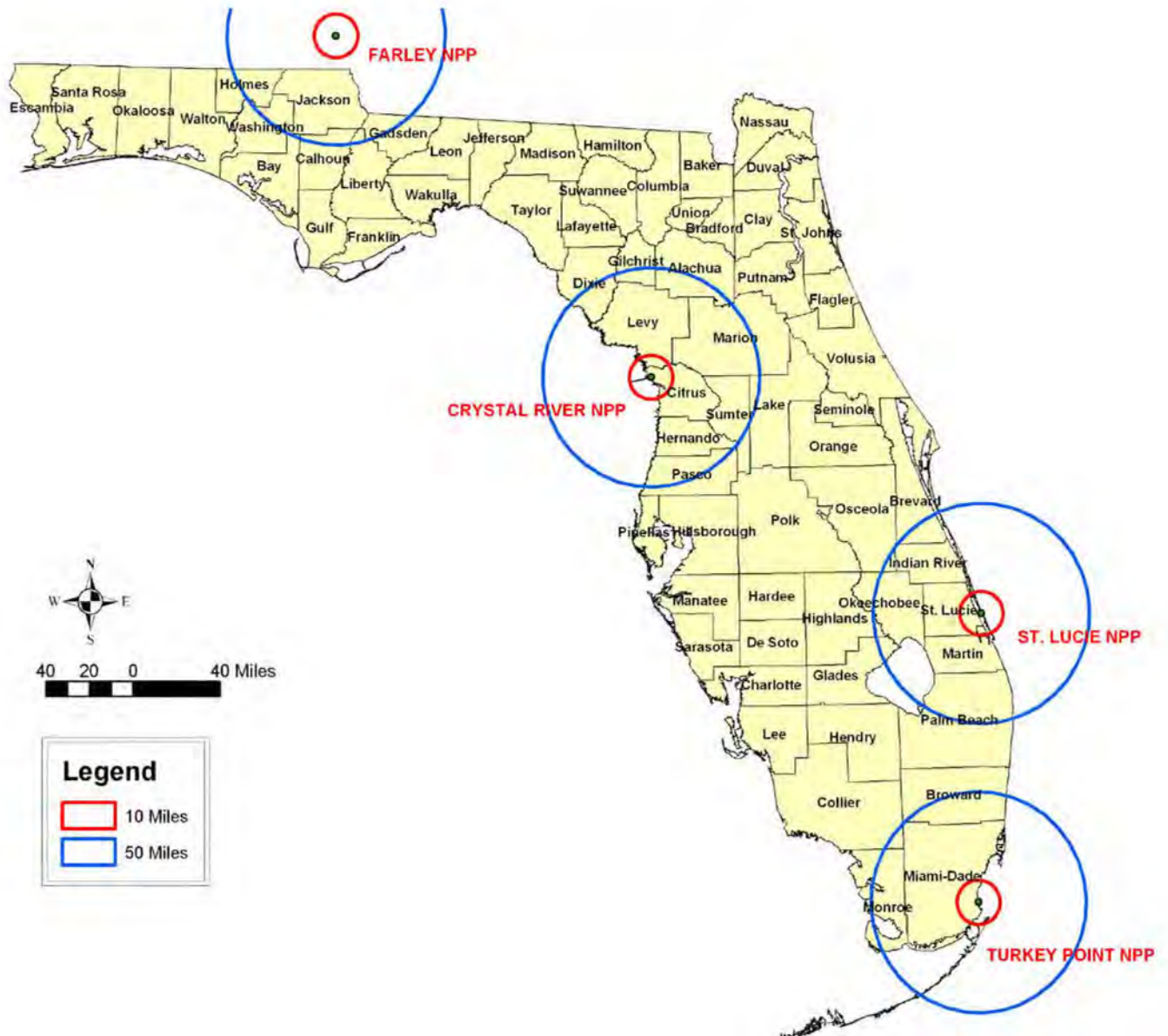
IV. REFERENCES

The following references and authorities may be consulted for further advice and guidance. Other than those references that have the inherent force and effect of law, this Plan is not intended to incorporate them by reference.

A. Supporting Annexes

- Radiological/Nuclear Incident Emergency response Plan

FIGURE 1-1

**NUCLEAR POWER PLANT SITES IN FLORIDA
10 MILE EMERGENCY AND 50 MILE INGESTION PLANNING ZONES**

THE RADIOLOGICAL RESPONSE ORGANIZATION

I. General

The organizational structure that the State of Florida will use in response to a commercial nuclear power plant emergency is described in Section IV, Concept of Operations, of the State Comprehensive Emergency Management Plan (CEMP). The State Emergency Response Team (SERT) will operate from the State of Florida Emergency Operations Center (SEOC) in Tallahassee and will be led by a Governor-appointed State Coordinating Officer, usually the Director of the Florida Division of Emergency Management.

When an emergency situation at a commercial nuclear power plant escalates to an Alert status, the State Coordinating Officer may deploy a State Management Team (SMT) to the affected Florida nuclear power plant's Emergency Operations Facility (EOF) or Alabama's Forward Emergency Operations Center. The size and composition of the SMT will be determined by the State Coordinating Officer and the SMT Incident Commander.

For events at Florida Utilities, the State Management Team will consist of, at a minimum, an

- Incident Commander
- Operations Chief
- Plans Chief
- Logistics Chief
- Finance Chief
- Radiological Emergency Preparedness Planning Technical Specialist
- Public Information Officer
- State Liaisons for the county Emergency Operations Centers

Any additional SMT personnel will deploy in accordance with their standard operating guidelines and will either be co-located at the emergency operations facility (if space permits) or at a facility located in close proximity to the emergency operations facility (see Figure 2-1).

Staffing at the SEOC for 24-hour operations for an extended length of time will be according to established operating guidelines. The emergency support functions are responsible for assuring continuity of their respective agencies' resources to ensure 24-hour emergency operations for an extended period of time.

The Florida Division of Emergency Management (FDEM) and all county jurisdictions of the State of Florida are 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. The FDEM may assign the right to accept such services, equipment, supplies, materials, or funds to any appropriate local governing body or agency.

II. State Emergency Response Team

The State Emergency Response Team (SERT) is comprised of 18 Emergency Support Functions (ESFs) empowered to deploy the resources of their agency or organization to

THE RADIOLOGICAL RESPONSE ORGANIZATION

carry out missions that are assigned by function. Each emergency support function consists of a primary agency and several support agencies. For a complete listing of the 18 ESFs see Section IV.A. of the CEMP.

The primary emergency support functions and primary agencies that will be involved with a radiological emergency/disaster at a fixed nuclear facility are:

A. Emergency Support Function 8 - Health and Medical

1. Department of Health

- a. Provide overall coordination of interagency health and medical services.
- b. Develop comprehensive policies and programs for decontamination and mitigation of hazards associated with sources of ionizing radiation.
- c. Advise, consult, and cooperate with other public agencies, affected groups, and utilities.
- d. Encourage, participate in, and conduct studies, public hearings, training and research relating to the control of sources of ionizing radiation.
- e. Respond to any emergency that involves possible or actual release of radiological materials in order to protect health, safety, and property.
- f. Coordinate with the Department of Environmental Protection in the chemical analysis of water obtained from public water supplies. The Department of Health will make the actual radiological analysis of water obtained from public water supplies.
- g. Support ESF 6 (Mass Care) in the coordination of overall reception and care responsibilities.

2. Department of Health, Bureau of Radiation Control

The Department of Health, Bureau of Radiation Control (BRC) is the primary radiological emergency agency for assessment of health hazards during radiological emergencies regardless of their severity. The agency is assigned this responsibility in Chapter 404, Florida Statutes. Should the Bureau of Radiation Control need monitoring and laboratory assistance, the operations officer will request the FDEM to obtain federal assistance through the Department of Energy's Savannah River Operations. Assistance may also be requested from other states through the Southern Mutual Radiation Assistance Plan and the Emergency Management Assistance Compact.

Responsibilities of the Department of Health, BRC include:

- a. Provide technical consultation and support to the Governor, the FDEM and local governments regarding radiation and radiological health (e.g., determine levels of radiation, health hazards, and

THE RADIOLOGICAL RESPONSE ORGANIZATION

- radiological decontamination) as the principal radiological assessment agency.
- b. Provide offsite monitoring.
- c. Collect and analyze samples by the BRC field teams according to established standard operating procedures.
- d. Evaluation of the extent of radiological contamination of the affected area(s).
- e. Recommend protective actions for persons living inside the 10-mile Emergency Planning Zone (EPZ).
- f. Provide laboratory analysis of air, water, and food samples from the 50-mile Ingestion Pathway Zone (IPZ).
- g. Manage and maintain supply of dosimetry for emergency workers.
- h. Manage and maintain supply of Potassium Iodide for the public and emergency workers.
- i. Coordinate distribution of radiological data to the State and county response organizations.
- j. Determine the severity of radiological emergencies when an actual release of radioactive materials occurs and make recommendations as the primary radiological assessment agency to the Governor, the State Coordinating Officer or designee, and county emergency management directors on protective actions to be taken based on a technical analysis of the situation.
- k. Respond to nuclear power plant emergencies by proceeding to the licensees' Emergency Operations Facilities (EOFs) or Alabama's forward emergency operations center.
- l. Maintain communication with State agencies, local governments, and nuclear power plants for planning and operational purposes.
- m. Contingent upon availability; provide staff in the Risk county emergency operations centers to interpret technical data and evaluate protective action recommendations.
- n. Provide criteria and technical support for the decision to relax protective actions and allow for recovery and re-entry into the affected area.

3. Department of Health, State Surgeon General

- a. Coordinate planning and operational support for the decision to relax protective actions and allow for recovery and re-entry into the affected area.
- b. Prepare and maintain a list of medical facilities which have the capability to treat radiological contaminated individuals (see Chapter 12).
- c. Develop and maintain procedures for the use and distribution of potassium iodide.

4. Department of Health, Director, Division of Environmental Health

- a. Coordinate planning with county health departments and provide support in supplying sanitary facilities for evacuees at reception centers and shelters.

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- b. Collect samples from public and surface water supplies for radiological analysis by the BRC in the event a radiological release occurs.
 - c. Coordinate with the Department of Environmental Protection in collecting and analyzing air and water samples.
- 5. Department of Agriculture and Consumer Services, Commissioner
 - a. Determine the needs of the agricultural industry in the state, as guided by the FDOH recommendations, and make appropriate recommendations to the Governor and the State Coordinating Officer during a radiological emergency.
 - b. Declare an agricultural emergency as guided by the FDOH when a radiological hazard is detected.
 - c. In consultation with the FDEM and the FDOH, implement agricultural procedures for nuclear power plant emergencies.
- 6. Department of Agriculture and Consumer Service, Division Of Agricultural Environmental Services
 - a. Coordinate with and assist the FDOH in obtaining samples of animal food and water for radiological testing.
 - b. Coordinate with and augment other State and local law enforcement agencies in establishing and operating agricultural checkpoints to prevent the distribution of potentially contaminated agricultural products.
 - c. Coordinate with the FDOH - BRC on embargo actions and the disposal of potentially contaminated agricultural products.
 - d. Other tasks as required.
- 7. Department of Agriculture and Consumer Service, Division of Dairy Industry
 - a. Coordinate with the FDOH on inspections of dairy farms to enforce the provisions of Chapter 502, Florida Statutes, as authorized.
 - b. Coordinate with the FDOH on inspections of dairy plants, dairy product plants, and other plants engaged in the manufacture and distribution of frozen desserts and dessert mixes to enforce the provisions of Chapters 502 and 503, Florida Statutes.
 - c. Coordinate with the FDOH on collecting, testing and analyzing samples of milk, dairy products, frozen desserts and frozen dessert mixes to enforce the provisions of Chapters 502 and 503, Florida Statutes.
 - d. Control and prevent distribution of contaminated milk and dairy products during a radiological emergency.

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8. Department of Agriculture and Consumer Service, Division of Fruit and Vegetable Inspection
 - a. Carry out technical duties prescribed under the provisions of Chapter 601, Florida Statutes, and such other technical duties as may be prescribed by the Department.
 - b. Coordinate with the FDOH and provide samples as necessary to determine the degree of radiological contamination of food products.
 - c. Coordinate with the FDOH-BRC on embargo actions and the disposal of potentially contaminated foods.
 - d. Provide a Department of Agriculture and Consumer Service liaison to all affected county emergency operations centers if requested. It will be the duty of the liaison personnel to ensure information flow between the Department of Agriculture and Consumer Service personnel in the SEOC and field personnel involved in recovery operations, and to assist in the resolution of problems arising within the Department of Agriculture and Consumer Service emergency operations.
 - e. Other tasks as required.
9. Department of Agriculture and Consumer Service, Division of Food Safety
 - a. Coordinate with the FDOH to determine minimal food and water sampling required for analysis.
 - b. Other tasks as required.
10. Department of Agriculture and Consumer Service, Division of Forestry
 - a. Assist the Division of Fruit and Vegetable in providing liaison and communications to county emergency operations centers.
 - b. Through an intergovernmental agreement with the FDOH, provide aircraft and pilots for radiation surveys, and transportation of emergency personnel and environmental samples.
 - c. Other tasks as required.
11. Department of Environmental Protection, Division of Waste Management, Bureau of Waste Clean-up
 - a. Assist the FDOH in conducting chemical analysis of water samples taken from public water supplies.
 - b. Restrict consumption of surface waters in the event of a release of significant concentrations of radioactive material into those supplies.
 - c. Coordinate with other State and county agencies to provide safe water supplies at reception shelter facilities.

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B. Emergency Support Function 16 - Law Enforcement and Security

1. Florida Department of Law Enforcement
 - a. Implement and coordinate law enforcement activities to include the use of mutual aid resources.
 - b. Maintain a list of special law enforcement equipment, specially trained personnel, and all regular, auxiliary, and reserve law enforcement personnel and equipment within the state.
 - c. Maintain communication with State law enforcement agencies in order to coordinate and integrate plans for traffic control and the participation of the agencies in law enforcement emergency operations.
 - d. Maintain communication with the Governor, State agencies, and local law enforcement officials in order to ensure coordination and cooperation in planning and operations in affected areas.
 - e. Facilitate the flow of law enforcement information from State organizations to local law enforcement officials.
2. Department of Highway Safety and Motor Vehicles, Division of Highway Patrol
 - a. Assist other law enforcement agencies in the movement of traffic during a radiological emergency as required.
 - b. Assist other law enforcement agencies in the state in securing the affected area.
 - c. Provide security and assist in staffing traffic control points to support county personnel who are involved in radiological emergency response operations.
 - d. Provide communication assistance as required.
 - e. Assist in the transportation of samples for analysis as needed.
3. Fish and Wildlife Conservation Commission
 - a. Conduct warning and evacuation of both deep and shallow waterways in and around nuclear power plants during radiological emergency operations.
 - b. Coordinate patrol activities with county and State law enforcement officials.
 - c. Assist the FDOH in collection of environmental samples as needed.
 - d. Support other law enforcement agencies with security as needed.
 - e. Provide communications assistance as required.
4. Florida Department of Environmental Protection, Division of Law Enforcement
 - a. Conduct warning and evacuation in State parks and recreation areas around nuclear power plants during radiological emergency operations.

THE RADIOLOGICAL RESPONSE ORGANIZATION

- b. Provide communications assistance as required.

5. Florida Department of Agriculture and Consumer Services, Division of Law Enforcement

- a. Assist the FDOH in collection of environmental samples, as required.
- b. Provide assistance with the enforcement of embargo orders.
- c. Provide communication assistance as required.

C. Emergency Support Functions 1 and 3 - Transportation and Public Works

1. Department of Transportation

- a. Coordinate activities between public and private agencies on matters relating to public transit.
- b. Support public transportation services where emergency services are required.
- c. Support county highway/road departments in securing and installing barricades, signs, and other necessary equipment needed for traffic control.
- d. Support traffic management activities in and around the affected areas.
- e. Support movement of emergency resources to and from the designated area.

D. Emergency Support Function 13 - Military Support

1. Department of Military Affairs - Florida National Guard

- a. Under the direction of the Governor, activate the Florida National Guard to aid the civil authorities whenever the civil authorities are unable to contain the emergency.
- b. The 44th Civil Support Team or other special units can provide radiological assistance if needed.
- c. Support state agencies and local governments on a mission specific basis during a radiological emergency operation.

E. Emergency Support Function 6 - Mass Care

1. Florida Department of Business and Professional Regulation

- a. Ensure the coordination of sheltering activities.
- b. Ensure the coordination, establishment, and operation of mass feeding in affected areas, to include: mobile feeding routes, fixed feeding sites, base camps, and comfort stations.

III. Risk Counties

- A. Provide direction and control of the emergency response at the local level.

THE RADIOLOGICAL RESPONSE ORGANIZATION

- B. Prepare county standard operating guidelines for response to emergencies at nuclear power plants.
- C. Provide for the safety of residents and transients through appropriate protective actions.
- D. Ensure that warning signals exist and those warning signals are operational.
- E. Ensure that procedures are developed for the distribution of Potassium Iodide to all emergency workers and members of the general public for whom evacuation from the effective area is not feasible.
- F. Ensure the county's ability to provide a continuous 24-hour operation of a local response for an extended period.

IV. Host Counties

- A. Prepare standard operating guidelines to receive and shelter evacuees from Risk counties with assistance from State Emergency Support Functions (ESFs) 6 and 8.
- B. Provide for monitoring and decontamination of evacuees from Risk counties at reception and/or shelter locations.
- C. Provide emergency medical services for evacuees.
- D. Provide security for evacuees.
- E. Provide and obtain current information reports from the SEOC.
- F. Provide for the dissemination of information to evacuees regarding re-entry, return and recovery.
- G. Ensure that procedures are developed for the distribution of Potassium Iodide.

V. Ingestion Pathway Counties

Provide county resources to assist applicable State ESFs in the implementation of their responsibilities, and support the collection, monitoring and control of potentially contaminated agricultural products, food products, and water supplies.

VI. Other Organizations

A. Florida Power & Light Company, and Progress Energy

- 1. Provide initial notification to the State Watch Office within 15 minutes of an emergency declaration in accordance with the licensee's emergency operations plans.

THE RADIOLOGICAL RESPONSE ORGANIZATION

2. Provide the State Watch Office with periodic updates of emergency status and plant parameters until the licensee's Emergency Operations Facility (EOF) is activated.
3. Provide State and local emergency personnel in the EOFs with periodic updates.
4. Dispatch offsite monitoring teams with necessary communications and detection equipment to provide radiological surveillance and make recommendations until the Department (s) of Health emergency personnel can respond.
5. Provide a liaison to the State and Risk county emergency operations centers to serve in an advisory capacity.
6. Provide adequate space and telephones in the EOFs for representatives from the State and Risk counties.
7. Activate and operate the emergency news center (refer to Chapter 7, Public Information and Education).
8. Provide release and dose projections based on available plant conditions and offsite monitoring results.
9. Provide protective action recommendations to the State and Risk counties based on release and dose projections.
10. Recommend reductions or closeout of emergency classes to state and risk county emergency personnel in the EOFs.
11. Following termination of the event, a written report will be submitted by the licensee to the United States Nuclear Regulatory Commission, the Florida Division of Emergency Management (FDEM), and Risk counties.
12. Provide funding for radiological emergency preparedness under the provisions of Chapter 252.60, Florida Statutes.

B. Southern Nuclear Operating Company

1. Notify the State Watch Office of an Alert, Site Area Emergency or General Emergency declaration at the Joseph. M. Farley Nuclear Power Plant.
2. Provide the State Watch Office with periodic updates of emergency status and plant parameters.
3. Provide adequate space in the EOFs, forward emergency operations facility in Houston County, Alabama and joint information center.

THE RADIOLOGICAL RESPONSE ORGANIZATION

VII. Federal Organizations and Responsibilities

Federal assistance provided to State and local governments in response to and recovery from a radiological incident will follow guidelines as established in the current National Response Framework (NRF).

A. Nuclear Regulatory Commission

1. Upon receipt or notification of an emergency from the licensee, the Nuclear Regulatory Commission will notify appropriate federal agencies and initiate response activities as appropriate.
2. Manage federal response actions onsite and coordinate these actions, when necessary, with offsite emergency response organizations.
3. Assess licensee protective action recommendations and/or develop federal protective action recommendations.
4. Serve as a source for information of a technical nature regarding the onsite incident conditions and the potential or real offsite radiological effects.

B. Federal Emergency Management Agency

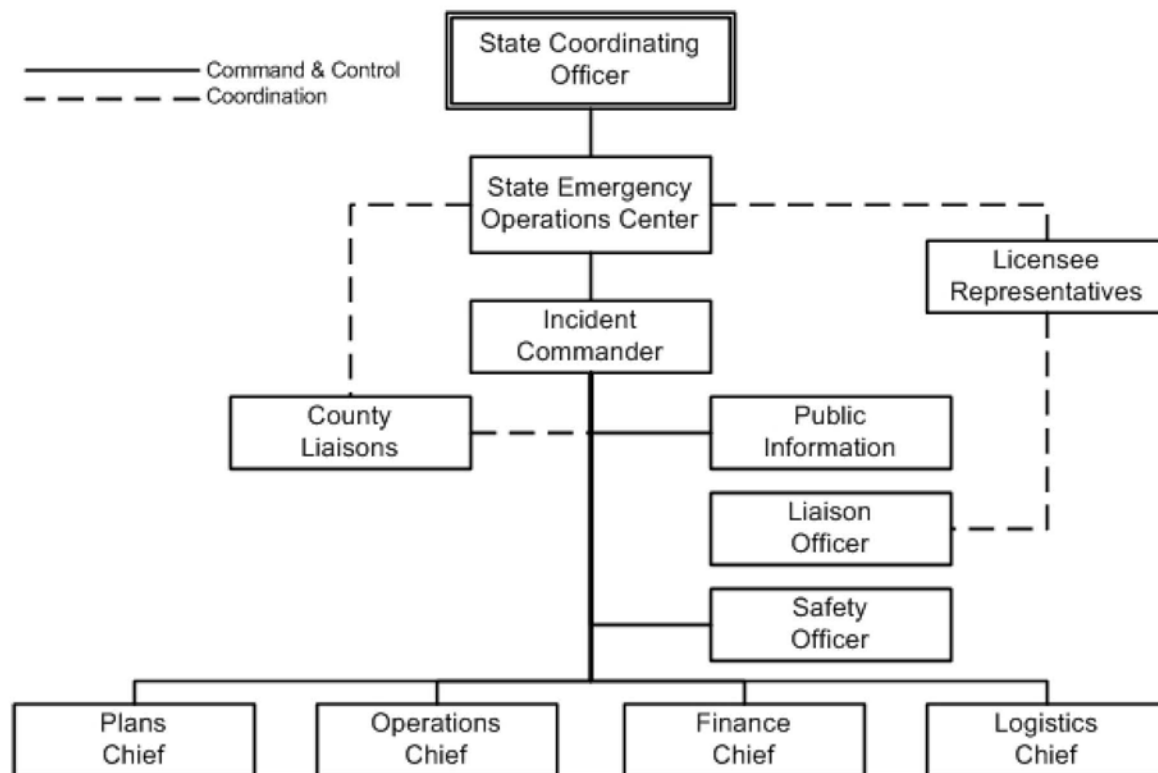
1. Upon receipt of notification of an emergency from the Nuclear Regulatory Commission, the Federal Emergency Management Agency (FEMA) will notify participating federal agencies.
2. Coordinate the provision of offsite federal assistance to State and local government agencies.
3. Promote the coordination of offsite and onsite response activities of federal agencies.
4. Serve as an information source for providing a summary of the total federal response to the Department of Homeland Security.

C. Department of Energy And The Environmental Protection Agency

1. Coordinate the offsite radiological monitoring, assessment, evaluation and reporting of all federal agencies during the initial phases of an emergency.
2. Maintain communication and a common set of offsite radiological monitoring data with the licensee and State and local agencies with similar responsibilities.
3. Provide offsite radiological monitoring data and its interpretation to the licensee and appropriate federal, State and local agencies, and assist in the development of protective action recommendations.

THE RADIOLOGICAL RESPONSE ORGANIZATION

FIGURE 2-1
STATE OF FLORIDA INCIDENT MANAGEMENT TEAM ORGANIZATIONAL CHART



THE RADIOLOGICAL RESPONSE ORGANIZATION

FIGURE 2-2
PRIMARY AND SUPPORT RESPONSIBILITIES MATRIX

RESPONSIBILITY/ RESPONDER	DEM	ESF 1&3	ESF 6	ESF 8	ESF 4 & 9	ESF 11	ESF 13	ESF 16	RISK/ HOST	LICENSEE
Command and Control	P			S					P	
Emergency Alert and Notification	P			S				S	P	P
Communications	P						S	S	P	S
Accident Assessment	S			P						P
Protective Response	S			P					P	P
Public Alert and Notification	S							S	P	S
Public Information	P								P	P
Radiological Exposure Control	P			P					S	S
Decontamination	S			P					P	
Access Control							S	S	P	
Field Monitoring and Sampling				P			S			S
Fire and Rescue					S	S			P	
Emergency Medical Services				S					P	
Law Enforcement								S	P	
Transportation		S					S		P	
Traffic Control							S	S	P	
Food Quality				S		P			S	
Potable Water						P			S	
Shelter/Care	S		P	S					P*	
Public Health and Sanitation				S					P	
Social Services				S					P	
Road Passage and Maintenance		S					S		P	
Security							S	S	P	
Recovery and Reentry	P		S	P					P	S

P = Primary S = Support

*For the St. Lucie Plant, this is a host county function

THE RADIOLOGICAL RESPONSE ORGANIZATION

FIGURE 2-2 continued

Command and Control	<u>Primary:</u>	Division of Emergency Management and Risk Counties
	<u>Support:</u>	Emergency Support Function 8
Emergency Alert and Notification	<u>Primary:</u>	Licensee, Division of Emergency Management, and Risk Counties
	<u>Support:</u>	Emergency Support Functions 8 and 16
Communications	<u>Primary:</u>	Division of Emergency Management and Risk Counties
	<u>Support:</u>	Licensee, Emergency Support Functions 16 and 13
Accident Assessment	<u>Primary:</u>	Licensee and Emergency Support Function 8
	<u>Support:</u>	Division of Emergency Management
Protective Response	<u>Primary:</u>	Licensee, Emergency Support Function 8, and Risk Counties
	<u>Support:</u>	Division of Emergency Management
Public Alert and Notification	<u>Primary:</u>	Risk Counties
	<u>Support:</u>	Licensee, Division of Emergency Management, and Emergency Support Function 16
Public Information	<u>Primary:</u>	Licensee, Division of Emergency Management, and Risk Counties
Radiological Exposure Control	<u>Primary:</u>	Division of Emergency Management and Emergency Support Function 8
	<u>Support:</u>	Licensee and Risk Counties
Decontamination	<u>Primary:</u>	Emergency Support Function 8, Risk and Host Counties
	<u>Support:</u>	Division of Emergency Management
Control of Access to the Evacuated Area	<u>Primary:</u>	Risk Counties
	<u>Support:</u>	Emergency Support Functions 16 and 13
Field Monitoring and Sampling	<u>Primary:</u>	Emergency Support Function 8
	<u>Support:</u>	Licensee
Fire and Rescue	<u>Primary:</u>	Risk Counties
	<u>Support:</u>	Emergency Support Functions 4 and 9

THE RADIOLOGICAL RESPONSE ORGANIZATION

FIGURE 2-2 continued

Emergency Medical Services	<u>Primary:</u>	Risk Counties
	<u>Support:</u>	Emergency Support Function 8
Law Enforcement	<u>Primary:</u>	Risk Counties
	<u>Support:</u>	Emergency Support Function 16
Transportation	<u>Primary:</u>	Risk Counties
	<u>Support:</u>	Emergency Support Functions 1 and 13
Traffic Control	<u>Primary:</u>	Risk and Host Counties
	<u>Support:</u>	Emergency Support Functions 13 and 16
Food Quality	<u>Primary:</u>	Emergency Support Function 11
	<u>Support:</u>	Emergency Support Function 8 and Risk Counties
Potable Water	<u>Primary:</u>	Emergency Support Function 11
	<u>Support:</u>	Risk Counties
Shelter/Care	<u>Primary:</u>	Risk, Host Counties and Emergency Support Function 6
	<u>Support:</u>	Emergency Support Function 8 and Division of Emergency Management
Public Health and Sanitation	<u>Primary:</u>	Risk Counties
	<u>Support:</u>	Emergency Support Function 8
Social Services	<u>Primary:</u>	Risk Counties and Emergency Support Function 8
Road Passage and Maintenance	<u>Primary:</u>	Risk Counties
	<u>Support:</u>	Emergency Support Functions 1, 3, and 13
Security	<u>Primary:</u>	Risk Counties
	<u>Support:</u>	Emergency Support Functions 13 and 16
Recovery and Re-entry	<u>Primary:</u>	Division of Emergency Management, Emergency Support Function 8, and Risk Counties
	<u>Support:</u>	Licensee and Emergency

I. General

This chapter describes the coordination and management of the emergency response among the State and local governments for a commercial nuclear power plant emergency. The organizational charts reflecting the functional relationships between State agencies and local governments for a power plant emergency is shown in Chapter 2.

II. Concept of Operations

A. Local Government Role

Local governments have the primary role in implementing protective actions to reduce risks to the general public from an emergency at a nuclear power plant. The Risk and Host counties affected by an emergency are responsible for directing the initial response to a radiological emergency situation. These counties will coordinate and direct such actions through their emergency management organizations and other county emergency response agencies. As the emergency situation progresses, the county emergency management director may recommend the county commission declare a local state of emergency. The county Emergency Operations Center (EOC) serves as the central clearinghouse for information collection and coordination of response and recovery resources within the county. It is anticipated that with an Unusual Event emergency event classification the local governments will maintain primary responsibility for coordinating the emergency response. As the emergency progresses, county EOC(s) may request assistance from the State.

B. State Government Role

The role of State government in response to a nuclear power plant emergency is to support local government operations. State Emergency Response Team actions are coordinated through the State Emergency Operations Center (SEOC) as outlined in Section IV, Concept of Operations, of the State of Florida Comprehensive Emergency Management Plan (CEMP).

An Executive Order will be drafted by the Florida Division of Emergency Management (FDEM) upon licensee notification of an Alert emergency classification and may be signed by the Governor. An executive order will be signed by the Governor upon utility notification of a Site Area Emergency classification or higher. A signed Executive Order declares a state of emergency designates a State Coordinating Officer and allows for enhanced state assistance from the SEOC.

1. Florida Licensees

The State Coordinating Officer or designee performs policy-making authority and commitment of State resources at the SEOC. The State Coordinating Officer or designee will deploy a SMT to the licensee's Emergency Operations Facility (EOF) as required. The SMT facilitates coordination of State, county and licensee response activities. The State Coordinating Officer will transfer command and control to the SMT if the event escalates to a Site Area Emergency or higher. The SMT Incident Commander then

COMMAND AND CONTROL

becomes the Deputy State Coordinating Officer and acts on behalf of the State Coordinating Officer. All decisions made by the Deputy State Coordinating Officer at the EOF will be relayed to the State Coordinating Officer who retains overall control of the event.

2. **Farley Plant**

The State Coordinating Officer or designee performs policy-making authority and commitment of state resources at the SEOC. The State Coordinating Officer or designee will deploy a Liaison Team to the Alabama Forward Emergency Operations Center as required. The Liaison Team provides information related to the emergency to the State Coordinating Officer. All decisions made in the Alabama Forward Emergency Operations Center will be relayed to the State Coordinating Officer who retains overall control of the event for the State of Florida.

EMERGENCY CLASSIFICATION SYSTEM

I. General

The Nuclear Regulatory Commission (NRC) has established four classes of radiological emergencies in increasing order of significance: Notification of Unusual Event, Alert, Site Area Emergency, and General Emergency. Progression is provided to ensure adequate emergency management preparations are taken for more serious event indicators.

II. Emergency Classes

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 four emergency classes.

A. Notification of Unusual Event

Class Description:

Events are in process or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection.

Release Potential:

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

Purpose:

Offsite notification is made to ensure 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.

B. Alert

Class Description:

Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant or 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.

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.

Purpose:

An alert declaration is made to ensure that emergency personnel are readily available to respond if the situation becomes more serious or to perform

EMERGENCY CLASSIFICATION SYSTEM

confirmatory radiation monitoring if required, and provide offsite authorities current information on plant status and parameters.

C. Site Area Emergency

Class Description:

Events are in process or have occurred which involve actual or likely major failures of plant functions needed for protection of the public or hostile action 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 result in exposure levels which exceed Environmental Protection Agency protective action guide exposure levels beyond the site boundaries.

Purpose:

A Site Area Emergency declaration is made to ensure that emergency response centers are staffed, to ensure that monitoring teams are dispatched, to ensure that personnel required for evacuation of near-site areas 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.

D. General Emergency

Class Description:

Events are in process or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity or security events that result in an actual loss of physical control of the facility.

Release Potential:

Releases of radioactive material can be reasonably expected to exceed Environmental Protection Agency protective action guide exposure levels offsite.

Purpose:

A General Emergency declaration is made to initiate predetermined protective actions for the public, to provide continuous assessment of information from the licensee and offsite organizational measurements, to initiate additional measures as indicated by actual or potential releases or security event, to provide consultation with offsite authorities, and to provide updates for the public through government authorities.

EMERGENCY CLASSIFICATION SYSTEM

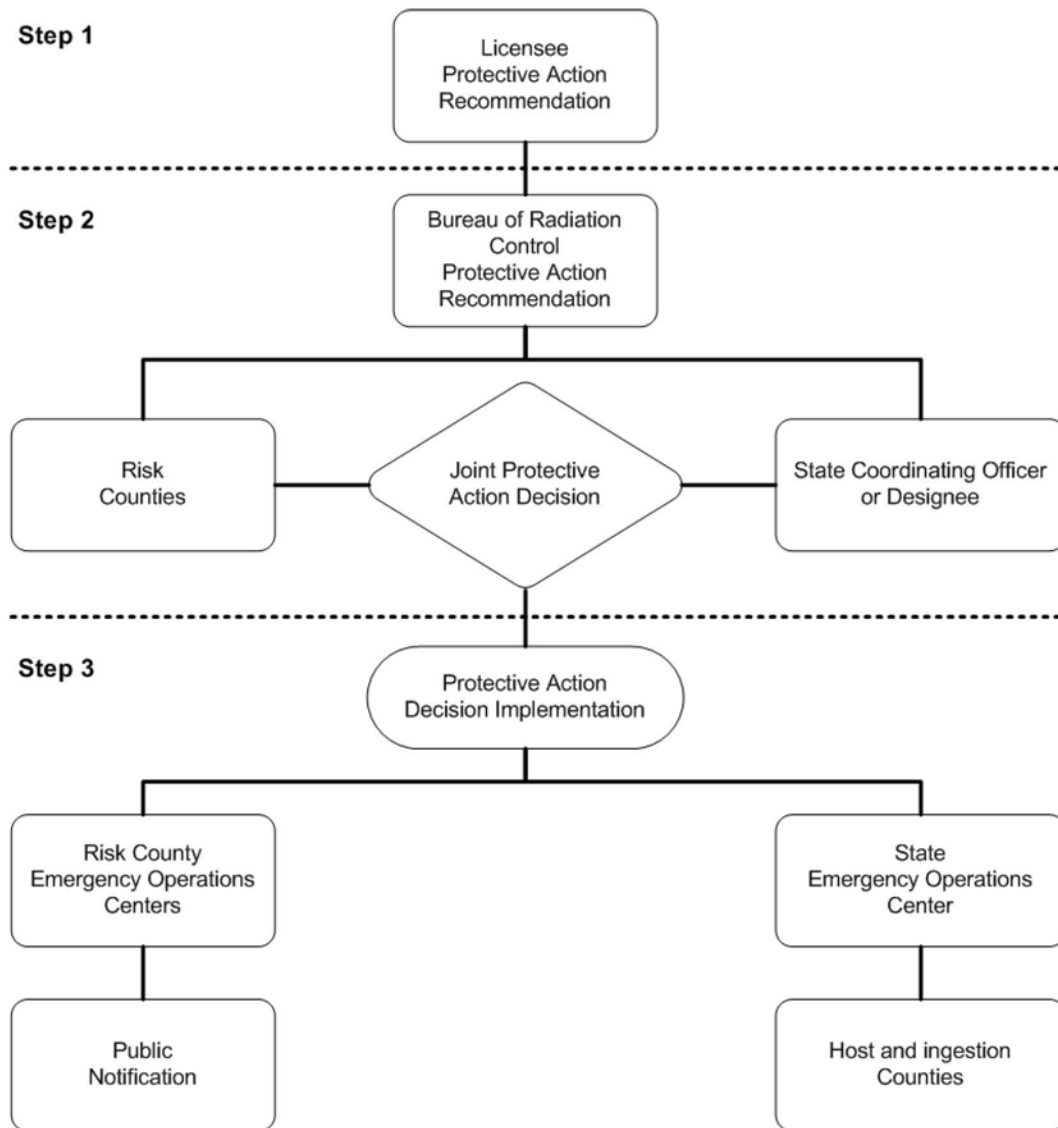
III. Emergency Action

Based on plant conditions, licensees will classify the event, make offsite notification of the emergency classification level (i.e., Unusual Event, Alert, Site Area Emergency, or General Emergency) and make a protective action recommendation if required. When the emergency operations facility is not operational and there is no signed Executive Order by the Governor, the Risk counties will maintain primary responsibility for coordinating emergency response with the State Emergency Operations Center and the licensee.

However, once the Governor has signed an Executive Order, an emergency classification with protective action recommendations by licensees will require joint state and local coordination to implement a protective action decision. Such state and local coordination will be conducted through a three step decision process as outlined in Figure 4-1.

EMERGENCY CLASSIFICATION SYSTEM

FIGURE 4-1
PROTECTIVE ACTION DECISION FLOW CHART
AT THE EMERGENCY OPERATION FACILITY



Step 1: The Licensee will make a protective action recommendation to the Risk counties and the State Coordinating Officer or designee at the Emergency Operation Facility (EOF) (if operable), based on plant conditions.

Step2: The Risk counties and the State Coordinating Officer or designee at the EOF (if operable), in consultation with the Department of Health, will assess the licensee's recommendation and formulate a joint protective action decision.

Step3: The Risk counties will make contact with their respective EOCs for implementation and public notification concerning the protective action recommendation(s). The State Emergency Operations Center will contact the host and ingestion counties.

NOTIFICATION AND ACTIVATION

I. General

The Florida Division of Emergency Management's (FDEM) State Watch Office is the designated point of contact in the event of a radiological emergency. As such, the FDEM is responsible for receiving notification of an emergency from the nuclear power plants, verifying information contained in the notification messages, and alerting appropriate state, local, and federal emergency response personnel. The Division is also responsible for assisting local governments in providing warning and instructions to the general public. The Division **may** receive initial warning of an event or classification from a nuclear power plant, the Federal Emergency Management Agency's (FEMA) National Operations Center, Nuclear Regulatory Commission, county or municipal government, or the news media.

To ensure that the State has the capability to respond to an emergency situation on a 24-hour basis, the State Emergency Response Team can be activated in the event resources are needed to supplement local governments. The emergency coordinating officers for each Emergency Support Function (ESF) will be responsible for alerting and activating necessary support personnel. The state will function under the following levels of activation in accordance with the State Comprehensive Emergency Management Plan (CEMP):

Levels of Activation:

- A. Level 3 - Monitoring - If a licensee declares an **Unusual Event**, the State Emergency Operations Center (SEOC) will remain at a level 3.
- B. Level 2 - Partial Activation - If a licensee declares an **Alert**, the SEOC **may** be partially activated and staffed by selected ESFs based on plant conditions, mission specific tasks or other concurrent events.
- C. Level 1 - Full Activation - If a licensee declares a **Site Area Emergency** or **General Emergency** classification, the SEOC **will** be fully activated and staffed by all ESFs and other stakeholders necessary to manage the State's response.

The State Watch Office communications operators are on duty at the SEOC in Tallahassee on a 24-hour basis. Specific information to be included in Florida nuclear power plant's initial and follow-up notification messages is shown in Figure 5-1. Specific information for the Joseph M. Farley Nuclear Power Plant, in Alabama, is shown in Figure 5-2. Updates and changes not affecting emergency classification or protective action recommendations will be recorded in the State Watch Office's Incident Recorder database.

II. Notification and Activation

The process of notification and activation of the State Emergency Response Team for each emergency classification level is outlined below. Specific details of notification and activation are contained in state and county standard operating guidelines.

NOTIFICATION AND ACTIVATION

A. Notification of an Unusual Event

1. Notification, Florida Licensees

Upon receipt of Notification of an Unusual Event from the licensee's emergency communicator, the State Watch Office will verify the receipt of the message by each of the Risk counties and the Department of Health, Bureau of Radiation Control (BRC), via the Hot Ring Down telephone system. The State Watch Office will then notify the Host and ingestion pathway counties pursuant to standard operating procedures.

Should the emergency notification come in on any circuit other than the Hot Ring Down system, the authenticity of the message will be verified by the State Watch Office prior to transmission to the Risk counties and the BRC. The State Watch Office will then make notifications according to established guidelines.

2. Notification, Farley

Notification of an Unusual Event will be made by the licensee communicator to the State of Georgia Emergency Management Agency Warning Point. Upon receipt of the notification, the Georgia Emergency Management Agency Warning Point will notify the Florida State Watch Office via facsimile and verify receipt via commercial telephone. The Florida State Watch Office will then notify ingestion pathway counties pursuant to standard operating procedures. The State Watch Office will then make notifications according to established guidelines.

3. Activation

No activation of the SEOC is anticipated for the Notification of an Unusual Event emergency classification; however such action can be taken if deemed appropriate. The State Emergency Response Team Chief will monitor the situation and be prepared to react if escalation to a higher classification is warranted or stand by until verbal closeout of the emergency.

B. Alert

1. Notification, Florida Licensees

Upon receipt of an Alert from the utility's emergency communicator, the state communications operator will verify the receipt of the message by each of the Risk counties and the BRC. The State Watch Office will then notify the host and ingestion counties.

Should the emergency notification come in on any system other than the Hot Ring Down system, the authenticity of the message will be verified by the State Watch Office before the message is disseminated. The State Watch Office will then make notifications according to established guidelines.

NOTIFICATION AND ACTIVATION

2. Notification, Farley

Notification of an Alert will be made by the Southern Nuclear emergency communicator via facsimile within thirty minutes of a declaration. The Florida State Watch Office will then notify ingestion pathway counties pursuant to established guidelines. The State Watch Office will then make notifications according to established guidelines.

3. Activation, Florida Licensees

The State Emergency Operations Center **may** be activated to Level 2 because of the possible threat to life and property. Upon notification, the State Coordinating Officer **may** authorize the deployment of a State Management Team as indicated in Chapter 3 of this Annex. An Executive Order **will** be drafted and **may** be signed as indicated in Chapter 3 of this Annex. A State Emergency Response Team liaison, typically a Division of Emergency Management Regional Coordinator, **may** be deployed to the licensee's emergency operations facility. As the situation warrants, 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 function. As the situation warrants, the risk and host county emergency management directors may activate their county emergency operations centers as needed.

4. Activation, Farley

The State Emergency Operations Center **may** be activated to Level 2 because of the possible threat to life and property. Upon notification, the State Coordinating Officer may authorize the deployment of a Liaison Team to the Alabama Forward Emergency Operations Center in Dothan, AL as indicated in Chapter 3 of this Annex. A Liaison may also be deployed to the Southern Nuclear emergency operations facility in Birmingham, AL. An Executive Order will be drafted and may be signed as indicated in Chapter 3 of this Annex. As the situation warrants, Department of Health staff may also be dispatched. The lead organization for each ESF will be responsible for alerting or notifying necessary personnel within their respective ESF.

C. Site Area Emergency

1. Notification, Florida Licensees

Upon receipt of a Site Area Emergency from the licensee's emergency communicator, the State Watch Office will verify the receipt of the message by each of the Risk counties and the Bureau of Radiation Control. The State Watch Office will then notify the host and ingestion counties.

Should the emergency notification come in on any system other than the Hot Ring Down system, the authenticity of the message will be verified by the State Watch Office before the message is disseminated. The State Watch Office will then make notifications according to established guidelines.

2. Notification, Farley

NOTIFICATION AND ACTIVATION

Notification of a Site Area Emergency will be made by the Southern Nuclear emergency communicator via facsimile within thirty minutes of a declaration. The Florida State Watch Office will then notify ingestion pathway counties pursuant to standard operating guidelines. The State Watch Office will then make notifications according to established guidelines.

3. Activation, Florida Utilities

Upon the direction of the State Coordinating Officer or the State Emergency Response Team Chief, the State Emergency Operations Center will be activated to Level 1 and the notification process initiated. An Executive Order will be signed as indicated in Chapter 3, Section II.B (Command and Control) of this Annex. The State Emergency Response Team Chief will deploy a State Management Team (SMT), if this has not already occurred, to the licensee's Emergency Offsite Facility (EOF). A State Emergency Response Team liaison, typically a FDEM Regional Coordinator, is deployed to the Risk counties and licensee emergency operations facility. Bureau of Radiation Control, monitoring teams and the Mobile Emergency Radiological Laboratory will be deployed to their assigned locations. The licensee's emergency news center will be activated. The SMT will assume direction and control from the SEOC following a coordination call with the State and Risk counties' EOCs and the Licensee's EOF. The Risk and Host counties will activate their EOCs, reception centers, and shelters in accordance with established guidelines. The ingestion pathway counties' EOCs may be activated in accordance with established guidelines. Required staffing at each EOF is identified in Chapter 8 of this Annex. Other emergency response personnel may be requested to proceed to the appropriate emergency response centers.

4. Activation, Farley

The SEOC will be activated to level 2 because of potential impacts to the State should the event escalate. Upon notification, the State Coordinating Officer will authorize the deployment of a Liaison Team to the Alabama Forward Emergency Operations Center in Dothan, AL as indicated in Chapter 3 of this Annex. A Liaison may also be deployed to the Southern Nuclear Emergency Operations Facility in Birmingham, AL. An Executive Order will be signed as indicated in Chapter 3 of this Annex. As the situation warrants, the Bureau of Radiation Control will deploy field monitoring teams and the Mobile Emergency Radiological Laboratory to their pre-designated locations. The lead organization for each ESF will be responsible for alerting or notifying necessary personnel within their respective ESF.

D. General Emergency

Procedures for notification and activation of emergency response personnel at this emergency class level are the same as those identified at a Site Area Emergency.

E. Abbreviated Security Notifications

For imminent or ongoing security based events, the notification process has been streamlined to ensure that critical information is relayed in an accurate and expedient

NOTIFICATION AND ACTIVATION

manner to allow plant personnel to return to their responsibilities in securing the facility.

During the initial notification, the licensee's communicator will clearly identify the call as an abbreviated security notification of an imminent or ongoing security event. Sample notification language is provided in Figure 5-3.

Activation will generally be conducted as outlined in the above emergency classification levels. Appropriate measures will be taken to ensure the safety of responding personnel and may alter or delay certain tasks from being accomplished.

III. **Notification of the Public**

Risk counties will implement procedures to provide notification and clear instructions, including periodic status updates, to the general public within the Plume Exposure Pathway.

The public notification system may be activated for an **Alert**, and **will** be activated for a **Site Area Emergency** or a **General Emergency** in a timely manner and without any undo delay upon the decision by the Chairpersons of the Risk counties, or their designees, to implement protective actions. Means of providing notification to the general public **will** include the activation of the public notification system which **may** include existing outdoor siren systems, the Emergency Alert System, the National Oceanic and Atmospheric Administration Very High Frequency Radio Network, participating local radio and television stations, and route alerting. The Risk county(s) will be responsible for coordination and development of written messages that will be provided to the general public during an emergency. Appendices I through IV of this Annex address general public notification in more detail using the above systems.

The Florida Division of Emergency Management will coordinate with affected counties, provide assistance as needed and provide periodic status updates to the general public.

NOTIFICATION AND ACTIVATION

FIGURE 5-1
FLORIDA NUCLEAR PLANT EMERGENCY NOTIFICATION FORM

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 ☐ Update 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(s): ____ 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 utility 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	I. ____ mrem

15. MESSAGE RECEIVED BY: (Name) ____ Date: ____/____/____ Time: ____

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NOTIFICATION AND ACTIVATION

FIGURE 5-2

ALABAMA NOTIFICATION MESSAGE FORM FOR THE FARLEY NUCLEAR POWER PLANT
RED VERBAL NOTIFICATION FORM

1. ☐ A This is a Drill ☐ B Actual Emergency ☒ Initial

2. Site: Farley Nuclear Plant

3. Confirmation Phone Numbers: (334)899-5156 or (334)794-0800 Ext. _____

5. Emergency Classification: ☒ General Emergency

6. ☒ Emergency Declaration At: Time/Date _____ / _____ / _____
(central) MM DD YY

7. Emergency Classification criteria: ☐ G1.1 ☐ G1.2 ☐ G2.1 ☐ G3.1
Failed Barriers: ☐ RCS ☐ Containment ☐ Fuel Clad ☐ none ☐ Heat Removal Sys Inadequate

14. Meteorological Data ☒ A Wind Direction (from) _____ ☐ B Speed(mph) _____ ☐ C AT _____

15. Recommended Actions:
☒ Evacuate and control access in down wind zones
☒ A-2 ☐ B-5 ☐ C-5 ☐ D5 ☐ E-5 ☐ F-5 ☐ I-5 ☐ J-5 ☐ K-5
☐ D1 Shelter and control access in down wind zones OR ☐ D2 Evacuate and control access in down wind zones
☐ B-10 ☐ C-10 ☐ D-10 ☐ E-10 ☐ F-10 ☐ G-10 ☐ H-10 ☐ I-10 ☐ J-10 ☐ K-10

AND In all affected areas: Monitor environmental radiation levels, locate and evacuate hot spots and implement control and possible confiscation of food and water supplies and consider evacuation of children and pregnant women.

☐ E Other _____

16. Approved By: _____ Emergency Director
(Name) (Title)

NOTIFICATION AND ACTIVATION

FIGURE 5-2 continued

ALABAMA NOTIFICATION MESSAGE FORM FOR THE FARLEY NUCLEAR POWER PLANT
ORANGE VERBAL NOTIFICATION FORM

1. ☐ This is a Drill ☐ Actual Emergency ☒ Initial

2. Site: Farley Nuclear Plant

3. Confirmation Phone Numbers: (334)899-5156 or (334)794-0800 Ext. _____

5. Emergency Classification: ☒ Site Area Emergency

6. ☒ Emergency Declaration At: _____ Time/Date _____ / ____ / ____
(central) MM DD YY

7. Emergency Classification criteria: ☐ S1.1 ☐ S1.2 ☐ S2.1 ☐ S2.2 ☐ S3.1 ☐ S3.2
☐ S3.3 ☐ S3.4 ☐ S4.1 ☐ S4.2 ☐ S5.1 ☐ S5.2 ☐ S6.1 ☐ S6.2 ☐ S6.3
☐ S7.1 ☐ S7.2 ☐ S7.3 ☐ S8.1 ☐ S8.2
 Failed Barriers: ☐ RCS ☐ Containment ☐ Fuel Clad ☐ none ☐ Heat Removal Sys Inadequate

14. Meteorological Data ☐ A Wind Direction (from) _____ ☐ B Speed(mph) _____ ☐ C ΔT _____

15. Recommended Actions:
☐ A There are no recommended protective actions.
☐ C Evacuate and control access in down wind zones
☐ A-2 ☐ B-5 ☐ C-5 ☐ D-5 ☐ E-5 ☐ F-5 ☐ I-5 ☐ J-5 ☐ K-5
☐ D1 Shelter and control access in down wind zones OR ☐ D2 Evacuate and control access in down wind zones
☐ B-10 ☐ C-10 ☐ D-10 ☐ E-10 ☐ F-10 ☐ G-10 ☐ H-10 ☐ I-10 ☐ J-10 ☐ K-10
AND In all affected areas: Monitor environmental radiation levels, located and evacuate hot spots and implement control and possible confiscation of food and water supplies and consider evacuation of children and pregnant women.
☐ E Other _____

16. Approved By: _____ Emergency Director _____
 (Name) (Title)

NOTIFICATION AND ACTIVATION

FIGURE 5-2 continued

ALABAMA NOTIFICATION MESSAGE FORM FOR THE FARLEY NUCLEAR POWER PLANT
YELLOW VERBAL NOTIFICATION FORM

1. ☒ This is a Drill ☐ Actual Emergency ☒ Initial

2. Site: Farley Nuclear Plant

3. Confirmation Phone Numbers: (334)899-5156 or (334)794-0800 Ext. _____

5. Emergency Classification: ☒ Alert

6. ☒ Emergency Declaration At: Time/Date _____ / _____ / _____
(central) MM DD YY

7. Emergency Classification criteria: ☐ A1.1 ☐ A1.2 ☐ A2.1 ☐ A2.2 ☐ A2.3 ☐ A3.1
☐ A3.2 ☐ A4.1 ☐ A4.2 ☐ A4.3 ☐ A4.4 ☐ A4.5 ☐ A4.6 ☐ A5.1 ☐ A5.2
☐ A5.3 ☐ A5.4 ☐ A5.5 ☐ A6.1 ☐ A6.2 ☐ A6.3 ☐ A7.1 ☐ A7.2 ☐ A7.3
☐ A7.4 ☐ A7.5 ☐ A7.6 ☐ A7.7 ☐ A7.8 ☐ A8.1 ☐ A8.2

Failed Barriers: ☐ RCS ☐ Containment ☐ Fuel Clad ☐ none ☐ Heat Removal Sys Inadequate

14. Meteorological Data ☒ Wind Direction (from) _____ ☐ Speed(mph) _____ ☐ AT _____

15. Recommended Actions:
☒ There are no recommended protective actions.

16. Approved By: _____ Emergency Director
(Name) (Title)

**ALABAMA NOTIFICATION MESSAGE FORM FOR THE FARLEY NUCLEAR POWER PLANT
BLUE UNUSUAL EVENT NOTIFICATION FORM**

1. ☒ A This is a Drill ☐ B Actual Emergency ☒ Initial

2. Site: Farley Nuclear Plant

3. Confirmation Phone Numbers: (334)899-5156 or (334)794-0800 Ext. _____

5. Emergency Classification:
☒ Notification Of Unusual Event

6. ☒ Emergency Declaration At: Time/Date _____ / _____ / _____
(central) MM DD YY

7. Emergency Classification criteria: ☐ N1.1 ☐ N1.2 ☐ N1.3 ☐ N1.4 ☐ N2.1 ☐ N2.2
☐ N2.3 ☐ N3.1 ☐ N3.2 ☐ N3.3 ☐ N4.1 ☐ N4.2 ☐ N4.3 ☐ N4.4 ☐ N4.5
☐ N5.1 ☐ N6.1 ☐ N6.2 ☐ N7.1 ☐ N7.2 ☐ N7.3 ☐ N7.4 ☐ N7.5 ☐ N7.6
☐ N7.7 ☐ N7.8 ☐ N7.9 ☐ N7.10 ☐ N8.1

Failed Barriers: ☐ RCS ☐ Containment ☐ Fuel Clad ☐ none ☐ Heat Removal Sys Inadequate

14. Meteorological Data ☒ A Wind Direction (from) _____ ☐ B Speed(mph) _____ ☐ C AT _____

15. Recommended Actions:
☒ There are no recommended protective actions.

16. Approved By: _____ Emergency Director
(Name) (Title)

NOTIFICATION AND ACTIVATION

FIGURE 5-2 continued

ALABAMA NOTIFICATION MESSAGE FORM FOR THE FARLEY NUCLEAR POWER PLANT
ENTIRE FORM

EMERGENCY NOTIFICATION

1. ☐ This is a Drill ☐ Actual Emergency ☐ Initial ☐ Follow-up* Message Number _____

2. Site: Farley Nuclear Plant Unit: _____ Reported By: _____

3. Transmittal Time/Date: _____ / _____ / _____ Confirmation Phone Numbers: (334)899-5156 or (334)794-0800 Ext. _____
(central) mm dd yy
Telecopy Phone Number: ☐ (205) 257-1155 ☐ (205) 257-1035 ☐ Other
TSC EOF

4. Authentication (if required): N/A (Number) N/A (Codeword)

5. Emergency Classification:
☐ Notification Of Unusual Event ☐ Alert ☐ Site Area Emergency ☐ General Emergency

6. ☐ Emergency Declaration At: ☐ Termination At: Time/Date _____ / _____ / _____ (If B go to item 16)
(central) mm dd yy

7. Emergency Description/Remarks: _____

Problems Include: ☐ RCS Leaking ☐ Containment Leaking ☐ Fuel Damage Indicated ☐ Heat Removal Systems Inadequate ☐ Additional comments on following page

8. Plant Condition: ☐ Improving ☐ Stable ☐ Degrading ☐ RMTs Dispatched ☐ Site Evacuation

9. Reactor Status: ☐ Shutdown Time/Date: _____ / _____ / _____ ☐ _____ % Power
(central) mm dd yy

10. Emergency Releases:
☐ None (go to item 14) ☐ Potential (go to item 14) ☐ Is Occurring ☐ Has Occurred

11. Type of Release ☐ Ground Level ☐ Mixed Mode
☐ Airborne: Started: _____ / _____ / _____ Stopped: _____ / _____ / _____
Time (central) Date Time (central) Date
☐ Liquid: Started: _____ / _____ / _____ Stopped: _____ / _____ / _____
Time (central) Date Time (central) Date

12. Release Magnitude ☐ μ Curie per Sec. ☐ Curies Tech. Specification Limits ☐ Below ☐ Above
☐ Noble Gases ☐ Iodines
☐ Particulates ☐ Other

13. Estimate Of Projected Off Site Dose ☐ New ☐ Unchanged ☐ Estimated Duration: _____ Hrs.
TEDE (mrem) Thyroid CDE (mrem)
Site Boundary ☐ D _____ ☐ E _____
2 miles ☐ F _____ ☐ G _____
5 miles ☐ H _____ ☐ I _____
10 miles ☐ J _____ ☐ K _____

14. Meteorological Data ☐ Wind Direction (from) _____ * ☐ Speed(mph) _____
☐ Stability Class _____ ☐ Precipitation (type) _____

15. Actions:
☐ There are no recommended protective actions.
☐ We would like to discuss recommended protective actions.
☐ Evacuate and control access in down wind zone(s) _____
☐ Shelter and control access in down wind zone(s) _____
AND In all affected areas: Monitor environmental radiation levels, locate and evacuate hot-spots and implement control and possible confiscation of food and water supplies and consider evacuation of children and pregnant women.
☐ Other _____

16. Approved By: _____ Time/Date _____ / _____ / _____
(Name) (Title) (central) mm dd yy

* If items 9 - 13 have not changed, only items 1 - 8 and 14 - 16 are required to be completed

FIGURE 6 SIDE 1

NOTIFICATION AND ACTIVATION

FIGURE 5-3
ABBREVIATED SECURITY NOTIFICATION SAMPLE LANGUAGE

This is (Plant Name) with an abbreviated security emergency notification, this is a (drill/actual event)

SWO will acknowledge and instruct utility communicator to continue

This is (Communicator Name) in the (CR, TSC, EOF). (Plant Name/Unit Number) has declared an (ECL) on (Date) at (Time) due to (description with EAL, if applicable). The utility recommends (no/the following) protective action recommendations for the public: (list PARs).

SWO will acknowledge, allow plant communicator to drop off, and then conduct an all station ring and relay the message to the risk counties and BRC.

EMERGENCY COMMUNICATIONS

I. General

This chapter describes the various communications systems that may be used during a radiological emergency.

II. State Watch Office

The Florida Division of Emergency Management (FDEM) operates a 24-hour emergency communications center at the State Emergency Operations Center (SEOC) called the State Watch Office (SWO). The mission of the SWO is to provide the people of Florida and the FDEM with efficient communications during normal and emergency operations. The SWO also serves as Florida's contact point for communications between local, State and federal governments and emergency response agencies.

The SWO is equipped with multiple communications networks composed of local, State and federal emergency communications systems.

III. Communications Systems

A. Hot Ring Down System

The primary means of 24-hour per day emergency communications between the Florida nuclear power plants, the SWO, the Bureau of Radiation Control (BRC) and the Risk counties is the Hot Ring Down system. This system allows State and local governments to receive emergency notification messages simultaneously.

The system consists of dedicated telephone circuits to communicate with the SWO. This system is monitored 24-hours per day by the SWO, which has the responsibility for network control. The circuits include the SWO, licensee control rooms and Emergency Offsite Facilities (EOFs), Risk county EOCs and the BRC. All stations on each circuit can call all or a selected number of other stations by utilizing a dial-up code.

B. 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 system. The commercial telephone system is the primary notification system for the Farley Plant. This service is also available for communicating with federal emergency response organizations (e.g., the Federal Emergency Management Agency (FEMA) the Nuclear Regulatory Commission (NRC), the United States Coast Guard, and the Federal Aviation Administration). In the event there is a commercial telephone service disruption, the state has access to the Federal National Warning System to communicate with federal emergency response organizations and the Emergency Satellite Communications System and State Warning System to communicate with the county warning points.

C. Emergency Satellite Communications System

The Emergency Satellite Communications System serves as the backup communications system to the Hot Ring Down system and commercial telephone for Florida licensees. The Emergency Satellite Communications System is maintained and operated on a 24-hour basis by the SWO in Tallahassee. Each nuclear power

EMERGENCY COMMUNICATIONS

plant has an Emergency Satellite Communications System located in the control room. Emergency Satellite Communications Systems are also located in each of the 67 county warning points. The Farley Plant does not have the Emergency Satellite Communications System; however they can communicate via commercial satellite phone as a backup to the commercial telephone system.

D. National Warning System

The National Warning System is a dedicated open circuit telephone system linking the SEOC to FEMA's primary and alternate operations centers, federal agencies and other State and local governments.

E. Florida Warning System

The Florida Warning System is a dedicated open circuit telephone system linking the SEOC to each of the 67 county 24-hour warning points.

F. High Frequency Radio Communications System

Telecommunications capabilities of the SWO also include a High Frequency Radio Teletype Network. This system can also be used as a communications back-up.

G. Communications Recorder

The Hot Ring Down system, the Emergency Satellite Communication System, and commercial telephones in the SWO are recorded electronically on a 24-hour basis. This allows for the accurate reconstruction of events following an emergency.

H. Florida Department of Health

The Florida Department of Health (FDOH) utilizes the State Law Enforcement Radio System as the primary form of communication between the Mobile Emergency Radiological Laboratory, radiological field monitoring teams, the emergency operations facility and others. Backup communication systems include satellite telephones/radio systems and cellular telephones.

I. National Oceanic and Atmospheric Administration Weather Radio

The FDEM has an agreement to utilize the very high frequency public weather radio system during an emergency as a means of notifying the citizens in the vicinity of the nuclear power plants in Florida. Any of the fourteen National Oceanic and Atmospheric Administration transmitters may be utilized by the FDEM in the event of an emergency.

J. Amateur Radio

The Radio Amateur Civil Emergency Service and Amateur Radio Emergency Service are viable ancillary communications networks among county agencies and/or between county and State organizations. During an emergency, a pool of Radio Amateur Civil Emergency Service and Amateur Radio Emergency Service volunteers may be utilized by the FDEM, Risk or Host counties.

IV. **Testing**

Testing of communication systems will be conducted on a regularly scheduled basis as shown in Figure 6-1.

EMERGENCY COMMUNICATIONS

**FIGURE 6-1
COMMUNICATIONS SYSTEMS TESTING CHART**

System (Responsible Agency)	Daily *	Weekly	Monthly	Quarterly
Hot Ring Down (SWO)		X		
Commercial Telephone (All)	X			
Emergency Satellite Communications System (SWO)		X		
Local Government Radio Frequency Modulation (applicable counties)	X			
State Warning System (SWO)	X			
National Warning System (DHS/FEMA)	X			
State Law Enforcement Radio System (DOH)	X			
Radio Amateur Civil Emergency Service	X			
Cellular Phone (All parties)	X			
Facsimile (All parties)	X			
Emergency Medical Service Radio Network (Medical services)	X			
DOH Satellite Communications System			X	

*Communications used on a daily basis, testing records are not maintained.