

Turkey Point Units 6 & 7
COL Application
Part 9 — Withheld Information

Part 9

Enclosure 4

**Radiological Emergency Preparedness Plan
Monroe County, Florida**



Monroe County

Florida

**Radiological Emergency
Preparedness**

Plan



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INTRODUCTION

The Turkey Point Nuclear Power Plant is operated by the Florida Power and Light (FPL) Company. It is located on the shore of Biscayne Bay, approximately 25 miles south of the City of Miami, and seven (7) miles north of the Monroe and Miami-Dade County line. Units three (3) and four (4) are twin 760 Megawatt electric nuclear power plants utilizing Westinghouse pressurized water reactors.

In the event of an emergency at the Plant, a risk to the public exists from exposure to radiation that could be released. Exposures may be received from a plume of radioactive gases as they pass overhead, or from contamination deposited on the ground as a result of fallout from the plume.

Emergencies at the Plant can range from minor incidents, which would have little or no impact on the County, to major accidents resulting in the release of radioactive elements and contaminants into the atmosphere and surrounding environment. Modeling data and past experience suggest that even a major accident at an American nuclear power plant would not cause the levels of exposure that resulted from the Chernobyl accident in the former Soviet Union.

Scope

This document will cover the county wide response to a Turkey Point Nuclear Plant accident.

How to use this plan

This plan is to be used as a general guide for the responding agencies; the responding agencies should not limit their responds or mission base on this plan.

Authority and References

Federal

- Nuclear/Radiological Incident Annex, 2004 National Response Plan.
- Federal Emergency Management Agency (FEMA) - Executive Order 12148 outlines FEMA as lead in State, tribal and local emergency planning and preparedness activities with respect to nuclear power facilities.

- Nuclear Regulatory Commission (NRC) - NRC Authorization Acts for 1980 [Public Law (PL) 96-295] and 1982-1983 (PL 97-415) links off-site emergency preparedness and facility licensing. The acts prohibit the NRC from issuing an operating license for a power plant until it determines that plans are in place which provide for reasonable assurance to public health and safety.
- Executive Order of the President, Number 12241, transfers responsibility for review and concurrence of State plans from the NRC to FEMA, establishes planning criteria, assistance priorities, off-site and funding responsibilities.
- NUREG-0654, FEMA-REP-1, Rev.1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants.
- Title 10 of the Code of Federal Regulations (10 CFR 50).
- Atomic Energy Act of 1954, as amended, Public Law 83-703.
- Title 44 of the Code of Federal Regulations (44 CFR 350).

State

- Florida State Statute Chapter 252, Division of Emergency Management.
- The State of Florida Comprehensive Emergency Management Plan-Annex A, The State of Florida Radiological Emergency Management Plan.
- Florida Radiological Protection Act, Florida Nuclear Code and Southern Industrial Nuclear Compact Law, as amended (Chapter 404, Florida Statutes). Governor's Executive Order 80-29, April 14, 1980.
- Southern Mutual Radiological Assistance Plan (SMRAP), Southern States Emergency Response Council.
- State of Florida Bureau of Radiation Control Department of Health - Radiological Emergencies, Standard Operating Procedures.

Local

- Monroe County CEMP establishes the duties of the Monroe County Department of Emergency Management to provide for the effective direction, control, and coordination of Monroe County government, disaster management services, personnel, and to provide collaboration with other governments and the private sector. The MCREP Plan establishes the overall control and management of emergency events resulting from a Turkey Point Nuclear Power Plant accident.

Distribution

Hard copies of this plan can be distributed to any county and/or municipal responding agency, electronic format of this plan via e-mail can only be send as a PDF file.

PROCEDURES SECTION

General Information

Emergency Planning Zones (EPZ)

Emergency Planning Zones are areas where emergency measures to protect the public may become necessary. Two zones have been identified: the Plume Exposure Pathway and the Ingestion Exposure Pathway. These zones extend ten (10) and fifty (50) miles around the plant, respectively.

Areas

The Plume Exposure Pathway encompasses the 10-mile area around the Plant and is divided into 10 evacuation areas. Wind speed and direction will determine the area(s) that could require evacuation if a radioactive release occurs. Areas one (1) through nine (9) are located within Miami-Dade County. Area 10 encompasses Ocean Reef, a private community in upper Key Largo in Monroe County. While the main focus of emergency planning concerns mainland Miami-Dade County, coastal bay areas may also be affected. These include Biscayne Bay, Biscayne National Park, and a portion of John Pennekamp Coral Reef State Park .

Ingestion Exposure Pathway (IEP)

The IEP extends from the Plant outwards to fifty (50) miles in every direction. This pathway is established to account for the effects of a radioactive release and the potential for contamination of water and food sources, including milk, fresh vegetables, fish, and seafood. In general, ingestion exposure represents a long-term problem.

Nuclear Plant Emergency Classifications

There are four (4) classes of emergencies have been established to define emergency conditions at a nuclear plant. This emergency classification system will typically develop sequentially. However, the possibility exists that an accident at the plant could result in the immediate declaration of any of the emergency classes.

1. **Unusual Event**

Unusual events are situations that either are in the process of occurring or have occurred, which indicate a potential degradation of the level of safety of the plant, or indicate a security threat to facility protection has been initiated.

2. **Alert**

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 hostile action.

3. **Site Area Emergency**

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) prevent effective access to, equipment needed for the protection of the public.

4. **General Emergency**

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 hostile action that results in actual loss of physical control of the facility.

Command and Control

Monroe County Emergency Management Department Director and the Monroe County Emergency Management Department Radiological Emergency Preparedness Administrator have primary responsibility for implementing protective actions to reduce risks to the general public. The Monroe County Radiological Emergency Preparedness Administrator or his/her designee will be the Incident Commander (IC). The Director of the Emergency Management Department will be responding from the FP&L EOF location in Miami. The initial response to an emergency at the Plant, with the potential for a radiological release, will be directed from the REP EOC, [REDACTED] Emergency Management Department is the

lead agency for Monroe County's response to a radiological emergency at Turkey Point Nuclear Plant. Activation of the EOC may occur upon notification of any emergency classification of an Alert or higher.

In accordance with F.S. 252.311, paragraph 3, State policy for responding to disasters is to support local emergency response efforts. In the case of a major disaster, however, the needs of residents and communities will likely be greater than local resources. In these situations, the State will provide effective, coordinated, and timely support to the affected communities and the public. The Florida Division of Emergency Management (FDEM) is the lead agency for State response and their response role is outlined in their Radiological Emergency Management Plan. FDEM coordinates State agency response to emergency situations at the Plant. The State Emergency Response Team (SERT) Chief is the designated Deputy State Coordinating Officer and will coordinate and direct all State support assets in the area. The State Coordinating Officer retains overall control of the State's response to the event.

The Emergency Operations Facility (EOF) [REDACTED]

[REDACTED] is activated at the direction of the FPL Recovery Manager upon classification of an Alert or higher. The EOF collects and analyzes plant data in order to establish company policy and provide initial accident assessment information. FPL personnel at the EOF will give protective action recommendations to the risk county and State emergency response organizations.

Monroe County is represented at the EOF by the Emergency Management Director and support staff such as executive staff and Public Information Officers (PIO), who is located at the ENC.

[REDACTED] PIOs from the Miami-Dade Department of Communications, Fire Rescue Department, and Police Department may represent Miami-Dade County at the ENC. Frequent press conferences and press releases allow for complete media coverage of emergency conditions and applicable response actions by authorities.

The Turkey Point Control Room monitors and regulates all internal nuclear reactor functions at Turkey Point. Instruments in the Control Room give early warning of a potential emergency and provide continuous monitoring of emergency situations.

The Technical Support Center located at Turkey Point provides in-depth diagnostic and engineering analysis. Health Physicists collect and analyze release data and develop initial off-site protective action recommendations until the EOF is activated.

In addition to the above-mentioned facilities, field sites will be assembled in support of emergency operations for an accident at Turkey Point, the field sites are:

- Emergency Reception Center (ERC)

The (ERC) will be located at the Key Largo Elementary School. The primary function at this site is the monitoring and decontamination of people. It will also host registration, temporary sheltering facilities, Potassium Iodide (KI) distribution and other emergency services as necessary. The American Red Cross and the M.C. Department of Health is responsible for response activities at this location.

Preparation

Radiological Emergency Response Training and Exercises

Radiological response training is a major component of the MCEM REP Program. The training plan is designed to ensure that first responders and support personnel are familiar with their roles and responsibilities in responding to a Turkey Point Emergency. The MCEM REP is responsible for assuring that appropriate county emergency response personnel are adequately trained in accordance with the training levels and standards. The Monroe County REP responders participate in annual, non-graded exercises and drills, in conjunction with the Miami-Dade Emergency Management, Florida Power and Light, and the State Division of Emergency Management. Training in preparation for graded, and non-graded, exercises is provided accordingly. After action meetings are conducted and improvements are implemented based on participants, observers, and evaluators feedback. Training emphasis will be placed on areas which indicate weakness in knowledge, and/or performance. Appropriate corrective actions will be implemented via class room and hands on knowledge based training. Communications capabilities are being tested during each exercise to ensure compatibility. Monroe County communication systems are being tested quarterly by the Monroe County Communications Department and in conjunction with the Florida Division of Emergency Management and Florida Power and Light.

Updates of Plans and Letters of Agreement

The Turkey Point Plan is updated annually and delivered to all participating and concerned agencies by March. Updates to the plan included telephone numbers and KI distribution procedures.

Turkey Point Siren

The 10 mile EPZ is encompassed by an extensive siren warning system, each siren has a radius of coverage that is graphically represented by a map.

The purpose of the sirens is to alert residents that an emergency exists at the Plant. Emergency information will not be disseminated over the siren system. Residents must tune to a local television or radio station for emergency information. The Turkey Point warning sirens are tested on the first Friday of every quarter: March – June – September – December

Medical Services (MS1) Drill

The MS1 drill is conducted mid-year and is alternated between Baptist Hospital and Mercy Hospital in conjunction with the Turkey Point and Miami-Dade Fire Rescue Mutual Aid Drill. Mariners Hospital is an activate drill participant.

Turkey Point Exercise

The Turkey Point Nuclear Exercise involves an emergency at the plant and the response of FPL and Miami-Dade County departments and agencies to a radiological release. For this exercise the EOC, EOF and the Turkey Point Technical Support Center are activated. Working together these groups demonstrate various aspects of the plan including, but not limited to, evacuation, notification, public protection measures, communications, and emergency services.

Public Education and Information

To inform the growing population of the 10 miles EPZ, about the Turkey Point Nuclear Plant, FPL and the MCEM updates and distributes a "Safety Planning for Neighbors of FPL's Turkey Point Nuclear Plant" booklet.

Emergency Facilities and Equipment/Sufficient Staffing

Operational checks are performed on radiological response equipment during the calendar year as required in accordance with NUREG-0654 and/or Miami-Dade County procedures.

Alert and notification

All classifiable emergencies at Turkey Point require alert and notification of State and local authorities by FPL. The Florida Nuclear Plant Emergency Notification Form establishes the content of notification messages. Within 15 minutes of categorizing a Plant emergency into one (1) of the four (4) recognized emergency classifications, Turkey Point's Emergency Coordinator or designee will notify the State Warning Point (SWP) in Tallahassee. The SWP is responsible for receiving notification of an emergency, verifying information contained in the notification message, and alerting local Offices of Emergency Management (OEMs) or designated Public Safety Answering Points (PSAPs) and federal emergency response agencies. In turn, affected OEMs or PSAPs will notify local response organizations. If appropriate, emergency response personnel will be called to duty using the alert and notification call-down system of the corresponding agency.

[REDACTED]

[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

Communications

Reliable communications between the Turkey Point Nuclear Power Plant and off-site government agencies is essential. There are three (3) separate communication systems that may be used. [REDACTED]

[REDACTED]

[REDACTED]

Response

Deployment of Response Forces

Monroe County response resources may be deployed as early as the declaration of an Alert. Due to the size of the required response, a field deployment is expected to require more personnel than County Departments generally have on-duty. At the direction of the IC, County Departments will recall or reassign those resources necessary to accomplish the Department's emergency responsibilities as contained in this plan and applicable SOPs. In order to expedite or facilitate the County's response to a Plant emergency, the County Mayor may declare a Local State of Emergency at the declaration of an Alert. Personnel and equipment costs for incidents that do not receive a disaster declaration will be forwarded to Florida Power and Light and/or American Nuclear Insurers for reimbursement. Additionally, for incidents in which a disaster declaration is received, costs would be documented and submitted to the Federal Emergency Management Agency (FEMA) for reimbursement. Personnel and equipment costs must be documented in accordance with Monroe County procedures and forwarded to MCEM for compilation and submission to FPL.

Alert and Notification of the Public

FPL has installed emergency warning sirens throughout the 10-mile Emergency Planning Zone. The system is made up of 47 pole-mounted sirens. Each siren rotates while delivering a wailing sound at approximately 70 decibels.

The siren system activation will occur in a timely manner (preferably within 15 minutes) of the decision to implement public protective actions. Ocean Reef Community would implement their "route alerting" and notification procedures (SOP1100), the the Ocean Reef Community does not utilize sirens.

NOAA Weather Radio – EAS (NWR-EAS) receivers are located in key locations, such as hospitals, schools, government offices and nursing homes throughout the 10-mile EPZ. The system is activated by request from the MCEM to the National Weather Service.

Highway Advisory Radios can be used to alert and notify motorists that an emergency exists at the Plant. The radio signal is limited to a distance of less than ten (10) miles and relies on repetitive recorded messages which listeners can tune-in on their car

radios. Pre-recorded messages will direct motorists to tune to a local radio station for

emergency information. Two systems exist within the 10-mile EPZ. The Florida Turnpike Authority operates one and the Department of Transportation operates the other.

Boaters in the waters within the 10-mile EPZ will be notified of emergencies by loudspeakers from boats and aircraft operated by the following ESF-16 support agencies:

- United States Coast Guard
- Florida Fish & Wildlife Conservation Commission
- Monroe County Sheriff's Office

Boaters would be advised to tune to VHF channel 16 for emergency information.

Public Information (ESF-14)

Two (2) types of public information are addressed in this plan. The first is emergency information. It is released from the EOC via ESF-14 and is intended to inform the public about protective actions that are to be implemented. Emergency information will take the form of Emergency Alert System (EAS) messages. Copies of EAS Messages are on file at the MCEM REP desk in a binder entitled Turkey Point EAS.

Emergency information is time sensitive. Once it becomes evident that public protective action is needed, ESF-14 will transmit copies of applicable EAS messages to the national weather services and the media in a timely manner (preferably within 15 minutes) of the decision on what protective action is most appropriate. Once initial protective measures have been implemented, all subsequent EAS messages will contain a protective action component. In other words, if an EAS message instructs the public to evacuate area 10 all subsequent EAS messages will repeat the protective measure (evacuate area 10) until such time that the protective measure is no longer necessary or is superseded by another protective action. This will ensure that the public receives clear and consistent emergency information.

The second type of information addressed in this plan is general information. It is released from the Florida Power & Light Emergency News Center (ENC) and is designed to describe the nature of the accident and the actions being undertaken to mitigate or correct the emergency. It may include updated information designed to dispel rumors, describe the extent of the emergency or quell public concerns. It may also include ancillary information that supports, expands, or clarifies the required protective actions.

Agencies issuing press releases will coordinate their release with ESF-14 in order to assure that the public receives a consistent, accurate message. An example of an inconsistent message would be something like the EOC issuing a press release reassuring the public that the accident is not significant, while another agency is telling the public that facilities or services within the area of concern are being closed or curtailed due to the incident.

Both emergency information and general information will be available to the public via the Monroe County's TV Ch. 76; Emergency Information Hotline and the County website at www.monroecounty-fl.gov.

The Monroe County Public Information Officer communicates updates with all mainstream media regarding radiological emergency events and communicates with the Monroe County REP in this capacity. The County REP Plan is posted for public view on the County website and media is directed to that link for additional information.

Protective Actions

- Accident Assessment

Control Room personnel at the Turkey Point Nuclear Plant are responsible for conducting a technical assessment of the Plant's condition and for taking steps to correct or minimize the effects of the emergency. They will communicate initial accident assessment data and recommended protective action, if applicable, to County and State Offices of Emergency Management. As resources are deployed for the incident, the Florida Bureau of Radiation Control (BRC), FPL and federal agencies will use modeling data, plant conditions and field team information to conduct the technical assessment of the Plant's situation and make protective action recommendations to the Monroe IC at the EOF.

- Protective Action Decision Making

Protective Action Guides have been developed by the Bureau of Radiation Control and are consistent with federal guidelines. Department of Health personnel will use EPA Protective Action Guide Manual 400-R-92-001 as a guide for recommending protective actions. Protective action options include:

- Evacuation
- In-place sheltering
- Early dismissal of childcare facilities and other special facilities
- Restricting access into affected areas
- Preventing the consumption and distribution of food and water

The principal exposure source within the plume includes whole body exposure to gamma radiation from radioactive gas, and possibly radioactive particles. In place sheltering and/or evacuation, and controlled access would be the principal protective actions (SOP 1800).

FPL will provide recommendations for protective actions to the MCEM. The EOC can choose to accept such recommendations or implement more stringent protective actions. The information provided is based on sectors originating from the plant. These sectors are converted to geographic areas by the EOC and are reviewed for response implementation.

Evacuation

Time permitting; the decision to implement recommendations will be made jointly at the EOF by the Monroe County IC and the Miami-Dade IC and presented to the Board of County Commissioners, the Governor, or any of their authorized representatives. In instances where State involvement in initial decision-making is not possible, the decision to take protective actions for Monroe County will be made by the Monroe County Mayor, MCEM Director or the Monroe IC. Evacuation of one (1) or more evacuation areas is the preferred method of protecting the residents of the 10-mile EPZ from radiation exposure. Evacuation orders will be implemented after consultation between the REP Emergency Operations Center and the Emergency Operations Facility on the evacuation implications (timing, traffic control, special needs, etc.).

Access control would be done by ESF-16 through the use of roadblocks and barricades at strategic points in the 10-mile Emergency Planning Zone (SOP 400). Residents and transients would be directed away from the restricted areas. Access control will primarily be enacted in conjunction with evacuations or pending evacuations, but may become necessary for other reasons. Evacuated areas will remain inaccessible to the general public until such time that sampling proves that it is safe to return into the area.

Evacuees will not be stopped along evacuation routes to check for contamination because massive traffic congestion would preclude the prompt and safe evacuation of the area. Shelter-in-Place may be ordered in place of actual, physical evacuation.

Emergency evacuation bus pick-up points have been established in key areas throughout the EPZ. MDT has the primary responsibility for assisting with the evacuation of the general public who may require transportation assistance. In the event of traffic impediment during evacuations, the Monroe County Sheriff's Office and the Florida Highway Patrol will be monitoring the activities of Road Rangers assistance and identified local towing companies to ensure timely traffic clearance.

Sheltering-In-Place

In-place sheltering protects individuals from becoming contaminated with radioactive material emanating from a release at the Plant. Individuals will be instructed to seek shelter inside buildings or homes, close all doors, windows or other external openings in the structure, and remain inside until otherwise instructed by the authorities. In most instances, air conditioning shut-off would not be necessary. EAS messages and press releases will contain specific guidance on appropriate protective measures. In-place sheltering would typically be done for areas that are not directly downwind from the Plant. In-place sheltering may be considered a primary protective action strategy when it is safer for the public not to evacuate. This would be the case in the following scenarios: a rapidly developing accident, when there are impediments to evacuation, or a brief release above PAG exposure levels.

Sampling

Once a release has occurred, BRC teams will take samples from exposed agriculture and water sites. Maps for recording survey and monitoring data, key land use data, dairies, food processing plants, water sheds, water supply intake and treatment plants and reservoirs will be maintained by the Florida Division of Emergency Management (FDEM).

Certain procedures can be instituted to protect food items. These include, but are not limited to:

- Quarantine of potentially contaminated milk
- Cut-off of contaminated water supplies
- Washing of all harvested produce

Additional guidance from the BRC and the Florida Department of Agriculture should be obtained prior to the implementation of the above measures to assure their adequacy under the existing conditions.

Responder Safety

All responders going into the radiation hazard area will be issued appropriate protective gear. This includes the following:

- CD V-742 High range dosimeter with a range between 0 and 200 roentgen (rem)
- CD V-138\139 Low range dosimeter with a range between 0 and 200 milliroentgen (mR)
- Film badge

- Pistol Grip Dosimeter charger (one dosimeter charger will be issued for every five low range dosimeters issued)
- Incident Radiation Exposure Record card (one card for every dosimeter issued)
- Potassium Iodide (KI) Instruction card
- Potassium Iodide (KI)
- Surgeon's mask / Respirators
- Latex gloves
- Eye protection

Responders going into radiation hazard areas and/or personnel conducting specific functions such as monitoring and decontamination will be required to wear a level of protection that amply allows for safe operations, following HAZMAT policies and procedure.

First responders have strict exposure limits that will be closely observed. Each organization will assign a safety officer who will be responsible for monitoring responder exposure limits and adjusting assignments as necessary to keep individual exposures within the authorized exposure limit.

The following exposure limits apply to a Turkey Point response:

- Initial exposure limit is established at 100 mR. Authorization from the IC must be given to exceed this exposure limit. It is referred to as the Callback Value since the individual exposed is directed to call back to the section supervisor upon approximating this value.
- The Turnback Value is established at 500 mR. First responders are directed to turn back from their mission upon approximating this exposure limit unless they are involved in a life-saving activity.
- The Lifesaving limit is established at 25 rem. A responder will be authorized to receive this level of exposure only when involved in a lifesaving situation.

The IC or designee is authorized to increase emergency responder exposure limits in excess of 500 mR after consultation with the Department of Health Operations Officer. Approved doses will be limited to levels specified in Table 2-1 of Florida Bureau of Radiation Control SOP 2.

Whole body exposure limits for emergency workers will not exceed 25 rem projected dose unless it is on a voluntary basis and the worker is aware of the risks involved. While working in a radiation area, personnel will monitor their dosimeter every 30 minutes and record their exposure.

First responders entering the radiation hazard area will be monitored and, if necessary, decontaminated upon completion of their mission.

Emergency Worker Equipment

Contaminated tools and equipment must be thoroughly washed. If equipment is determined to still be contaminated after a thorough cleaning, it must be clearly marked as "Radioactive Material" and disposed of as radioactive waste by the BRC. Equipment that is determined to be twice background or greater will be considered contaminated.

Water used for decontamination will be redirected into collection ditches, holding ponds, or other secure areas whenever possible. The area will be monitored for residual contamination after the event has been terminated. If contamination is found, the area will remain sealed off under the control of the Department of Health.

The following are general recommended guidelines for controlling or limiting contaminated water runoff:

Trenches can be dug to direct the flow of water away from emergency workers and victims. Simple dikes can be built to contain the runoff. Plastic barriers can be used to prevent water from seeping into the earth. Contaminants will naturally be filtered out by the layers of earth and are expected to remain near the surface. Where practicable, runoff will be kept from entering closed bodies of water such as lakes and ponds. Closed water sources suspected of having become contaminated will be sampled for residual radiation levels and processed as necessary to bring it within acceptable EPA limits. Drainage systems such as storm drains are much more difficult to control for runoff. However, contaminants are expected to dilute to the point where residual radiation will be within the acceptable limits as set forth by the EPA.

Potassium Iodide

Potassium iodine (KI) may be used to saturate the thyroid gland with stable iodine. This saturation with non-radioactive (stable) iodine serves to limit the uptake of radioactive iodine to the thyroid. The medication provides protection solely to the thyroid from one substance, radioactive iodine. It is not protective against radiation and will not limit the radiation exposure of other body organs. It offers no protection against exposure of the body, including the thyroid, to radiation originating outside the body.

KI may be issued to emergency workers and those who are deemed difficult to move when authorized by the Monroe IC upon the recommendation of the BRC and County Health Officials. If the decision is made to administer KI, the drug should be given before, or as soon as possible after, an incident resulting in a release of radioactive iodine with a projected dose to the thyroid gland greater than 5 rem.

Decisions to administer KI to the general public is made by the State Health Officer and is detailed in Florida Department of Health, Bureau of Radiation Control.

KI will be administered by the County Health Department to evacuees in accordance with established protocols at the Emergency Reception Center. (Refer to Monroe County Health Department - Protocol for Potassium Iodide Distribution – SOP 1500).

People who are allergic to iodine will not be issued KI.

Emergency Services

The ERC is designed to provide health and safety assistance to the evacuating public.

- The MCFR in support of ESF-8 (Health and Medical) will set up monitoring and decontamination stations. Evacuees who are contaminated will undergo gross decontamination. Contaminated clothing will be placed in suitable containers for later disposition under the direction of the County Health Department and the Florida BRC. Radiation readings above twice background will be considered grounds for decontamination. Refer to the following SOPs:
- Every effort will be made to register and account for individual family members receiving emergency services so that loved ones can be located. The American Red Cross (ARC) will manage a Disaster Information System designed to expedite family reunification. Information will be obtained from evacuees as they are processed through the ERC. Registration consists of obtaining name, address, telephone number and destination of evacuees. The data will be tabulated and copies will be submitted to the County EOC. The ARC will use this information to assist them in reunification of family members¹.
- FPL Risk Management and American Nuclear Insurers will provide financial assistance for temporary living expenses including shelter, food, clothing, etc. to residents forced to evacuate for a Turkey Point emergency. Individuals seeking financial assistance will have to demonstrate that they have been directly impacted by the emergency actions implemented. Initially, this can be done with a driver's license or other document reflecting that the individual resided within the affected area. FPL Risk Management will not provide assistance to individuals who choose to evacuate or take other actions beyond those directed by County authorities. Risk Management and American Nuclear Insurers will deploy personnel to multiple locations where affected persons can request assistance. The EOC will establish

¹ Due to the need to maintain the radiological integrity of the ERC, everyone going to this site will be monitored, and if necessary, decontaminated. In order to avoid needless monitoring and decontamination, physical reunifications will be accomplished at a site separate from the ERC.

communications with Risk Management and assist in the selection and coordination of appropriate assistance sites.

- Individuals requiring treatment for injuries not radiological in nature will be transported to hospitals in accordance with standard MCFR operating procedures. Mariners Hospital in Monroe County has the equipment and staff necessary to decontaminate and treat persons who are injured and contaminated with radioactive material, if necessary.
- Evacuees will be directed to temporary evacuation centers staffed by the American Red Cross (ARC) after receiving an initial screening and other necessary emergency services at the Emergency Reception Center. If it becomes necessary to provide shelter for an extended period of time, FPL, and the ARC will determine the feasibility of relocating evacuees to area hotels and motels.
- Coordinating the delivery of medical and health services to victims of radiological emergencies is the responsibility of the Department of Health. Local Department of Health and other public health clinics will be utilized for general health care of evacuees. Additional medical personnel will be assigned to these facilities through coordination with the Florida Department of Health.

Special Considerations

There are several groups of people and/or facilities that require specialized attention during an emergency at the Plant (within the 50-mile Ingestion Pathway radius only).

Special Needs (ESF-18)

Monroe County Social Services Department and the Monroe County Department of Health maintain a list of people needing evacuation assistance. Ambulances, buses, and wheelchair-equipped vans will be dispatched to provide transportation to the ERC or other appropriate facility.

Public Schools

If an evacuation is ordered during school hours the schools administration will dispatch school buses to pick up students and transport them outside the affected area. Families will be advised and press releases will be issued to inform families of such transport and their pick-up destination.

Residential Healthcare Facilities

Monroe County does not have such facilities within the 10-mile EPZ. However, the below would be applicable in the 50-mile Ingestion Pathway scenario.

Residential Health Care Facilities (hospitals, nursing homes, adult living facilities, intermediate care facilities, ambulatory surgical centers and adult day care) are required to have mutual aid agreements with a similar facility in the event they are required to evacuate. In case of an emergency at the Plant, Residential Healthcare Facilities within the 50-mile Ingestion Pathway will be notified by the Agency for Health Care Administration (ACHA) so they can begin preparations. Whenever possible, medical facilities will be allowed to practice in-place sheltering to prevent unnecessary trauma to patients. In cases where the incident is severe or will be extended over a long period of time, medical facilities will be required to evacuate. If necessary, Miami-Dade County Transit Authority buses, as well as ambulances, can be dispatched to complete evacuation of these facilities.

Coastal Waters

The MCEM is the lead agency for coordinating boater evacuation. The Coast Guard is responsible for coordinating the implementation of any marine safety or security zones necessary in an emergency at the Plant. The United States Coast Guard (USCG) will coordinate missions with Florida Fish and Wildlife and the Monroe County Sheriff's Office. Coast Guard Sector Miami will broadcast emergency Alert messages on Marine Channel 16 as necessary. Additionally, as available, helicopters with public address capability will sweep the area and advise vessels to clear the area and/or monitor maritime safety broadcasts for further information.

State and Federal Assistance

An emergency at the Plant may be of such significance that local resources may be insufficient to manage the situation. If the County's IC determines that State or Federal resources are needed, he will declare a local State of Emergency and formally request State/federal assistance. Requests for assistance will be made through the FDEM or the State Emergency Response Team (SERT) who will draft an Executive Order recommending that the Governor also declare a State of Emergency.

If the State Coordinating Officer (SCO) or the Governor concurs with the need for assistance as requested, s/he will activate or request assistance from one or more of the following sources:

- State agencies
- Other States with membership in the Southern Mutual Radiological Assistance Plan
- Federal agencies

When an emergency occurs at the Turkey Point Nuclear Power Plant that threatens public safety, the federal government will activate the Federal Radiological Monitoring and Assistance Plan (FRMAP). When activated, the plan calls for several federal agencies to respond to the involved nuclear plant and be prepared to assist State and local governments.

Activation of FRMAP will occur when the Department of Energy (DOE) has been notified that a radiological emergency has occurred and that an authorized person has requested federal assistance. Authorized persons are the BRC Operations Officer, for radiological monitoring and laboratory assistance, and the State Coordinating Officer in the State EOC.

The following personnel and equipment resources are available and will be provided on request:

- Radiological monitoring and environmental specialists with supporting equipment
- Aerial radiological monitoring equipment
- Fixed and mobile laboratory support
- Remote handling equipment
- Technical assistance in predicting the dispersion of radioactivity into the environment
- Medical consultation on the treatment of injuries complicated by radioactive contamination
- Technical support for emergency public information
- Department of Energy, Savannah River Operations will provide personnel and equipment to ensure liaison, coordination and communications among FRMAP agencies and appropriate State/local officials at the scene.

Recovery

Plume Footprint

One of the first functions to be accomplished after a radiological release is to replace model-based data used to project initial protective actions with actual monitoring results. The quickest and most efficient mechanism for obtaining an estimate of the release deposition is through the use of the Department of Energy's (DOE) Aerial Measuring System (AMS). AMS consists of fixed and rotary wing aircraft with radiological monitoring capability that can be deployed to conduct surveys of the affected area. AMS is only one component of the Federal Radiological Monitoring and Assessment Center (FRMAC) that is available through the Department of Homeland Security (DHS).

The State or County will request FRMAC by calling DHS as the lead federal agency (LFA) or by calling DOE directly. The County EOC will work closely with the LFA/DOE to coordinate the logistics of arriving federal support. A FRMAC Advance Party will also be deployed and will meet with the LFA, State and County to establish the initial FRMAC monitoring and sampling plan.

The FRMAC will gather radiological data to:

- Make plume and deposition predictions
- Determine air and ground concentrations
- Determine deposition patterns of isotopic concentrations, exposure rates and dose projections
- Assess isotopic concentrations in environmental and foodstuff samples

Once deployment authorization from DHS is received, AMS has a local arrival time of approximately eight (8) hours. Each aerial mission is expected to take from two (2) – three (3) hours and an additional one (1) – three (3) hours is needed to compile the results for distribution. Assessment data and associated recommendations will be forwarded to the State and County Emergency Management agencies via the FRMAC or LFA. In an effort to maximize interagency cooperation, Miami-Dade will request a FRMAC liaison be assigned to ESF-5 (Planning & Intelligence) in the EOC.

Public Protective Action Adjustment

Initial AMS flights will provide rapid, rough, residual fallout patterns and intensity of contamination deposited after the passage of the plume. Detailed radiological surveys will be performed by both aerial and grounds based survey teams to measure and map the extent of the deposition, determine exposure rates, and identify specific radionuclide and their intensities. Sufficient information regarding the need for additional protective action or reduction of any existing restrictions will become available as a result of these more detailed surveys. Areas will be opened for re-entry only when clearly definable boundaries are available (e.g. highways, streets, canals, etc.). The MC EOC, Florida BRC and FRMAC will cooperatively prepare and maintain maps identifying areas that have been and will require screening.

The MCDOH will also maintain exposure records for all Monroe County personnel involved in screening or sample collection activities.

Sampling priorities will be based on actual conditions. The IC will develop sampling priorities in coordination with FDEM and the LFA. In general, sampling priorities are:

1. Determining a rough contamination footprint
2. Non-evacuated areas where people are living that are near and/or downwind of the contamination footprint
3. Evacuated critical facilities that are not in the contamination footprint
4. Evacuated areas where people live that are not in the contamination footprint
5. Drinking water and/or open-air water treatment facilities within or near the affected areas

Advisory Team on Environment, Food & Health

Federal protective action recommendations by the LFA will be based on advice from the Advisory Team on Environment, Food and Health, and will take into consideration United States Department of Agriculture, EPA and Health and Human Services guidance. The Advisory Team will not release information or make recommendations to the public unless authorized to do so by the LFA. Ultimately, the Advisory Team will co-locate with the FRMAC.

Medical Support for Radiological Emergencies

Mariners Hospital in Tavernier is equipped to provide medical care to people with radiological injuries or exposures. In the event that additional medical support is needed, request will be made for activation of the Radiation Emergency Assistance Center/Training Site (REAC/TS) and/or the Southern Mutual Radiological Assistance Plan. Requests for activation of these support mechanisms will be made to the LFA for REAC/TS and the FDEM for SMRAP.

REAC/TS maintains a radiological emergency response team in Oak Ridge, TN, consisting of physicians, nurses, health physicists, coordinators, and necessary support personnel that are on twenty-four (24) hour call to provide consultative or direct medical and radiological assistance.

Security of Hazard Areas

Any hot spots identified by survey teams will be marked off and secured by local and State law enforcement personnel. The Florida Department of Agriculture and Consumer Services will restrict the transportation of agricultural products until the Governor's Advisory Committee concurs that the area's products are safe.

As areas are opened for re-entry, roadblocks and other means for restricting access to that area will be relocated. ESF-16 agencies will coordinate and assist the return of evacuees into clear areas.

Equipment and Supplies

Monroe County uses CDV-771-1 kits for radiological monitoring. These kits are located on fire apparatus and at the Tavernier Fire Station. MCEM REP maintains an inventory of radiological monitoring equipment. Emergency equipment and supplies will be distributed to field command posts for issuance to field personnel at the direction of the Monroe IC.

MCEM inventories and inspects communications equipment quarterly, and radiological monitoring equipment at least annually, or after each exercise to ensure that they are operational. Local operability checks are performed on all field-assigned monitoring equipment regularly and after each use by MCFR.

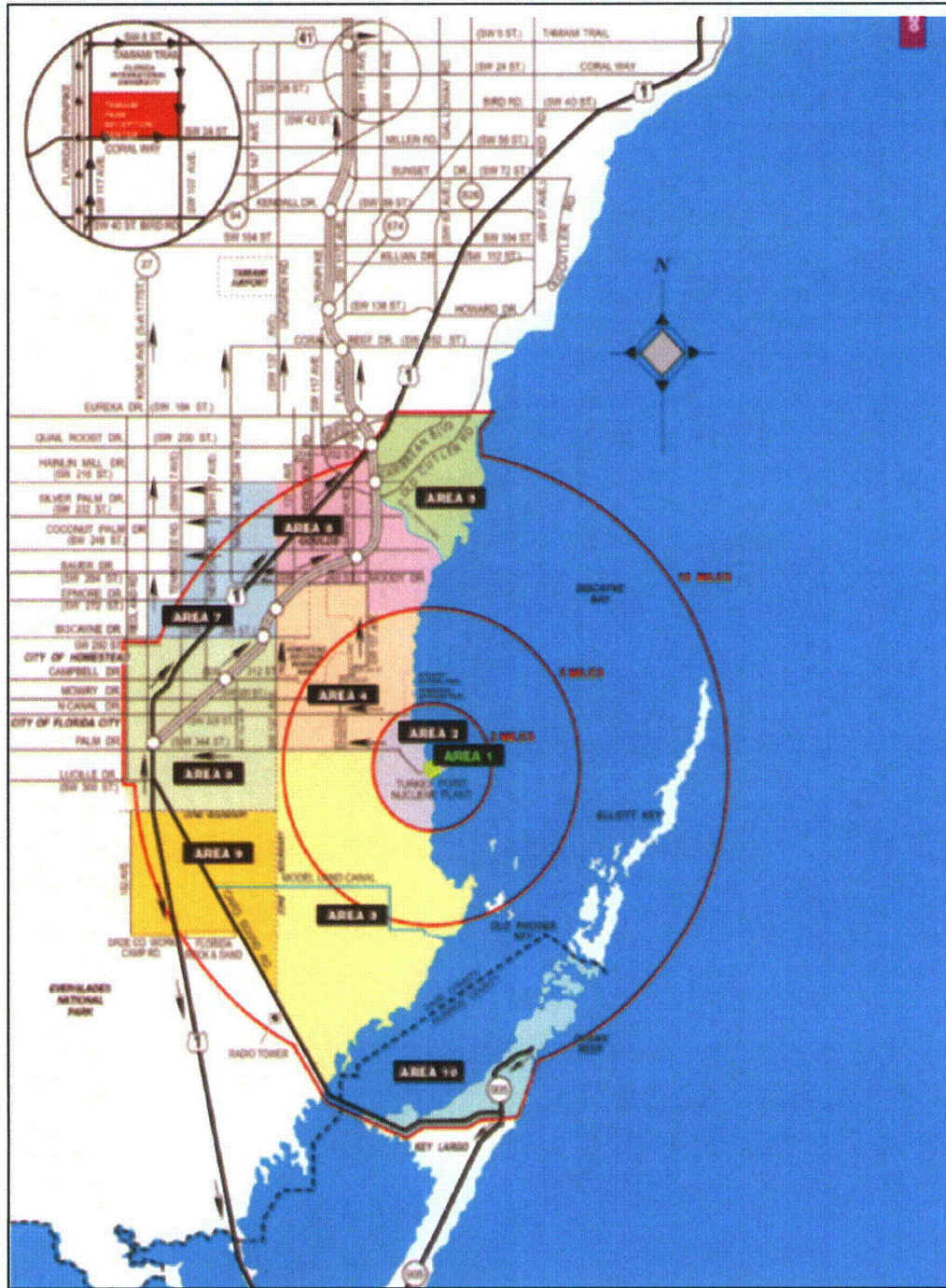
The Bureau of Radiation Control, Radiological Maintenance and Calibration Facility will exchange defective radiological monitoring instruments. Calibration of the instruments

is in accordance with intervals recommended by the supplier and/or Bureau of Radiation Control Calibration lab.

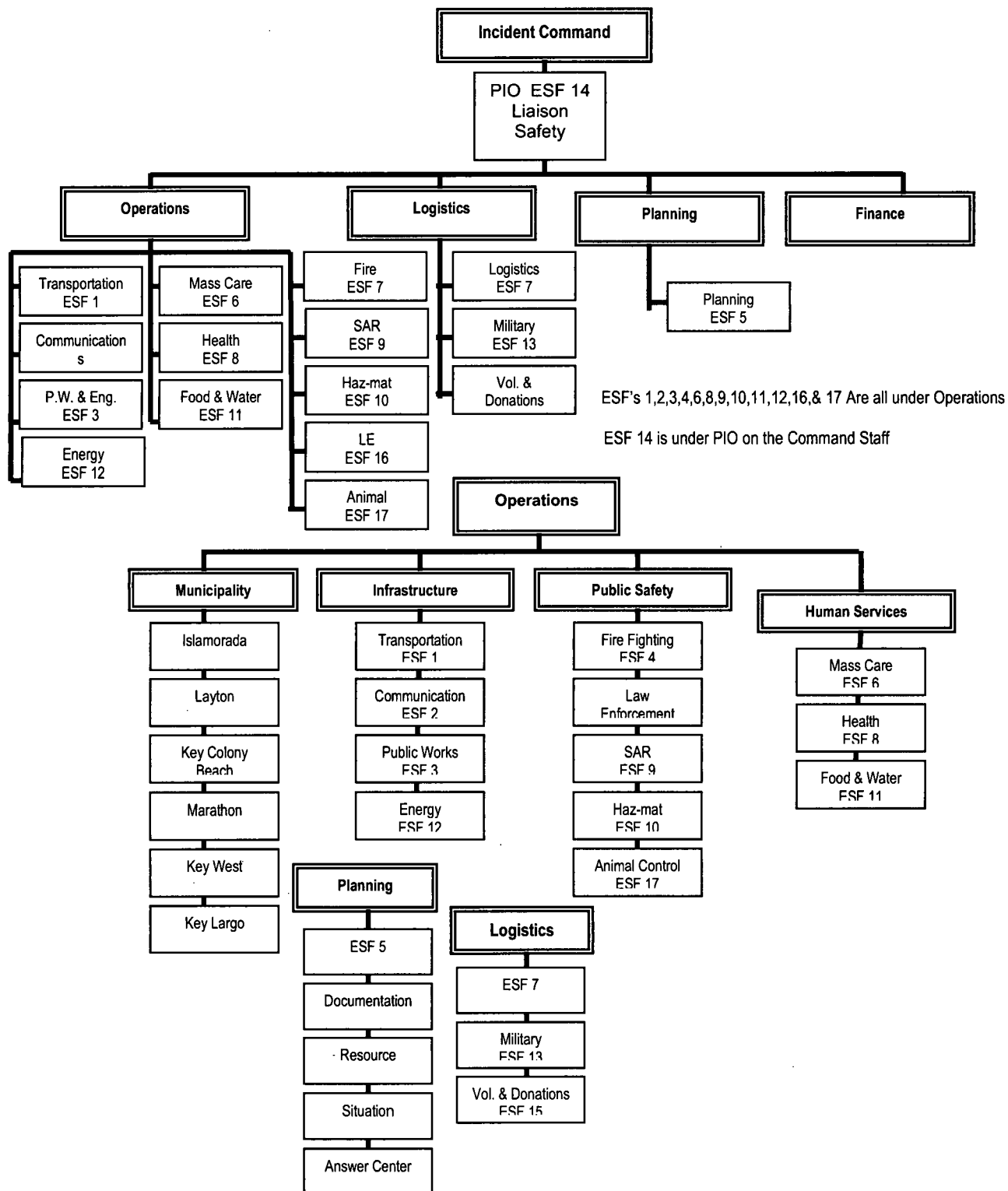
Supplementary dosimetry, survey meters, and TLD can be requested from the Bureau of Radiation Control, other host and risk counties, and the NRC. Portal monitors can also be requested from these same sources and from nuclear plants.

APPENDIX

Appendix "A": Emergency Planning Zone



Appendix “B”: Monroe County EOC Table of Organization



Appendix "C": Containment Building

