



**Exelon** Generation®

**EP-AA-1013**  
Revision 1

# **EXELON NUCLEAR**

## **RADIOLOGICAL EMERGENCY PLAN ANNEX FOR NINE MILE POINT STATION**

**TABLE OF CONTENTS**

<b><u>Section</u></b>	<b><u>Page</u></b>
Section 1: Introduction.....	1-1
1.1 Purpose.....	1-1
1.2 Emergency Organization.....	1-1
Section 2: Organizational Control of Emergencies.....	2-1
2.1 Typical Nuclear Division / Station Organization.....	2-1
2.2 On-Shift Emergency Response Organization Assignments .....	2-2
2.3 Authority Over the Emergency Response Organization.....	2-4
2.4 Criteria for Assuming Command and Control (Succession) .....	2-4
2.5 Non-Delegable Responsibilities .....	2-4
2.6 Emergency Response Organization Positional Responsibilities .....	2-5
2.7 Emergency Response Organization Block Diagram .....	2-18
2.8 Corporate Emergency Response Organization.....	2-18
2.9 Industry/Private Support Organizations.....	2-18
2.10 Supplemental Emergency Assistance to the ERO .....	2-20
2.11 Coordination with Participating Government Agencies .....	2-20
Figure 2.1 Minimum Staffing Requirements for the ERO .....	2-23
Figure 2.2 ERO Management Structure.....	2-27
Figure 2.3 TSC Staffing.....	2-28
Figure 2.4 OSC Staffing .....	2-29
Figure 2.5 EOF Staffing .....	2-31
Figure 2.6 JIC Staffing .....	2-31
Section 3: Emergency Conditions .....	3-1
3.1 Classification System .....	3-1
3.2 Spectrum of Postulated Accidents .....	3-3
Figure 3.1 Required Actions and Participation by Response Organizations for Various Emergency Classes .....	3-4
Section 4: Emergency Measures .....	4-1
4.1 Initiation of Emergency Actions.....	4-1
4.2 Activation of Emergency Organization .....	4-2
4.3 Assessment Actions.....	4-4
4.4 Assessment Capabilities .....	64-7

4.5 Dose Assessment Methods and Techniques ..... 4-8

4.6 Corrective Actions ..... 4-11

4.7 Protective Actions ..... 4-11

4.8 Aid to Affected Personnel..... 4-18

4.9 Emergency Public Information and Rumor Control ..... 4-19

Figure 4.1 Activation of Emergency Organization- Summary of  
Notification and Response ..... 4-20

Figure 4.2 Emergency Organization Interfaces (Initial Notification)..... 4-24

Figure 4.3 Emergency Organization Interfaces (After ERF's Staffed) ..... 4-25

Section 5: Emergency Facilities and Equipment ..... 5-1

5.1 Emergency Response Facilities ..... 5-1

5.2 Communications Systems..... 5-4

5.3 Assessment Facilities and Systems ..... 5-6

5.4 Protective Facilities ..... 5-11

5.5 On-Site First Aid and Medical Facilities..... 5-13

5.6 Decontamination Facilities for Emergency Personnel ..... 5-13

5.7 Damage Control Equipment..... 5-14

5.8 Emergency Vehicles ..... 5-14

Section 6: Maintaining Emergency Preparedness..... 6-1

6.1 Organizational Preparedness..... 6-1

6.2 Reviewing and Updating of Plans and Procedures ..... 6-6

6.3 Maintenance and Inventory of Emergency Equipment and Supplies ... 6-7

6.4 Public Education and Information..... 6-8

Figure 6.1 Emergency Preparedness Department..... 6-9

Figure 6.2 Initial Training and Periodic Retraining..... 6-10

Section 7: Recovery ..... 7-1

7.1 Progression from Emergency Response to Recovery..... 7-1

7.2 Recovery Operations ..... 7-2

7.3 Emergency Organization Transformations ..... 7-3

7.4 Recovery Organization..... 7-3

Figure 7.1 Emergency Response/Recovery Organization ..... 7-7

Section 8: Acronyms and Definitions..... 8-1

    8.1    Acronyms ..... 8-1

    8.2    Definitions ..... 8-3

**APPENDICES**

1. NUREG-0654/FEMA-REP-1 Cross Reference Index
2. Letters of Agreement
3. Emergency Plan Implementing Procedures
4. Emergency Response Organization Responsibilities
5. Oswego County Radiological Emergency Response Plan and New York State Radiological Emergency Response Plan
6. Typical Additional Support Resources
7. Resource Material
8. Emergency Plan Commitments

**ADDENDUMS**

- Addendum 1, Nine Mile Point Station On-Shift Staffing Analysis Report
- Addendum 2, Evacuation Time Estimates for the James A. Fitzpatrick/Nine Mile Point Emergency Planning Zone
- Addendum 3, Unit 1 Emergency Action Levels for Nine Mile Point Station
- Addendum 4, Unit 2 Emergency Action Levels for Nine Mile Point Station

**REVISION HISTORY**

Revision 0; February 2015		
Revision 1; February 2016		

**Section 1: Introduction**

As required in the conditions set forth by the Nuclear Regulatory Commission (NRC) for the operating licenses for the Exelon Nuclear Stations, the management of Exelon recognizes its responsibility and authority to operate and maintain the nuclear power stations in such a manner as to provide for the safety of the general public.

The Exelon Emergency Preparedness Program consists of the Exelon Nuclear Standardized Emergency Plan (E-Plan), Station Annexes, emergency plan implementing procedures, and associated program administrative documents. The Exelon E-Plan outlines the basis for response actions that would be implemented in an emergency. Planning efforts common to all Exelon Nuclear stations are encompassed within the E-Plan.

This document serves as the Nine Mile Point Nuclear Station (NMPNS) Emergency Plan Annex and contains information and guidance that is unique to the station. This includes facility geography location for a full understanding and representation of the station's emergency response capabilities. The Station Annex is subject to the same review and audit requirements as the Exelon Nuclear Standardized Emergency Plan.

**1.1 Purpose**

This Station Annex describes the total preparedness program established, implemented and coordinated by NMPNS to assure the capability and readiness of coping with and mitigating both onsite and offsite consequences of radiological emergencies.

The Station Annex covers the spectrum of emergencies from minor localized incidents to major emergencies involving protective measures by offsite response organizations. Included are guidelines for immediate response, assessment of emergency situations, defined action criteria and delineation of support functions. Emergency Plan Implementing Procedures provide detailed information for individuals who may be involved with specific emergency response functions.

This Station Annex provides for a graded scale of response to distinct classifications for emergency conditions, action within those classifications, and criteria for escalation to a more severe classification. This classification system is compatible with that used by the State of New York and the Oswego County Emergency Management Office. The plans have four emergency categories: Unusual Event, Alert, Site Area Emergency, and General Emergency. In addition to notifying the offsite agencies of the existing emergency classification, provisions are made in the implementing procedures for the Station to advise the State and County of appropriate protective actions.

**1.2 Emergency Organization**

The organization for control of emergencies begins with the shift organization of the affected unit(s) and contains provisions for augmentation and extension to include other Division personnel, and outside emergency response organizations. As an incident increases in severity or potential severity, the emergency response and corresponding response organization must necessarily increase in size. Staffing levels have been established to provide appropriate response and are discussed in detail in Section 2.0 of this Station Annex.

**1.3 Interrelationship Between Emergency Plan and Other Procedures**

Interrelationship of this Station Annex with other procedures, plans and emergency arrangements is necessary to ensure an effective response organization. These interrelated documents include:

- a. Nine Mile Point Nuclear Station Emergency Plan Implementing Procedures are designed to detail specific actions required by Station personnel in response to radiological and non-radiological emergency conditions. A listing of these procedures is contained in Appendix C.
- b. Operating Procedures (OP), Emergency Operating Procedures (EOP) Special Operating Procedures (SOP), and Severe Accident Procedures (SAP) detail immediate and subsequent operator actions in response to various system transients. These operating procedures are coordinated with the Station Annex and its implementing procedures to ensure appropriate actions are taken on a timely basis.
- c. Station Chemistry Department and Radiation Protection Department Procedures define health physics requirements for the control and handling of radioactive materials, personnel decontamination, and respiratory protection, sampling techniques, radiation survey techniques and radiation exposure guidelines. Selected procedures, which are applicable to both normal and emergency conditions, are used in conjunction with the Station Annex and its implementing procedures.
- d. Station Physical Security and Fire Protection Plans and their implementing procedures, provide overall guidance and specific instructions to Nuclear Security and Station personnel for emergencies involving security or fire. These plans and procedures are coordinated with the Station Annex and its implementing procedures to ensure compatibility, and with Offsite Plans to ensure prompt access for Offsite Response Organization Responders when necessary.
- e. The Oswego County Radiological Emergency Preparedness Plan and the New York State Radiological Emergency Preparedness Plan, in conjunction with this Station Annex and its implementing procedures, provide for early and redundant notification schemes, continued assessment and update of radiological conditions, and the coordination of onsite and offsite protective actions.

The concept of operations, and its relationship to the Federal, State, local and private organizations that are part of the overall emergency response organizations, is described in Section 2.0 and 4.0. A block diagram, which illustrates these interrelationships, is included in Station Annex, Figures 4.1-4.3, Emergency Organizations Interfaces. Illustrations of how the interfaces between various segments of response organizations change during various phases of emergency and recovery operations are shown in Station Annex, Section 4.

## **Section 2: Organizational Control of Emergencies**

This section describes the Exelon Emergency Response Organization (ERO) at Nine Mile Point, its key positions and associated responsibilities. It outlines the staffing requirements which provide initial emergency response actions and provisions for timely augmentation of on-shift personnel when required. It also describes interfaces among emergency response personnel and specifies the offsite support available to respond to the nuclear generating stations.

### **2.1 Typical Nuclear Division/Station Organization**

The typical Nuclear Division organization for normal operation is shown in GAP-POL-01, Composition and Responsibility of the Nine Mile Point Nuclear Station LLC Organization.

Personnel in certain categories, principally Operations, Chemistry and Radiation Protection work in shifts so that coverage is provided 24 hours per day. For certain station conditions, such as outages, testing, etc., personnel who do not normally work on shift may work other than normal hours to provide extended coverage.

The minimum staffing at each Unit during normal operation is contained in the NMP On-Shift Staffing Analysis Report, EP-AA-1013, Addendum 1. A detailed analysis of initial on-shift responsibilities and response to an emergency condition is contained in the NMP On-Shift Staffing Analysis Report, EP-AA-1013, Addendum 1.

#### **2.1.1 Station Responsibility During Normal Working Hours**

During normal working hours, the Vice President Nine Mile Point has overall responsibility for the site. The Plant Manager has overall responsibility for Unit 1 and Unit 2 operations. The Shift Manager (SM) on duty has responsibility for ensuring that the Unit is operated safely and within the respective license and Technical Specification requirements. The SM has the authority and responsibility to order shutdown of the reactor and/or declare an emergency if required. Also, any licensed reactor operator on duty in a Control Room can shutdown (scram) the reactor if it is in an unsafe condition.

#### **2.1.2 Station Responsibility During Off-Normal Working Hours**

During off-normal working hours, the SM's have overall responsibility for the site and safe operation of their respective units. Selected management personnel are on call and may be reached through the use of an approved notification system if a SM needs to notify them of an event that requires technical consultation or requires additional personnel. However, it is the on-duty SM who has the responsibility and authority to declare an emergency. Upon declaring an emergency, the SM immediately becomes the Shift Emergency Director.

In the event of an emergency declaration due to an initiating condition affecting both Unit 1 and Unit 2, both Units' SMs will confer and determine:

- The Shift Manager of the Unit with the higher emergency classification will become the Shift Emergency Director.
- If emergency classification levels are equal, the SM first notified will become the Shift Emergency Director.
- If there is any question as to who should initiate the Station Annex, the Unit 1 SM shall assume the Shift Emergency Director duties.

## **2.2 On-Shift Emergency Response Organization Assignments**

The initial phases of an emergency situation at a nuclear station will most likely involve a relatively small number of individuals. These individuals must be capable of (1) determining that an emergency exists; (2) providing initial classification and assessment; and (3) promptly notifying other groups and individuals in the emergency organization. The subsequent phases of the emergency situation may require an increasing augmentation of the emergency organization.

All emergency facilities will have minimum staffing within 60 minutes. Minimum staff positions are defined in Table 2.1.

All Exelon Nuclear stations have the capability at all times to perform detection, mitigation, classification, and notification functions required in the early phases of an emergency.

## **2.3 Authority Over The Emergency Response Organization**

The Emergency Director in Command and Control is the designated Exelon individual who has overall authority and responsibility, management ability, and technical knowledge for coordinating all emergency response activities at the nuclear power station. The Emergency Director will immediately and unilaterally initiate any emergency actions, including providing protective action recommendations to authorities responsible for implementing offsite emergency measures.

The Shift Manager is available at all times to assume the responsibilities of Emergency Director. A qualified individual is on-call to respond to the EOF and relieve the Shift Manager of Emergency Director duties.

## **2.4 Criteria for Assuming Command and Control (Succession)**

The responsibility for initial assessment of and response to an emergency rests with the Shift Manager. Emergency personnel assume responsibility for their positions upon receiving notification to activate when an event has been declared.

The Emergency Director responsibilities are initially assumed by the Shift Manager. If the event is classified at an Alert or Higher level, or the Shift Manager deems it appropriate, the Shift ERO will be augmented by the on-call ERO.

The on-call Corporate Emergency Director will report to the EOF and assume Command and Control. In accordance with the Nine Mile Point Emergency Plan, the TSC Emergency Director does not take Command and Control responsibilities.

The Shift Manager is relieved of Command and Control as soon as possible after the declaration of an Alert or higher classification. Command and Control does not transfer until the following criteria have been met:

- Adequate EOF staff levels are present in support of the non-delegable responsibilities.
- The staff has been fully briefed as to the status of the event and the currently proposed plan of action.
- A formal turnover between the Emergency Director relinquishing Command and Control and the Emergency Director assuming Command and Control has been made.

## **2.5 Non-Delegable Responsibilities**

Functional responsibilities of the Emergency Director that may not be delegated are:

- Classify and declare emergencies.
- Direct and approve offsite emergency notifications to state and local authorities.
- Make Protective Action Recommendations to offsite authorities.
- Ensure appropriate evacuation actions for plant personnel.
- Approve emergency exposures and/or the issuance of KI.

## **2.6 Emergency Response Organization Positional Responsibilities**

Table 2.1 outlines ERO positions required to meet minimum staffing and full augmentation of the on-shift complement at an Alert or higher classification, and the major tasks assigned to each position. The full augmentation staffing levels are used as a planning basis to cover a wide range of possible events. For extended events (one which lasts for more than 24 hours), actual staffing will be established by the Emergency Director based on the event and personnel availability. However, additional staffing or reduced staffing will only occur after discussion concerning the impact on plant operations and emergency response.

The station's ERO consist of three major sub groups reporting to the Emergency Director:

- Onsite ERO, consisting of Control Room, TSC, OSC and Security staffs. The primary functions of the Onsite ERO is perform mitigative actions and ensure appropriate onsite protective actions are taken.
- Offsite ERO, consisting of EOF staff. The primary functions of the Offsite ERO are to interface with offsite authorities and perform offsite radiological assessment.
- Public Information ERO, consisting of JIC staff. The primary function of the Public information ERO is to provide accurate information to the public through News Media.

## 2.7 Emergency Response Organization Block Diagram

Figures 2.2 through 2.6 show the reporting chains and interfaces of the ERO.

## 2.8 Corporate Emergency Response Organization

In the event of a declared emergency at one of Exelon's Nuclear Stations, a Corporate Duty Officer is notified. The Duty Officer will notify senior company management personnel of the event. The Emergency Director will keep senior management informed of events and any need for assistance.

Specific departments of the company may be called on to assist as necessary to provide support for logistics, public information, finance, technical issues, etc.. Senior management may assist with interfacing government authorities and other outside organizations.

## 2.9 Industry/Private Support Organizations

Exelon retains contractors to provide supporting services to the company's nuclear generating stations. For station specific support, copies of current contracts and letters of agreement with these groups are maintained by the Emergency Preparedness Department.

Current contracts and letters of agreement are maintained in the Emergency Preparedness Department's files.

- a. Support from Other Nuclear Power Plants: The Nine Mile Point Nuclear Station is a co-signator to a Letter of Agreement (see Appendix 2) between the James A. Fitzpatrick Nuclear Power Plant, R. E. Ginna Power Station and the NMPNS. In the event of a radiological emergency or other situations resulting in the need for additional equipment and/or personnel assistance, these plants have agreed to provide assistance as requested.

## 2.10 Coordination with Participating Government Agencies

### 2.10.1 Federal Agencies

The principal Federal government agencies having emergency responsibilities relative to the NMPNS, and a summary of those responsibilities, are:

a. U.S. Department of Energy (DOE)

The DOE, Brookhaven Area Office, will respond to requests from NMPNS for assistance. This assistance is limited to advice and emergency action(s) essential for the control of the immediate hazards to public health and safety.

The primary method of notification to DOE is by commercial telephone. Notification may also be made through NRC. Assistance can be requested by the NMPNS ED/RM, the Oswego County Emergency Management Director or the Commissioner of the New York State Department of Health. Medical Assistance provided by DOE could also include medical assistance by the Radiation Emergency Assistance Center/Training Site (REAC/TS) Support from Oak Ridge.

When notified of an emergency the Federal Radiological Monitoring and Assessment Plan (FRMAP) team would request a Coast Guard helicopter pick up a six person team at Brookhaven and fly them to the Nine Mile Point area with their equipment. Approximate arrival time of five (5) hours from notification is expected. This team would provide initial radiation surveys, obtain airborne samples and analyze these samples with the equipment available. The team would also act as an advance party to establish an initial base of operations for follow-on personnel. A possible location for the FRMAP team to set up operations is the Oswego County Airport, which is about ten (10) miles from the NMPNS and in close proximity to the Emergency Response Facilities yet still outside of the 10 mile EPZ. Use of this airport facility would also allow for equipment to be flown in on fixed wing aircraft close to the facilities that would be used for staging and dispatch.

b. Federal Energy Regulatory Commission (FERC)

Two (2) licensed hydroelectric developments are situated within a ten (10) mile radius of the Nine Mile Point Nuclear Station and the James A. Fitzpatrick Nuclear Power Plant. The Minetto and Varick Hydroelectric Stations are part of Project Number 2474 licensed with the Federal Energy Regulatory Commission. A plan has been developed to implement a response plan to safely shutdown and evacuate these hydroelectric facilities. This would be done in the event of a radiological emergency at either nuclear station. In addition, this plan addresses the means to minimize the impact to the public as a result of this emergency shutdown of the hydroelectric stations.

**2.10.2 State and Local Agencies**

This section identifies the principal State and local government agencies having action responsibilities in the event of a radiological emergency, including a Hostile Action Based event, in the vicinity of the NMPNS. The radiological emergency response plans of these agencies: describe their respective responsibilities, authorities, capabilities and emergency functions; contain provisions for preparedness and response to radiological emergencies by each organization; and contain the primary and alternate methods of emergency notifications.

a. Oswego County Emergency Management Office (OCEMO)

The OCEMO is the lead government agency for coordination and response at the local level. The Oswego County Radiological Emergency Preparedness Plan contains provisions for:

- Planning and coordination with local, State and Federal authorities
- Initial response to notification by NMPNS
- Alert and warning of local political subdivision
- Notification of other emergency response personnel
- Public information concerning the incident
- Evacuation and other protective measures for local populations

Normally the OCEMO is notified by NMPNS via the County Warning Point. It may, however, be notified by the New York State Office of Emergency Management (NYSOEM). A secondary method of notification is via radio from the NMPNS to the County EOC or County Warning Point.

**Figure 2.1: Minimum Staffing Requirements for the ERO**

Functional Area	Major Tasks	Emergency Positions	Minimum Staff (1)	Full Augmentation	
1. Plant Ops and Assessment	Control Room Staff	Shift Manager (Shift)	1*		
		Senior Reactor Operator (SRO) (Shift)	1*		
		Reactor Operator (RO) (Shift)	2*		
		Equipment Operator (EO) (Shift)	2*		
		RP Technician (Shift)	1*		
		Chemistry Technician (Shift)	1*		
2. Emergency Direction and Control	Command and Control	Shift Manager (Shift)	See above		
		Corporate Emergency Director (EOF)	1		
	Station Emergency Director (TSC)	1			
	Facility Control	TSC Director (TSC)	1		
EOF Director (EOF)		1			
3. Notification & Comm.	Emergency Communications	Shift Communicator (Shift)	1*		
		State/Local Communicator (EOF)	1		
		ENS Communicator (TSC)	1		
		HPN Communicator (EOF)		1	
	Plant Status & Technical Activities	All ERFs: Operations Communicators (one for TSC, EOF, OSC and each CR)			5
		EIS Operators (all facilities)			4 (Note 2)
	In-Plant Team Control	Team Tracker (OSC)			1
	Governmental		EOC Communicator (EOF)		1
State Liaison (EOF)				1	
County Liaison (EOF)				1	
Incident Command Post Liaison				(Note 8)	

**Nine Mile Point Annex**

**Exelon Nuclear**

Functional Area	Major Tasks	Emergency Positions	Minimum Staff (1)	Full Augmentation
4. Radiological Assessment	Offsite Dose Assessment	Dose Assessor (EOF)		2
	Offsite Surveys	Environmental Coordinator (EOF)		1
		Offsite Monitoring Team (EOF)	4	
	Onsite Surveys	RP Technician (OSC)	2	
	In-plant Surveys	RP Technician (OSC)	2	
	Chemistry	Chemistry Technician (OSC)	1	1
	RP Supervisory	TSC Radiation Protection Manager (TSC)	1	
		EOF Radiation Protection Manager (EOF)	1	
5. Plant System Engineering, Repair, and Corrective Actions	Technical Support / Accident Analysis	Shift Technical Advisor (Shift) Technical Manager (TSC) Electrical Engineer (TSC) Mechanical Engineer (TSC) Core Thermal Hydraulic Engineer (TSC) Operations Manager (TSC) Technical Advisor (EOF) TSC Technical Staff	1*  1 1 1 1 1 1	1       Note 3
	Repair and Corrective Actions	Maintenance Manager (TSC) OSC Director (OSC) Assistant OSC Director (OSC) Electrical Technicians (OSC) Mechanical Technicians (OSC) I&C Technicians (OSC)  Operations Personnel (OSC) Leads (Ops, Elec, Main, I&C, & RP)	 1 1 2 2 2   2	1   Note 3 Note 3 Note 3  Note 3 5 (Note 4)
6. In-Plant Protective Actions	Radiation Protection	RP Technician (OSC)	4	
7. Fire Fighting	--	Fire Brigade (Shift)	Note 5	

**Nine Mile Point Annex**

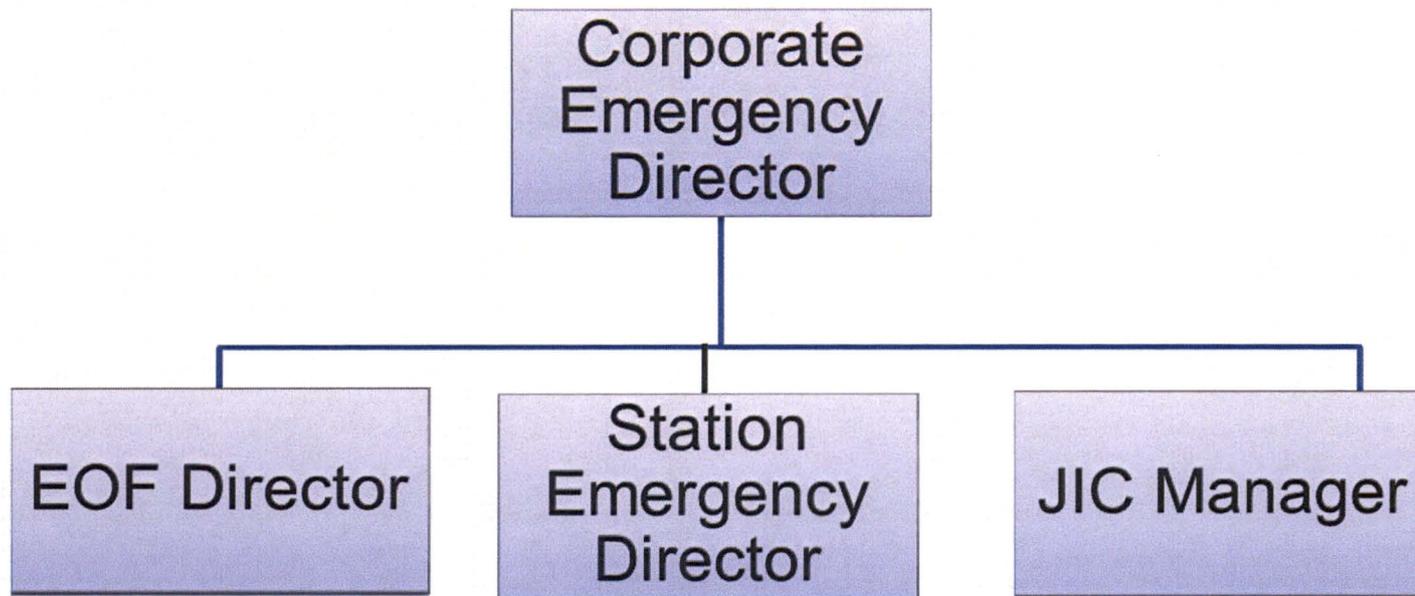
**Exelon Nuclear**

Functional Area	Major Tasks	Emergency Positions	Minimum Staff (1)	Full Augmentation
8. First Aid / Rescue	--	First Aid provided by trained Shift Personnel Rescue support provided by shift personnel or OSC personnel.		
9. Site Access Control	Security & Accountability	Security Shift Supervisor (Shift) Security Personnel Security Coordinator (TSC)	Note 6	1
10. Resource Allocation and Admin Support	Logistics	EOF Logistics Manager (EOF) JIC Logistics Manager (JIC)	1	1
	Administration	Administrative Staff (TSC) Administrative Staff (OSC) Administrative Staff (EOF) Administrative Staff (JIC)		2 1 2 (Note 7) 2 (Note 7)
	Facility Operations	Computer Specialist (TSC / OSC) Computer Specialist (EOF / JIC)		1 1
11. Public Information	Media Interface	Company Spokesperson (JIC) Media Liaison (JIC)	1	1
	Information Development	News Writer (JIC) Technical Advisor (JIC)	1	1
	Media Monitoring and Rumor Control	MM/RC Coordinator (JIC) Inquiry Phone Team (JIC) Media Monitoring Team (JIC)	1	2 (Note 3) 2 (Note 3)
	Facility Operation and Control	JIC Manager (JIC) JIC Security (JIC)	1	1
		<b>TOTALS:</b>	<b>Shift staff: 10 Augmented Min Staff: 40</b>	<b>513</b>

Notes:

- (1) Provided by On-Shift personnel, denoted by an asterisk.
- (2) Computer Specialist may perform EIS Operator duties.
- (3) Personnel numbers depend on the type and extent of the emergency.
- (4) Craft Lead positions can be filled by senior technicians or craft supervisors.
- (5) Fire Brigade per FSAR/Technical Specifications, as applicable. May be a collateral duty.
- (6) Per Station Security Plan.
- (7) EOF/JIC or TSC/OSC may share Administrative Staffs
- (8) Up to 3 Incident Command Post (ICP) Liaisons may be called based on event when a near site ICP is established.

**Figure 2.2: ERO Management Structure**



**Offsite ERO**

Interface with Offsite Response Organizations (Federal, State and Local) to coordinate Protective Actions for the public

**Onsite ERO**

Onsite (OCA) Protective Response and Mitigative Actions.

**Public Information ERO**

Provides information to the Public through the News Media, addresses phone inquiries, conducts Rumor Control operations.

Figure 2.3: TSC Staffing

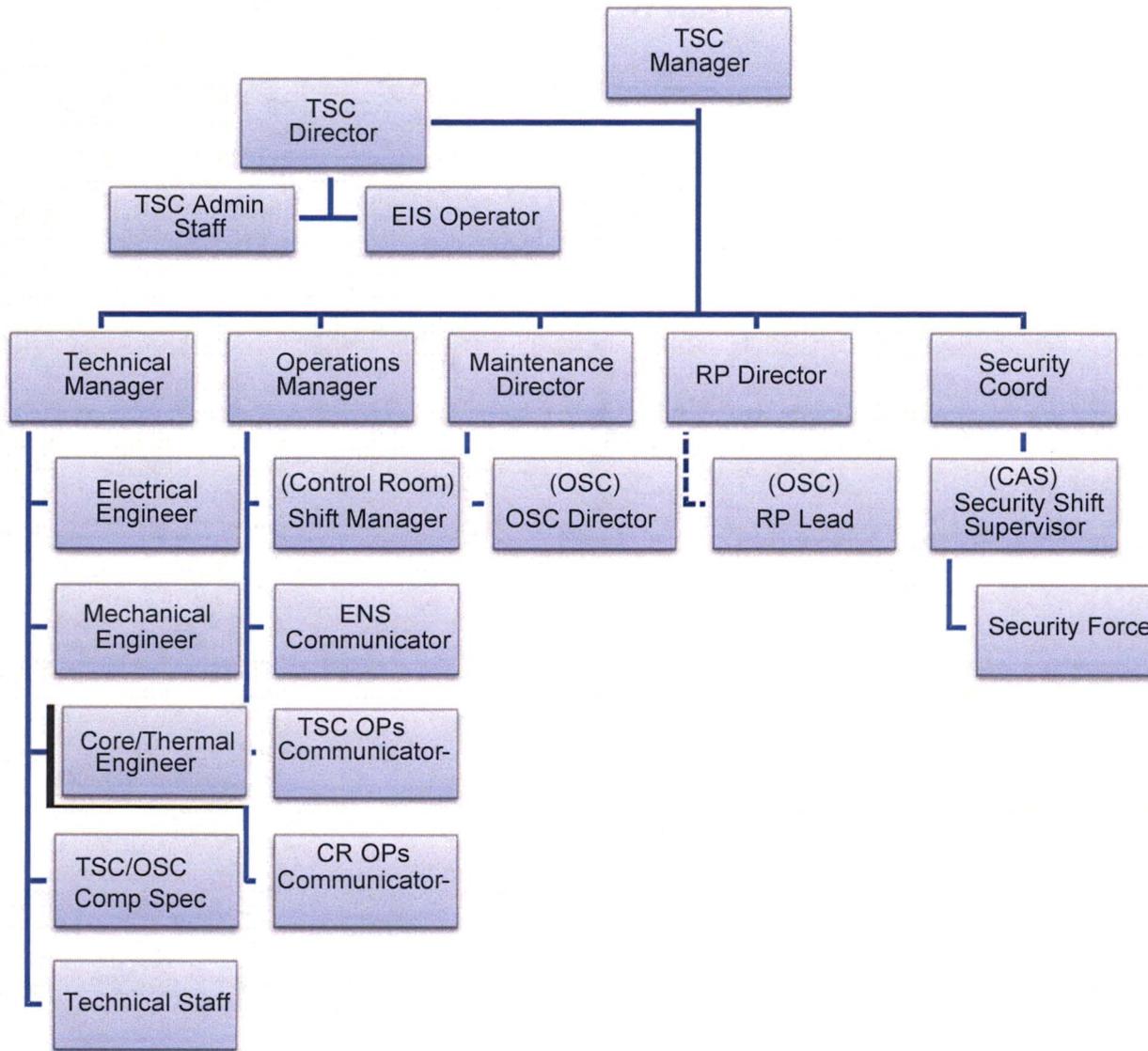


Figure 2.4: OSC Staffing

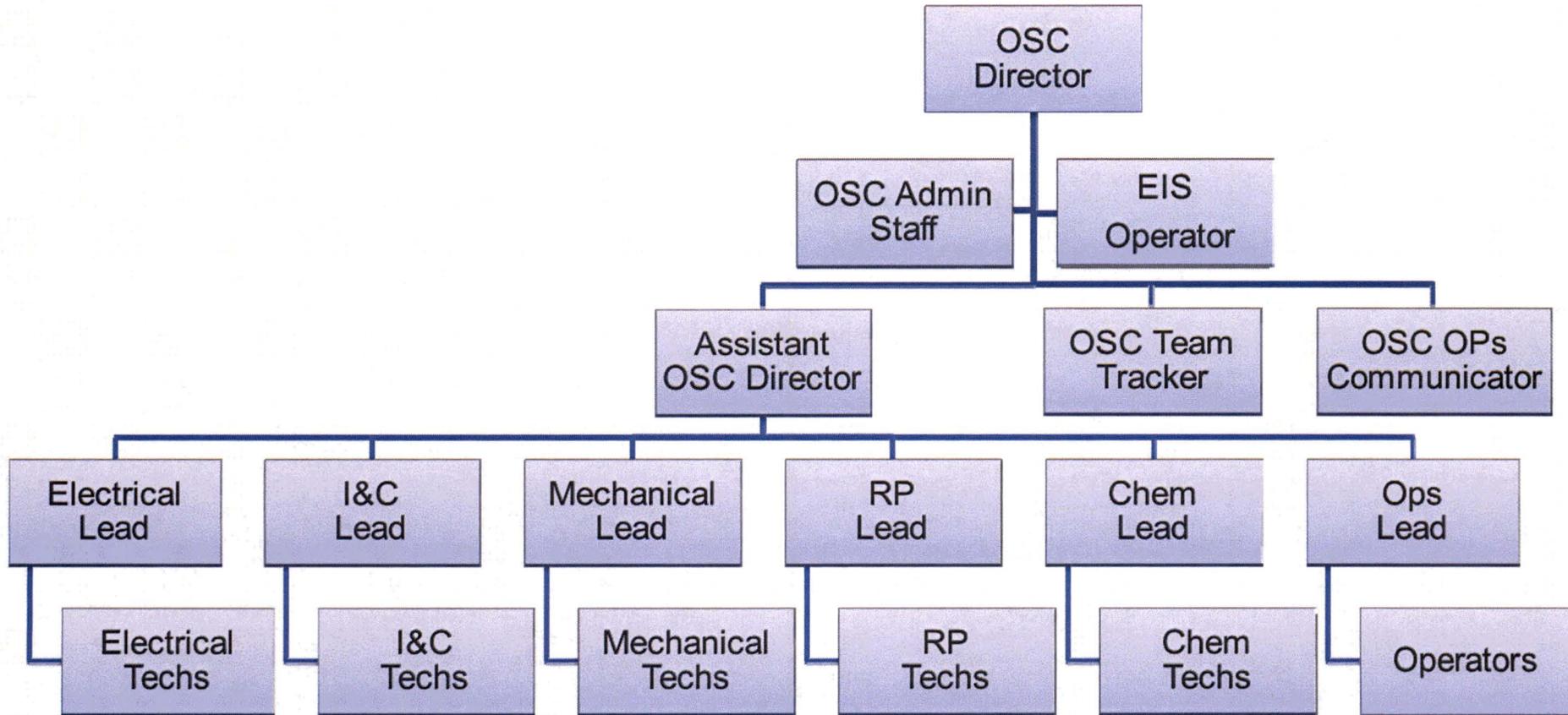


Figure 2.5 EOF Staffing

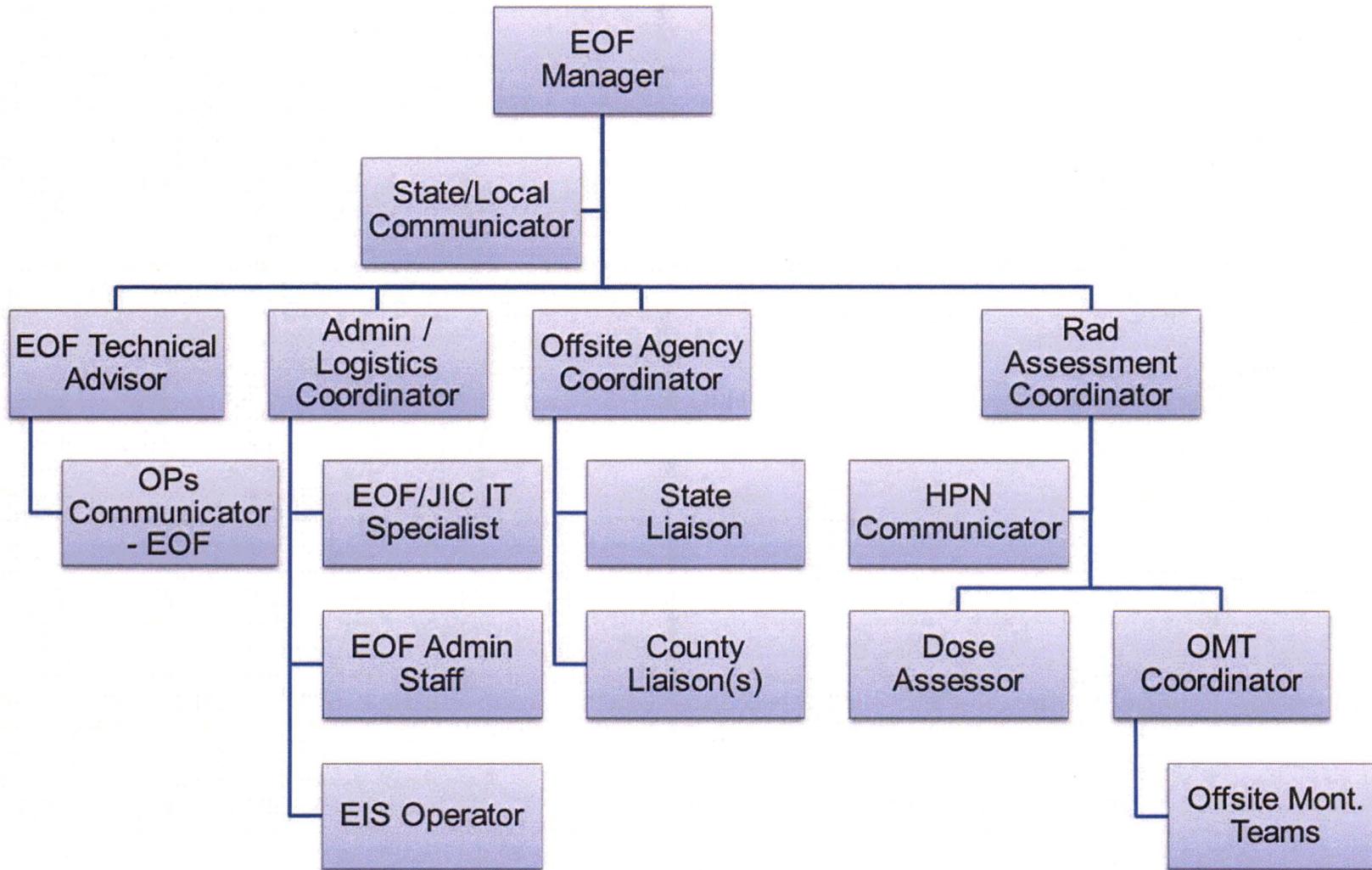
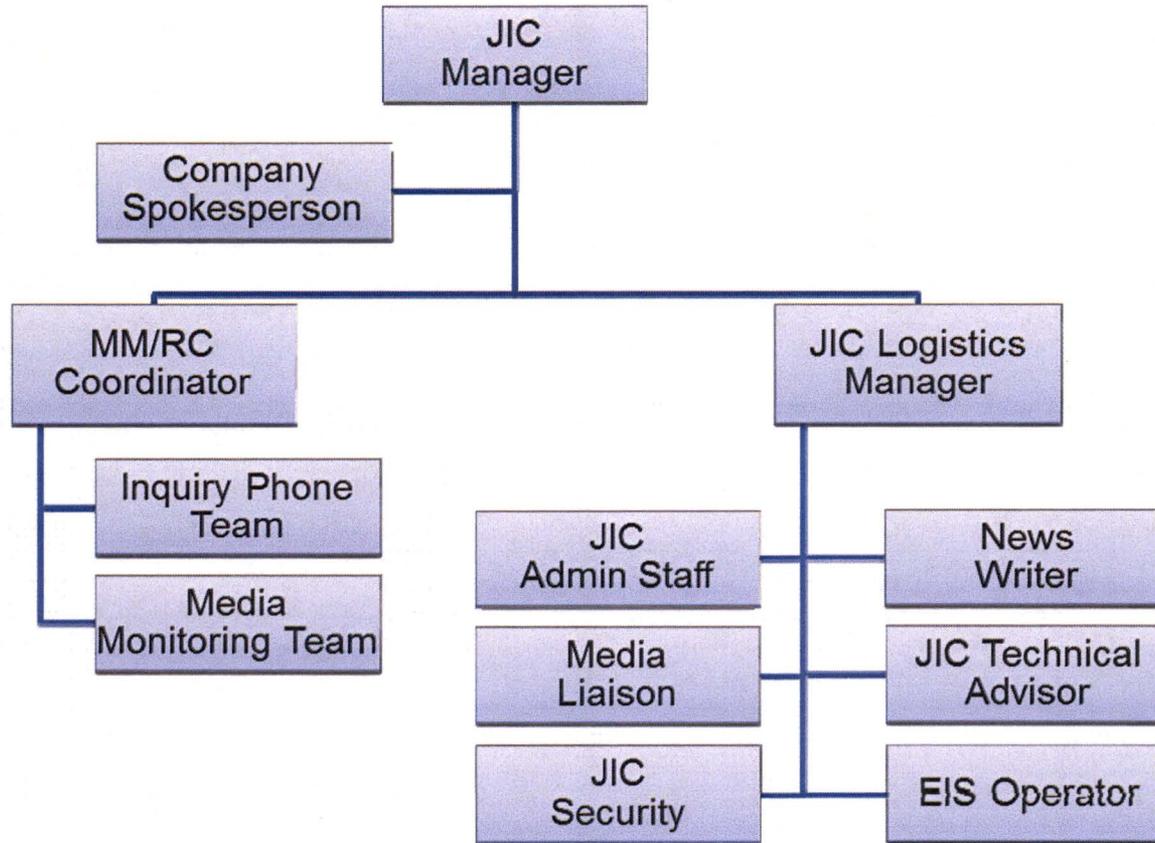


Figure 2.6 JIC Staffing



**Section 3: Emergency Conditions**

**3.1 Classification System**

The spectrum of probable and postulated emergency conditions have been categorized into four emergency classes. Emergency Action Level (EAL) criteria have been specified for recognizing, categorizing and declaring emergency classes based, to the extent feasible, on readily available information such as Control Room instrumentation. In many cases the emergency classification is immediately apparent from in-plant instrumentation and is consistent with requirements of USNRC Regulatory Guide 1.101. In other cases more extensive assessment is necessary to determine the applicable emergency classification. In any case, continuing assessment ensures that the emergency classification is commensurate with the severity of the emergency condition.

The information is presented by recognition Category with the associated Unit system/ equipment or instrument parameters clearly defined:

- Reactor Fuel
- RPV
- Primary Containment
- Secondary Containment
- Radioactivity Release
- Electrical Failures
- Equipment Failures
- Hazards
- Other

Each EAL Initiating Condition is structured in the following way:

- Recognition Category- as described above
- Emergency Class- Unusual Event, Alert, Site Area Emergency and General Emergency
- Initiating Condition- Symptom- or Event- Based, Identification and Title
- Operating Mode applicability- Power Operation, Hot Standby, Hot Shutdown, Cold Shutdown, Refueling, Defueled or All.

NMPNS maintains the capability to assess, classify and declare an emergency condition within 15 minutes after the availability of indications to plant operators that an Emergency Action Level (EAL) has been exceeded.

The 15 minute criterion does not prevent implementation of response actions to protect the public health and safety provided that any delay in declaration does not deny the State and Local authorities the opportunity to implement emergency response actions.

The 15 minute criterion commences when plant instrumentation, plant alarms, computer displays or incoming verbal reports that correspond to an EAL first

become available to any plant operator and encompasses all assessment, classification, verification and declaration actions.

As used here, "plant operator" means any member of the plant staff who, by virtue of training and experience, is qualified to assess the indications or reports for validity and to compare the same to the EALs. A "plant operator" does not encompass plant personnel such as chemists, radiation protection technicians, craft personnel, security personnel, and others whose positions require they report, rather than assess, abnormal conditions to the control room.

In the case where EALs are related to an analysis, e.g. dose assessment or sampling, the 15 minute declaration period starts with the availability of analysis results, to any plant operator, that show the conditions of the EAL to be exceeded.

Procedures EP-CE-111, Emergency Classification and Protective Action Recommendations, provide specific implementation guidance on this classification system. Figure 3.1 provides action and participation by response organizations for the various emergency classifications. EP-AA-1013, Addendums 3 and 4 provide the basis by which each of the emergency action levels was determined.

### 3.1.1 Unusual Event

Events are in process or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs. Although the emergency situation can be corrected and/or controlled, notification of NMPNS Management may be performed. In addition, appropriate offsite agencies are notified of the nature and extent of the incident, even though no action may be required of them.

### 3.1.2 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 intentional malicious dedicated efforts of a hostile act. Any releases are expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels.

### 3.1.3 Site Area Emergency

Events are in process or have occurred which involve an actual or likely major failures of plant functions needed for protection of the public or security events that result in intentional damage or malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) prevents effective access to equipment needed for the protection of the public. Any releases are not

expected to result in exposure levels which exceed EPA Protective Action Guideline exposure levels beyond the site boundary.

**3.1.4 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 security events that result in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the immediate site area.

**3.2 Spectrum of Postulated Accidents**

Postulated accidents are described in Chapter XV of the Unit 1 FSAR and Chapter 15 of the Unit 2 USAR.

Postulated accidents for dry fuel storage (ISFSI related) are described in the Transnuclear Inc. Updated Final Safety Analysis Report (NUHOMS<sup>®</sup> UFSAR) for the Standardized NUHOMS<sup>®</sup> Horizontal Modular Storage System for Irradiated Nuclear Fuel. Postulated accidents utilizing the Standardized NUHOMS<sup>®</sup> -61BT dry shielded canisters are described in Section K.11.2 of the NUHOMS<sup>®</sup> UFSAR and Section T. 11.2 of the UFSAR describes the postulated accident utilizing the Standardized NUHOMS<sup>®</sup> -61BTH dry shielded canisters.

**FIGURE 3.1**  
**REQUIRED ACTIONS AND PARTICIPATION BY**  
**RESPONSE ORGANIZATIONS FOR VARIOUS EMERGENCY CLASSES**

Emergency Class	Participation By NMPNS			Plant Staff	Participation By Off-Site Agencies
	Necessity for <u>Protective Action</u>		Necessity for Corrective Action		
	On-Site	Off-Site			
Unusual Event	Possible	Not Required	Possible <sup>1)</sup>	Action Required	No Action Required
Alert	Possible	Not Required	Possible <sup>2)</sup>	Action Required	EOC's On Alert
Site Area Emergency	Probable	Not Required	Probable <sup>3)</sup>	Action Required	EOC Action Required
General Emergency	Probable	Required	Probable <sup>3)</sup>	Action Required	EOC Action Required

- 1) May involve normal organizational response such as ambulance, rescue personnel and use of medical facilities as would occur for any industrial accident.
- 2) May require police, firemen, ambulance, and/or medical facilities to be on alert or to respond.
- 3) May involve police and Coast Guard, firefighters, ambulance and/or use of medical facilities. May involve radiological monitoring teams from NMPNS, local, State and Federal agencies.

#### **4.0 Emergency Measures**

Emergency Measures are actions taken to ensure that an emergency situation is assessed and that proper corrective and/or protective actions are taken. These actions include activation of the appropriate components of the emergency organizations, both on-site and off-site; assessment of plant systems status and radiological conditions; mitigative actions to mitigate or terminate an emergency situation; protective actions to minimize the consequences of the emergency to Station personnel and to the general public in the Station environs; decontamination and medical treatment for Station personnel; and other supporting actions such as timely and accurate emergency news releases to the public media.

This section describes the emergency measures which may be performed and applicable criteria, guidelines and methodology for performing those measures.

#### **4.1 Initiation of Emergency Actions**

Emergency actions are initiated primarily in response to alarmed instrumentation, but may be initiated through notification to the Control Rooms by individual(s) at the Nine Mile Point Nuclear Station who become aware of an apparent emergency situation or by persons outside of the plant in the case of severe weather warnings or hostile actions. The affected unit Control Room Operator (CRO) performs the necessary immediate actions to contend with the off-normal situation in accordance with instrument alarm response procedures (which are contained in the Operating Procedures), Special Operating Procedures, Emergency Operating Procedures and/or other appropriate procedures. The CRO promptly notifies the affected unit SM of the potential emergency situation. This SM assesses the situation and, if necessary, declares the emergency.

As delineated in Section 4.1 of this Emergency Plan, NMPNS maintains the capability to assess, classify and declare an emergency within 15 minutes after the availability of indications to plant operators that an Emergency Action Level (EAL) has been exceeded.

The affected unit SM assumes the role of NMPNS Shift Emergency Director until responsibilities are relieved by the Corporate Emergency Director in the EOF. In the event of an emergency declaration due to an initiating condition affecting both Unit 1 and Unit 2, both Units' SMs will confer and determine:

- The Unit with the higher emergency classification will become the Shift Emergency Director.
- If emergency classification levels are equal, the SM first notified will become the Shift Emergency Director.
- If there is any question as to who should initiate the Station Annex, the Unit 1 SM shall assume the Shift Emergency Director duties.

The Shift Emergency Director continues to assess and classify the condition and initiates the appropriate corrective and protective actions and ensures activation of the necessary segments of the total emergency organization.

The Operating Procedures contain appropriate action statements which refer the operator to the Emergency Plan Implementing Procedures when specified plant parameter values are exceeded or equipment status warrants such response. Severe Accident Procedure (SAP) entry conditions are defined in the station Emergency Operating Procedures. The Shift Emergency Director, in consultation with the Station Emergency Director, determines when SAP entry is required.

#### **4.2 Activation of Emergency Organization**

This section describes the provisions for notifying and/or activating groups and organizations within the emergency organization in response to potential or actual emergency events at the station. Procedures for notifying, alerting and mobilizing emergency response organizations, including message authentication, are contained in procedure EP-CE-114-100, Emergency Notifications (CNG). Figure 4.1 summarizes the notification/activation of both the onsite and the offsite emergency organization and designates potential action requirements for each emergency classification. A diagram identifying the major emergency facilities and their interfaces during various stages is shown in Figures 4.2 and 4.3.

##### **4.2.1 Offsite Notification and Follow-up Messages**

The contents of initial emergency notification messages which would be sent from the affected unit to New York State and Oswego County is contained in EP-CE-114-100. Notification Fact Sheets were developed in conjunction with New York State and Oswego County, and serve as the means of initial emergency notification. The contents of the Notification Fact Sheets are consistent with the guidance outlined in Section II.E of NUREG-0654. As a minimum, the following information is provided:

- o Facility name, communicator name and call back telephone number
- o Date/time of incident
- o Class of emergency
- o Brief description of event
- o Radioactive material release information
- o Protective action recommendations
- o Event prognosis
- o Meteorological information

Follow-up notifications are made at regular intervals as detailed in EP-CE-114-100 and contain information consistent with the guidance detailed in Section II.E of NUREG-0654. As a minimum the follow-up information contains the above information and the following:

- Actual or projected dose rates and projected integrated dose rates at site boundary
- Projected dose rates and integrated dose at projected peak and at 2, 5 and 10 miles
- Surface contamination estimates

A mutual agreement has been reached between New York State Licensees and New York State excluding event prognosis information from initial notification messages.

#### 4.2.2 Offsite Emergency Organization

##### a. Offsite Authorities

The Corporate Emergency Director ensures that offsite authorities are notified and apprised of potential or actual emergency events at the NMPNS. Notifications are made to the Oswego County and New York State Warning Points using methods described in EP-CE-114-100. Notification to these authorities of an Unusual Event, an Alert, a Site Area Emergency or a General Emergency commences within 15 minutes following the declaration of an emergency classification. A representative from NMPNS may be sent to the State Emergency Operations Center (SEOC) and to the Oswego County Emergency Operations Center (OCEOC) for a Site Area or General Emergency when the SEOC and the OCEOC, respectively, is fully activated. These representatives aid and assist the New York State Disaster Preparedness Commissioner and the Chairman of the Oswego County Legislature, or their representatives, in defining the extent of the emergency and mitigating measures being taken.

Backup radiological emergency assistance may be provided by the U.S. Department of Energy in Brookhaven, N.Y. Notifications for assistance may be made by the NMPNS Corporate Emergency Director, by the Oswego County Emergency Management Director or by the New York State Commissioner of Health.

#### 4.2.3 On-Site Notification and Organization

##### a. Notification of NMPNS personnel takes place through the following methods:

- 1) PA System (GAtrionics). This system is capable of sending voice messages and signals indicating a fire, station alarm, or evacuation alarm to all areas within the protected area. It is used to alert personnel onsite of emergency conditions.

- 2) Telephone. The telephone can be used to contact any needed personnel during emergency conditions.

EP-CE-114-100 contains the implementing procedures for making appropriate notifications.

- b. Upon being informed of a potential or actual emergency condition, the affected unit SM immediately assesses the condition. The SM ensures that appropriate actions have been initiated to maintain the safe and proper operation of the plant. This SM then classifies the condition as an Unusual Event, Alert, Site Area Emergency or General Emergency. If the event is classified as an emergency (as defined in EP-CE-111) that requires implementation of this Plan, the SM assumes the role of Shift Emergency Director and takes the following actions:

- 1) Implement immediate actions in accordance with this Plan and the applicable Emergency Plan Implementing Procedures.
- 2) Ensure that on-site emergency response individuals and groups are notified (and off-site groups, if conditions require), using the PA system and/or direct communications.
- 3) Notify on-site individuals to implement a Local Area/Building, Protected Area or Exclusion Area Evacuation, if appropriate, which may include accountability. These notifications are made by sounding the appropriate alarm followed by an announcement of supplementary information over the PA system. Notification is also made to the JAFNPP Control Room (who then activates their notification system).
- 4) May notify the Plant Manager or their designated alternate to apprise them of the situation. Because of the probable short duration and/or low severity of the condition, the Shift Emergency Director responsibilities are likely to remain with the SM through termination of Unusual Event classifications.
- 5) Ensure that off-duty station personnel are notified to provide assistance with emergency activities as necessary. This notification process is described in EP-CE-114-100. Off-duty personnel are called in as required.
- 6) Notify appropriate TSC, OSC and EOF personnel if the condition is classified as an Alert or higher.

### **4.3 Assessment Actions**

Provisions are made for assessment and continuing re-assessment throughout the course of an emergency to ensure the effective coordination, direction and upgrading of emergency activities in a timely manner. The assessment actions are described in detail in the Emergency Plan Implementing Procedures.

#### **4.3.1 Unusual Event**

The purpose of the Unusual Event classification is to provide early warning of minor events which could lead to more serious consequences. The Unusual Event conditions represent potential degradation of the level of safety of the plant or indicate a security threat to facility protection. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs. Declaring an Unusual Event assures that the first step for any response later found to be needed, has been carried out by bringing onsite staff and offsite organizations to a state of readiness, thus providing a system for handling information and decision making.

The NRC, State, and Oswego County authorities will be promptly notified to assure that the first step of any necessary response can quickly be initiated. Offsite organizations will standby for further information or termination. On-shift resources can be augmented to assess and respond as needed.

#### 4.3.2 Alert

Events of the Alert classification involve actual or potential degradation of the level of safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of intentional malicious dedicated efforts of a hostile act. Any radioactivity released would result in exposures of only a small fraction of the guidelines for required offsite action. By assuring that emergency personnel are available, protective actions, such as performing confirmatory radiation monitoring and providing offsite authorities with current status information, will be ensured.

For events which fall into the Alert classification, the Emergency Response Organization will promptly notify the NRC, State and County authorities of the Alert Classification and the reasons for the classification. The TSC and EOF will be staffed to assist in the assessment of the incident and determination of proper responses. Periodic plant status updates will be given to offsite authorities who will also be advised of any change in the classification of the event.

Non-essential personnel will normally be evacuated from the protected area (provided it is safe) to designated locations outside of the protected area at this level. All ERO personnel will assemble at their designated emergency facilities, and accountability may also be initiated. This ensures that:

- Appropriate staff is available to mitigate the event,
- The potential to over-expose non-essential personnel is minimized,
- Non-essential personnel are prepared for possible exclusion area evacuation by pre-staging these personnel outside of the protected area.

The JIC will be staffed in order to coordinate public information activities warranted by the emergency. Offsite agencies may activate their resources and facilities and may alert other emergency personnel, such as monitoring teams, communication centers, the Emergency Alert System (EAS), and law

enforcement. They will be ready to escalate to a more severe classification, if appropriate.

#### 4.3.3 Site Area Emergency

A Site Area Emergency (SAE) is declared when events are in progress or have occurred which involve actual or likely major failures of plant functions needed for the protection of the public or security events that result in intentional damage or malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) prevents effective access to equipment needed for the protection of the public. Any releases are not expected to exceed EPA Protective Action Guideline exposure levels except near the site boundary.

In the event that a SAE is declared, the actions to be taken by various plant groups are detailed in the implementing procedures for the plant. The Emergency Response Organization will make the initial notification to the County authorities, State, and NRC.

The purpose of declaring a SAE is to assure that non-essential personnel are protected in the event of a release of radioactive materials. Should a release be anticipated or in progress, non-essential personnel will normally be directed to evacuate to the either the Offsite Assembly Area (provided it is safe) for monitoring and if necessary decontamination, or home if there was no release of contamination from the station. If no release is anticipated or in progress, non-essential personnel will normally remain at designated locations within the exclusion area, to permit more rapid return of personnel to normal duties. Accountability of personnel remaining within the protected area, as a minimum will commence at this level, and continues until event termination or de-escalation. Also, offsite agency authorities will be available at primary response centers for consultation and updates on the situation, and to provide information to the public.

For events which fall into the SAE classification, the County, State, and NRC will be promptly notified of the SAE classification, and the reasons for the SAE classification. The TSC and EOF will be staffed to assist in the assessment of the incident and determination of proper responses. Periodic plant status updates will be given to offsite authorities who will also be advised of any change in the classification of the event.

The JIC will be staffed in order to coordinate public information activities warranted by the emergency.

Offsite agencies may activate their resources and facilities and may alert other emergency personnel, such as monitoring teams, communication centers, EAS, and law enforcement. They will be ready to escalate to a more severe classification, if appropriate.

#### 4.3.4 General Emergency

A General Emergency (GE) is declared when events are in progress or have occurred which involve actual or imminent substantial core damage or melting with potential loss of containment integrity or security events that result in an actual loss of physical control of the facility. Releases of radioactive material can be expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the immediate site area.

In the event that a GE is declared, the actions to be taken by the various plant groups are detailed in the implementing procedures for the plant. The Emergency Response Organization will make the initial notification to the County authorities, State, and NRC. Initial notification of a GE shall contain initial Protective Action Recommendations. The purposes for declaring the GE are:

- To initiate protective actions for the public and site personnel as predetermined by projected, or by actual releases.
- To provide continuous assessment of information from the affected unit.
- To provide for consultation with offsite authorities.
- To keep the public informed through the JIC.
- To evacuate non-essential personnel from the exclusion area (provided it is safe) to either the Offsite Assembly Area (OAA) for monitoring and if necessary decontamination, or home if there has been no release of contamination from the station.

The TSC and EOF will be staffed to assist in the assessment of the incident and proper determination of responses. Periodic plant status updates will be given to offsite authorities who will also be advised of any change in the classification of the incident. The JIC will be staffed in order to coordinate public information activities warranted by the emergency. Offsite agencies will activate all needed resources and facilities.

### 4.4 Assessment Capabilities

#### 4.4.1 Field Radiological Assessment

Field radiological data is collected by onsite and offsite survey teams. The teams may be deployed for any emergency classification involving projected or actual releases of radioactive materials. The survey teams use emergency/company vehicles (or personal vehicles, if needed) for transportation and maintain contact with the EOF or TSC.

Downwind Survey equipment is maintained for emergency use by onsite and offsite survey teams. This equipment includes portable instrumentation for performing direct radiation surveys, performing contamination surveys and collecting and analyzing airborne samples for gross and iodine radioactivity.

Rapid assessment of any radiological hazards resulting from the gaseous effluents are made in the field using the environmental samples taken. Radiation Protection Procedures will be used to implement the required radiological surveys/samples and analyze of the results of these surveys/samples taken from within the NMPNS. Procedure EP-AA-112-500-F-55, NMP Offsite Monitoring Team Guidance, will be used to analyze the offsite survey and sample results to provide an initial estimate of the offsite radiological consequences.

Rapid field assessment of liquid samples is not considered essential because the nearest drinking water supply is far enough away to provide ample time for warning the appropriate State and local authorities in the event protective measures are required. When field liquid samples are required, they will be taken and transported back to the appropriate facility for assessment.

#### 4.4.2 Field Airborne Radioiodine Assessment

Monitoring for radioiodine is accomplished by the use of portable sampling pumps equipped with a particulate filter and silver zeolite cartridges. The particulate filter and silver zeolite cartridges can be field counted in a low background area for immediate determination of total radioiodine concentration. Cartridges and filters can be further analyzed using gamma spectrometry in either the NMPNS counting laboratory, the environmental laboratory or the adjacent JAFNPP counting laboratory. The lower limit of detection for radioiodine is less than  $1.0E-7$   $\mu\text{Ci/cc}$  under all weather conditions.

#### 4.4.3 Field Contamination Assessment

A second type of radiological data which the onsite and offsite survey teams collect is surface contamination levels for the radionuclides listed in NUREG-0654, Table 3 (Radionuclides with Significant Contribution to Dominant Exposure Modes). The data obtained from these sample measurements assist in protective action decisions affecting the general public during the emergency and post-emergency recovery/re-entry phase. This data can be used to determine 10CFR140 applicability.

Surface contamination may be estimated using procedure EP-AA-112-500-F-55 during the emergency and actual values are determined by sampling snow, grass, soil, leafy vegetation, surface water as deemed appropriate during emergency recovery activities. EP-AA-112-500-F-55 describes in detail the emergency radiological environmental sampling program.

#### 4.5 Dose Assessment Methods and Techniques

The NMPNS has established a method for relating various measured environmental media activity levels to dose rates for key isotopes and gross radioactivity measurements. NMPNS has formulated provisions for estimating integrated dose from the projected and actual dose rates (refer to EP-AA-110-204, NMP Dose Assessment). The results of these calculations can then be tabulated and compared with applicable protective action guides.

The information most important in determining offsite consequences is source term, dose assessment, environmental measurements and dose projections. The following paragraphs describe these dose assessment terms and techniques.

##### 4.5.1 Source Term Determination

###### a. Projected Source Term Determination

The release rate and/or source term from NMPNS during a nuclear emergency can be projected as described in EP-AA-110-204, and are listed as follows:

- 1) Containment High Range Monitors (CHRM) (relate CHRM to a radioactivity concentration in the drywell, then assume a flowrate from the drywell to the atmosphere).
- 2) Grab samples.
- 3) Back calculation from downwind gamma dose rate measurements.
- 4) UFSAR/USAR postulated accident release rates.

###### b. Actual Source Term Determination

The method for determining actual release rate for source term determination from NMPNS during a nuclear emergency are described in EP-AA-110-204, and are listed as follows:

- 1) Effluent monitors
- 2) Stack teletector (Unit 1 only)
- 3) Grab samples

##### 4.5.2 Offsite Radiological Dose Assessment Process

Dose assessment or projection represents the calculation of an accumulated dose at some time in the future if current or projected conditions continue. During an accident, the Plant Parameter Display System and personal computers will provide the ERO with the timely information required to make decisions. Radiological and meteorological instrumentation readings are used to project dose rates at predetermined distances from the station, and to determine the integrated dose received. Dose assessment methods used by Exelon personnel to project offsite doses include:

- a. Monitored Release Points - This method utilizes the plant's effluent radiation monitors and system flow rates. Effluent release points are used to directly calculate a release rate. The point of the release determines the way the source term is affected and is adjusted by the dose assessment process.
- b. Containment Leakage/Failure - This method uses a variety of containment failures or leak rates in conjunction with available source term estimations to develop a release rate to the environment. A direct vent of containment can be modeled as a failure to isolate.
- c. Release Point Samples - This method uses a sample at the release point and an estimated flow rate to develop a release rate at the point of release.
- d. Field Monitoring Team Data - This method uses a field survey or sample and the atmospheric model to back calculate a release rate and ratio concentrations of radioactive material at various points up and downwind of plume centerline.

The computer applications used to provide dose calculations are evaluated against the EPA-400 plume exposure Protective Action Guides (PAGs) applicable for the early phase of an accident. These evaluations place an emphasis on determining the necessity for offsite protective action recommendations. Dose assessment actions will be performed in the following sequence:

- a. First, onset of a release to 1 hour post-accident:
  - 1) Shift personnel will rely on a simplified computerized dose model to assist them in developing offsite dose projections using real time data from effluent monitors and site meteorology.
- b. Second, 1 hour post-accident to event termination:
  - 1) Estimates of off-site doses based on more sophisticated techniques are provided. Dedicated ERO personnel will analyze the offsite consequences of a release using more complex computerized dose modeling. These additional methods are able to analyze more offsite conditions than the simplified quick method, as well account for more specific source term considerations

#### 4.5.3 Onsite Dose Assessment and Protective Actions

Health Physics procedures provides procedures for assessing the radiological conditions onsite, and protective actions needed in response to those actual or projected conditions. EP-CE-113, Personnel Protective Actions provides for control of emergency exposures.

#### 4.5.4 Environmental Measurements

The second method available to assess dose is based on measured activity in environmental media. Dose can also be determined on the basis of plant and

environmental measurements collected per EP-AA-112-500-F-55 and the post-accident sampling procedures.

Environmental samples collected by the downwind survey teams and environmental survey teams are returned for laboratory analysis. Environmental media such as milk, human food products and water are analyzed in a laboratory environment to determine the concentrations of key isotopes which would then be converted (either by hand calculation or computer using appropriate formulas) to dose.

**4.5.5 Dose Projection**

- a. Preliminary estimates of total population exposure are made using the method in EP-AA-110-204, and EP-AA-112-500-F-55. These preliminary estimates are based on projected or actual field measurements made during the course of the emergency. During the recovery phase of the emergency, these estimates are refined based upon actual emergency and environmental Optically Stimulated Luminescent Dosimeters (OSLD) results, information obtained from the Oswego County Emergency Management Office on evacuated and sheltered population, and evacuation time estimates for various Emergency Response Planning Areas (ERPA's).

**4.6 Mitigative Actions**

Detailed Emergency Operating Procedures, Special Operating Procedures, and Severe Accident Procedures as appropriate are used by the station operating personnel to assist them in recognizing potential or actual emergency events and responding to emergency and severe accident conditions. These procedures describe the mitigative actions necessary to place the plant in a safe condition. Additionally, Emergency Plan Implementing Procedures, as listed in this Station Annex, Appendix 3, describe subsequent and/or supplemental mitigative actions for the scope of potential situations within each of the emergency classifications. These Emergency Plan Implementing Procedures are designed to guide the actions of personnel to correct or mitigate a condition as early and as near to the source of the problem as feasible.

**4.7 Protective Actions**

Protective actions are measures which are implemented to prevent or mitigate consequences to individuals during or after a radiological incident. Protective actions within the NMPNS site boundary are the responsibility of the NMPNS Emergency Director, but may include assistance by off-site organizations. Protective actions outside the NMPNS site boundary are primarily the responsibility of State and local emergency organizations, but may include

coordination of activities, dissemination of appropriate data and recommendations by the NMPNS Emergency Director.

4.7.1 Onsite Protective Actions

Onsite protective actions are directed by the Emergency Director and are reviewed to consider the possible impact on the activities of offsite response personnel prior to being ordered.

The primary protective measure for onsite personnel in an emergency is prompt evacuation from areas which may be affected by significant radiation, contamination or airborne radioactivity. For personnel who must stay onsite as part of the on-site emergency response team other protective measures may be used as discussed in the following sections.

In addition, a range of protective actions to protect onsite personnel during hostile action events has been developed. This range of protective actions ensures the continued ability to safely shut down the reactors and perform emergency response functions. The response functions include:

- Evacuation of personnel from target buildings
- Site evacuation by opening gates, while continuing to defend them
- Dispersal of Licensed Operators
- Sheltering personnel away from potential site targets
- Accounting for personnel after the attack

The following are the primary onsite protective actions:

a. Local Area/Building Evacuation

A local area/building evacuation is confined to local areas or buildings within the protected area. This evacuation requires all personnel within the designated area or building to rapidly exit the area/building and remain clear of the area/building until further notice. The decision to implement a local area/building evacuation is the responsibility of the Emergency Director. This decision is based largely on evaluation and judgment of the magnitude and severity of the situation on a case by case basis. Factors to be considered may include:

- the safety of personnel within the area/building
- smoke/heat or other hazards
- actual or estimated levels of radiation and/or airborne radioactivity involved, as well as the potential exposure to personnel that would result from both evacuating and not evacuating specific station areas/buildings.

The warning of personnel in the station can be accomplished in less than 15 minutes. (This includes visitors, contractor and construction personnel).

Notification is made by sounding the evacuation alarm, followed by an announcement over the plant PA system. (Refer to EP-CE-113, Personnel Protective Actions)

b. Protected Area Evacuation

A Protected Area Evacuation is confined to areas within the protected area. This evacuation requires that ERO members assemble at their designated ERF, and non-essential personnel leave the protected area and assemble at designated locations outside of the protected area. (refer to EP-CE-113).

The decision to implement a protected area evacuation is the responsibility of the Emergency Director (as appropriate). A protected area evacuation is automatically implemented at an Alert or Site Area Emergency provided it is safe to perform. The warning of personnel in the protected area can be accomplished in less than 15 minutes. (This includes visitors, contractor and construction personnel)

Notification of a protected area evacuation is made by sounding the evacuation alarm, followed by an announcement over the plant PA system.

c. Owner Controlled Area (OCA) Evacuation

EP-CE-113 describes the evacuation of non-essential personnel from the NMPNS protected area via the Security Buildings to the Offsite Assembly Area. It also includes, as appropriate, the evacuation of individuals from the NMPNS OCA, including the Nuclear Learning Center, Energy Center, Sewage Treatment Facility and all other NMPNS site locations to their homes or Offsite Assembly Area

The Off-site Assembly Area is normally the Oswego County Airport, Hanger K, in Volney (Fulton). The Emergency Director may specify alternate routes or alternate locations, if appropriate. Personnel will use privately owned vehicles to evacuate. Security personnel help ensure that personnel proceed to the Offsite Assembly Area. JAFNPP is advised of the NMPNS OCA evacuation and the projected dose rates which could affect their personnel. The decision to implement an OCA evacuation is the responsibility of the Emergency Director. The decision is based on the declaration of a Site Area Emergency in which a radioactive release is anticipated or in progress, the declaration of a General Emergency, or upon declaration of a site evacuation by JAFNPP.

Notification of an OCA evacuation is made by sounding the evacuation alarm, followed by an announcement over the station PA system.

Other persons who may be in public access areas, passing through the site, or within a NMPNS controlled location, will be notified by methods outlined in EP-CE-113. The warning of personnel in the OCA can be

accomplished in less than 15 minutes. (This includes visitors, contractors and construction personnel)

d. Personnel Accountability

To ensure that station personnel present in affected areas have been accounted for and to determine the whereabouts of personnel who have not been accounted for within the protected area, measures have been established to provide for personnel accountability. Accountability for personnel remaining within the protected area following an accountability order is performed in accordance with EP-CE-113.

Initial accountability results in the generation of a list of missing persons within 30 minutes of an announcement to evacuate non-essential personnel or an announcement to perform accountability and/or identifying any individuals not accounted for.

**NOTE:** The personnel accountability process is considered initiated when the announcement has been completed.

The accountability system works as follows: Personnel enter the protected area through security access points. Upon entering the area personnel position their security identification proximity card (Owner Controlled Area Card) near the entrance Proximity Card Readers. Their access is tracked by the security department computer. In the event of an emergency, personnel within the protected area report to onsite assembly areas, or exit the protected area activating a Proximity Card Reader at the accountability area or at the protected area exit. After a number of personnel have completed this process (about 20 minutes after the announcement), a report is produced. The information on the report yields the names of individuals who are present in the protected area, but who have not activated a Proximity Card Reader (activations are subtracted from the overall database). The personnel accountability process continues throughout the event. Search and rescue efforts begin at the completion of the initial accountability process, and are performed in accordance with EP-AA-113, Personnel Protective Actions.

e. Contamination Control

The NMPNS Radiation Protection Procedures contain provisions governing the control of contamination including access control, use of protective clothing, contamination monitoring, and the release of potentially contaminated items from Restricted Areas.

The requirements and guidelines of these procedures apply to contamination control during emergency conditions.

Specific onsite contamination control measures for food supplies is not necessary since no agricultural products for consumption are grown within the NMPNS exclusion area. Also, no drinking water supplies

originate onsite. Drinking water is obtained from City of Oswego water supplies or bottled water suppliers.

f. Exposure Control

The radiation exposure of station personnel during emergency operations is maintained As Low As Reasonably Achievable (ALARA), and should be maintained less than the administrative guides established in the NMPNS Radiation Protection Procedures and/or less than the Federal radiation exposure standards established in 10CFR20. In order to accomplish this objective, administrative means used during normal operations to minimize personnel exposure, such as Radiation Work Permits, Authorization to Exceed Radiation Exposure Guides, and ALARA measures should remain in force to the extent consistent with timely implementation of emergency measures.

If necessary actions require personnel exposures to exceed normal limits, or if normal access control and radiological work practices results in unacceptable delays, the established exposure control criteria and methods may be waived or modified at the discretion of the Shift Emergency Director or Corporate Emergency Director (as appropriate). In the event of a declared emergency, the emergency dose limits outlined in EPA-400 have been proceduralized in EP-CE-113, Personnel Protective Actions, and may be used. EP-CE-113 also provides procedures for expeditious decision making, a reasonable consideration of relative risks, and the capacity for just-in-time authorization or emergency exposures.

Emergency dose limits are as follows:

TEDE Limit (rem)	Activity
5	All activities during the emergency
10	Protecting valuable property
25	Lifesaving or protection of large populations
>25	Lifesaving or protection of large populations, only if individuals receiving exposure is a volunteer, and fully aware of risks involved.

Dosimetry equipment is provided at the station as part of the normal Radiation Protection Program, and such dosimetry continues to be used during emergency situations. Dosimetry consists of OSLDs (or equivalent) and Self-Reading Dosimeters (SRD) (or equivalent, e.g. electronic dosimeters), also known as Pocket Direct-Reading Dosimeters. A limited number of such dosimetry are also available in emergency

supplies. Personnel are available 24 hours a day during an emergency to issue and/or process dosimetry devices.

The NMPNS Radiation Protection Procedures contain provisions for administration of the Facility Bioassay Program. EP-CE-113 provides guidance for accelerated or additional bioassays in the event there are individuals who are suspected of being exposed to elevated levels of airborne activity as a result of the emergency. Radiation Protection Procedures provide for issuing, using, and reading/processing dosimetry devices and provisions for exposure record keeping. During an emergency the processing frequency is based upon the exposure rates and/or the exposure received by emergency personnel.

g. Respiratory Protection

The NMPNS Radiation Protection Procedures contain provisions governing the use of respiratory protection equipment and administration of the NMPNS Respiratory Protection Program. Site specific ERO Respirator qualification requirements contained in the ERO Training and Qualification procedure take precedence over requirements contained in the Exelon Standardized Radiological Emergency Plan for Nine Mile Point Station.

Exceptions to normal respiratory protection practices may be instituted by the Shift Emergency Director or ED (as appropriate), with the advice of the RP Director.

h. Potassium Iodide (KI)

Potassium iodide (KI) is available for use by NMPNS employees in the event of an emergency. Indications and when KI should be used are contained with EP-CE-113.

4.7.2 Offsite Protective Actions

a. Protective Actions Within Oswego County

The responsibility for actions to protect offsite individuals rests with the County of Oswego, New York State Office of Emergency Management and New York State Department of Health as described in the New York State Radiological Emergency Preparedness Plan.

The NYS Department of Health is responsible for evaluating information obtained from the NMPNS and/or other sources and recommending appropriate offsite protective actions to the OEM/OCEMO.

The principal offsite local coordinating agency for providing response to radiological emergencies in the vicinity of the NMPNS is the OCEMO. The entire 10-mile Emergency Planning Zone is contained within Oswego County.

A detailed study has been conducted of the status and capacities of roads, traffic patterns and demography within the 10-mile radius Emergency Planning Zone. This study includes the estimated times to evacuate all or specific segments of the population, identifies potential problem areas and provides contingencies for dealing with adverse conditions. The time estimates for various scenarios were performed: 1) Nighttime, normal weather; 2) Nighttime, adverse weather; 3) School in session, normal weather; 4) School in session, adverse weather. This study, "Evacuation Travel Estimates (ETE) for the James A. Fitzpatrick/Nine Mile Point Emergency Planning Zone" is contained in EP-AA-1013, Addendum 2 and was used in the development of detailed evacuation plans by the OCEMO. The ETE meets the criteria established in NUREG-0654.

b. Oswego County Prompt Notification System

The physical and administrative means for alerting and warning the population of an incident at the Nine Mile Point Nuclear Station is described in detail in EP-CE-111 and the Oswego County Radiological Emergency Response Plan.

The responsibility for activation of the Prompt Notification System (PNS) rests with the Chairman of the Oswego County Legislature or designee. The Oswego County Emergency Management Office administratively activates the warning system and supplies appropriate emergency messages to the Emergency Alert System (EAS) station serving the jurisdiction in accordance with the provisions of their emergency response plans. Siren activation equipment is located at the OCEMO and the Oswego County 911 Center.

The PNS consists of:

- Outdoor sirens.
- Reverse calling system (as back-up to the above).
- Emergency Alert System.

This system meets NUREG-0654 and FEMA-REP-10 design and testing criteria. System design and testing requirements are detailed in the approved FEMA Design Report.

c. Protective Action Guides and Recommendation of Protective Action Recommendations

Protective Action Guides (PAG's) identify protective actions to be taken prior to or following a significant release of radioactive material. They are based on NUREG-0654/FEMA-REP-1, Rev 1, Supplement 3, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" and Frequently Asked Questions (FAQ) documented in "EPFAQ 2013-004 Final

Response". PAGs for the "plume phase" have been established by the US Environmental Protection Agency.

The numerical guides for TEDE and  $CDE_{\text{Thyroid}}$  (child) dose to the general public are listed below. The procedure used by NMPNS personnel in determining the appropriate protective action recommendation (PAR) is detailed in EP-CE-111. PARs are reviewed prior to issuance to assess their potential impact on offsite response organization activities.

Protective Action Guidelines		
Early or Plume Phase		
	TEDE (rem)	$CDE_T$ (rem)
Evacuate	>1	>5

The following principles guide the formulation of PARs for the NMPNS:

- Evacuation is the preferred method of protecting the public in the event of a significant radiological release. EPA 400 Protective Action Guidelines are used.
- NMPNS does consider sheltering due to Controlled Containment Venting with release durations of < 1 hour and dose assessments do not exceed the EPA PAGs.
- If determined to be appropriate by New York State or Oswego County Officials, thyroid prophylaxis may be provided to the general public. NMPNS recommendations include implementation of the KI Plan in order to be consistent with offsite plans.

**4.8 Aid to Affected Personnel**

Procedures are established which provide for control of radiation exposure, including emergency exposure, personnel contamination, assistance to injured persons, and situations involving complications due to the presence of radiation or radioactive contamination.

4.8.1 Decontamination

Personnel contamination in emergency situations is controlled to the extent feasible by the normal methods of using protective clothing and surveying for contamination following the removal of such clothing. Designated personnel decontamination areas consisting of showers and sinks which drain to the radwaste system, are available for either routine or emergency use at the NMPNS. Similar facilities are available at the JAFNPP. Station radiation protection personnel are instructed in the proper methods of removing minor contamination from skin surfaces. Efforts involving significant amounts of contamination, particularly in the vicinity of facial openings, will normally be performed under the direction of Radiation Protection personnel. Detailed methods for personnel decontamination are described in Radiation Protection Procedures. Decontamination limits are detailed in station Radiation Protection Procedures.

4.8.2 First Aid

Individuals are onsite who can administer first-aid. First aid to injured personnel is normally performed in conjunction with any necessary decontamination methods. However, if immediate treatment of the injury is vital, that treatment shall take precedence over decontamination. This philosophy also extends to offsite emergency assistance involving radioactive contamination. For that purpose, measures are established to ensure timely offsite medical treatment and limiting the spread of contamination, as described in Station Annex Sections 4.8.3 and 4.8.4.

4.8.3 Medical Transportation

Arrangements have been made with the Oswego County 911 Center to transport from the NMPNS to a medical treatment facility any injured personnel, including radioactively contaminated personnel and those involved in radiation exposure incidents, or a Hostile Action Based event.

Copies of the agreements from facilities/organizations which provide emergency services are contained in Station Annex Appendix 2. Ambulance emergency supplies are available for use and are stored at designated points of access to the NMPNS.

4.8.4 Medical Treatment

Arrangements have been made with the Oswego Hospital (Oswego, N.Y.) for the medical treatment of patients from the NMPNS who may have a radiation exposure injury or injuries complicated by radioactive contamination, or been involved in a Hostile Action Based event. The Oswego Hospital has developed a detailed procedure for handling radioactively contaminated patients or those involved in radiation exposure incidents at the NMPNS. Similar arrangements have been made with the State University of New York University Hospital at Syracuse (Syracuse, N.Y.) for medical treatment of contaminated injuries and significant overexposures to radiation or been involved in a Hostile Action Based

event. University Hospital has developed detailed procedures for handling radioactively contaminated or those patients involved in radiation exposure incidents at the NMPNS.

Medical treatment facilities and on-site personnel may also contact a radiation management expert who is contracted to provide radiological treatment advice upon request. Radiation Protection Procedures describe actions necessary for decontamination of emergency worker wounds, and waste disposal. The Emergency Equipment Inventory procedure lists decontamination equipment available at Oswego Hospital. This service is available 24 hours per day year-round as specified in the Letter of Agreement in Appendix 2.

#### **4.9 Emergency Public Information and Rumor Control**

A telephone inquiry response program and a rumor control program has been established by NMPNS. NMPNS in conjunction with state and county governments cooperate on responses to inquiries which may occur as a result of an emergency situation at the NMPNS. Implementing procedures are contained in EP-AA-112-600, Public Information Organization.

**FIGURE 4-1  
ACTIVATION OF EMERGENCY ORGANIZATION  
SUMMARY OF NOTIFICATION AND RESPONSE**

Class	Criteria	Notifications		Response	
		Onsite	Offsite	Onsite Personnel	Offsite Personnel
UNUSUAL EVENT	Off-normal events which could indicate a potential degradation in the level of plant safety	1) The following notifications are made on an as-needed basis: <ul style="list-style-type: none"> <li>• Nine Mile Point Fire Brigade</li> <li>• Damage Control Teams</li> <li>• Control Room Advisory Staff</li> <li>• Security Force</li> <li>• Survey Teams</li> <li>• Other Personnel</li> </ul>	1) The following shall be notified: <ul style="list-style-type: none"> <li>• Oswego County</li> <li>• State of New York</li> <li>• NRC Hdqtrs</li> </ul> 2) The following notifications are made on an as-needed basis: <ul style="list-style-type: none"> <li>• Fire units</li> <li>• Rescue units</li> <li>• Ambulance service</li> <li>• Hospital</li> <li>• Local Area/Building Evacuation</li> </ul>	1) Make prompt offsite notifications  2) Perform continuing assessment  3) The following actions are performed on an as-needed basis: <ul style="list-style-type: none"> <li>• Emergency Repairs</li> <li>• Administer First Aid, and</li> <li>• Other medical treatment</li> <li>• Accountability</li> </ul>	1) The following are performed on an as-needed basis: <ul style="list-style-type: none"> <li>• Provide firefighting assistance</li> <li>• Assist in rescue operations</li> <li>• Provide medical transportation</li> <li>• Provide medical treatment</li> <li>• Assist in damage control</li> <li>• Perform onsite monitoring</li> <li>• Institute security measures</li> </ul>

**FIGURE 4.1 (Cont.)  
ACTIVATION OF EMERGENCY ORGANIZATION  
SUMMARY OF NOTIFICATION AND RESPONSE**

Class	Criteria	Notifications		Response	
		Onsite	Offsite	Onsite Personnel	Offsite Personnel
ALERT	Events which indicate an actual degradation in the level of plant safety	1) The following notifications are made on an as-needed basis: <ul style="list-style-type: none"> <li>• Nine Mile Point Fire Brigade</li> <li>• Damage Control Teams</li> <li>• Control Room Advisory Staff</li> <li>• Security Force</li> <li>• Survey Teams</li> <li>• Dose Projection Personnel</li> <li>• Other Personnel</li> <li>• (as necessary)</li> <li>• Notify TSC, OSC, and EOF personnel</li> </ul>	1) The following shall be notified: <ul style="list-style-type: none"> <li>• Oswego County</li> <li>• State of New York</li> <li>• NRC Hdqtrs</li> </ul> 2) The following notifications are made on an as-needed basis: <ul style="list-style-type: none"> <li>• Fire units</li> <li>• Ambulance service</li> <li>• Hospital</li> </ul>	1) Make prompt offsite notifications 2) Perform continuing assessment 3) Staff TSC, OSC, EOF 4) The following actions are performed on an as-needed basis: <ul style="list-style-type: none"> <li>• Administer first aid</li> <li>• Conduct rescue operations</li> <li>• Perform onsite and offsite monitoring</li> <li>• Perform offsite dose projections</li> <li>• Institute security measures</li> <li>• Fight fire</li> <li>• Perform emergency repairs</li> <li>• Protected Area Evacuation</li> <li>• Accountability</li> </ul>	1) The following are performed on an as-needed basis: <ul style="list-style-type: none"> <li>• Provide firefighting assistance</li> <li>• Assist in rescue operations</li> <li>• Provide medical transportation</li> <li>• Provide medical treatment</li> <li>• Assist in damage control</li> <li>• Provide onsite assistance as required</li> <li>• Activate primary response centers</li> <li>• Alert key personnel</li> <li>• Conduct confirmatory dose projections</li> <li>• Maintain emergency communications</li> </ul>

**FIGURE 4.1 (Cont.)  
ACTIVATION OF EMERGENCY ORGANIZATION  
SUMMARY OF NOTIFICATION AND RESPONSE**

Class	Criteria	Notifications		Response	
		Onsite	Offsite	Onsite Personnel	Offsite Personnel
SITE AREA EMERGENCY	Events which involve actual or likely major failures of plant functions needed for protection of the public	1) The following notifications are made on an as-needed basis: <ul style="list-style-type: none"> <li>• Nine Mile Point Fire Brigade</li> <li>• Damage Control Teams</li> <li>• Control Room Advisory Staff</li> <li>• Security Force</li> <li>• Survey Teams</li> <li>• Dose Projection Personnel</li> <li>• Other Personnel (as necessary)</li> <li>• Notify TSC, OSC, and EOF personnel</li> </ul>	1) The following shall be notified: <ul style="list-style-type: none"> <li>• Oswego County</li> <li>• State of New York</li> <li>• NRC Hdqtrs</li> </ul> 2) The following notifications are made on an as-needed basis: <ul style="list-style-type: none"> <li>• Fire units</li> <li>• Rescue units</li> <li>• Ambulance service</li> <li>• Hospital</li> </ul>	1) Make prompt offsite notifications 2) Perform continuing assessment 3) Staff TSC, OSC, and EOF 4) Accountability 5) The following actions are performed on an as-needed basis: <ul style="list-style-type: none"> <li>• Administer first aid</li> <li>• Conduct rescue operations</li> <li>• Perform onsite and offsite monitoring</li> <li>• Perform offsite dose projections</li> <li>• Institute security measures</li> <li>• Firefighting</li> <li>• Emergency Repairs</li> <li>• Recommend offsite protective actions</li> <li>• Augment resources</li> <li>• Protected Area Evacuation</li> <li>• Implement Exclusion Area Evacuation</li> </ul>	1) The following are performed on an as-needed basis: <ul style="list-style-type: none"> <li>• Provide firefighting assistance</li> <li>• Assist in rescue operations</li> <li>• Provide medical transportation</li> <li>• Provide medical treatment</li> <li>• Assist in damage control</li> <li>• Provide onsite assistance as required</li> <li>• Activate primary response centers</li> <li>• Alert key personnel to standby</li> <li>• Conduct confirmatory dose projections</li> <li>• Maintain emergency communications</li> <li>• Place public notification system in standby status</li> <li>• Implement appropriate near site protective measures</li> </ul>

**FIGURE4.1 (Cont.)  
ACTIVATION OF EMERGENCY ORGANIZATION  
SUMMARY OF NOTIFICATION AND RESPONSE**

Class	Criteria	Notifications		Response	
		Onsite	Offsite	Onsite Personnel	Offsite Personnel
GENERAL EMERGENCY	Events which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity	1) The following notifications are made on an as-needed basis: <ul style="list-style-type: none"> <li>• Nine Mile Point Fire Brigade</li> <li>• Damage Control Teams</li> <li>• Control Room Advisory Staff</li> <li>• Security Force</li> <li>• Survey Teams</li> <li>• Dose Projection Personnel</li> <li>• Other Personnel (as necessary)</li> <li>• Notify TSC, OSC and EOF personnel</li> </ul>	1) The following shall be notified: <ul style="list-style-type: none"> <li>• Oswego County</li> <li>• State of New York</li> <li>• NRC Hdqtrs</li> </ul> 2) The following notifications are made on an as-needed basis: <ul style="list-style-type: none"> <li>• Fire units</li> <li>• Rescue units</li> <li>• Ambulance service</li> <li>• Hospital</li> </ul>	1) Make prompt offsite notifications 2) Perform continuing assessment 3) Staff TSC, OSC, and EOF 4) Exclusion Area Evacuation 5) Accountability 6) Recommend offsite protective actions 7) The following actions are performed on an as-needed basis: <ul style="list-style-type: none"> <li>• Administer first aid</li> <li>• Conduct rescue operations</li> <li>• Perform onsite and offsite monitoring</li> <li>• Perform offsite dose projections</li> <li>• Institute security measures</li> <li>• Firefighting</li> <li>• Emergency Repairs</li> <li>• Augment resources</li> </ul>	1)The following are performed on an as-needed basis: <ul style="list-style-type: none"> <li>• Provide firefighting assistance</li> <li>• Assist in rescue operations</li> <li>• Provide medical transportation</li> <li>• Provide medical treatment</li> <li>• Assist in damage control</li> <li>• Provide onsite assistance as required</li> <li>• Activate primary response centers</li> <li>• Alert key personnel to standby</li> <li>• Conduct confirmatory dose projections</li> <li>• Maintain emergency communications</li> <li>• Implement appropriate protective measures</li> <li>• Mobilize emergency response personnel</li> <li>• Continuously evaluate dose projections</li> <li>• Place public notification system in standby status</li> </ul>

**FIGURE 4.2 - EMERGENCY ORGANIZATION INTERFACES  
(INITIAL NOTIFICATION)**

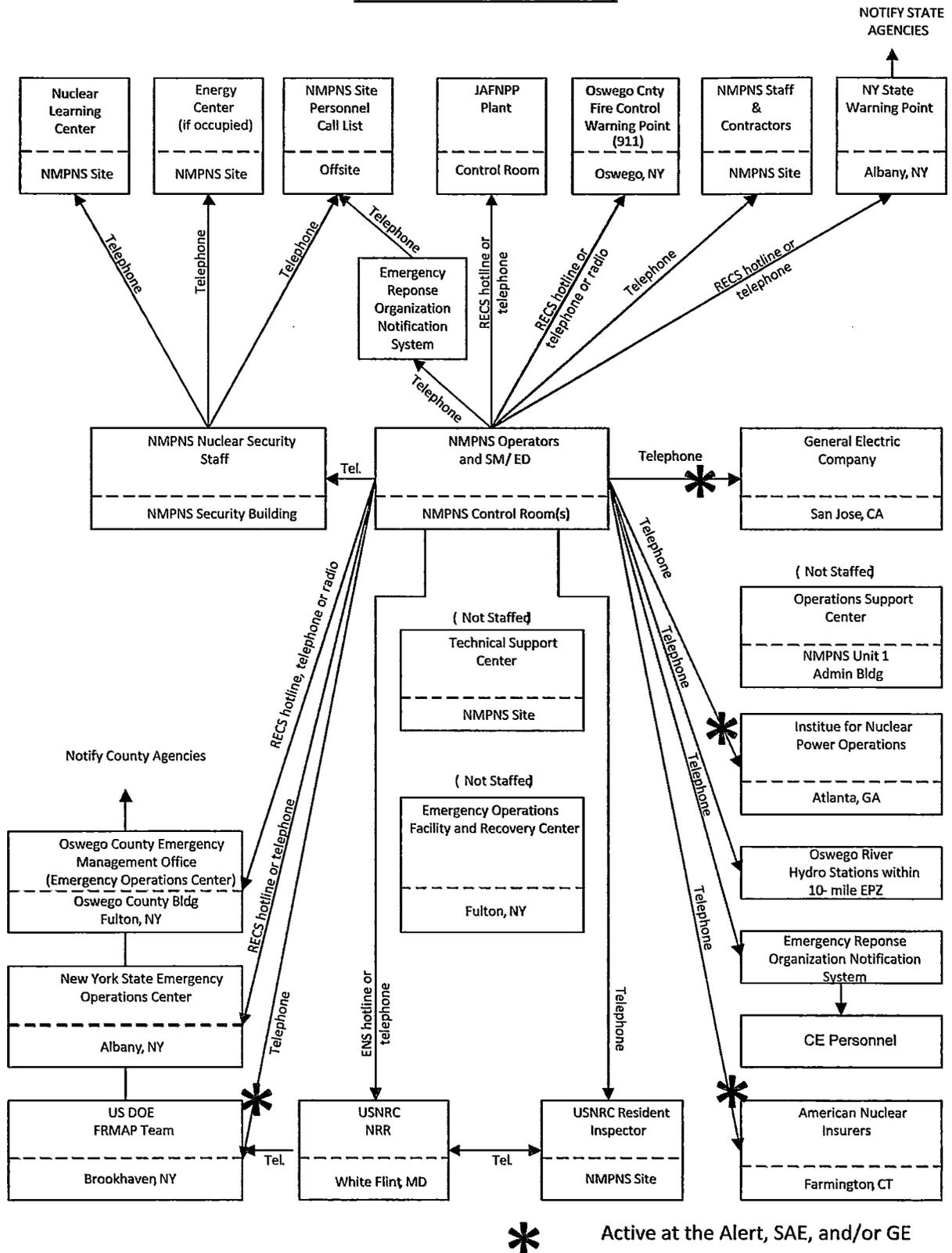
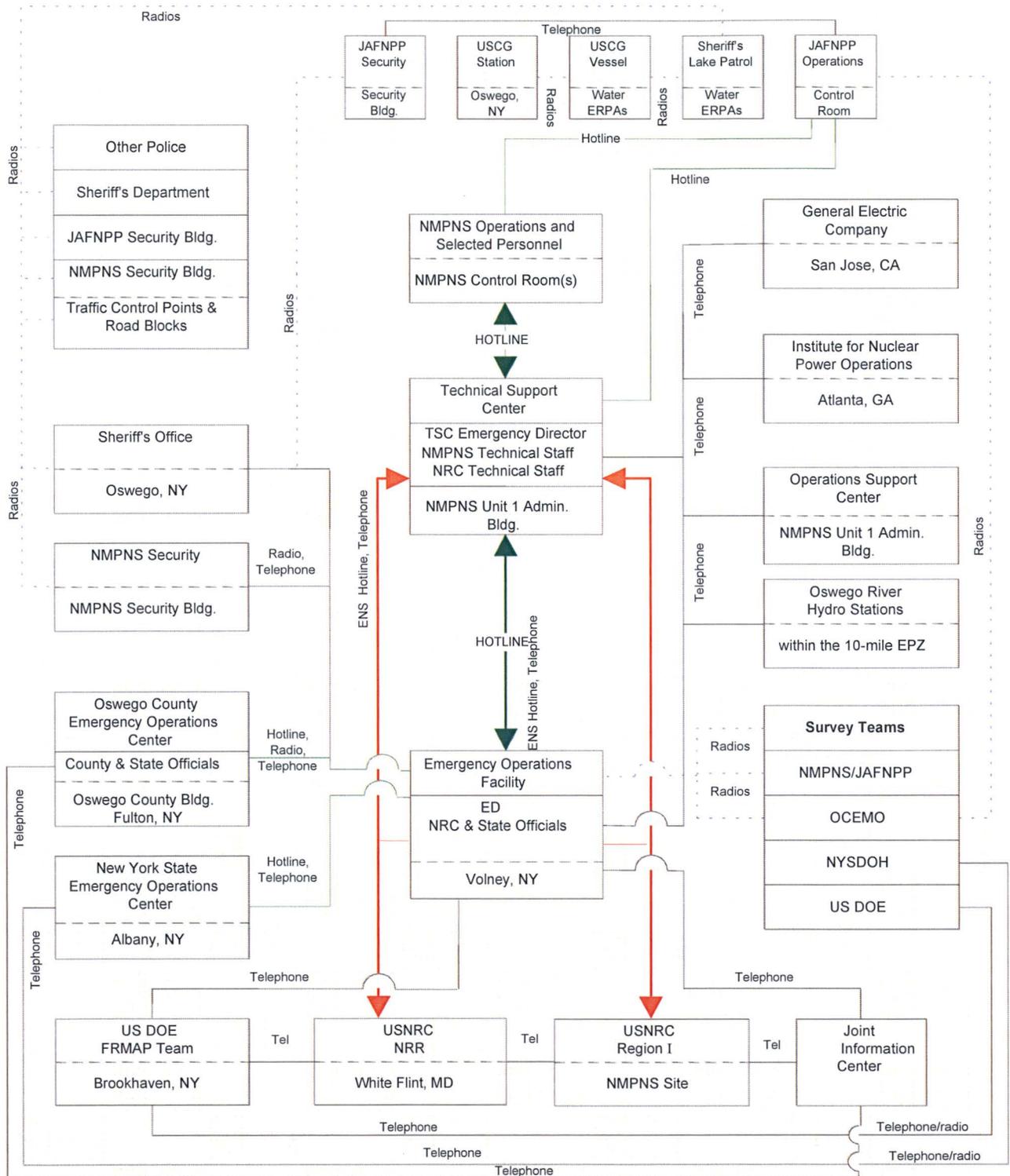


FIGURE 4.3  
EMERGENCY ORGANIZATION INTERFACES  
(AFTER EMERGENCY FACILITIES STAFFED)  
(Supersedes Standard Plan EP-AA-1000, Figures F-1 & F-2)



**Section 5: Emergency Facilities and Equipment**

Emergency facilities, equipment and communications are provided to ensure the capabilities for the prompt, efficient assessment and control of situations exists. Access to emergency facilities and equipment is governed by EPIP-EPP-14.

**5.1 Emergency Response Facilities**

**5.1.1 Control Room(s)**

The Unit 1 and Unit 2 Control Rooms are equipped with indications and controls for major plant systems. A portion of the indications for each Unit is the Safety Parameter Display System (SPDS). The purpose of SPDS is to display plant parameters in the Control Room(s) and TSC. The type and number of indications may be changed if future requirements change. Indications and assessment aids interrelated with meteorological and radiological dose calculation data are also provided, as well as access to emergency communications systems. The Control Rooms are designed for continuous occupancy following the most limiting accident.

**5.1.2 Technical Support Center (TSC)**

The NMPNS TSC is a facility located in the Unit 1 Administration Building at floor elevation 248. This is where station management and technical personnel can access technical data and displays necessary to assist Control Room personnel during emergency conditions. As part of their assistance, TSC personnel monitor station parameters to ensure prompt corrective and mitigating actions are taken.

The TSC is in close proximity to the Unit 1 and Unit 2 Control Rooms and has similar radiological habitability as the Control Rooms under accident conditions. The TSC provides access to site document control computer files which can provide any permanent plant record, as described in ANSI N45.2.9-1974, including as-built drawings. In addition, the TSC document control facility has copies of the NMPNS Emergency Plan and Implementing Procedures, Final Safety Analysis Reports, Technical Specifications, Administrative Procedures, Operating Procedures and other documents which may be used during an emergency. Space has been provided for five (5) NRC personnel.

**5.1.3 Operations Support Center (OSC)**

The OSC is an on-site assembly area at NMPNS to which designated station personnel report for accountability and special assignment. It is located in the Unit 1 Administration Building and includes the 261' Maintenance and Electrical Shops, Locker Rooms, Storeroom, and 248' Radiation Protection offices, and the Contractor staging area. The OSC Core Area is located adjacent to the TSC Core Area and within the TSC envelope on elevation 248'. The OSC has sufficient space to assemble station ERO personnel, and maintain them immediately available for assignment. After activation, the ERO personnel may

be instructed to resume duties or may be assigned new duties in support of emergency operations.

The OSC has installed and readily available communications equipment with which to control OSC related activities. Emergency cabinets with supplies and equipment for various teams (e.g., survey equipment, protective clothing, respiratory protection equipment, radios etc.) are located near the OSC. The First Aid Room and a personnel decontamination room are located nearby with appropriate supplies. In addition, the Maintenance Shops can be used to obtain necessary equipment and tools for damage control teams. A listing of OSC emergency equipment is included in the Emergency Equipment Inventory procedure and is representative of equipment specified in NUREG 0654 to support OSC operations.

#### 5.1.4 Emergency Operations Facility (EOF)

The EOF is a Co-located Licensee (NMP and JAF) controlled and operated emergency response facility located approximately 12 miles from the reactor site on County Route 176, just outside Fulton, NY, adjacent to the Oswego County Airport. The purpose of the EOF is to provide continuous coordination with local, State and Federal agencies and to provide evaluation of NMPNS activities during an emergency. Space is provided so that Federal, State and local response agencies can monitor and coordinate with the utility response activities from this location. Utility recovery operations are also handled at this facility. It is expected that manufacturer and vendor representatives may require twenty-four (24) hours to arrive following notification. Federal, State and County Officials could arrive at any time following notification.

The EOF has facilities and capabilities for the following:

- Management of the overall NMP emergency response
- Coordination of radiological and environmental assessment
- Determination of Protective Action Recommendations (PAR)
- Notification of offsite agencies
- Coordination of event, plant and response information provided to public information staff for dissemination to the media and public
- Staffing within 60 minutes and activating the facility within the same time requirement or as soon as possible thereafter
- Coordination of emergency response activities with Federal, State and local agencies
- Obtaining and displaying key plant data and radiological information for NMP Units 1 and 2

- Analyzing plant technical information and providing technical briefings on event conditions and prognosis to staff and offsite agency responders for NMP Units 1 and 2
- Effectively responding to and coordinating response efforts for events occurring simultaneously at more than one site for Co-located licensees

5.1.5 Security Tactical Operations Center (STOC)

The STOC is a security command center that may be activated during a safeguards contingency or site emergency to ensure effective nuclear security program direction under unusual conditions. The STOC is located on the second floor of the west security annex building.

5.1.6 Joint Information Center (JIC)

The JIC is located near the Oswego County Airport, on County Route 176 in the Town of Volney, New York approximately 12 miles from the site. The function of this facility is to provide a single point of contact for disseminating information to the public. This dedicated facility has a large open area, used for briefings, and numerous small offices with telephones which can be used by news media personnel. A listing of equipment necessary to perform this function is in the Emergency Equipment Inventory procedure. The JIC is activated for an Alert, Site Area, or General Emergency.

5.1.7 Alternative Facility

The Alternative Facility maintains the capability for staging the TSC/OSC emergency response organization personnel in the event of a hostile action. This alternative facility has the capability for communications with the emergency operations facility, control room, and plant security and the capability for engineering assessment activities, including damage control team planning and preparation. Consistent with NRC EPFAQ No. 2013-005, the EOF will satisfy the offsite notification responsibilities for the Alternative Facility. The Alternative Facility is located at the Nine Mile/Fitzpatrick EOF on County Route 176, just outside Fulton, NY, adjacent to the Oswego County Airport.

5.1.8 Oswego County Emergency Operations Center (OCEOC)

The OCEOC is located in the Emergency Management Office, County Branch Building, Fulton, N.Y. The County Warning Point is located at Oswego County 911 Center. Communications are available 24 hours per day at this warning point. Upon activation by the Oswego County Emergency Management Office, communications, planning, and coordination personnel become available at the OCEOC. A representative from NMPNS may be dispatched to this facility to act as liaison between the County and the site for a Site Area Emergency or General Emergency.

**5.1.9 State Emergency Operations Center (SEOC)**

The SEOC is located in the substructure of the Public Security Building, State Office Building Campus, Albany, New York. The State Warning Point communication systems and the State Emergency Management Office are also located in this center. Communication systems operate on an around the clock basis. State direction and control of emergency operations is conducted from the SEOC. Field operations are implemented through the State Emergency Management Office, Lake District Office, in Newark, N.Y. Upon activation, planning and coordination personnel become available at the SEOC. A representative from NMPNS may be dispatched to this facility to act as liaison between the State and the site for a Site Area Emergency or General Emergency.

**5.2 Communication Systems**

The Nine Mile Point communication capabilities include multiple systems and redundancies which ensure the performance of vital functions in transmitting and receiving information throughout the course of an emergency. Multiple modes and paths are available for necessary emergency communications. Typical communications capabilities and the interfaces between expected supporting agencies are provided in Figure 4.2 and Figure 4.3. Systems available at the various emergency facility locations or available for use by response organizations are:

**5.2.1 Telephone Systems**

The telephone system at NMPNS consists of an in plant dial system with connections to the local telephone system. The main emergency response facilities or organizations which have telephones are listed below:

- Control Rooms
- Technical Support Center
- Operations Support Center
- Emergency Operations Facility
- Security Tactical Operations Center
- Joint Information Center
- Oswego County Emergency Operations Center
- Oswego County Warning Point (Oswego County 911 Center)
- Oswego Hospital
- University Hospital
- New York State Warning Point

- New York State Emergency Operations Center
- NRC
- Other Emergency Response Organizations

**5.2.2 NRC Emergency Notification System (ENS) Hotline**

The ENS is a separate and completely independent telephone system which is part of the Federal Telephone System from the local telephone system. It is used to provide initial notification of an emergency and continuing emergency information. NMPNS facilities at which these telephones are located include:

- Control Rooms
- Technical Support Center
- Emergency Operations Facility

**5.2.3 Radiological Emergency Communications System (RECS)**

The RECS is a separate and completely independent system from the local telephone system and is similar to the ENS. This system is used to provide initial notification of an emergency and continuing emergency information to New York State and Oswego County Authorities. Facilities at which these telephones are located include:

- Control Rooms
- Technical Support Center
- Emergency Operations Facility
- JAFNPP Control Room, TSC
- Oswego County Warning Point (Oswego County 911 Center)
- Oswego County Emergency Operations Center
- NYS Warning Point
- NYS Alternate Warning Point (State Police Communications Center)
- NYS Emergency Operations Center
- NYS Department of Health (Headquarters in Albany)

**5.2.4 NRC Health Physics Network (HPN)**

The HPN telephone system is also a part of the Federal Telephone System. It is primarily used to transmit health physics (radiological) data to the NRC during an emergency. NMPNS facilities at which these HPN telephones are located include:

- Technical Support Center
- Emergency Operations Facility

5.2.5 Other Dedicated Telephone Line Systems

Dedicated telephone systems provide direct communication between the points shown. As appropriate these points are linked by one or more dedicated lines. They can be used in any situation but are primarily for emergency use. These systems include:

- Control Rooms to Technical Support Center
- Technical Support Center to Operations Support Center
- Emergency Operations Facility to Technical Support Center

5.2.6 Public Address and Page System

This system (commonly referred to as the GAltronics) is located in the various NMPNS facilities and includes outdoor speakers. It is a communications system which can be used by all station personnel.

Public Address Systems (other than GAltronics) are also located in the TSC, JIC, OSC and EOF. The system in the TSC allows announcements to be heard throughout the TSC and the OSC Core Area. The EOF and JIC systems allow announcements to be heard throughout the EOF or JIC. The OSC PA System permits announcements to be made throughout the OSC.

5.2.7 Radio Systems

NMPNS has various radio frequencies assigned for use. These frequencies include off-site and in-plant repeater channels, NMPNS channels and Oswego County public safety frequencies. All radio systems used for emergencies have significant redundancies (that is, separate power sources, antennas, feed lines, and consoles) that preclude loss of radio capability during emergencies. All NMPNS emergency facilities are equipped with consoles that allow use of all frequencies that may be used for emergencies. Thus, all emergency facilities (including the Control Rooms) are capable of contacting radio-equipped personnel within the plant and the 10-mile EPZ, and with Oswego County 911 Center and County emergency facilities. Additionally, all ambulances that service NMPNS have direct communication with Oswego and University Hospitals. NMPNS utilizes a telephone activated notification system to notify ERO personnel.

5.2.8 Emergency Response Data System (ERDS)

A computer system that collects a variety of information regarding plant operating parameters, meteorological data, effluent information and other data, and transmits it to the NRC.

### 5.3 Assessment Facilities and Systems

#### 5.3.1 Onsite Assessment Facilities

- a. Initially following an emergency, the primary on-site emergency assessment facility is the affected unit Control Room. This assessment function is transferred to the TSC after that on-site facility has been activated. These facilities are described in the Station Annex Section 5.1.1.
- b. If background radiation levels permit, post-accident radiological samples may be analyzed on-site in the NMPNS Chemistry laboratory located at Unit 1 or the Unit 2 Chemistry Counting Room located at Unit 2. These in-plant laboratories have full computer/gamma isotopic, gross beta and gross alpha analysis capabilities. These facilities are available 24 hours per day seven days per week as needed.

#### 5.3.2 Offsite Assessment Facility

- a. The offsite emergency assessment facility is the EOF. This facility is described in Station Annex, Section 5.1.4.
- b. NMPNS maintains an agreement with JAFNPP to have environmental samples evaluated by a vendor maintained by JAFNPP. Post-accident radiological samples can be sent off-site to the JAFNPP vendor in the event that the NMPNS in-plant laboratory is unavailable for any reason. If the JAFNPP vendor cannot perform the analyses or cannot handle the number of analyses required, samples can be sent to the Calvert Cliffs Nuclear Plant laboratory, located in Lusby Maryland. This laboratory also has similar capabilities to the NMPNS Health Physics laboratory. These facilities are available 24 hours per day seven days per week as needed.

#### 5.3.3 Assessment Systems

- a. Plant Process Computer (PPC) and Safety Parameter Display System (SPDS)

The PPC and SPDS provide historical and real time plant data via displays and hard-copy devices that are located in the Control Rooms, TSC, and EOF.

Both systems are designed to assist emergency response staff and Control Room operators in the decision making process during normal and abnormal plant conditions. These systems are described in greater detail in the Unit 1 UFSAR and Unit 2 USAR.

- b. Radiological Monitoring

- 1) Plant Radiation Monitoring Systems

These systems, consisting of process and area radiation monitors, provide accident assessment by measuring and recording radiation levels and radioactivity concentrations at strategically selected

locations throughout the plant. Local alarm functions associated with the monitors provide for plant personnel protection. A listing of these monitors is contained in Volume 3 Section XII Unit 1 UFSAR and Unit 2 USAR Chapter 12.3:

2) Onsite Radiological Monitoring System

There are 6 environmental radiological monitoring stations which surround the site or are located within the site boundary. Onsite monitoring stations surround the plant as specified in the Offsite Dose Calculation Manual (ODCM) and are designed to continuously collect particulate and iodine air samples. The capability to collect precipitation samples is also available.

Environmental Thermoluminescent Dosimeters (TLD), are located at approximately 70 stations, both onsite and offsite. The TLD's are collected, and evaluated quarterly. The TLD stations (on-site and off-site) exceed the NRC Radiological Assessment Branch Technical Position in total number and quality of monitors. In addition to the environmental TLD monitoring, a group of Optically Stimulated Luminescent Dosimeters (OSLD) called Emergency Preparedness OSLD's and 10CFR20 OSLD's have been placed in various locations around the site and the county. These OSLD's are evaluated during or after an emergency situation has occurred and as part of the facilities 10CFR20 program. The emergency OSLD's and 10CFR20 OSLD's are also renewed quarterly.

3) Containment High-Range Radiation Monitor

Unit 1 is equipped with two, containment high-range radiation monitors with a gamma detection range of  $10^0$  to  $10^8$  R/hr. Unit 2 is equipped with four high range gamma detectors capable of monitoring radiation in the range of  $10^0$  to  $10^7$  R/hr. The purpose of these monitors is to detect gross fuel failure.

4) Offsite Radiological Monitoring Systems

There are approximately nine offsite radiological monitoring stations. These stations surround the plant and are described in the ODCM. Each of these monitoring stations is designed to continuously collect particulate and iodine air samples, and each has the capability for collecting precipitation samples, if required. Four (4) of the monitoring stations are along the site boundary and have radiation monitors. The radiation monitors are used to measure dose rates resulting from possible plume releases of radioactive material from the plant.

Environmental Thermoluminescent Dosimeters (TLD) and Optically Stimulated Luminescent Dosimeters (OSLD) are as described in Section b.2 above.

5) Emergency Radiological Survey Teams

In addition to the monitoring capabilities provided by the fixed assessment systems, survey teams may be dispatched on-site and off-site to take direct radiation readings and collect samples for field or laboratory evaluation in the field. Survey team members are notified through normal station communications systems, the standard call-out procedure by telephone or radio activated beepers. Survey teams can be deployed within approximately 60 minutes of notification.

Direction of the survey teams may be initiated by the affected control room, but is normally transferred to the TSC when it is activated. Following activation of the EOF, direction of the teams, including receipt and analysis of data is transferred to this facility. Monitoring information from the State and/or County may also be available and would be used.

c. Containment Monitors

Containment monitor data may be used to determine the extent of core damage. EPIP-EPP-09 provides the required implementation steps to determine the extent of core damage, using information obtained from these monitors.

1) Containment High-Range Radiation Monitor

See Station Annex, Section 5.3.3.b.3.

2) Containment Pressure Monitor

Continuous indication and recording of containment pressure from -5 psig to 250 psig is provided in the Unit 1 Control Room for each pressure transmitter.

The Unit 2 drywell pressure monitors provide continuous indication and recording of containment pressure from -5 psig to 150 psig in the Unit 2 Control Room.

3) Containment Water Level Monitor

Continuous indication and recording of the torus pool water level from 15 inches above the bottom of the torus to 3 feet, 8.5 inches above the normal water level of the torus pool is provided in the Unit 1 Control Room for each transmitter.

The Unit 2 suppression pool water level from the 192' level to the 217' level is continuously indicated and recorded in the Unit 2 Control Room.

4) Containment Hydrogen Monitor

Redundant continuous indication of hydrogen concentration in the containment is provided in the control room over the range from 0

to 20% for Unit 1 and over the range from 0 to 30% for Unit 2 by the H<sub>2</sub>-O<sub>2</sub> Sampling System.

d. Sampling Systems

Data obtained from sampling systems may be used to determine the extent of core damage. EPIP-EPP-09 provides the required implementation steps to determine the extent of core damage, using information obtained from these systems.

1) Plant Effluent Monitoring System

The Unit 1 OffGas Effluent Stack Monitoring Systems (OGESMS) performs a continuous analysis of stack gross radioactivity via an isokinetic probe. Particulate and iodine samples are collected by standard cartridges which are manually inserted into the main sample lines, allowed to collect samples for a specified period of time, removed from the lines and analyzed.

The Unit 2 Wide Range Gaseous Monitoring Systems (WRGMS) performs a continuous analysis of stack and vent gross radioactivity via isokinetic probes. Particulate and iodine samples are collected by standard cartridges which are manually inserted into the stack and vent main sample lines, allowed to collect samples for a specified period of time, removed from the lines and analyzed.

2) In-Plant Iodine Instrumentation

Portable instrumentation is used for the sampling of in-plant iodine levels. Samples are taken on silver zeolite or TEDA impregnated charcoal sampling cartridges. The charcoal sample cartridges are then taken to the Station Laboratory where they are purged to remove entrapped noble gases and then analyzed. The silver zeolite cartridges have an iodine retention efficiency in excess of 99% while retaining only trace amounts of noble gases and thus do not have to be purged prior to analysis.

3) Grab Samples

A grab sample can be taken for determination of liquid or gaseous activity.

e. Fire Protection Systems

Fire protection at each Unit is provided by a complete network of fire detection, suppression and extinguishing systems. These systems are activated by a variety of thermal and products of combustion fire detection devices located throughout the station. At present the fire zones cover the turbine generator unit, vital areas and general station areas. Station Operating Procedures identify fire detectors and their locations.

f. Geophysical Phenomena Monitoring System

Monitors are provided to detect and record natural phenomena events which could result in plant damage due to ground motion or structural vibration and stress. Backup information can be obtained from: the other NMPNS Unit, the JAFNPP which also has seismic detectors; a contracted weather service; a local National Weather Service station, etc.

Hydrologic conditions (e.g., floods, low water, hurricanes) would be observed by the shift operating crew and/or information would be provided by the U.S. Coast Guard, a contracted weather service or a local National Weather Service station.

g. Meteorological Measuring System

Wind speed, wind direction and temperature sensors are installed on a suitably isolated tower at elevations of approximately 30, 100 and 200 feet above plant grade. The data collected by these sensors are telemetered to the NMPNS Unit 1 and Unit 2 Control Rooms and are designed to be continuously recorded on strip charts in the Control Rooms and the TSC (wind speed/direction only). In addition to this primary tower, a single level, 90-foot tall, backup tower and a single level, 30-foot tall inland tower are maintained as alternate sources of meteorological data. This data is also available in the TSC and the EOF. Meteorological data can also be supplied by local weather stations. Regional National Weather Service offices may provide access to their meteorological data, as required. Other sources include several supplemental towers located in the general area outside the 10-mile EPZ. Wind Roses may be obtained from Unit 1 UFSAR or Unit 2 USAR.

**5.4 Protective Facilities**

Onsite facilities and designated assembly locations are provided which ensure adequate radiological protection for personnel assigned to emergency duties in the plant, and for the accommodation of other personnel evacuated from areas that may be affected by radiation and/or airborne radioactivity.

**5.4.1 Control Rooms**

In addition to serving as the first line control for emergency situations, each Unit Control Room has the following features which provide protection for personnel who have control room duties throughout the course of any emergency:

- a. Adequate shielding by concrete walls to permit continuous occupancy under severe accident conditions.
- b. An independent emergency air supply system, equipped with absolute and activated charcoal filters.

- c. Continuous monitoring of radiation levels in the Control Room and throughout the plant by the Area Radiation Monitors (ARM) system, with readout in the Control Rooms.
- d. Emergency lighting and power, supplied by a 125 V dc System.
- e. Communications systems, as described in Station Annex Section 5.2.

Additional details regarding the design and inherent protective capabilities of each Unit's Control Room are discussed in the respective Nine Mile Point Nuclear Station UFSAR/USAR as appropriate.

#### 5.4.2 Technical Support Center (TSC)

The TSC serves as the long range emergency control facility for the station. To allow for long-term human occupancy during an emergency situation, the following personnel protective features have been incorporated into the design:

- a. Adequate shielding to permit continuous long term occupancy under severe accident conditions.
- b. An independent emergency air supply system, equipped with absolute and activated charcoal filters.
- c. Emergency lighting and reliable power supplies.
- d. Communications systems as described in Station Annex Section 5.2.
- e. Continuous monitoring of radiation and airborne activity levels in the TSC.

#### 5.4.3 Onsite Assembly Areas/ Evacuation Assembly Areas

Specific locations at the station are designated for assembly of personnel in the event of the need to account for all personnel within the protected area. These areas provide space to accommodate personnel who may be at the station. They are located on the basis of logical access routes and physical separation from likely areas of radiation and/or airborne radioactivity. Other areas outside of the protected area but within the exclusion area are designated locations (evacuation assembly areas) to which non-essential personnel are required to report during a Protected Area Evacuation. The purpose of these locations is to provide a location close to the protected area to allow for rapid return of personnel following termination of the emergency, yet outside of the protected area and away from any potential unnecessary exposure.

Upon announcement of a Protected Area Evacuation, personnel in the protected area, including office personnel and visitors, evacuate immediately to the designated Evacuation Assembly Areas. As they exit through the security access, they card out. The Control Room Operators remain in the Control Rooms and other operators on-site (on-shift, relief or operators in training) report to the OSC. TSC and OSC staff card in and remain in their respective emergency facilities, which are designated as assembly areas. Designated security personnel assemble at the Main Security Building, and the Alternate Access Point.

Adequate shelter from inclement weather is provided. Onsite Assembly Areas are described in procedure EP-CE-113. The responsibility to ensure that a visitor evacuates to the proper area rests with the individual accompanying the visitor at the time evacuation occurs.

#### **5.4.4 Off-site Assembly Area**

The purpose of the Off-site Assembly Area (OAA) is to provide a location for the assembly, monitoring, and, if necessary, decontamination of the personnel who leave the site following an Exclusion Area Evacuation.

The Oswego County Airport, Hanger K; in Volney, New York, is designated as the Off-site Assembly Area. This facility is located approximately 12 miles from the site.

Personnel may be monitored for contamination upon arrival at the OAA. Decontamination will be done in accordance with normal station procedures. Supplies are available at the OAA such as: protective clothing and decontamination supplies. Detailed personnel and equipment decontamination methods, and techniques for removal of radioiodine and other particulates are contained in station Radiation Protection procedures.

#### **5.5 On-Site First Aid and Medical Facilities**

A first aid treatment facility, equipped with industrial first aid supplies, is located near the Locker Rooms in the Unit 1 Administration Building. The Site Medical Facility is also equipped with industrial first aid supplies and is located in the P Building at Unit 2. A listing of first aid equipment that is located within the Protected Area is contained in Emergency Equipment inventory procedures.

Additional medical equipment is provided at designated locations throughout the station.

#### **5.6 Decontamination Facilities for Emergency Personnel**

Personnel decontamination rooms are located in the Unit 1 Administration Building and the Unit 2 Control Building. These are the primary facilities for decontaminating emergency personnel. If these facilities are unavailable for any reason, emergency personnel may be decontaminated at the JAFNPP facility.

The liquid waste from each of these decontamination facilities is disposed of via the respective plants liquid radwaste system. Solid waste is disposed of in containers provided for this purpose located at each decontamination facility. If additional decontamination facilities are necessary, the station locker room shower facilities can be used on an interim basis for performing decontamination, even though they do not drain to radwaste.

### 5.7 Damage Control Equipment

Damage control equipment consists of normal and special purpose tools and devices used for emergency maintenance functions throughout the station. Personnel assigned to damage control teams are cognizant of the locations of specific equipment which may be required in an emergency. The Rescue Cabinet inventory, Damage Control Tool Box inventory and shoring materials, including scaffolding (stored in the Unit 1 Turbine Building), and various shapes of angle iron, plate and bar stock are available through the warehouse. Heavy duty and specialized equipment, and trained equipment operators, can be provided if necessary.

### 5.8 Emergency Vehicles

NMPNS has access to helicopters and fixed wing aircraft. Their use can be requested to assist in an emergency response effort through the Emergency Operations Facility (EOF). The EOF also coordinates the use of helicopters operated by the New York State Police, Oswego County and Onondaga County. Also, keys for selected site vehicles are maintained in Control Rooms, and the OSC.

### 5.8 CATEGORIES OF EMERGENCY EQUIPMENT

- 5.8.1 Equipment available for use during emergencies is described in the Emergency Equipment Inventory procedure. Equipment/Facilities important to maintaining Emergency Preparedness is detailed in EP-CE-121-1004, Nine Mile Point Equipment Matrix.
- 5.8.2 Equipment for use in coping with a radiation emergency which would necessitate site evacuation is stored in a number of strategic locations: the Technical Support Center, the Control Room, the Operational Support Center, and the EOF. Sufficient variety and quantities of equipment are stored in each location. Dedicated equipment is inventoried to insure it is available, using the equipment list in the Emergency Equipment Inventory procedure. Equipment includes radiation monitors, protective breathing equipment, communications and data retrieval capability, dosimetry and protective clothing.
- 5.8.3 The Operations Support Center contains equipment for general use, as well as equipment for specific survey team use. The general use equipment includes communications equipment, reference material, survey instruments, dosimeters, counting equipment, sampling equipment, protective clothing, and decontamination equipment.

**Section 6: Maintaining Emergency Preparedness**

A concept of in-depth preparedness is employed regarding the Nine Mile Point Nuclear Station Emergency Preparedness Program. This concept is accomplished through training, emergency drills and exercises. Personnel are trained to provide an in-depth response capability for required actions in an emergency situation. Similarly, members of the population within the emergency planning zone are informed as to their expected response to an emergency at the Nine Mile Point Nuclear Station. This section of the Station Annex includes the means to achieve and maintain emergency preparedness and to ensure maintenance of an effective emergency program.

**6.1 Organizational Preparedness**

**6.1.1 Training**

The Site Training Director is responsible for the Emergency Preparedness Training and Qualification Program provided to ERO personnel in accredited programs (Operations, Maintenance, Radiation Protection, Engineering and Chemistry).

The Emergency Preparedness Manager is responsible for maintenance of all non-accredited ERO personnel position specific qualifications. Training requirements for ERO personnel are detailed in the ERO Training and Qualification procedure.

The NMP Senior Nuclear Site Communications Specialist coordinates with the Oswego County Emergency Management Office to schedule public news organization training, administer the training and provide records of the activities to the Emergency Preparedness Department for record retention. The Director, Oswego County Emergency Management Office is responsible for planning and conducting emergency preparedness training for emergency response personnel in Oswego County.

Emergency training includes, as appropriate:

- a. Unescorted personnel entering or working within the Nine Mile Point Nuclear Station Protected Area receive, as a minimum, orientation regarding individual employee responsibilities, response to station alarms, the use of applicable station communications systems and requirements associated with personnel accountability and evacuations.
- b. Temporary work force personnel onsite are informed of their emergency response in accordance with applicable procedures for evacuations, and accountability.
- c. Personnel assigned to the NMPNS ERO with specific emergency preparedness duties and responsibilities receive specialized training for

their respective assignments. Station Annex Figure 6.2 delineates which personnel receive specialized training, the type of training and the required frequency of such training.

- d. The New York State Office of Emergency Management develops, conducts, and coordinates a training program for State personnel and may assist the County in developing training policy for disaster operational readiness. The Oswego County Emergency Management Director is responsible for planning and conducting emergency preparedness training of county emergency response personnel. The New York State Division of Military and Naval Affairs, has the responsibility for a statewide warning and communication system and may be requested to assist State and local agencies in specific disasters.
- e. The key personnel from the emergency/disaster services organizations listed below are invited, on an annual basis, to participate in a training program. The program, as appropriate, identifies interfaces between the NMPNS emergency organizations and the offsite (i.e., State, County and Federal) emergency organizations.

The program shall include a review of appropriate sections of the NMPNS Station Annex and appropriate Emergency Plan Implementing Procedures including: classification of emergencies; emergency action levels; reporting requirements; assessment, protective and mitigative actions; and communications networks. The organizations invited include but are not limited to:

- 1) New York State Office of Emergency Management
  - 2) New York State Department of Health
  - 3) Oswego County Emergency Management Office
- f. NMPNS provides for training to local offsite support organizations as specified in respective letters of agreement and as required to ensure a high state of emergency preparedness and response capability of these organizations. The local organizations that may provide onsite emergency assistance are encouraged to become familiar with the Nine Mile Point Nuclear Station (including the physical plant layout, site access arrangements and procedures, and key station personnel), and are invited to attend emergency preparedness training conducted by NMPNS. Such training is provided annually to the appropriate organizations and individuals:
    - 1) The local fire, local law enforcement and ambulance companies are invited to participate in a training program that may include but is not limited to:
      - i. Interface with the NMPNS Security Force during emergencies
      - ii. Basic health physics training

**Nine Mile Point Annex**

**Exelon Nuclear**

- iii. Nine Mile Point Nuclear Station facility layout including arrangements and procedures for site access for Offsite Response Organization Responders
  - iv. Onsite fire protection system equipment (permanent and portable)
  - v. Differences between onsite firefighting equipment and fire company supplied equipment
  - vi. Communications system
  - vii. Review of appropriate sections of the NMPNS Emergency Plan and Emergency Implementing Procedures
  - viii. The onsite emergency organization including the interface with the Nine Mile Point Nuclear Station Fire Brigade
- 2) The local medical support organizations and individuals are invited to participate in a training program that may include but is not limited to:
- i. Communications systems
  - ii. The onsite emergency organization including the interface between NMPNS Radiation Protection personnel, the local medical support personnel, and the radiation medicine consultants (Oswego Hospital, University Hospital or others)
  - iii. Radiological aspects of emergency medical treatment
  - iv. Nine Mile Point Nuclear Station Emergency Plan Implementing Procedures and Radiation Protection Procedures for decontamination
  - v. Review of appropriate sections of the radiation emergency plans and/or procedures of the Oswego Hospital and University Hospital
- g. Annually, a program to acquaint the news media (that is, major public news organizations serving the NMPNS area, such as local radio/TV stations, newspapers, local wire service offices and local correspondents to national new media) with the NMPNS emergency plan, information concerning radiation, the emergency classification scheme and points of contact for release of public information during an emergency, will be conducted.
- h. Personnel responsible for the Nine Mile Point emergency preparedness effort receive appropriate training to maintain their level of competency. The Site Emergency Preparedness Manager and staff attend relevant seminars and meetings on emergency preparedness issues, such as those held by the NRC/FEMA and Nuclear Energy Institute. In addition,

appropriate technical literature (such as any information received from NEI, FEMA, NRC, etc.) is reviewed to assist in maintaining this competency. Training requirements for NMP personnel responsible for the emergency planning effort are contained in EP-AA-120, Emergency Plan Administration.

### 6.1.2 Exercises and Drills

Exercises are realistic, pre-planned simulations of accidents, designed and conducted so that the response of the emergency organization closely approximates their response to an actual incident. Drills are pre-planned simulations in which the participants are "walked" or "talked" through one or more procedures, or aspects of the Station Annex. The primary purpose of drills is to provide individuals with hands-on training in a controlled situation. During practical drills on-the-spot correction of erroneous performance may be made and a demonstration of the proper performance offered by the instructor/controller. Drills are evaluated by drill controllers and observers. The response of Division personnel to an actual emergency condition may be allowed to satisfy a particular drill requirement, provided that a critique is performed and documented in the manner specified for a drill. In addition, selected training sessions can satisfy drill requirements as allowed by procedure.

Biennial exercises and annual drills are conducted in order to test the state of emergency preparedness of participating individuals, organizations, and agencies. An exercise or drill may be conducted that simulates an emergency that results in offsite radiological releases requiring response by offsite authorities to: 1) ensure that the participants are familiar with their respective duties and responsibilities; 2) verify the adequacy of both the NMPNS Emergency Plan and the methods used in the appropriate Implementing Procedures; 3) test communications networks and systems; 4) check the availability of emergency supplies and equipment; 5) verify the operability of emergency equipment; and 6) verify adequate interrelationships with offsite agency plans. Exercise scenarios provide the ERO with the opportunity to demonstrate proficiency in the key skills necessary to implement the principal functional areas of emergency response. Principal functional areas include: Management and coordination of the emergency response, Accident assessment, Event Classification, Notification of Offsite authorities, Assessment of the Onsite/offsite impact of radiological releases, Protective Action Recommendation development, Protective Action decision making, Plant system repair and mitigative action implementation, Public Notification /Information processes. Biennial Exercise scenarios are submitted to the NRC for review and approval. Biennial Exercises are evaluated and graded by the NRC and FEMA to determine that there is "reasonable assurance" that adequate protective measures will be taken in the event of an emergency. The NRC may require a remedial exercise if they cannot find reasonable assurance or determine that the

ERO has maintained the key skills specific to emergency response. All Drills and exercises that provide performance opportunities to develop, maintain or demonstrate key skills, provide for a formal critique with controllers and players following the completion of the drill. The critiques are to identify weak or deficient areas that need correction. During the critique, comments are gathered which are used to improve the emergency preparedness program, and a final assessment of the drill or exercise is made. Weaknesses or deficiencies identified in critiques are corrected and tracked through the Corrective Action Program.

The Site Emergency Preparedness Manager is responsible for planning, scheduling, and coordinating emergency planning related exercises and drills. The Fire Marshal, in conjunction with the Manager Operations and the Manager Training, is responsible for planning, scheduling, and coordinating Fire Brigade related drills. Drills are subject to management review. The Site Emergency Preparedness Manager is responsible for reviewing pre-exercise information to ensure only appropriate information is provided to the participants. In addition, participants are not permitted to review or otherwise view exercise scenarios.

Exercises and drills are conducted to simulate actual emergency conditions as closely as possible and may be scheduled such that more than one drill or exercise can be conducted simultaneously. Scenarios are prepared that emphasize coordination among onsite and offsite organizations as appropriate and may involve participation by the Nine Mile Point Fire Brigade; monitoring teams; varying degrees of participation of county, state, and Federal agencies and organizations and local offsite support personnel and organizations.

Scenarios are varied and include a wide spectrum of radiological releases and events. These events include hostile actions, no or minimal radiological release, initial or rapid Site Area or General Emergency declarations, Severe Accident Management and Large Area Loss (10CFR50.54(hh)(2)), integration of offsite resource and events that simultaneously involve both NMP and JAF.

Emergency Preparedness Drills and Exercises may include: communications drills, fire drills, medical emergency drills, radiological monitoring drills, and health physics drills. EOF activation drills are periodically conducted to maintain the proficiency of the EOF staff. Drills/Exercises are planned, scheduled and evaluated in accordance with EP-AA-122, Exercise and Drills.

### 6.1.3 Site Emergency Preparedness Manager

The Site Emergency Preparedness Manager is the individual with overall responsibility and authority for radiological emergency response preparedness for the NMPNS. See Figure 6.1 for Emergency Preparedness organization.

The primary duties of the Site Emergency Preparedness Manager include, but are not limited to:

- a. Ensuring the coordination of the NMPNS Emergency Plans with:
  - 1) Federal Plans
  - 2) State Plans
  - 3) County Plans
  - 4) NMPNS Physical Security Plan
  - 5) NMPNS Fire Protection Plan
- b. Ensuring that the information, in the Emergency Plan Implementing Procedures are consistent with the NMPNS Station Annex.
- c. Ensuring that the Emergency Plan Implementing Procedures interface properly with the Administrative Procedures, Security Procedures, Chemistry Procedures, Radiation Protection Procedures, Special Operating Procedures, Emergency Operating Procedures, Severe Accident Management Guidelines, and Training Procedures.
- d. Assisting the Manager Training in coordinating emergency planning related specialty training.
- e. Coordinating emergency preparedness related drills and exercises.
- f. Coordinating the review and update of the NMPNS Emergency Plan and Emergency Plan Implementing Procedures.
- g. Ensuring the maintenance and inventory of emergency equipment and supplies by scheduling inventory surveillances.
- h. Keeping abreast of changes in Federal regulations and guidance that may affect emergency planning.
- i. Ensuring qualified review of exercise materials and scenarios.

## **6.2 Reviewing and Updating of Plans and Procedures**

### **6.2.1 Responsibility for Reviewing and Updating**

Reviewing and updating of the NMPNS Emergency Plan and Emergency Plan Implementing Procedures are the responsibilities of the Site Emergency Preparedness Manager. Reviews of the plan and procedures are performed annually by the Site Emergency Preparedness Manager and/or the Emergency Preparedness staff. Recommended changes are reviewed and approved in accordance with NMPNS Administrative Procedures. An independent review of the emergency preparedness program and implementing procedures shall be conducted, in accordance with 10CFR50.54(t), at least every 24 months or as necessary based on an assessment by the licensee against performance indicators, and as soon as reasonably practicable after a change occurs in

personnel, procedures, equipment, or facilities that potentially could adversely affect emergency preparedness, but no longer than 12 months after the change. This review will be conducted by Quality and Performance Assessment as part of the QA Audit program, under the cognizance of the Nuclear Safety Review Board (NSRB).

**6.2.2 Changes to the Plans or Procedures**

Any recommendation for corrective actions or revisions to the NMPNS Emergency Plans and the Emergency Plan Implementing Procedures shall be forwarded to the Site Emergency Preparedness Manager. These recommendations may result from audits, exercises, drills, changes in operating procedures or conditions, or changes in organization, equipment, personnel, phone numbers or methods of communication or operation. The Site Emergency Preparedness Manager shall implement approved recommendations for changes in accordance with station procedures. Review and approval of these recommended changes shall be conducted in accordance with Technical Specifications and Administrative Procedures. The letters of agreement will be updated at least every 2 years. Verification of the telephone numbers found in the Station Annex and Implementing Procedures occurs quarterly in accordance with the Emergency Equipment Inventory procedure.

**6.2.3 Recertification of Plans and Procedures**

The Emergency Plan and procedures are reviewed annually in accordance with site administrative procedures. The Emergency Plan is recertified annually in accordance with EP-AA-120, Emergency Plan Administration. Emergency plans and procedures are written to comply with the guidance in the Procedure Writers Manual. Changes will be submitted for approval in accordance with Technical Specifications and Administrative procedures and distributed to official copy holders.

**6.2.4 Distribution**

Holders of official copies of the Nine Mile Point Nuclear Station Annex (SEP) receive approved changes to the SEP so that they can maintain their copies current.

**6.3 Maintenance and Inventory of Emergency Equipment and Supplies**

**6.3.1 Responsibility for Maintenance and Inventory**

The Site Emergency Preparedness Manager is responsible for ensuring the maintenance and inventory of emergency equipment and supplies. The authority for planning, scheduling, and performing the quarterly inventory and inspection of designated emergency equipment and supplies has been delegated as outlined in the Emergency Equipment Inventory procedure.

**6.3.2 Maintenance and Inventory**

Emergency supplies are inspected and inventoried as specified in the Emergency Equipment Inventory procedure. Instruments will be inspected for operability and calibration status in accordance with station calibration procedures. Instruments with expired calibrations or instruments with calibrations which will expire prior to the next inspection/inventory will be removed and calibrated, or replaced with calibrated equipment prior to their expiration date. Sufficient instruments are available to replace those removed from service for calibration or repair. Procedures for instrument calibration are contained in the station procedures. Calibration intervals meet or exceed any written recommendations of the manufacturers of the equipment. In addition, emergency communications systems involving dedicated telephone lines, base station, portable and console radios are tested periodically in accordance with the Emergency Equipment Inventory procedure.

**6.3.3 Discrepancies**

Any discrepancies found during inventory and inspection will be corrected as detailed in the Emergency Equipment Inventory procedure

**6.4 Public Education and Information**

**6.4.1 Instructional Material**

The NMPNS, in cooperation with the James A. Fitzpatrick Nuclear Power Plant and with state and county authorities, develop and periodically disseminate emergency planning instructional material to residents and transient populations in the Emergency Planning Zone (EPZ). This ensures that the permanent and transient adult population is provided an adequate opportunity to become aware of this information. This instructional material includes basic education information on:

- Basic educational information on radiation
- Public notification system
- Public response to warning signals
- Protective measures
- Sheltering procedures
- Evacuation routes and procedures
- Special needs of the handicapped
- Contact for additional information

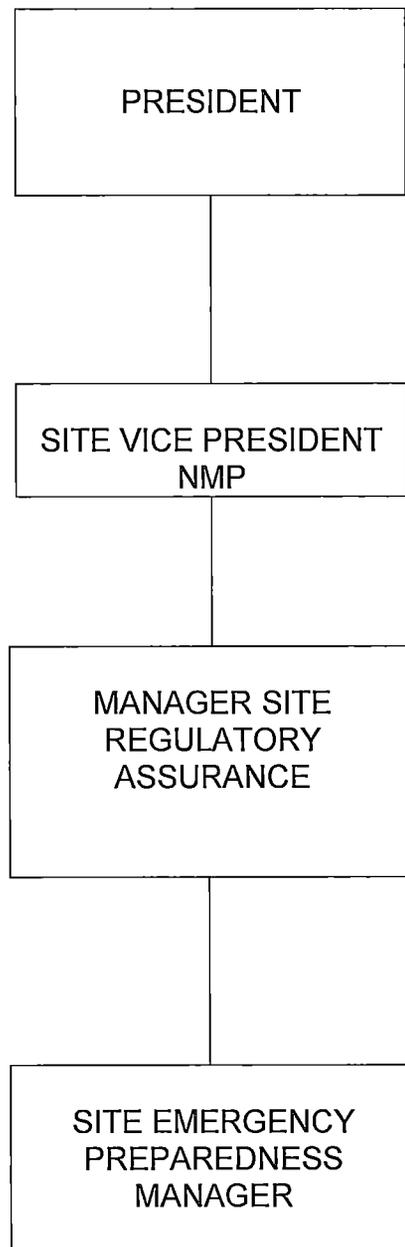
6.4.2 Dissemination of Instructional Material

The following methods may be used to ensure that emergency planning information is transmitted to residents and transients in the EPZ:

- Advertisements summarizing the actions to be taken by residents are published annually in the local newspapers
- Printed instructions and evacuation maps are distributed to EPZ residents
- Printed instructions are included in the local telephone directory
- Printed instructions and evacuation maps are distributed to motels, hotels and recreation areas

A sample of this material is retained in the Emergency Preparedness Permanent Plant File. This material is developed and distributed periodically as required by CNG-EP-1.01-1002.

**FIGURE 6.1**  
**EMERGENCY PREPAREDNESS DEPARTMENT**



**FIGURE 6.2**  
**INITIAL TRAINING AND PERIODIC RETRAINING\***

Emergency Response Category	Involved Personnel (Typical)	Initial Training and Periodic Retraining
1. <u>Emergency Plan Indoctrination</u>	Persons granted unescorted access to the Protected Area	<u>Initial</u> - Emergency Plan content and implementation; specifically: personal actions, warnings, assembly areas, use of station communications, personnel accountability and evacuation to an offsite assembly area.
2. <u>Emergency Directors/ ERF Coordinators</u>	Plant Manager; Managers of Operations, SMs, Initial responders, and others as designated	<u>Initial</u> - Instruction on the scope, responsibilities, and function of the Emergency Plan and Implementing Procedures, including Incident Command System (ICS) concepts, position titles and terminology.  <u>Periodic</u> - On an annual basis*. Review of any changes made since the last training period.
3. <u>Personnel responsible for accident assessment and/or accident management</u>	SM/Emergency Director and the Emergency Director at EOF, TSC, OSC and EOF Managers; and Alternates	<u>Initial</u> - Instruction on the NMPNS Emergency Plan and Implementing Procedures and Technical Support Guidelines germane to their particular assessment/management function, including Incident Command System (ICS) concepts, position titles and terminology.  <u>Periodic</u> - Retraining will be on an annual basis* and will include a review of the above material and any changes made since the last training period.
4. <u>Radiological Monitoring /Analysis personnel</u>	Radiation Management Supervisors, Radiation Protection Technicians, and others as designated	Selected Radiation Protection personnel receive substantial training in radiation monitoring.  <u>Initial</u> - Training for personnel performing radiation monitoring and analysis duties will consist of instruction in the downwind and/or in plant radiation monitoring and sampling Implementing Procedures, including Incident Command System (ICS) concepts, position titles and terminology.  <u>Periodic</u> - Retraining will be on an annual basis* with hands-on instrumentation usage including interpretation of results.

**FIGURE 6.2 (Cont.)  
INITIAL TRAINING AND PERIODIC RETRAINING\***

Emergency Response Category	Involved Personnel (Typical)	Initial Training and Periodic Retraining
5. <u>Fire Response /First Aid/Rescue/Medical Support</u>	NMPNS Fire Brigade/Offsite Fire Departments Ambulance and Hospital Personnel	Designated members will receive training as appropriate in basic patient care and treatment. Members will also be instructed on the availability of onsite medical treatment supplies and equipment; communication systems; access controls radiological hazards; and roles, interfaces and responsibilities with local fire/medical support personnel, including Incident Command System (ICS) concepts, position titles and terminology.
6. <u>Damage Control/Repair Teams personnel</u>	Nuclear Operators, Nuclear Auxiliary Operators, Maintenance Supervision, I&C Supervision, Radiation Protection Supervision Selected Maintenance, I&C and Radiation Protection Personnel, and others as designated	Repair and Damage Control are considered a normal part of the job functions of the listed personnel and, as such, special training in these functions, other than appropriate emergency plan and procedures training, is not required.
7. <u>Security Personnel/Local Law Enforcement Officials</u>	Security personnel assigned responsibilities for Emergency Plan function, and Local Law Enforcement Officials.	Training and retraining requirements are outlined in the Nine Mile Point Nuclear Security Training and Qualification Plan, including Incident Command System (ICS) concepts, position titles and terminology.
8. <u>Communication Personnel</u>	As designated	<p><u>Initial</u> - Training shall consist of a review of appropriate Implementing Procedures, communications equipment and messages, including Incident Command System (ICS) concepts, position titles and terminology.</p> <p><u>Periodic</u> - Retraining will be conducted annually*.</p>

\* In the context of station ERO training for those individual holding ERO positions, annually is defined as once every 12 months.

**Section 7: Recovery**

Actions taken during an emergency situation fall into two general categories; response and recovery. Response actions are those taken to manage the consequences of an emergency and to bring the emergency under control. Recovery actions are those longer term actions taken to restore the station, as nearly as possible, to its pre-emergency condition.

This section describes recovery actions and establishes typical criteria for declaring that an emergency has entered the recovery phase.

**7.1 Progression From Emergency Response to Recovery**

The two general action categories, response and recovery, are directed by separate organizations: the On-Site Emergency Organization is responsible for initial response while the Recovery Organization is responsible for long term response and recovery.

**7.1.1 Re-entry Phase**

The Re-entry Phase is the period following evacuation during which access to the station is restricted. This period can commence with the start of the emergency, or can develop as the emergency progresses, and may last into the recovery phase. Re-entry may be made to perform essential tasks such as saving human life, controlling release of radioactive materials, and preventing additional damage to plant and equipment.

Additional actions to be taken during the Re-entry Phase are controlled by implementing procedures and will be directed by the Emergency Director or the Recovery Manager (RM). Planning for re-entry will include evaluation of available survey data, review of exposures incurred, projection of manpower and equipment needs, and re-entry survey team activation. Upon re-entry a comprehensive survey of the plant will be made to define radiological problem areas. Data gathered during the re-entry operation and additional information developed by the various technical support groups will be assessed and used in developing subsequent recovery plans.

The planned radiation exposure limits for re-entry should be consistent with 10 CFR 20. If the need arises for exposures in excess of the limits of 10 CFR 20, the ED may institute the higher limits identified in Section 4.0 of the NMPNS Station Annex.

**7.1.2 Termination of Emergency Phase**

The Corporate Emergency Director will periodically evaluate and assess the status of the emergency, the effectiveness of emergency actions, and the need to update the emergency class. The Corporate Emergency Director, in consultation with the Station Emergency Director and offsite authorities, will determine when the emergency phase has ended. Notification of the appropriate authorities (e.g., county, state, and federal agencies, etc.) and the Emergency Response Organization will then take place. Criteria for declaring an emergency situation resolved is dependent on the emergency classification declared but may

include: Radiation levels in all in-plant areas are stable or are decreasing with time.

- Reactor and associated systems are in a safe, stable condition, a reactor cool-down is in progress and it has been determined that the plant has the ability to achieve and maintain a cold shutdown condition.
- Releases of radioactive materials to the environment are under control or have ceased.
- Any fire, flooding or similar emergency conditions are under control or have ceased.
- Drywell pressure is at normal levels.

Emergency Plan Implementing Procedure EP-CE-115, Termination and Recovery provides the specific guidance on termination of the emergency phase and commencement of the recovery phase.

### 7.1.3 Recovery Phase

During the initial stage of the Recovery Phase, data gathered from re-entry operations and additional information developed by the various technical support groups will be assessed. A plan of action for returning the plant to a condition within Technical Specifications limits will be developed using the guidance provided in EP-CE-115.

## 7.2 Recovery Operations

Recovery operations necessary to restore the plant to an operational condition will be conducted within the framework of the Recovery Organization. From the EOF, the CED or Recovery Manager (RM) and EOF staff will direct entry into recovery operations.

Specific recovery tasks and the sequence in which they are performed will be at the direction of the Recovery Manager. The Recovery Manager will be responsible for deactivating the Recovery Organization. Activities for which the Recovery Organization is responsible during the recovery phase include, but are not necessarily limited to, the following:

- a. Logistical
- b. Corrective Actions
- c. Engineering
- d. Radiological
- e. Administrative

Procedures detailing performance of the above tasks will be developed if required, during the recovery phase.

During recovery operations, the radiation exposure limits of 10 CFR 20 apply. Compliance with those limits will be the responsibility of the Recovery Manager via the applicable Health Physics organization.

Recovery actions that plan for or may result in radioactive releases will be evaluated by the Recovery Manager and EOF staff as far in advance of the action as possible. These actions and data pertaining to the release will be reported to the appropriate off-site emergency response organizations and agencies.

### **7.3 Emergency Organization Transformations**

The emergency response organization may go through a series of transformations depending upon the time of initiation, type, severity and duration of the emergency condition.

A long-term recovery organization that is general in nature has been defined. The transition to the Recovery Organization will be communicated to concerned parties by the Recovery Manager, via the ERF managers/coordinators.

### **7.4 Recovery Organization**

The Recovery Organization is comprised of two major groups: Functional and Support. (See Figure 7-1)

The Functional Group is essentially comprised of the normal station organization and would be responsible for the development and implementation of plans and procedures necessary for the long-term emergency response and recovery operations. The Functional Group is directed and coordinated by the RM through the Plant Manager, the Engineering Director, the Maintenance Director and the Director, Work Control and Outage Management. The Functional Group utilizes personnel performing duties they normally perform, such as; Operations, Maintenance, Engineering, Chemistry, Radiation Protection and Outage Management.

The Support Group is comprised essentially of those positions established in the augmentation of the initial on shift emergency response at the Emergency Operations Facility with the addition of the following managers/directors providing support functions as required/needed from the following organizations: Human Resources, Training, Business Planning, JIC Director, Quality and Performance Assessment, Security and Emergency Preparedness (Corporate), Procurement and Warehouse Services (Corporate), IT and Telecommunications Services (Corporate). The Support Group would assist the Functional Group in areas such as plant modification, design, construction, recovery engineering, quality assurance/control, and administrative support functions such as purchasing, transportation, treasury, materials management, communications, legal, claims, and risk management, etc.

Other personnel may be called upon to enable the Recovery Organization to function on a 24 hour per day basis for extended periods or to provide special expertise in specific areas as dictated by the type and severity of the particular emergency.

7.4.1 Recovery Organization Staff

As stated above, the recovery organization is comprised of positions already in place during the emergency, and other staff performing normal functions. Examples of additional staff that may be called on to support the recovery operations are described below. It is expected that the additional staff will be performing duties similar to those they are normally expected to perform on a day to day basis, thus additional training for these positions is not required.

7.4.1.1 Functional Group

a. Plant Manager

The Plant Manager is the typical designee for this position. The Plant Manager reports to the Recovery Manager during the recovery phase of an emergency and is responsible for obtaining and coordinating services from the various departments that are the normal direct reports to this position. Additionally, the Plant Manager has responsibility for oversight of the Plant Operations Review Committee (PORC). These services/departments may include:

- Operations
- Chemistry
- Radiation Protection
- Reactor Engineering

The Plant Manager will be expected to ensure that staffing and work schedules are setup as required to support the recovery organization.

b. Director Engineering

The Director Engineering is the typical designee for this position. This position reports to the Recovery Manager during the recovery phase of an emergency and is responsible for obtaining and coordinating services from the various departments that are the normal direct reports to this position. These services/departments may include:

- Electrical Engineering
- Structural Engineering
- Mechanical Engineering
- Systems Engineering
- Thermo-hydraulic Engineering

The Director Engineering Services will be expected to ensure that staffing and work schedules are setup as required to support the recovery organization.

c. Director Maintenance

The Director Maintenance is the typical designee for this position. This position reports to the Recovery Manager during the recovery phase of an emergency and is responsible for obtaining and

coordinating services from the various departments that are the normal direct reports to this position. These services/departments may include any of the maintenance disciplines (electrical, mechanical, I & C).

The Director Manager will be expected to ensure that staffing and work schedules are setup as required to support the recovery organization.

d. Director, Work Management

The Director, Work Management is the typical designee for this position. This position reports to the Recovery Manager during the recovery phase of an emergency and is responsible for obtaining and coordinating services from the various departments that are the normal direct reports to this position. These services/departments may include: work control, outage planning and scheduling, project management and onsite material procurement services.

The Director, Work Management will be expected to ensure that staffing and work schedules are setup as required to support the recovery organization.

7.4.1.2 Support Group

a. Director, Training

The Director, Training is the typical designee for this position. This position reports to the Recovery Manager during the recovery phase of an emergency and is responsible for providing whatever training services are required.

b. Manager, Human Resources

The Manager, Human Resources is the typical designee for this position. This position reports to the Recovery Manager during the recovery phase of an emergency and is responsible for providing all necessary aspects of human resources, including occupational health and safety aspects as required.

c. Manager, Finance and Business Operations

The Director Finance and Business Operations is the typical designee for this position. This position reports to the Recovery Manager during the recovery phase of an emergency and is responsible for ensuring all necessary business management aspects of the emergency recovery are provided for as required.

d. Manager, Quality & Performance Assessment

The Director Quality and Performance Assessment is the typical designee for this position. This position reports to the Recovery Manager during the recovery phase of an emergency and is responsible for ensuring all quality aspects of the emergency recovery as required.

e. Directors (Corporate)

The Directors of Security and Emergency Preparedness, Procurement and Warehouse Services, and Information Technology and Telecommunications are the typical designees for these positions. These positions, as requested, report to the ALM during the recovery phase of an emergency and are responsible for obtaining and coordinating services from their departments. These services may include:

- Nuclear Security
- Procurement
- Emergency Preparedness
- Site Services
- Technical Services

The Directors (Corporate) will be expected to ensure that staffing and work schedules are setup as required to support the recovery organization.

7.4.2 Augmentation of the Emergency Response/ Recovery Organization

Additional augmentation may be necessary, as the situation dictates, by the Institute for Nuclear Power Operations (technical personnel and equipment), by the NSSS vendor (technical personnel, equipment and replacement parts as needed) and by other local nuclear power plants (survey teams and laboratory facilities).

7.4.2.1 Contract Services

Long-term emergency response and recovery activities may require additional personnel and equipment.

When contracted services are required, the normal practice of assigning a NMPNS employee to administer the contracted service, i.e., provide overall technical direction, coordination, and review, will be employed to ensure the actions of the contractor support the needs of the recovery operation.

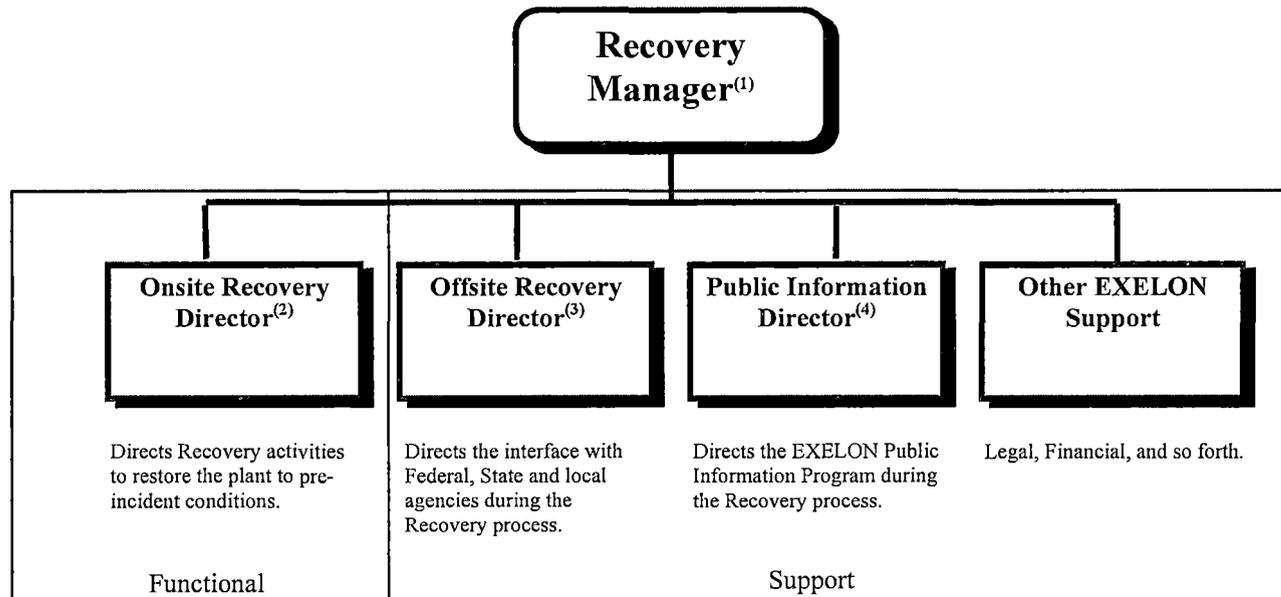
7.4.2.2 Local Support Services

Local support services necessary to support a large influx of personnel from the contractors, vendors and government support organizations may be required. These services include items such as:

- Lodging
- Food
- Transportation

There are sufficient facilities in the vicinity of the station to supply these basic services. Individual contracts will be negotiated for these facilities as necessary.

**Figure 7.1: Typical Recovery Organization (for Site Area or General Emergency)**



**NOTES:**

- (1) The Recovery Manager position will normally be filled by a Vice President- or designee. IF the station VP does not fill position the Recovery Manager reports to the VP.
- (2) The Onsite Recovery Director position will normally be filled by the Plant Manager or designee. The normal plant staff will support recovery activities as required. A special Radiation Protection Manager and/or Administrative and Logistics Manager may need to be appointed for events which involving severe plant damage or large releases of radioactive materials inside or outside the plant.
- (3) The Offsite Recovery Director position will normally be filled by the Site Emergency Preparedness Manager or designee. Radiological support positions should be designated to support offsite recovery activities if there was a significant release of radioactive materials.
- (4) The Public Information Manager position will normally be filled by the Communications Department personnel.
- (5) Other positions may be designated to support completion of the Recovery Plan as needed.

## Nine Mile Point Annex

---

### SECTION 8: ACRONYMS AND DEFINITIONS

#### 8.1 Acronyms

This section contains the acronyms of terms that are used in a special context in this plan and/or are unique to Nine Mile Point Nuclear Station (NMPNS).

- o ALARA - As Low As Reasonably Achievable
- o ARM - Area Radiation Monitor
- o CDE<sub>T</sub> - Committed Dose Equivalent - Thyroid (Child)
- o CRS - Control Room Supervisor
- o CWP - County Warning Point
- o DOE - U.S. Department of Energy
- o EAL - Emergency Action Level
- o EAS - Emergency Alert System
- o ED - Emergency Director
- o EDE - Effective Dose Equivalent
- o ED - Emergency Director
- o ENS - Emergency Notification System
- o EOC - Emergency Operations Center
- o EOF - Emergency Operations Facility
- o EPA - U.S. Environmental Protection Agency
- o EPIP - Emergency Plan Implementing Procedure
- o EPMP - Emergency Plan Maintenance Procedure
- o EPZ - Emergency Planning Zone
- o ERF - Emergency Response Facilities
- o ETE - Evacuation Time Estimate
- o FRMAP - Federal Radiological Monitoring and Assessment Plan
- o FSAR - Final Safety Analysis Report
- o ISFSI - Independent Spent Fuel Storage Installation
- o JAFNPP - James A. Fitzpatrick Nuclear Power Plant

## Nine Mile Point Annex

---

- o JIC – Joint Information Center
- o KI - Potassium Iodide
- o LCO - Limiting Condition for Operation
- o MMS - Meteorological Monitoring System
- o NED - Nuclear Engineering Department
- o NMPNS - Nine Mile Point Nuclear Station
- o NRC - U.S. Nuclear Regulatory Commission
- o NSRB - Nuclear Safety Review Board
- o NSSS - Nuclear Steam Supply System
- o NWS - National Weather Service
- o NYSDOH - New York State Department of Health
- o OCEMO - Oswego County Emergency Management Office
- o OCEOC - Oswego County Emergency Operations Center
- o ODAM - NMPNS Offsite Dose Assessment Manager
- o OEM - Office of Emergency Management (New York State)
- o OSC - Operations Support Center
- o OSLD - Optically Stimulated Luminescent Dosimeter
- o PAG - Protective Action Guide
- o PAR - Protective Action Recommendation
- o PNS - The Oswego County Prompt Notification System
- o PORC - Plant Operations Review Committee
- o QATR - Quality Assurance Topical Report
- o RAM - NMPNS Radiological Assessment Manager
- o RECS - Radiological Emergency Communications System
- o RO - Reactor Operator
- o SEP - NMPNS Station Annex
- o SEOC - State Emergency Operations Center

## Nine Mile Point Annex

---

- o SM – Shift Manager
- o SOP - Special Operating Procedure
- o SRD - Self-Reading Dosimeters
- o SRO - Senior Reactor Operators
- o STA - Shift Technical Advisor
- o STOC - Security Tactical Operations Center
- o SUNY - State University of New York
- o SWP - State Warning Point
- o TEDE - Total Effective Dose Equivalent
- o TIBL - Thermal Internal Boundary Layer
- o TLD - Thermoluminescent Dosimeter
- o TSC - Technical Support Center
- o USAR - Updated Safety Analysis Report
- o WSFO - Weather Service Forecasting Office

### **8.2 Definitions**

This section contains the definitions of terms that are used in a special context in this plan and/or are unique to Nine Mile Point Nuclear Station (NMPNS).

- o ACCESS CONTROL POINTS - Checkpoints for incoming traffic to be stopped and identification verified. These points are established by Nuclear Security at the Alert, or higher emergency classification, or as directed by the Emergency Director. The Access Control Points are pre-designated at two locations:
  - Owner Controlled Area (OCA) Checkpoint, Lake Road
  - NMP/Fitzpatrick Property Line, Lake Road
- o AFFECTED UNIT - The affected unit is NMPNS Unit 1 and/or Unit 2 whichever has declared an emergency.
- o ALTERNATE STATE WARNING POINT - The Alternate SWP is located in the N.Y. State Police Communications Center in the Public Security Building, State Office Building Campus, Albany, N.Y. This facility is manned 24 hours per day and could perform the same functions as the State Warning Point (see State Warning Point).

## Nine Mile Point Annex

---

- o AREA RADIATION MONITOR (ARM) - A fixed instrument which typically measures gross gamma radiation levels in a local area and alarms when the radiation exposure rate reaches the preset alarm level.
- o ASSESSMENT ACTIONS - Those actions taken during or after an accident to obtain and process information that is necessary to make decisions to implement specific emergency measures.
- o ASSESSMENT FACILITY - A facility used for evaluation of information including instrument data, to assess the scope and severity of an emergency condition. Such facilities available to Nine Mile Point include:
  - Onsite
    - Control Rooms
    - Technical Support Center
  - Off-Site
    - Emergency Operations Facility
- o CDE<sub>T</sub> - Represents the dose equivalent to the child thyroid, weighted on the basis of the relative detriment to the individual, for an exposure period of 50 years.
- o MITIGATIVE ACTIONS - Those emergency measures taken to mitigate or terminate an emergency situation at or near the source of the problem in order to prevent an uncontrolled release of radioactive material or to reduce the magnitude of a release.
- o COUNTY WARNING POINT (CWP) - The communications center at Oswego County 911 Center in Oswego, N.Y. is the County Warning Point. It serves as a 24-hour notification point for messages from the utilities to appropriate officials in the county.
- o DOSE PROJECTION - A calculated estimate of the potential dose to individuals at a given location onsite or offsite. It is determined from the quantity of radioactive material released and the appropriate meteorological transport and diffusion parameters.
- o EMERGENCY - A situation outside of routine operational events or minor equipment malfunction which could lead to a radiological hazard affecting the health and safety of workers or the public, or result in significant damage to property
- o EMERGENCY ACTIONS - A collective term encompassing the assessment, corrective and protective actions taken during the course of an emergency.
- o EMERGENCY ACTION LEVELS (EAL) - Specific indications or conditions used as thresholds for initiating specific emergency actions.

## Nine Mile Point Annex

---

- o EMERGENCY ALERT SYSTEM (EAS) - A system of radio stations organized to permit designated government officials to issue emergency information and instructions in threatened or actual emergencies.
- o EMERGENCY CLASSIFICATION - A condition which falls into one of the following categories: Unusual Event, Alert, Site Area Emergency, or General Emergency.
- o EMERGENCY DIRECTOR - The individual responsible for the implementation and administration of the NMPNS Station Annex. Directs the emergency response organization and has overall authority for control of the emergency situation and for assuring continuity of resources.
- o EMERGENCY OPERATIONS CENTERS (EOC) - Local and State facilities for assessment of emergency information and direction of local and State emergency response personnel.
- o EMERGENCY PLAN IMPLEMENTING PROCEDURES - A procedure that provides detailed instructions to NMPNS personnel and implements an action or activity described in the Station Annex. These procedures are considered Technical Specification related and are listed in Appendix 3.
- o EMERGENCY PLAN MAINTENANCE PROCEDURES - Procedures which provide instructions, checklists, and guidance to maintain the emergency preparedness program, equipment and associated documents.
- o EMERGENCY PLANNING ZONE (EPZ) - A designated area around NMPNS used to facilitate offsite emergency planning. There are two Emergency Planning Zones: the plume exposure pathway and the ingestion exposure pathway.
- o EMERGENCY RESPONSE FACILITY (ERF) - A generic term referring to a facility that is used for emergency purposes. These facilities include the Control Room, Technical Support Center, Emergency Operations Facility, Operations Support Center, Joint Information Center, Oswego County Emergency Operations Center, etc.
- o EMERGENCY RESPONSE/RECOVERY ORGANIZATION - The organization, which consists of Nuclear Division, corporate and outside personnel, that manages the large scale or long-term response to and recovery from an accident.
- o ENVIRONMENTAL MONITORING TEAMS - These teams are characterized by personnel from the station staff (Radiation Protection or Environmental Departments) or contractor staff that collect environmental measurements as part of the Expanded Radiological Environmental Monitoring Program.

## Nine Mile Point Annex

---

- o EVACUATION ASSEMBLY AREAS - Areas outside of the protected area where personnel evacuated from the protected area are assembled. The two primary areas typically designated are the P-Building at Unit 2 for personnel exiting the protected area via the Unit 2 security access, and the Nuclear Learning Center for personnel exiting the protected area via the Unit 1 security access.
- o EXCLUSION AREA - The area controlled by NMPNS surrounding the station, in which the licensee has the authority to determine all activities including exclusion or removal of personnel and property from the area. For emergency preparedness purposes, the NMPNS/JAFNPP exclusion areas are considered to be one exclusion area.
- o EXPANDED RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM - This program is characterized by an increase in the number and frequency of samples collected, plus other additional sampling of critical pathways (such as snow, ground deposition, surface water, etc.)
- o FEDERAL RADIOLOGICAL MONITORING AND ASSESSMENT PLAN (FRMAP) - The Federal government's means of providing in-depth assistance to licensees, States, and local governments in the event of a radiological emergency. The monitoring and assessment teams are normally provided by the Department of Energy (DOE).
- o HAZARDOUS MATERIALS - Any element, compound or combination thereof, which is detonable, flammable, corrosive, toxic, an oxidizer, an etiologic agent, or highly reactive and which because of handling, storage processing, or packaging may have detrimental effects upon operating personnel and emergency personnel, the public, plant equipment, and/or the environment.
- o INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI) - The ISFSI is a complex designed and constructed for the interim storage of spent fuel, solid reactor-related greater than Class C (GTCC) waste, and other radioactive materials associated with spent nuclear fuel assemblies discharged from NMPNS Unit 1 and Unit 2 reactors.
- o INGESTION EXPOSURE PATHWAY - The principal exposure from this pathway would be from ingestion of contaminated water or foods such as milk or fresh vegetables. The duration of principal exposures could range in length from hours to months.
- o LOCAL AREA EVACUATION - Evacuation of personnel from localized areas within the station with assembly outside the affected local area.
- o NINE MILE POINT NUCLEAR STATION L.L.C (NMPNS) - A limited liability corporation and operator of Nine Mile Point Nuclear Station.

## Nine Mile Point Annex

---

- o NUCLEAR SAFETY REVIEW BOARD (NSRB) - a committee which provides independent review and audit of designated activities affecting the safe operation of the stations.
- o OFFSITE - Any area outside of the joint property controlled by NMPNS and JAFNPP.
- o OFFSITE ASSEMBLY AREA (OAA) - Specific location outside the NMPNS 10 mile EPZ for the assembly of personnel in the event of an exclusion area evacuation. This area is typically the Oswego County Airport, Hanger K; in the town of Volney.
- o ONSITE - The area within the joint property controlled by NMPNS and JAFNPP, the exclusion area.
- o ONSITE ASSEMBLY AREAS - These are areas within the protected area where personnel will gather to allow for continuous accountability of personnel remaining within the protected area.
- o OSWEGO COUNTY EMERGENCY OPERATIONS CENTER (OCEOC) - A facility that serves as the county command post from which emergency operations will be directed and coordinated. The OCEOC is located in the Oswego County Emergency Management Offices in the basement of the Oswego County Branch Building, Route 481, Fulton, N.Y.
- o OWNER CONTROLLED AREA (OCA) EVACUATION - Evacuation of all non-essential personnel from the NMPNS OCA to either the designated Offsite Assembly Area or to their home. This includes, as appropriate, the evacuation of individuals from the NMPNS OCA including the Nuclear Learning Center; Energy Center, Sewage Treatment Facility, all other NMPNS site locations, and a notification to the James A. Fitzpatrick Nuclear Station of the evacuation.
- o PERSONNEL ACCOUNTABILITY SYSTEM - A system of accounting for personnel within the Protected Area. The system was developed in response to NUREG-0654 (Section II.J.5) and uses the Nuclear Security Proximity Cards assigned to personnel entering the Protected Area, Emergency Accountability Card readers located throughout the protected area, and a computerized database. The system provides timely identification of individuals who have NOT reported to Onsite Assembly Areas or exited the protected area and generates a personnel accountability report.
- o PA SYSTEM - A generic term used throughout the Site Emergency Plan referring to a Public Address system where an announcement or alarm can be made and heard throughout the protected area. Other terms used for the PA system are the GALtronics, Plant Paging System, Page Party/Public Address Communications Subsystem (PP/PA), etc.

## Nine Mile Point Annex

---

- o PREVENTIVE PAG - These are projected dose commitment values at which recommendations should be made to responsible offsite officials. These actions should have minimal impact to prevent or reduce the radioactive contamination of human food or animal feed.
- o PLANT OPERATIONS REVIEW COMMITTEE (PORC) - A review group which, in accordance with the QATR, functions by advising the PORC Chairman and the Nuclear Safety Review Board concerning the safety aspects of proposed courses of action.
- o PLUME EXPOSURE PATHWAY - A pathway by which individuals can be exposed to radiation. The principal exposure sources from this pathway are: (a) whole body external exposure to gamma radiation from the plume and from deposited material; and (b) inhalation exposure from the passing radioactive plume.
- o PROTECTED AREA - This is the area within the station security fence designated to implement the security requirements of 10CFR73. It is sometimes referred to in the context of Unit 1 and/or Unit 2 protected area.
- o PROTECTED AREA EVACUATION - Evacuation of nonessential individuals within the stations' protected area, to assembly areas outside of the protected area designated as Evacuation Assembly Areas. These areas are typically the Nuclear Learning Center and the P-Building.
- o PROTECTIVE ACTIONS - Those emergency measures taken before or after a release of radioactive material has occurred for the purpose of preventing or minimizing radiological exposures to persons that would be likely to occur if the actions were not taken. Some of the possible protective actions are:
  - Evacuation
  - Isolation of Ingestion Pathway and Sources
  - Radioprotective Drug Administration
- o PROTECTIVE ACTION GUIDES (PAGs) - Projected radiological dose or dose commitment values to individuals in the general population that warrant protective action before or following a release of radioactive material. Protective actions would be warranted provided that the reduction in individual dose expected to be achieved by carrying out the protective action is not offset by excessive risks to individual safety in taking the protective action. The PAG does not include the dose that has unavoidably occurred prior to the assessment.
- o RADIOLOGICALLY CONTROLLED AREA (RCA) - Major plant areas to which access is limited for the purpose of protecting personnel from exposure to radiation and contamination.

## Nine Mile Point Annex

---

- o RADIOLOGICAL EMERGENCY COMMUNICATIONS SYSTEM (RECS) - A dedicated telephone system used to provide initial notification of an emergency, and continuing emergency information, to the State and to Oswego County.
- o RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM - Characterized by the collection of normal radiological samples required by technical specifications and additional optional samples not covered in technical specifications (such as soil, meat, poultry, etc.)
- o RECOVERY ACTIONS - Those actions taken after an emergency to restore the plant as nearly as possible to its pre-emergency condition.
- o REQUISITE TRAINING - The training specified for an emergency position, and contained within Training Department Procedures for Emergency Preparedness.
- o RESTRICTED AREA - Any area to which access is controlled by NMPNS for purposes of protection of individuals from exposure to radioactive materials.
- o SAFE SHUTDOWN SYSTEM - A descriptive term applying to a combination of systems that can be used to provide a decay heat removal path.
- o SAFETY ANALYSIS REPORT (SAR) - A periodically updated multi volume report describing a nuclear power station's site, design features, safety features and the utility's intended methods of operation. The SAR must be submitted to the U.S. NRC by the utility when applying for an operating license for the nuclear station. The Unit 1 SAR may be referred to as UFSAR and Unit 2 to as USAR.
- o SAFETY ANALYSIS REPORT FOR THE ISFSI - The Standardized NUHOMS<sup>®</sup> Updated Final Safety Analysis Report (NUHOMS<sup>®</sup> UFSAR) provides the generic safety analysis for the Standardized NUHOMS<sup>®</sup> system for storage of light water reactor spent nuclear fuel assemblies (No. NUH-003, Revision 11, NRC Docket No. 72-1004). This system provides for the safe dry storage of spent fuel in a passive ISFSI which fully complies with the requirements of 10CFR72 and ANSI 57.9. This UFSAR formed the basis for generic NRC certification of the standardized NUHOMS<sup>®</sup> system and is used by 10CFR50/10CFR72 general license holders in accordance with 10CFR72 Subparts K and L.
- o SAFETY PARAMETER DISPLAY SYSTEM (SPDS) - This system provides a display of plant parameters from which the safety status of station operations may be assessed in the Control Rooms and Technical Support Center.

## Nine Mile Point Annex

---

- o SECURITY CONTINGENCY EVENT - A deliberate act or perceived threat of an act which could imperil the station and endanger the public health and safety by exposure to radiation.
- o SECURITY TACTICAL OPERATIONS CENTER (STOC) - A security command center that may be activated during a security contingency event, or activation of the site emergency plan.
- o SHIFT MANAGER/EMERGENCY DIRECTOR - The individual responsible for the implementation and administration of the NMPNS Site Emergency Plan. Directs the emergency response organization and has overall authority for control of the emergency situation and for assuring continuity of resources until relieved by the Emergency Director in the EOF.
- o SITE EMERGENCY PREPAREDNESS MANAGER - The individual responsible for the coordination of emergency planning efforts.
- o SPECIAL OPERATING PROCEDURES (SOP) - These procedures contain instructions for station operators usually attributed to emergency procedures in the regulatory guides and standards.
- o STATE EMERGENCY OPERATIONS CENTER (SEOC) - The State command post from which emergency operations will be directed and coordinated.
- o STATE WARNING POINT (SWP) - Serves as a notification point for messages from the utilities to appropriate officials in the State. The SWP is manned on a 24-hour per day basis.
- o STATION - As used in the Site Emergency plan, Station refers to the site containing the two Nine Mile Point reactors, associated outbuildings and all personnel working to support the operation of the site.
- o TECHNICAL SUPPORT CENTER MANAGER (TSCM) - The individual responsible for implementation of on-site support activities necessary to effectively implement the SEP and mitigate the emergency. The TSCM has the leadership role to ensure on-site emergency activities are carried out in accordance with the SEP and implementing procedures at the direction of the Shift Emergency Director or ED.
- o TOTAL EFFECTIVE DOSE EQUIVALENT (TEDE) - Represents the sum of the effective dose equivalent and the committed effective dose equivalent.
- o UNRESTRICTED AREA - Any area to which access is not controlled by NMPNS for purposes of protection of individuals from exposure to radiation and radioactive materials, and any area used for residential quarters.

**APPENDIX 1**

**CROSS-REFERENCE INDEX  
BETWEEN NMPNS EMERGENCY PLAN  
AND NUREG-0654/FEMA-REP-1 REV 1**

<u>NUREG</u> 0654	<u>CRITERIA</u>	<u>NMPNS STATION ANNEX</u> <u>SECTION</u>
A.1.a	Identification of Response Organizations	2.1, 2.2, 2.9, 2.10, 2.11
A.1.b	Organization of Concept of Operations	2.1, 2.2, 2.9, 2.10, 2.11
A.1.c	Organizational Inter-Relationships- Block Diagram	Fig. 2.1, Fig. 2.2, Fig. 2.6, Fig. 2.3, Fig 2.4, Fig 2.5, Fig. 4.2, Fig. 4.3
A.1.d	Designation of Organization Director	2.1, 2.3, 2.4
A.1.e	24 Hour Response/Communication	2.1, 2.2,
A.2.a	Organization Authority	Appendix 5
A.2.b	Legal Basis for Organization Authority	Appendix 5
A.3	Formal Intra-Government/Organization Agreements	Appendix 2
A.4	Designated Authority for Organization Resource Continuity	2.6
B.1	Provision for Onsite Shift Emergency Organization	2.1, 2.1.1, 2.1.2, 2.2, EP-AA-1013, Addendum 1
B.2	Designation of Onsite Emergency Coordinator	2.1, 2.2
B.3	Line of succession for the Emergency Coordinator	2.2.1, 2.2.2b, 2.2, 2.1, 2.3, 2.4
B.4	Functional Responsibilities of the Emergency Coordinator	2.2, 2.5
B.5	Qualification of Onsite Emergency Personnel	2.2, Fig. 2.1
B.6	Onsite Emergency Organization Interface	Fig. 2.1-2.6, Fig. 4.2, Fig. 4.3
B.7	Corporate level support and Table B-1	2.1, 2.8

APPENDIX 1

CROSS-REFERENCE INDEX  
 BETWEEN NMPNS EMERGENCY PLAN  
 AND NUREG-0654/FEMA-REP-1 REV 1

<u>NUREG</u> <u>0654</u>	<u>CRITERIA</u>	<u>NMPNS STATION ANNEX</u> <u>SECTION</u>
B.7.a	Logistical Support for Emergency Personnel	2.6
B.7.b	Technical Support Planning/Reentry/Recovery	7.4
B.7.c	Management level Interface with Governmental Authorities	2.6, Fig. 2.1
B.7.d	Augmentation of Media Release personnel	2.6, Fig. 2.1
B.8	Augmentation by Private Contractors/Organizations	7.4.2, 2.9, 2.10
B.9	Local Agency Support Services and Agreements	4.8, Appendix 2, 2.10
C.1.a	Authority to request Federal Resources	2.2.b, 2.3, 2.6.2.a
C.1.b	Resources expected and Arrival Times	2.11
C.1.c	Support Available for Federal Response	5.1.4, 5.2, 2.11
C.2.a	Representative of State/County to EOF	Appendix 5
C.2.b	NMPNS Representative to State/County EOCs	2.6.2.i, 2.6.2.j
C.3	Radiological Laboratory Capabilities	5.3.1, 5.3.2
C.4	Sources for Nuclear Assistance	5.6, 9.4.2, Appendix 2, 2.9, 2.10, 4.8, 5.1.7, 5.1.8, 5.3
D.1	Facility Emergency Classification Methodology	3.1, 4.3, Fig 3.1
D.2	Initiating Conditions	3.1, 4.3, Fig. 3.1
D.3	State Emergency Classification System	Appendix 5
D.4	State and Local Procedures	Appendix 5

APPENDIX 1

CROSS-REFERENCE INDEX  
BETWEEN NMPNS EMERGENCY PLAN  
AND NUREG-0654/FEMA-REP-1 REV 1

<u>NUREG</u> <u>0654</u>	<u>CRITERIA</u>	<u>NMPNS STATION ANNEX</u> <u>SECTION</u>
E.1	Bases for Notification/Verification	4.2.1, 4.2.2, 4.2.3, Fig. 4.1
E.2	Personnel Notification/Alerting/Mobilization	4.2.2, 4.2.3
E.3	Initial Emergency Message Content	4.2.1
E.4 & 4.a-n	Provisions for Content of Plant Follow up Messages	4.2.1
E.5	Dissemination of Information from Plant to Public via EAS	Appendix 5
E.6	Means for Population Notification	4.2.2.a, 4.7.2, Appendix 5
E.7	Provisions for Written Public Instruction Messages	4.7.2, 6.4.1, Appendix 5
F.1.a	24 Hour Notification/Activation of State and County Emergency Response	2.1,5.2, 2.5,4.2.1, 4.2.2, , 5.1.7, 5.1.8, 5.2.1, 5.2.3, 5.2.8, Appendix 2, Appendix 5
F.1.b	Communications with State/County	Fig. 4.2, Fig. 4.3, 5.2, 5.2.3
F.1.c	Communications with Federal Emergency Response Organizations	Fig. 4.2, Fig. 4.3, 5.2, 5.2.1, 5.2.2, 5.2.4
F.1.d	Communications between Plant and EOF/State and County and monitoring teams	4.2.1, 4.2.3, Fig. 4.2, Fig. 4.3, 5.2, 5.2.1, 5.2.3, 5.2.4, 5.2.6, 5.2.7
F.1.e	Provisions for alerting each Response Organization	Fig. 4.2, Fig. 4.3, 4.2.2, 5.2
F.1.f	Communications between Plant/ NRC HQ and Regional Office/ the EOF/ and monitoring team assembly areas	Fig. 4.2, Fig. 4.3, 5.2, 5.2.2, 5.2.4, 5.2.8
F.2	Communications for fixed and mobile medical facilities	5.2.1, 5.2.7
F.3	Periodic Communications testing	6.3.2

APPENDIX 1

CROSS-REFERENCE INDEX  
BETWEEN NMPNS EMERGENCY PLAN  
AND NUREG-0654/FEMA-REP-1 REV 1

<u>NUREG 0654</u>	<u>CRITERIA</u>	<u>NMPNS STATION ANNEX SECTION</u>
G.1	Public Emergency Education/Information	6.4.1, 6.4.2
G.2	Public Emergency Education Program	6.4.1, 6.4.2
G.3.a	Media Contacts and Locations	5.1.6, 2.6.3
G.3.b	Media at the EOF	5.1.6
G.4.a	Designated Public Information Spokesperson	2.6.3.b
G.4.b	Timely Exchange Among Spokespersons	2.6.3.b
G.4.c	Arrangements for Rumor Control	4.9, 2.6.3.h
G.5	News Media Education Program	6.1.1g
H.1	NUREG 0696 TSC and OSC Requirements	5.1.2, 5.1.3
H.2	Near Site EOF	5.1.4
H.3	State and County EOCs	Appendix 5
H.4	Timely Activation/Staffing of ERFs/EOCs	2.2,
H.5.a	Onsite Monitoring Systems - Geophysical	5.3.3.f, 5.3.3.g, 5.3.3.h.
H.5.b	Onsite Monitoring Systems - Radiological	5.3.3.b, 5.3.3.d.
H.5.c	Onsite Monitoring Systems - Process	5.3.3.a, 5.3.3.c.
H.5.d	Onsite Monitoring Systems - Fire	5.3.3.e.
H.6.a	Offsite Monitoring Systems/Equipment - Geophysical	5.3.3.f, 5.3.3.g., 5.3.3.h.

APPENDIX 1

CROSS-REFERENCE INDEX  
 BETWEEN NMPNS EMERGENCY PLAN  
 AND NUREG-0654/FEMA-REP-1 REV 1

<u>NUREG</u> <u>0654</u>	<u>CRITERIA</u>	<u>NMPNS STATION ANNEX</u> <u>SECTION</u>
H.6.b	Offsite Monitoring Systems/Equipment - Radiological Sampling/Rate meters/Dosimetry	5.3.3.b
H.6.c	Offsite Monitoring Systems/Equipment - Laboratories	5.3.2
H.7	Offsite Radiological Monitoring Equipment	5.3.3.b.4
H.8	Meteorological Monitoring Instrumentation/Procedures	5.3.3.g, 5.3.3.h
H.9	Provision for the OSC	5.1.3
H.10	Inspection/Inventory/Calibration of Emergency Equipment/Instruments	6.3.2
H.11	Identification of Emergency Equipment	5.8
H.12	Central Point for Collection/Analysis of Field Data	5.3.3.b.5
I.1	Identification of Plant Condition Parameters and Corresponding Emergency Classes	3.1, 3.2, 4.5.1, 5.3.3
I.2	Monitoring Capabilities	4.5.1, 5.3.3
I.3.a	Methods/Techniques for Source term Determination	4.5.1, 5.3.3
I.3.b	Methods/Techniques to determine Release Magnitude	4.5.1, 5.3.3
I.4	Onsite/Offsite Exposures/Contamination for Effluent Monitor Readings	4.5.1, 4.5.2, 5.3.3.h
I.5	Acquisition of Meteorological Information	4.5.2, 5.2.8, 5.3.3.g, 5.3.3.h
I.6	Determination of Release Rate/Projected Doses given Inoperable Instrumentation	4.5, 4.5.2, 4.5.4

APPENDIX 1

CROSS-REFERENCE INDEX  
BETWEEN NMPNS EMERGENCY PLAN  
AND NUREG-0654/FEMA-REP-1 REV 1

<u>NUREG</u> <u>0654</u>	<u>CRITERIA</u>	<u>NMPNS STATION ANNEX</u> <u>SECTION</u>
I.7	Capabilities for Field Monitoring within the Plume Exposure EPZ	4.4.1, 4.4.2, 4.4.3
I.8	Capability for Assessment of Actual/Potential Magnitude and Location of Radiological Hazards	4.4, 4.5, 5.2, 5.3.3.b.5
I.9	Capability to Detect Airborne Radioiodine Concentrations as low as 5e-08 microcuries	4.4.2
I.10	Estimation of Integrated Doses; Comparison with PAGs	4.4, 4.5
I.11	Arrangements to Locate and Track the Plume	Appendix 5
J.1.a	Capability to warn personnel - Employees with Emergency Assignments	4.7.1.a, b, c, d, 5.4.3
J.1.b	Capability to warn personnel - Visitors	4.7.1.a, b, c, d, 5.4.3
J.1.c	Capability to warn personnel - Contractor and Construction	4.7.1.a, b, c, d, 5.4.3
J.1.d	Capability to warn personnel - Others in the Exclusion Area	4.7.1.c, d, 5.4.3
J.2	Offsite Sheltering/Evacuation of Onsite Personnel	4.7.1.c
J.3	Radiological Monitoring of Personnel Evacuated from Site	5.4.4
J.4	Onsite Non-essential Personnel Evacuation/Decontamination at Offsite Facility	4.7.1.c, 5.4.4
J.5	Accountability for Onsite Personnel	4.7.1.d.
J.6.a	Onsite Personnel Protection - Respiratory	4.7.1.g

APPENDIX 1

CROSS-REFERENCE INDEX  
BETWEEN NMPNS EMERGENCY PLAN  
AND NUREG-0654/FEMA-REP-1 REV 1

<u>NUREG 0654</u>	<u>CRITERIA</u>	<u>NMPNS STATION ANNEX SECTION</u>
J.6.b	Onsite Personnel Protection - Protective Clothing	4.7.1.e
J.6.c	Onsite Personnel Protection - KI	4.7.1.h
J.7	Prompt Notification of Offsite Authorities - PARs	4.7.2.c
J.8	Onsite Plan Contains Plume Exposure EPZ ETEs	4.7.2, 4.7.2.a, EP-AA-1013, Addendum 2
J.9	Protective Action Guides (Personnel Exposure and Food Stuffs)	Appendix 5
J.10.a	Maps - Evacuation Routes/Areas/Pre-selected Sampling Points/Relocation Centers/Shelter Areas	Appendix 5, 7 EP-AA-1013, Addendum 2
J.10.b	Maps - Population Distribution By ERPA	Appendix 5, 7
J.10.c	Means for Notifying Resident and Transient Population	4.7.2.b, Appendix 5, 7
J.10.d	Means to Protect Mobility Impaired	Appendix 5
J.10.e	KI Distribution	Appendix 5
J.10.f	KI Administration	Appendix 5
J.10.g	Means for Relocation	Appendix 5
J.10.h	Relocation to Reception centers in Host Areas	Appendix 5
J.10.i	Traffic Capabilities of Evacuation Routes	Appendix 5
J.10.j	Evacuated Area Access Control	Appendix 5
J.10.k	Contingencies for Impediments on Evacuation Routes	Appendix 5
J.10.l	ETEs for EPZ	Appendix 5, EP-AA-1013, Addendum 2

APPENDIX 1

CROSS-REFERENCE INDEX  
BETWEEN NMPNS EMERGENCY PLAN  
AND NUREG-0654/FEMA-REP-1 REV 1

<u>NUREG</u> <u>0654</u>	<u>CRITERIA</u>	<u>NMPNS STATION ANNEX</u> <u>SECTION</u>
J.10.m	Basis for PARs During Emergencies	4.7.2.c, Appendix E & F
J.11	Protective Measures for Ingestion Pathway	Appendix E
J.12	Registration and Monitoring of Evacuees	Appendix E
K.1.a	Onsite Exposure Guidelines - Removal of Injured Persons	4.7.1.f
K.1.b	Onsite Exposure Guidelines - Corrective Actions	4.7.1.f
K.1.c	Onsite Exposure Guidelines - Performing Assessment	4.7.1.f
K.1.d	Onsite Exposure Guidelines - Performing First Aid	4.7.1.f
K.1.e	Onsite Exposure Guidelines - Performing Personnel Decontamination	4.7.1.f
K.1.f	Onsite Exposure Guidelines - Providing Ambulance Services	4.7.1.f
K.1.g	Onsite Exposure Guidelines - Providing Medical Treatment	4.7.1.f
K.2	Onsite Radiation Protection Program	4.7.1.f
K.3.a	Provide for 24 Hour/Day Dosimetry	4.7.1.f
K.3.b	Provide for Reading Dosimetry 24 Hour/Day	4.7.1.f
K.4	Authorizations for Personnel Exposure in Excess of PAGs	Appendix E
K.5.a	Determining Need for Decontamination	4.7.1.e, 4.8.1
K.5.b	Means for Decontamination of Emergency Workers	4.8.1, 5.4.4, 5.6

APPENDIX 1

CROSS-REFERENCE INDEX  
BETWEEN NMPNS EMERGENCY PLAN  
AND NUREG-0654/FEMA-REP-1 REV 1

<u>NUREG 0654</u>	<u>CRITERIA</u>	<u>NMPNS STATION ANNEX SECTION</u>
K.6.a	Onsite Contamination Controls - Area Access	4.7.1.e
K.6.b	Onsite Contamination Controls - Drinking Water and Food Stuffs	4.7.1.e
K.6.c	Onsite Contamination Controls - Criteria for return to normal use	4.7.1.e
K.7	Capability for Decontamination of Relocated Onsite Personnel	5.4.4
L.1	Ability of Medical/Health Services to Evaluate Radiation Exposure/Handle Contaminated Personnel	4.8.4, Appendix 2
L.2	Onsite First Aid Capability	4.8.2
L.3	Identification of Medical Services Facilities Equipped/ Trained to Treat Radiological Accident Victims	Appendix 5
L.4	Transportation to Medical Facilities	4.8.3, Appendix 2
M.1	General Plans for Re-Entry/Recovery and Relaxation of PARs	7.1.1, 7.2
M.2	Designation of Facility Recovery Organization	Fig. 7.1
M.3	Notification of Recovery Organization	7.3
M.4	Methodology for Estimating Total Population Dose	4.5.4
N.1.a	Drill Simulating Offsite Releases	6.1.2
N.1.b	Exercise Tests all Elements, Times, & Weather Conditions, Some Unannounced	6.1.2
N.2.a	Communications Drills	6.1.2

APPENDIX 1

CROSS-REFERENCE INDEX  
 BETWEEN NMPNS EMERGENCY PLAN  
 AND NUREG-0654/FEMA-REP-1 REV 1

<u>NUREG 0654</u>	<u>CRITERIA</u>	<u>NMPNS STATION ANNEX SECTION</u>
N.2.b	Fire Drills	6.1.2
N.2.c	Medical Emergency Drills	6.1.2
N.2.d	Radiological Monitoring Drills	6.1.2
N.2.e.1	Health Physics Drills - Response/Analysis of Airborne & Liquid Samples/ Direct Radiation Readings in the Environment	6.1.2
N.3.a	Drill Scenarios - Objectives/Evaluations	6.1.2
N.3.b	Drill Scenarios - Date/Time/Place/Participants	6.1.2
N.3.c	Drill Scenarios - Simulated Events	6.1.2
N.3.d	Drill Scenarios - Time Schedule	6.1.2
N.3.e	Drill Scenarios - Narrative Summary	6.1.2
N.3.f	Drill Scenarios - Arrangements for Official Observations	6.1.2
N.4	Official Observers Critique Exercises with Formal Evaluation	6.1.2
N.5	Improvements and Corrective Actions based upon comments received	6.1.2
O.1.a	Training Requirements - Site Specific Training for Offsite Organizations	6.1.1
O.1.b	Training Requirements - Offsite Agencies Fire/Police/Ambulance/Rescue	6.1.1, Appendix 5

APPENDIX 1

CROSS-REFERENCE INDEX  
BETWEEN NMPNS EMERGENCY PLAN  
AND NUREG-0654/FEMA-REP-1 REV 1

<u>NUREG 0654</u>	<u>CRITERIA</u>	<u>NMPNS STATION ANNEX SECTION</u>
O.2	Onsite ERO Training/Practicals/Drills with on the spot correction	6.1.2
O.3	Onsite First Aid Training	Fig. 6.2
O.4.a	Initial and Continuing Training Requirements - Directors/Coordinators	Fig. 6.2
O.4.b	Initial and Continuing Training Requirements - Accident Assessment Personnel	Fig. 6.2
O.4.c	Initial and Continuing Training Requirements - Radiological Monitoring and Analysis Teams	Fig. 6.2
O.4.d	Initial and Continuing Training Requirements - Police, Security, Fire Fighters	6.1.1, Fig. 6.2
O.4.e	Initial and Continuing Training Requirements - Damage and Repair Teams	Fig. 6.2
O.4.f	Initial and Continuing Training Requirements - First Aid and Rescue Personnel	Fig. 6.2
O.4.g	Initial and Continuing Training Requirements - Local Support Services Personnel	6.1.1, Fig. 6.2
O.4.h	Initial and Continuing Training Requirements - Medical Support Personnel	6.1.1, Fig. 6.2
O.4.i	Initial and Continuing Training Requirements - Licensee Headquarters Personnel	Fig. 6.2
O.4.j	Initial and Continuing Training Requirements - Communicators	Fig. 6.2
O.5	Initial and Continuing Training Requirements - ERO	Fig. 6.2

APPENDIX 1

CROSS-REFERENCE INDEX  
BETWEEN NMPNS EMERGENCY PLAN  
AND NUREG-0654/FEMA-REP-1 REV 1

<u>NUREG 0654</u>	<u>CRITERIA</u>	<u>NMPNS STATION ANNEX SECTION</u>
P.1	EP Department Personnel Training	6.1.1, 6.1.1.h
P.2	EP Director Authority Requirement	6.1.3, Fig. 6.1
P.3	EP Director Responsibility Requirement	6.1.3
P.4	Annual Recertification of Plan and Procedures	6.2.3
P.5	Procedures for Plan and Procedure Revision/ Distribution	6.2, 6.2.3
P.6	Listing of Supporting Plans	Appendix 5
P.7	Requirement for List of Implementing Procedures	Appendix 3
P.8	Requirement for SEP Table of Contents, NUREG 0654 Cross Reference	Table of Contents, Appendix 1
P.9	Requirement for Independent Audit of EP Program	6.2.1
P.10	Requirement to Update Telephone Numbers Quarterly	6.2.2

**APPENDIX 2**  
**LETTERS OF AGREEMENT**

The up-to-date Letters of Agreement are maintained under separate cover in the Emergency Preparedness Group's file but are considered to be incorporated as part of this document by reference.

<b>Current Letters of Agreement exist between NMPNS and:</b>	<b>In regards to</b>
1) EA Engineering, Science, and Technology	Provides technical assistance
2) James A. Fitzpatrick Nuclear R. E. Ginna Nuclear Plant	Each provides personnel, equipment, and facilities as required. JAF provides for siren mechanical maintenance, and laboratory services
3) General Electric	Provide assistance per SIL #324
4) INPO	Provide information on the availability of personnel and equipment able to assist
5) New York State	Provide assistance as per the New York State Radiological Emergency Preparedness Plan
6) Derek R. Cooney, MD, FF/NREMT-P. FACEP	Provide emergency medical care
7) County of Oswego	
a) Oswego County Emergency Management Office	Provide assistance as per the Oswego County Radiological Emergency Preparedness Plan
b) Oswego County 911 Center	Provides 24 hour, 7 day a week contact point for local fire and ambulance service.
c) Oswego County Sheriff's Department	Provides for support from all local law enforcement agencies.
8) Oswego Hospital	Provide medical care of radioactivity contaminated patients

**APPENDIX 2**  
**LETTERS OF AGREEMENT**

The up-to-date Letters of Agreement are maintained under separate cover in the Emergency Preparedness Group's file but are considered to be incorporated as part of this document by reference.	
<b>Current Letters of Agreement exist between NMPNS and:</b>	<b>In regards to</b>
9) State University of New York, University Hospital	Provide emergency medical care for radioactively contaminated patients
10) Department of Energy	Provide radiological assistance Provide emergency medical assistance (REAC/TS)
11) Oswego County Airport	Provide support for the following via service level agreement: <ul style="list-style-type: none"> <li>• Use of Hanger K for Alternate and Alternative facilities for NMPNS</li> </ul>
12) Dr. Padma Ram, MD	Provide emergency medical care
13) Local transportation providers	Provide for fixed wing and helicopter air service and ground transport equipment/service

APPENDIX 3Emergency Plan Implementing Procedures

Number	Title
EP-CE-113	Personnel Protective Actions  Methods used to conduct evacuations including protected area, exclusion area and accountability for those remaining in the protected area.
EP-AA-112-500-F-55	NMP Offsite Monitoring Team Guidance  Responsibilities and actions for performing onsite and offsite emergency and environmental surveys.
EP-CE-111	Emergency Classification and Protective Action Recommendations  Criteria to classify emergencies.
EP-CE-113	Personnel Protective Actions  Actions to provide radiological controls for emergency exposure, use of KI and emergency respiratory protection
EP-CE-114-100	Emergency Notifications  Instructions for prompt notification to offsite authorities, emergency response agencies and selected NMP personnel.
EP-AA-112-600	Public Information Organization  Guidance for dissemination of emergency information
EP-AA-112-400	Emergency Operations Facility Activation and Operations  Emergency responsibilities and duties of the EOF ERO members.
EP-AA-112-100	Control Room Operations  Responsibilities and duties of on-shift ERO in the event of Emergency Plan activation.
EP-AA-112-200	Technical Support Center Activation and Operations  Emergency responsibilities and duties of the TSC ERO members.
EP-AA-112-300	Operations Support Center Activation and Operations  Emergency responsibilities and duties of the OSC ERO members.
EP-CE-115	Termination and Recovery  Transition into and conduct of operations during termination phase of a classified event.

APPENDIX 3Emergency Plan Implementing Procedures

Number	Title
EP-AA-110-204	NMP Dose Assessment Method to perform dose assessment and projections
EPIP-EPP-01-EAL	Emergency Action Level Matrix Unit 1
EPIP-EPP-02-EAL	Emergency Action Level Matrix Unit 2 Multi-colored matrices used to evaluate initiating conditions for entry into an emergency classification.
EPIP-EPP-09	Determination of Core Damage Under Accident Conditions Method to determine the degree of reactor core damage utilizing sampling and calculations based on core inventory.
OP-NM-106-104	Security Contingency Actions Process to establish and maintain interface during Security Contingency Events.
EPIP-EPP-21	Radiation Emergencies Handling radiation emergencies with consequences limited to the Nine Mile Point Site.
EP-AA-1013, Addendum 3	Unit 1 Emergency Action Levels for Nine Mile Point Station
EP-AA-1013, Addendum 4	Unit 2 Emergency Action Levels for Nine Mile Point Station Explanation and rationale for each Emergency Action Level (EAL).

**APPENDIX 4**

**Emergency Response Organization Responsibilities**

Note: The positions and responsibilities described in this Appendix apply to Nine Mile Point station and supersede the list of ERO positions and respective ERO responsibilities identified in the Exelon Standard Plan.

**1.0 ON-SHIFT STAFF POSITIONAL RESPONSIBILITIES**

1.1 Shift Emergency Director / Shift Manager:

NOTE: \* Indicates Non-Delegable responsibilities when performing Emergency Director duties.

- Coordinate between CR, OSC and TSC to set OSC team task priorities.
- Perform or direct emergency PA announcements.
- Ensure flow of information within and between the emergency response facilities.
- Integrate ERO activities with the Incident Command Post (ICP) response activities.
- Assume overall command and control of emergency response.
- Classify and declare emergencies.\*
- Direct notification and activation of the ERO.
- Direct and approve offsite emergency notifications to state and local authorities\*.
- Direct ENS communications with the NRC.
- Oversee the performance and evaluate the results of dose projection activities.
- Ensure appropriate accountability and search and rescue actions for plant personnel.
- Ensure appropriate evacuation actions for plant personnel\*.
- Approve the issuance of KI.
- Make Protective Action Recommendations to offsite authorities\*.
- Approve emergency exposures.\*
- Terminate the emergency event.

1.2 Shift Manager (After Transfer of Command and Control)

- Coordinate between CR, OSC and TSC to set OSC team task priorities.
- Perform or direct emergency PA announcements.
- Ensure flow of information within and between the emergency response facilities.
- Participate in Inter-Facility Briefings to communicate and obtain event and response information.
- Authorize and prioritize requests for external assistance (police, fire, medical) as necessary.
- Assist with Emergency Classification.

**APPENDIX 4**

**Emergency Response Organization Responsibilities**

- 1.3 Shift Technical Advisor (STA), SROs and ROs
  - Assist with emergency classification.
  
- 1.4 Designated Shift Communicator
  - Notify the ERO.
  - Perform offsite emergency notifications to state and local authorities.
  - Provide plant data and plant information to the NRC via the ENS.
  
- 1.5 Designated Shift Dose Assessor
  - Perform dose assessments.
  
- 1.6 Shift Radiation Protection Technician(s)
  - Ensure habitability is established and maintained for occupied onsite areas.
  - Monitor in-plant radiological conditions.
  - Coordinate RP support for personnel dispatched into the plant.
  
- 1.7 Shift Chemistry Technician
  - Conduct sampling to assist with emergency assessment activities.
  
- 1.8 Security Shift Supervisor
  - Supervise security force activities.
  - Perform offsite emergency notifications to state and local authorities.
  - Establish and maintain Protected Area accountability.
  - Establish and supervise plant access controls.
  - Supervise security actions for site evacuation.
  - Coordinate administration of KI to the security officers.
  
- 1.9 Other Shift Personnel (Non-licensed Operators, Security Force, Maintenance Personnel)
  - Support emergency response as directed.
  
- 2.0 **TECHNICAL SUPPORT CENTER (TSC)**
  
- 2.1 Station Emergency Director
  - Manage all onsite emergency activities in support of plant operations.
  - Establish plant/station response priorities.
  - Integrate ERO activities with the Incident Command Post (ICP) response activities.
  - Authorize and prioritize requests for external assistance (onsite technical support, manpower) as necessary.
  - Assist with emergency classification.

**APPENDIX 4**

**Emergency Response Organization Responsibilities**

- Provide informational updates and recommendations to the ED, regarding plant status and activities.
- Direct ENS communications with the NRC.
- Authorize emergency response facility relocations.
- Evaluate event assessments and mitigative strategies to determine operational and response actions.
- Authorize and direct extreme measures (SAMGs, EDMGs, §50.54(x) or suspend security controls).
- Ensure appropriate accountability and search and rescue actions for plant personnel.
- Ensure accountability, once established, is maintained in all occupied areas of the station.
- Ensure appropriate evacuation actions for plant personnel.
- Coordinate between CR, OSC and TSC to set OSC team task priorities.
- Conduct facility briefs and updates.
- Participate in the Inter-Facility briefing to communicate and obtain event and response information.
- Coordinate integration of the NRC Site Team
- Assist in the development of recovery plans.

2.2 TSC Director

- Activate the Facility.
- Establish and maintain facility accountability.
- Manage the operation of the facility.
- Review and ensure facility displays are maintained current.
- Coordinate ERO shift relief rosters for the onsite facilities.
- Develop ERO shift relief rosters for the facility.
- Perform or direct emergency PA announcements.
- Coordinate integration of the NRC Site Team.
- Arrange for logistics support.
- Ensure flow of information within and between the emergency response facilities.
- Provide input for facility briefs and updates.
- Coordinate TSC relocation.

2.3 Technical Manager

- Manage the activities of the TSC engineering / technical staff.
- Ensure additional personnel and/or equipment is arranged for, as necessary.
- Provide engineering support for accident detection and assessment.
- Develop mitigative strategies based on assessment of the event.

**APPENDIX 4**

**Emergency Response Organization Responsibilities**

- Analyze and develop extreme measures actions (SAMGs, EDMGs, §50.54(x) or suspend security controls).
  - Provide input for facility briefs and updates.
- 2.4 Electrical Engineer
- Provide engineering support for accident detection and assessment.
  - Provide input into mitigative strategies.
  - Analyze and develop extreme measures actions (SAMGs, EDMGs, §50.54(x) or suspend security controls).
- 2.5 Mechanical Engineer
- Provide engineering support for accident detection and assessment.
  - Provide input into mitigative strategies.
  - Analyze and develop extreme measures actions (SAMGs, EDMGs, §50.54(x) or suspend security controls).
- 2.6 Core/Thermal Hydraulic Engineer
- Provide engineering support for accident detection and assessment.
  - Provide input into mitigative strategies.
  - Perform core damage estimations.
  - Analyze and develop extreme measures actions (SAMGs, EDMGs, §50.54(x) or suspend security controls).
- 2.7 Technical Staff
- Provide input for mitigative strategies
  - Support the setup of systems and equipment within the facility.
- 2.8 TSC/OSC Computer Specialist
- Support the setup of systems and equipment within the facility.
  - Monitor facility equipment (computer related and communications) to ensure adequate operation.
  - Resolve any IT related malfunctions.
- 2.9 TSC Operations Manager
- Manage the activities of the TSC Operations staff.
  - Assist with emergency classification.
  - Provide technical assistance communication path to the Shift Manager.
  - Support the establishment of plant/station response priorities.
  - Provide operations support for accident detection and assessment.

**APPENDIX 4**

**Emergency Response Organization Responsibilities**

- Recommend operations actions to the Shift Manager in support of restoration and accident mitigation.
  - Analyze and develop extreme measures actions (SAMGs, EDMGs, §50.54(x) or suspend security controls).
  - Coordinate between CR, OSC and TSC to set OSC team task priorities.
  - Coordinate operations activities outside of the Control Room between the Shift Manager and OSC.
  - Provide input for facility briefs and updates.
- 2.10 ENS Communicator
- Provide event data and plant information to the NRC via the ENS.
  - Verify Emergency Response Data System (ERDS) operation.
  - Monitor assigned communication line and provide key information to facility staff.
  - Monitor event information on the facility display systems.
- 2.11 TSC Operations Communicator
- Communicate key information between the facilities over the Technical Information Line.
  - Monitor assigned communication line and provide key information to facility staff.
  - Display, monitor and trend plant data and event information on the facility display systems.
- 2.12 CR Operations Communicator
- Communicate key information between the facilities over the Technical Information Line.
  - Monitor assigned communication line and provide key information to facility staff.
- 2.13 Maintenance Manager
- Provide input into mitigative strategies.
  - Coordinate between CR, OSC and TSC to set OSC team task priorities.
  - Coordinate repair and OSC team task information between the TSC and OSC.
  - Provide input for facility briefs and updates.
- 2.14 TSC Radiation Protection Manager
- Manage and direct the radiological activities of the RP personnel.
  - Ensure additional personnel and/or equipment is arranged for, as necessary.
  - Provide radiological support for accident detection and assessment.

**APPENDIX 4**

**Emergency Response Organization Responsibilities**

- Monitor, evaluate and communicate conditions involving any release of radioactivity.
- Provide support and logistics for site evacuation activities.
- Evaluate the need for and ensure proper use of KI.
- Ensure habitability is established and maintained for occupied onsite areas.
- Ensure proper emergency exposure controls are taken for personnel.
- Provide radiological assistance for planning rescue operations and repair team monitoring.
- Direct personnel decontamination activities.
- Provide radiological assistance for the transfer of injured and/or contaminated personnel.
- Provide input for facility briefs and updates.

2.15 Security Coordinator

- Integrate ERO activities with the ICP response activities.
- Manage the activities of the site security force.
- Request and coordinate emergency activities with Local Law Enforcement Agencies (LLEAs).
- Provide security related communications with the NRC.
- Direct accountability and search & rescue activities.
- Direct site evacuation activities.
- Direct site access controls activities.
- Coordinate security activities between the SSS and OSC.
- Determine radiation protection measures for security force personnel and law enforcement agency personnel on site.
- Provide input for facility briefs and updates.

2.16 TSC Administrative Staff

- Perform administrative and logistic support functions for facility personnel.
- Establish and maintain facility accountability.

NOTE: NMP TSC EIS Operator duties may be performed by the TSC/OSC Computer specialist.

2.17 TSC EIS Operator

- Collect and input data and maintain EIS displays.

**APPENDIX 4**

**Emergency Response Organization Responsibilities**

**3.0 Operations Support Center (OSC):**

**3.1 OSC Director**

- Activate the Facility.
- Manage the operation of the facility.
- Develop ERO shift relief rosters for the facility.
- Ensure flow of information within and between the emergency response facilities.
- Support the establishment of plant / station response priorities.
- Direct accountability and search & rescue activities.
- Establish and maintain facility accountability.
- Coordinate between CR, OSC and TSC to set OSC team task priorities.
- Coordinate OSC team dispatch and control.
- Conduct facility briefs and updates.
- Participate in the Inter-Facility Briefing to communicate and obtain event and response information.

**3.2 Assistant OSC Director**

- Coordinate between CR, OSC and TSC to set OSC team task priorities.
- Participate with OSC team dispatch and control.
- Assemble and dispatch OSC and offsite monitoring teams.
- Provide input for facility briefs and updates.

**3.3 OSC Group, Chemistry and Operations Leads**

- Manage OSC manpower needs.
- Assist with formation of OSC teams.
- Participate with OSC team dispatch and control.
- Provide technical support to dispatched OSC teams.

**3.4 OSC Group, Chemistry and Operations Personnel**

- Perform job duties as an OSC team member.

**3.5 OSC Radiation Protection (RP) Lead**

- Manage OSC manpower needs.
- Brief and dispatch the onsite/offsite radiation monitoring teams.
- Monitor in-plant radiological conditions.
- Ensure habitability is established and maintained for occupied onsite areas.
- Participate with OSC team dispatch and control.
- Coordinate RP support for OSC teams.
- Track OSC Team emergency exposure.

**APPENDIX 4**

**Emergency Response Organization Responsibilities**

- Implement appropriate protective measures for OSC personnel.
  - Establish OSC and plant access radiological controls.
  - Provide input for facility briefs and updates.
- 3.6 OSC Radiation Protection Technicians(s)
- Perform habitability monitoring in occupied areas.
  - Perform job duties as an OSC team member.
- 3.7 OSC Team Tracker
- Maintain Team Tracking Status display.
  - Participate with OSC team dispatch, control and tracking.
  - Track and maintain communications with OSC teams.
- 3.8 OSC Operations Communicator
- Communicate key information between the facilities over the Technical Information Line.
  - Monitor the Technical Information Line and announce key information to facility staff.
  - Display, monitor and trend plant data and event information on the facility display systems.
- 3.9 OSC Administrative Staff
- Perform administrative and logistic support functions for facility personnel.

NOTE: EIS tasks may be performed by the Ops Communicator - OSC.

- 3.10 OSC EIS Operator
- Collect and input data and maintain EIS displays.

**4.0 Emergency Operations Facility - Offsite ERO**

**4.1 Emergency Director**

NOTE: \* Indicates Non-Delegable responsibilities when performing Emergency Director duties.

- Assume overall command and control of emergency response.
- Ensure all EXELON emergency response facilities are properly staffed and activated.
- Classify emergencies.\*
- Direct and approve offsite emergency notifications to state and local authorities.\*

**APPENDIX 4**

**Emergency Response Organization Responsibilities**

- Make Protective Action Recommendations to offsite authorities.\*
- Direct ENS communications with the NRC.
- Ensure appropriate evacuation actions for plant personnel.\*
- Approve the issuance of KI.
- Approve emergency exposures.\*
- Integrate ERO activities with the Incident Command Post (ICP) response activities.
- Authorize and prioritize requests for external assistance (governmental) as necessary.
- Authorize and prioritize requests for external assistance (offsite technical support, manpower) as necessary.
- Ensure other organization's management/decision makers (NRC, State, EXELON, etc.) are kept informed of the emergency situation.
- Ensure flow of information within and between the emergency response facilities.
- Approve technical content of media statements.
- Coordinate integration of the NRC site team.
- Authorize and direct extreme measures (SAMGs, EDMGs, §50.54(x) or suspend security controls).
- Terminate the emergency event.
- Establish a recovery plan and organization.
- Conduct facility briefs and updates.
- Conduct an Inter-Facility briefings to communicate and obtain event and response information.

4.2 EOF Director

- Activate the Facility.
- Manage the operation of the facility.
- Assist offsite agency personnel responding to the facility.
- Coordinate integration of the NRC site team.
- Assist with emergency classification.
- Support the completion of timely offsite event notifications to State and local authorities.
- Evaluate conditions and determine recommendations for PARs.
- Assist in the development of recovery plans.
- Participate in the Inter-Facility briefing to communicate and obtain event and response information.
- Provide input for facility briefs and updates.

**APPENDIX 4**

**Emergency Response Organization Responsibilities**

- 4.3 EOF Technical Advisor
- Assist with emergency classification.
  - Monitor plant status and Control Room activities.
  - Provide input for facility briefs and updates.
- 4.4 EOF Operations Communicator
- Communicate key information between the facilities over the Technical Information Line.
  - Monitor assigned communication line and provide key information to facility staff.
  - Display, monitor and trend plant data and event information on the facility display systems.
- 4.5 EOF Logistics Manager
- Ensure ERO personnel have been properly notified and are responding to the facilities.
  - Oversee staffing of EOF and assist with staffing for other facilities.
  - Develop ERO shift relief rosters for the facility.
  - Coordinate ERO shift relief rosters for all facilities and the notification of personnel.
  - Manage the administrative support staff.
  - Review and ensure facility displays are maintained current.
  - Manage the procurement and logistical support activities for the onsite and offsite emergency response personnel and facilities.
  - Monitor and maintain access controls for the facility.
  - Communicate with and coordinate support for ERO responders or plant personnel sent offsite to relocation areas.
  - Provide input for facility briefs and updates
- 4.6 EOF/JIC Computer Specialist
- Support the setup of systems and equipment within the facility.
  - Monitor facility equipment (computer related and communications) to ensure adequate operation.
  - Resolve any IT related malfunctions.
  - Assist in operation of JIC audio visual equipment.
  - Perform the duties of EOF EIS Operator.
- 4.7 EOF Administrative Staff
- Callout ERO relief shift.
  - Set up EOF equipment in preparation for facility activation.
  - Perform administrative and logistic support functions for facility personnel.

**APPENDIX 4**

**Emergency Response Organization Responsibilities**

**4.8 EOC Communicator**

- Monitor plant conditions and event response activities.
- Provide information updates to and address questions and support requests from the offsite liaisons.
- Notify and brief external agencies and groups (INPO, ANI) of the emergency event.
- Provide input for facility briefs and updates.

**4.9 State Liaison**

- Communicate EOC / ICP actions and decisions to the EOF.
- Provide technical support and information to the EOC / ICP.

**4.10 County Liaison(s)**

- Communicate EOC / ICP actions and decisions to the EOF.
- Provide technical support and information to the EOC / ICP.

**4.11 EOF Radiation Protection Manager**

- Manage and direct the radiological activities of the Offsite RP personnel.
- Coordinate activities with the external agency field monitoring teams.
- Coordinate the comparison and exchange of dose assessment results with offsite agency personnel.
- Assist with emergency classification.
- Monitor, evaluate and communicate conditions involving any release of radioactivity.
- Oversee the performance and evaluate the results of dose projection activities.
- Perform dose assessment.
- Oversee the performance and evaluate the results of Offsite Monitoring Team (OMT) activities.
- Provide support and logistics for site evacuation activities.
- Evaluate the need for and ensure proper use of KI.
- Evaluate conditions and determine recommendations for PARs.
- Ensure proper emergency exposure controls are taken for personnel.
- Provide assistance to state and federal agencies for ingestion pathway radiological activities.
- Provide input for facility briefs and updates.

**4.12 HPN Communicator**

- Provide event data and plant information to the NRC via the HPN.
- Monitor assigned communication line and provide key information to facility staff.

**APPENDIX 4**

**Emergency Response Organization Responsibilities**

- 4.13 Dose Assessor
- Monitor, evaluate and communicate conditions involving any release of radioactivity.
  - Perform dose assessment.
  - Evaluate conditions and determine recommendations for PARs.
- 4.14 Environmental Coordinator
- Direct and track Offsite Monitoring Team activities.
  - Coordinate activities with the external agency field monitoring teams.
  - Establish and maintain OMT communications.
  - Maintain and update the radiological status displays.
  - Coordinate the receipt, analysis, storage and transfer of field monitoring samples.
  - Record and report field monitoring survey, sample and exposure information.
- 4.15 Offsite Monitoring Teams
- Establish and maintain OMT communications.
  - Perform equipment checks and inventories in preparation of deployment.
  - Track radiological plumes.
  - Perform and report results of radiation surveys and environmental sampling.
  - Coordinate the receipt, analysis, storage and transfer of field monitoring samples.
  - Communicate exposure status to the Environmental Coordinator.
    - 1) State/Local Communicator
      - Perform offsite emergency notifications to state and local authorities.
    - 2) EIS Operator
      - Collect and input data and maintain EIS displays.
- 5.0 Public Information ERO (JIC Staff)**
- 5.1 JIC Manager
- Activate the Facility.
  - Manage the operation of the facility.
  - Assist offsite agency personnel responding to the facility.
  - Coordinate integration of the NRC Site Team.
  - Provide liaison to the NRC Site Team.
  - Arrange for support for Emergency Alert System (EAS) information.

APPENDIX 4

Emergency Response Organization Responsibilities

- Ensure flow of information within and between the emergency response facilities.
- Interface with offsite agency Public Information Officers (PIOs) to coordinate overall information flow to the media and public.
- Coordinate facilitation of the media briefing schedule.
- Ensure news media briefings are held regularly during the course of the emergency.
- Oversee conduct of media briefings.
- Integrate ERO activities with the Incident Command Post (ICP) response activities
- Assist in the development of recovery plans.
- Conduct facility briefs and updates.
- Participate in the Inter-Facility Briefing to communicate and obtain event and response information.

5.2 Company Spokesperson

- Establish periodic contact with the communications personnel in the corporate office.
- Interface with offsite agency PIOs to coordinate overall information flow to the media and public.
- Provide interviews to the media.
- Serve as Company Spokesperson during press conferences at the JIC.
- Participate in the Inter-Facility Briefing to communicate and obtain event and response information.
- Provide input for facility briefs and updates.

5.3 EOF Logistics Manager

- Manage the administrative support staff.
- Develop ERO shift relief rosters for the facility.
- Arrange for logistics support.
- Oversee set-up and testing of JIC equipment.
- Maintain access control to the JIC.
- Provide input for facility briefs and updates.
- Oversee collection of technical data and station activities for drafting Media Statements and answering JIC questions.
- Coordinate preparation, review and distribution of Media Statements.
- Obtain ED approval for the technical content of Media Statements.
- Keep JIC staff informed of plant status and EXELON emergency response activities.

**APPENDIX 4**

**Emergency Response Organization Responsibilities**

**5.4 News Writer**

- Prepare draft Media Statements.
- Develop public information materials (bulletins, backgrounders and chronologies).

**5.5 JIC Technical Advisor**

- Provide technical expertise to the JIC staff.
- Assist the News Writer with development of technically accurate media statements.
- Provide answers to technical questions from the news media regarding the emergency situation.
- Periodically monitor EOF/TSC briefings and Technical Information Line to obtain information.
- Provide technical information support to the Company Spokesperson.
- Monitor event information on the facility display systems.
- Provide input for facility briefs and updates.

**5.6 Media Liaison**

- Ensures media is informed of protocol and schedules established for media briefings.
- Coordinate preparations for media briefings.
- Distribute media statements to the media in the media briefing area.
- Coordinate media relations in JIC and update media between press conferences.
- Coordinate special interviews and facility tours for the media.
- Coordinate JIC briefing area preparation and establish briefing protocol.

**5.7 JIC Administrative Staff**

- Assist in badging and direction of members of the media to proper work locations.
- Perform administrative and logistic support functions for facility personnel.
- Distribute media materials to the press.

**5.8 Media Monitoring / Rumor Control Coordinator**

- Supervise media monitoring and Inquiry Phone Team personnel.
- Review Media Monitoring team information for trends, misinformation and rumors.
- Review Phone Team information for trends, misinformation and rumors.
- Ensure adequate staff is available to perform media monitoring and phone team functions.
- Provide input for facility briefs and updates.

**APPENDIX 4**

**Emergency Response Organization Responsibilities**

**5.9 Inquiry Phone Team**

- Respond to and log phone inquiries from the media and the public.
- Monitor telephone lines for trends, misinformation and rumors.

**5.10 Media Monitoring Team**

- Monitor media coverage of the event for trends

**5.11 JIC Security**

- Provide badging and access controls for the facility.

**5.12 JIC EIS Operator**

- Collect and input data and maintain EIS displays.

**6.0 In addition to the position specific responsibilities listed above all ERO members have the following general responsibilities:**

- Perform position turnover for protracted events
- Respond as directed when notified of a declared event
- Maintain personal event logs and records in support of the after action report
- Restore area and materials upon event termination
- Apply fundamental ERO knowledge in the performance of your ERO duties
- Properly use ERO procedures and checklists in the performance of your ERO duties
- Acquire & maintain qualification in your assigned ERO position
- Apply human performance error reduction techniques in the performance of you ERO duties

APPENDIX 5

**OSWEGO COUNTY RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN  
NEW YORK STATE RADIOLOGICAL EMERGENCY PREPAREDNESS PLAN**

The Oswego County Radiological Emergency Preparedness Plan and the New York State Radiological Emergency Preparedness Plan are submitted under separate cover but are considered to be incorporated as part of this document by reference. Locations of maps to relocation centers in host areas as required by NUREG 0654 II.J.10a are contained within the Host County Plan and is included by reference to the Oswego County Radiological Emergency Preparedness Plan.

APPENDIX 6  
TYPICAL ADDITIONAL SUPPORT RESOURCES

1. AIRFIELDS

- a. Greater Rochester International  
1200 Brooks Avenue  
Rochester, NY 14624  
Tel. (585) 753-7020
- b. Oswego County Airport  
40 Airport Dr.  
Fulton, NY 13069  
Tel. (315) 591-9130, (315) 591-9132
- c. Griffiss International Airport  
592 Hangar Rd  
Rome, NY 13342  
Tel. (315) 736-4171 - Airport Manager
- d. Syracuse Hancock International Airport  
Hancock Field  
Syracuse, NY 13212  
Tel. (315) 374-4629 Director of Operations,  
Operations Department (315) 374-4403, 4405  
(315) 455-6218 (Air Traffic Control)
- e. Watertown International Airport  
22529 Airport Dr.  
Dexter, NY 13634  
Tel. (315) 639-3809

2. COMMAND POSTS

- a. NMPNS Emergency Operations Facility  
County Route 176 & Airport Rd.  
R.D.#2 Box 656  
Fulton, NY 13069

APPENDIX 6  
TYPICAL ADDITIONAL SUPPORT RESOURCES

2. COMMAND POSTS (Cont.).

- b. NMPNS Technical Support Center  
NMPNS  
Lake Road P.O. Box 63  
Lycoming, NY 13093  
Tel. (315) 349-2487
- c. Joint Information Center  
Oswego County Airport  
County Route 176  
Volney, NY 13069  
Tel. (315) 592-3700
- d. New York State Emergency Operations Center  
Emergency Management Office  
Public Security Building, State Campus  
Albany, NY 12232  
Tel. (518) 457-9997
- e. Oswego County Emergency Operations Center  
200 North Second Street  
Fulton, NY 13069  
Tel. (315) 591-9150

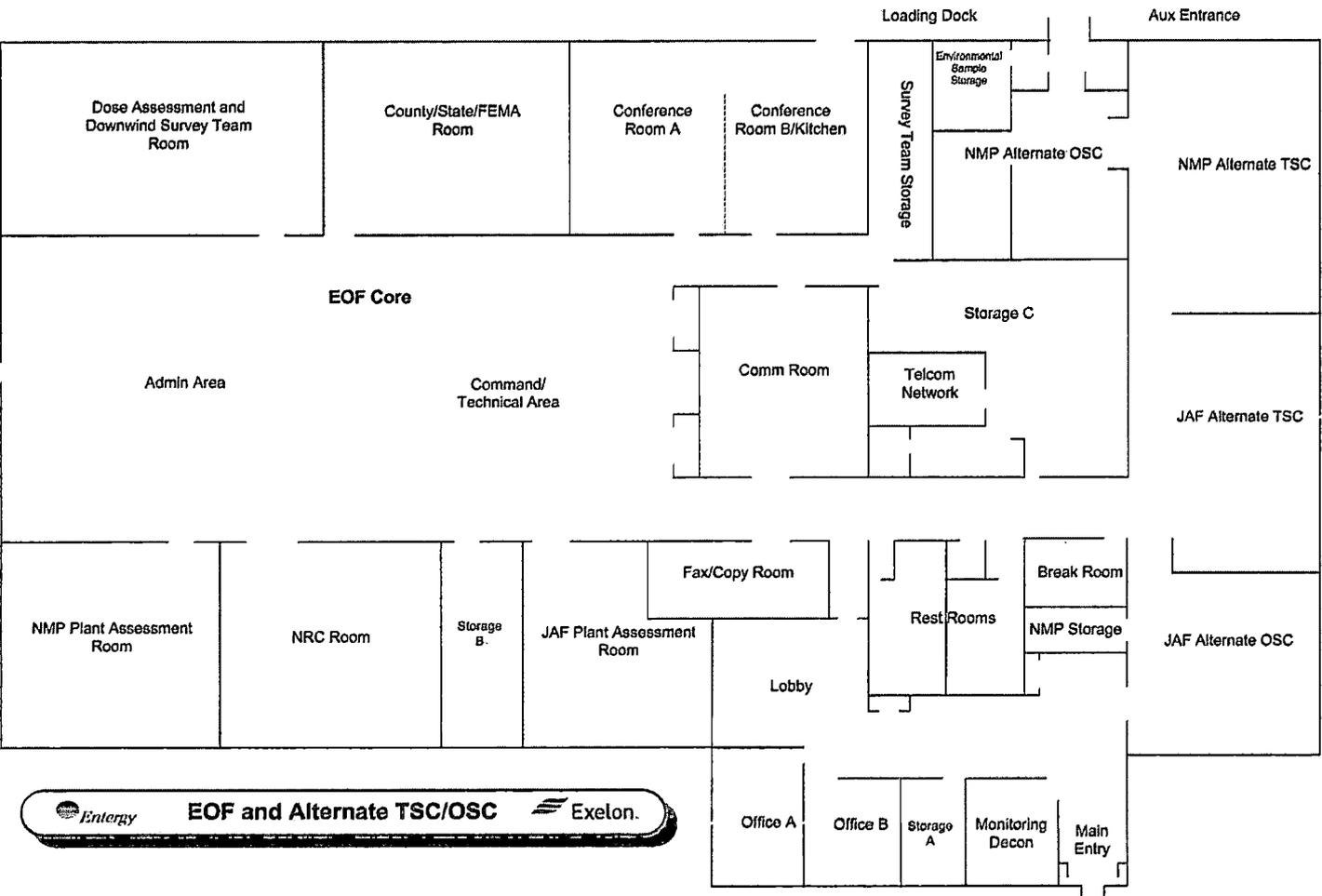
3. TELEPHONE SYSTEMS IN 10-MILE EPZ

- a. Windstream  
108 S. 2nd St.  
Fulton, NY 13069  
(800) 800-6609, (315) 592-8246
- b. Verizon  
1095 Avenue of the Americas  
New York, NY 10036  
(800) 579-8702, (800) 890-6611 (Repair No.)

APPENDIX 6  
TYPICAL ADDITIONAL SUPPORT RESOURCES

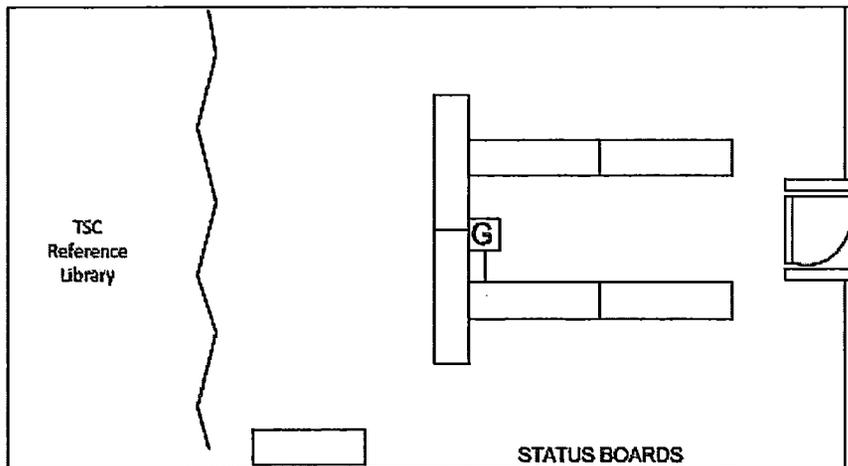
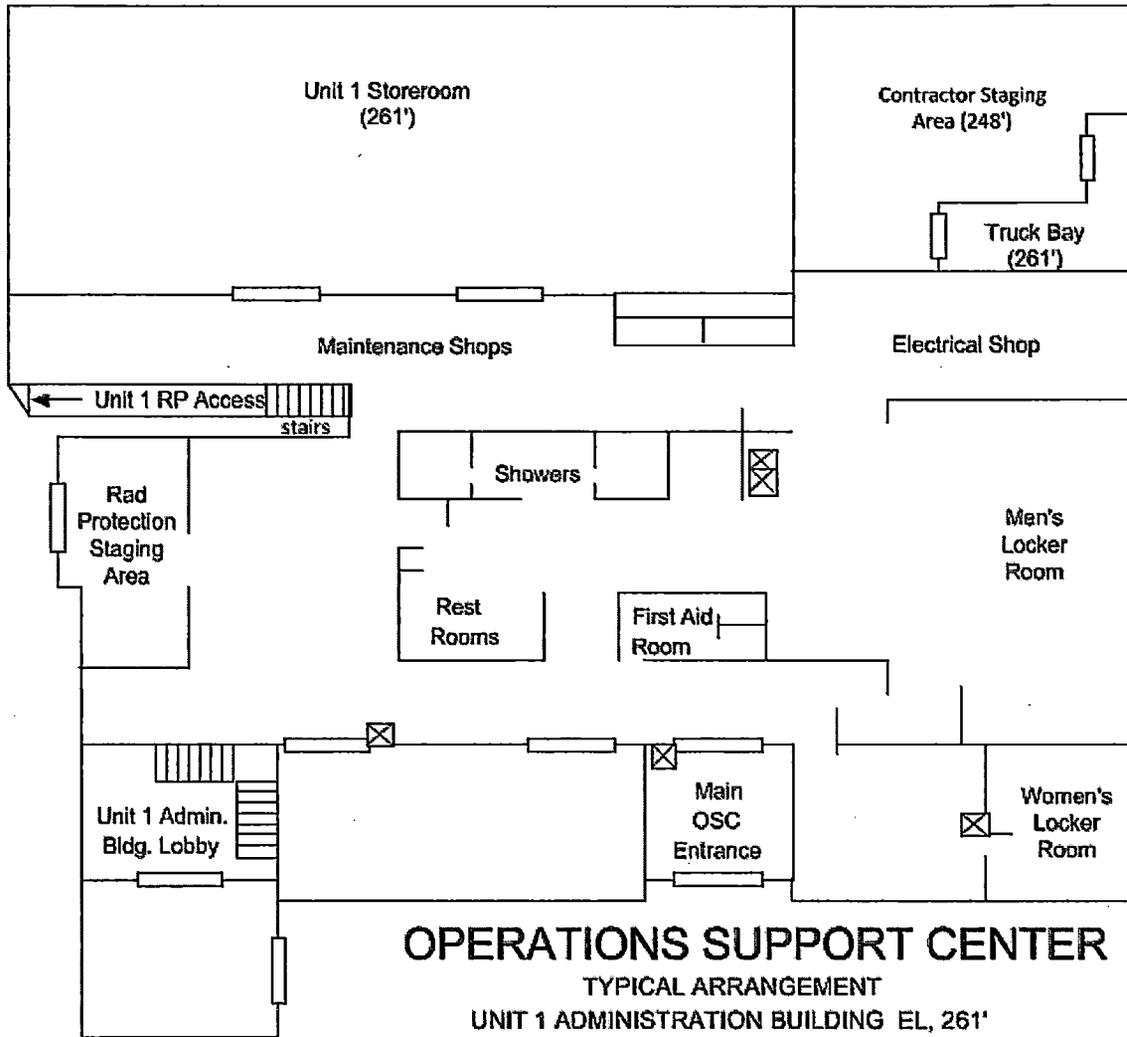
4. NINE MILE POINT UHF RADIO SYSTEM
  - a. Base, mobile, and portable transceivers
  - b. In plant and off-site repeaters

**APPENDIX 7 - RESOURCE MATERIAL**  
**EMERGENCY OPERATIONS FACILITY**  
(Typical Arrangement)



**APPENDIX 7 - RESOURCE MATERIAL**

**OPERATIONS SUPPORT CENTER (Typical Arrangement)**

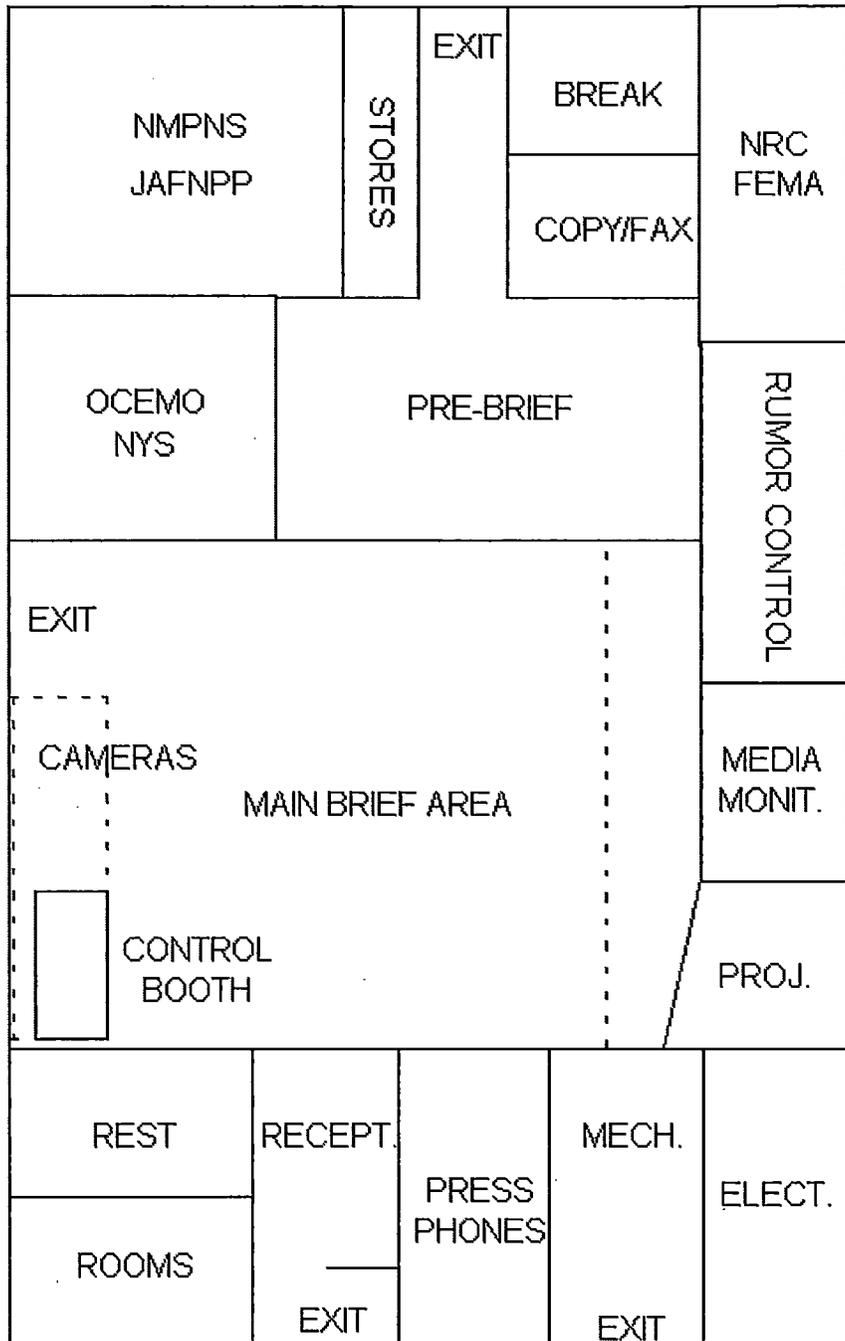


KEY	
	Gaitronics
	Emergency Accountability Reader

DETAIL OF THE  
OPERATIONS SUPPORT  
CENTER  
CORE AREA EL. 248'  
TYPICAL  
ARRANGEMENT

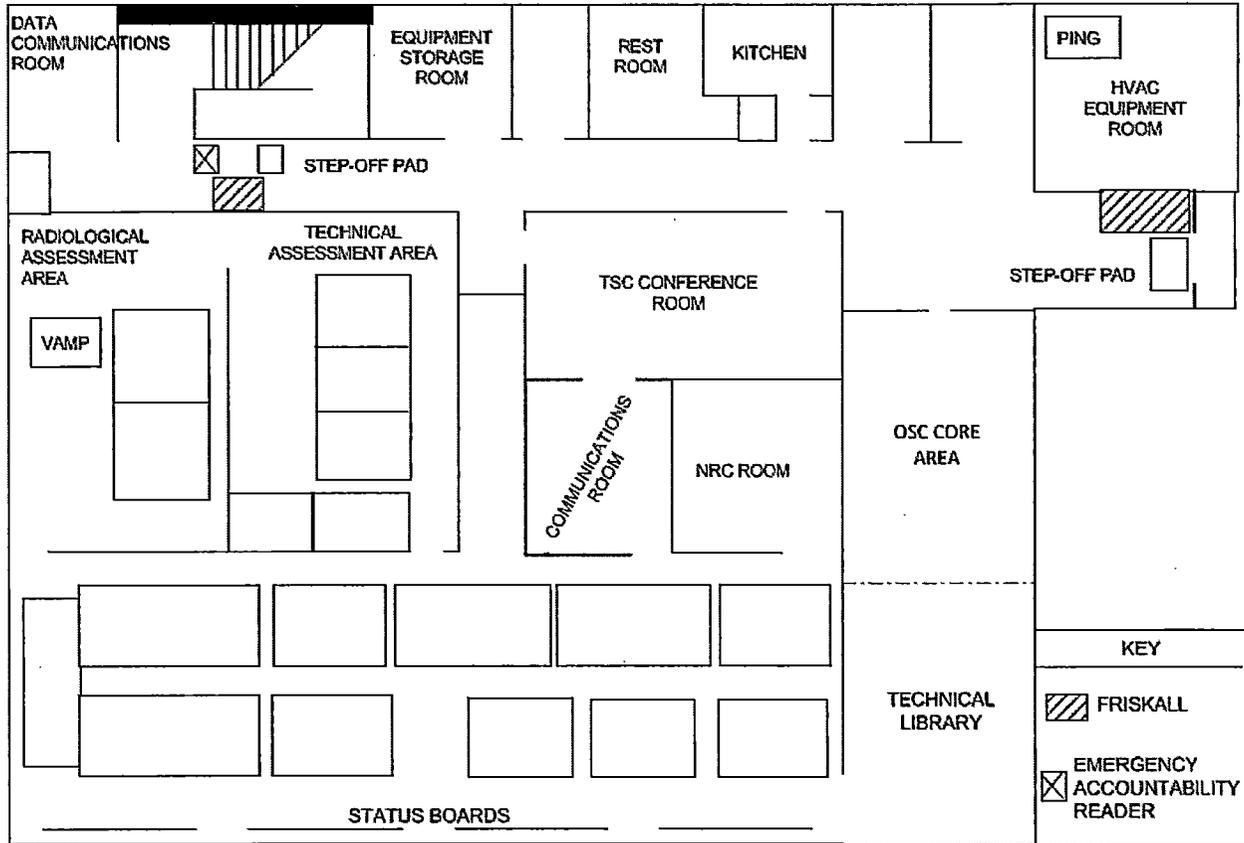
JOINT INFORMATION CENTER  
(Typical Arrangement)

**APPENDIX 7 - RESOURCE MATERIAL**



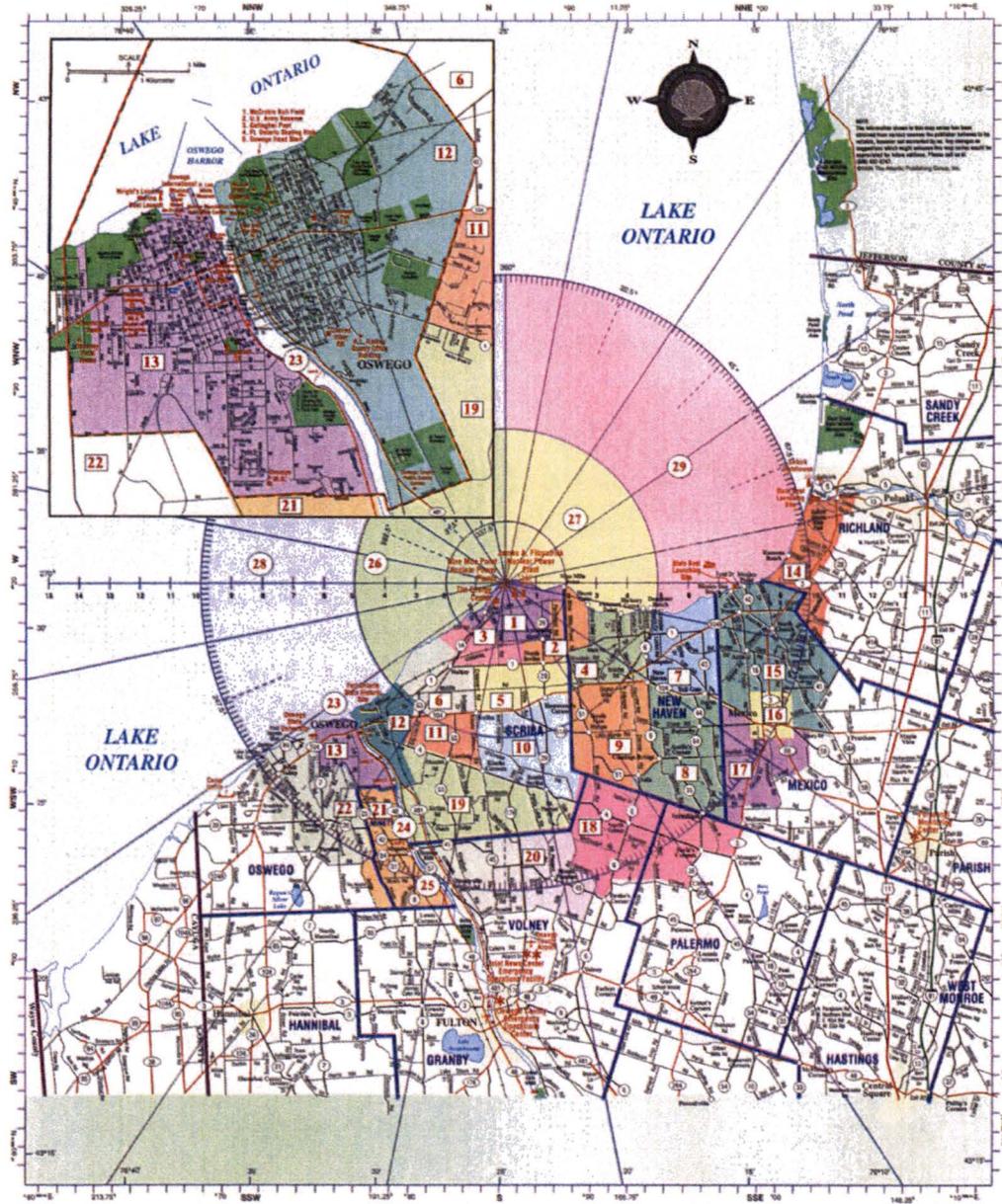
**APPENDIX 7 - RESOURCE MATERIAL**

**TECHNICAL SUPPORT CENTER  
(Typical Arrangement)**



**TECHNICAL SUPPORT CENTER  
TYPICAL ARRANGEMENT  
UNIT 1 ADMINISTRATION BUILDING EL.248'**

APPENDIX 7 - RESOURCE MATERIAL
TEN MILE EMERGENCY PLANNING ZONE



Ten Mile Emergency Planning Zone (Plume Exposure Pathway)

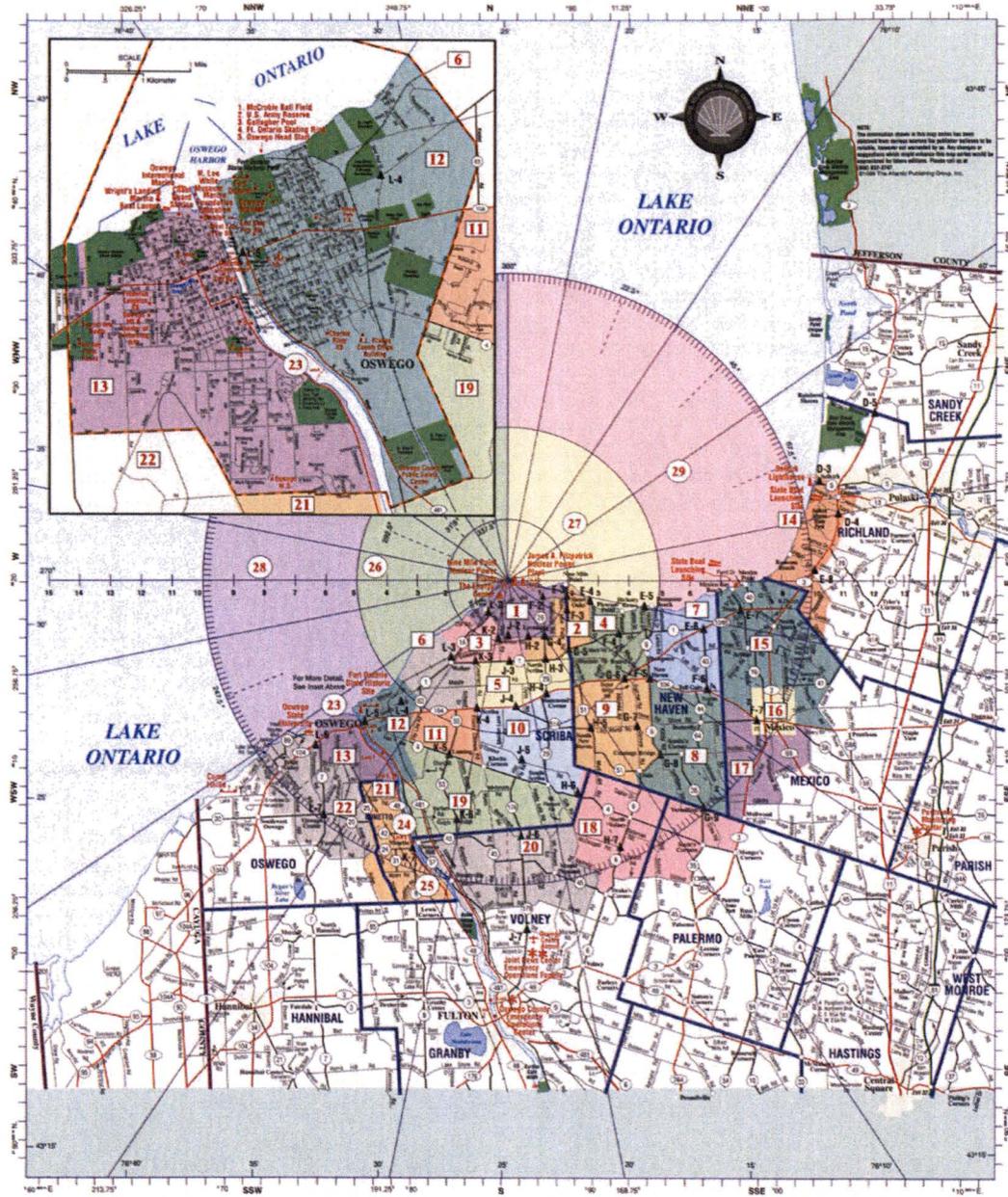
- Legend for map symbols: Interstate Highways, U.S. & State Highways, County Roads, Town Roads, County Boundaries, Township Boundaries, City and Villages, Railroads, Emergency Response Planning Area (ERPA) & Number, ERPA-Water Area Numbers, Emergency Facility.

Nine Mile Point / James A. Fitzpatrick Radiological Emergency Plans and Procedures



**APPENDIX 7 - RESOURCE MATERIAL**

**OFFSITE SURVEY LOCATIONS**



Offsite Survey Locations

- Interstate Highways
- U.S. & State Highways
- County Roads
- Town Roads
- County Boundaries
- Township Boundaries
- City and Villages
- Railroads
- Emergency Response Planning Area (ERPA) & Number
- ERPA- Water Area Numbers
- Offsite Survey Locations
- Emergency Facility

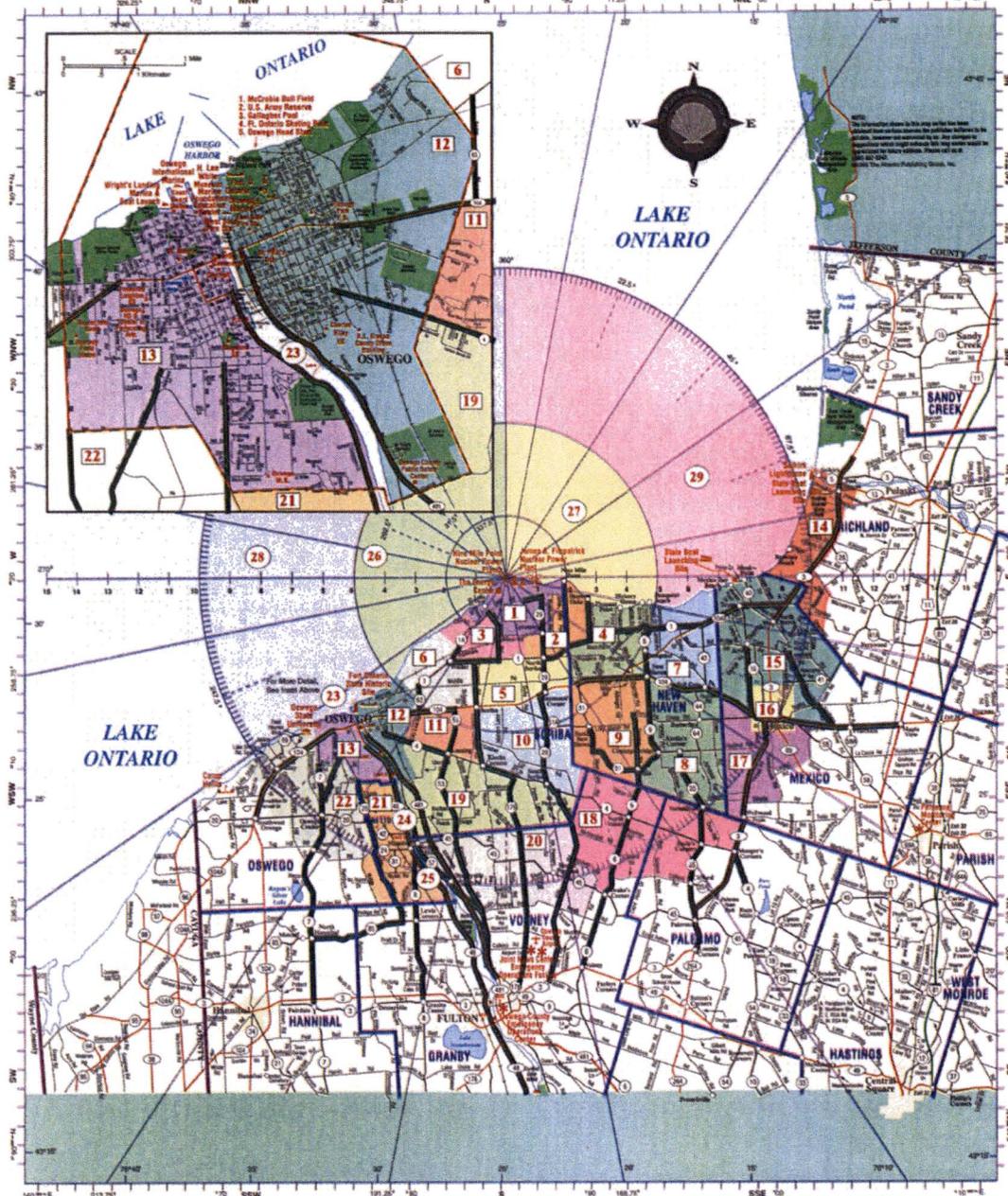
Nine Mile Point / James A. Fitzpatrick  
Radiological Emergency Plans  
and Procedures

NINE MILE POINT  
EMERGENCY PREPAREDNESS



APPENDIX 7 - RESOURCE MATERIAL

PRIMARY EVACUATION ROUTES



Primary Evacuation Routes

- Interstate Highways
- U.S. & State Highways
- County Roads
- Town Roads
- County Boundaries
- Township Boundaries
- City and Villages
- Railroads
- Emergency Response Planning Area (ERPA) & Number
- ERPA - Water Area Numbers
- Primary Evacuation Routes
- Emergency Facility

Nine Mile Point / James A. Fitzpatrick Radiological Emergency Plans and Procedures

NINE MILE POINT EMERGENCY PREPAREDNESS



**Appendix 8**

**Emergency Plan Commitments**

<u>Section(s)/Step Number</u>	<u>NCTS Number</u>	<u>Description</u>
3.2.1, 4.1.3 5.2, 5.4, 7.1.4	NCTS #503441-02	Revise SEP and procedures to more clearly follow the intent of the NRC rule. Delete Sympathetic Alert.
5.2.2	NCTS #504223-26	Identify the control room staffing requirements during Modes 1, 2, 3 and when the emergency plan is activated