

GINNA STATION NUCLEAR EMERGENCY RESPONSE PLAN
(NERP)

CONTROLLED COPYHOLDER NUMBER 23

REVISION NUMBER 24

REVISION DATE April 28, 2005

PORC APPROVED

MEETING NO. 2005-0022

DATE April 19, 2005

GINNA STATION NUCLEAR EMERGENCY RESPONSE PLAN

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GINNA STATION NUCLEAR EMERGENCY RESPONSE PLAN

1.0. SCOPE AND APPLICABILITY:

The Ginna Station Nuclear Emergency Response Plan (NERP) describes the total preparedness program established, implemented and coordinated by R.E. Ginna Nuclear Power Plant LLC and the resources and capabilities available from Constellation Energy Group (CEG), hereinafter referred to as "the Company", to ensure the capability and readiness for coping with and mitigating both onsite and offsite consequences of radiological emergencies at Ginna Station. The plan 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 and recovery functions. Emergency Plan Implementing Procedures (EPIPs) provide detailed information for individuals who may be involved with specific emergency response functions.

The NERP provides for a graded scale of response for distinct classifications of emergency conditions, actions within those classifications and criteria for escalating to a more severe classification. This classification system is identical to that used by the State of New York and the local (Wayne and Monroe County) emergency response agencies. The plans have four categories of emergencies: Unusual Event, Alert, Site Area Emergency and General Emergency. A fifth condition, Local Radiation Emergency, has been added. A Local Radiation Emergency is less severe than an Unusual Event and does not involve any offsite organization.

The NERP describes the activities and provisions other than engineered safeguards systems which are intended to limit exposures to the general public as well as to plant personnel. The NERP covers the following conditions:

- 1) Major release to the atmosphere.
- 2) Major release to the lake.
- 3) Abnormally high radiation or airborne radioactivity in a particular area of the plant.
- 4) Plant conditions that may lead to potential releases.

Note: Offsite Transportation accidents are covered by Radiation Protection Procedures (RP Procedures) and do not require classification in this Plan.

The Company has the immediate and continuing responsibility for limiting the consequences of an incident at the Ginna Nuclear Power Plant. Limiting the consequences to public health and safety should take clear precedence over limiting financial loss or adverse publicity. During a radiological emergency, the Company should take whatever action is deemed necessary to limit the consequences to public health and safety, even if that action violates the Ginna Technical Specifications. Such actions would require prior approval, as a minimum, by a licensed Senior Reactor Operator and follow-up notification to the NRC in accordance with 10CFR50.54 (X) and (Y).

The Company is responsible for keeping Federal, State and local authorities informed of the status of the emergency as it relates to protection of the public health and safety. The Company will recommend to Federal, State and local authorities specific protective actions to limit the danger to the public, including evacuation.

The Company understands that it is the Nuclear Regulatory Commission's policy that the emergency should be managed by the licensee. The NRC Headquarters Staff is limited in its ability to provide detailed recommendations to plant personnel or plant managers at the site. The Company understands that the NRC Operations Center will be the primary location where this agency will monitor and evaluate licensee actions. During that time, the normal response roles for the NRC Operations Center will be to monitor, inform, and, upon request, advise licensees and other Federal, State and local authorities. The authority for managing the NRC's emergency response efforts will be transferred to a senior onsite NRC representative when the NRC Headquarters Staff is confident the onsite representatives are prepared to receive that authority. Their role will continue to be monitoring, advising and informing plant and local authorities.

1.1

Definitions:

- Assembly Area - A designated building in which all non-essential personnel congregate following a site evacuation.
- Centers - Locations where communications, equipment and information are available and personnel will assemble to evaluate conditions during and after an event. See Section 6.1 for details.
- Corporate Nuclear Emergency Planner - The individual who has overall responsibility for maintaining the Ginna Station Nuclear Emergency Response Plan and implementing procedures. He will also coordinate these plans with New York State and county organizations having emergency responsibilities. He will act as liaison with private organizations in developing plans which augment the Company plans.
- Drill - A drill is a supervised instruction period aimed at developing, maintaining and testing skills needed for a particular operation. A drill will be supervised by qualified instructors or controllers.
- Emergency Classification Levels - Four Emergency Classification Levels have been established by the NRC and incorporated into the NERP and State and county plans. Each Emergency Classification requires a different degree of response actions by the state, counties and the Company. The four emergency classification levels are:

Unusual Event - an event which indicates a potential degradation of the level of safety of the plant

Alert - an event in progress which involves an actual or potentially substantial degradation of the level of safety of the plant

Site Area Emergency - events have occurred which involve actual or likely major failures of plant functions needed for protection of the public.

General Emergency - events which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity

- Emergency Coordinator - An individual who has received appropriate training in the actions to be taken in the event of an incident at Ginna Station. He has full authority and responsibility for meeting the emergency. This is the Shift Manager or, in his absence the Control Room foreman, until he is relieved by the TSC Emergency Coordinator taking Command and Control. Finally, when the EOF assumes Command and Control, the EOF/Recovery Manager assumes overall responsibility for the emergency. The Emergency Coordinator maintains close liaison between the TSC and EOF.
- Emergency Planning Zone (EPZ) - An area around Ginna Station divided into Emergency Response Planning Areas (ERPAs) for which preplanned actions to meet possible hazards have been developed. Actions to meet site hazards are the responsibility of the Company. Protective actions in the Emergency Planning Zone (approximately 10 miles) are the responsibility of the county organizations. New York State is responsible for actions to limit ingestion exposure in the zone out to approximately 50 miles.
- Emergency Operations Facility (EOF) - A facility located in the basement of 1255 Research Forest, Macedon, NY, from which additional Company personnel, consultants, NRC and other individuals can provide assistance to the plant in evaluating any emergency, gaining control of it and continuing the recovery operation. Meteorology, field monitoring and plant data can be evaluated here by a health physicist and recommendations made to the State and counties for protection of the public.
- Emergency Response Organization - The minimum number of emergency positions which must be staffed within one hour whenever the Technical Support Center or the Emergency Operations Facility are required to activate. These positions are identified in Sections 4.2.2 and 4.2.4 of the Ginna Station Nuclear Emergency Response Plan.
- Emergency Support Organization - The fully-staffed onsite and offsite emergency organization as depicted in Section 4.2.4 and Figure 4.2C.
- Engineering Support Center (ESC) - Located in the basement of the Robert E. Smith Engineering Building at Ginna Station and staffed by the Engineering Department, the ESC provides assistance to the TSC, EOF and other departments during an emergency.
- Exercise - An exercise is an event that tests the integrated capability and a major portion of the basic elements existing within the emergency response plans and organizations.
- Joint Emergency News Center - Located at 1255 Research Forest, Macedon, NY, it has facilities for press briefings, public inquiry and general information dissemination. Information regarding the status of Ginna Station will come from the EOF. The Joint Emergency News Center may be set up prior to activation of the EOF. See EPIP 4-6, "Joint Emergency News Center Activation" for details.

- Local State of Emergency - May be declared by a county executive in the event that public safety is imperiled by a disaster or public emergency. Following such a declaration, the county executive may promulgate local emergency orders to protect life and property or to bring the emergency under control. Actions may include for example, prohibition or control of vehicular traffic, closing of public facilities and suspension of local ordinances. (Further details provided in NYS Executive Law Article 2-B)
- Offsite - All public and private property outside the site property.
- Onsite - That property around Ginna Station which is owned and controlled by the Company (same as the Owner Controlled Area).
- Onsite Emergency Planner (OEP) - The Onsite Emergency Planner provides assistance on emergency planning issues at the plant and will be designated duties and responsibilities similar to those of the CNEP.
- Operational Support Center (OSC) - An area adjacent to the TSC where personnel qualified to support the operational needs of the plant will be assigned.
- Operational Support Center Satellite – An area located in the Service Building basement for Maintenance personnel to congregate during activation of the OSC. Instruction will be given to OSC Satellite personnel for assembly of Maintenance Assessment and repair teams.
- Owner Controlled Area (OCA) - That property around Ginna Station which is owned and controlled by the Company.
- Protected Area - An area encompassed by physical barriers, to which access is controlled for security purposes. At Ginna, the Protected Area is inside the security fence.
- Protective Action Recommendation (PAR) - Proposed actions recommended by the licensee to County and State officials to shelter or evacuate members of the general public based upon plant conditions or projected radiological doses.
- Radiological Emergency - An incident that may result in the uncontrolled release of radioactive material leading to a hazard or potential hazard to the health and safety of the general public. As a result, the Ginna Emergency Organization, the Company recovery organization, and State and county emergency organizations may be activated, depending upon the level of response required.
- Restricted Area - An area to which access is limited by the station for the purpose of protecting individuals against undue risks from exposure to radiation and contamination.
- State Disaster Emergency - May be declared by the Governor on his own initiative or pursuant to a request from one or more county executives. Actions may include public notifications, protective actions, and requests for Federal assistance. (Further details provided in NYS Executive Law Article 2-B)
- Survey Center – Located in the Training Center basement, field survey teams are dispatched from this facility to gather actual data for evaluation by Dose Assessment.

- Technical Support Center (TSC) - An onsite facility which is used by the plant staff to assist the operating personnel in evaluating an emergency and bringing the plant under control. The TSC is a coordinating center for gathering and initially evaluating information relative to accident conditions and possible offsite radiation and contamination. The initial EOF actions will take place here until that center is staffed. The Emergency Coordinator will maintain communications from here with the EOF personnel.

CHARTER FOR:

**EMERGENCY PLANNING
MILESTONE COMMITTEE**

CHAIRMAN: Corporate Nuclear Emergency Planner

ALTERNATE: Onsite Emergency Planner

MISSION STATEMENT:

To provide oversight and track the progress of major nuclear emergency planning activities among supporting Company departments and external support organizations. Major coordination activities include: annual drill and exercise scheduling, scenario development, annual training, siren tests, public information brochures, annual Ginna Station Nuclear Emergency Response Plan (NERP) reviews, corrective actions, medical activities and other offsite support requirements. Ensure that new policy and program requirements become formally integrated in implementing procedures and training.

MEMBERSHIP:

Membership includes representatives from management, emergency planning, Ginna training, corporate communications, Ginna operations, operational review, and others as needed.

MEETING FREQUENCY:

Meetings are held approximately monthly and other times as needed.

DELIVERABLE PRODUCT:

Emergency Planning Milestone Schedule, Annual Exercise Scope and Objectives.

SUMMARY OF EMERGENCY PLAN:

The primary objective of this plan is to protect the public and onsite personnel in the event of a radiation emergency. This plan describes in general the actions to be taken by Company personnel in coordination with Federal, State and local authorities.

Through an emergency organization which is described, the magnitude and impact of radioactive releases will be assessed and the need for the activation of a more extensive emergency response will be determined. The systems for notification of emergency personnel, Federal, State and local authorities, and the public are described along with the emergency facilities and equipment which are available for the trained emergency staff. The goal of the Ginna Station emergency organization is the safe shutdown and recovery of the Station and protection of the health and safety of the public and employees.

The general actions to be taken in the event of a radiation accident include the following:

- 1) Observation and determination of the classification of the occurrence.
- 2) Prevention or minimization of radiation hazards by the Emergency Coordinator and the on-duty operators.
- 3) Evacuation of all non-essential personnel from the plant to the Ginna Training Center or other location, as appropriate.
- 4) Involvement of plant security personnel, supervisory personnel, Chemistry and Radiation Protection personnel, and other plant staff.
- 5) Notification of NRC Operations Center and State and local authorities, issuance of news releases, and emergency medical treatment.
- 6) Activation of Emergency Response and Emergency Support Organizations.
- 7) Recovery and restoration of the plant to normal operation.

The extent of response to an emergency situation is determined by the seriousness of potential consequences. With the potential for effects to the general public, the assistance of Federal, State and local agencies will be required. For situations which only affect onsite operations, the situation will be met by the Company's capability.

The awareness of an emergency situation will most likely originate in the Control Room. From an evaluation of plant parameters, the seriousness of the incident can be determined and the appropriate classification determined. The on-duty plant operators, under the direction of the Shift Manager, in consultation with the Shift Technical Advisor, will take action to mitigate the incident and to obtain the assistance of other plant and Company personnel.

Personnel onsite will be alerted by a warning signal if evacuation is deemed advisable and off-duty personnel will be called in through an established call procedure. Federal, State and county officials will be notified so that they may begin to set up their response organizations. If the level of the incident requires activation of the emergency organization, trained people will staff the Technical Support Center, the Survey Center, the Emergency Operations Facility and the Joint Emergency News Center. These centers will be activated, per procedure, by designated people who have been trained in the duties required to meet the incident. Sufficient individuals are trained so that the positions can be filled regardless of who is onsite or available for call-in.

Public officials will be kept informed of the situation as it progresses. For certain classes of events, the EOF will be activated for continuing management of the incident and to assist in restoring the plant to normal operation. A Joint Emergency News Center will be established to keep the public aware of the situation and news releases will be coordinated between the Company, New York State and other government agencies.

EMERGENCY CONDITIONS:

Emergencies are classified into four categories which cover the entire spectrum from probable incidents to postulated major accidents. This system is coordinated with the NRC, New York State, Wayne County and Monroe County to ensure that the classification system is compatible with that used by all organizations. The system provides for notification of appropriate emergency response organizations and implementation of actions immediately applicable to a specific condition. Provisions are included for revising the classification level and the corresponding responses in the event of a change in severity of the emergency condition. This section identifies the events which comprise each of the four emergency classifications, requiring formal offsite notification. This section also describes a condition known as the Local Radiation Emergency which does not require formal notification.

Criteria for characterizing, recognizing and declaring each emergency classification are given along with appropriate emergency classifications. Recognition and classification criteria are based, to the extent feasible, on readily available information such as Control Room instrumentation. Plant parameter values and the corresponding emergency classifications are given in appropriate implementing procedures. Immediate actions to be taken in response to plant conditions are detailed in plant operating and emergency procedures. Other emergency actions in response to radiation emergencies are identified in Section 5.0 and described in detail in applicable Emergency Plan Implementing Procedures (EPIP) as listed in Appendix E.

The emergency classification system is illustrated by some examples provided in Table 3.1. A comprehensive listing of Ginna specific initiating conditions for each emergency classification is provided in EPIP 1-0.

EPIP 1-0 is based on NEI guidance provided in NESP-007 and demonstrates how an initiating condition leads directly to the appropriate emergency classification, based on the magnitude of the event. In some cases, extensive assessment is necessary to determine the applicable emergency classification. In any case, continuing reassessment is required to ensure that the classification is upgraded or downgraded commensurate with the severity of the condition.

Anytime a current set of conditions is identified which requires an emergency classification, the event shall be classified and declared, even if the condition identified is quickly corrected.

Conditions which depend on delayed evaluation results (i.e. chemistry, RP analysis, etc.), shall be classified and declared as soon as the results are known.

Anytime previous initiating conditions are identified that would have warranted an emergency classification but are no longer in effect at the time of identification, and do not require further evaluation or analysis, the event will be classified but not declared. Conditions which are corrected but may require further safety evaluation or analysis, will be classified and declared.

The NRC will be notified anytime an event is classified. This notification will be made by means of the NRC Emergency Notification System (ENS) phone.

The Plant Manager and Corporate Nuclear Emergency Planner (or their alternates) shall also be informed of this notification as soon as possible.

Emergency Plan Implementing Procedures can be found in the Control Room, Technical Support Center, Emergency Operations Facility, Ginna Station Copier Room and on the internal Nuclear Emergency Response Plan website.

3.1 Local Radiation Emergency:

NOTE: The Local Radiation Emergency is not one of the Four NRC Emergency Classifications and does not require any offsite notification.

Incidents may occur which require response only within the plant. A Local Radiation Emergency is defined as a radiation emergency condition whose consequences affect only personnel onsite. A Local Radiation Emergency shall be announced when (1) an unexplained alarm of an area radiation monitor occurs, (2) report of unexpected increase in airborne activity in a work area, (3) report of a radioactive spill that results in an upgrade of the contamination level, (4) valid HI FLUX AT SHUTDOWN ALARM, (5) fuel handling accident, or (6) it is deemed necessary by Control Room personnel or Radiation Protection. Operator judgment shall prevail so that the emergency procedure may be initiated without total dependence on instruments.

A radiation alarm in the Auxiliary Building could indicate a faulty monitor, but if the vent monitor alarms concurrently, a serious condition has probably occurred. A release rate of less than the Unusual Event criteria limits can be treated as a Local Radiation Emergency.

NOTE: The Following are the Four NRC Emergency Classifications.

3.2 Unusual Event:

Events within this Emergency Classification generally characterize off-normal plant conditions which, by themselves, do not constitute significant emergency conditions. Some of these events could, however, indicate a potential degradation in the level of plant safety and/or could escalate to a more severe condition if appropriate action is not taken.

The primary purpose for this classification is to ensure that the plant operating staff recognizes initiating conditions, takes appropriate action, and comes to a state of readiness to respond in the event that the condition becomes more significant. The Unusual Event classification or higher also requires that offsite authorities are promptly informed of the abnormal condition by use of the Radiological Emergency Communications System (RECS) and the New York State Radiological Emergency Data Form, Part I, found in procedure EPIP 1-5, "Notifications". No response is necessary by offsite authorities for events within this classification. The TSC or EOF will not usually be activated, although the TSC Director, Operations Assessment Manager, Dose Assessment Manager and Technical Assessment Manager will normally report to the TSC to provide assistance. A Rad/Chem or RP qualified technician responds within 30 minutes of an unplanned reactor trip or declaration of an Unusual Event or higher to assist the Shift RP Technician.

Table 3.1 provides an example page of EPIP 1-0, displaying the degree of severity which classifies an initiating condition as an "Unusual Event" class. When giving notice to State and county officials, the Company will make sure that they clearly understand the Unusual Event classification and that, if conditions change, there will be further notification.

3.3 Alert:

This Emergency Classification is characterized by events which indicate an actual degradation of the level of plant safety. This classification may require response by the plant emergency organization, augmentation of onsite emergency resources, and constitutes the lowest level where emergency offsite response may be anticipated.

Table 3.1 provides an example page of EPIP 1-0, displaying the degree of severity which classifies an initiating plant condition as "Alert" class. All Ginna Emergency facilities will be staffed at an Alert or higher.

Prompt notification of an event within this classification will be made to the NRC, State of New York and Monroe and Wayne Counties. While the initial assessment would not require immediate response, potential releases of radioactivity make it advisable to alert offsite organizations. Periodic status updates will be made to keep authorities aware of the situation.

3.4

Site Area Emergency:

A Site Area Emergency is characterized by events involving actual or probable major failures of plant functions needed for protection of the public. Most events within this classification constitute actual or clear potential for significant releases of radioactive material to the environment. For a Site Area Emergency, all emergency response facilities are activated. Although emergency actions involving members of the public may not be necessary, offsite emergency response organizations should be mobilized and ready to implement protective measures. Protective actions taken onsite are: the evacuation, if deemed necessary, of all persons in areas other than the Control Room, Technical Support Center, OSC Satellite and Engineering Support Center; activation of the Technical Support Center; initiation of onsite and offsite radiation monitoring; and close monitoring of plant status so that utility and other authorities can be advised of changing conditions, whether increasing or decreasing in severity. Meteorological and release data and survey results will be used to provide offsite dose estimates.

Table 3.1 provides an example page of EPIP 1-0, displaying the degree of severity which classifies an initiating condition as a "Site Area Emergency" class. For the purpose of classifying an emergency, instrument indications in the Control Room will be used. The instruments of interest and appropriate action points are part of the implementing procedures.

**TABLE 3.1
SAMPLE EMERGENCY CLASSIFICATION GUIDELINES**

6.1 Loss of AC Power Sources

GENERAL EMERGENCY PROCEED TO EPIP 1-4	SITE AREA EMERGENCY PROCEED TO EPIP 1-3	ALERT PROCEED TO EPIP 1-2	UNUSUAL EVENT PROCEED TO EPIP 1-1
<p>6.1.5 Loss of all safeguards bus AC power</p> <p align="center"><u>AND EITHER</u></p> <p>Power restoration to any safeguards bus is not likely in ≤ 4 hours</p> <p align="center">OR</p> <p>Actual or imminent entry into ORANGE or RED path on F- 0.2, CORE COOLING</p> <p><u>Mode Applicability:</u> - (1) Power Operations - (2) Startup - (3) Hot Shutdown - (4) Hot Standby</p>	<p>6.1.4 Loss of both trains of AC Buses power for >15 minutes.</p> <p><u>Mode Applicability:</u> - (1) Power Operations - (2) Startup - (3) Hot Shutdown - (4) Hot Standby</p>	<p>6.1.2 Loss of both trains of AC Buses for >15 minutes.</p> <p><u>Mode Applicability:</u> - (5) Cold Shutdown - (6) Refueling - Defueled</p> <p>6.1.3 Available safeguard train AC Power reduced to only one of the following sources for >15 minutes. - EDG 1A (14/18) - EDG 1B (16/17) - Station Auxiliary Transformer 12A - Station Auxiliary Transformer 12B</p> <p><u>Mode Applicability:</u> - (1) Power Operations - (2) Startup - (3) Hot Shutdown - (4) Hot Standby</p>	<p>6.1.1 Loss of ability to supply power to the safeguard trains from offsite circuits 751 and 767 for >15 minutes.</p> <p><u>Mode Applicability:</u> - All</p>

General Emergency:

A General Emergency is characterized by events which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity. Initial declaration that a General Emergency may exist is based on a situation which may have the potential for serious radiological consequences to the health and safety of the general public. A Site Area Emergency most likely would have been declared earlier and, if events are in progress which may involve core degradation with potential for loss of containment integrity, a General Emergency should be declared. For a General Emergency, all emergency response facilities are activated. Table 3.1 provides an example page of EPIP 1-0, displaying the degree of severity which classifies an initiating condition as a "General Emergency" class.

The Emergency Coordinator or EOF/Recovery Manager, if he has assumed command and control, will promptly notify State and local authorities and the NRC of the plant status and reasons for declaring a General Emergency. The Emergency Coordinator or EOF/Recovery Manager will also make recommendations for offsite emergency measures to be taken. The responsibility for this recommendation to offsite authorities may not be delegated.

4.0 ORGANIZATIONAL CONTROL OF RADIATION EMERGENCY:

4.1 Normal Operating Organization:

The overall responsibility for safe operation of the plant rests with the Plant Manager. The normal staff organization is given in Figure 4.1. Individual responsibilities for normal operations are defined in administrative procedures. The minimum shift complement consists of the operating personnel as shown in Figure 4.2: one Shift Manager; one Control Room Foreman; one Head Control Operator; one Control Operator; two Auxiliary Operators; one Communicator; and a Shift Technical Advisor.

Radiation Protection within the plant is provided by the Shift RP Technician on duty. This individual, also trained in chemistry and shift coverage, is scheduled around the clock for normal operations. According to the call-in procedure, all other technicians and chemists can be called in to assist in case of an emergency. The Shift RP Technician is augmented by Auxiliary Operators, who are also trained in Radiation Protection practices.

A 5-person fire brigade (includes the two Auxiliary Operators as a collateral duty) is onsite at all times. Procedures provide for calling the local fire department for assistance, if needed.

Medical emergencies and first aid are covered by an administrative procedure (A-7 "Procedures for Handling Illness or Injuries at Ginna Station"). Auxiliary Operators are trained in first aid and the dedicated Fire Brigade members are trained as first responders.

The operating shift complement provides the initial emergency response and the communications link to offsite participating emergency organizations and/or off-duty staff personnel. See Figure 5.1.

Site access control and personnel accountability is the responsibility of the security personnel.

**FIGURE 4.1
NORMAL GINNA STAFF ORGANIZATION**

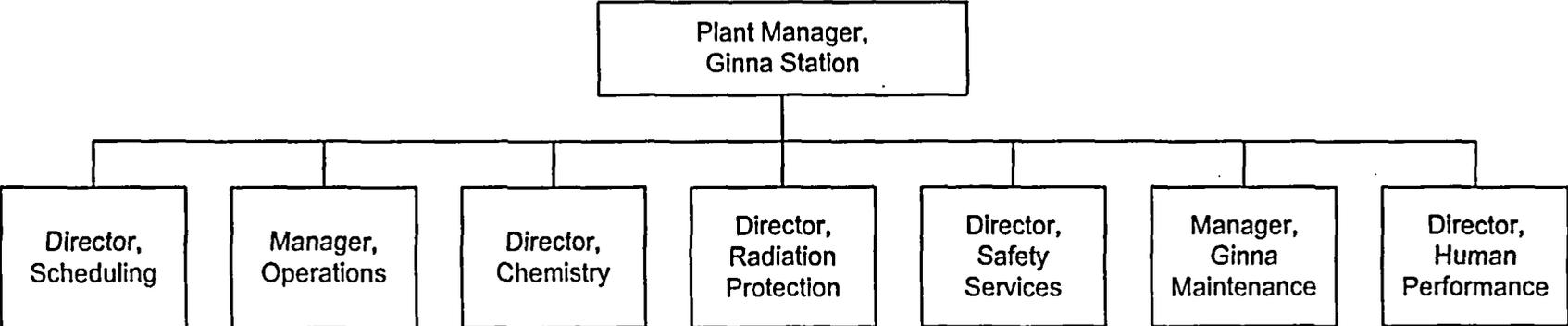
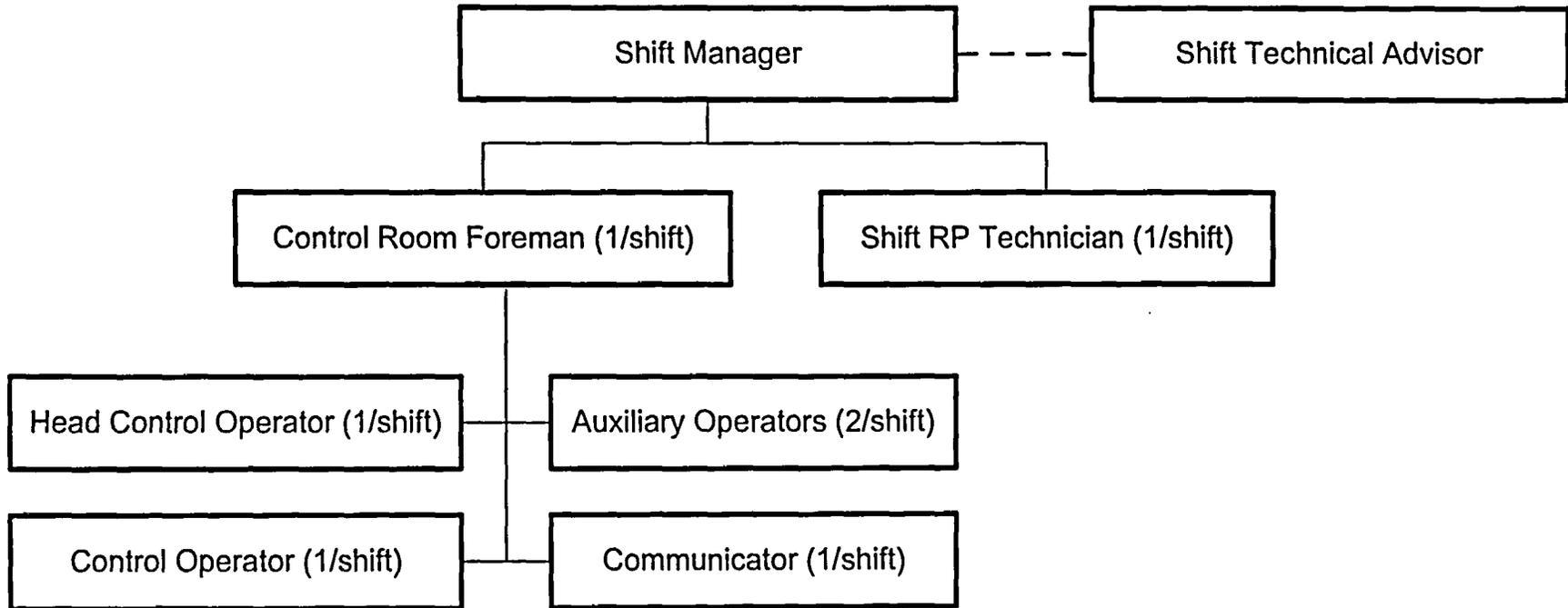


FIGURE 4.2
NORMAL OPERATIONS SHIFT COMPLEMENT



4.2 Emergency Organization:

4.2.1 Command and Control: The overall responsibility of the Nuclear Emergency Response Plan (NERP) implementation is initially assigned to an Emergency Coordinator. These individuals have received appropriate training in the actions to be taken in the event of an incident at Ginna Station. The Emergency Coordinator has full authority and responsibility for meeting the emergency. The position is filled by the Shift Manager (or the Control Room Foreman if the Shift Manager is absent) until relieved by the TSC Emergency Coordinator taking Command and Control. Finally, when the EOF assumes Command and Control, the EOF/Recovery Manager assumes overall responsibility for the emergency. The TSC Emergency Coordinator then maintains close liaison between the Control Room, TSC and EOF. The TSC continues its accident assessment, repair and corrective actions, and other activities to restore the plant to a safe condition.

Figure 4.2A shows the organization with the Shift Manager as Emergency Coordinator. This Phase I organization is the normal Control Room complement and has emergency responsibility until relieved by the TSC Emergency Coordinator and a Phase II organization. After the TSC assumes command and control, the Control Room organization reports to the TSC Operations Assessment Manager (as shown in Figure 4.2B) and then has the primary function of safe plant manipulation.

Table 4.1 illustrates the correlation between the plant organization (Figures 4.2A, 4.2B and 4.2C) and NUREG 0654. Until the TSC or EOF assume command and control, these individuals provide staff augmentation to the Shift Manager as the Emergency Coordinator.

The TSC and EOF are activated by notification of key responders. Each facility is considered "operational" when all essential positions are adequately staffed. Command and control is transferred from the Control Room to the TSC after the Emergency Coordinator and TSC Director have assured proper staffing, communications and assessment capability are available in the TSC. The TSC Director assumes responsibility for the emergency and becomes the TSC Emergency Coordinator when the TSC takes command and control.

The same process is used when command and control is transferred from the TSC to the EOF. The EOF will activate and support the action of the onsite emergency organization. As soon as practicable, the EOF/Recovery Manager and TSC Emergency Coordinator confer and coordinate transfer of command and control to the EOF at a mutually acceptable time.

Upon assuming command and control, the TSC or EOF become responsible for the following aspects of the emergency:

- Overall direction of the company emergency response, including determination of emergency classification level and protective action recommendations, if warranted;
- Notifications to NYS, Wayne and Monroe Counties and providing continued updated information on accident status;
- Dose assessment and offsite field team coordination.

Normally, all aspects of command and control are transferred simultaneously. However, certain conditions may warrant transferring a given responsibility area (e.g., field team coordination) at a different time. This can be directed per the discretion of the Emergency Coordinator and/or EOF/Recovery Manager.

If Severe Accident Management (SAM) criteria is entered, designated TSC positions will additionally implement SAMG duties to mitigate further core damage.

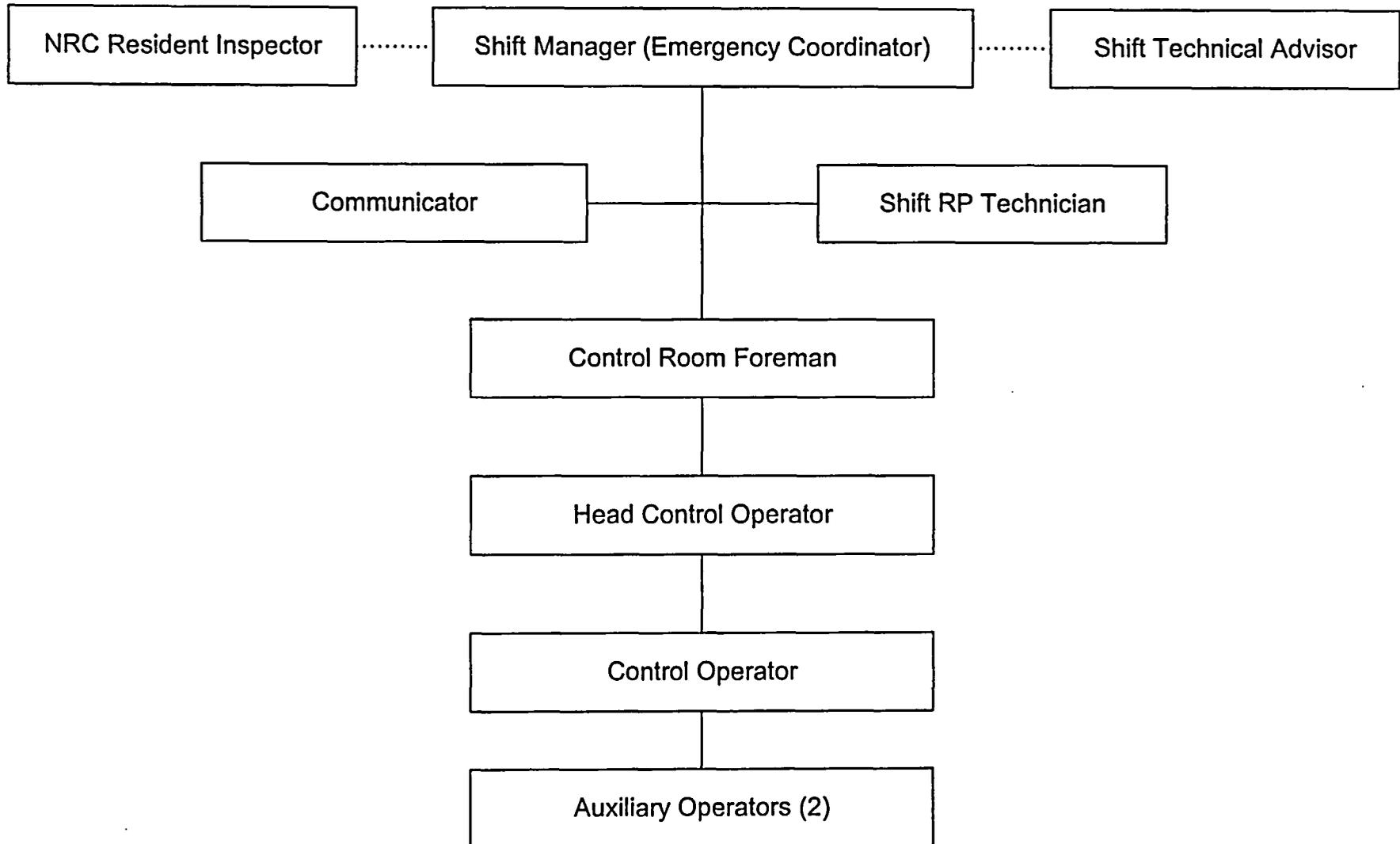
**TABLE 4.1
STAFF RESPONSIBILITIES FOR NUCLEAR POWER PLANT EMERGENCIES**

MAJOR FUNCTIONAL AREA	NORMAL ONSITE POSITION (FIGURE 4.2A)	SUBSEQUENT CALL-IN POSITION (FIGURE 4.2B and 4.2C)
Plant Operations and Assessment of Operational Aspects		
Shift Manager (SRO)	Shift Manager	
Shift Foreman (SRO)	Shift Foreman	
Control Room Operators	Control Room Operators (2)	
Auxiliary Operators	Auxiliary Operators (2)	
Emergency Direction and Control		
Shift Technical Advisor, Shift Manager or designated facility manager	Shift Manager (collateral duty)	TSC Director
Notification/Communication		
Communicator	Shift Communicator	TSC Communicator EOF Communicator
Radiological Accident Assessment and Support of Operational Accident Assessment		
Senior Manager (EOF Director)		EOF/Recovery Manager
Senior Health Physics (HP) Expertise		TSC Dose Assessment Manager EOF Dose Assessment Manager
Offsite Surveys		Survey Team members (4)
Onsite Surveys		Survey Team members (2)
HP Technicians (In-plant surveys)	Shift RP Technician	Rad/Chem or RP Technician (30-minute responder) RP Technician
Rad/Chem Technician		Rad/Chem Technician

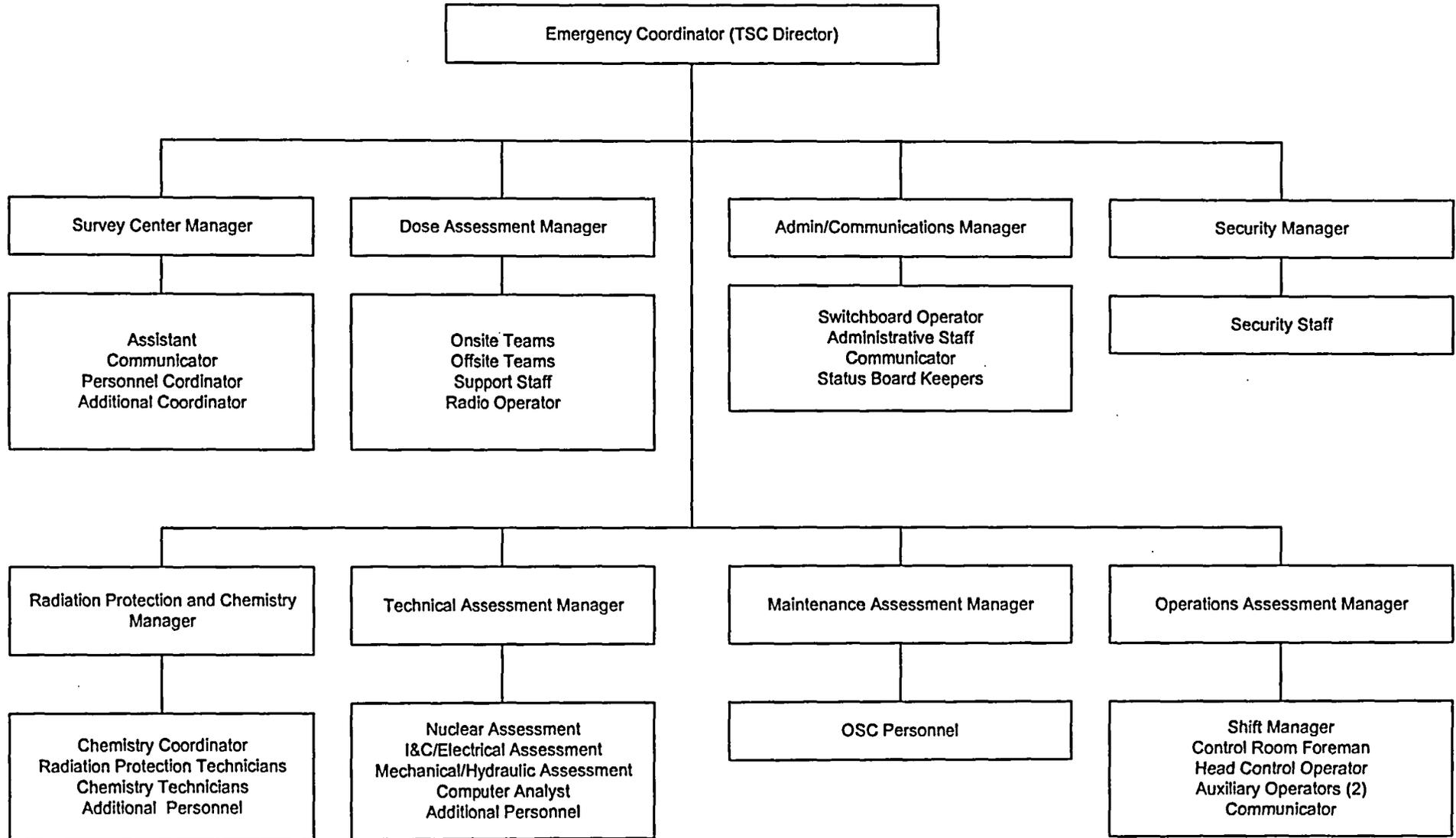
TABLE 4.1
STAFF RESPONSIBILITIES FOR NUCLEAR POWER PLANT EMERGENCIES
(Continued)

MAJOR FUNCTIONAL AREA	NORMAL ONSITE POSITION (FIGURE 4.2A)	SUBSEQUENT CALL-IN POSITION (FIGURE 4.2B and 4.2C)
Plant System Engineering, Repair and Corrective Actions		
Shift Technical Advisor	Shift Technical Advisor	
Core/Thermal Hydraulics		TSC Nuclear Assessment
Electrical		TSC I&C/Electrical Assessment
Mechanical		TSC Mechanical/Hydraulic Assessment
Mechanical Maintenance	Auxiliary Operator (collateral duty)	Mechanic
Rad Waste Operator		
Electrical Maintenance	Auxiliary Operator (collateral duty)	Electrician
Instrument & Control Technician		I&C Technician
Protective Actions (In-plant)		
HP Technicians	Shift RP Technician (collateral duty)	RP/Chemistry Manager RP Technicians (3)
Fire Fighting		
Fire Brigade	Fire Brigade (5) • Auxiliary Operators (2) (collateral duty) • Fire Brigade members (3)	Ontario Fire Company
Rescue Operations and First-Aid		
Rescue & First Aid	Fire Brigade members (3) (collateral duty)	Ontario Volunteer Emergency Squad
Site Access Control and Personnel Accountability		
Security Personnel	Per Security Plan	Per Security Plan

FIGURE 4.2A
ONSITE ORGANIZATION WITH SHIFT MANAGER AS EMERGENCY COORDINATOR



**FIGURE 4.2B
TECHNICAL SUPPORT CENTER ORGANIZATION CHART**



4.2.2

Figure 4.2B shows the emergency organization after the TSC Emergency Coordinator assumes command and control.

Under the Emergency Coordinator, there are eight major functions in the emergency organization: Admin./Communication; TSC Security; TSC Dose Assessment; Survey Center; Radiation Protection and Chemistry; Plant Technical Assessment; Plant Maintenance Assessment; and Plant Operations Assessment. If onsite when notified of TSC activation, the emergency organization personnel will report immediately to the TSC. If offsite when they receive notification, as specified in the implementing procedures, personnel shall report to the plant, the Survey Center or Ontario Fire Company's Exempt Hall (if directed) to obtain assignments. The Ginna Training Center and Ontario Fire Company's Exempt Hall are used as emergency congregating areas for personnel called from offsite. They will proceed to the TSC as advised by the Survey Center Manager or Emergency Coordinator.

When onsite, the Operations Assessment Manager or his alternate shall report to the Technical Support Center to direct plant operations in combating the emergency. Accident assessment will be performed mainly in the Technical Support Center (TSC). This center will be staffed by engineering level plant staff and will have all information from the Control Room available. The Ginna TSC Emergency Response Organization consists of, as a minimum, the following positions:

- TSC Director
- Operations Assessment Manager
- TSC Communicator
- Technical Assessment Manager
- Maintenance Assessment Manager
- Dose Assessment Manager
- Radiation Protection and Chemistry Manager
- Survey Center Manager
- Survey Team members (6)
- RP Technicians (5)
- I&C/Electrical Assessment
- Nuclear Assessment
- Mechanical/Hydraulic Assessment
- Electrician
- Mechanic
- I&C Technician

These positions will be staffed by individuals reporting onsite within one hour of the declaration of an ALERT or higher classification in accordance with NRC SER dated July 24, 2003.

The plant Security organization will maintain liaison in the TSC so as to coordinate its onsite and site perimeter activities with the needs of the Emergency Coordinator (See Figure 4.2B).

When Severe Accident Management (SAM) guidelines are entered, the following positions assume additional duties:

- TSC Emergency Coordinator – Decision Maker
- Operations Assessment Manager – Evaluator
- Technical Assessment Manager - Evaluator
- Nuclear Assessment Manager – Evaluator

The Dose Assessment Manager is responsible for offsite dose assessment. Dose assessment for offsite areas will be made at the TSC until such time as the EOF organization is staffed and prepared to assume responsibility for offsite dose assessment. Maps, procedures, trained personnel and current plant data are available in the TSC to aid in performing these assessments.

Responsibility for onsite radiation protection and exposure control rests with the plant Radiation Protection and Chemistry Manager who is part of the TSC Staff. He will insure the precautions of Section 5.4.4.1 are followed during the emergency.

The Ginna Training Center (West) basement is used as the Survey Center for dispatching monitoring teams. Information gathered by the teams will be used by the Company, the New York State Department of Health and local authorities to determine what actions should be taken to limit radiation exposure to the general public. An alternate Survey Team staging area will be used in case the Ginna Training Center basement is not habitable. Alternate Survey Team staging areas may include the offsite warehouse or other offsite facilities. The Emergency Operations Facility (EOF) also maintains radio and telephone communications capability for Survey Team deployment and plume tracking.

The 10-mile emergency planning zone (EPZ) has been divided into three areas of responsibility for performing radiological surveys. The Company will be responsible for deploying survey teams and obtaining data within 5 miles of the plant. Wayne and Monroe Counties will be responsible for surveys in the areas between 5 and 10 miles from the plant in each of the respective counties. Field team results will be shared among the three organizations. This is for planning purposes and does not preclude an organization from sending their teams to any location they desire to obtain information.

The Survey Center Manager is one of the first positions filled. Trained Survey Team members sign in on the organizational board as they arrive and immediately prepare to follow assigned survey routes. Their equipment, as specified in procedures, includes radios for communications with the TSC and EOF Dose Assessment areas. Each team, consisting of two persons, obtains transportation (See 6.4.7 and 7.3) and monitoring equipment and can be in the field in about one hour after an event is declared. Survey teams can be directed from the EOF if the Survey Center is not habitable or when EOF assumes formal control of the offsite teams.

All personnel are trained to specific responsibilities within the emergency organization and records are maintained by the Nuclear Training Department and in Central Records.

4.2.3 Offsite Emergency Organization:

In the event of an emergency condition at Ginna, the facilities at 1255 Research Forest, and the plant organizational structures will be transformed into an Emergency Response Organization and, subsequently, into an Emergency Support Organization.

The company's Emergency Support Organization is charged with the responsibility of bringing together a cohesive company management and technical team. This organization will be calling upon the maximum resources available within the company and the entire nuclear industry for the purpose of (1) assuring the safe shutdown and recovery of Ginna Station following an accident condition and, (2) minimizing the impact of the situation on the health and safety of the public.

The Ginna Station short-term responding organization is made up of site personnel, those on-shift and those immediately available from the plant staff complement. The Emergency Support Organization will be available to the Ginna Station Plant Manager for implementation of long-term recovery operations.

The company's Emergency Support Organization is established under the leadership of a single individual called the EOF/Recovery Manager. The EOF/Recovery Manager is supported by various technical and advisory disciplines including Engineering, Facilities and Personnel, Nuclear Operations, Public Communications and Dose Assessment.

4.2.4 Implementation of the Offsite Emergency Organization:

Ginna Station procedures provide that the EOF/Recovery Manager (or qualified alternate) is notified and provided with details concerning the emergency, the emergency classification, station status, and immediate corporate assistance, if any, which may be required. The EOF/Recovery Manager has the authority to activate the Emergency Operations Facility.

The Emergency Support Organization (Figure 4.2C) is activated at the Alert, Site Area Emergency and General Emergency categories although it may be activated under other categories. The EOF is located at 1255 Research Forest, Macedon, New York. A Joint Emergency News Center (JENC) will also be activated at 1255 Research Forest. The JENC will be used to coordinate news releases and press conferences in coordination with the appropriate Federal, State and local authorities.

Personnel who have responsibilities in the EOF will be notified of an incident and the need for them to report to the EOF according to an approved procedure. Each individual assigned to the EOF will have a designated alternate who will be notified as necessary.

The EOF will be staffed by Company personnel comprising the EOF's Emergency Response Organization approximately one hour after the declaration of a Alert or higher category. The EOF Emergency Response Organization consists of, as a minimum, the following positions:

- EOF/Recovery Manager
- Nuclear Operations Manager
- Engineering Manager
- News Center Manager
- Dose Assessment Manager
- Communicator

Other personnel from the Company, consultants, and contract personnel will be called to the EOF to assist as needed. The EOF Emergency Response Organization transforms into the Emergency Support Organization upon activation of the EOF.

4.2.5 Organization:

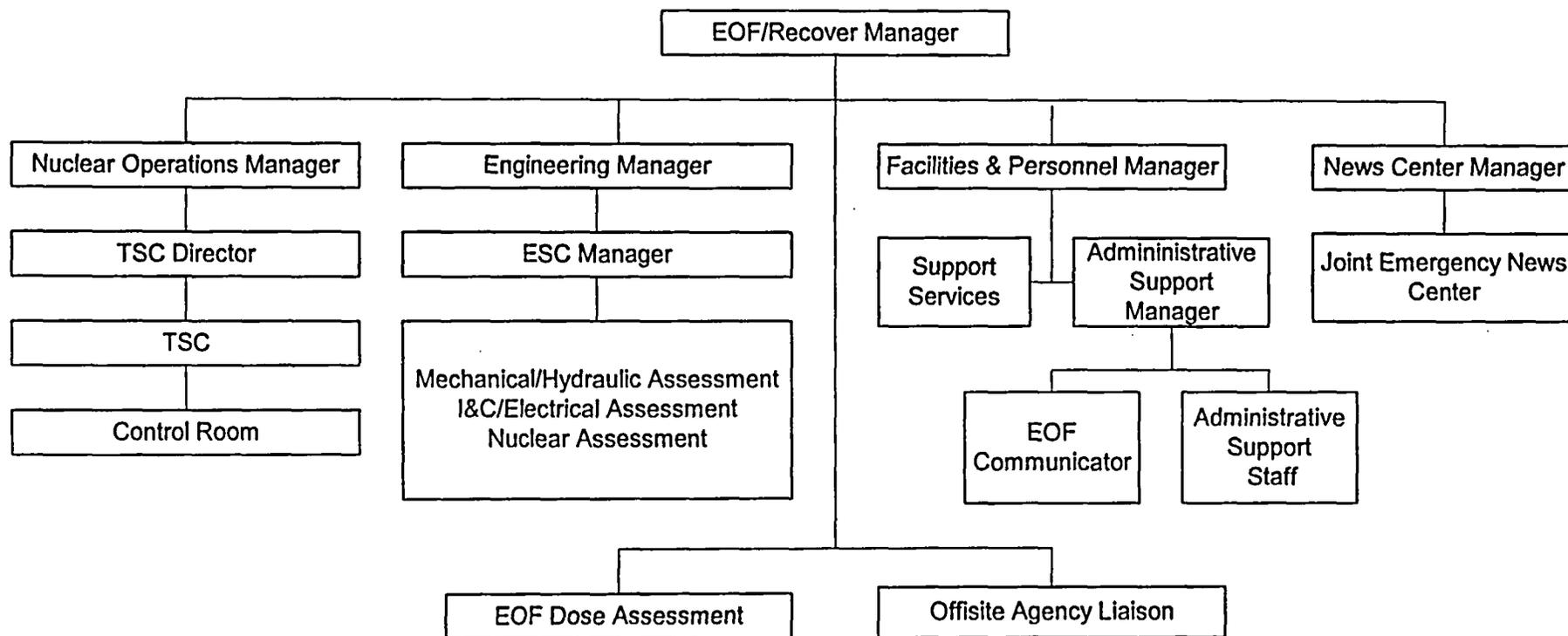
The EOF/Recovery Manager will be responsible for the offsite radiological consequence assessment and interaction with the remainder of the emergency and recovery plan arrangements. Emergency Support Organization participants, under the direction of the EOF/Recovery Manager, possess the necessary experience and expertise in radiological assessment to effectively evaluate possible accident consequences. The EOF/Recovery Manager will be responsible for communications with offsite authorities designated in the Emergency Plan and for providing the accident diagnosis and prognosis information necessary for the offsite authorities to assist in their emergency response. Through other members of the Emergency Support Organization, he will arrange for the dispatch of any special assistance or service requested by the station and serve as the primary coordinator between the station and the Emergency Support Organization.

The Emergency Coordinator (through the Nuclear Operations Manager) and the Emergency Support Organization report to the EOF/Recovery Manager. Members of the Emergency Support Organization are company officials experienced in their area of responsibility. Each official will manage an adequately staffed group in the following areas:

1. Technical support with the nuclear experience and technical expertise to support station operations and recovery.
2. Offsite dose assessment, radiological control and waste management with the nuclear experience and technical expertise to manage these aspects of the response and recovery operations.
3. Design and construction support with the responsibility of coordinating the activities of the company, A/E, NSSS supplier and construction forces on proposed station modifications or other design and construction support required for response and recovery.
4. Advisory support functions with advisory support consisting of senior representatives of the NSSS supplier and special consultants as necessary.
5. Public Communications' staff with the responsibility of providing administration, logistics, communications, and personnel support for the response and recovery operations.
6. Administration and logistics with the responsibility of providing administration, logistics, communications, and personnel support for the response and recovery operations.

The EOF will be organized as shown on the attached Emergency Support Organization Chart, Figure 4.2C. The positions will be filled by trained individuals as listed in Section 4.2.6.

**FIGURE 4.2C
GINNA NUCLEAR EMERGENCY SUPPORT ORGANIZATION**



4.2.6 Responsibilities:

The following describes the positions and principal responsibilities of the EOF and Joint Emergency News Center personnel. Detailed responsibilities for each position are provided in EPIP 4-7 and EPIP 5-7.

- 4.2.6.1 EOF/Recovery Manager assumes overall command and control of the recovery operation.
- 4.2.6.2 Nuclear Operations Manager assists EOF/Recovery Manager in coordinating activities of the offsite organization to support site activities.
- 4.2.6.3 Engineering Manager coordinates the design and construction activities of the utility, A/E, NSSS Supplier, construction forces, and outside vendors.
- 4.2.6.4 Facilities and Personnel Manager provides administrative, logistic, communications, and personnel support for the recovery operation. Directs the interface with RG&E to meet the emergency.
- 4.2.6.5 News Center Manager directs implementation of procedures governing JENC facility activation, operations and public information functions.
- 4.2.6.6 Corporate Spokesperson informs the community through the media of current and potential plant conditions.
- 4.2.6.7 Offsite Agency Liaison updates County, State, and Federal Agency Representatives in the EOF and the county and state EOCs on conditions related to the event.
- 4.2.6.8 EOF Dose Assessment Manager makes recommendations to the EOF/Recovery Manager on Protective Action Recommendations (PARS) based on projected doses and affected Emergency Response Planning areas.
- 4.2.6.9 EOF Communicator provides required notifications and updates to New York State, Wayne and Monroe Counties.

4.3 Augmentation of the Emergency Organization and Interface with Other Plans:

The Ginna emergency organization is augmented by a number of offsite services. Figure 4.3 shows the relationship of non-Company offsite organizations in emergency response. Letters of agreement are provided in Appendix A. These agreements are considered valid until changed by the author during the annual review of the Nuclear Emergency Response Plan (NERP). The authors of the letters of agreement are contacted in person or by telephone and the content of the letters is verified. This is documented by placing the review date on Attachment 1 of EPIP 5-6.

Plant procedures contain the phone numbers and alternate means of contact needed to initiate emergency response actions. The communicator will initiate a call to New York State, Monroe County and Wayne County EOC, using the N.Y.S. Radiological Emergency Communication System (RECS). During working hours, the EOC staff will respond. During off hours, the County 911 Centers and the State Warning Point will respond for each Emergency Director to RECS calls.

The EOF/Recovery Manager is alerted by a call from an automated notification system or from the Ginna Control Room. Other offsite assistance, such as DOE-RAP team or Westinghouse, is alerted by a call from the Emergency Coordinator or designee to their duty officer at the phone numbers listed in procedures.

4.3.1 State of New York, Wayne and Monroe Counties Emergency Actions:

The Company is responsible for promptly notifying State and county authorities when conditions affect, or may affect, safe plant operations.

It is the responsibility of these offsite agencies to provide prompt notification to their parent and support organizations if it is determined that conditions or circumstances, either onsite or offsite, have affected or may affect normal and safe plant operations or conditions in the environs.

Wayne and Monroe Counties' decision processes are based EPA Protective Action Guidelines (PAG), current road and weather conditions, time requirements for implementing PAGES and accident diagnosis and prognosis received from the licensee, New York State, USNRC and DOE.

The Nuclear Regulatory Commission (NRC) has established, and the State of New York has accepted, four Emergency Classification Levels for which the Company shall provide early and prompt notification to both State and County authorities. These Classification Levels are consistent with those described in Sections 3.2 through 3.5 in this plan.

The "Unusual Event" and "Alert" classes provide early and prompt notification of minor events which could lead to more serious consequences or which might be indicative of more serious conditions which are not yet fully realized. A gradation is provided to assure more complete offsite response preparations for more serious indicators.

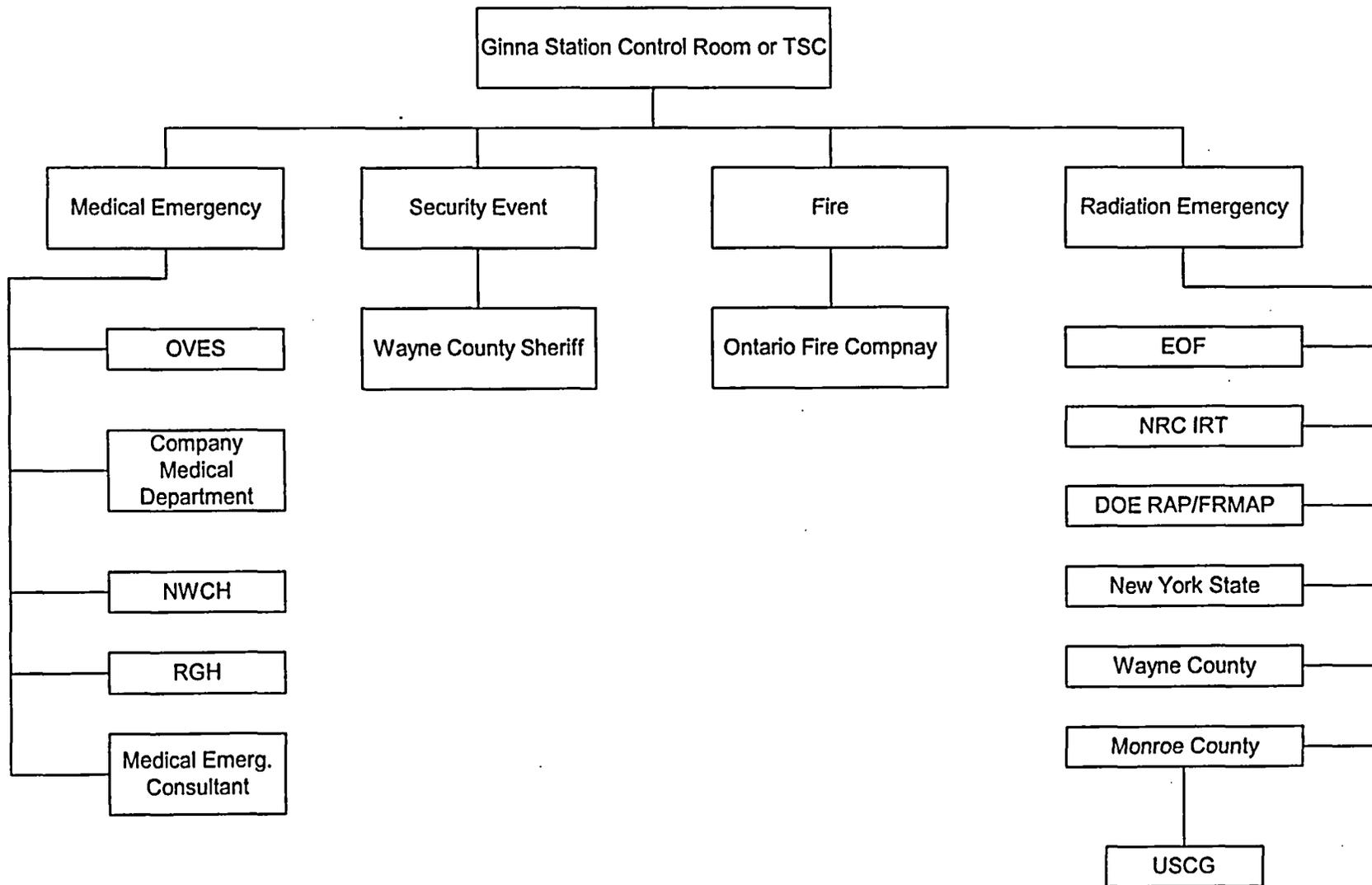
The "Site Area Emergency" class reflects conditions indicating significant releases are likely or are occurring but where a core-melt situation is not indicated.

The "General Emergency" class involves actual or imminent substantial core degradation or melting with the potential for loss of containment. For both the "Site Area Emergency" and "General Emergency", full mobilization of offsite emergency personnel is required.

The "General Emergency" classification requires immediate consideration of Protective Action Recommendations by the Company and communication of these recommendations to Wayne and Monroe Counties and New York State.

Although Protective Action considerations are mutually discussed by each county, the Chairman of the N.Y.S. Disaster Preparedness Commission and both County Executives may decide to take actions of different magnitude. Protective Actions are based on current and forecasted weather conditions, road construction and other possible impediments.

**FIGURE 4.3
INTER-RELATIONSHIPS OF GINNA STATION AND RESPONSE ORGANIZATIONS**



4.3.2 Local Disaster Coordinator (Wayne County Emergency Management Office and Monroe County Office of Emergency Preparedness).

In general, the responsibilities of the Local Emergency Preparedness Coordinator in each county include the following:

- a On receipt of notification from the State of New York, or Ginna Station Control Room, alert local authorities and officials in accordance with established plans.
- b) Coordinate response of local authorities and provide for available local assistance to the Company and State authorities in accordance with established plans.

The participation of the counties, upon notification of an event involving the general public, is outlined in their Radiological Emergency Plans, which are reviewed in Appendix B.

The Office of Emergency Preparedness in each county consists of small administrative staffs and a pool of reserve personnel located throughout the counties. Members receive training in monitoring, establishing relocation centers and providing medical attention, food, and lodging for evacuees. Extensive communication resources are available for use by the Local Disaster Coordinators and staff, including a number of radios for contacting the county fire coordinator, the police forces, public works and commercial radio stations. A roster of telephone numbers and contacts is maintained to communicate with agencies on State and local levels. Monitoring teams are available and radiological kits are maintained in shelters and firehouses located throughout the counties.

4.3.3 United States Coast Guard (USCG)

The USCG provides emergency support upon request by Wayne and Monroe Counties. In accordance with the Wayne County Radiological Emergency Preparedness Plan and Monroe County Radiological Emergency Preparedness Plan.

4.3.4 United States Nuclear Regulatory Commission, Region 1, Incident Response. (Reference: Supplement to NUREG/BR-0230 "Response Coordination Manual")

This NRC Plan describes the notification, communication decision-making and mobilization of the NRC Incident Response Organization in the event of an event/incident related to Ginna Station.

The extent of mobilization will depend upon the emergency classification and associated plant conditions.

The Company will supply whatever support services and resources are needed to maintain Federal assistance.

United States Department of Energy Radiological Assistance Program, Region I, Brookhaven Area Office, Upton, New York (DOE RAP/IRAP):

Since Ginna Station is located in DOE Region I, the Brookhaven Office of the U.S. Department of Energy (DOE) has the responsibility to provide radiological assistance in the event of an emergency. Their principal goal is to be prepared in the event of a major accidental release, or other loss of control of radioactive material.

Radiological assistance can be requested at any time by calling and indicating the nature of the incident, the location, and how to contact utility and local authorities in order to coordinate the Department of Energy response.

The assistance includes advice and emergency actions essential for the control of the immediate hazards to health and safety. This preparedness includes plans and procedures for: effective and economic use of resources; minimization of radiation exposure of individuals and the public; prevention of the spread of radioactive materials into the environment; and appropriate countermeasures to control and remove radiological hazards. Large numbers of qualified radiation, nuclear and medical specialists are the principal resource that can be made available in an emergency along with quantities of radiation monitoring equipment and specialized detector and test equipment.

Most assistance requests can be handled by giving advice, by sending radiological safety experts to the incident scene, or by transferring the request to another Federal agency or a State agency. The Department of Energy, Brookhaven Office, has agreed to provide such assistance upon notification of a hazard to the general public. Available resources are noted in the county plans. Assistance could be onsite within 4 hours of a request. The Company will supply whatever support services and resources are needed to maintain Federal assistance. RAP/IRAP teams initially report to the EOF for briefing and coordination.

It should be understood that this Federal advice, assistance and equipment is provided to the local government institutions to assist in carrying out their responsibilities and authority for protecting the health and safety of the local population and in no way supersedes that local responsibility. Furthermore, this assistance may be terminated as soon as the immediate hazards are brought under control and there is reasonable assurance that public health and safety are being protected.

4.3.5 County Sheriff:

The Wayne County Sheriff's Department will assume responsibility for necessary police services in Wayne County. They respond to directions and requests from the Director of Wayne County, Office of Emergency Management, who identifies problems and designates responsibilities. Ginna Station, does not make direct contact with the Sheriff's Department for a radiation emergency. The same arrangement is true for the Monroe County Sheriff's Department which is directed by the Monroe County Director of Emergency Preparedness.

4.3.6 Radiation Emergency Medical Response

The Ginna Station emergency medical response is detailed in procedure A-7. Control Room personnel are notified of any medical emergency. The location and known information about the emergency is announced over the plant page and the medical response team responds. Emergency medical services (EMS) may be contacted via the 911 dispatcher. Advanced Life Support (ALS), Mercy Flight and mutual aid can also be requested via the Control Room to augment the local EMS.

4.3.7 Ontario Volunteer Emergency Squad:

The responsibility of the Ontario Volunteer Emergency Squad (OVES) is to respond to requests by Ginna to assist in emergency first aid and to transport patients to the hospital, if required. The emergency medical procedure includes the means of communication with the ambulance squad.

OVES is located approximately five miles from Ginna Station. It is a volunteer organization consisting of about 60 members. They have been trained in rescue and first aid and require a certified medic (Emergency Medical Technician - EMT) to respond with all ambulance crews. The level of patient care OVES provides is sustained during transport to other advanced medical facilities such as Rochester General Hospital. The Emergency Squad maintains all required training certifications as required by the New York State Health Department Bureau of Emergency Health Services. Active members are required to be at least 18 years of age and have a minimum training level equivalent to the American Red Cross Standard First Aid Course. The members are invited to attend an annual Ginna Station site re-familiarization tour and are instructed in radiation protection requirements.

4.3.8 Rochester General Hospital/Newark-Wayne Community Hospital:

Arrangements have been made with the designated hospitals to receive and assume control of patients from Ginna Station, if requested. Implementing procedures include the means of communication between the utility and the hospital.

Rochester General Hospital is equipped with a dedicated room for treatment of radiologically contaminated victims. Newark/Wayne has an area within the hospital which can be converted to a radiation treatment room. Adequate contamination control and procedures are maintained in each facility. Hospital personnel are trained in the treatment of radiation accident patients and each hospital has an approved radiological emergency plan specific to their facilities and resources.

Radiation Management Consultants (RMC) provide annual training to hospital staff. Radiation Protection instrumentation is supplied to the hospital by the Company. Annual training drills are conducted by the Company and the hospitals and include critiques by RMC. Hospital staffs also attend training seminars on treatment of radiation accident victims.

4.3.9 Medical Emergency Consultant:

Radiation Management Consultants (RMC) will respond as follows upon request from one of the medical responders or from the Company:

- a) Dispatch a radiation emergency medical team, which is available on a 24 hour basis.
- b) Make available the services of a radiation/decontamination treatment facility as stated in the annual letter of agreement.
- c) Make transportation arrangements (air or ground) for patients to the radiation/decontamination treatment facility as stated in the annual letter of agreement.

RMC has laboratory facilities at the University City Science Center in Philadelphia and maintains medical facilities at the Hospital of the University of Pennsylvania. RMC has an arrangement with the hospital for management and treatment of radiation accident victims and ensures that facilities necessary for treatment are readily available by equipping the hospital with the medical and radiological equipment needed. RMC has conducted an initial evaluation and made recommendations for an effective local medical emergency program, coordinating the planning for local medical support with RMC and the Hospital of the University of Pennsylvania. Periodic site visits are made to coordinate and review emergency medical support with company officials and local medical personnel.

RMC can provide radiological emergency training for plant, hospital and ambulance personnel if not provided by Company personnel.

4.3.10 The Company Medical Department and Contract Physicians

The Company medical department is contacted for all medical emergencies occurring at Ginna Station. The medical department provides contract physicians to interface between the hospital health care organization and the Company. Radiation Management Consultants (RMC) may be contacted for assistance during or after a radiation medical emergency. Contract physicians can facilitate the integration of RMC, or other responders, with the hospital health care organization treating the victim.

4.3.11 Ontario Volunteer Fire Department:

The Ontario Volunteer Fire Department will provide fire fighting personnel and equipment in accordance with Site Contingency, Fire Emergency Plans, to supplement the trained personnel and equipment which is available onsite.

The Ontario Volunteer Fire Department is located approximately five miles from the Ginna Station. It is a volunteer organization consisting of about 50 active members. Additional fire fighting support is available to the Ontario Volunteer Fire Department through the Wayne County Mutual Aid Fire Coordinator. They conduct their own weekly training meetings. The members are invited to attend an annual tour of the Ginna Station site to re-familiarize them with the facility and its onsite fire fighting equipment and with radiation protection requirements. Drills are performed in conformance with the Fire Protection Program.

4.3.12 Consultants and Contractors:

Implementing procedures give the name and phone contacts for additional consultants and contractors who may be requested to provide technical assistance to the emergency organization.

In case of a radiation event, the Emergency Coordinator has the authority to procure the services of any consultant group he may feel is needed. The Company, as part of the Institute of Nuclear Power Operations (INPO), can call upon INPO resources to supplement Company efforts in executing emergency response plans. Support may be requested directly from licensees and service companies listed in the INPO Emergency Resources Manual or may be obtained by using INPO as an agent to arrange and coordinate the required support. The Company also has agreements with upstate New York State licensees for mutual assistance in times of emergency.

4.3.13 Laboratories:

There are two radiochemical laboratories at Ginna. One is adjacent to the controlled area and is used for primary coolant and other plant samples.

The second laboratory is used for environmental samples and is located in the Ginna Training Center East, remote from the plant. This laboratory contains some of the equipment found in main laboratory and could be used for diluted post-accident samples if needed.

The laboratory at James A. Fitzpatrick Nuclear Power Plant is operated by Entergy Nuclear Northeast and is available for analysis of samples. The laboratory is located about 45 miles away near Fulton, NY.

4.4

Other Emergency Plans:

In the event of an emergency such as adverse weather, earthquake, fire or high water, the following Site Contingency procedures are utilized.:

ER-SC.1	Adverse Weather Emergency Plan
SC-3	Fire Emergency Plan and Implementing Procedures
ER-SC.2	High Water (Flood) Emergency Plan
ER-SC.4	Earthquake Emergency Plan
ER-SC.5	Action for Hazardous Chemical Spill and Implementing Procedures
ER-SC.7	Site Contingency Plan - Aircraft Crash
ER-SC.8	Turbine Blade Failure and Missiles
ER-SEC.1	Response to Change in Security Threat Level
ER-SEC.2	Response to Intrusion by Adversary
ER-SEC.3	Response to Airborne Threat
GS Series	Security Contingencies
A-7	Procedures for Handling Illness or Injury at Ginna Station

In addition, Ginna's NERP and other implementing procedures are coordinated with the following external organizations' plans:

1. Rochester General Hospital Radiological Medical Emergency Plan
2. Newark-Wayne Community Hospital Radiological Medical Emergency Plan
3. Monroe County Radiological Emergency Preparedness Plan
4. Wayne County Radiological Emergency Response Plan
5. New York State Radiological Emergency Preparedness Plan for Commercial Nuclear Power Plants.

5.0 EMERGENCY MEASURES:

The following sections provide the guidelines for implementing procedures of the four emergency categories described in Section 3.0.

5.1 Local Radiation Emergency:

A Local Radiation Emergency condition is established to provide a level of response to a radiological incident which is less serious than the four NRC Emergency Classifications. It has no effect offsite and has no potential for any offsite effects. There is normally no notification or action required by offsite agencies.

- a) EPIP 1-13, "Local Radiation Emergency", contains the details of the response. In general, any individual aware of an incident shall notify the Control Room of this fact.
- b) The Control Room shall announce over the plant P.A. System that a local evacuation of the area is required.
- c) All personnel in the affected area shall leave the area as directed.

5.1.1 Subsequent Action:

The situation will be evaluated and actions taken to terminate the emergency. The plant shall determine the course of action to be taken to clean up the affected area, correct the cause of the incident, and return the area to normal operation. State and county authorities may be notified of the incident for informational purposes but no actions are required offsite.

NOTE: THE FOLLOWING ARE NRC EMERGENCY CLASSIFICATIONS THAT REQUIRE STATE, COUNTY, AND NRC NOTIFICATION.

5.2 Unusual Event:

The purpose for the Unusual Event Classification is to provide early warning of minor events which could lead to more serious consequences. The Unusual Event conditions indicate a potential degradation of the level of safety of the plant. 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 necessary has been carried out by bringing onsite staff and offsite organizations to a state of readiness, thereby providing a system for handling information and decision-making.

The NRC, State and county authorities will be promptly notified to assure that the first step of any necessary response can be initiated. The Plant Manager will be notified of the Unusual Event Emergency to bring the plant staff to a state of readiness and provide for responsible decision-making. On-shift resources can be augmented so as to be able to assess and respond as needed. Offsite organizations will standby for further information or closeout.

A RP or Rad/Chem qualified technician will also be activated to respond within 30 minutes of the declaration of an Unusual Event as well as for unplanned reactor trips in accordance with NRC SER dated July 24, 2003.

Alert:

Events of the Alert Classification involve actual or potential degradation of the level of safety of the plant. Any radioactivity released during an Alert would result in exposures well below the guidelines for required offsite action. By assuring that emergency personnel are available to respond if the situation should become worse, protective actions could be taken much quicker, such as performing confirmatory radiation monitoring and providing offsite authorities with current status information.

For events which fall in the Alert Classification, Ginna Station will promptly notify the NRC, State and county authorities of the Alert status and the reasons for the classification. All Ginna emergency facilities will be staffed so as to assist in the assessment of the incident and determination of a proper response. Periodic plant status updates will be given to offsite authorities who will also be advised of any change in the classification of the incident.

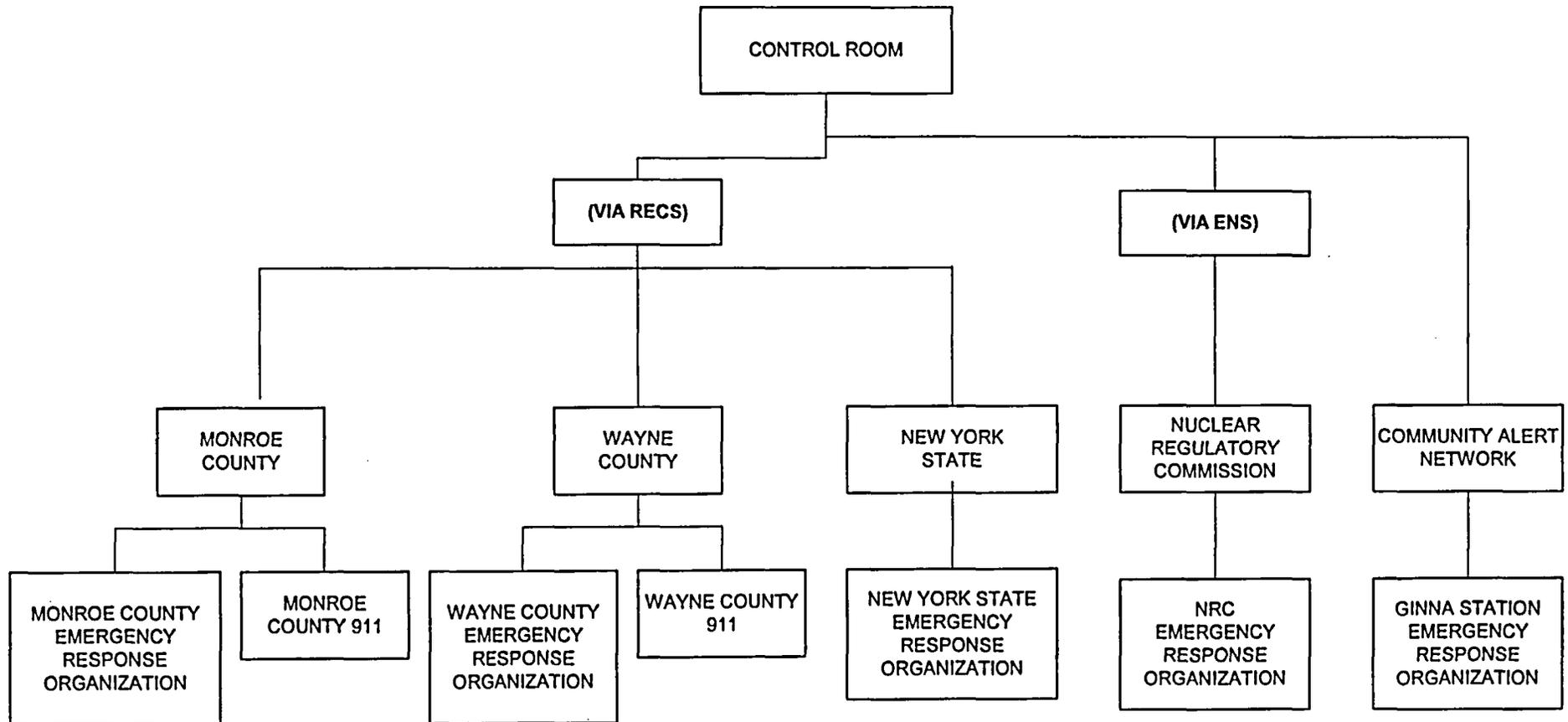
Plant staff will be notified as specified in the implementing procedures. This series of calls is arranged in order of importance and will activate the emergency organization.

Unless they are already in the plant, persons so notified will report to the plant, the Ontario Fire Company's Exempt Hall or, if directed by Security to the Survey Center where jobs are assigned in line with the trained capabilities of the individual. Procedures provide for staffing of all Ginna emergency facilities. The organization is normally activated via an automated system activated from the Control Room.

The Joint Emergency News Center will be staffed by Company, county and State personnel in order to coordinate public information activities warranted by the emergency.

Offsite agencies will activate primary response centers to standby status and will alert other key emergency personnel, such as monitoring teams and communications centers, the Emergency Alerting System, or law enforcement. They will be ready to escalate to a more severe classification, if appropriate.

Figure 5.1 Ginna Notification Process



5.4 Site Area Emergency:

A Site Area Emergency 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. Any releases are not expected to exceed EPA Protective Action Guideline exposure levels except near the site boundary.

In the event that a Site Area Emergency is declared, the actions to be taken by various plant groups are detailed in the implementing procedures for the plant. The Control Room will make the initial notification to the NRC, State and county authorities.

The purpose of the declaration of a Site Area Emergency is to assure that personnel required for evacuation of near-site areas are at their duty stations if such an evacuation is called for. 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.

5.4.1 Activation of Emergency Organization:

Emergency procedures necessary to cope with the plant system malfunction will be implemented. All on-duty operations personnel will report to the Control Room. Control Room ventilation dampers will be switched from outside to inside air and the charcoal filters will be put into service.

Plant Security:

During a plant evacuation, the plant security officers assist in the activation of the plan as follows:

- One security officer will proceed to the Training Center with a radio and will unlock the Training Center, if necessary.
- The Security Shift Supervisor will deploy resources to restrict access to the owner controlled area during an Alert or higher. They will inform the TSC Security Manager or Emergency Coordinator of any security issues.
- At least one security officer will remain in the Guard House to instruct all evacuating personnel leaving the plant to retain their photo ID/TLD combination and to proceed to the Training Center or alternate assembly area until released.

The security officers at the plant entrance will stop all personnel and their vehicles from entering the site and direct them to the Training Center or alternate assembly area until the TSC Security Manager or his designee notifies them that the condition has been corrected.

Radiation Protection and Chemistry

The Radiation Protection and Chemistry Manager shall assist the Emergency Coordinator in evaluating the emergency. During working hours, he will report directly to the Technical Support Center. Other Radiation Protection section personnel will:

- a) Pick up extra survey instruments from the Radiation Protection office.

- b) Report to the Technical Support Center and assume responsibilities as stated in the implementing procedures.
- Radiation Protection personnel shall ensure the Survey Center Manager reports the dosimeter readings of evacuated personnel who were in radiologically controlled areas of the plant. The exposure data will be relayed by the Survey Center to the Radiation Protection and Chemistry Manager in the Technical Support Center.
 - One Dose Assessment Manager will report to the Technical Support Center. During off-duty hours, Dose Assessment personnel and RP technicians shall report to their emergency response locations as stated in the implementing procedures. The on-duty Shift RP Technician shall report to the Control Room and provide radiological assessment support as deemed necessary by the Shift Manager.

Off-Duty Personnel

Off-Duty personnel, upon notification, shall report to their emergency response locations, unless directed to the Survey Center, where they would pick up the equipment needed for safe plant entry.

5.4.2 Immediate Assessment:

The Shift Manager shall immediately assess the incident. The Shift Manager is responsible for the implementation of the Emergency Plan until command and control is transferred. The Shift Supervisor will evaluate plant conditions by checking control and safeguards systems, plant data and radiation monitors. He shall ensure all offsite agencies are notified in accordance with EPIP 1-5 and that the following information is given:

- a) Name of facility and communicator
- b) Date/time of incident
- c) Class of Emergency (Unusual Event, Alert, Site Area Emergency, General Emergency)
- d) Brief Description of Event
- e) Radioactive Material Release (None, Atmospheric, Ground, Lake)
- f) Protective Actions Recommended for appropriate population
- g) Winds and weather

The Wayne County Office of Emergency Management and the Monroe County Office of Emergency Preparedness will be notified at the same time through the use of the New York State Radiological Emergency Communications System (RECS). An Emergency Communicator is part of each shift and will maintain contact with New York State and the counties during an emergency. As the RECS line is a closed system, call-back verification by the State and counties is not necessary. The Communicators will also maintain communications with the NRC via the Emergency Notification System (ENS).

If necessary, the Shift Manager shall issue radiation protection equipment and dispatch a RP Technician team to conduct in-plant or area surveys. A relief schedule will be determined if it is necessary. (See Radiation Protection During an Emergency, Section 5.4.4.1).

5.4.3 Subsequent Actions:

To ensure that immediate and direct action shall be taken in an emergency situation, the Technical Support Center, Operational Support Center and Survey Center will be staffed. Details for staffing are in the implementing procedures. During normal working hours, individuals assigned to the Technical Support Center will go there directly. Others assigned to the Survey Center will report there.

During off-duty hours, upon notification of an emergency through the call out procedure, personnel may report to the TSC using normal procedures unless directed to the Survey Center. At the Survey Center, implementing procedures provide guidance for site entry. When the Plant Manager or other qualified individual arrives, he shall assume the responsibilities of TSC Director.

The TSC Director shall assume responsibility for the activation of onsite Emergency Centers and establish contact with the Control Room. The TSC Director will request from the on-duty Shift Manager an evaluation of plant conditions and all data which has been relayed to the state in preparation for assuming Emergency Coordinator responsibilities. Upon transfer of command and control, the TSC Director assumes the role of Emergency Coordinator.

The Dose Assessment Manager or Survey Center Manager will dispatch monitoring teams to areas of concern and request each team to report by telephone or radio. Survey teams shall not be placed in a position where they might receive a whole body dose greater than 1 Rem without special permission from the Emergency Coordinator or Dose Assessment Manager.

The Emergency Coordinator will report conditions to company management as specified in EPIP 1-5.

The Emergency Coordinator will evaluate radiological data and plant parameters. Current conditions and follow-up actions will be reported to management periodically. The New York State officials and Monroe County and Wayne County Directors of Emergency Management will be kept advised of changing conditions. Responders are assigned as the Ginna Technical Representative Liaisons at the State and County Emergency Operating Centers to provide information and data to offsite agency officials.

Follow-up messages to offsite authorities will contain the following information as appropriate:

- a) Location, name of caller
- b) Class of emergency and date and time of incident
- c) Type of actual or projected release, estimated duration and impact time
- d) Estimated quantity of release for various materials
- e) Chemical and physical form of release material (noble gases, iodine, particulate)
- f) Current weather conditions

- g) Actual or projected dose rate and time integrated dose at site boundary
- h) Projected dose rate and integrated doses in affected sectors
- i) Estimation of any surface radioactive contamination
- j) Recommended emergency response actions or protective measures
- k) Prognosis for course of the event
- l) Status of in-plant emergency actions, and licensee response
- m) Request for further support

The Emergency Medical Plan will be instituted, if necessary. The Shift Manager shall be provided with any survey data necessary for him to meet his responsibilities.

The Emergency Coordinator will determine if additional personnel should be called to the plant to cope with emergency conditions.

Personnel and cars shall be monitored and surveyed to assess the extent of contamination before leaving the site. All non-essential personnel should be allowed to leave the site.

5.4.4 Onsite Protective Actions:

During a radiological emergency, protective actions will be employed as follows:

5.4.4.1 Radiation Protection During an Emergency:

During a radiological emergency, precautions and limitations to minimize doses shall be observed by personnel entering an incident area. In general, doses will be limited to station administrative control levels for occupational radiation exposure in accordance with station procedures. Every effort shall be made to keep exposure As Low As Reasonably Achievable (ALARA) while accomplishing the necessary tasks. Radiation exposures in an emergency shall be evaluated on an ALARA basis. Survey teams are limited to 1 Rem TEDE dose during the incident unless special permission is given by the Emergency Coordinator or Dose Assessment.

For lifesaving actions such as the removal of an injured person and providing first aid, ambulance service, medical treatment or other actions required to reduce severe health effects to the public, volunteers may receive up to 75 Rem TEDE whole body exposure. The limit set for performing assessment actions or undertaking corrective actions to prevent substantial radiological releases is 25 Rem TEDE. Authorization to receive doses greater than station administrative limits can be given only by the Emergency Coordinator.

Survey teams will consist of at least two persons. All entries into high radiation areas must be carefully planned from available survey data, review of personnel current exposure records, and pre-planning of the activities to be accomplished. Whenever planning to enter an incident area, use the applicable EPIP procedures to adequately protect the responders by determining the appropriate survey instruments, protective clothing, dosimetry, respiratory protection or other resources needed. Close communications between team members shall be maintained as much as possible.

The radiation protection program during an emergency will be based on the program defined in the RP series of procedures. Dosimeters are available in the Survey Center for the survey teams. Provisions for round-the-clock capability to issue dosimeters and maintain dose records will be established to meet long-term needs of the plant procedures. The capability to read TLDs will be used to maintain control of individual doses.

5.4.4.2 Site Evacuation:

EPIP 1-6, Site Evacuation, provides specific instructions for evacuation of the Protected Area.

The evacuation alarm (special tone) will be activated from the Control Room by an Auxiliary Operator per direction from the Shift Manager.

Upon becoming aware of the evacuation alarm, all personnel, except those whose duties during an emergency specify otherwise, shall immediately leave their area of work by the nearest exit. All building exits to the outdoors may be used. Normal egress of the radiologically controlled area should be used if possible. If not possible, workers should use the nearest exit and remove their protective clothing as directed by procedures, if worn. Personnel will walk to the Assembly Area and stand by for further instructions. All dosimeters will be retained by the individual.

The "Assembly Area" refers to the Training Center or alternate locations defined in the EPIP procedures depending on plume direction and habitability considerations.

The guide accompanying any visitors is responsible to see that visitors are taken to the Assembly Area. Other personnel who may be onsite outside the restricted area would hear the site evacuation signal. Also, one of the duties of the Personnel Coordinator is to assist in accountability of personnel outside the restricted area, and to provide other support to the Survey Center Manager, as needed.

After evacuation of the plant areas, an accounting will be made of all personnel who were onsite. Accountability of personnel is carried out by plant security using the "onsite" computer list to determine that all persons are accounted for. The TSC Security Manager initiates a process whereby accountability is verified for all individuals inside the protected area. Drills have indicated that this procedure can be completed within 30 minutes. This procedure is verified to be complete by the Emergency Coordinator using his checklist.

Cars will be monitored and surveyed as necessary before they are allowed to leave the site. Personnel leaving the site will take a route selected by the Emergency Coordinator, after consultation with the Wayne County Emergency Operations Center, giving consideration to the wind direction or road impediments. (See Figure 5.1) Before leaving, persons will be monitored for contamination and TLD badges collected.

Normally, private cars would be used for leaving the site. In case cars are contaminated, buses will be brought in for the evacuation. The Emergency Coordinator will consult with the Wayne County Emergency Director concerning numbers of evacuating personnel and vehicles, and which evacuation routes will be used.

5.4.4.3 Emergency Medical Treatment:

All emergency medical treatment will be carried out using an emergency medical treatment plan. This plan specifies the types of medical action to be taken in any type of radiation or contamination emergency. First aid team members maintain their proficiency through Red Cross First Aid Training or equivalent as a minimum.

EPIP 2-9 provides guidelines for the administration and use of potassium iodide (KI) for onsite personnel and survey teams. The determination of need for KI is the responsibility of the Dose Assessment Manager or the Radiation Protection and Chemistry Manager. Approval of the Emergency Coordinator is required.

Radio-protective drugs will be issued for the general public only if approved by the New York State Department of Health.

5.4.4.4 Search and Rescue:

Following site evacuation, all personnel will be accounted for using security records, sign-in sheets, log sheets, etc. The Emergency Coordinator will determine the necessity for a search and rescue operation. Such an operation will be coordinated by the Shift Manager and the Emergency Coordinator.

The search and rescue team will consist of at least two persons including Radiation Protection and a person who knows the missing individual.

The search should start at the last known location or work assignment of the unaccounted-for individual. Radiation surveys should be made as the team progresses. It may be necessary to administer first aid to the individual after he is located. The Emergency Coordinator or Control Room shall be advised of the situation.

5.4.4.5 Decontamination:

A Radiation Protection procedure provides guidance for graduated measures to be used for decontamination. The objective of decontamination is to prevent the spread of radioactive material on the individual, to the environment or to other personnel and to reduce the resultant dose. Decontamination is essentially the removal of radioactive material and is performed starting with the highest level of contamination using the simplest procedures. Continued decontamination may show diminishing effectiveness and require a decision to stop or use more potent agents.

Decontamination kits, which contain items to decontaminate the skin and for wound cleansing, are available. Decontamination should continue until it is no longer effective but not so as to abrade skin. This procedure should be effective against iodine and other contaminants.

If personnel cannot be decontaminated to the limits of Procedure RP-SUR-PERS-DECON, "Personnel Decontamination", Radiation Management Consultants may be contacted.

Instruments are available to determine contamination levels of personnel or equipment and the effectiveness of decontamination. Waste drums are available as containers for radioactive waste and emergency clothing is available, if needed.

5.4.4.6 Offsite Authority Actions:

Offsite authorities will provide assistance as needed to protect the public. In the event a Site Area Emergency is declared, this may include activating the public notification system and providing information and periodic updates of the situation through the EAS (Emergency Alert System) and/or press briefings. Resources at primary response centers will be augmented by calling other emergency services to standby status and dispatching certain emergency personnel to initiate their functions (i.e. monitoring and communications). Information from the licensee, monitoring teams and weather stations will be continually evaluated with regard to changes in protective actions already initiated for the public, such as sheltering of people or milk animals. Monitoring results and any actions taken should be reported to the licensee and others having a need to know.

5.5 General Emergency:

The General Emergency will be declared when the conditions described in Section 3.5 exist. Actions associated with the General Emergency declaration are to: (1) initiate protective actions for the public as predetermined or as indicated by actual releases; (2) provide continuous assessment of information from Ginna Station and offsite measurements; (3) provide consultation with offsite authorities; and (4) keep the public informed through updates of the situation through the Joint Emergency News Center.

5.5.1 Company Actions:

A General Emergency requires that all actions prescribed for the Site Area Emergency (see Section 5.4) be implemented. The NRC, State of New York, and county authorities, who will already have been contacted for lower classifications, will now be updated.

The Emergency Coordinator (or EOF/Recovery Manager as appropriate) may request the assistance of offsite groups which could include Radiation Management Consultants, Company medical department, and Department of Energy, Brookhaven Radiological Assistance Program. Technical personnel from other Company departments and/or consultants will be called as needed.

The Emergency Coordinator (or EOF/Recovery Manager) has the responsibility to determine the magnitude and extent of the incident by evaluating information from the Control Room and the survey teams. This information will consist of instrumentation readings and any survey results available. He shall update the State and local authorities with new survey data and other information and recommend protective actions. Protective action recommendations, if dose projection information is available, will be based on the "Manual of Protective Action Guides and Protective Action for Nuclear Incidents" EPA-400-R-92-001, October 1991, U.S. Environmental Protection Agency. A summary of recommended actions is presented in Table 5.1.

Figure 5.3 provides the scheme for Predetermined Protective Action Recommendations based upon reaching a General Emergency and present wind conditions, and reflects an initial 2 mile radius and 5 miles downwind evacuation recommendation. This methodology is contained in EPIP 2-1, which also provides guidance for upgrading an initial PAR based on pertinent factors.

In making his recommendation for sheltering or evacuation, the Emergency Coordinator (or EOF/Recovery Manager) should evaluate the weather forecast in relation to changing winds and precipitation. He should also evaluate the calculated evacuation times (Appendix G) in relation to predicted start, length and termination of a release.

Emergency staff at Wayne and Monroe Counties and New York State shall determine, by evaluating the information given by the Emergency Coordinator (or EOF/Recovery Manager as appropriate), if area evacuation or sheltering is necessary, to what extent, and how to undertake protective action including evacuation. A projection of population distribution in the 10 mile plume exposure zone is included in Appendix F. A summary of evacuation time estimates for various conditions is provided in Appendix G.

All survey and sample analysis results will be retained by the Radiation Protection and Chemistry Manager for appropriate documentation. Formal reports shall be written and distributed as required by 10CFR20 and the Ginna Technical Specifications. Information concerning the offsite consequences of the incident and protective actions to protect the public will be coordinated in accordance with the New York State Radiological Emergency Plan and County Emergency Plans. A Company spokesperson in the JENC will release the information concerning the plant, plant safeguards and its employees, and assistance being provided to State and local authorities.

Severe Accident Management Guidelines (SAMG) entry conditions are defined in the Station Emergency Operating Procedures.

5.5.2 Offsite Authorities Actions:

All actions of paragraph 5.4.4.6 for Site Area Emergency will be reviewed and enacted for a General Emergency. All emergency personnel will have been activated and all response centers are operating. Information is evaluated and forwarded to the proper authorities and the public. Protective actions will be instituted as needed for the public and milk animals.

FIGURE 5.3
EVACUATION AREAS BY ZONES
PROTECTIVE ACTION RECOMMENDATIONS BY ERPA FOR GENERAL EMERGENCY CLASSIFICATION

Wind From	(Degrees)	Initial Protective Action Recommendations (Evacuation based on 2 mile radius & 5 miles downwind)	Secondary Protective Action Recommendations* (Evacuation based on 5 mile radius & 10 miles downwind)
N	349 to 11	Evacuate:W (1,2,3) and implement KI Plan Shelter: Remainder of EPZ	Evacuate: W (1,2,3,5,6,7) M (1,2,4,5) and implement KI Plan Shelter: Remainder of EPZ
NNE	12 to 33	Evacuate:W (1,2) M (1) and implement KI Plan Shelter: Remainder of EPZ	Evacuate: W (1,2,3,6,7) M (1,2,3,4,5,6,7,9) and implement KI Plan Shelter: Remainder of EPZ
NE	34 to 56	Evacuate:W (1,2) M (1) and implement KI Plan Shelter: Remainder of EPZ	Evacuate: W (1,2,3,7) M (1,2,3,4,5,6,7,8,9) and implement KI Plan Shelter: Remainder of EPZ
ENE	57 to 78	Evacuate:W (1,2) M (1) and implement KI Plan Shelter: Remainder of EPZ	Evacuate: W (1,2,3,7) M (1,2,3,4,5,6,7,8,9) and implement KI Plan Shelter: Remainder of EPZ
E	79 to 101	Evacuate:W (1,2) M (1) and implement KI Plan Shelter: Remainder of EPZ	Evacuate: W (1,2,3) M (1,2,3,4,6,7,8,9) and implement KI Plan Shelter: Remainder of EPZ
ESE	102 to 124	Evacuate:W (1) M (1) and implement KI Plan Shelter: Remainder of EPZ	Evacuate: W (1,2,3) M (1,3,6,8,9) and implement KI Plan Shelter: Remainder of EPZ
SE	125 to 146	Evacuate:W (1) and implement KI Plan Shelter: Remainder of EPZ	Evacuate: W (1,2,3) M (1) and implement KI Plan Shelter: Remainder of EPZ
SSE	147 to 168	Evacuate:W (1) and implement KI Plan Shelter: Remainder of EPZ	Evacuate: W (1,2,3) M (1) and implement KI Plan Shelter: Remainder of EPZ
S	169 to 191	Evacuate:W (1) and implement KI Plan Shelter: Remainder of EPZ	Evacuate: W (1,2,3) M (1) and implement KI Plan Shelter: Remainder of EPZ
SSW	192 to 213	Evacuate:W (1) and implement KI Plan Shelter: Remainder of EPZ	Evacuate: W (1,2,3) M (1) and implement KI Plan Shelter: Remainder of EPZ
SW	214 to 236	Evacuate:W (1,3) and implement KI Plan Shelter: Remainder of EPZ	Evacuate: W (1,2,3,4) M (1) and implement KI Plan Shelter: Remainder of EPZ
WSW	237 to 258	Evacuate:W (1,3) and implement KI Plan Shelter: Remainder of EPZ	Evacuate: W (1,2,3,4,5) M (1) and implement KI Plan Shelter: Remainder of EPZ
W	259 to 281	Evacuate:W (1,3) and implement KI Plan Shelter: Remainder of EPZ	Evacuate: W (1,2,3,4,5,6) M (1) and implement KI Plan Shelter: Remainder of EPZ
WNW	282 to 303	Evacuate:W (1,2,3) and implement KI Plan Shelter: Remainder of EPZ	Evacuate: W (1,2,3,4,5,6,7) M (1) and implement KI Plan Shelter: Remainder of EPZ
NW	304 to 326	Evacuate:W (1,2,3) and implement KI Plan Shelter: Remainder of EPZ	Evacuate: W (1,2,3,4,5,6,7) M (1,2) and implement KI Plan Shelter: Remainder of EPZ
NNW	327 to 348	Evacuate: W (1,2,3) and implement KI Plan Shelter: Remainder of EPZ	Evacuate: W (1,2,3,4,5,6,7) M (1,2,5) and implement KI Plan Shelter: Remainder of EPZ

* Secondary Protective Actions are recommended when dose projections or field teams indicate ≥ 1 REM TEDE beyond 5 miles

5.6 Major Release to Lake Ontario or Deer Creek:

If a major release to the Lake Ontario or Deer Creek occurs which exceeds the Technical Specification limit or the limiting concentrations specified in 10CFR20, Appendix B, Table II, Column 2, at the point of discharge, the following actions shall be taken:

The release will be classified per EPIP 1-0, "Ginna Station Event Evaluation and Classification" and appropriate notifications will be made, if necessary, per the classification and corresponding procedures. The Ontario Water District will be notified. The waste discharge will be isolated, grab samples will be obtained, and dilution will be estimated in accordance with EPIP 1-16.

The Radiation Protection section will be instructed to monitor the Ontario Water District Station water.

TABLE 5.1 Recommended Protective Actions to Reduce Whole Body and Thyroid Dose

PROJECTED DOSE TO THE POPULATION	RECOMMENDED ACTION	COMMENTS
Total Whole Body < 1 REM*	No planned protective actions. Local authorities or State may issue an advisory to seek shelter and await further instructions. Monitor environmental radiation levels.	None.
Total Whole Body ≥ 1 REM*	Conduct evacuation.* Monitor environmental radiation levels and adjust area for mandatory evacuation based on these levels. Control access.	Evacuation (or for some situations, sheltering**) should be initiated at one REM. Seeking shelter would be an alternative if evacuation were not immediately possible.
Project Dose (REM) to Emergency Team Workers		
Total Whole Body ≥ 25 REM	Control exposure of emergency team members to these levels except for lifesaving mission. (Appropriate controls for emergency workers include time limitations, respirators and stable iodine.)	None.
Total Whole Body ≥ 75 REM	Control exposure of emergency team members performing lifesaving missions to this level. (Control of time of exposure will be most effective.)	None.

NOTES:

- The sum of the effective dose equivalent resulting from exposure to external sources and the committed effective dose equivalent incurred from all significant inhalation pathways during the early phase.
- ** Sheltering may be the preferred protective action when it will provide protection equal to or greater than evacuation, based on consideration of factors such as source term characteristics, and temporal or other site-specific conditions.

Public Relations:

Public information will be released by a Company spokesperson operating from the Joint Emergency News Center. Public information personnel will be assisted by a Technical Spokesman who keeps in contact with the Emergency Coordinator and EOF operations. Company personnel will exchange information with government Public Information officers on a timely basis. All news releases will be coordinated among Federal, state, county and Company sources.

The Company communications department and the News Center Manager will be notified of any activation of this plan beginning at the Unusual Event classification level. Initial notification at the Unusual Event will be from the Emergency Preparedness group after they have completed their evaluation of the situation. Instructions for notifying public information personnel at higher classifications are contained in EPIP 1-5.

A Joint Emergency News Center (6.1.8) will be activated during a nuclear emergency at an Alert or more severe event. The Emergency Plan Implementing Procedures provide for staffing this Center and outline the duties of various positions. Individuals who are qualified to assume these positions are designated. Space is allocated in the Joint Emergency News Center for use by various regulatory and government officials to coordinate and facilitate the flow of accurate information to the public. A Company spokesperson who has access to the EOF will be available to the news media for briefing and questions.

Information concerning plant employees is available through a "Spouse Phone" located in the Joint Emergency News Center.

Information concerning the status of the plant, employees and Protective Action Recommendations shall be released by the Public Information Officers representing the Company and Federal, State and local governments.

A public information program to acquaint the public with the proper actions to be taken in the event of a nuclear emergency at Ginna Station will be implemented on an annual basis. This program will provide information about radiation, protective actions which can be taken, suggested evacuation routes, special needs of the handicapped, proper responses to warning signals, and where additional information can be obtained. The program will be coordinated between Company, State and county officials, and consists of printed calendars, brochures and, for Wayne County only, telephone directory instructions.

Material for placement in parks, motels and retail establishments to which transients have access will be provided on an annual basis.

An annual briefing and training session will be held to acquaint the news media with the Ginna Nuclear Emergency Response Plan and related government agency emergency plans. Information on plant operation, radiation effects and concerns, the implementation of our Emergency Plan, points of contact for the release of public information at the Company and other relevant topics will be kept current through these sessions.

Figure 5.7 is a sample preformatted press statement which can be used to inform the public of the situation at Ginna.

FIGURE 5.7 SAMPLE PREFORMATTED FORM



Constellation Energy

R.E. Ginna Nuclear Power Plant

INITIAL MEDIA PHONE CONTACT/NEWS ANNOUNCEMENT #1

DATE: _____

HOUR: _____

(SAMPLE)

THIS IS A: (Check One)

DRILL/EXERCISE []

ACTUAL EVENT []

(Check one of the boxes above.) THIS IS AN EXERCISE - ACTUAL EVENT.

| MACEDON, NY (DATE) -- DUE TO EMERGENCY CONDITIONS AT THE
R.E. GINNA NUCLEAR POWER PLANT, A(N) _____ HAS
BEEN DECLARED. THE JOINT EMERGENCY NEWS CENTER (JENC) HAS BEEN
| OPENED. IT IS LOCATED AT 1255 RESEARCH FOREST IN MACEDON,
NEW YORK.

FURTHER INFORMATION WILL BE AVAILABLE AT THIS LOCATION FOR MEDIA REPRESENTATIVES.

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6.0 EMERGENCY FACILITIES:

Emergency facilities comprise a number of categories including emergency response facilities, communications systems, assessment facilities, protective facilities and first aid and medical facilities. Each is briefly described as follows:

6.1 Emergency Response Facilities:

Locations have been designated to be used for evaluation and control of an emergency situation: the Control Room, the Survey Center, the Technical Support Center, Operational Support Center, Emergency Operations Facility, Engineering Support Center and the Joint Emergency News Center. Figure 6.1 shows the relationship of these Centers during an emergency.

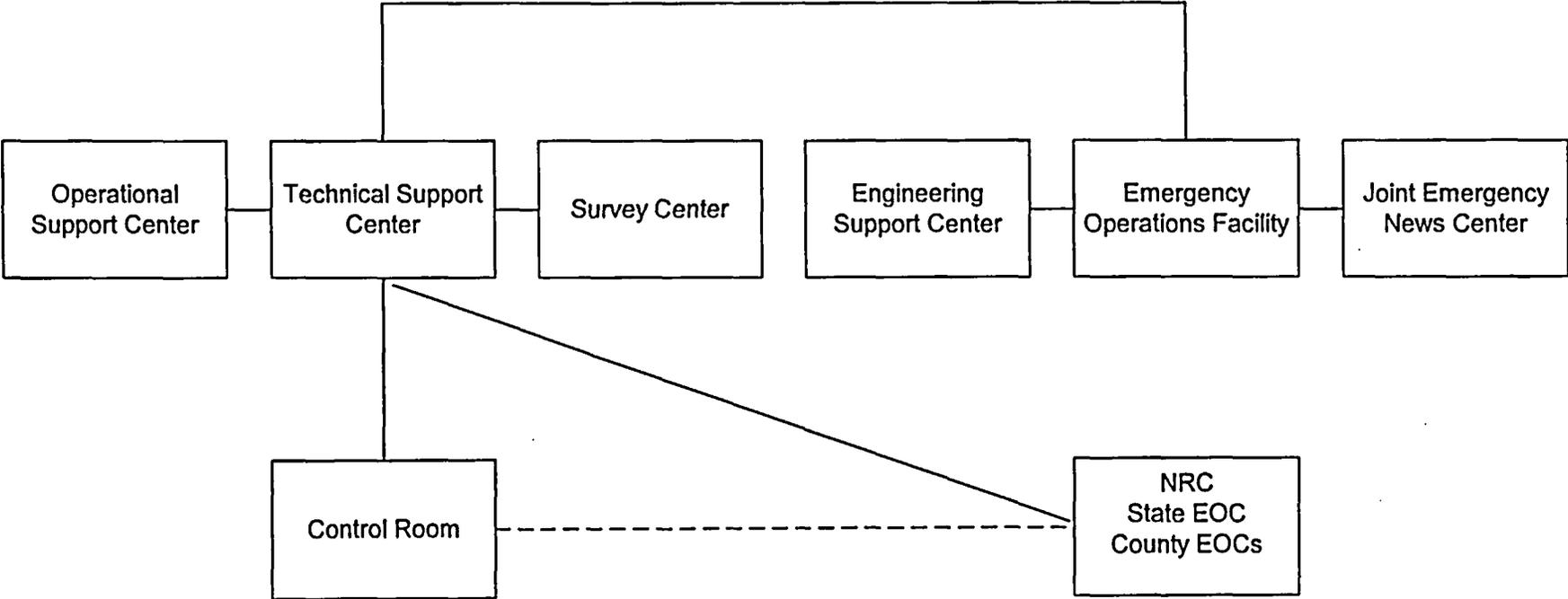
6.1.1 Control Room:

The Ginna Station Control Room is designed for continuous occupancy following the most limiting accident; therefore, control of plant systems will take place from this center, and on-shift crew activities relating to mitigating the consequences of the accident will be initiated and coordinated by the on-duty Shift Manager in the Control Room. Equipment for radiation monitoring and protective clothing and respiratory equipment is kept in an emergency cabinet.

6.1.2 Survey Center (SC):

The basement of the Ginna Training Center West will be used as a dispatching center for survey teams. Their equipment will be stored in lockers so that availability of equipment is assured. All field monitoring data will be reported through a communicator to the TSC or EOF Dose Assessment Manager as appropriate. The Dose Assessment Manager will evaluate the data and make protective action recommendations, if needed.

FIGURE 6.1 GINNA STATION EMERGENCY CENTERS INTERFACES



6.1.3 Alternate Survey Team Staging Area:

An alternate Survey Team Staging Area will be designated by the Emergency Coordinator if the Survey Center is not habitable because of high radiation levels or airborne contamination levels. Alternate Survey Team Staging Areas may include the offsite warehouse or other offsite facilities.

6.1.4 Technical Support Center (TSC):

An area at the east end of Ginna Station Turbine Building has been constructed for use as the TSC. It is equipped for direct communication with the Control Room, Survey Center, Operational Support Center and the Emergency Operations Facility. The TSC also has direct phone lines to the NRC, New York State, Monroe and Wayne Counties, as well as radios and normal phones. A terminal to the plant process computer data link is installed in the Center for obtaining plant operational data. Piping and equipment drawings are also available. A radiation monitor is mounted in the Technical Support Center. The Center has filtered air supply and is shielded to meet the same habitability requirements as the Control Room. A continuous air monitor is installed to indicate the activity of airborne iodine, noble gas and particulate. This Center meets the criteria of NUREG-0696 and is within 2 minutes walking time of the Control Room. Protective clothing and breathing apparatus are available, if needed.

6.1.5 Operational Support Center (OSC):

An area within the TSC has been designated as the OSC. Personnel who are capable of providing support to the operational needs of the plant will be assigned to this area in case of an emergency. Telephones and the plant GAI-tronics page are available.

Personnel designated by the implementing procedures will report to the OSC, either directly if already onsite or through the Survey Center if called in from off-hours.

The OSC is staffed by the Maintenance Planners. The planners will prepare work packages for the craft personnel. The craft personnel are staged in the OSC Satellite. The OSC Satellite is located in the basement of the Service Building near the maintenance shops.

The overall management of the OSC and OSC Satellite is provided by the TSC Maintenance Assessment Manager. The TSC Maintenance Assessment Manager is located near, and works directly with, the TSC Operations Assessment Manager and the TSC Technical Assessment Manager to determine equipment needs vital to safe plant operation. The TSC Maintenance Assessment Manager receives input on equipment problems and priority of operational concern from the Control Room via the TSC Operations Assessment Manager. The TSC Operations Assessment Manager, TSC Maintenance Assessment Manager and TSC Technical Assessment Manager receive information via wireless headsets with the Control Room staff. The TSC Maintenance Assessment Manager provides direct input to the OSC and the OSC Satellite via the OSC Satellite Manager.

The OSC is within the protected envelope of the TSC. The OSC falls under the same habitability requirements of the TSC. The OSC Satellite is not a "hardened" facility and, therefore, does not have any protection from airborne radioactivity. The procedure for activation of the OSC Satellite has provisions that, if the ambient radiation levels or airborne radioactivity levels become too high, the OSC Satellite should be relocated to the TSC.

The OSC and OSC Satellite are directed by the TSC Maintenance Assessment Manager. The TSC Maintenance Assessment Manager is on a wireless headset link with the TSC Operations Assessment Manager and the Control Room. The TSC Maintenance Assessment Manager is located in the TSC near the Operations Assessment Manager. This allows the maintenance organization to get input on maintenance priorities from the Operations Assessment and Technical Assessment Manager. The TSC Maintenance Assessment Manager has a dedicated telephone in the TSC. The OSC Satellite Manager and each discipline planner have a dedicated telephone extension.

Supplies in the OSC include respiratory protection equipment, protective clothing, portable lighting and portable radios. Potassium iodide tablets and self-reading pocket dosimeters are also included in the OSC locker. Radiation monitoring equipment for surveys of the OSC or for use out on a job is available in the TSC or in the Radiation Protection office. Emergency equipment necessary to repair, control or mitigate the consequences of an accident is available in shops and in the stockroom within the plant.

The OSC Satellite has equipment stored in a locker that is used by Maintenance shop personnel during an emergency.

6.1.6 Emergency Operations Facility (EOF):

The Emergency Operations Facility (EOF) for the Ginna Nuclear Power Plant is located at 1255 Research Forest, Macedon, NY. The EOF shares the structure with the Joint emergency News Center (JENC). The building is a single story structure of 19,000 square feet situated on a 7.23 acre land parcel with parking space for 200+ vehicles. The structure was erected in early 2005 and was built in accordance with the Town of Macedon and the State of New York building codes.

Approximately 7,500 square feet is designated and kept in readiness to operate as an EOF. An additional 4,00 square feet is utilized for training space but can be activated for use during a nuclear event. It will accommodate the numbers of people anticipated and provides facilities for these people. During an emergency, the entire building will be secured for exclusive use by emergency personnel. Offices are provided for Constellation personnel, NRC Federal State and Local Government officials. In addition, sufficient area for Ginna emergency personnel and support groups, such as vendors and consultants, is available in the building. Facilities and briefing areas are provided for the Constellation Communications personnel, news media and general public. Figure 6.2 depicts the layout of the building and identifies the EOF, JENC, NRC and media presentation areas. Facilities are provided for the news media and the Company emergency communications personnel in the front portion of the building.

Ample telephone and data communications are provided for the emergency personnel and news media. Emergency personnel are provided with communications redundancy: digital and Centrex lines are provided through multiple vendors; and dedicated lines to Baltimore (MD), Albany (NY), Lyons (NY), Rochester (NY), Henrietta (NY), Ginna Station and the NRC are available. A Satellite Phone System is also provided. The Data/Computer systems has its own network server and is supported on T1 lines back to Ginna and Constellation in Baltimore, MD. Two-way radio communications are installed for use by radiological survey teams. Cable TV service is provided by the local cable provider.

To aid in emergency assessment, pertinent information (such as engineering drawings, UFSAR, Technical Specifications, etc.) are stored at the facility and available via computer.

A terminal to the plant process computer data link is installed in the facility for obtaining plant operational data. As the emergency is evaluated, accurate and up-to-date information of the situation is relayed to appropriate governmental agencies and the public through this center.

Communications equipment and radiation monitoring equipment for use by field teams from the EOF is maintained and readily available to them.

6.1.7 Engineering Support Center (ESC):

The Engineering Support Center (ESC) is located onsite at Ginna Station in the basement of the R. E. Smith Engineering building. During normal operations, this area is designated as the Engineering Resource Center (ERC) and is located in the basement of the Engineering building. During an emergency, the ERC will be transformed into the ESC.

All facilities required for the engineering functions necessary to support the Ginna plant, (i.e. reproduction, word processing, drawings, plant technical specifications, UFSAR, Ginna procedures, computer terminals, data displays, communications, etc.) are located either on this floor or in the building.

Radiation monitoring equipment is maintained in the ESC to monitor ESC personnel exposure. If the ESC must be evacuated, ESC personnel will relocate to the TSC, Survey Center or EOF dependent upon the event and the urgency of engineering analysis. ESC operations are detailed in procedure EPIP 3-2, "Engineering Support Center Activation".

6.1.8 Joint Emergency News Center (JENC):

The Joint Emergency News Center (JENC) for the Ginna Nuclear Power Plant is located at 1255 Research Forest, Macedon, NY. The JENC shares the structure with the Emergency Operations Facility (EOF). The building is a single story structure of 19,000 square feet situated on a 7.23 acre land parcel with parking space for 200+ vehicles. The structure was erected in early 2005 and was built in accordance with the Town of Macedon and the State of New York building codes.

Figure 6.2 depicts a layout of the building as it will be used for a Joint Emergency News Center. The auditorium will be used for press conferences during the emergency. When not used for press conferences, it is normally used as a conference room. The auditorium is 3,500 square feet and has a 100 seat capacity. The media work area adjacent to the auditorium will be used for phone communications by the news media. Sixteen phones are available for use by the news media.

Basic information regarding the status of the Ginna Nuclear Power Plant will come from the EOF/Recovery Manager. After review by Company technical personnel, news releases will be issued from the Joint Emergency News Center. A telephone center for response to the general public will be established and the Offsite Agency Liaison in the EOF will be in contact with elected officials. See EPIP 4-7 for details.

6.1.9 Habitability:

The offsite facilities are located approximately 12 miles south of the Ginna plant. Since their location is not in the direction of the prevailing wind patterns and considering the relative distance from the plant, radiation protection equipment is not a consideration. Building heat at Research Forest is provided by natural gas fired, forced air, furnaces. Cooling is provided with electric split units. The building's electric supply is 480 volt three phase, 600 amp service. Both the gas and electric mains are underground. A secondary electric source is supplied by natural gas fueled generator, which provided 50 KV at 480/208/120 voltages. The building is also supported with a UPS/battery system and provides 208/120 volt service for approximately 30 minutes. This is to allow for a delayed start of the generator. Lavatory facilities are available and can accommodate the emergency personnel anticipated.

6.1.10 Near Site Mustering Facility

The EOF/JENC located at Research Forest has been designated as the near-site mustering facility. It is approximately 12 miles from the site. Extensive communications infrastructures exist to communicate with the site. The use of this facility as a near-site mustering facility allows for the best coordination of site resources. Ginna site responders may be initially directed to this facility if the Shift Manager determines that it is hazardous to respond to the site. This facility is used as a mustering location until the decision is made to proceed to the site.

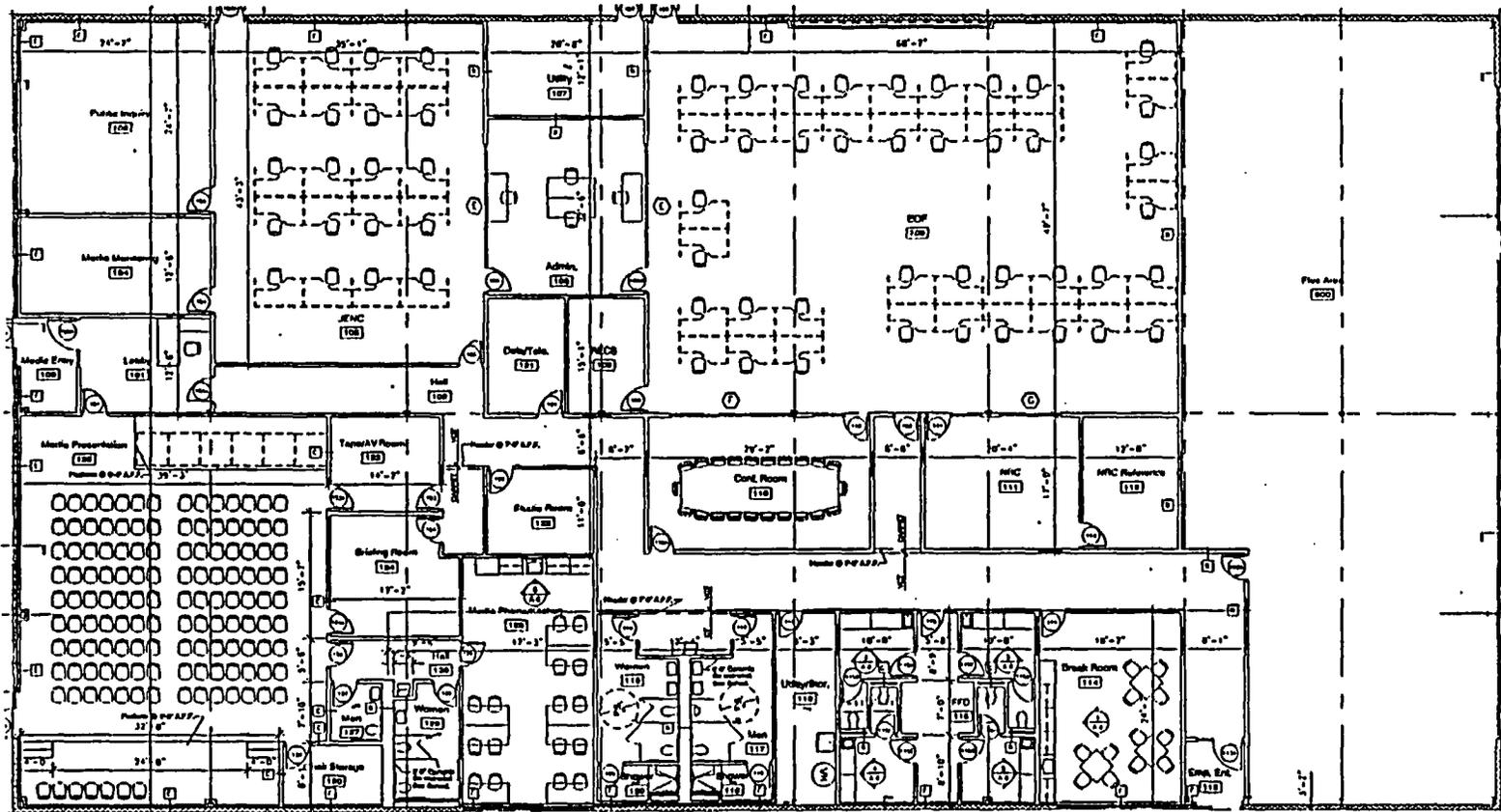


FIGURE 6.2 EMERGENCY OPERATIONS FACILITY / JOINT EMERGENCY NEWS CENTER FLOOR PLAN

6.2 Communications Systems: (Ginna Station)

A broad range of communication equipment is available at Ginna Station. Several systems are installed for communication between Ginna Emergency Facilities and for communication with outside agencies. Equipment is periodically verified operable by plant procedure. The use of particular types is specified in the appropriate implementing procedures as first choice and backup systems. All services other than radio are underground between centers. Communication systems are tested periodically.

6.2.1 Evacuation Warning:

A special warbling tone on the GAI-tronics page system is sounded from the Control Room to warn personnel of a site evacuation. Warning is immediate to all persons on site as directed by the Emergency Plan Implementing Procedures (EPIPs). High noise areas have, in addition to the Public Address system, red warning lights with signs to direct personnel to evacuate. Special announcements on the page and special tones are used for other emergencies.

6.2.2 Phone Systems:

Communications between the Control Room, Technical Support Center, Survey Center and other operations centers can be established using either telephone, radio or plant PA System. Communication systems are tested periodically according to the schedule in the implementing procedure.

The telephone system at Ginna affords a great deal of flexibility and capacity. Calls can be received or made to either the Frontier telephone system or the local Verizon telephone system. The telephone system has its own power supply located onsite which could maintain house phones independent of offsite lines. There are Ontario direct lines powered by the Verizon telephone system. The Technical Support Center and Emergency Operations facility also contain satellite telephones for redundant communications in the event of phone system problems.

In case of an emergency, personnel not at the plant can be summoned using either the on site phones or direct lines to the Verizon and Frontier systems. A contracted notification system is used to notify responders of an emergency at the site.

Offsite radiation survey teams are also provided with portable cellular telephones as back-ups for their portable radios.

6.2.3 Radio Systems:

There are three frequencies available for use at Ginna Station. They are assigned to the Fire Brigade, Security, and Radiation Monitoring. The base stations and antennae are located for maximum transmission coverage of the areas of use. The security channel is monitored at Central Security and at the Guardhouse. The Radiation Monitoring and Fire Brigade channels have operator capability at the Survey Center, Technical Support Center and at the Emergency Operations Facility. Portable radios are available for use by survey teams in the field.

The Ginna Control Room also has a receiving and broadcasting station on a frequency which is monitored offsite by the Transmission Operator at the RG&E Energy Control Center. This channel is available for indirect communication to the State Police, Monroe and Wayne County Sheriffs and Monroe or Wayne County EOC's.

Portable low power hand radio sets are located in the Technical Support Center to be distributed in the event of an emergency for backup or mobile communication. Portable hand radio sets are also located in the Survey Center for use by the survey teams. Offsite survey teams can communicate with the Survey Center, Technical Support Center or EOF.

6.2.4 Offsite Communications:

Extensive phone communications capability exists at the EOF at the Research Forest building. There are presently 400 telephone lines from the Research Forest facility to the local telephone exchanges. Each one of these lines can have several handsets at different locations sharing a common circuit. The Research Forest system is powered by an AC power supply which is backed up with a generator and battery un-interruptible power supply. A satellite telephone is stored in the TSC. This phone can be used if the commercial telephone system is inoperable or if there are transmission or grid problems that affect the offsite phone system. Additional circuits to the Ginna plant are provided by five outgoing and five incoming lines provided by the Verizon system.

A 25 line Centrex system to the EOF and Joint Emergency News Center is totally separate from the Verizon system. A direct line is connected between EOF Dose Assessment and TSC Dose Assessment and between the TSC Director and the EOF/Recovery Manager. Also, four satellite telephones have been installed at Research Forest.

A radio communications system provides the backup to the Ginna phone system. Three other frequencies are available in the Control Room and Technical Support Center for the use of Fire Brigades, Radiation Survey Teams, and Plant Security. The use of these channels is explained in Section 6.2.3.

The EOF has access to all channels except security and provides monitoring of the Radiation Survey Teams during an incident.

Direct contact between the EOF and the TSC or Control Room is possible on the 153.50 MHz channel in case of telephone failure.

The New York State Radiological Emergency Communications System (RECS) has drops at 9 locations across the State connecting the Ginna plant, TSC, EOF, Wayne County, Monroe County and New York State Emergency Preparedness Centers.

There is also a network of facsimile machines connecting key areas as well as telephone paging units for key staff position persons.

6.2.5 Offsite Notification:

Notification to State and county emergency response organizations is available 24 hours per day. The State Warning Point is staffed 24 hours by the New York State Emergency Management Office. Monroe County Office of Emergency Preparedness and Wayne County Office of Emergency Management answer the RECS line during the workday. During non-business hours, weekends and holidays, the RECs line is covered for Wayne and Monroe Counties at their 911 Centers. At Ginna Station, there are always Control Room personnel to originate calls. New York State has responsibility for communications to other counties which may fall within the ingestion pathway exposure zone. Any contacts with Canada or Ontario Province would also be through the State agencies.

To contact appropriate offsite agencies, the telephones would normally be used as previously noted in Section 6.2.2, with direct lines or the commercial telephone system.

To contact appropriate offsite agencies, the telephones would normally be used as previously noted in Section 6.2.2, with direct lines or the commercial telephone system. If necessary, offsite agencies can be contacted using satellite phones.

Communications with Federal emergency response organizations consists of telephone contact to the Department of Energy, Brookhaven Radiological Assistance Program. This call would be made by the Emergency Coordinator or EOF/Recovery Manager per our letter of agreement with Brookhaven. Their assistance may also be requested by the State or counties.

The NRC Emergency Telecommunications System (ETS) consists of the NRC Emergency Notification System (ENS) "red phones". They are installed in the Control Room, the EOF and the Technical Support Center (including the NRC office). NRC Health Physics Network phones are also available in the Technical Support Center and EOF. There are additional ETS telephones in the EOF and TSC.

6.3 Assessment Facilities:

Facilities are provided for the assessment of post-accident radiological conditions in order to determine the appropriate emergency measures. They consist of onsite monitoring systems, laboratory facilities and environmental radiological monitoring and sampling equipment.

6.3.1 Safety Assessment System and Plant Process Computer System (SAS/PPCS):

The PPCS computer system at Ginna Station provides historical and real time plant information via displays and hard copy devices that are located in the Ginna Control Room, the Technical Support Center, the Emergency Operation Facility and the Engineering Support Center.

PPCS display and report information is accessed via an alpha-numeric keyboard or icons that supports menu driven functions. PPCS provides the logging and archival capability.

Both computer systems are designed to assist Control Room operators and emergency response personnel in the decision-making process during normal and abnormal plant conditions.

6.3.2 Process Radiation Monitoring System:

The process radiation monitoring system provides indications and alarms which permit assessment of in-plant conditions, as well as providing certain automatic actuations. The general functions of these systems are as follows:

- a) To indicate primary system leakage and fuel rod failures.
- b) To indicate radioactivity levels in selected process systems.
- c) To indicate radioactivity released through vents or drains.
- d) To provide visible and audible alarms in the Control Room when a significant increase in radiation occurs in systems or areas.
- e) To alarm in the Control Room on monitoring equipment failure.
- f) To shut down a purge or a release if radioactivity reaches the alarm set points and thereby avoid exceeding the release limits.

6.3.3 Effluent Monitors:

Effluent monitors available at Ginna are listed in Tables 6.3A and 6.3B. Of these monitors, particular importance is placed upon the plant vent monitors and liquid release monitor; the former because, as described in Section 3.0, Emergency Conditions, in combination with other monitors, it indicates the need for site evacuation and protective actions for the public; the latter because it indicates the need for protective measures with regard to the use of lake water.

Alarm setpoints are based upon the maximum allowable environmental radioactivity concentration and dose which might result from a release and set at a fraction of those values. Monitor calibration factors, correlating monitor readings and vent concentrations can be used to estimate the release rate. From vent concentrations, the offsite dose or concentration levels can be calculated. Table 6.3A summarizes these monitors and alarm functions.

Several approaches are available to supplement effluent monitor readings for the assessment of release rates and projected doses.

High range monitors have been established for the estimation of noble gas release from the plant ventilation exhaust point in the event that normal range effluent monitors are off scale or inoperable. Periodic grab samples of effluent release paths would also be used to quantify and further refine estimated releases from the plant. Table 6.3B summarizes the SPING 4 high range monitoring system.

If no release data is available, a method for assessment of release rates is used in conjunction with the X/Q table values or map overlays and offsite concentrations. The release rate of radioactive material from the plant can be calculated from the measured airborne concentration at a given downwind sample location and the X/Q value for that location. The airborne concentration is multiplied by the X/Q value and divided by the wind speed to obtain an estimated release rate from the plant.

Appendix C, Table C-1 of this plan contains a table of resultant doses and quantities released from selected potential accidents. These doses and releases are based upon 10% of the values used as part of the plant safety evaluation.

"Manual of Protection Action Guides and Protective Actions for Nuclear Incidents" (EPA 400-R-92-001), NUREG-0133 (October, 78) and Regulatory Guide 1.109 Rev. 1 (Oct. 7) provide the methodology for relating radiological measurements in various environmental media or effluent monitor readings to offsite dose or dose rates. Meteorological conditions can be factored into these calculations.

A procedure for manually estimating offsite doses for areas around the plant is available in the Control Room, TSC and EOF. Based upon these results, protective actions can be recommended. A computer program operating on a microcomputer is also available in the TSC and EOF. This system mimics the overlay method of calculating downwind dose rates and airborne contamination levels.

A more sophisticated computer program, which uses the methods used for environmental dose calculations required by Federal regulations, is also available to assess doses during and after an emergency. Additional information on the radiological consequences of a variety of accidents can be found in Chapter 15 of the Ginna Updated Final Safety Analysis Report.

External dose or dose rates from surface contamination or airborne radioactivity are determined by direct field measurements (TLD or survey meter.) Internal dose commitments from key isotopes via water or airborne pathways would be evaluated using the uptake rates, dose conversion factors, and other pathway parameters given in EPA 400, NUREG-0133 and Regulatory Guide 1.109. Computer software is available through consultants using these dose calculation models so as to determine the radiological dose assessment. In this manner, rapid determination of dose estimates from multiple pathways may be made for comparison with protective action guides.

EFFLUENT RADIATION MONITORING

TABLE 6.3A

RADIATION MONITORS	LOCATION	METER READOUT	DETECTOR RANGE	PURPOSE
R-10A Containment Iodine	Top Floor Cold Side Intermediate Building	Control Room and Plant Computer	0.1 - 10 ⁷ cpm	Indicates the concentration of radioiodine in the containment atmosphere or containment vent air.
R-10B Plant Vent Iodine	"	"	"	Indicates the concentration of radioiodine in the plant vent air.
R-11 Containment Particulate	"	"	"	Normally measures short-lived particulate daughters of noble gasses in the containment atmosphere or containment vent air.
R-12 Containment Gas	"	"	"	Measures the noble gas concentration in which xenon 133 is the major isotope present in the containment atmosphere or containment vent air.
R-13 Plant Vent Particulate	"	"	"	Plant vent particulate monitor normally measures short-lived particulate daughters of noble gas.
R-14 Plant Vent Gas	"	"	"	Plant vent noble gas monitor normally measures low concentrations of xenon 133 from reactor coolant leaks in the auxiliary building.
R-15 Air Ejector	Turbine Building Top Floor, NW	"	"	Measures condenser off gas and is usually the first sensor of primary to secondary leakage.
R-16 Containment Fan Cooling Water	Turbine Building Basement Southwest corner	"	"	Monitors the service water from the containment fan coolers.
R-17 Component Cooling Water	Top floor Auxiliary Building	"	"	Used to detect leakage of primary coolant into component cooling water.
R-18 Liquid Waste Disposal	Auxiliary Building top floor west end	"	"	Monitors liquid released for unexpected activity activity levels. An alarm will isolate the release.

EFFLUENT RADIATION MONITORING

TABLE 6.3A (continued)

RADIATION MONITORS	LOCATION	METER READOUT	DETECTOR RANGE	PURPOSE
R-19 S/G Blowdown	Intermediate Bldg South side Intermediate floor	Control Room & Plant Computer	0.1 - 10 ⁷ cpm	Monitors Steam Generator blowdown water for primary to secondary leakage. High activity will isolate the S/G blowdowns.
R-20A Spent Fuel Pool Heat Exchanger 1A Cooling Water	Auxiliary Building Intermediate floor West end	"	"	Monitors for leakage from the spent fuel pool into the service water as the result of heat exchanger tube leaks
R-20B Spent Fuel Pool Heat Exchanger 1B Cooling Water	Auxiliary Building top floor	"	"	Monitors for leakage from the spent fuel pool into the service water as the result of heat exchanger tube leaks
R-21 Retention Tank	Service Bldg Basement Recirculation Line	"	"	Monitors retention tank water which is collected from normally clean areas of the plant. An alarm will isolate the release
R-22 High Conductivity Waste Tank	AVT Room		10 ¹ - 10 ⁶	Monitors condensate polisher regeneration waste water activity. An alarm will isolate the normal discharge

TABLE 6.3B

SPING 4 RADIATION MONITORING SYSTEM

Unit #01 Containment Vent Sampler, Unit #02 Plant Vent Sampler

CHANNEL	RANGE
#01 Beta Particulate	10^{-6} to 10^0 μ Ci on the filter
#02 Alpha Particulate	Radon/thoron detector to correct beta particulate levels
#03 Iodine	10^5 to 10 μ Ci on the filter
#04 Iodine Adjacent Window	Note: This channel provides background compensation for channel #03
#05 Noble Gas Low Range	10^{-8} to 10^{-2} μ Ci/cc equivalent Xe-133
#06 Area Monitor	10^{-3} to 10^3 mR/hr. Monitors area radiation levels at the unit
#07 Noble Gas Middle Range	10^{-5} to 101 μ Ci/cc equivalent Xe-133
#08 Gamma Background	Note: This channel provides background compensation for channels #05, #07 and #09.
#09 Noble Gas High Range	10^{-3} to 10^3 μ Ci/cc equivalent Xe-133

Note: Units 1 and 2 can be read on the PPCS or locally on the 296' level of the north side of the intermediate building. The readout of SPING data is also available on the SS-1 unit in the TSC.

TABLE 6.3B (Continued)

SPING 4 RADIATION MONITORING SYSTEM

Unit #03 Air Ejector Monitor

NOTE: Channel 1-4 exist in the unit but are not used. Unit #03 can be read on the PPCS or the top floor of the turbine building (northeast wall).

CHANNEL	RANGE
#05 Noble Gas Low Range	10^{-8} to 10^{-2} $\mu\text{Ci/cc}$ equivalent Xe-13
#06 Area Monitor	0.001 to 1000 mR/hr. Monitors area radiation levels at the unit
#07 Noble Gas Middle Range	10^{-5} to 10^1 $\mu\text{Ci/cc}$ equivalent Xe-133
#08 Gamma Background	Note: This channel is used only for background compensation for channels #05, #07 and #09.
#09 Noble Gas High Range	10^{-3} to 10^3 $\mu\text{Ci/cc}$ equivalent Xe-133

Unit #04 Steam Line Monitors

NOTE: Unit #04 can be read on the PPCS, digital display in the control room or at the 296 foot level of the intermediate building north.

CHANNEL	RANGE
#01 "A" Steam Line Monitor	10^{-2} to 10^{+4} mR/hr
#02 "B" Steam Line Monitor	10^{-2} to 10^{+4} mR/hr

TABLE 6.3C
AREA MONITORS

RADIATION MONITORS	LOCATION	METER READOUT	DETECTOR RANGE	POSSIBLE MEANINGS OF ALARMS OR UPWARD TRENDING OF MONITORS
R-1 Control Room Monitor	Control Room	Control Room and PPCS	0.1 to 10 ⁷ mR/hr	Possible radiation level in the Control Room. Possible Control Room inaccessibility
R-2 Containment	By Personnel Hatch	"	"	Rising radiation levels in Containment
R-7 Incore Detector Area	Intermediate Floor Containment	"	"	Indicates flux mapping in progress or possible rising radiation levels in containment
R-9 Letdown Line Monitor	Auxiliary Building, Basement Floor, NaOH Tank Room	"	"	Increasing radiation levels in the reactor coolant system
R-29 High Range Containment Monitor	Containment, Operating Floor, Northwest	"	1 to 10 ⁷ R/hr	Primary coolant leak inside containment
R-30 High Range Containment Monitor	Containment, Operating Floor, Northeast	"	1 to 10 ⁷ R/hr	Primary coolant leak inside containment

6.3.4 Area Radiation Monitoring System:

The plant area radiation monitoring system provides indications and alarms which assist in assessment of plant conditions. Its general functions are as follows:

- a) To indicate the general radiation level in specified areas of the plant.
- b) To provide visible and audible alarms at both the Control Room and the remote meter location when a significant increase in radiation level occurs.
- c) To provide a visible alarm in the Control Room on meter or detector failure.

As described in Section 3.0, Emergency Conditions, this system is used to initiate local radiation emergency protective action and, in combination with other systems, to indicate the need for a site evacuation and possible offsite protective measures. Table 6.3C lists the location of area monitors of major interest. Alarm set points can be found in Plant Procedure P-9.

High Range Radiation Monitors are installed within containment with readout in the Control Room. A procedure is available by which readings can be converted to an interpretation of the extent of fuel damage and/or radioactivity released to the containment atmosphere.

6.3.5 Source Range Nuclear Instrumentation:

The two source range channels are used at shutdown to provide an audible count rate signal and audible alarms both in the Control Room and Containment to call attention to unexpected increase in neutron flux. A high source range alarm in Containment is the signal to evacuate the area.

6.3.6 Continuous Air Monitors:

Several mobile radiation monitors are available within the controlled areas particularly for use during work where local detection of excessive airborne contamination is advisable. Various combinations of noble gases, iodine and particulate monitors are available. These are equipped with meter as well as audible and visible alarms.

6.3.7 Portable Monitors, Sampling Equipment and Other Special Equipment:

Portable monitors, sampling equipment and other special equipment for assessing the extent of the consequences of a radiation emergency are located in the Control Room, the Radiation Protection office, the Auxiliary Building and the Survey Center, including individual survey equipment boxes for each survey team. A summary of this equipment is given in Appendix D. Additional sampling and monitoring equipment is also available in the TSC and the EOF.

6.3.8 Process and Containment Monitors:

Numerous process variables are indicated and recorded in the Control Room to ensure safe and orderly operation of all systems and processes over the full operating range of the plant, as well as for detection of off-normal or emergency conditions. Of these monitors, particular importance is placed upon those which provide for detection of a loss of coolant accident and the immediate automatic actuation of equipment to mitigate its consequences. These include 4 channels for Pressurizer pressure, 3 channels for Pressurizer level, 4 channels for Steam Generator level, 4 channels for Reactor Coolant average temperature, 2 channels for steam flow and feedwater flow for each Steam Generator. Along with these are indications of Containment conditions which include 6 channels for Containment pressure, sump level and pump actuation, safety injection recirculation sump level indicator, 4 channels for fan cooler condensate level, and 6 channels for dew point temperature. Greater detail for the process and containment monitors is given in the UFSAR, Chapter 7, and in our letter dated January 31, 1984, from John E. Maier, RG&E, to Dennis Crutchfield, NRC.

Seismic and hydrologic emergencies are treated by Procedure ER-SC.4 and ER-SC.2 respectively. A seismic monitor (accelograph) is located in the intermediate building sub-basement and a lake level indication is available from the plant computers or the Screen House.

Information concerning seismic or hydrologic events can be obtained from offsite agencies such as the N.Y.S. geologist at the State Education Department or at Cornell University Geology Department.

6.3.9 Plant Laboratories:

The laboratory area of the plant is maintained for the purpose of monitoring the condition of a variety of fluid streams and stored fluids including: the activity and isotopic content; for assessing the degree of contamination of plant areas, movable items and personnel; and for storing, calibrating and maintaining portable and laboratory radiation measuring instruments. Separate laboratory services are contracted with Entergy Nuclear Northeast's Environmental Laboratory in Fulton, New York, for assessing the effect of the plant operation on the environs.

By the use of a Post-Accident Sampling System located in the controlled area of the Intermediate Building, samples can be drawn from reactor coolant, containment atmosphere, and containment sump. These samples are processed from a remote control board to open valves, collect the sample, and read out results of the analysis. Analysis for chlorides and radioactive isotopes can be completed on diluted, shielded grab samples in a laboratory facility within the times required by NRC NUREG-0737. Samples can be taken and analyzed without exceeding personnel doses of 5 Rem. This system will also be used for normal operational samples.

In addition to laboratory facilities within the plant, some capability is provided at the Survey Center for use in assessing the offsite effects of an incident. The resources of the Environmental Laboratory operated by Entergy Nuclear Northeast at Fulton, New York are also available as noted in a letter of agreement. The chemistry laboratories of the nuclear plants at the Oswego, New York, site are also available to supplement the Ginna onsite laboratory.

6.3.10 Meteorological Monitoring:

Data on meteorological conditions is available to the Control Room for use in assessing the consequences of an airborne release of radioactive matter. All meteorological measuring devices, with the exception of the precipitation measuring system, are mounted on a 250 ft. weather tower located at the Ginna plant site. Wind speed, wind direction and temperature are measured at the 33, 150, and 250 ft. levels. The 33 ft. wind speed and direction sensor readings are recorded on the Radiation Monitoring System Panel in the Ginna Control Room. Temperatures at three tower levels are also indicated in the Control Room by digital display. This information will be relayed to the NRC Operations Center and the New York State and County EOCs. Meteorological data is available continuously and is also programmed for print out at 15 minute averages, accessible from the TSC and EOF.

Rainfall is measured by a tipping bucket rain gauge located at the base of the Ginna weather tower. Wind direction, wind speed, and temperature indications from the three tower elevations are also registered on the Ginna Plant Process Computer System. Instrumentation and calibration procedures associated with the Ginna meteorological program are in conformance with Regulatory Guide 1.23.

The weather tower is equipped with redundant sensing devices for use as backup indicators of wind speed, direction, temperature and temperature difference. All meteorological data will be collected and computer processed to provide estimates of radioactive materials transport and diffusion under routine and accident conditions. Power for the meteorological measurements system and associated equipment is supplied by an electrical feed separate from the plant. Means for remote interrogation of the meteorological system by telephone link is available to the TSC and EOF via computer terminals at each location.

The Buffalo International Airport (National Weather Service) has meteorological instrumentation readings which can be accessed by private phone number on a 24 hour basis. A backup weather tower is located in close proximity south of the plant, and has a wind direction and speed recorder. Means for remote interrogation of the backup meteorological system is available at the TSC and EOF via computer terminal.

An implementing procedure describes the method by which onsite meteorological information is used for the estimation of offsite radiation doses. Based upon wind conditions and determined atmospheric stability, estimates of downwind radioactivity concentrations and doses can be made by the health physicist in the Dose Assessment areas using manual or computerized calculation methods.

6.3.11 Environs Radiological Monitoring:

Sampling systems are established for normal environmental sampling in the immediate area surrounding the plant and also in locations whose distance from the plant roughly corresponds to 1/100th of the onsite radioactivity concentrations estimated from annual average atmospheric dispersion. These stations contain provisions for air sampling and for radiation dose measurement. Certain stations include precipitation collectors. They provide information about the extent of a general emergency and its effect on the environment, in accordance with appropriate implementing procedure.

In addition, an array of thermoluminescent dosimeters (TLD's) is in place at the site boundary, at the offsite sampling stations (approximately 10 miles) and at the onsite sampling stations. Up to 25 additional TLD's have been placed at specified locations, which will add to the evaluation of doses throughout the Emergency Planning Zone. The placement of these TLD's around Ginna Station for routine or post-accident radiation assessment is given in an implementing procedure.

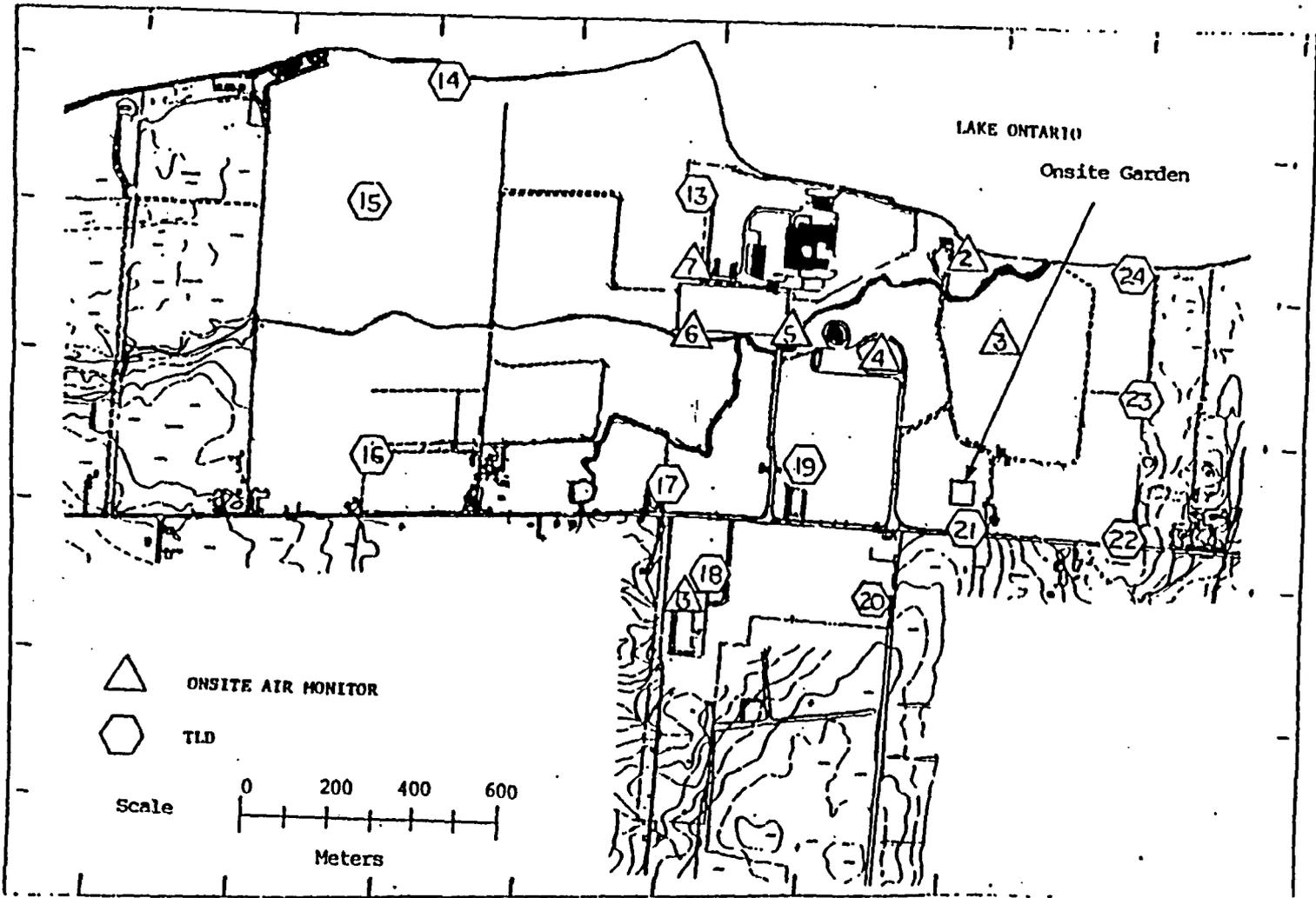
Maps are included in that procedure so as to locate the TLD's for best coverage (Figure 6.3). The radiological program provided meets the minimum requirements of the NRC Radiological Assessment Branch Technical Position for Environmental Radiological Monitoring.

Monitoring teams are quickly dispatched to follow designated routes for the field monitoring within the plume exposure zone. A Ginna Station procedure details the method used for the rapid field determination of airborne particulate and radioiodine concentrations following an accident in addition to radiation levels. The procedure consists of operating a portable air sampler which contains a silver zeolite cartridge and particulate filter, followed by direct filter measurement with a count rate meter probe. The minimum sensitivity for iodine by this method, based upon a 6 minute sampling time, is approximately $2.3 \text{ E-}8$ microcurie/cc.

It is recognized that under certain post-accident conditions, some unavoidable interference from noble gas or high background levels may affect the initial filter readings being taken in the field. The absorption of noble gases in the charcoal cartridge would lead to an overestimate of airborne radioiodine concentrations. Therefore, silver zeolite is used. If background levels are too high to determine a proper filter reading, an alternate location out of the radiation plume will be used to obtain filter measurements.

Air samples collected by survey teams from portable sampling devices and from fixed air monitoring systems may be evaluated using higher sensitivity methods with onsite or near-site analytical equipment (e.g., environmental laboratory).

FIGURE 6.3 TLD MAP



6.3.12 Emergency Instruments and Equipment:

Emergency equipment for the various centers is described in Appendix D. This equipment is checked monthly to be certain that it is available, in place and operable. Any instrument or equipment found to be in need of repair or calibration is immediately replaced from the Radiation Protection reserve supplies. Instruments are calibrated along with plant instruments by the Radiation Protection section according to RP procedures which meet the manufacturers' recommendations. Sufficient reserves of instruments and equipment to replace those that are removed from service for maintenance and/or calibration are available.

6.3.13 Public Alerting System:

An alerting system to make the public aware of an incident at Ginna Station which may require protective action on their part has been developed and installed. The Ginna prompt public notification system consists of 96 sirens supplemented by more than 40 tone alert radios at schools, nursing homes and industrial establishments. The special supplemental needs of transient populations at locations such as motels, parks and work camps will be addressed, as necessary, within the individual county plans. Instructions for transient populations have been distributed to such locations.

The design objective for this system is to complete the initial alerting of the affected population within the Plume Exposure Pathway within 15 minutes after the notification of State and local governments by the Nuclear Facility Operator. The system was designed to assure coverage of essentially 100% of the population within the 10 mile Emergency Planning Zone.

The control of the system rests with the county officials within their respective borders. In Monroe County, the County Executive has this authority and, in Wayne County, it is the Chairman of the Board of Supervisors. Sirens and tone alerts are activated by a radio signal and a digital encoding system is employed to insure a secure, reliable control. The sirens activate for 3 to 5 minutes.

A backup activation point is available in each county for activating the alert system should the primary transmitter fail. The siren portion of the alert system is designed to produce a minimum 10dB(c) above ambient sound levels in all portions of the Emergency Planning Zone or a sound level of at least 60 dB for population areas with <2,000 persons/mile or 70dB for population areas with >2,000 persons/mile.

The Technical Support Center (TSC) has an activation point that can be used as a back-up for both Monroe and Wayne Counties.

The objectives of the Ginna prompt public notification system are twofold: to notify the general public both indoors and outdoors of the existence of an emergency situation and to provide for the communication of preliminary emergency information.

In conjunction with the alert system, the public will be kept informed of the procedures they should follow if the system is activated, through activation of the Emergency Alert System (EAS).

Sample messages to be given over the EAS radio are part of the county procedures. A calendar that is distributed annually provides information regarding the system and appropriate actions to be taken.

Siren reliability will be tested periodically at 3 levels of operation:

1. Bi-weekly silent tests to verify system electronic components are functioning.

2. Quarterly manually activated growl tests
3. Annual full duration audible tests of the entire system.

Periodic surveys will be taken by the Federal Emergency Management Agency to determine any difficulties which may require corrective measures.

Alert system operational reliability is expected to be greater than 95%. Sirens are powered off the RG&E distribution system which has better than 99% availability. It is fed from the New York State Power Pool grid; therefore, it is not dependent on the operation of Ginna. The Company has the responsibility for maintaining the siren alert system operable. The location of sirens and tone alert radios is given in Appendix I.

A siren verification system is installed providing remote feedback capability to both counties and Ginna from all 96 siren units. The system is used to verify proper siren activation and to verify whether inadvertent siren activations have occurred.

When appropriate, growl testing of the sirens will be conducted following preventive or corrective maintenance. Depending on the scope of the maintenance, the work order will determine if growl testing is appropriate.

6.3.14 Fire Protection Facilities:

The fire protection facilities comprise of a number of automatic and non-automatic protection systems as well as assessment and alerting equipment.

Fire protection facilities have been installed in accordance with NRC Fire Protection Safety Evaluations. Detection is provided in all areas of the plant that contain vital equipment. The system initiates suppression systems and alarms in the Control Room.

6.4 Protective Facilities:

Aspects of the plant which are provided to serve a protective function to personnel onsite in the event of an emergency are described in this section. They include accident shielding, protective ventilation, emergency condition signaling equipment, re-assembly locations, containment control provisions, and other protective equipment and supplies. First aid and medical facilities are treated separately in Section 6.5.

6.4.1 Accident Shield:

The containment vessel consists of the 3 ft. - 6 in. thick reinforced concrete cylinder capped by a hemispherical reinforced concrete dome of a 2 ft. - 6 in. thickness. The shielding includes supplemental shields in front of the containment personnel hatch and 20 in. walls, east and south sides and the roof of the Control Room. The equipment access hatch is shielded by a 3-ft. thick concrete shadow shield and a 1-ft. concrete roof to reduce scattered dose levels. Concrete walls and ceiling of the Technical Support Center provide shielding.

6.4.2 Protective Ventilation:

During normal operation, fresh makeup air is admitted to the Control Room ventilation system through an intake louvre located in the Turbine Building outside wall. The amount of makeup air varies between 0 and 25 percent of the unit flow rate, depending on outside air temperature. Pneumatically operated dampers can be positioned from the Control Room to isolate the fresh air intake and to place a separate charcoal filter unit in recirculation service.

The charcoal filter unit includes both high efficiency particulate air (HEPA) and charcoal filters for removing radioactive particulate and gaseous iodine from the Control Room atmosphere. Its capacity is approximately 25 percent of the system flow rate, and the unit is installed in a normally isolated bypass circuit. In the event of high radiation levels, chlorine or toxic gas in the Control Room, the Control Room radiation monitor will automatically close the redundant dampers in the fresh air intake duct and the dampers in the return air duct to the Turbine Building, and will open the damper in the charcoal filter unit inlet duct. This signal will also start a separate fan to provide flow through the charcoal filter unit.

Until radioactivity in the Control Room atmosphere is reduced to a safe level, system flow will be in a closed cycle from the Control Room, with approximately 25 percent bypass flow through the charcoal filter unit, through the air conditioning unit and back to the Control Room.

The dampers can also be positioned to permit fresh air makeup to the system through the charcoal filter unit. Since all Control Room penetrations including doors are designed to high standards of leak tightness and the Control Room is maintained at essentially atmospheric pressure, the infiltration of contaminated air into the Control Room is limited to a very low rate. With the charcoal filter unit in service, airborne particulate activity can be cleaned up at an effective rate of approximately 3 filtered air changes per hour. In addition, Control Room personnel have access to portable respiratory equipment.

The Control Room contains sufficient air to permit safe occupancy by the operating staff for as long as necessary before outside air makeup is required for breathing.

The Technical Support Center has filtered fresh air makeup, with charcoal filtration, to meet habitability requirements for unlimited occupancy.

6.4.3 Alerting Equipment:

Plant personnel are signaled to evacuate at once by a special tone, activated manually in the Control Room. In areas where audible signals may not be heard, special flashing lights have been installed. For fire and medical emergencies, an explicit announcement is made over the PA system.

6.4.4 Reassembly Locations:

Several reassembly locations have been established, the selection of which will depend on the conditions of the emergency. Non-operating personnel affected by a local radiation emergency are to report to the Decontamination Area.

In the event of a site evacuation, all Control Room operators are to report to the Control Room, the protective features of which are described above. Non-operating personnel are to reassemble at the Ginna Training Center, except for those having a role in the Technical Support Center, Operational Support Center, Engineering Support Center or the Survey Center described in Section 6.1. The Training Center auditorium, roughly 600 ft. from the reactor, seats 150 people; there is additional room in the classrooms and offices. A local radiation monitor is installed on the Training Center which houses the Survey Center to aid in the evaluation of the necessity for emergency organization personnel to relocate.

6.4.5 Contamination Control Provisions:

The plant site is divided into two categories, the "Clean Area" and the Radiologically Controlled Area. Entry to and exit from the Radiologically Controlled Area is normally through the designated Access Control Point. Any area in which radioactive materials and radiation are present shall be surveyed, classified, roped and conspicuously posted with the appropriate radiation caution sign. These then become Radiologically Controlled Areas and proper access is provided and controlled. Plant procedures provide the radiation or contamination levels at which an area is declared a Radiologically Controlled Area or removed from radiation control status.

The general arrangement of the service facilities is designed to provide adequate personnel decontamination and change areas. The clean locker room is used to store items of personal clothing not required or allowed in the Controlled Area.

The Hot Shop is employed as a protective clothing change area. A supply of clean protective clothing for personnel is maintained in this area, and there is provision for collection of used protective clothing.

All personnel will survey themselves on leaving the Controlled Area using equipment provided at the Access Control Point.

Personnel decontamination kits with instructions posted for their use are available in the dispensary described in Section 6.5, First Aid and Medical Facilities.

In the event of a site evacuation, provisions for decontamination are available at the Survey Center.

A 1000-gallon holding tank is available to contain decontamination water from a sink and shower located in the Survey Center. Decontamination water will be sampled prior to transfer, treatment or disposal.

6.4.6 Protective Equipment and Supplies:

Personnel entering the Controlled Area may be required to wear protective clothing. The nature of the work to be done governs the selection of protective clothing to be worn by individuals. The protective apparel available are shoe covers, head covers, gloves and coveralls. Additional items of specialized apparel such as plastic suits, face shields, and respirators are available for operations involving high levels of contamination. In all cases, Radiation Protection personnel shall evaluate the radiological conditions and specify the required items of protective clothing to be worn.

Respiratory protective devices are required wherever an airborne radiation area exists or is expected. In such cases, Radiation Protection personnel monitor the airborne concentrations and specify the necessary protective devices according to concentration and type of airborne contaminants present.

Available respiratory devices include full face air purifying respirators (filter type both negative and pressured powered air purifying units). Air line supplied respirators of pressure demand type are used as well as constant flow hoods. Self-Contained Breathing Apparatus, using full face masks and pressure demand regulators are also available.

For use in an emergency, equipment and supplies are located in the Control Room, Technical Support Center, Respiratory Protection Facility and the Survey Center. Equipment categories are given in Appendix D.

6.4.7 Emergency Vehicles:

In the event it becomes necessary to make use of automotive equipment, a number of vehicles will be available. These include company-owned vehicles and personal vehicles. A small delivery truck and a small work truck are assigned to the Station. The ground maintenance garage, nearby, is assigned a 4-wheel drive truck. Company policy reimburses employees for the use of personal vehicles for business purposes. Lastly, a large and diverse fleet of vehicles is available from the Company vehicle fleet.

6.5 First Aid and Medical Facilities:

First aid and medical provisions include both onsite and offsite facilities. The latter are described in Section 4.3, Augmentation of the Emergency Organization. A dispensary onsite contains sinks, a toilet, a bed, a stretcher, and miscellaneous first aid equipment and supplies. Decontamination kits can be obtained from the Radiation Protection group. Personnel decontamination kits and bioassay collection kits are available at Rochester General Hospital and Newark Wayne Community Hospital.

Auxiliary Operators and Fire Brigade members are trained in first aid procedures using Red Cross Multi-Media or an equivalent program. An administrative procedure establishes a First Aid Team and the actions to be followed in the event of illness or injury at Ginna Station.

7.0 Maintaining Nuclear Emergency Preparedness:

Formalized training program(s) have been established to ensure that all personnel who actively participate in the Nuclear Emergency Response Plan (NERP) maintain their familiarity with the plan and their required response. A radiation emergency exercise shall be conducted at least annually, with emphasis placed upon orderly implementation of the emergency plan.

It is the Company management's expectation that responders will respond immediately upon being notified and not wait for additional time. This expectation is reinforced as part of the responder training.

Personnel trained for onsite response to a radiation emergency are part of the regular plant staff and are trained to specific responsibilities within the emergency organization. Training is documented by the Manager, Nuclear Training, and the Corporate Nuclear Emergency Planner. Any emergency plan work by consultants will be under the control of, and reviewed by, the Corporate Nuclear Emergency Planner.

Exercises shall be evaluated by the Corporate Nuclear Emergency Planner and reviewed by the Plant Operations Review Committee (PORC), thereby assuring the effectiveness of the plan throughout the lifetime of the R.E. Ginna facility.

7.1 Training and Drills:

Training classes on the emergency plan shall be conducted annually (+/- 3 months) for all Ginna emergency response personnel who may actively participate in the radiation emergency plan. Details of the training programs are established in TR C.22 (Nuclear Emergency Response Plan Training Program). Training will include a demonstration of their ability to perform the functions to which they may be assigned by participating in a Drill or Exercise at least once every two years. During drills, on-the-spot corrections of erroneous performance may be made, followed by a critique or corrective action.

Efforts will also be made to vary the timing of the exercises such that back-shifts will be involved once every six years (i.e. between 6 p.m. and 4 a.m.). Attempts will be made to have some drills unannounced.

Specialized training will be provided for:

1. Technical Support Center assignees
2. Operation Support Center assignees
3. First Aid Teams
4. Survey Teams
5. Emergency Operations Facility personnel
6. Security personnel
7. Local Emergency Support Services personnel
8. Fire Brigade personnel
9. Dose Assessment personnel
10. Core Damage Assessment personnel
11. JENC personnel
12. On-Shift Radiation Protection technicians
13. Severe Accident Management Evaluators and Decision-Makers

7.1.2 Emergency Coordinator:

Training of Emergency Coordinators will be given annually to the personnel who fill the Emergency Coordinator position. This training will cover responsibilities, communications, emergency classifications, protective action recommendations, and review of all procedures pertinent to their respective duties under the Nuclear Emergency Response Plan. The Nuclear Training Department shall prepare necessary lesson plans and document this training. The individuals to be trained and material to be covered are delineated in TR C.22.

7.1.3 Survey Teams:

Survey team training will be given to selected personnel. Training material will cover Radiation Protection practices and techniques utilized during radiation monitoring, Survey Center equipment and its use, radio communication techniques, monitoring and sampling procedures, survey routes and sample points, contamination and decontamination considerations, and review of implementing procedures used by survey teams. Field training will be given as needed.

7.1.4 Special Training for Participating Agencies:

Annual training will be provided to offsite support agencies, State and county on EALs/PARs and other pertinent topics.

Training shall also be provided at least annually for but not limited to the following groups:

- a) Ontario Volunteer Fire Company
- b) Ontario Volunteer Emergency Squad
- c) Rochester General Hospital
- d) Newark-Wayne Community Hospital

Training for these groups consists of lectures concerning their required involvement during radiation emergencies, procedures for notification, and basic radiation protection.

7.1.5 Drills and Exercises:

TR C.22 (Nuclear Emergency Response Plan Training Program) establishes the training program which develops and maintains the proficiency of emergency response personnel. This program meets the requirements of 10CFR50 Appendix E Section IV F regarding coping with emergencies. Through the initial training program and annual drills, personnel will be familiarized with the intent of the plan and the content of implementing procedures. Key personnel will be trained in the specific duties to which they may be assigned. Lectures and field training will be used, as appropriate, to familiarize personnel with their duties.

Communications equipment and processes are checked periodically as established by an implementing procedure. The New York State Radiological Emergency Communications System (RECS) and the NRC Emergency Notification System (ENS) are tested monthly.

Fire drills are conducted in accordance with plant procedures. A medical emergency drill which involves a simulated contaminated/injured individual and participation by the local support services will be conducted annually. A plant environs radiological monitoring drill (onsite and offsite) will be conducted annually in conjunction with training for and during the annual exercise. This shall include collection and review of analysis procedures for environmental samples. Radiation Protection drills, which include sampling analysis of simulated high activity post-accident samples using the post-accident sampling system, will be conducted semi-annually.

Periodic drills will check communication systems, response time, performance of participants, and interrelations of the various emergency centers. Training drills may be held prior to any exercises. Exercises will be held in conjunction with Ginna Station, New York State and local governments as required by regulations. All aspects of an exercise will be monitored by trained observers and a report made to the Nuclear Safety Audit and Review Board. Any comments will be evaluated and actions taken if appropriate. Managers of EOF functions will evaluate their procedures, notification lists, and equipment needs annually to ensure that they can meet their assigned functions.

Preparation of the scenarios for use in exercises and drills will be coordinated by the Corporate Nuclear Emergency Planner (CNEP). The scenario preparation team is appointed by the CNEP to develop the scenario package which shall include the scope, goals and objectives of the exercise, a time line of real and simulated events, a narrative summary, participating organizations, appropriate messages and data sheets, evaluation criteria, and information for official observers. The Emergency Planning Milestone Committee will review and approve the scope and objectives for the Annual Ginna Emergency Exercise. The CNEP will arrange for qualified observers/controllers and coordinate activities of participating organizations. The scenario should be varied from year to year to test all major elements of the plan within a 5 year period. The exercise shall simulate an emergency that results in offsite radiological releases which require response by offsite authorities.

Annually, a radiation emergency exercise will be held. This exercise will be coordinated with principal participating offsite agencies, testing at a minimum the communication links and one other element. Drills will be started at various times of the day and under various weather conditions. Some exercises will be unannounced. Scenarios will be developed which allow for free play in decision-making by those individuals in responsible positions. Structured responses will be used only to the extent necessary to keep the exercise moving so as to meet the objectives of the exercise.

Written evaluation of the Radiation Emergency Exercise shall be submitted by the CNEP to the Plant Operations Review Committee and Nuclear Safety Audit and Review Board emphasizing areas of strength and weakness and outlining plans for remedial action, as necessary.

A critique at which controllers, observers or participants may make comments will be held as soon as practical after the exercise to evaluate the actions and interactions of response organizations. These comments will be evaluated by the Corporate Nuclear Emergency Planner (CNEP) to determine if they should become Commitment Action Tracking System (CATS) items or ACTION Reports for tracking to assure that necessary corrections to the Plan are implemented.

7.1.6

Corporate Nuclear Emergency Planner (CNEP) and Onsite Emergency Planner (OEP):

The Corporate Nuclear Emergency Planner (CNEP) is responsible for coordinating the NERP with other response organizations. He will review the Plan and agreements to certify that they are current. The update will take into account changes identified by drills and exercises.

The CNEP reports to the Manager, Nuclear Emergency Preparedness and Training Support. An Onsite Emergency Planner (OEP) provides assistance on emergency planning issues in the plant and will be designated duties and responsibilities similar to those of the CNEP. See Figure 7.1.

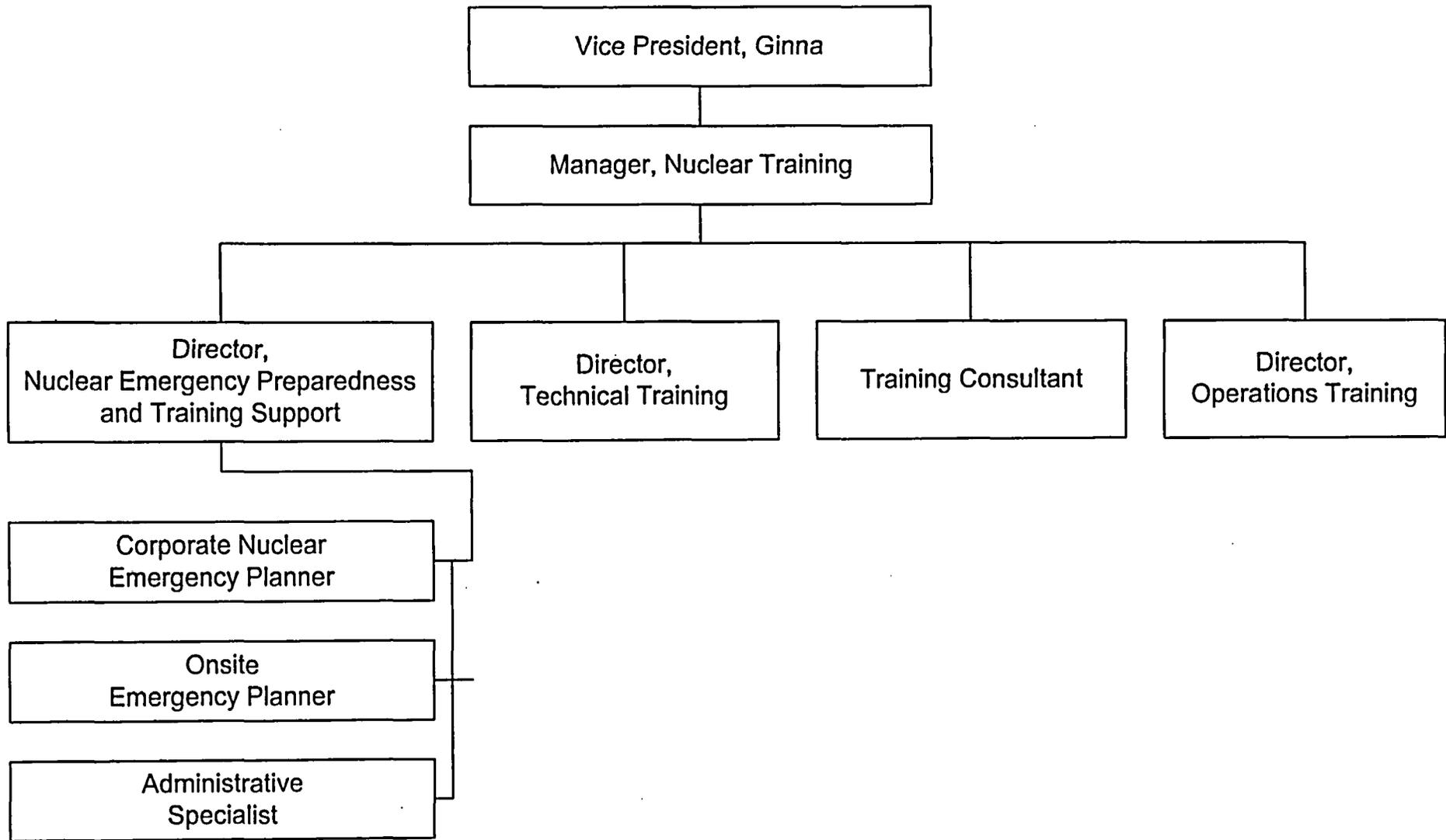
The CNEP and OEP will maintain their awareness of emergency response activities, facilities and procedures by participating in related committees and reviewing completed documentation. The CNEP is the chairman of the Emergency Plan Implementing Procedures Committee (EPIPC) which reviews all changes to EPIP's and emergency facilities.

The CNEP and OEP conduct surveillance of the emergency response facilities through scheduled inspections and tests to ensure their readiness. The CNEP and OEP meet routinely with Ginna management and supervisors to discuss emergency concerns, training and changes relative to emergency planning. These meetings include: Milestone Committee, PORC, EPIPC, MOPAR, NERP Curriculum Committee and special task forces.

The CNEP and OEP will attend appropriate training, seminars, workshops, and conferences sponsored by the Company, the nuclear industry, and Federal, State and local governments to keep current on emergency planning techniques and concepts.

The CNEP is the chairman of the Milestone Committee which develops a milestone list to track the progress of emergency planning activities and acts as a sounding board for all emergency planning issues.

**FIGURE 7.1
NUCLEAR EMERGENCY PREPAREDNESS ORGANIZATION**



7.2 Annual Review and Revision of the Plan and Procedures:

Annual review and revision of the Nuclear Emergency Response Plan (EPIP 5-6) will occur following the annual QA audit. Revisions to the Plan are subject to approval by PORC and review by the Nuclear Safety Review Board (NSRB).

Revisions to the Plan and Emergency Plan Implementing Procedures (EPIP) may be the result of drills, exercises, training or routine surveillance. The Plan and Emergency Plan Implementing Procedures are reviewed by the EPIP Committee. EPIP Procedure changes are controlled using the guidance in the administrative procedures A-205.2 and the IP-PRO series.

Emergency procedure changes are controlled so that only current copies are available for use. Revised procedures are distributed to a list of controlled copy holders with receipt verification. Shift Operators and licensed staff are made aware of revisions during regularly scheduled training coordinated by the Nuclear Training Department. Emergency telephone numbers are kept up-to-date through quarterly review and distribution of revisions.

7.3 Emergency Equipment and Supplies:

The operational readiness of all items of emergency equipment and supplies will be assured through monthly inspections of emergency equipment. The implementing procedure includes inspecting and testing of equipment stored in the Control Room, Survey Center, Technical Support Center, Radiation Protection office, JENC and EOF. Also included is the procedure for testing the operability of the equipment.

Necessary transportation for offsite surveys will be a personal car supplied by one member of the team. Since most employees commute by private car because of the remoteness of the facility, no lack of vehicles is anticipated. Company policy provides for mileage reimbursement.

7.3.1 Siren Tests and operability:

The Ginna Emergency Sirens shall be activated at intervals not to exceed one year (+ or - Three calendar Months). This test will be considered successful if no more than 10% (10 of 96) of the sirens fail to operate properly. Any time it is found that more than 25% (24 of 96) of the sirens are inoperable for more than one hour, then an Eight-Hour notification will be made to the NRC. Using procedure 0-9.3 Attachment 3 (reference: 10CFR50.72(b)(1)(v)).

7.4 Auditing:

All Nuclear Emergency Response Plan elements are reviewed by persons who have no direct responsibility for the implementation of the emergency preparedness program either:

- a. At intervals not to exceed 12 months (+ or- 3 months) or;
- b. 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. In any case, all elements of the emergency preparedness program must be reviewed at least once every 24 months.

The review must include an evaluation for adequacy of interfaces with State and local governments and of licensee drills, exercises, capabilities and procedures. The results of the review, along with recommendations for improvements, must be documented, reported to corporate and plant management, and retained for a period of five years. The part of the review involving the evaluation for adequacy of interface with State and local governments must be available to the appropriate State and local governments.

Follow-up implementation tasks are assigned through the use of ACTION Reports. The results of the review are reviewed by the NSRB.

8.0

Recovery:

After the initial emergency response actions are concluded (i.e., the plant is in cold shutdown and under control), a decision to begin the recovery phase will be initiated. A number of considerations will enter into the decision to begin the recovery phase and dismantle the Emergency Response Organization. The decision to enter the recovery phase will be made by the EOF/Recovery Manager in consultation with his support managers, the Plant Operation Review Committee, and the NSRB and onsite personnel. EPIP 3-4, "Emergency Termination and Recovery" will be used by the organization to transition from a response organization to a recovery organization.

The decision to enter the recovery phase should be based upon a comprehensive review of station parameters and conditions. These should include, but are not limited to the following:

1. The initial emergency response actions are concluded (i.e., the station is in cold shutdown and under control).
2. Station parameters of operation no longer indicate a potential or actual emergency exists.
3. The reactor shutdown conditions are stable.
4. The reactor containment building integrity is intact.
5. The release of radioactivity from the station is controllable and no longer exceeds permissible levels, and no danger to the general public from the above source(s) is credible.
6. Radioactivity waste systems and decontamination facilities are operable to the extent needed.
7. A reactor heat sink is available and operating.
8. The integrity of power supplies and electrical equipment needed for the station to be capable of sustaining itself in a long term shutdown condition is intact.
9. The operability and integrity of instrumentation, including radiation monitor equipment has been demonstrated.
10. Trained personnel and support services are available for when station entry and cleanup is possible.

Federal, State and local authorities shall be advised of any decisions and resulting changes pertaining to the Emergency Organization status.

8.1

Recovery Actions:

Re-entry of the plant, decontamination, repair, and return to operation will be controlled by a general implementing procedure which provides for development of a flexible plan of actions and specifies particular evaluation and planning activities. A recovery organization to provide long term augmentation of the emergency organization has been established. A procedure to alert these people and put the EOF into operation is part of our implementing procedures.

Company personnel are assigned to the recovery organization to fill the following positions:

EOF/Recovery Manager

Nuclear Operations Manager

Engineering Manager

Facilities and Personnel Manager

News Center Manager

EOF Dose Assessment Manager

Offsite Agency Liaison

Corporate Spokesperson

Each of the aforementioned will have a designated alternate and a staff assigned to assist in the event of an accident.

The EOF will be activated and staffed by Company personnel within 1 hour after the declaration of an Alert of higher classification. The transition to a recovery organization can occur any time after the EOF has been activated and is procedurally controlled by EPIP 3-4. This organization would be available to assist the plant and the Emergency Coordinator in the event of an extended emergency situation. The members of the recovery organization will be given appropriate training annually.

The EOF/Recovery Manager will notify all response organizations that recovery operations are underway.

In the recovery phase, all actions will be carefully planned by station supervisory personnel in conjunction with the Recovery Team, the Technical Support Center personnel and the Plant Operations Review Committee. Planning for recovery will include evaluation of survey data, review of exposures incurred, projection of manpower and equipment needs, and re-entry survey team activities. Actions prescribed upon re-entry include a comprehensive survey of the plant to define radiological problem areas. Based on survey results, high radiation areas and areas of contamination will be isolated and posted and, if possible, portable shielding will be used, as appropriate.

Upon evaluation of plant conditions, further activities for making necessary repairs, decontamination and restoration to normal operations will be outlined by the Plant Operations Review Committee in accordance with standard Radiation Protection practices. Personnel radiation exposure during the recovery stage of the incident shall be closely controlled and documented. Individual exposures shall be in accordance with 10CFR20 limits.

Corporate management and Technical Support personnel will augment the plant staff in long-term recovery operations.

- a) The Human Resource Services Department has investigated the availability and made preliminary plans for providing logistics support.
- b) Technical support will be provided by the Nuclear Engineering Services Department and consultants under the direction of the Manager, Nuclear Engineering Services.

APPENDIX A
LETTERS OF AGREEMENT

<u>Page</u>	
A2	Department of Energy, Brookhaven Area Office
A3	New York State Disaster Preparedness Commission
A4	Ontario Volunteer Emergency Squad
A5	Rochester General Hospital & Newark-Wayne Community Hospital
A6	Ontario Fire Company
A7-A8	Radiation Management Consultants
A9	Wayne County Board of Supervisors
A10-A11	U.S. Department of Commerce, National Weather Service
A12	Agreement between James A. Fitzpatrick Nuclear Power Plant, Nine Mile Point Nuclear Power Station and the R. E. Ginna Station
A13	Wayne County Sheriff's Department
A14-A15	New York State Police
A16	County of Monroe
A17	Institute of Nuclear Power Operations



Department of Energy

Brookhaven Group
P.O. Box 5000
Upton, New York 11973

A2

January 17, 2001

TO: DISTRIBUTION LIST

SUBJECT: DEPARTMENT OF ENERGY'S (DOE) RADIOLOGICAL ASSISTANCE PROGRAM (RAP) MEMORANDUM OF UNDERSTANDING

As most of you are aware, the Department of Energy's (DOE) Brookhaven Area Office (BAO) is the Regional Coordinating Office (RCO) for DOE's Region 1, which is comprised of the eleven northeastern states. As the RCO, BAO is responsible for coordinating DOE emergency assistance, upon request from any state, county, local, or tribal agency requesting DOE support to an event involving nuclear/radiological material. In the past, BAO annually issued letters re-stating our RCO responsibilities to the eleven states and various nuclear utilities in Region 1. This annual letter was a burden, not only on BAO for issuing them, but also for each of the recipients to maintain them to demonstrate current status.

In an effort to streamline this process, BAO is reviewing the requirement for re-issuing the letters on an annual basis, as well as determining if they are even required at all. Numerous federal laws, regulations, and DOE Orders, that are readily available to the public via the Internet, already require DOE to maintain an ever-ready response capability for coping with any nuclear/radiological incident. Our letters merely reiterated what was already required. The possible elimination of the annual letters would in no way impact the assistance or support that BAO is required to provide and has maintained over the years. BAO, as the RCO for DOE Region 1, will carry out that assistance required by law, regulation, and implementing DOE Orders.

As BAO researches the requirement for the annual letters, the letters that previously were in place shall remain in effect until further notice. If you have any questions or would like further details, you can reach me at (631) 344-7309.

Sincerely,

A handwritten signature in black ink, appearing to read "S.M. Centore".

Steven M. Centore
Regional Response Coordinator



Edward F. Jacoby, Jr., Director

New York State Emergency Management Office
1220 Washington Avenue
Building 22, Suite 101
Albany, NY 12226-2251

A-3

May 25, 2004

Mr. Peter S. Polfeit
Corporate Nuclear Emergency Planner
Rochester Gas & Electric Corporation
89 East Avenue
Rochester, New York 14649-0001

Dear Mr. Polfeit:

This serves to update the annual agreement between Constellation Energy and the New York State Emergency Management Office for the Radiological Emergency Preparedness Program.

In the event of an emergency at Constellation Energy's R.E. Ginna Nuclear Power Plant, New York State will respond in accordance with procedures contained within the State Radiological Emergency Preparedness Plan. Notification to New York State of an emergency should be initiated via the Radiological Emergency Communication System hotline. The State will also continue to participate in necessary training exercises and drills.

Sincerely,

Edward F. Jacoby, Jr.
Director

EFJ:lw

ONTARIO VOLUNTEER EMERGENCY SQUAD

POST OFFICE BOX 444
ONTARIO, NY 14519



A - 4

February 11, 2005

Constellation Energy/Ginna Nuclear Power Plant
1503 Lake Road
Ontario, NY 14519

Attn: Mr. Peter S. Polfleit
Corporate Nuclear Emergency Planner

Dear Mr. Polfleit:

This is a letter of agreement entered into between Constellation Energy/Ginna Nuclear Power Plant and the Ontario Volunteer Emergency Squad. O.V.E.S. will provide emergency medical services when requested, for the year 2005. This service will include ambulance transport to all area hospitals.

I welcome the opportunity to further discuss expectations, training, available equipment, security clearances, and any other topic that may expedite the correct level of care to Ginna personnel. I can be reached at 315-524-5751.

O.V.E.S. and I look forward to the opportunity to assist you in providing medical services to the personnel of Constellation Energy/Ginna.

Sincerely,

A handwritten signature in cursive script, appearing to read 'James A. Goetz', is written over a printed name.

James Goetz
President

JG/km

viaHealth
Rochester
General
Hospital

1425 Portland Avenue
Rochester, NY 14621-3095

585 922 4000
www.viahealth.org

January 19, 2005

Mr. Peter S. Polfleit
Rochester Gas & Electric Corporation
89 East Avenue
Rochester, NY 14649

Dear Mr. Polfleit:

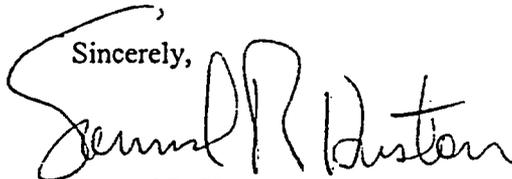
Rochester General Hospital and Newark-Wayne Community Hospital are pleased to confirm our continued commitment to serve the community with a full range of health care services. This commitment includes prospective planning for caring for patients from the Ginna Nuclear Power Plant or members of the general public who might be injured in the event of a radiation accident.

We have participated in training exercises in conjunction with Ginna and the Radiation Management Corporation for the past several years and will continue to do so. Our hospital Radiation Disaster Plan is detailed in our hospital Fire & Safety Manual, a copy of which is available to you. This manual is updated periodically and contains the protocol to access services at Rochester General Hospital and Newark-Wayne Community Hospital.

We look forward to continuing to participate with your personnel in the emergency training exercises as well as subsequent review sessions to critique these exercises. We appreciate your support in helping to maintain an adequate facility and also appropriate skills to deal with potential radiation accidents.

If I could provide additional information or support regarding this issue, please do not hesitate to contact me.

Sincerely,



Samuel R. Huston
President

SRH:dc

MEMBER OF
NORTHERN CENTRAL VOLUNTEER FIREMEN'S ASSOC. INC.
FIREMEN'S ASSOC. STATE OF NEW YORK



MEMBER OF
WAYNE COUNTY VOLUNTEER FIREMEN'S ASSOC., INC.
WAYNE COUNTY FIRE CHIEFS ASSOC.

Ontario Fire Company

6160 WALTER CONE DRIVE
ONTARIO, NEW YORK 14519

January 31, 2003

Mr. Peter Polfeit
Rochester Gas and Electric Corporation
89 East Avenue
Rochester, NY, 14649

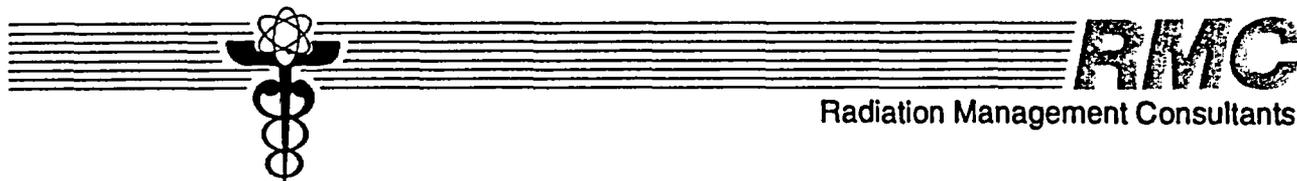
Dear Mr. Polfeit,

I am writing in response to your letter of January 6, 2003. The Ontario Fire Company will continue to provide emergency service to the R.E. Ginna Nuclear Power Station when requested. As always we look forward to working with the staff at Ginna at the training sessions throughout the year. If you have any questions please contact me at 315-524-9795.

Sincerely,

A handwritten signature in cursive script that reads "John C. Hill Jr." The signature is written in black ink and is positioned above the printed name of the signatory.

John C. Hill Jr., Chief
Ontario Fire Company



January 28, 2005

Constellation Energy/Ginna Nuclear Power Plant
Attn: Peter Polfleit
Corporate Nuclear Emergency Planner
1503 Lake Road
Ontario, NY 14519

RE: Emergency Medical Assistance Program for 2005

Dear Mr. Polfleit:

This confirms an agreement between Radiation Management Consultants (RMC) and Constellation Energy wherein RMC agrees to furnish certain services to R. E. Ginna Nuclear Power Plant. These services comprise a program that is identified by RMC as an Emergency Medical Assistance Program (EMAP). This agreement remains in effect from January 1, 2005 through December 31, 2005. With regard to the R. E. Ginna Nuclear Power Plant, the EMAP program contains the following provisions:

1. Twenty-four hour per day availability of expert medical consultation on evaluation of radiation injuries.
2. Twenty-four hour per day availability of RMC's Radiation Emergency Medical Team (REM-Team) comprised of physicians, Certified Health Physicists and a technician with portable instrumentation to travel the emergency site and assist hospital personnel, attending physicians and/or plant personnel in the initial evaluation of radiation injuries.
3. Available assistance in the transfer of patients to Definitive Care Centers at Loyola University Medical Center, Chicago, IL (or any other qualified medical center that the client should so designate) for the treatment of radiation injuries.
4. Twenty-four hour per day availability of RMC's dose assessment capabilities including:
 - A. Access to a bioassay laboratory for urine, fecal, sputum and tissue analysis.
 - B. Mobile Whole Body Counting
 - C. Experienced Certified Health Physicists and Physician Team for evaluation of radiation exposures.

January 28, 2005
Constellation Energy/Ginna Nuclear Power Plant
Page #2

5. Accident Response: Consultation and laboratory services under RMC's employment and control are at no extra charge except for travel, lodging and meals. For personnel not employed by RMC, fees and expenses will be billed separately at cost.
6. Preparation of incident/accident reports for NRC and other regulatory bodies at no additional charge.
7. Legal and medical appearances as required and requested by R. E. Ginna Nuclear Power Plant will be performed and charged as identified under pricing section of the contract.

RADIATION MANAGEMENT CONSULTANTS, INC.



Roger E. Linneemann, M.D.
President

RMC:jb



Wayne County Board of Supervisors

A - 9

COURT HOUSE
26 CHURCH STREET, LYONS NY 14489-1134

Marvin E. Decker, Chairman

315-946-5400

AUTHORIZATION DOCUMENT

The purpose of the Wayne County Radiological Emergency Preparedness Plan is to protect the health and safety of the general public of Wayne County, New York, in the event of a radiological release incident at the Robert E. Ginia Nuclear Power Plant.

The undersigned official hereby endorses the purposes and the goals of the Wayne County Radiological Preparedness Plan.

The undersigned official, also, hereby concurs in the present conceptual organization responsibilities necessary to successfully execute the Wayne County Radiological Emergency Management Plan.

The Plan supersedes all previous Wayne County Radiological Emergency Preparedness Plans, and is subject to correction and/or revision based upon new or changed information and/or laws, ordinances and resolutions which may be approved by the Wayne County Board of Supervisors. Interim revisions may be made at any time for incorporation therein as "revisions", appropriately dated.

The Plan will be reviewed at least annually, following each exercise, and at such other times as may be directed by the Wayne County Board of Supervisors and/or Federal/State authority.

For the Wayne County Board of Supervisors:


Marvin E. Decker, Chairman
Wayne County Board of Supervisors
January 14, 2005



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE

587 Aero Drive
Buffalo, NY 14225

A - 10

January 14, 2005

Mr. Peter Polfleit
Corporate Nuclear Emergency Planner
Constellation Energy/Ginna Nuclear Power Plant
1503 Lake Road
Ontario, NY 14519

Dear Mr. Polfleit:

The National Weather Service in Buffalo, NY is committed to provide meteorological support, upon request, in the event of an accident or other declared emergency occurring at any nuclear power facility within its County Warning Area. This support, resources permitting, will normally be in the form of site specific forecasts of wind, temperature and precipitation at the surface and aloft. All forecasts would normally be coordinated through local and state emergency management agencies.

In addition, upon request and resources permitting, our office would assign a meteorologist to serve as a coordinator at an Emergency Operations Facility. The meteorologist would act as a liaison between National Weather Service forecasters and emergency response officials to expedite requests and dissemination of the site specific weather forecasts.

In order to provide the best possible support to the Ginna facility, our office should be notified of any alert or emergency as soon as possible. In the event we are unable to provide the necessary support, the National Weather Service Forecast Office in Cleveland, OH will provide back-up. The following *unlisted* telephone numbers are available for your use:

National Weather Service Forecast Office, Buffalo NY
(716) 565-0013
(716) 565-0014
(716) 565-9002 (FAX)

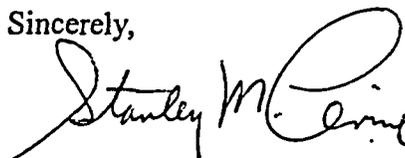
National Weather Service Forecast Office, Cleveland OH
(216) 265-2380
(216) 265-2381
(216) 265-2371 (FAX)

Requests for activation of the NOAA Weather Radio warning alarm and the Emergency Alert System (EAS) Specific Message Area Encoder (SAME) at Rochester during an emergency should be coordinated through local and New York State Emergency Management officials using the procedures specified in existing Memoranda of Understanding.



Finally, the National Weather Service Forecast Office in Buffalo will participate in all Federal and New York State observed exercises and the associated pre-exercise drills.

Sincerely,

A handwritten signature in black ink that reads "Stanley M. Levine". The signature is written in a cursive style with a large, looping initial "S".

Stanley M. Levine
Warning Coordination Meteorologist

cc: W/ER1x1 - Richard Watling
WCM, WFO CLE - Gary Garnet
Operations Planning Officer, Monroe OEP - S. Macaluso

To: PRSiflut
RWHs

A12



July 25, 2000

Mr. Robert C. Mecredy
R.E. Ginna Nuclear Power Plant
Rochester Gas & Electric Corporation
89 East Avenue
Rochester, NY 14649

Re: Assignment of Letter of Agreement between James A. FitzPatrick Nuclear Power Plant, Nine Mile Point Nuclear Power Stations and R.E. Ginna Nuclear Power Plant

Dear Mr. Mecredy:

The New York Power Authority (the "Authority") has contracted to sell the James A. FitzPatrick ("JAF") and Indian Point 3 ("IP3") Nuclear Power Stations to subsidiaries of Entergy Corporation. Entergy Nuclear FitzPatrick, LLC ("ENF") will acquire JAF and Entergy Nuclear Indian Point 3, LLC will acquire IP3.

As part of the above purchase and sale transaction, the Authority intends to assign and ENF has agreed to assume the Letter of Agreement between James A. FitzPatrick Nuclear Power Plant, Nine Mile Point Nuclear Power Stations and R.E. Ginna Nuclear Power Plant dated February 5, 1999 (the "Agreement").

This letter is to serve as notice of the assignment of the Agreement, to be effective as of the closing of the purchase and sale transaction, which is tentatively scheduled for September 7, 2000. Upon assignment and assumption of the Agreement, ENF will assume performance of all obligations of the Authority under the Agreement and will have all of the Authority's rights. The Authority will notify you promptly upon the completion of the assignment.

If you have any questions, please call Patricia Leto at 914-681-6623. Thank you for your cooperation.

New York Power Authority

By: 
John Hoff, Vice President
Procurement and Real Estate

cc: Howard Stevens, Esq.
Patricia Leto
Connie Wells



Office of the Sheriff
Wayne County

RICHARD J. PISCIOTTI, Sheriff

A - 13

January 13, 2005

Ginna Nuclear Power Plant
ATT: Mr. Peter S. Polfleit, Nuclear Emergency Planner
1503 Lake Road
Ontario, New York 14519

RE: **RESPONSE PLAN** - updated from 03/16/04

Dear Mr. Polfleit:

In accordance with the regulations of the Nuclear Regulatory Commission, the Wayne County Sheriff's Office hereby submits the following response plan with regard to the "Ginna Nuclear Power Station".

RESPONSE PLAN: In that the Wayne County Sheriff's Office is the law enforcement agency having jurisdiction at Ginna Nuclear Power Station, Lake Road, Ontario, Wayne County, New York, we agree to respond to and assist at the station site when summoned to support the station security organization. The officers will respond upon notice with a Mobile Command Post, Personnel and specialized equipment when requested. We are also conducting periodic in-service classes concerning refresher emergency response to the facility, and we will, of course, continue to support in full scale drills in conjunction with your company.

In addition, we support and endorse the opportunity to visit the station at least annually for purposes of orientation and familiarization. These sessions will also be an appropriate forum for establishing interface between our command and the individual(s) in authority at the station.

If there should be any questions concerning this response plan, please feel free to contact my office.

Respectfully submitted,

BY: RICHARD J. PISCIOTTI
Sheriff

kwc

pc: Lt. Tack
file

RECORDS DIVISION (315) 946-5790
FAX (315) 946-5811

MAIN OFFICE - (315) 946-9711
CIVIL DIVISION - (315) 946-5793



WAYNE E. BENNETT
SUPERINTENDENT

**NEW YORK STATE POLICE
TROOP "E" HEADQUARTERS
1569 ROCHESTER ROAD
CANANDAIGUA, N.Y. 14425**

January 18, 2005

Mr. Peter S. Polfleit
Corporate Nuclear Emergency Planner
89 East Avenue
Rochester, New York 14649

Dear Mr. Polfleit:

Reference is made to your correspondence dated May 12, 2004, requesting an update of our Letter of Agreement with Constellation Energy. This information is in reference to our response to incidents at the R.E. Ginna Nuclear Power Plant located in Ontario, Wayne County.

The Division of State Police will supply activities as set forth in the New York State Radiological Emergency Preparedness Plan and the New York State Disaster Preparedness Plan. These plans have been created in an effort to coordinate Local and State Government response to emergencies that threaten life and/or property.

In regard to other matters of a police nature, our members are governed by statute and will respond within the constraints of such laws when a violation occurs which may be of an emergency nature. However, our policy concerning labor relations and strikes is governed by Section 290-G of the General Municipal Law, which provides the sheriff of the county with primary responsibility for the matters of this nature.

In the event of an emergency, the number of personnel to be dispatched will depend upon the exigency of the situation. The command of State Police personnel responding to the plant will always rest with our ranking member. We will coordinate our activities with State and Local Government Emergency Response Personnel, as well as Constellation Energy Officials. It should be noted Troop "E" has a Letter of Agreement with the Wayne County Sheriff's Department pertaining to our cooperative response to a radiation type emergency at the R.E. Ginna Plant. We have patrols operating out of Williamson, Wolcott, and Lyons Stations, and Walworth Satellite Office in Wayne County, and necessarily the response time to your plant will vary from approximately five minutes to twenty minutes, depending on the location and availability of patrols at the time of such emergency. Currently, we have patrols assigned to Ginna, however, such an assignment is at the request of the Governor and may change at any given time.

We will continue to train our personnel, attempt to upgrade equipment, and maintain liaison with other State and Local Government Agencies and the Rochester Gas and Electric Corporation in an effort to enhance our response to any emergency situation at the Ginna Plant.

You may be assured of our continued full cooperation in all matters of mutual interest and concern.

Sincerely,

A handwritten signature in black ink, appearing to read 'S. T. White', with a stylized flourish at the end.

Major Steven T. White
Troop E Commander

STW/ee



Office of the County Executive

Monroe County, New York

Maggie Brooks
County Executive

Richard F. Mackey
Deputy County Executive

A - 16

January 21, 2005

Mr. Peter S. Polfleit
Corporate Nuclear Emergency Planner
Constellation Energy/Ginna Nuclear Power Plant
1503 Lake Road
Ontario, NY 14519

Dear Mr. Polfleit:

Monroe County is willing and able to implement the Monroe County Radiological Emergency Plan as required for actual incidents or exercises at the Ginna Nuclear Power Station. Per federal regulations, appropriate numbers of personnel are regularly trained in accordance with the Plan.

Sincerely,

Maggie Brooks
Maggie Brooks
Monroe County Executive

MB/mbm



*Institute of
Nuclear Power
Operations*

Suite 100
700 Galleria Parkway, SE
Atlanta, GA 30339-5957
770-644-8000
FAX 770-644-8549

September 24, 2003

Dear Ladies and Gentlemen:

This letter certifies that the plant emergency assistance agreement between INPO and its member utilities remains in effect. In the event of an emergency at your utility, INPO will assist you in acquiring the help of other organizations in the industry, as described in Section 1 of the *Emergency Resources Manual*, INPO 86-032. If requested, INPO will provide the following assistance:

- Facilitate technical information flow from the affected utility to the nuclear industry.
- Locate replacement equipment and personnel with technical expertise.
- Obtain technical information and industry experience regarding plant component and systems.
- Provide an INPO liaison to facilitate interface.

This agreement will remain in effect until terminated in writing. Should you have questions, please call me at (770) 644-8304 or e-mail mossdj@inpo.org.

Sincerely,

A handwritten signature in black ink that reads "David J. Moss". The signature is written in a cursive, flowing style.

David J. Moss
Manager
Radiological Protection

DJM/jls

APPENDIX B**SUMMARIES OF INTERFACING EMERGENCY PLANS**1. New York State Radiological Emergency Preparedness Plan:

The purpose of the NYS Plan is to minimize the risk to the health of the inhabitants of the state in the event of a radiological emergency. This will be accomplished by identifying measures to prevent and mitigate such an emergency; by developing mechanisms to coordinate Federal, state, local and private sector resources, during and after such an emergency; and by providing for recovery following a radiological emergency.

The New York State Department of Health is the state agency having primary responsibility in this area.

The New York State Public Health Law gives the Commissioner of Health broad authority for protecting the health and life of the people of New York State, including protection against ionizing radiation. The State Sanitary Code, Part 16, which implements the Public Health Law, includes requirements relating to accidents, emergencies, or incidents.

Article 2-B of the New York State Executive Law (State and Local Natural and Manmade Disaster Preparedness), created a State Disaster Preparedness Commission. This Commission is charged with a wide variety of power and responsibilities, designed to provide a comprehensive emergency system to prevent or react to emergencies or disasters within the State. Among these responsibilities are: (1) to develop and maintain a State plan and to assist local government in developing such plans; (2) to direct State disaster operations and coordinate State operations with local disaster operations; (3) to coordinate recovery operations and recovery assistance; and (4) to provide training to assure that responsible personnel are familiar with plans and procedures. Where, by tradition, emergency plans have been primarily concerned with response activities, New York State has adopted an overall emergency preparedness system which includes two interrelated critical phases.

(1) Preventive/Mitigation:

This is the initial phase of activities that is aimed at eliminating or reducing the probability of the occurrence of a radiological emergency, and at minimizing the impact of a radiological emergency on public health and property. These activities include the development of new legislation and the development of preparedness plans and training programs. Prevention/mitigation activities form a basis for enhancing the quality of response operations.

(2) Response:

The response phase follows the identification or notification of an emergency. Generally, response activities are planned to minimize the adverse impact on public health and to protect property, to the extent possible, through emergency assistance. These activities include accident assessment and evaluation and radiological exposure control. They also reduce the probability of secondary damage and speed recovery operations.

2. Wayne County Radiological Emergency Response Plan (CRERP):

When considering radiological emergencies, preparedness, response, and recovery are general responsibilities which are shared by all levels of government and the nuclear facility operators. These emergencies will be dealt with at the local or county level until such time that the county's resources have been exhausted. At this point, in addition to technical guidance and evaluation, the county will request state assistance through the New York State Emergency Management Office (SEMO).

The mission of the County Emergency Response Organization and the County Radiological Emergency Response Plan (CRERP) is to protect the health and safety of the general public of Wayne County in the unlikely event of a radiological release incident at the Ginna Nuclear Power Station.

In order to successfully execute this mission it will be necessary to perform the following operations:

1. Monitor and assess the scope and magnitude of the incident;
2. Evaluate and decide which protective action response options should be initiated;
3. Implement the appropriate protective action response option (or combination of options, if necessary.)

The successful implementation of the CRERP will depend on the efficient and effective coordination with other emergency response organizations. Specifically, the CRERP will be closely coordinated with the RERP of Monroe County; the New York State Radiological Emergency Plan; and the Ginna Station Nuclear Emergency Response Plan.

3. Monroe County Radiological Emergency Response Plan (CRERP):

When considering radiological emergencies, preparedness, response, and recovery are general responsibilities which are shared by all levels of government and the nuclear facility operators. These emergencies will be dealt with at the local or county level until such time that the county's resources have been exhausted. At this point, in addition to technical guidance and evaluation, the county will request state assistance through the New York State Emergency Management Office (SEMO).

The mission of the County Emergency Response Organization and the County Radiological Emergency Plan is to protect the health and safety of the general public of Monroe County in the unlikely event of a radiological release incident at the Ginna Nuclear Power Station.

In order to successfully execute this mission it will be necessary to perform the following operations:

1. Monitor and assess the scope and magnitude of the incident;
2. Evaluate and decide which protective action response options should be initiated;
3. Implement the appropriate protective action response option (or combination of options, if necessary.)

In addition to these operations, the successful implementation of the CRERP will depend on the efficient and effective coordination with other emergency response organizations. Specifically, the CRERP will be closely coordinated with the RERP of Wayne County; the New York State Radiological Emergency Plan; and the Ginna Station Nuclear Emergency Response Plan.

4. Rochester General Hospital Radiological Medical Emergency Plan

The purpose of this plan is to describe the response of Rochester General Hospital (RGH) to an injured and radioactively contaminated patient. The procedure will describe the responsibilities of the hospital staff, the set-up of the Radiation Decontamination Center (RDC), notification protocols, equipment and supplies, decontamination and contamination control techniques.

RGH is a support hospital for the Ginna plant and has agreed to provide medical care to patient(s) who sustained injuries and who may be contaminated and/or overexposed to ionizing radiation.

5. Newark-Wayne Community Hospital Radiological Medical Emergency Plan

The purpose of this plan is to describe the response of Newark-Wayne Community Hospital (NWCH) to an injured and radioactively contaminated patient. The procedure will describe the responsibilities of the hospital staff, the set-up of the Radiation Emergency Area, notification protocols, equipment and supplies, decontamination and contamination control techniques.

NWCH is a support hospital for the Ginna plant and has agreed to provide medical care to patient(s) who sustained injuries and who may be contaminated and/or overexposed to ionizing radiation.

APPENDIX C

PRE-CALCULATED POST-ACCIDENT DOSES

Table C-1 shows the estimated two-hour Exclusion Area Boundary (EAB) doses for several accident sequences. The values given are 10% of the NRC Safety Evaluation values.

Additional information on post-accident doses is provided in Chapter 15 of the Updated Final Safety Analysis Report (UFSAR) for Ginna Station.

Table C-1**ESTIMATED TWO HOUR DOSE AT EXCLUSION AREA BOUNDARY (1)**

	<u>WHOLE BODY</u> (REM)	<u>(2) THYROID</u> <u>INHALATION</u> (REM)
Loss of Coolant Accident 1 spray pump and 1 filter operational)	0.3	13.0
Steam Break Outside Containment (3)	<0.1	1.5
Control Rod Ejection	0.1	10.3
CVCS Letdown Line Break	0.1	1.2
Steam Generator Tube Rupture	<0.1	2.4
Fuel Handling Accident (4)		
at 100 hours, no filters	<0.1	9.6
at 7 days, no filters	<0.1	7.3
at 100 hours, filters	<0.1	6.2

Notes:

1. Estimated doses in table are 10% of values contained in NRC letters dated September 24, 1981, September 29, 1981, and March 3, 1982.
2. Assumes delayed addition of NaOH, therefore thyroid dose slightly conservative (i.e. by 10-15%).
3. All analyses assume 1 gpm primary to secondary steam generator leakage, initial secondary activity of 0.1 $\mu\text{Ci/gm}$, and meteorological conditions with X/Q of $4.8 \times 10^{-4} \text{ sec/m}^3$
4. Fuel handling accident assumes peak power assembly with all rods damaged.

APPENDIX D**CATEGORIES OF EMERGENCY EQUIPMENT**

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 Survey Center, the Operational Support Center, and the EOF. Sufficient variety and quantities of equipment are stored in each location, and additional equipment and supplies are in the Radiation Protection office. Dedicated equipment is inventoried monthly to insure it is available, using the equipment list in the implementing procedure. Equipment includes radiation monitors, respiratory protection, communications and data retrieval capability, dosimetry and protective clothing.

In the Control Room the dedicated equipment and supplies include self-contained breathing apparatus (SCBA), dosimetry, a supply of protective clothing, and dose rate instruments.

In the Radiation Protection office there are additional SCBA's, dosimeters, protective clothing and dose rate instruments.

The Survey Center contains equipment for general use, as well as kits 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. The survey team boxes contain protective clothing, sampling supplies, record keeping materials, respirators and dosimetry, up-to-date procedures and other useful supplies.

APPENDIX E**EMERGENCY PLAN IMPLEMENTING PROCEDURES (EPIP)**

<u>EPIP #</u> <u>REFERENCE</u>	<u>TITLE/PURPOSE</u>	<u>PLAN</u>
1-0	<u>GINNA Station Event Evaluation and Classification</u> Provides guidance in evaluating and classifying situations which may require activation of the Nuclear Emergency Response Plan (NERP)	3.0 to 3.5
1-1	<u>Unusual Event</u> Describes the actions to be implemented following classification of an Unusual Event.	3.2, 5.2
1-2	<u>Alert</u> Describes the actions to be implemented following classification of an Alert.	3.3, 5.4
1-3	<u>Site Area Emergency</u> Describes the actions to be implemented following classification of a Site Area Emergency.	3.4, 5.5
1-4	<u>General Emergency</u> Describes the actions to be taken following classification of a General Emergency	3.5, 5.5
1-5	<u>Notifications</u> Specifies means for notification of personnel of personnel to activate the NERP.	2.0, 3.0, 3.2, 3.3, 4.2, 4.3, 5.2 - 5.5, 6.2.4, 6.2.5, 7.1.4
1-6	<u>Site Evacuation</u> Provides guidance for evacuating the site due to situations threatening the health/safety of personnel.	5.4, 5.5.1, 6.2.1, 6.3, 6.4
1-7	<u>Accountability of Personnel</u> Provides instruction for accountability actions in the event of a plant evacuation.	5.4.4.2
1-8	<u>Search and Rescue Operation</u> Provides a method for search and operation.	5.4.4.4
1-9	<u>Technical Support Center Activation</u> Designates personnel and action for activating at an Alert or greater level.	4.2.2
1-10	<u>Operational Support Center (OSC) Activation</u> Provides guidance for personnel staffing the OSC.	6.1.5
1-11	<u>Survey Center Activation</u> Describes duties of personnel reporting to SC at Alert level or greater.	6.1.2

APPENDIX E (continued)**EMERGENCY PLAN IMPLEMENTING PROCEDURES (EPIP)**

<u>EPIP #</u> <u>REFERENCE</u>	<u>TITLE/PURPOSE</u>	<u>PLAN</u>
1-12	<u>Repair and Corrective Action Guidelines During Emergency Situations</u> Guidelines for personnel to be considered for repair and corrective actions.	5.4.4.1
1-13	<u>Local Radiation Emergency</u> Provides actions to protect health and safety of plant personnel.	3.1, 5.1
1-15	<u>Use of Health Physics Network (HPN)</u> Provides guidance for TSC/EOF personnel on proper use of HPN system.	6.2.5
1-16	<u>Radioactive Liquid Release to Lake Ontario or Deer Creek</u> Provides instructions for actions if a liquid release to the Lake exceeds mpc in 10CFR20.	5.4.2, 5.6
1-17	<u>Planning for Adverse Weather</u> Provides actions to consider for site preparation for severe weather.	
1-18	<u>Discretionary Actions for Emergency Conditions</u> Provides additional measures to be considered along with those pre-planned actions identified in the NERP and Implementing procedures.	
2-1	<u>Protective Action Recommendations</u> Provides guidance to Emergency Coordinator or EOF/Recovery Manager in making PARs to offsite authorities.	5.5.1
2-2	<u>Obtaining Meteorological Data and Forecasts and Their Use in Dose Assessment</u> Provides guidance on obtaining material data and forecast information.	6.3.3
2-3	<u>Emergency Release Rate Determination</u> Provides method of determining release rates from various points during accident conditions.	6.3.3
2-4	<u>Emergency Dose Projections -- Manual Method</u> Provides a manual method for performing dose projections.	5.6, 6.3.3

APPENDIX E (continued)

EMERGENCY PLAN IMPLEMENTING PROCEDURES (EPIP)

<u>EPIP #</u> <u>REFERENCE</u>	<u>TITLE/PURPOSE</u>	<u>PLAN</u>
2-5	<u>Emergency Dose Projections -- Personal Computer Method</u> Provides a personal computer method for performing dose projections.	6.3.3
2-6	<u>Emergency Dose Projections -- MIDAS Program</u> Provides a MIDAS Program for performing dose projections.	6.3.3
2-7	<u>Management of Emergency Survey Teams</u> Provides guidance for efficient use of Survey Teams.	6.3.11
2-8	<u>Voluntary Acceptance of Emergency Radiation Exposure</u> Provides guidance for maximum protection of personnel and repair teams.	5.4.4.1
2-9	<u>Administration of Potassium Iodide (KI)</u> Provides guidelines for administration and use of KI.	5.4.4.3
2-10	<u>Inplant Radiation Surveys</u> Provides guidelines for conducting inplant radiation surveys and monitoring.	5.4.4.1
2-11	<u>Onsite Surveys</u> Procedure to be followed for conducting onsite radiological surveys.	5.4.3, 6.3.11
2-12	<u>Offsite Surveys</u> Procedures to be followed in conducting offsite radiological surveys.	6.3.11
2-13	<u>Iodine and Particulate Activity Determination From Air Samples</u> Provides method for preliminary determination of particulate and iodine cartridges.	6.3.11
2-14	<u>Post Plume Environmental Sampling</u> Provides guidance for Survey Teams in collecting environmental samples, e.g., snow, grass, soil, etc.	6.3.11

APPENDIX E (continued)**EMERGENCY PLAN IMPLEMENTING PROCEDURES (EPIP)**

<u>EPIP #</u> <u>REFERENCE</u>	<u>TITLE/PURPOSE</u>	<u>PLAN</u>
2-15	<u>Post Plume Evaluation of Offsite Doses Due to Deposition</u> Provides methods of estimating dose resulting from deposition and PARs based on that deposition based on that deposition.	6.3.3
2-16	<u>Core Damage Estimation</u> Provides an estimate of core damage based on fission product concentrations and other indications.	6.3
2-17	<u>Hypothetical (pre-release) Dose Estimates</u> Provides guidance to Dose Assessment personnel on projecting doses based on the known source term before a release.	6.3.3
2-18	<u>Control Room Dose Assessment</u> Provides Control Room personnel a method for performing initial projections of downwind dose rates and doses.	6.3.3
3-1	<u>Emergency Operations Facility (EOF) Activation</u> Provides guidance on activation and operation to EOF personnel.	4.2, 5.4, 6.1.6, 8.1
3-2	<u>Engineering Support Center (ESC)</u> Provides guidance for the establishment of the ESC.	4.2, 6.1.7
3-3	<u>Immediate Entry</u> Provides instructions for immediate entry to the Ginna Site from the Survey Center.	5.4.4.1
3-4	<u>Emergency Termination and Recovery</u> Provides a method for terminating the classification and guidelines for post accident recovery.	4.2, 4.2.3, 8.0
3-7	<u>Security During Emergencies</u> Outlines the security functions outside of the Ginna restricted area and the EOF.	5.4.1
4-1	<u>Public Information Response To An Unusual Event</u> Provides instruction for implementing the Public Information Response at an Unusual Event.	5.7

APPENDIX E (continued)**EMERGENCY PLAN IMPLEMENTING PROCEDURES (EPIP)**

<u>EPIP #</u> <u>REFERENCE</u>	<u>TITLE/PURPOSE</u>	<u>PLAN</u>
4-3	<u>Accidental Activation of Ginna Emergency Notification System Sirens</u> Provides guidance for appropriate actions in the event of a non-scheduled siren activation.	
4-6	<u>Joint Emergency News Center Activation</u> Describes the method for activating the JENC.	5.7
4-7	<u>Public Information Organization Staffing</u> Provides method to define and implement the Joint Emergency News Center position functions and responsibilities.	5.7, 6.1.8
4-8	<u>Testing of the Ginna Sirens from the Technical Support Center</u> Provides instruction for testing of the emergency sirens from the TSC.	
4-9	<u>Activation of Ginna Emergency Sirens from the Technical Support Center</u> Provides instruction for TSC activation of the sirens as a back-up to the county activation points.	
4-10	<u>Silent Testing of the Ginna Sirens from the County Activation Points</u> Provides guidance for silent testing of the sirens.	
4-11	<u>Activation of the Ginna Sirens from the County Activation Points</u> Provides guidance for activation of the sirens.	
5-1	<u>Offsite Emergency Response Facilities and Equipment Periodic Inventory and Operational Checks</u>	6.2, 7.1.5
5-2	<u>Onsite Emergency Response Facilities and Equipment Periodic Inventory and Operational Checks</u>	6.2, 7.3
5-5	<u>Conduct of Drills and Exercises</u> Describes preparation, conduct and documentation of emergency preparedness drills and exercises.	7.1, 7.1.5
5-6	<u>Annual Review of Nuclear Emergency Response Plan (NERP)</u> Provides guidance for the annual comprehensive review and verification of NERP.	7.2

APPENDIX E (continued)**EMERGENCY PLAN IMPLEMENTING PROCEDURES (EPIP)**

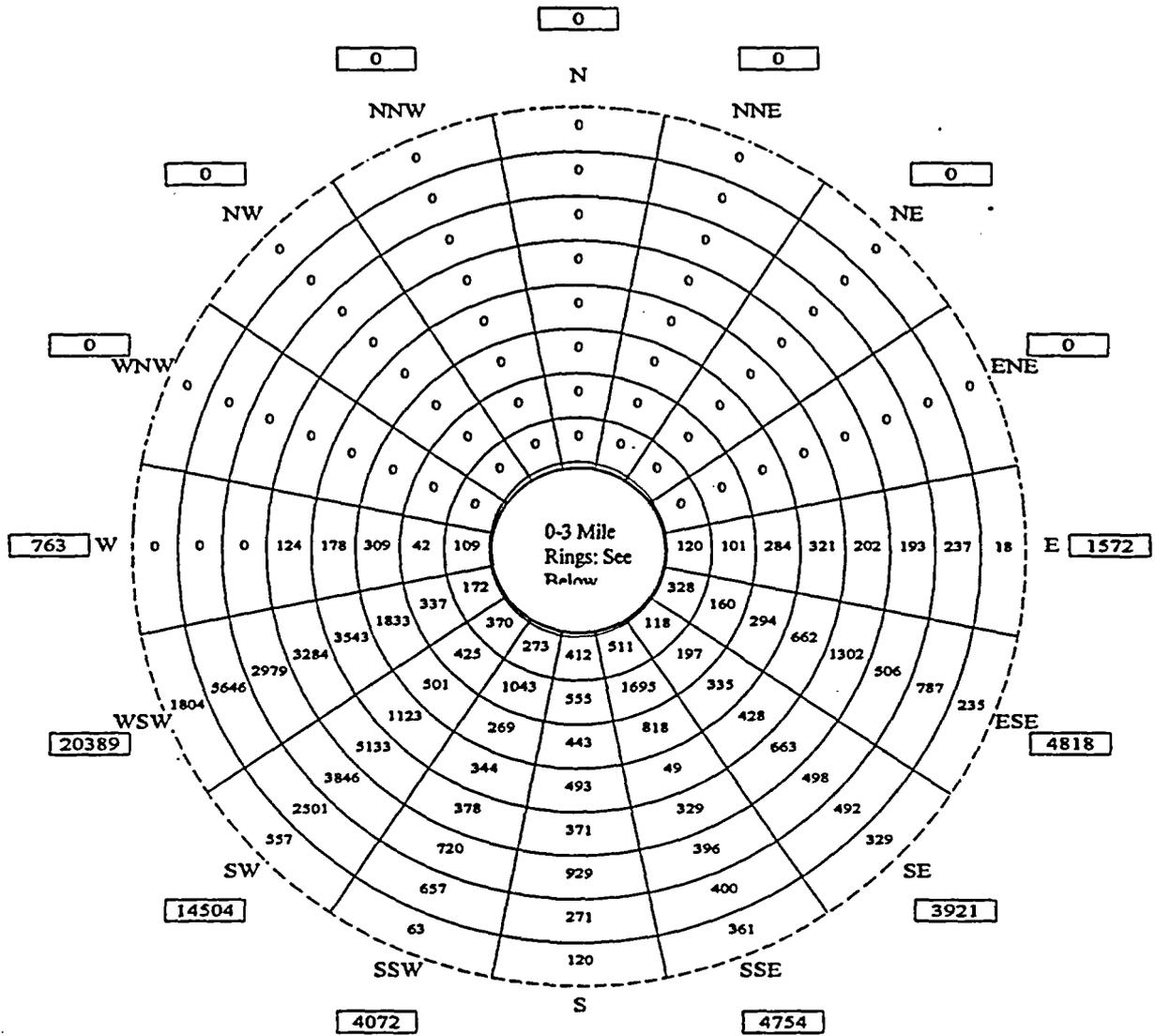
<u>EPIP #</u> <u>REFERENCE</u>	<u>TITLE/PURPOSE</u>	<u>PLAN</u>
5-7	<u>Emergency Organization</u> Provides method to define and implement the Emergency Organization including functions and responsibilities of each position.	4.2
5-9	<u>Testing the Off Hours Call-in Procedure and Quarterly Telephone Number Check</u> Provides instruction for quarterly NERP telephone number checks and off hours notification testing as required by NUREG-0654.	
5-10	<u>Emergency Response Data System (ERDS)</u> Define administrative controls to the PPCS data points, administrative controls for PPCS data communications protocol and testing of the data link.	
A-7	<u>Procedures for Handling Illness or Injuries at Ginna Station</u> Actions to be taken to prevent additional injury and to assure that individuals receive prompt first aid and medical attention	4.1, 4.3.6 to 4.3.10, 5.4.4.3, 6.5
GS-1009	<u>Fire, Explosion or Other Emergency Plan Activation</u> This provides detailed instructions for the Security Force in the event of an emergency plan activation	5.4.1
EPG-1	<u>Emergency Planning Guideline</u> This guideline provides direction for the administration of Emergency Planning activities.	
EPG-2	<u>Emergency Response Organization</u> This guideline provides the contact information for qualified ERO responders.	

APPENDIX FPOPULATION DATA SITE VICINITY

This Appendix presents the information requested by NUREG-0654 on the population distribution around the Ginna Nuclear Power Station.

| Figure F-1 is the 2003 population data in sector form. Figure F-2 is the permanent population data by Emergency Response Planning Area (ERPA).

FIGURE F-1 Permanent Residents by Sector



☐ Total segment 0 to EPZ

☐ 0-3 Mile Rings

POPULATION			
Ring Miles	Ring Subtotal	Total Miles	Cumulative Total
0-1	81	0-1	81
1-2	1104	0-2	1185
2-3	1901	0-3	3086
3-4	2414	0-4	5500
4-5	4556	0-5	10056
5-6	5087	0-6	15143
6-7	7140	0-7	22283
7-8	11787	0-8	34070
8-9	10067	0-9	44137
9-10	10990	0-10	55127
10-EPZ	3487	0-EPZ	58614

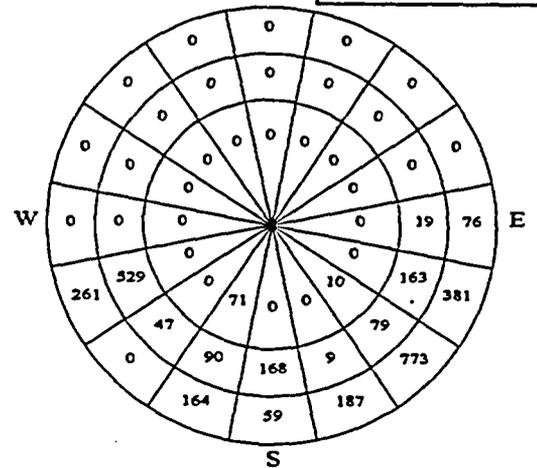


Figure F-2

Permanent Resident Population and Vehicles by ERPA

ERPA	Persons	Vehicles
W-1	3,877	1,837
W-2	6,043	2,861
W-3	1,081	512
W-4	2,227	1,055
W-5	3,976	1,882
W-6	2,181	1,035
W-7	4,579	2,167
Wayne County Totals:	23,964	11,349
M-1	3,973	2,011
M-2	482	243
M-3	359	182
M-4	6,965	3,523
M-5	1,324	670
M-6	6,893	3,487
M-7	7,624	3,858
M-8	3,100	1,570
M-9	3,930	1,989
Monroe County Totals:	34,650	17,533
EPZ Totals:	58,614	28,882

APPENDIX G

ANALYSIS OF EVACUATION TRAVEL TIMES

This Evacuation Time Estimate (ETE) is in strict compliance with NUREG-0654 and related guidelines. The ETE serves as one criterion for developing a Protective Action Decision (PAD). This appendix discusses the various components required to update the evacuation time estimates for the Ginna EPZ. These components are listed below:

- Evacuation Scenarios
- Weather Conditions
- Trip Generation
- Traffic Assignment
- Notification Time
- Mobilization Time
- Evacuation Travel Time Estimates
- Distribution of the Evacuation Population by Time
- Critical Roadway Links

A. Evacuation Scenarios

Evacuation travel time estimates are prepared to serve as a guide for local emergency coordinators in refining their emergency response plans and as an aid to local officials in selecting protective actions during an emergency. Evacuation travel time estimates were prepared for four distinct time-based scenarios and three distinct weather conditions for inclusion in the company's and Monroe and Wayne County RERP's.

These estimates assumed various partial as well as simultaneous evacuations of the entire EPZ. The weather scenarios included in the current Monroe and Wayne County RERP's are listed below.

Every Protective Action Recommendation (PAR) possibility for evacuation is modeled; additionally, the entire 2 mile, 5 mile and 10 mile evacuations are modeled.

Every evacuation scenario is run against the following time of year and weather conditions:

- Summer
 - Midweek and Weekend, Midday (School not in Session)
 - Good Weather
 - Rain
 - Midweek and Weekend, Evening (School not in Session)
 - Good Weather
- Winter
 - Midweek and Weekend, Midday
 - Good Weather
 - Rain
 - Snow
 - Midweek and Weekend Evening
 - Good Weather

These time-based scenarios were chosen and analyzed for the RERP's because they cover significantly different patterns of population distribution and transportation availability. Hence, the decision maker is provided with a tool for deciding the travel time required to evacuate various areas (sectors) or the entire EPZ under four different weather conditions and at different times of the day. These evacuation travel times are shown later in this section. A detailed description of the above scenarios is presented below.

Evacuation scenarios define the range of external conditions that could prevail at the time of an emergency (e.g., season, day-of-week, weather....).

Each "evacuation case" consists of calculating the ETE for one region under one scenario.

The total number of evacuation cases for Ginna is 35 regions x 12 weather scenarios which equals 420 ETE's. The regions are listed at the end of this Appendix in Table G-1.

The ETE will be calculated on the basis that the event escalates rapidly to the extent that the advisory to evacuate is virtually simultaneous with the alert.

100% of the population within the evacuation region will evacuate; a substantial percentage of the population outside of that region and outside the EPZ will also elect to voluntarily travel away from the plant.

ETE's were developed for each scenario. The process defines the region to be evacuated, identified demand (in vehicles), sub-divided into "time periods" to represent the variation of demand over time. Then, highway link capabilities were estimated based on field survey observations and on scenario-based weather conditions.

The ETE is the elapsed time for the evacuating traffic originating within the evacuation region to leave the region.

Population estimates are based upon 2000 Census data, projected to year 2003. The county specific projections are based upon growth rates estimated by comparing 1990 and 2000 Census data. Estimates of employees who commute into the EPZ are based upon the New York State Journey to Work Database, applied to the year 2000 employment data stratified on an ERPA basis. Specific major employers were also considered. Demographic data was adapted from telephone surveys conducted in Nine Mile Point EPZ due to similarity to the Ginna EPZ.

The ETE assumed 100% evacuation of the impacted region, 50% evacuation of other EPZ areas within indicated downwind distance and 35% evacuation of population within remaining areas inside the EPZ. This is displayed in Figure G-1 at the end of this Appendix..

Evacuation Regions take the form of circles or of "keyhole" configuration consisting of a circle and a sector expanding to 5 or 10 miles from the plant. The EPZ is subdivided into Emergency Response Planning Areas. Regions consist of groups of contiguous ERPAs.

The evacuation travel time depends primarily on the relationship between Traffic Demand and Highway Capacity.

When Demand exceeds over some time period, travel speed declines and the traffic environment exhibits queuing (stop-and-go), which is characteristic of congested conditions. Traffic does move, but slowly.

B. Weather Conditions

NUREG-0654 stipulates that two weather conditions, normal and adverse, be considered in the evacuation travel time analysis; however, local weather conditions in the Rochester area, particularly during the winter, suggest that two types of adverse weather conditions be considered when estimating evacuation times. Normal weather has been termed as good weather and adverse weather has been broken out into two categories -- "rainy weather" and "snowy weather". A brief synopsis of each is summarized below:

- Good Weather - Weather conditions exist that do not impede traffic flow. Good weather excludes rain, snow, fog, and ice on roadways.
- Rainy Weather - Weather conditions exist that will impede traffic flow such as rain, fog, or a light snow which may result in a wet or lightly covered road surface. The evacuation roadway network is passable during weather conditions such as these, albeit at a reduced ability to facilitate traffic.
- Snowy Weather - Snowy weather will be defined as the worst possible weather conditions when the evacuation roadway network is passable. These conditions would exist when the roads are covered and/or packed with snow, when plowed snow is located at the roadway's edge which makes it difficult to move stalled vehicles off the road, when melting snow helps to make the road surface slippery or ice covered, and when drifting snow blocks roads. The ability of the evacuation roadway network to facilitate traffic during adverse weather conditions is less than during rainy weather.

The effects of these weather conditions on the roadway capacities, and hence the evacuation travel time estimates, have been discussed earlier in Section III.

It is assumed that everyone within an ERPA that is issued an Advisory to evacuate will, in fact, respond in general accord with the planned routes.

It is assumed that no early dismissal to home of school children is contemplated. According to county policy, school children are not to be released to their parents on school grounds. All students will be evacuated to the reception centers assigned to the schools, and then released to their parents as they arrive at the reception centers. Sufficient bus resources are identified to handle 100% of the students in one wave.

"Voluntary evacuation" occurs when people in areas of the EPZ not ordered to evacuate nevertheless chose to do so. Within the annular ring defined by the distance to be evacuated (5-miles or 10-miles downwind), 50% of the people not advised to evacuate are assumed to evacuate within the same time-frame. Between the annular ring, defined by the extent of the downwind evacuation order out to the EPZ boundary, it is assumed that 35% of the people will voluntarily evacuate. This is graphically presented at the end of this Appendix in Figure G-2.

C. Trip Generation

For each traffic zone included in an ERPA, the number of evacuation trips generated by that traffic zone was estimated by trip type. The number of trips varied significantly by scenario. For example, for the Summer, Midweek, Midday Scenario, large numbers of evacuation trips were attributable to transient employees working in the EPZ. However, for the Summer, Weekend, Midday Scenario, this same trip type (employees) was much less significant because most businesses are closed.

The number of trips for each traffic zone was based on population and vehicle occupancy data. For example, if a traffic zone has a nursing home with 120 ambulatory and 15 wheelchair-bound residents, and if the facility owns one 10-passenger wheelchair van, then five vehicle trips would be generated by the nursing home (three buses provided by a bus company with 40 passengers each to evacuate the ambulatory population, and one facility-owned van and one other 5-passenger wheelchair van would be provided by a bus company to evacuate the wheelchair bound residents).

Vehicle trips generated by each zone were then converted to passenger car equivalents (PCEs) for traffic assignment purposes. Buses were weighted as the equivalent of two cars, since their primary impact would be one of increased roadway space during a slow, congested evacuation condition.

D. Traffic Assignments

The assignment of the evacuation vehicles generated by each traffic zone over designated evacuation routes was performed by a computer model developed specifically for evacuation planning studies. The model loads the network and computes the travel and delay times for all zones being analyzed in any given Sector.

This computer model is based on a static traffic assignment procedure which assumes instantaneous loading of the evacuation network and concurrent vehicular demand on all roadway segments. Although this procedure is not an exact simulation of vehicle movement during an evacuation, the static traffic assignment (which has been accepted by the Federal Emergency Management Agency) results in evacuation travel time estimates which closely resemble those of a dynamic model. A detailed description of the static traffic assignment algorithm, and the results of the comparison between static and dynamic assignment is presented in Appendix H of the full ETE report for the Ginna 10-mile Emergency Planning Zone.

E. Notification Time

The Ginna EPZ is served by a siren notification system that meets the acceptable design objectives specified in Appendix 3 of NUREG-0654. This siren system covers the entire EPZ. Tone alert radios (emergency alert receivers) are also provided to public and private schools, daycare centers, nursery schools, local police departments, and major employers located in the EPZ. The Counties' evacuation plans contain backup notification procedures such as route alerting in the event of a siren or tone alert system malfunction.

The Planning Basis Assumption for the calculation of the ETE is a rapidly accelerating accident (fast-breaking or immediate General Emergency) that requires evacuation. It is assumed that the general population will begin the task of preparing to evacuate within 10 minutes of siren alert. A rapidly escalating accident scenario assumes that the general population will evacuate over the same time frame as do the school children, the transi-dependent population, and the special facility population.

F. Confirmation Time

Mobilization time represents the time required by evacuees to perform all their necessary preparatory activities prior to starting the trip.

G. Components of the Evacuation Travel Time

The estimates of evacuation travel time include public preparation time, terminal time, and roadway travel time. Each is discussed as follows:

1. Public Preparation Time - Public preparation time during an evacuation can vary significantly. For example, patrons staying at hotels are capable of preparing to evacuate in a shorter time frame than permanent residents who are likely to have many issues to attend to. Therefore, preparation time for hotel patrons has been assumed to be shorter than that for permanent residents.

The evacuation of the Maplewood Nursing Home will require additional preparation time. Staff officials estimate they need approximately one hour to have all residents ready to load onto transportation made available by outside agencies.

2. Terminal Time - The terminal time for vehicles departing from home represents the time to drive via local residential streets and collector roads in a traffic zone to the first link of the pre-designated primary evacuation route.

For bus routes, terminal time is comprised of inbound travel time, time to travel the emergency bus route, and loading time at pickup points for transit dependant people. Inbound travel time varies depending upon the evacuation scenario.

3. Roadway Travel Time - The roadway travel time is the amount of time required for all vehicles to traverse the entire length of their evacuation route to the edge of the 10-mile radius in the EPZ, depending upon the evacuation ordered. The time depends on both normal operating speeds on the road and on delays due to congestion (where the vehicle volumes approach or exceed the capacity of the roadway at a particular location). Hence, the roadway travel time is the amount of time beginning when the first vehicle enters the evacuation route, assuming normal operating speeds, until the last vehicle leaves the sector, taking into account reduced speeds attributable to congestion.

It is assumed that everyone within the group of ERPA's forming a Region that is issued an Advisory to Evacuate will, in fact, respond in general accord with the planned routes.

Other assumptions are:

- No early dismissal of school children occurs.
- According to County policy, school children are not to be released to their parents on school grounds. All students will be evacuated to the reception centers assigned to the schools and then released to their parents as they arrive at the reception centers. Sufficient bus resources are identified to accommodate 100 percent of the students in one wave.
- A portion of those households with access to a vehicle will evacuate without waiting arrival home of all commuters. Data from the telephone survey indicates that approximately 40 percent of households with commuters, who have other vehicles available for evacuation, will not wait for the commuter to arrive home before leaving the area.
- Normal traffic flow will be assumed present at the start of the emergency.
- Access Control Points (ACP) will be staffed within approximately one hour following the siren notifications, to divert traffic attempting to enter the EPZ. Earlier activation of ACP locations would delay returning commuters.

H. Evacuation Travel Time Estimates

The evacuation travel time estimates developed for the Ginna EPZ are in accordance with the implementation procedures and other operational strategies indicated in the Monroe and Wayne County RERP's. The implementation procedures include provisions such as pre-designated evacuation routes for all ERPA's, prioritized traffic control locations and predetermined emergency bus routes with designated pickup points for the public.

Table G-1 DEFINITION OF EVACUATION REGIONS

REGION	ERPA IN MONROE	ERPA IN WAYNE	DESCRIPTION	ERPA IN REGION
R1		W1	2 MILE RING	W1
R2	M1	W1-W3	5 MILE RING	M1, W1-W3
R3	M1-M9	W1-W7	Full EPZ	M1-M9, W1-W7
			2 MILE RING AND SECTOR TO 5 MILE	
R4		W1, W2, W3	N	W1, W2, W3
R5	M1	W1, W2	NNE	M1, W1, W2
R6	M1	W1, W2	NE	M1, W1, W2
R7	M1	W1, W2	ENE	M1, W1, W2
R8	M1	W1, W2	E	M1, W1, W2
R9	M1	W1	ESE	M1, W1
R10		W1	SE	W1
R11		W1	SSE	W1
R12		W1	S	W1
R13		W1	SSW	W1
R14		W1, W3	SW	W1, W3
R15		W1, W3	WSW	W1, W3
R16		W1, W3	W	W1, W3
R17		W1, W3	WNW	W1, W3
R18		W1, W3	NW	W1, W3
R19		W1, W3	NNW	W1, W3

Table G-1 DEFINITION OF EVACUATION REGIONS
(Continued)

REGION	ERPA IN MONROE	ERPA IN WAYNE	DESCRIPTION	ERPA IN REGION
			5 MILE RING AND SECTOR TO EPZ BOUNDARY	
R20	M1 M2, M4, M5	W1-W3, W5-W7	N	M1, M2, M4, M5, W1-W3, W5-W7
R21	M1-M5, M6, M7, M9	W1-W7, W6, W7	NNE	M1-M5, M6, M7, M9, W1-W3, W6, W7
R22	M1-M9	W1-W3, W7	NE	M1-M9, W1-W3, W7
R23	M1-M9	W1-W3, W7	ENE	M1-M9, W1-W3, W7
R24	M1, M2, M3, M4, M6-M9	W1-W3	E	M1, M2, M3, M4, M6-M9, W1-W3
R25	M1, M3, M6, M8, M9	W1-W3	ESE	M1, M3, M6, M8, M9, W1-W3
R26	M1	W1-W3	SE	M1, W1-W3
R27	M1	W1-W3	SSE	M1, W1-W3
R28	M1	W1-W3	S	M1, W1-W3
R29	M1	W1-W3	SSW	M1, W1-W3
R30	M1	W1-W3, W4	SW	M1, W1-W3, W4
R31	M1	W1-W4, W5	WSW	M1, W1-W4, W5
R32	M1	W1-W5, W6	W	M1, W1-W5, W6
R33	M1	W1-W6, W7	WNW	M1, W1-W6, W7
R34	M1, M2	W-W7	NW	M1, M2, W1-W7
R35	M1, M2, M5	W1-W3, W4, W5-W7	NNW	M1, M2, M5, W1-W3, W4, W5-W7

FIGURE G-1 SHADOW EVACUATION REGION

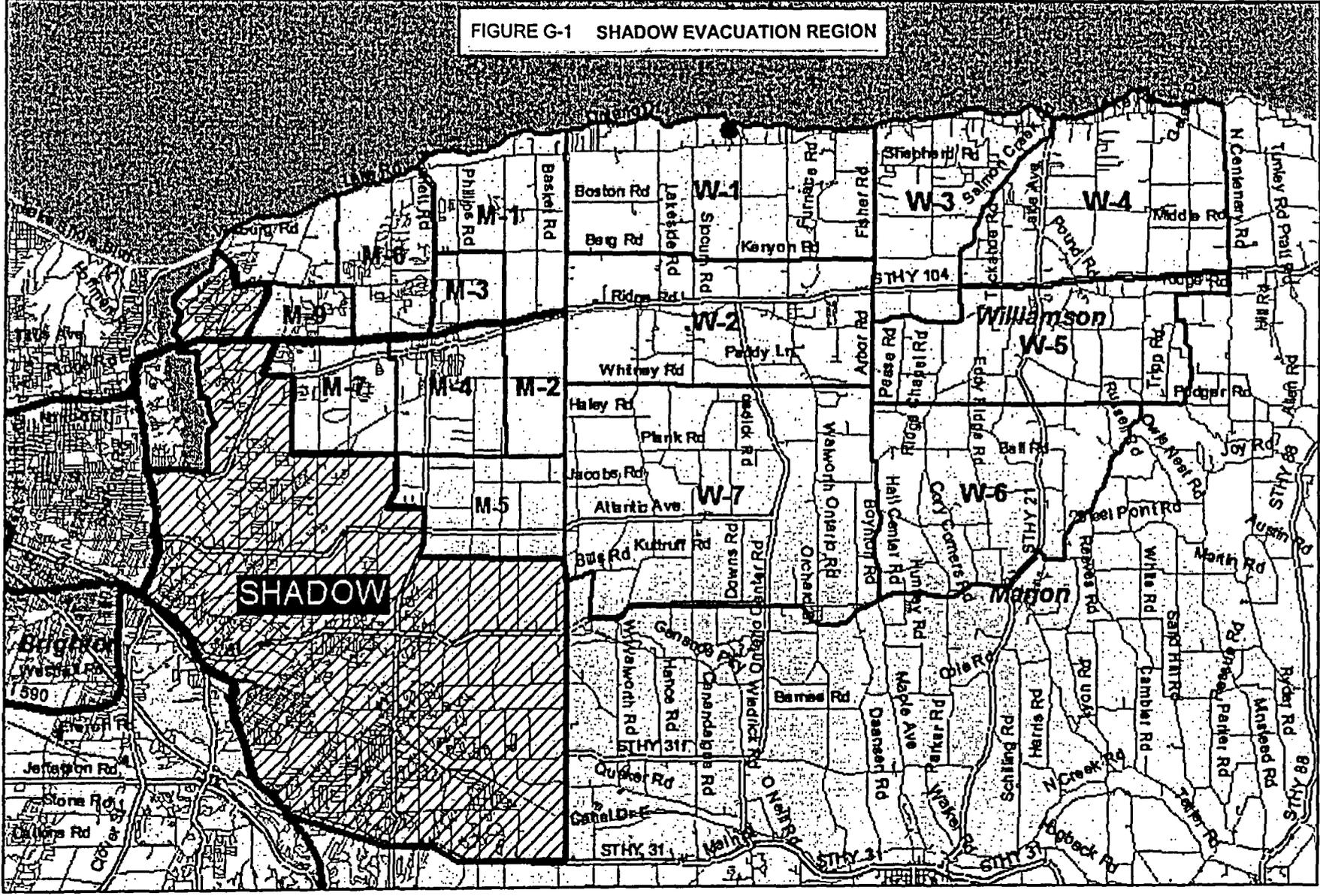
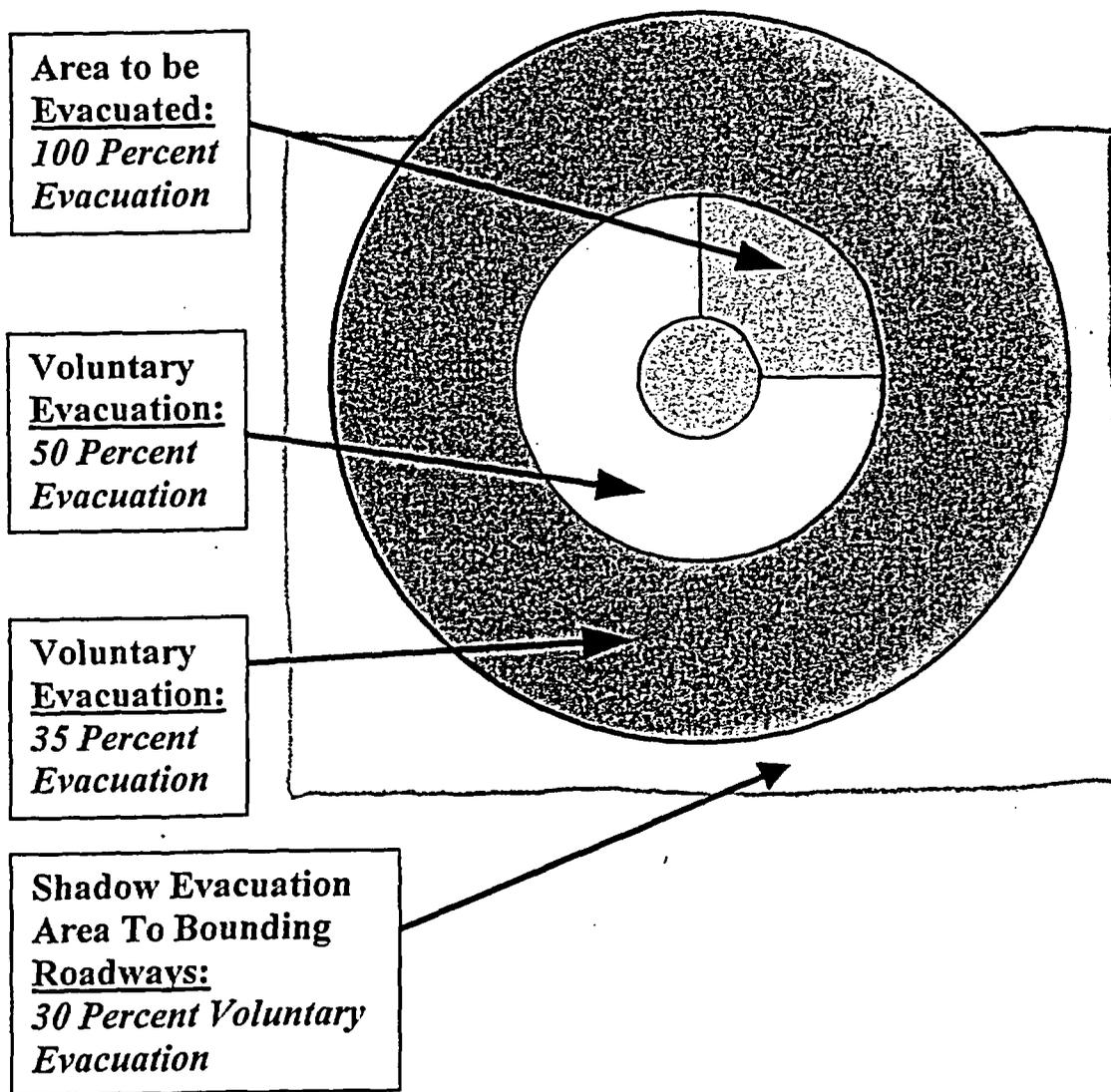


Figure G-2 SHADOW EVACUATION METHODOLOGY



APPENDIX H**NUREG-0654 EVALUATION CRITERIA CROSS REFERENCE**

<u>NUREG-0654 Reference</u>	<u>Criteria</u>	<u>Response Plan Section No.</u>
A1-Item	a Identification of Response Organizations	4.3
	b Organization of Concept of Operations	1.0, 2.0
	c Organizational Inter-Relationships - Block Diagrams	Fig. 4.3
	d Designation of Organization Director	1.1, 4.2
	e 24 Hour Response/Communication	6.2
A2-Item	a Organization Authority	N/A*
	b Legal Basis for Organization Authority	N/A*
A3	Formal Intra-government/Organization Agreements	Appendix A
A4	Designated Authority for Organization Resource Continuity	4.2
B1	Provision for Onsite Shift Emergency Organization	4.1, 4.2
B2	Designation of Onsite Emergency Coordinator	4.2
B3	Line of Succession for the Emergency Coordinator	4.2
B4	Functional Responsibilities of the Emergency Coordinator	3.5, 4.2, 5.4.3, 5.5.1
B5	Qualification of On-Site Emergency Personnel	4.1, 4.2, 7.0
B6	Onsite Emergency Organization Interface	4.2, 4.3, 6.1, 8.1
B7	Redundant, See M-2	
B8	Designation of Minimum Staffing Requirements for Plant Emergencies	4.1, 4.2
B8-Item	a Logistics Support for Emergency Personnel	4.2
	b Technical Support for Planning/ Re-entry/Recovery Operations	4.2
	c Management Level Interface with Governmental Authorities	4.2

*N/A - Not required in Licensee Plans

APPENDIX H

NUREG-0654 EVALUATION CRITERIA CROSS REFERENCE (continued)

<u>NUREG-0654 Reference</u>	<u>Criteria</u>	<u>Response Plan Section No.</u>
B8-Item d	Information/Press Releases	4.2.1, 5.7
B8	Designation of Contractor/Private Organization for Technical Assistance	4.3.11
B9	Designation/Responsibility/Limitations of Local Agency Assistance	4.3 Appendix A
C1-Item a	Authority to Request RAP/IRAP Resources	4.2, 5.5 6.2.5
	b Federal Resources Expected and Time of Arrival	4.3.4
	c Specify Support Available to Federal Response	4.3.4
C2-Item a	Organization Representative at Near-Site Emergency Operations Facility	N/A
	b License Representative at Governmental OEC	5.4.3
C3	Radiological Laboratory Capabilities	4.3.12
C4	Nuclear Assistance Sources	4.3.11, 4.3.12
D1	Facility Emergency Classification System	Table 3.1 (Pp. 6-8)
D2	Initiating Conditions	
D3	State and Local Emergency Classification System	N/A
D4	State and Local Procedures	4.3.1, 4.3.2
E1	Bases for Notification/Verification	3.0
E2	Personnel Notification/Alert/Mobilization Procedures	5.4.3
E3	Contents of Initial Plant Emergency Messages	5.4.2
E4	Provisions for Content of Plant Follow-up Messages	5.4.3
E5	Dissemination of Information from Plant Operators	N/A
E6	Means for Population Notification	6.3.13

*N/A - Not required in Licensee Plans, see State and County Plans.

APPENDIX H**NUREG-0654 EVALUATION CRITERIA CROSS REFERENCE (continued)**

<u>NUREG-0654 Reference</u>	<u>Criteria</u>	<u>Response Plan Section No.</u>
E7	Provision for Written Public Instruction Messages	5.5
F1 - Item	a,b,c,d,f 24-Hour Notification/Activation of Emergency Response Network	6.2.5
	e Alerting Ginna Emergency Personnel	5.4.1
F2	Communications with Medical Support Facilities	4.3.7, 4.3.8
F3	Periodic Communications System Testing	6.2, 6.2.2
G1	Public Emergency Education/Information	5.5
G2	Public Emergency Education Program	5.7
G3-Item	a,b Public Information Control Point	6.1.8
G4-Item	a Designated Public Information Spokesperson	Fig. 6.2B, 5.5
	b Timely Exchange Among Spokespersons	4.2
	c Arrangements for Rumor Control	6.1.8
G5	News Media Education Program	5.7
H1	NUREG-0696 Technical & On-site Operational Support Centers	6.1.4, 6.1.5
H2	Near-Site Emergency Operations Facilities	6.1.6, 6.1.7
H3	State & Local Emergency Operations Center	N/A
H4	Provision for Activation/Staffing of Emergency Operations Center	4.2, 6.1
H5-Item	a,b,c,d Onsite Monitoring Systems	6.3.1, 6.3.8, 6.3.10, 6.3.14
H6-Item	a Offsite Geophysical Phenomena Monitors	6.3.8
	b Off-site Radiological Monitors/Dosimetry	6.3.7, 6.3.11
	c Laboratory Facilities	6.3.9
H7	Off-site Radiological Monitoring Equipment	6.3.10, 6.3.11

*N/A - Not required in Licensee Plans, see State and County Plans.

APPENDIX H**NUREG-0654 EVALUATION CRITERIA CROSS REFERENCE (continued)**

<u>NUREG-0654 Reference</u>	<u>Criteria</u>	<u>Response Plan Section No.</u>
H8	Provision for Meteorological Instrumentation/ Procedures	6.3.10
H9	Provision for On-site Operations Support Center	6.1.5
H10	Inspection/Inventory/Calibration of Emergency Equipment/Instruments	6.3.12
H11	Categories of Emergency Equipment	Appendix D
H12	Centralized Point for Receipt and Analysis of All Field Monitoring Data	6.1.2, 6.3.9
I1	Identification of Plant Condition Parameters and Corresponding Emergency Classes	3.0, 5.0
I2	NUREG-0578 Post-Accident Sampling and Monitoring Capabilities	6.3.2, 6.3.3, 6.3.6, 6.3.8, 6.3.9
I3-Item	a Methods/Techniques for Source Term Determination	6.3.2
	b Methods/Techniques to Determine Release Magnitude	6.3.3
I4	Onsite/Offsite Exposures and Contamination for Various Meteorological Conditions	6.3.3
I5	Acquisition of Meteorological Information	6.3.10
I6	Determination of Release Rate/Projected Doses given Inoperable Instrumentation	6.3.3
I7	Capabilities for Field Monitoring within the Plume Exposure EPZ	6.3.11
I8	Capability for Assessment of Actual/Potential Magnitude and Location of Radiological Hazards	4.2, 5.4.1 5.4.2, 5.4.3
I9	Capability to Detect Airborne Radioiodine Concentrations as Low as 1E-07 microcurie/cc	6.3.11
I10	Estimation of Integrated Doses; Comparison with Protective Action Guides	5.5.1
I11	Arrangements to Locate and Track the Plume	N/A
J1-Item	a,b,c,d Capability to Warn Personnel	5.4.4.2, 6.2

*N/A - Not required in Licensee Plans, see State and County Plans.

APPENDIX H**NUREG-0654 EVALUATION CRITERIA CROSS REFERENCE (continued)**

<u>NUREG-0654 Reference</u>	<u>Criteria</u>	<u>Response Plan Section No.</u>
J2	Offsite Sheltering/Evacuation of Onsite Personnel	5.4.4.2
J3	Radiological Monitoring of Personnel Evacuated from Site	5.4.4.1
J4	Onsite Non-Essential Personnel Evacuation/Decontamination at Offsite Facility	5.4.4.2, 5.4.4.5
J5	Accountability for Onsite Personnel	5.4.4.2
J6-Item	a,b,c Onsite Personnel Protection	5.4.4.3, 6.1.5
J7	Prompt Notification of Offsite Authorities	3.2, 5.2
J8	Onsite Plan Contains Plume Exposure EPZ Evacuation Time Estimates	Appendix G
J9	Protective Action Guides (Personnel Exposure/Food Stuffs)	N/A
J10-Item	a Maps of Evacuation Routes/Sectors Relocation Centers	Figures G1A and G1B
	b Population Distribution by Sector/Zone	Appendix F
	c Means of Notification of Transient/Resident Population	6.3.13
	d Protection of Impaired Persons	N/A*
	e Radioprotective Drug Distribution	N/A
	f Radioprotective Drug Administration	N/A
	g Means of Relocation	N/A
	h Relocation Centers 5 to 10 miles Beyond the EPZ	N/A
	i Evacuation Routes/Traffic Capabilities	N/A
	j Evacuated Area Access Control	N/A
	k Evacuation Route Impediments/Contingency Measures	N/A

*N/A - Not required in Licensee Plans, see State and County Plans.

APPENDIX H

NUREG-0654 EVALUATION CRITERIA CROSS REFERENCE (continued)

<u>NUREG-0654 Reference</u>	<u>Criteria</u>	<u>Response Plan Section No.</u>
J-10	l Evacuation Time Estimates for EPZ	Appendix G
	m Basis for Protective Actions used in EPZ during Emergency Conditions	Table 5.1
J11	Protective Measures for the Ingestion Pathway	N/A
J12	Registration & Monitoring of Evacuees	N/A
K1-Item	a Onsite Exposure Guidelines for the Removal of Injured Persons	5.4.4.1
	b Onsite Exposure Guidelines for the Undertaking of Corrective Actions	5.4.4.1
	c Exposure Guidelines for Performing Assessment Actions	5.4.4.1
	d Guidelines for Providing First Aid	5.4.4.1
	e Guidelines for Providing Personnel Decontamination	5.4.4.5
	f Guidelines for Providing Ambulance Service	5.4.4.1
	g Guidelines for Providing Medical Treatment Services	5.4.4.1
K2	Onsite Radiation Protection Program	5.4.4.1
K3-Item	a,b 24-Hour Dosimetry Service	5.4.4.1
K4	Authorization for Personnel Exposure in Excess of the Protective Action Guides	N/A
K5-Item	a,b Determination of Need for Decontamination	5.4.4.5
K6-Item	a,b,c Onsite Controls	6.4.5
K7	Capability for Decontamination of Relocated Onsite Personnel	5.4.4.5, 6.4.5
L1	Ability of Medical/Health Services to Evaluate Radiation Exposure/ Handle Contaminated Individuals	4.3.6 - 4.3.10, 6.5

*N/A - Not required in Licensee Plans, see State and County Plans.

APPENDIX H

NUREG-0654 EVALUATION CRITERIA CROSS REFERENCE (continued)

<u>NUREG-0654 Reference</u>	<u>Criteria</u>	<u>Response Plan Section No.</u>
I2	Onsite First Aid Capability	5.4.4.3
L3	Identification of Medical Services Facilities Equipped/ Trained to Treat Radiological Accident Victims	4.3.7, 4.3.8, 4.3.9, 4.3.10
L4	Transportation to Medical Facilities	4.3.7
M1	Plans for Recovery/De-escalation of Protective Measures	8.0, 8.1
M2	Designation of Facility Recovery Organization	4.2.5, 8.1
M3	Notification of Recovery Operation Initiation	8.1
M4	Methodology for Periodic Exposure Estimate	6.3.3
N1-Item	a Drill Simulates Offsite Releases	7.1.5
	b Drills Test All Elements, Time, & Weather Conditions	7.1.5
N2-Item	a Communication Drills	7.1.5
	b Fire Drills	4.3.11
	c Medical Emergency Drills	4.3.7 - 4.3.9
	d Radiological Monitoring Drills	7.1.3, 7.1.5
	e Health Physics Drill	7.1.5
N3-Item	a,b,c,d,e,f Drill Scenarios	7.1.5
N4	Qualified Observers/Critique	7.1.5
N5	Improvements/Corrective Actions	7.4
O1-Item	a Onsite Emergency Response Training for Offsite Emergency Organizations	7.1.4
	b Offsite Emergency Response Organization Training	7.1.5
O2	Onsite Training/Corrective Actions	7.1
O3	Onsite First Aid Team Training	4.1, 5.4.4.3
O4	Response Personnel Training	7.1

APPENDIX H**NUREG-0654 EVALUATION CRITERIA CROSS REFERENCE (continued)**

<u>NUREG-0654 Reference</u>	<u>Criteria</u>	<u>Response Plan Section No.</u>
O5	Annual Retraining of Personnel	7.0
P1	Planning Personnel Training	7.0
P2	Designation of Planning Authority Letter	1.1.C
P3	Designation of Emergency Planning Coordinator Letter	1.1.C
P4	Annual Review and Update of Response Plan	7.2
P5	Provisions for Plan Distribution and Promulgation of Plan Revisions	7.2
P6	Listing of Support Plans	Appendix B
P7	Procedures for Plan Implementation	Appendix E
P8	Table of Contents	Page 1
P9	Independent Audit of Emergency Preparedness Program	7.4
P10	Updating of Telephone Numbers	7.2

APPENDIX I**GINNA SIREN/TONE ALERT LOCATIONS**

<u>SIREN #</u>	<u>LOCATION</u>
1	Lake Rd. 300' E. of Baker Rd., Webster
2	Drumm Rd. 2000' N. of Klem Rd., Webster on RG&E R.O.W.
3	Webster Park Rd. off Lake Rd., Webster
4	Hidden Valley Rd. 400' E. of Holt Rd., Webster
5	Webster Nine Mile Pt. Rd. at Webster Sewer Plant, Webster
6	Nine Mile Pt. Rd. at Lake Rd., Webster
7	Phillips Rd. 3600' S. of Lake Rd., Webster
8	Salt Rd. 1300' N. of Schlegel Rd., Webster
9	Lake Rd. 900' E. of Salt Rd., Webster
10	County Line Rd. 800' N. of Schlegel Rd., Webster
11	Salt Rd. 100' N. of Iron - Wayne Co. X-Way, Webster
12	South Avenue. 500' S. of Main St., Webster Fire Dept.
13	State Rd. 1800' E. of Jackson Rd., Webster
14	Salt Rd. 200' N. of State Rd., Webster
15	County Line Rd. 1300' S. of Ridge Rd., Ontario
16	County Line Rd. 1300' S. of Whitney Rd., Walworth
17	Kennedy Rd. Cor. of Hogan Rd., Penfield
18	Sweets Corners Rd. 700' W. of County Line Rd., Penfield
19	Gloria Dr. 200' S. of Sweets Corners Rd., Penfield
20	Salt Rd. 2500' S. of Kennedy Rd., Penfield
21	Nine Mile Pt. Rd. 150' S. of Northup Rd., Penfield
22	Harris Rd. 700' S. of Marchner Rd., Penfield
23	Jackson Rd. 3100' S. of State Rd., Penfield
24	Shoecraft Rd. 300' S. of Ridge Rd. E., Webster

APPENDIX IGINNA SIREN/TONE ALERT LOCATIONS (Cont'd.)

<u>SIREN #</u>	<u>LOCATION</u>
25	Hard Rd. 1600' N. of Picture Parkway on RG&E R.O.W., Webster
26	Gravel Rd. 3000' S. of Klem Rd., Webster
27	Lake Rd. 600' W. of Parsons Acres PVT, Ontario
28	Lake Rd. 200' E. of Verdine Rd., Ontario
29	Boston Rd. 4900' E. of County Line Rd., Ontario
30	Berg Rd. 4575' E. of Co. Line Rd., Ontario
31	Ridge Rd. 300' W. of Lincoln Rd., Ontario
32	Lake Side Rd. 800' N. of Berg Rd., Ontario
33	Ginna Sta. 400' N of Ginna Training Center, Ontario
34	Brick Church Rd. 1600' E. of Ontario Center Rd., Ontario
35	Kenyon Rd. 500' E. of Ontario Center Rd., Ontario
36	2200 Lake Rd. Waste Water Treatment Plant, Ontario
37	Knickerbocker Rd. 3100' S. of Lake Rd., Ontario
38	Trimble Rd. 1000' E. of Furnace Rd., Ontario
39	Route 104 1200' W. of Fisher Rd., Ontario
40	Walworth Rd. 750' N. of Paddy La., Ontario
41	Ridge Rd. E. & Cone Dr. Ontario Fire Dept., Ontario
42	Ridge Rd. E. 1200' E. of Slocum Rd., Ontario
43	Whitney Rd. 1300' W. of Swadling Rd., Ontario
44	Hennessey Rd. 500' E. of Bushwood Rd., Walworth
45	Walworth Ontario Rd. 4200' N. of Tummonds Rd., Walworth
46	Walworth Ontario Rd. 900' N. of Smith Hill Rd., Walworth
47	Ontario Center Rd. 4200' S. of Plank Rd., Walworth
48	Plank Rd. opp. Fosdick Rd., Walworth
49	Lincoln Rd. N.E. corner Plank Rd., Walworth Lincoln Fire Department

APPENDIX IGINNA SIREN/TONE ALERT LOCATIONS (Cont'd.)

<u>SIREN #</u>	<u>LOCATION</u>
50	Atlantic Ave. 370' W. of Cream Ridge Rd., Walworth
51	Stalker Rd. 2000' N. of Walworth Penfield Rd., Walworth
52	West Walworth Rd. 1900' S. of Bills Rd., West Walworth West Walworth Fire Department
53	Walworth Penfield Rd. - on RG&E R.O.W., Walworth 1100' W. of Canandaigua Rd.
54	Atlantic Ave. 900' E. of Canandaigua Rd., Walworth
55	Walworth Penfield Rd. 1000' E. of Weidrich Rd., Walworth
56	Ontario Center Rd. 2400' S. of Atlantic Ave., Walworth
57	Church St. 350' S. of Walworth - Penfield Rd., Walworth Walworth Fire Department
58	Walworth Ontario Rd. 2600' S. of Smith Hill Rd., Walworth
59	Boynton Rd. 3500' S. of Smith Hill Rd., Walworth
60	Boynton Rd. 3200' N. of Marion Walworth Rd., Walworth
61	Walworth Marion Rd. 800' W. of Huntley Rd., Marion
62	Goosen Rd. 200' E. of Hall Crt. Rd., Marion
63	Gildersleeve Rd. 1400' N. of Hall Center Rd., Marion
64	Ridge Chapel Rd. 1300' N. of Engelson Rd., Marion
65	Gildersleeve Rd. 700' W. of Eddy Ridge Rd., Marion
66	Goosen Rd. 500' W. of Ridge Chapel Rd., Marion
67	Dean Rd. 3600' N. of Walworth - Marion Rd., Marion
68	Warner Rd. 1900' W. of Williamson - Marion Rd., Marion
69	Franklin Rd. 2300' E. of Williamson - Marion Rd., Marion
70	Russell Rd. 1200' N. of Marion E. Williamson Rd., Marion
71	Everdyke Rd. 1100' W. of Marion E. Williamson Rd., Williamson
72	Pearsall Rd. 402' W. of Franklin Rd., Williamson
73	Eddy Rd. 1300' W. of Van Cruyningham Road, Williamson

APPENDIX I**GINNA SIREN/TONE ALERT LOCATIONS (Cont'd.)**

<u>SIREN #</u>	<u>LOCATION</u>
74	Ridge Chapel Rd. 1000' N. of Eddy Rd., Williamson
75	Arbor Rd. 4000' S. of Ridge Rd., Williamson
76	Ridge Rd. 200' E. of Ridge Chapel Rd., Williamson
77	Lake Avenue. 1000' N. of Stanford St., Williamson Williamson Fire Department
78	Congdon Rd. 900' E. of Willow Avenue, Williamson
79	Richardson Rd. 1600' S. of Ridge Rd., Sodus
80	Marion E. Williamson Rd. 600' S. of Ridge Rd., Williamson
81	Redman Rd. 400' N. of Rt. 104, Sodus
82	East T. L. Rd. 800' S. of Middle Rd., Williamson
83	Pound Rd. 1000' N. of Bear Swamp Rd., Williamson
84	Tuckahoe Rd. 400' N. of Rt. 104, Williamson
85	Stoney Lonesome Rd. 2200' N. of Kenyon Rd., Williamson
86	Fisher Rd. 500' S. of Trumble Rd., Williamson
87	Shepherd Rd. 2000' E. of Fisher Rd., Williamson
88	Lake Rd. 1500' E. of Stoney Lonesome Rd., Williamson
89	Shepherd Rd. 2950' E. of Stoney Lonesome Rd., Williamson
90	Tuckahoe Rd. 800' N. of Church Rd., Williamson
91	Lake Rd. 700' W. of Hamilton St., Williamson
92	Bear Swamp Rd. 1800' N. of Brassier Rd., Williamson
93	Lake Rd. 2600' E. of Bear Swamp Rd., Williamson
94	East Town Line Rd. 1100' N. of Brassier Rd., Williamson
95	Redman Rd. 400' N. of Van Lare Rd., Sodus
96	Lake Rd. 1500' W. of Centenary Rd., Sodus

APPENDIX I**TONE ALERTS MONROE COUNTY**

<u>NO.</u>	<u>ERPA</u>	<u>PLACE</u>	<u>ADDRESS</u>
201	M1	DeWitt Rd. School	722 Dewitt Road
202	M1	Heritage Christian Home	548 Klem Rd.
203	M6	St. Rita's School	1008 Maple Drive
204	M5	Willink Middle School	Publisher's Parkway, Web
206	M6	Webster Schroeder High School	875 Ridge Road, Web.
207	M5	Klem Rd. School, North	1015 Klem Road
208	M5	Klem Rd. School, South	1025 Klem Road
209	M3	Maplewood Nursing Home	100 Daniel Drive
210	M3	Webster Child Care Center	169 E. Main St., Web.
211	M3	Admin. Office, Webster Schools	119 South Avenue
212	M2	Xerox Corp. Security Bldg.	Bldg. #317
213	M3	Holy Trinity School	1456 Ridge Road
214	M2	State Road School	1401 State Road
215	M2	Webster Parks & Recreation	985 Ebner Drive, Web.
216	M1	Schlegel Rd. School	1548 Schlegel Rd., Web.
217	M4	Plank Road School, North	705 Plank Rd N. School
218	M1	Woodside Co-op Nursery	570 Klem Road
220	M2	Webster Christian School	675 Holt Road
222	M3	Webster Nursery School	59 South Avenue
223	M1	Toddler's Workshop Daycare	12 May St., Webster
224	M5	St. Martin Lutheran Church	813 Bay Road
225	M1	Webster Presbyterian Pre-School	550 Webster Road
228	M7	Finger Lakes DDS	1331 Hatch Road, Web
230	M1	Webster Police Station	1000 Ridge Rd., Web.
231	M4	Plank Road School, South	715 Plank Road
234	M4	Heritage Christian Home	1305 State Road
235	Outside EPZ	Monroe County O.E.P.	1190 Scottsville Road
238	M2	Imperial Drive Group Home	1190 Imperial Drive
240	M4	Harris Group Home	1660 Harris Road
280	M1	Heritage Christian Home	1348 Robinhood Lane
281	M9	Heritage Christian Home	686 Hard Road
282	M1	Heritage Christian Home	1331 Schelgel Road
	M1	Heritage Christian Home	1452 Schelgel Road
	M1	Paychex, Inc.	675 Basket Road, Web
	M4	Finger Lakes DDS	30 Pierce Street, Web
	M5	Webster Thomas High School	800 Five Mile Line Rd., Web.
	M6	Barbara Ernst	1080 Lake Road, Web.
	M6	Charles Reilly	617 Lakeview Terrace, Web.
	M7	Rainbow Christian Day Care	895 Ridge Road, Web.
	M8	Finger Lakes DDS	264 Birch Lane, Web

APPENDIX I (Continued)**TONE ALERTS WAYNE COUNTY**

<u>NO.</u>	<u>EPRA</u>	<u>PLACE</u>	<u>ADDRESS</u>
239	W1	Water Filtration Plant	1961 Lake Rd, Ontario
251	W2	Wayne Central High School	6200 Ontario Center Road
253	W2	Wayne Central Middle School	6076 Ontario Center Road
254	W2	Ontario Elementary School	1784 Ridge Road, Ontario
255	W2	Ontario Primary School	1730 Ridge Road, Ontario
256	W2	Free Will School	4320 Canandaigua Road
257	W4	Williamson School District Office	Miller Street
258	W4	Williamson High School	Route #21 (South Ave.)
259	W4	Williamson Middle School	Miller Street
260	W4	Williamson Primary School	Miller Street
261	W3	Marion Jr./Sr. High School	4034 Warner Road, Marion
262	W4	Cadbury Beverages	Rt. 104 (4363 State Rd., Ont.)
264	W4	Seneca Foods, E. Williamson	Route #104
265	W4	Williamson Co-op Nursery	4057 West Main Street
268	W4	Lake Ontario ABCD	6395 Tuckahoe Road, Williamson
270	W2	Magic Years Nursery School	6229 Ontario Center Road
271	W4	Raggedy Ann & Andy Nursery Sch.	4146 E. Main St., Williamson
272	W2	Rhyme Tyme Day Care Center	944 Route 104., Ontario
273	W2	Ontario Water Department	2200 Lake Road, Ontario
275	W2	Rochester Industrial Control, Inc.	6400 Furnace Road
276	W2	Rochester Industrial Control, Inc.	6400 Furnace Road
277	W1	The Tot Spot Day Care Center	6225 Slocum Road
	W2	Finger Lakes Developmental Disabilities Service Org.	6121 Slocum Road
	W7	Finger Lakes DDS	4500 Ontario Center Road
	W1	Finger Lakes DDS	242 Trimble Road
	W5	Finger Lakes DDS	4080 Circle Drive
	W2	Hop, Skip & Jump Preschool	2016 Ridge Road

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INPUT PARAMETERS: TYPE: PREPIP

STATUS VALUE(S): EF

5 YEARS ONLY:

PREPIP EMERGENCY PLAN IMPLEMENTING PROCEDURE

PROCEDURE NUMBER	PROCEDURE TITLE	REV	EFFECT DATE	LAST REVIEW	NEXT REVIEW	ST
EPIP-2-14	POST PLUME ENVIRONMENTAL SAMPLING	017	04/28/2005	04/22/2004	04/22/2009	EF
EPIP-2-15	POST PLUME EVALUATION OF OFFSITE DOSES DUE TO DEPOSITION	007	02/01/2005	02/01/2005	02/05/2010	EF
EPIP-2-16	CORE DAMAGE ESTIMATION	014	08/06/2004	08/06/2004	08/06/2009	EF
EPIP-2-17	HYPOTHETICAL (PRE-RELEASE) DOSE ESTIMATES	010	04/28/2005	04/22/2004	04/22/2009	EF
EPIP-2-18	CONTROL ROOM DOSE ASSESSMENT	015	05/23/2003	05/23/2003	05/23/2008	EF
EPIP-3-1	EMERGENCY OPERATIONS FACILITY (EOF) ACTIVATION AND OPERATIONS	029	04/28/2005	01/21/2005	04/22/2009	EF
EPIP-3-2	ENGINEERING SUPPORT CENTER (ESC)	011	12/08/2004	12/08/2004	08/09/2007	EF
EPIP-3-3	IMMEDIATE ENTRY	011	02/05/2004	02/05/2004	08/08/2008	EF
EPIP-3-4	EMERGENCY TERMINATION AND RECOVERY	013	04/28/2005	02/01/2005	02/01/2010	EF
EPIP-4-1	PUBLIC INFORMATION RESPONSE TO AN UNUSUAL EVENT	008	06/10/2004	06/10/2004	06/10/2009	EF
EPIP-4-3	ACCIDENTAL ACTIVATION OF GINNA EMERGENCY NOTIFICATION SYSTEM SIRENS	017	09/17/2004	06/10/2004	06/10/2009	EF
EPIP-4-6	JOINT EMERGENCY NEWS CENTER ACTIVATION	012	04/28/2005	08/06/2004	08/06/2009	EF
EPIP-4-7	PUBLIC INFORMATION ORGANIZATION STAFFING	030	04/28/2005	02/01/2005	06/10/2009	EF
EPIP-4-8	TESTING OF THE GINNA SIRENS FROM THE TECHNICAL SUPPORT CENTER	007	02/01/2005	02/01/2005	04/22/2009	EF
EPIP-4-9	ACTIVATION OF GINNA EMERGENCY SIRENS FROM THE TECHNICAL SUPPORT CENTER	003	05/03/2004	05/03/2004	05/03/2009	EF
EPIP-4-10	SILENT TESTING OF THE GINNA SIRENS FROM THE COUNTY ACTIVATION POINTS	007	01/12/2005	01/12/2005	08/02/2009	EF
EPIP-4-11	ACTIVATION OF THE GINNA SIRENS FROM THE COUNTY ACTIVATION POINTS	002	05/03/2004	05/03/2004	05/03/2009	EF
EPIP-5-1	OFFSITE EMERGENCY RESPONSE FACILITIES AND EQUIPMENT PERIODIC INVENTORY AND OPERA	032	04/28/2005	02/01/2005	06/10/2009	EF
EPIP-5-2	ONSITE EMERGENCY RESPONSE FACILITIES AND EQUIPMENT PERIODIC INVENTORY AND OPERATI	036	04/28/2005	02/01/2005	08/06/2009	EF
EPIP-5-5	CONDUCT OF DRILLS AND EXERCISES	017	02/01/2005	02/01/2005	11/17/2008	EF
EPIP-5-6	ANNUAL REVIEW OF THE R.E. GINNA STATION NUCLEAR EMERGENCY RESPONSE PLAN (NERP)	005	05/28/2004	05/28/2004	05/28/2009	EF
EPIP-5-7	EMERGENCY ORGANIZATION	048	04/28/2005	02/01/2005	11/11/2009	EF
EPIP-5-9	TESTING THE OFF HOURS CALL-IN PROCEDURE AND QUARTERLY TELEPHONE NUMBER CHECK	012	04/28/2005	02/01/2005	05/03/2009	EF
EPIP-5-10	EMERGENCY RESPONSE DATA SYSTEM (ERDS)	007	12/03/2002	12/03/2002	12/03/2007	EF
NERP	GINNA STATION NUCLEAR EMERGENCY RESPONSE PLAN	024	04/28/2005	06/10/2004	06/10/2009	EF

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GRAND TOTAL: 55

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INPUT PARAMETERS: TYPE: PREPIP STATUS VALUE(S): EF 5 YEARS ONLY:

PREPIP EMERGENCY PLAN IMPLEMENTING PROCEDURE

PROCEDURE NUMBER	PROCEDURE TITLE	REV	EFFECT DATE	LAST REVIEW	NEXT REVIEW	ST
EPIP-1-0	GINNA STATION EVENT EVALUATION AND CLASSIFICATION	034	03/11/2005	03/11/2005	03/11/2010	EF
EPIP-1-1	UNUSUAL EVENT	007	01/11/2005	01/11/2005	04/22/2009	EF
EPIP-1-2	ALERT	007	01/11/2005	01/11/2005	04/22/2009	EF
EPIP-1-3	SITE AREA EMERGENCY	009	01/11/2005	01/11/2005	04/22/2009	EF
EPIP-1-4	GENERAL EMERGENCY	011	01/11/2005	01/11/2005	04/22/2009	EF
EPIP-1-5	NOTIFICATIONS	065	04/28/2005	03/11/2005	03/11/2010	EF
EPIP-1-6	SITE EVACUATION	019	04/28/2005	04/22/2004	04/22/2009	EF
EPIP-1-7	ACCOUNTABILITY OF PERSONNEL	010	06/10/2004	06/10/2004	06/10/2009	EF
EPIP-1-8	SEARCH AND RESCUE OPERATION	006	05/23/2003	05/23/2003	05/23/2008	EF
EPIP-1-9	TECHNICAL SUPPORT CENTER ACTIVATION	030	04/28/2005	02/01/2005	02/04/2009	EF
EPIP-1-10	OPERATIONAL SUPPORT CENTER (OSC) ACTIVATION	013	05/23/2003	05/23/2003	05/23/2008	EF
EPIP-1-11	SURVEY CENTER ACTIVATION	033	04/28/2005	06/10/2004	06/10/2009	EF
EPIP-1-12	REPAIR AND CORRECTIVE ACTION GUIDELINES DURING EMERGENCY SITUATIONS	009	12/20/2001	12/20/2001	12/20/2006	EF
EPIP-1-13	LOCAL RADIATION EMERGENCY	007	06/10/2004	06/10/2004	06/10/2009	EF
EPIP-1-15	USE OF THE HEALTH PHYSICS NETWORK HPN	006	05/28/2004	05/28/2004	05/28/2009	EF
EPIP-1-16	RADIOACTIVE LIQUID RELEASE TO LAKE ONTARIO OR DEER CREEK	005	02/25/2003	02/25/2003	02/25/2008	EF
EPIP-1-17	PLANNING FOR ADVERSE WEATHER	007	03/11/2005	03/11/2005	08/06/2009	EF
EPIP-1-18	DISCRETIONARY ACTIONS FOR EMERGENCY CONDITIONS	009	04/28/2005	08/06/2004	08/06/2009	EF
EPIP-2-1	PROTECTIVE ACTION RECOMMENDATIONS	022	01/21/2005	01/21/2005	08/08/2008	EF
EPIP-2-2	OBTAINING METEOROLOGICAL DATA AND FORECASTS AND THEIR USE IN EMERGENCY DOSE AS017	015	04/28/2005	03/11/2005	12/03/2007	EF
EPIP-2-3	EMERGENCY RELEASE RATE DETERMINATION	015	07/01/2002	07/01/2002	07/01/2007	EF
EPIP-2-4	EMERGENCY DOSE PROJECTIONS - MANUAL METHOD	015	01/21/2005	01/21/2005	08/08/2008	EF
EPIP-2-5	EMERGENCY DOSE PROJECTIONS PERSONAL COMPUTER METHOD	017	02/01/2005	02/01/2005	04/22/2009	EF
EPIP-2-7	MANAGEMENT OF EMERGENCY SURVEY TEAMS	012	02/01/2005	02/01/2005	02/01/2010	EF
EPIP-2-8	VOLUNTARY ACCEPTANCE OF EMERGENCY RADIATION EXPOSURE	008	01/21/2005	01/21/2005	06/10/2009	EF
EPIP-2-9	ADMINISTRATION OF POTASSIUM IODIDE (KI)	010	03/11/2005	03/11/2005	07/12/2009	EF
EPIP-2-10	INPLANT RADIATION SURVEYS	004	08/09/2002	08/09/2002	08/09/2007	EF
EPIP-2-11	ONSITE SURVEYS	021	12/08/2004	12/08/2004	01/14/2009	EF
EPIP-2-12	OFFSITE SURVEYS	025	12/08/2004	12/08/2004	06/10/2009	EF
EPIP-2-13	IODINE AND PARTICULATE ACTIVITY DETERMINATION FROM AIR SAMPLES	010	12/08/2004	12/08/2004	08/06/2009	EF