

# CATEGORY 1

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SUBJECT: Forwards revised 0-EPIP-20112, "Communications Network."  
           Revision updates titles & references & provides  
           clarification on coverage of sys, routing of lines & use of  
           equipment.

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APR 20 1998

L-98-098  
10 CFR 50.54(q)  
10 CFR 50 Appendix E

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

Re: Turkey Point Units 3 and 4  
Docket Nos. 50-250 and 50-251  
Emergency Plan Implementing Procedure Changes

Emergency Plan Implementing Procedure 0-EPIP-20112, "Communications Network," has been revised to update titles and references, and to provide clarification on coverage of systems, routing of lines, and use of equipment.

Pursuant to the requirements of 10 CFR 50.54(q) and 10 CFR 50 Appendix E, one copy of the revised procedure is enclosed. A summary of changes to the procedure is attached. The implementation date for these procedure changes was March 27, 1998. FPL has determined that the changes described do not result in a decrease in the effectiveness of the Emergency Plan.

Very truly yours,

R. J. Hovey  
Vice President  
Turkey Point Plant

CLM

Attachment, enclosure

cc: Regional Administrator, Region II, USNRC (2 copies)  
Senior Resident Inspector, USNRC, Turkey Point Plant (w/o enclosure)

9804240260 980420  
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5045'

The subject Emergency Plan Implementing Procedure has been revised. Changes to the procedure include the following:

Deleted reference to HF-ALE as a backup communication system. Satellite communications are now used in lieu of the HF-ALE (ref: L-97-113).

NAWAS references have been removed and replaced with ESATCOM, including instructions on how to reset the ESATCOM system.

Added reference to the portable MagnaPhone Satellite System.

Provided clarification on coverage areas and access of the FPL and commercial paging systems.

Provided clarification on the routing of communication lines which provide service to emergency notification equipment.

Provided clarification on the UHF/VHF channel designations and use of the equipment.

Clarified the description and use of the handheld radio system.

Clarified the use of portable cellular phones.

Clarified instructions for dialing long distance numbers

Department of Health and Rehabilitative Services (DHRS) references have been changed to Department of Health - Bureau of Radiation Control (DOH-BRC).

Replaced reference to plant switchboard with automated attendant.

Replaced Southern Bell references with Bell South.

Deleted reference to making a long distance personal call during normal working hours (involving the use of a manual switchboard operator).

Deleted outdated statement concerning the replacement of old ENS and HPN circuits.

Removed reference to a backup cellular telephone set in the Vice President's Office.

Deleted references to OCL and MCL in the TSC (these circuits have been removed by the NRC).

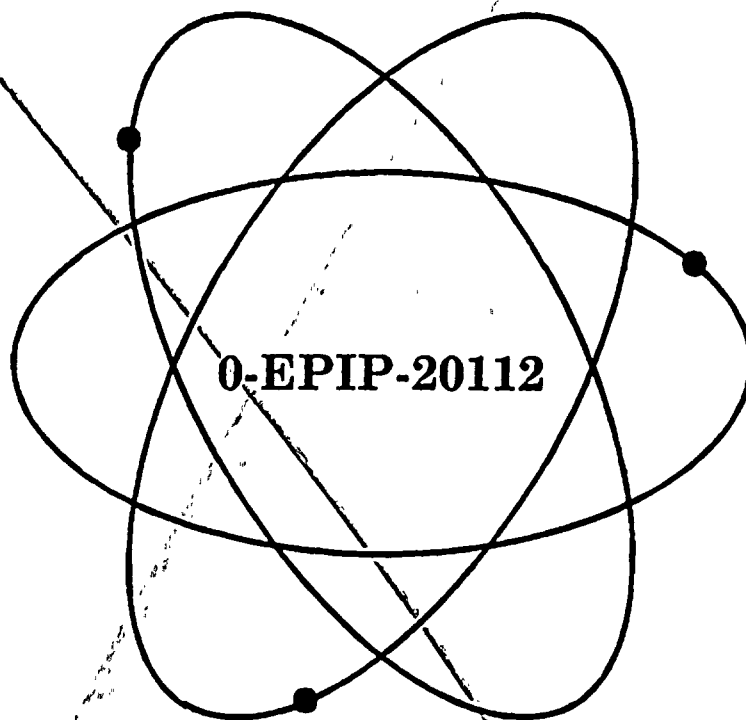


50-250

# Florida Power & Light Company

## Turkey Point Nuclear Plant

This procedure may be affected by an O.T.S.C. (On The Spot Change) verify information prior to use.  
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0-EPIP-20112

Title:

## Communications Network

### Safety Related Procedure

Responsible Department:	Emergency Preparedness
Reviewed by PNSC:	94-129
Approved by Plant General Manager:	6/30/94
Periodic Review Due:	1/6/96
Implementation Date:	7/1/94

RTSs 92-1132P, 93-0447, 93-0746, 93-1461, 94-0773P

PCIM 92-004, 92-124



**LIST OF EFFECTIVE PAGES**

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## 1.0 PURPOSE

- 1.1 This procedure provides descriptive information on the various modes of communication available at the Turkey Point Plant as required by the Turkey Point Radiological Emergency Plan, and provides instructions for their use.
- 1.2 This procedure describes the communications network available for use at the Turkey Point Plant in emergency conditions.
- 1.3 Instructions are also included on the use of alternate communications systems when part of the network has been affected by the emergency and is not operable.

## 2.0 REFERENCES/RECORDS REQUIRED/COMMITMENT DOCUMENTS

### 2.1 References

#### 2.1.1 Final Safety Analysis Report

- 1. FSAR, Section 7.7, Operating Control Stations

#### 2.1.2 Plant Procedures

- 1. 0-ONOP-105, Control Room Evacuation
- 2. 3-OSP-300.2, Alternate Shutdown Panel 3C264 Switch and Instrument Alignment Check
- 3. 4-OSP-300.2, Alternate Shutdown Panel 4C264 Switch and Instrument Alignment Check
- 4. 3/4-OSP-300.4, Dedicated Alternate Shutdown Communication System Operability Test
- 5. EPIP-20101, Duties of the Emergency Coordinator
- 6. EPAD-007, Emergency Response Facilities and Equipment Surveillances

#### 2.1.3 Regulatory Guidelines

- 1. Code of Federal Regulations, Title 10, Part 50, Appendix E
- 2. NRC IE Information Notice 85-44, Emergency Communication System Monthly Test
- 3. NRC IE Information Notice 86-97, Emergency Communications System

#### 2.1.4 Miscellaneous Documents

1. Turkey Point Radiological Emergency Plan
2. FPL Radio Operations Handbook
3. 5610-E-250 Communications System Diagram
4. PC/M 87-261, New (Unit 4) EDG Building Lighting, Fire Protection, Communications, and HVAC
5. PC/M 90-493, Public Address System in Southern Plant Area
6. PC/M 92-124, Offsite Radio Communication Project
7. Vendor Manual V000596, Motorola/Offsite Radio
8. PC/M 92-004, Upgrading Plant Page Audibility

#### 2.2 Records Required

- 2.2.1 None

#### 2.3 Commitment Documents

- 2.3.1 None

### 3.0 RESPONSIBILITIES

#### 3.1 Emergency Response Organization (ERO) Members

- 3.1.1 Making communications in accordance with this procedure if assigned to an ERO position required to make communications.
- 3.1.2 Bringing available radios to the Operations Support Center (OSC) for use by Emergency Response Teams (ERTs).





## 4.0 DEFINITIONS

### 4.1 Plant Page Systems

4.1.1 The plant page system is a solid-state public address system which uses noise-cancelling dynamic microphone handsets located throughout the plant site (Protected Area, Switchyard, Nuclear Training Center, Employee Processing Facility, Central Receiving Facility, etc.). The system includes one paging channel and one party line channel. The two channels are independent such that paging can be accomplished without disturbing communications on the party line channel. The PTN Page System can be merged with the PTF Page System to allow site-wide communications from any of the PTN or PTF stations. The Page Merge switches are located on the Unit 3 and 4 RCO's desk and on the PTF Control Center Operator's desk.

4.1.2 Power to the Paging System is supplied from a variety of sources. The original page system, located throughout the power block area, receives power from vital Motor Control Center 3D (breaker 30824) via a 480V/120V transformer located in the Cable Spreading Room. Alternate power is available from PTF General Service Station MCC via PTF LP-11. A 60 amp double-pole double-throw disconnect switch is mounted behind Unit 3 Vertical Panel B for swapping power as required.

4.1.3 During the 1991 Dual Unit Outage the Plant Page System was expanded to cover the Unit 4 EDG Building and the southern plant areas. These areas of the system were provided independent power supplies to minimize loading on the original page system. The page system in the Unit 4 EDG building receives power from MCC 4K via 4DP87 located in the Unit 4 EDG Building (see PC/M 87-261). The southern plant area page system receives power from DP99 located in the Mechanical Maintenance Machine Shop. DP99 receives power from 4J Load Center via DP437 (see PC/M 90-493). The following plant areas are supplied by Power Panel SBT located in the NAB Telephone/LAN Room.

1. NAB Plant Page Power/South Perimeter Page Power (SBT-1)
2. Simulator/Trng Page Power (SBT-10)
3. TB-7016 (NEB Page Power) (SBT-11)
4. TB-7004 (Material Warehouse Page Power/South Page Power) (SBT-12)

4.1.4 Plant Alarms: Plant alarms are broadcast over the Plant Page System. A Gaitronics Tone Generator is connected to the Page System to broadcast the following alarms: Site Evacuation, Containment Evacuation, Emergency Plan Activation and Fire. The Tone Generator receives power from the same source as the Plant Page System. Alarm priorities are set in the system, and are in order of the alarms listed above. The Alarm Reset pushbutton, located in the NPS Observation Cubicle may be used to interrupt an activated alarm. Any alarm may be reset by momentarily depressing the "Alarm Reset" pushbutton.



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4.1.5 Page Volume Boost - Pushbuttons are located on the console in the NPS Observation Cubicle and on the Unit 3 and 4 RCO's desks which cause Page System speakers which are equipped with Volume Level Control (VLC) to broadcast at maximum volume, and blue strobe lights to be activated while the pushbutton is depressed. The Page Volume Boost may be used to make Emergency announcements from the Control Room.

#### 4.2 Motor Maintenance/Refueling Circuit

4.2.1 This communications system is separate from the Plant Page System, except that it receives 120V AC power from the Plant Page System power supply source. This circuit consists of various outlets throughout the plant, near major equipment both inside and outside the containment, and at the fuel handling areas. A headset, with attached microphone, can be plugged into these outlets to enable communication while leaving the operator's hands free. Outlets for this circuit are also provided in the control room of Units 3 and 4. This system allows communications between the Control Room and stations, as well as communications between stations.

#### 4.3 Plant Bell System Telephones

4.3.1 There are numerous Bell Telephone System lines connected to the plant through the switchboard in the Nuclear Administrative Building (NAB) for normal dial telephone service. Several extensions of this system are located throughout the Protected Area to facilitate in-plant communication.

4.3.2 Offsite telephone communications are provided via two paths: commercial underground telephone lines on Palm Drive, and fiber optic lines from the General Office on the FPL Transmission Lines. Additionally, a backup Microwave System has been installed which will automatically pick up the services provided by the FPL Fiber optic if this line fails. The antenna for this system is located on the NAB roof. Telephone service is provided via the Southern Bell Homestead Telephone Office. All Turkey Point extensions, including Fossil Plant and Land Utilization Extensions (246 exchange), are routed through the Telephone Room in the NAB. Direct Inbound Dial (DID) calls to the plant, i.e. calls to plant extensions beginning with a "6" or "7", will be routed from the Homestead Office to the plant via either the Palm Drive lines or the fiber optic line for connection to the plant phone system. Non-DID plant extensions may be accessed from offsite by calling the switchboard (246-1300) which will allow automated or manual transfer to the desired extension. All calls to 246-1300 are routed to the plant via the Palm Drive telephone line.



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- 4.3.3 In addition to the plant telephone extensions (246 exchange), there are direct Homestead telephone extensions (245/247/248 exchanges) located throughout the plant. These extensions are independent of the plant telephone system, but are routed to the plant via the Palm Drive telephone lines.
- 4.3.4 All of the emergency telecommunications circuits, i.e. State of Florida Hot Ring Down, National Warning System (NAWAS), FTS-2000, are routed via the Palm Drive Telephone lines from the Southern Bell Homestead Telephone Office.
- 4.3.5 LEASE LINE: A direct line to the System Operations Power Coordinator's Office, which is also connected to several other plants and substations, is constantly monitored by means of open speakers at the control rooms of the various plants (including PTF and PTN) and at the switchboard in the System Operations Power Coordinator's Office. This line is in constant use, and its main function during both normal and emergency conditions is for transmitting and receiving instructions and information to and from the System Operations Power Coordinator's Office.



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#### 4.4 Company FM Radio System

##### 4.4.1 UHF/VHF Radio Systems

UHF and VHF Radio Systems are provided for offsite communication with Florida Power & Light facilities and Government Agencies. The transceivers for these systems are installed in Cabinet C474, located in the Control Building Elevator Vestibule on the mezzanine (30 foot) elevation. Antennas are mounted on the Missile Barrier between the Computer Room Chiller Units on the Control Room roof. Control units are installed in the NPS's office which allow channel selection and local volume control of the system via the plant telephone lines. Each radio can be connected to six separate control units in parallel to allow use of the radios from multiple locations. The radio units receive nonvital uninterruptible power from AC Panel 3P31, Breaker 15, and have individual, local batteries for enhanced reliability. The Control Units receive Vital AC power from DP-312A, Breaker 3 via Fire Protection Panel, C39A. Listings of the UHF and VHF channels is provided in the Emergency Response Directory.

#### NOTE

*The PTN UHF and VHF Radio Systems are to be operated from the remote control units. Local operation of the radio units is to be performed by qualified radio personnel only. Contact the Emergency Preparedness Coordinator or Miami Radio personnel if local operation is necessary. Refer to the Emergency Response Directory for telephone numbers.*

4.4.2 UHF Radio System: The UHF radio is a 450 Mega Hertz (MHz) unit that may be used to communicate with the PTN Emergency Operations Facility (EOF), System Operations, Storm Headquarters, and other Florida Power & Light facilities and mobile units located throughout Dade County. The system utilizes radio repeaters located throughout Dade County (Princeton, Hialeah, and Brickell) to provide communications throughout the area. Channel 9 (display indicates FPL 9) is guarded (i.e., monitored) by the Miami Radio Shop, and may be used to establish offsite communications. A local government frequency is also available, and may be used to communicate with Dade County Emergency Operations Center, if necessary. In an emergency, any channel may be used to establish communications.





4.4.3 VHF Radio System: The VHF radio is a 150 MHz unit that may be used for longer range communications than the UHF System to the PTN EOF and FPL Corporate Offices in Juno Beach.

1. DIRICO 1 through 12 are Tone Groups which use a radio repeater located on the DIRICO Radio Tower in North Dade County. The Tone Groups allow different groups to communicate privately using the same frequency. DIRICO 12 is designated as the FPL Emergency Channel. In the event of an emergency, FPL Radio personnel will assume control of the channel assignments. All stations should monitor DIRICO 12 and radio personnel will coordinate Talk Group assignments for emergency communications.
2. In the event that the DIRICO repeater failed, communication may be made on DIRICO SIMP. This channel is a conventional, simplex mode of operation that uses the DIRICO repeater frequency to communicate directly between individual stations, independently of the repeater. In this mode of operation, PTN would be able to communicate with stations in North Dade County, including the PTN EOF/General Office.
3. The Cutler Power Plant has VHF channels which are available on the PTN VHF Radio System.
4. U. S. Coast Guard (USCG) and NOAA Weather Radio Channels are also available on the PTN VHF System. USCG CH 16 and 22A are emergency channels which may be used for emergency communication if required. NOAA Weather Channels may be used to monitor weather conditions and receive weather advisories.

#### 4.5 Portable Radios

##### NOTE

*Radio Transmissions are restricted in certain areas which are posted throughout the plant. Always observe posted restrictions.*

- 4.5.1 Numerous portable radio transmitter-receiver sets operating on the Turkey Point 900 Megahertz Trunked Radio System are available to supplement the fixed communications equipment in the plant. These small, lightweight, battery-operated sets, which may be easily carried by personnel to any location on the plant site provide extensive communications capabilities among all plant departments, and provide access to the telephone system. Additionally, this system may be used by offsite personnel to communicate with onsite personnel, including the performance of radiological monitoring. For further explanation of the radio system operation, see Enclosure 1.

#### 4.6 FPL Intelligent Tandem Network (ITN)

- 4.6.1 Each of the main Company Offices have their own company designated telephone exchange number, allowing inter-office direct dialing. The ITN is accessed by dialing "8" from a plant extension. Refer to the FPL Inter-Office Directory for more details on the FPL ITN.

#### 4.7 FPL Radio Paging System

- 4.7.1 Company telephones can inter-office dial the FPL Radio Paging System. This system is capable of reaching pagers in most areas of Dade, Broward, Palm Beach, and Sarasota counties. Pagers are regularly assigned to key personnel. Additional pagers can be quickly assigned as necessary.

#### 4.8 Commercial Paging System

- 4.8.1 Commercial pagers are issued as an alternative to the FPL Radio Paging System. Most of the commercial pagers have a range from Fort Pierce to Key West.



#### 4.9 National Warning System (NAWAS)

- 4.9.1 The NAWAS is the backup communication system to the State Hot Ring Down telephone. The NAWAS is installed in the Nuclear Plant Supervisor's office in the Unit 3 and 4 Control Room, and in the EOF. This system uses commercial, protected telephone land lines routed along Palm Drive. The initial emergency notification and all status updates to the State Warning Point at the Division of Emergency Management, Monroe County, and the Dade County Emergency Management Directors will be made via NAWAS if the State Hot Ring Down telephone is inoperable. If NAWAS is also inoperable, then notification will be made via commercial telephone.

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

- 4.10.1 The LGR System is installed in the NPSs office, in the Control Room, in the TSC, and in the EOF. This system, which operates on frequencies assigned to the State Division of Emergency Management (DEM), can be used to maintain communications with the State Department of Health and Rehabilitative Services (DHRS), Mobile Emergency Radiological Laboratory (MERL), and the Emergency Management Directors. The frequency band of the LGR provides reliable communication for a range of approximately 20 miles.
- 4.10.2 Two frequencies are assigned for LGR use. 39.18 Mega Hertz (MHz) is the primary frequency, and is assigned to the F2 selector buttons on the Plant LGR. 39.10 MHz is the backup frequency, and is assigned to the F1 selector buttons on the Plant LGR.

#### NOTE

*The PTN LGR System is to be normally operated from the control units. Local operation of the radio units should only be performed by qualified radio personnel. Contact the Emergency Preparedness Coordinator or Miami Radio personnel if local radio operation is necessary. Refer to the Emergency Response Directory for telephone numbers.*

- 4.10.3 The PTN LRG System radio unit is located at the PTN Telecommunications Radio Tower approximately one-half mile west of the plant along the Alternate Evacuation Route. The antenna is mounted on the Radio Tower. Control units located in the NPSs office and the TSC operate the radio by means of the plant telephone system, via underground telephone cable from the radio tower to the Nuclear Employee Processing Building (NEPB) via telecommunications manways and conduits. The PTN EOF LGR System utilizes similar equipment and configuration, and provides a backup means of communication with the plant.



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#### 4.11 Emergency Notification System (ENS)

- 4.11.1 As of June 1992, the old ENS circuit ("red phone") has been replaced with the FTS-2000 Telephone Network. ENS circuits for notifications to the NRC Operations Center are incorporated into the FTS-2000 network. ENS extensions on the FTS-2000 network are located in the Control Room, the Technical Support Center, the Simulator Control Room, the NRC Resident Inspectors office, and the Emergency Operations Facility. Refer to FTS-2000 Emergency Telecommunication System Description.

#### 4.12 State Hot Ring Down Telephone

- 4.12.1 The State Hot Ring Down telephone is installed in the Units 3 and 4 Control Room, the TSC, and the EOF. This system uses dedicated commercial telephone lines and is activated through predesignated three digit access "telephone numbers". The initial notification and all status updates of an emergency are made via this system to the State Department of Emergency Management (State Warning Point-Tallahassee) and the County Emergency Management Directors. NAWAS serves as a backup.

#### 4.13 Health Physics Network (HPN)

- 4.13.1 The HPN is installed in the TSC and EOF. This system uses FTS-2000 telephone lines. The HPN is designed to provide health physics and environmental information to the NRC Operations Center and the NRC Region II Response Center in the event of an ongoing emergency.

#### 4.14 Dedicated Alternate Shutdown Communications System

4.14.1 This system is completely independent of the normally used Plant Page System. It is provided to enable the operators to coordinate operations and monitor status of the plant during Control Room Evacuation conditions (see 0-ONOP-105, Control Room Evacuation). Units 3 and 4 Alternate Shutdown Communications systems are permanently cross-connected to facilitate communications throughout the plant. To meet regulatory requirements, the Alternate Shutdown Communications system is protected from any fires in the Control Room, Cable Spreading Room, or North-South Breezeway. Most units have only a unit-specific wall station, however the following "common" areas have a wall station for each unit:

1. 3B 4160 Volt Swgr Room (Alternate Shutdown Panel)
2. 4B 4160 Volt Swgr Room (Alternate Shutdown Panel)
3. Auxiliary Feedwater Pump Cage
4. Auxiliary Building Hallway
5. Technical Support Center
6. 3B EDG Room
7. Main Control Room

4.14.2 The Control Room stations are normally isolated from the other stations for fire protection via Key Lock switches located in the Computer Room (switch normally in Isolate position). The Key Lock switch, when positioned to Normal, provides for Control Room communications necessary for an orderly transfer of control back to the Control Room.

4.14.3 Operation of this system is identical to the normal Plant Page System. In addition to a handset, each communications station is provided with a headset and extension cord, stored in a locked communications headset box. Power is provided from power panels 3/4P93, located in their respective units B 4160 Volt Switchgear Room. All wall stations are uniquely identified as Alternate Shutdown Communications Stations.





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#### 4.15 Cellular Telephone Backup System

4.15.1 Separate telephone sets in the offices of the NPS and Site Vice President have been dedicated as a backup telephone system. These sets are interfaced with permanently installed cellular telephone units in the Telephone Frame room and have a permanently installed backup battery and AC power fed from the Security System Diesel backed load center. Antennas for these telephones are located on the Nuclear Administration Building roof.

#### 4.16 FTS-2000 Emergency Telecommunications System

4.16.1 The NRC has replaced the old ENS and HPN circuits with the FTS-2000 Emergency Telecommunications System. The FTS-2000 system is an AT&T telecommunications network used by U.S. government agencies, and is similar to FPL's Intelligent Tandem Network (ITN). This system is provided by the U.S. government and is for official use only. Refer to Enclosures 1 and 2 for FTS-2000 services and their locations.

#### 4.17 Alternate Communications Systems

4.17.1 In cases where an emergency has affected one of the normal means of communications, or in the case that a normal system is out of service, the following system will serve as backup:

##### Normal System

##### Alternates

Plant Page System

Portable Radios, Bell System  
Telephones, Dedicated Alternate  
Shutdown Communications System

Bell System Telephones

Cellular Telephones, Portable Radios



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#### **4.18 High Frequency/Automatic Link Establishment (HF/ALE) Radio System**

**4.18.1** The HF/ALE Radio System is an automated mode of high frequency, single side band (HF SSB) radio communications (2 to 30 Mega Hertz) which has the ability of long range, world wide communication. ALE is an option of the Motorola MICOM-1 HF SSB radio which is designed to automatically select the best working channel out of the available channels assigned to the user. The HF/ALE uses a combination of HF SSB techniques (scanning, selective calling, sounding, channel selection, and link quality analysis (LQA)) to make long range high frequency communications as easy and reliable as possible. Refer to Enclosure 4, HF/ALE Radio System Principles of Operation for more information.

#### **NOTE**

*The HF/ALE Radio System is designed to be operated remotely from the telephone set located in the NPS's office. Local operation should only be performed by qualified radio personnel. If location operation of the HF radio is necessary, contact the Emergency Preparedness Coordinator or Miami Radio personnel. Refer to the Emergency Response Directory for telephone numbers.*

**4.18.2** The PTN HF/ALE Radio System consists of: two HF/ALE radio units; two HF antennas, and associated components (tuners, etc); and a remote telephone handset located in the NPS's office, and selectable to either HF/ALE radio. The two HF/ALE radios are designated as

- 1. Onsite and**
- 2. Offsite**

Either of these radios may be accessed by the telephone set which has a switch to select either the onsite or offsite radio.



- 4.18.3 Onsite HF/ALE Radio: The onsite HF/ALE radio is located in the Control Building Elevator Vestibule Mezzanine (30 foot) Elevation, in Cabinet C474A. It receives power from nonvital, uninterruptible AC Panel 3P31, Breaker 15. The antenna is a long wire antenna connected between the Missile Barrier on the Control Building roof, and the Cask Storage Crane Girder. The radio is connected to the plant telephone system to provide remote control from the Control Room.
- 4.18.4 Offsite HF/ALE Radio: The offsite HF/ALE radio is located at the PTN Telecommunications radio tower approximately one half mile west of the plant on the north side of the cooling canals. The radio unit is located in the block building located at the base of the radio tower. The equipment at the tower location normally receives power from the MacGregor Substation, and has an emergency generator if normal power is lost. The antenna for this radio is a long wire connected between concrete transmission pole just east of the radio tower. This radio is remotely controlled by the telephone set in the NPS's office via buried telephone cable which connects to the plant telephone system.



## 5.0 PROCEDURE

### 5.1 Emergency Use of the Plant Page System

#### NOTES

- Do not keep the Plant Page System busy unnecessarily; if a prolonged conversation is to be carried on, request the other party to call your station on the Bell phone, thus releasing the Plant Page System for other use.
- Always speak clearly, distinctly, firmly, and with normal tone when using any of the communications systems described.
- Do not leave the Plant Page System page pushbutton depressed while carrying on a normal conversation, as this will tie up the paging channel, preventing another party from using the paging channel.
- All radio communications shall be conducted in accordance with Federal Communications Commission regulations and company rules as set forth in Reference 2.1 4.2, FPL Radio Operations Handbook.
- The use of the Plant Page System during emergency conditions is to notify plant personnel of the emergency and to issue appropriate instructions to cope with the emergency.
- The spoken message will be broadcast through all Plant Page speakers but will not interfere with party line channel conversations.
- Use of the "Page Volume Boost" will activate the Blue High Intensity Strobe Lights, as well as increase all Page System speakers which are equipped with VLC to broadcast at maximum volume.

5.1.1 Lift the handset from its holder.

5.1.2 Activate the Public Address mode of the Page System by:

- a. If making an emergency announcement from the Control Room, depressing the Page Volume Boost pushbutton, and
- b. Depressing the Page Activation button on the handset station

5.1.3 Speak into the handset mouth piece.

5.1.4 At communication completion, release the Page Activation Button and the Page Volume Boost Button, if applicable.

5.1.5 Request non-emergency use of the party line channel to cease by speaking into the handset mouth piece without depressing the Page Activation Button, if necessary.





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## 5.2 Emergency Use of the Motor Maintenance/Refueling Circuit

### NOTE

*This system may be used during emergencies to communicate and issue instructions to personnel working to correct the emergency condition, or stationed by the areas where outlets from this system are located, thus leaving the PA system clear for other emergency related use.*

- 5.2.1 Obtain headset and microphone sets from the Control Room or Maintenance Department.
- 5.2.2 Issue sets to personnel assigned to the station with which it is desired to communicate.
- 5.2.3 Plug the head and microphone sets into the jacks at the station.
- 5.2.4 Speak normally, clearly, and distinctly into the microphone for communications.
- 5.2.5 WHEN communications are to be terminated, THEN unplug the head and microphone set from the jack and return them to their storage place.

## 5.3 Use of the Bell System Telephones

### NOTE

*The Bell System telephone lines assigned to the plant are the normal means of communication with outside agencies, both during normal and emergency conditions. All lines can be accessed through the switchboard in the Nuclear Administration Building.*

- 5.3.1 Perform one of the following steps to access the Plant Bell System from outside of the plant:
  - 1. Dial direct by combining the three digit prefix "246" to any extension beginning with a "6" or "7" (Direct Inbound Dial-DID), or
  - 2. Access the plant switchboard by first dialing 246-1300 followed by the desired plant extension.



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### 5.3.2 Accessing Outside Numbers Using the Plant Bell System

#### NOTES

- *The use of the Bell System telephone lines is normally unrestricted (except for placing long distance phone calls) and outgoing calls may be made using standard Bell System procedures.*
- *Outgoing calls may be restricted from any plant extension on a case by case basis. An extension may have unrestricted access (dial "8" and dial "9" capability), FPL ITN access only (dial "8"), local exchange access only (dial "9"), or no outgoing access. Contact MIS Department regarding access restrictions.*

#### 1. Accessing a Local Phone Number

- a. Dial 9 to obtain a local outside line.
- b. Dial local number at the receipt of a dial tone.

#### 2. Calling Within the FPL ITN System from an ITN Capable Phone

- a. Dial 8 to call within the ITN system (i.e., Turkey Point to Juno Beach).
- b. Dial ITN number at receipt of a dial tone.

#### 3. Making a Personal Long Distance Call (Normal Working Hours Only)

- a. Dial "0" to contact the switchboard operator.
- b. Request a long distance line.
- c. Provide the operator with the following information:
  - (1) Desired area code and phone number.
  - (2) Your name
  - (3) Means of charging the call (credit card, home phone, or collect)
- d. The switchboard operator will dial the desired number and connect you.

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### 5.3.2 (Cont'd)

#### 4. Making a Business Long Distance Call via the ITN System

- a. Dial "8".
- b. Dial the desired area code and phone number at receipt of a dial tone.
- c. Dial your valid ITN authorization number after the authorization prompt tone is heard.

### 5.3.3 Calling Another Extension Within the Plant

#### NOTE

*The Bell System telephones in the plant are also four digit extensions for intra-plant calls.*

1. Dial the four digit number assigned to the desired extension to reach another extension in the plant.

### 5.3.4 Use of Facsimile Machines

#### NOTES

- *Extensions assigned to facsimile machines can be used for voice communication; however, normal use is limited to the facsimile machine.*
- *Facsimile machines are located in numerous locations. Refer to the Emergency Response Directory for locations and extension numbers.*
- *These instructions are valid for facsimile machines connected to "246" extensions. If a facsimile machine is hooked up to a "245", "247", or "248" number, dialing "8" or "9" is not required, and ITN long distance service is not available.*
- *Facsimile machines may receive at any time while the power switch is on.*

1. Ensure power switch is on.
2. Place the documents to be faxed face down in the document holder.

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### 5.3.4 (Cont'd)

3. Enter the number of the receiving fax machine utilizing the keypad to perform the following:
  - a. To send a fax to another Turkey Point extension, dial the four digit extension number.
  - b. To send a fax to a location in the FPL ITN, dial 8, "pause", and then the desired ITN extension.
  - c. To send a fax to a local number not on the FPL ITN, dial 9, "pause", and then the desired local phone number.
  - d. To send a fax to a long distance extension not on the FPL ITN, dial 8, "pause", dial the desired fax number (area code and phone number), "pause", "pause", "pause", and then dial the ITN authorization code.
4. Press the FAX/SEND button.

### 5.3.5 Use of the Lease Line

#### NOTE

*During an emergency, the party requiring the use of this line for emergency related communications shall identify himself, state that the line is needed for emergency use, and request that all other parties using the line for non-emergency communications clear the line.*

1. Remove the handset from its holder (this cuts out the speaker).
2. Call the station or party desired using their call name.
3. Replace the handset in its holder when communications are complete.



### 5.3.6 Use of the Emergency H-E-L-P Phone Number

#### NOTES

- *The following extensions have been designated as emergency numbers:*
  - Emergencies-1000*
  - Fire-4444*
  - Medical-4040*
  - Safety-6500*
  - Health Physics-6599*
  - Security-6911*
- *The NPS Emergency line (1000) and the Fire phone (4444) emergency extensions are restricted to incoming calls only.*
- *H-E-L-P line instructions are posted on phones located throughout the plant.*

1. To report an emergency, dial 4357 (i.e. H-E-L-P) from any plant extension.
2. A voice message will prompt a response by providing the following options:
  - a. Emergency - for reporting any emergency to the NPS at extension 1000.
  - b. Fire - for reporting any fire emergency to the Fire phone on the Unit 3 RCOs desk at extension 4444.
  - c. Security - for contacting the Central Alarm Station (CAS) at extension 6911.
  - d. Health Physics - for contacting the Health Physics Shift Supervisor at extension 6599.
  - e. Safety - for contacting the Safety Department at extension 6500.
  - f. Operations Support Center - for contacting the OSC during a declared emergency at extension 7169.
  - g. Technical Support Center - for contacting the TSC during a declared emergency at extension 4613.





#### 5.4 Use of the Portable Radio Transmitter-Receivers (Walkie-Talkies)

##### NOTES

- Various portable radio transmitter-receivers are available in the plant for communication with personnel throughout the plant and may be used when it is desired to communicate with personnel in areas where there are no permanent communication devices, such as in the outlying areas of the plant.
- Portable radios will be used during emergency conditions and when a normal means of communication is not functioning.
- When activating the Emergency Response Facilities, available Motorola 900S radios should be brought to the Operations Support Center for use by Emergency Response Teams.
- Each radio may be selected to one of 18 available talk groups. Call group listings are usually affixed to the side of the radio, and may be reprogrammed by Security Department.

- 5.4.1 Turn on the portable radio by rotating the volume control clockwise.
- 5.4.2 Select the desired talk group by selecting the six position and three position switches to the proper position.
- 5.4.3 Transmit by depressing the Push-To-Talk (PTT) switch on the side of the radio (or on the side of an installed extension microphone/speaker) and speaking into the front speaker.
- 5.4.4 Release the PTT switch to receive of the same channel.
- 5.4.5 WHEN no further transmission or reception is desired, THEN turn the radio off by rotating the volume control counterclockwise.

#### 5.5 Use of the National Warning System (NAWAS)

- 5.5.1 Pick up the handset from its cradle.
- 5.5.2 Call the desired station by name (i.e., "State Warning Point") and identify your station.
- 5.5.3 Advise the personnel on the other end of the system of the conditions at the plant.
- 5.5.4 WHEN communications are complete, THEN replace the handset on its cradle.



## 5.6 Use of the Local Government Radio (LGR)

### 5.6.1 Communicating with the LGR

#### NOTE

*The LGR System is to be operated from the control units. Local operation of the radio unit is to be performed by qualified radio personnel only. Contact the Emergency Preparedness Coordinator or Miami Radio personnel if local operation is necessary. Refer to the Emergency Response Directory for telephone numbers.*

1. Select Frequency: Press and release the "F1/F2" button to select the desired channel
  - a. F2 (39.18 M Hz) Primary
  - b. F1 (39.10 M Hz) Secondary
2. Monitor Channel: Press and hold the "MONITOR" button and listen for voice traffic.
  - a. If no voice traffic is present, release the "MONITOR" button and continue with the next step, "Transmit".
  - b. If voice traffic is present, wait until the channel is clear before transmitting.
3. Transmit:
  - a. Handset in Cradle:
    - (1) Press and hold the "TRANSMIT" button.
    - (2) Verify the "XMIT" light is on.

#### NOTE

*For optimum performance, always be within a 2 foot range of the microphone which is located under the handset.*

- (3) Speak at normal voice level towards the microphone.
  - b. Using the Handset:
    - (1) Press and hold the Push-to-Talk (PTT) bar located on the underside of the handset grip.
    - (2) Verify the "XMIT" light is on.
    - (3) Speak at normal voice level into the handset microphone.



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5.6.1 (Cont)

4. Listen:

- a. Release the "TRANSMIT" button or PTT bar to listen for incoming calls or responses.

5.6.2 Using the LGR Intercom

1. Start Intercom

a. With Handset in Cradle:

- (1) Press and hold the "INTERCOM" button.
- (2) Speak at normal voice level towards the microphone.

b. Using the Handset

- (1) Press and hold the "INTERCOM" button. Do NOT use the PTT bar.
- (2) Speak at normal voice level into the handset microphone.

2. When communication has ended

- a. Release the "INTERCOM" button.
- b. Replace the handset in cradle, if used.

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### 5.7 Use of the State Hot Ring Down Telephone

#### NOTES

- *The State Hot Ring Down telephone uses dedicated commercial phone lines to contact the State Department of Emergency Management warning points through the use of three-digit access codes. Each warning point is accessed through its own three-digit code.*
- *Listing of the three-digit codes for stations on the Hot Ring Down (HRD) network are located on pull-out cards on the bottom of the HRD Telephones, and in the Emergency Response Directory (ERD).*

5.7.1 Lift the handset and dial "100" for the State Warning Point.

5.7.2 WHEN acknowledged, THEN identify yourself and the facility you are calling from.

5.7.3 Relay all applicable data, as necessary.

5.7.4 WHEN communications are to be terminated, THEN replace the handset.

### 5.8 Use of the FTS-2000 Emergency Telecommunications System

#### NOTES

- *Within one hour of the time that the Emergency Plan is implemented, the NRC Operations Center (NRCOC) is required to be notified using the NRC FTS-2000 ENS circuit.*
- *If FTS-2000 is inoperable, commercial telephone lines shall be used to notify the NRCOC.*
- *The FTS-2000 system uses dial tone from one of the FTS-2000 Network Service Nodes located throughout the United States.*
- *No access codes or prefixes need to be dialed. Only dial the appropriate 10-digit telephone number.*
- *NRCOC phone numbers and the functions each FTS-2000 phone (ENS, HPN, etc.) are posted on a sticker on the FTS-2000 telephone and are also listed in the PTN Emergency Response Directory.*

5.8.1 To place a call using FTS-2000, perform the following:

1. Lift the receiver on the FTS-2000 telephone and listen for a dial tone.
2. WHEN receiving the dial tone, THEN dial the first number listed on the sticker affixed to the FTS-2000 telephone, using all 10 digits.



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### 5.8.1 (Cont'd)

3. IF the first number is busy, THEN proceed on with the next number on the list.
4. Continue calling until communications are established.

### 5.8.2 Reporting FTS-2000 Trouble

#### NOTES

- Problems with the FTS-2000 system should be reported to the NRC.
- Commercial phone numbers for the NRCOC may be found in the PTN Emergency Response Directory and are also the same as those posted on the FTS-2000 telephone. Standard long distance calling procedures need to be used to contact the NRC via commercial circuits (see Substep 5.3.2.4).
- Once notified of FTS-2000 problems, the NRC is responsible for any corrective actions unless the problem is determined to be within the plant telephone system. The NRCOC reports FTS-2000 problems to the FTS-2000 Trouble Handling Information System (THIS), operated by U.S. West Communications. The THIS issues the NRC a trouble ticket number and provides them periodic status updates. The THIS relays the problem report to the AT&T FTS-2000 Network Control Center (NCC). The NCC analyzes the problem and attempts to isolate or determine the problem location. Isolation is performed between the FTS-2000 switch and the plant telephone system. If the problem is within the FTS-2000 system, the NCC will direct corrective action including dispatch of work crews and report restoration of the circuit to the NRCOC upon completion of repairs. If the NCC determines that no problem exists within the FTS-2000 portion of the circuit, the NRCOC will be informed of this via the THIS. The NRCOC will then inform the licensee that the problem is within the plant telephone system.

1. IF trouble is noted with the FTS-2000 system, THEN notify the NRCOC.
2. IF the trouble is isolated to the plant telephone system, THEN take corrective action by notifying the plant Management Information Systems (MIS) Department.





## 5.9 Use of the Dedicated Alternate Shutdown Communications System

### NOTES

- *The Dedicated Alternate Communications System is used for maintaining constant communications between manned stations in the event that the Control Room requires evacuation.*
- *Notify the Unit RCO if it becomes necessary to break communications or when communications are restored.*
- *Maintain the Control Room circuits isolated via the Keylock switches until control is to be reestablished in the Control Room.*
- *Dedicated Alternate Shutdown headsets should be disconnected when leaving an area to prevent excessive background noise on the communication circuit.*

#### 5.9.1 Set up the desired station by performing the following:

1. Remove the headset and extension cord from the locked communications box.
2. Plug the headset into the jack.
3. Establish and maintain communications as directed by procedure.

#### 5.9.2 Use the page feature to contact plant personnel by performing the following steps:

### NOTE

*The paging key switch must be released when paging is no longer required.*

1. Key the paging switch on the handset, or headset extension cord.
2. Make announcement into the microphone.
3. Release the paging key switch.

#### 5.9.3 When use is to be terminated, restore the headset and extension cord to the communications box and relock the box.



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#### 5.10 Use of the Cellular Telephone Backup System

5.10.1 To use the cellular telephones located in the Nuclear Plant Supervisor's office or the Site Vice President's office, follow standard Bell System procedures as follows:

1. Lift the handset.
2. Dial the desired telephone number.
3. Replace the handset at conversation completion,

#### 5.11 Use of the Portable Cellular Telephone Units

- 5.11.1 Ensure the power is on.
- 5.11.2 Lift the handset.
- 5.11.3 Dial the desired number.
- 5.11.4 Press the "SEND" button.
- 5.11.5 Press the "END" button at conversations end.
- 5.11.6 Replace the handset.

#### NOTE

*The PTN UHF and VHF Radio Systems are to be operated from the remote control units. Local operation of the radio units is to be performed by qualified radio personnel only. Contact the Emergency Preparedness Coordinator or Miami Radio personnel if local operation is necessary. Refer to the Emergency Response Directory for telephone numbers.*

#### 5.12 Use of the PTN UHF and VHF Radio Systems

5.12.1 The UHF and VHF Radio Systems operate identically.

#### NOTE

*By depressing the "HOME" button on the control unit, the primary channels listed below will be selected.*

1. Select the desired channel using the "Mode" toggle bar, or depressing the "HOME" button.
  - a. UHF System - FPL 9 (Primary)
  - b. VHF System - DIRICO 12 (Primary)



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#### 5.12.1 (Cont'd)

2. Adjust volume level using the "VOL" toggle bar. Level is indicated on Control Unit display.
  - a. Leave the handset in the cradle to adjust the built in speaker volume.
  - b. Lift handset from cradle to adjust ear piece volume.
3. Check that the "Busy" light on the Control Unit is not on. If the "Busy" light is on, wait for the channel to clear.

#### NOTE

*The built in speaker is cut out when the handset is out of the cradle.*

4. To transmit:
  - a. Using the built-in speaker and microphone, depress the "TRANSMIT" bar.
  - b. Using the handset, lift the handset and depress the Push to Talk button on the handset.
5. Wait for the red "Transmit" light to come on steady.
6. Speak slowly and clearly into the microphone.
7. If there is no response on the primary channel, select any other channel and repeat the previous steps.

#### 5.13 Use of the HF/ALE Radio System

#### NOTE

*The HF/ALE Radios are to be operated from the remote telephone set in the NPSs office. Local operation is to be performed by qualified radio personnel only. Refer to the Emergency Response Directory for Emergency Preparedness and Miami Radio personnel contracts, if local operation is necessary.*

##### 5.13.1 Placing an HF/ALE call:

1. Select the desired radio set using the selector switch on the back of the telephone.
  - a. Onsite
  - b. Offsite



5.13.1 (Cont'd)NOTE

*If the telephone set is off hook, and 10 seconds elapse without depressing a key or you press a non-digit key, a busy tone will be heard. If this occurs, hang up the telephone and try the call again.*

2. Lift the telephone handset.
3. Listen for a dial tone.

NOTES

- *If the called party goes off hook within one (1) minute, the Ring back tone will stop and communications are established. From this point on, if neither party presses the Push to Talk (PTT) button for five (5) minutes, a Fast Busy tone will be heard, and the link will be disconnected.*
- *When making HF/ALE communications*
  1. *Do not pause too long between sentences.*
  2. *Say "Over" at the end of the message and release the Push to Talk (PTT) button to listen.*
  3. *Give the called operator time to say "Over" and release the PTT button before you depress your PTT button and start talking.*
  4. *It is recommended to repeat the first word at the message to ensure the HF/ALE radios are properly keyed.*

4. Dial the four (4) digit extension of the desire station. Refer to the Emergency Response Directory for a listing of stations.
  - a. If a busy tone is heard after the fourth digit, the address is not in the HF/ALE directory. Hang up the telephone, verify the address number, and attempt the call again.
5. Listen for a Wait tone (approximately every 3 seconds) while the HF/ALE attempts to establish a link with the desired station.
6. Listen for a Ring back Tone (like a telephone ringing) indicating that the link has been established, and the station being called is ringing.
  - a. If a busy tone is heard, the link could not be established. Hang up the HF/ALE telephone set and attempt the call again or call another station.



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5.13.1 (Cont'd)

NOTE

*When placing a call, it may take up to 3 minutes to establish a link.*

7. When the called station answers, depress the PTT button and talk into the handset microphone.
8. When the conversation is finished, terminate the link by going on hook (placing the handset in the telephone cradle).
  - a. If the other party goes on hook first, you will hear a Fast Busy tone which will stop when you go back on hook.
9. Verify the selector switch on the HF/ALE telephone set is in the Onsite position unless continued communications using the offsite HF/ALE radio is planned.



## 5.13.2 Receiving an HF/ALE Call

NOTES

- *The HF/ALE Telephone set can receive a call when the handset is on hook or off hook.*
  1. *If on hook, the telephone will ring like a normal telephone.*
  2. *If off hook, you will hear a normal telephone ringing tone which will stop when you press the PTT button.*
- *If the HF/ALE call is not answered within one (1) minute, the communication link will be automatically terminated.*

1. Go off hook (i.e. pick up the handset) and listen for the three second Long Distance tone.
2. When the Long Distance tone stops, press the PTT button, identify the station by saying "This is Turkey Point Nuclear, Over", and release the PTT button.
3. Conduct the communication using the PTT button, speaking into the handset microphone, releasing the PTT button, and listening to the handset earpiece.
4. When the conversation is finished, terminate the link by going on hook.
  - a. If the other party goes on hook first, you will hear a Fast Busy tone which will stop when you go on hook.
5. Verify the selector switch on the HF/ALE telephone set is in the Onsite position unless continued communications using the Offsite HF/ALE radio is planned.

END OF TEXT

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**ENCLOSURE 1**  
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**DESCRIPTION AND USE OF THE MOTOROLA MTX-900S  
SMARTNET RADIO SYSTEM**

The Motorola SmartNet is a system employing computer technology in an FM 900MHz repeater radio system. The entire site is controlled via the central computer which maintains frequency control of the system. The system works on what is known as Trunking technology. A Central Site Controller (CSC) monitors a preset Control Channel for any incoming requests for service. This request is sent to the CSC in a digital form on a preset frequency. The CSC will control all frequencies in the system and will assign radios to the most appropriate frequencies as they become available. Using this method the system can serve a small amount of frequencies to a vast amount of users.

As a user uses the radio, the CSC will assign that radio to a frequency for the moment in time. As the user continues use, the CSC may assign a different frequency and will instruct the user's radio to actually change frequency as needed. The user has no need to be concerned about which frequency to tune the radio to as this will be a function of the radio itself via instructions from the CSC. All the user has to remember is that at times others may be using the system and that all channels may, at any one time, be in use. At that time, the radio will inform the user by emitting a special tone from the radio.

Turkey Point has a system of 5 repeaters and 1 CSC. If a frequency is available for the user, the CSC will transmit a digitized message to the user's radio, as well as all other radios that are set to the selected channel. Thus, if your radio is set, via the channel selectors on the top of the radio, to talk group DELTA the CSC will first identify your radio in a list of authorized radios that are allowed access to this system. If your radio does not identify itself by either sending a special coded site security number and/or is not in the access authorization list, the radio is ignored by the system and will not be allowed to use any of the frequencies assigned to the system. However if the radio is authorized, the CSC will then locate the next available frequency of the 5 assigned and will instruct the users radio as well as any other radio that is set via the channel selector switches to switch to the frequency that has been assigned. If a frequency is not available at that time a BONK sound will be heard from your radio for as long as the talk button is held down. If this BONK is emitted, the user should release the push to talk (PTT) button on his radio. When a frequency becomes available, the radio will emit a DE DE DIT sound indicating a frequency has become available and the user may proceed with his transmission.

Since the system is computer controlled, it is likely from time to time, though hopefully very seldom, to experience technical problems. If for any reason the CSC should fail, the system will continue to function in what is called the FAILSOFT mode. In this mode the user's radio will automatically tune itself to a preset frequency for the duration of the CSC outage. In this mode the radio will emit a very faint beep sound every 10 seconds and will constantly be receiving a DEAD CARRIER from the repeater to which the radio has been assigned. The frequency the radio will tune to will depend on which channel the selector on the radio is set to at the time of CSC failure. This condition will last for as long as the CSC is down. After the CSC is brought back online, the radio will return to the normal operating mode and all features above will again become available.



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**ENCLOSURE 1**  
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**DESCRIPTION AND USE OF THE MOTOROLA MTX-900S  
SMARTNET RADIO SYSTEM**

The System is also on an Uninterruptible Power Supply (UPS) System. This system consists of plant equipment in the form of Diesel Power Systems as well as standby batteries. If the system experiences power losses, the system will revert to battery backup. While on battery backup power, the system will continue normal operation however it will go into a battery revert mode which will cause the repeaters to switch to half output power. Thus, in times of power outages the range of the system may be decreased due to the half output power mode. When the power is restored, the system will return to normal output power.

At times it may become necessary for a radio user to be contacted; however, the user may not be able to hear voice communications, for instance in times of high noise. If the user must be contacted, the system can be instructed to send an ALERT to the user's radio at which time the user's radio will emit 4 LOUD beeps which are at a volume much higher than that which can be set with the normal volume control. This feature can be initiated from a computer console in the Security Central Alarm Station (CAS) by request through the Security Specialist. If the radio is alerted, it will continue to give the 4 beeps in increments of 5 seconds until the user pushes the PTT to transmit. This feature is able to be used regardless of the channel the radio is set on. The only reason the alert may not be received by the user's radio is in the case of the battery being discharged, the radio is in an area where reception is not possible, the radio is out of range of the system, or the radio is turned off.

In addition to the alert feature, the system can also ask the radio its status. This request for status will give the computer console in the CAS the channel the radio is turned to and will also tell the operator if the radio is turned on or off. Again, this feature is available by request through the Security Specialist.

One other feature needs mention. This is the ability to disable the radio. This feature would be used if the radio is not accounted for by the user and is presumed stolen or lost. The CAS operator can instruct the system via the computer console to put the radio in a sleep or disabled mode. In this mode the user's radio will not receive or transmit any voice transmissions, although the computer console can again be used to request the radio's status. This feature can be reversed if the radio is recovered and returned to service. This again is a feature that the Security Specialist can request for you.

The MTX-900S Smartnet radio generates the following audible tones to indicate radio operating conditions:

**Illegal Mode** A low-pitched *baaaah* tone is heard when an invalid or unprogrammed operation is attempted, for example:

- 1) the rotary and toggle switches are set to an unprogrammed position
- 2) no response is received from the trunking controller to a Private Conversation request (trunked systems only)
- 3) the phone button is pressed but the radio is not authorized to access the telephone network.



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**ENCLOSURE 1**  
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**DESCRIPTION AND USE OF THE MOTOROLA MTX-900S  
SMARTNET RADIO SYSTEM**

Low Battery	A cricket-like <i>chirp-chirp</i> heard when the PTT is released indicates that the battery charge is getting low. This tone will also sound every two minutes when the radio is idle.
Time-Out Timer	A low-pitched <i>baaah</i> tone heard while transmitting indicates that the present transmission will be cut off in four seconds. Quickly release the PTT and press it again to cancel the tone and finish transmitting your message.
Valid Key	A <i>chirp</i> tone is heard when the keypad or push buttons are pressed to indicate the button press is accepted.
Invalid Key	A <i>bonk</i> tone is heard when the keypad or push buttons are pressed to indicate the button press is rejected.
Talk Permit	On radios with this feature enabled a high-pitched <i>dih-dih-dit</i> tone heard when the PTT is pressed indicates that a channel grant has been received from the trunking controller and the radio can transmit.
Dispatch Busy	A continuous <i>bah-bah-bah</i> tone heard when the PTT is pressed indicates that the system is busy (no voice channels are available). Release the PTT and wait for a Call Back tone.
Call Back	This is the same as the Talk Permit tone. It is heard following a Dispatch Busy when a voice channel becomes available. When the Call Back tone is heard, press the PTT to transmit.
Talk Prohibit/ Out-of-Range	A continuous <i>baaah</i> tone heard when the PTT is pressed indicates that is no response from the trunking controller; transmission is not possible. The radio may be out-of-range or not authorized to access the trunked system.
Emergency Alarm	If active, either one or five <i>beep</i> tones will be heard when the orange side button is pressed (after the valid key <i>chirp</i> recognition is heard). One <i>beep</i> indicates that the alarm was sent but not acknowledged by the central controller. Four more <i>beep</i> tones indicate that the alarm has been acknowledged.
Emergency Exit	To exit emergency operation or to reset the emergency button following an emergency call, the orange emergency side button must be pressed and held for 1.5 seconds. At that time a valid key <i>chirp</i> will be heard, followed by a one second <i>beep</i> tone.





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**ENCLOSURE 2**  
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**FTS-2000 SERVICES**

The following NRC essential emergency communications functions are provided by FTS-2000 voice and data service:

1. **Emergency Notification System (ENS):** Initial notification by the licensee, as well as ongoing information regarding plant systems, status, and parameters.
2. **Health Physics Network (HPN):** Communication with the licensee on radiological conditions (in plant and offsite) and meteorological conditions, as well as the assessment of trends, and the need for protective measures onsite and offsite.
3. **Reactor Safety Counterpart Link (RSCL):** Established initially with the NRC base team, and then with the NRC site team representatives once they arrive at the site, to conduct internal NRC discussions on plant and equipment conditions separate from the licensee and without interfering with the exchange of information between the licensee and the NRC. This is the channel by which the NRC Operations Center supports NRC reactor safety personnel at the site. In addition, this link may also be used for discussion between the Reactor Safety Team Director and the licensee plant management at the site.
4. **Protective Measures Counterpart Link (PMCL):** Established initially with the base team, and then with the NRC site team representatives once they arrive at the site, to conduct internal NRC discussions on radiological releases and meteorological conditions, and the need for protective actions separate from the licensee and without interfering with the exchange of information between the licensee and the NRC. This is the channel by which the NRC Operations Center supports NRC protective measures personnel at the site. In addition, this link may also be used for discussion between the Protective Measures Team Director and the licensee plant management at the site.
5. **Emergency Response Data Channel (ERDS):** This is the channel over which the raw reactor data is transmitted from the site. The ERDS is being implemented by a separate NRC project and PC/M, and will provide a data path to allow transmission of plant computer (ERDADS) data directly to the NRC via FTS-2000. This will require manual activation after declaration of an emergency.
6. **Management Counterpart Link (MCL):** Established for any internal discussions between the Executive Team Director or Executive Team members and the NRC Director of Site Operations or top level licensee management at the site.
7. **Operations Counterpart Link (OCL):** Established with the base team and the NRC site team for access to any of the products or services provided on the NRC Operations Center's Local Area Network. This includes technical projections, press releases, status reports, electronic mail, and various computerized analytical tools.



## ENCLOSURE 3

(Page 1 of 1)

## FTS-2000 LOCATIONS

FTS-2000 service extensions for PTN (both onsite and offsite) consist of the following:

1. Control Room

NPS Communications Area: ENS

2. Technical Support Center (TSC)

Emergency Management Area: ENS

Dose Assessment Area: HPN

NRC Conference Room: ENS PMCL HPN

RSCL OCL MCL

3. Computer Room

ERDS (one per unit)

4. Simulator Control Room

NPS Communications Area: ENS

5. Emergency Operations Facility (EOF)

NRC Conference Room: ENS

Dose Assessment Area: HPN

NRC Area: ENS PMCL HPN

RSCL OCL MCL



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**ENCLOSURE 4**  
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**HF/ALE RADIO SYSTEM PRINCIPLES OF OPERATION**

Operations of the HF/ALE radio from the telephone set is very similar to the normal operation of a telephone. FPL Telecommunications has set up a Network of HF/ALE stations or addresses. The directory of the Network Addresses is maintained in the Emergency Response Directory. Each HF/ALE radio has a private four digit address, analogous to a telephone directory. The directory of addresses is also programmed in the onsite and offsite HF/ALE radios. The HF/ALE radio automatically contacts each address in its directory periodically throughout the day. By doing so, the radio knows the best frequency to attempt communications on with each addressee. Thus, for normal operation, the radio operator simply lifts the handset, listens for dial tone, dials the desired number, hears the ring tone, and hangs up at the end of the conversation. Unlike the normal telephone there are two activities that take place when using the HF/ALE telephone set to transmit and receive:

1. Pressing the Push to Talk (PTT) button on the handset before talking
2. Saying "Over" at the end of each message.

Refer to the Operations Section of this procedure for specific steps on making or receiving an HF/ALE call.

**NOTE**

*The HF/ALE radios are to be operated from the telephone sets for normal communications. Local operation of the radios should only be performed by qualified radio personnel. Contact the Emergency Preparedness Coordinator, or Miami Radio personnel if local operation is necessary. Refer to the Emergency Response Directory for telephone numbers.*

**FINAL PAGE**



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