Southern Nuclear Operating Company

AR-07-0656

Enclosure 4

Proposed Revision to ESP Emergency Plan Annex V2

NOTE: This enclosure consists of a 60-page proposed ESP Emergency Plan Annex V2 revision with designation "Revision 2 (Draft)" in the footer of changed annex sections.

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Preface

This section contains those specific portions of the VEGP Emergency Plan that are applicable to Vogtle Electric Generating Plant (VEGP) Units 3 and 4 only.

The VEGP Emergency Plan is designed to be compliant with 10 CFR 50.47 and 10 CFR 50 Appendix E. It is based on the guidance contained in NUREG 0654, Revision 1, *Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants,* with the exception of emergency action levels which are based on Nuclear Energy Institute (NEI) Guideline 99-01, Revision 4, *Methodology for Development of Emergency Action Levels* for Units 1 and 2 and NEI 07-01, Revision 0, Methodology for Development of Emergency Action Levels Advanced Passive Light Water Reactors for Units 3 and 4.

In addition, for Units 3 and 4, the VEGP Emergency Plan is designed to be compliant with 10 CFR 52.17(b)(1), 10 CFR 52.17(b)(2)(ii), and 10 CFR 52.17(b)(3). NUREG 0654, Supplement 2 is also used as guidance for the development of the VEGP Emergency Plan pertaining to Units 3 and 4 for the Early Site Permitting process.

The VEGP Emergency Plan is designed to accommodate the unique features of the two unit designs used at the Site. A common VEGP Emergency Plan is supported by Annex V1 which contains the parts of the Emergency Plan that are unique to existing Units 1 and 2, and Annex V2 which contains the parts of the Emergency Plan that are unique to new Units 3 and 4 (i.e., the proposed Westinghouse Electric Company, LLC, AP1000 standard reactor plants). Each segment of the Emergency Plan is supported by Appendices that contain supporting information for each segment of the plan.

In addition, the Appendices for Annex V2 contain a set of inspections, tests, analyses, and acceptance criteria (ITAAC) that contain those elements of the Emergency Plan pertaining to Units 3 and 4 that cannot be completed or verified prior to approval of the Emergency Plan as part of the Early Site Permitting Process and will be carried as COL action items. After Units 3 and 4 are operating, all references to ITAACs will be removed.

V2A Assignment of Responsibilities

There are no specific features of Assignment of Responsibilities unique to Units 3 and 4. Refer to the main section for details.

V2B VEGP Emergency Organization

The specific features of the VEGP Emergency Organization unique to Units 3 and 4 are listed in the main section.

V2C Emergency Response Support and Rescue

There are no specific features of Emergency Response and Support and Rescue unique to Units 3 and 4. Refer to the main section for details.

V2D Emergency Classification System

V2D.1 Classification of Emergencies

There are no specific features of Classification of Emergencies unique to Units 3 and 4. Refer to the main section for details.

V2D.2 Emergency Class Description and Response

The Initiating Condition Matrix for modes 1, 2, 3, and 4 for Units 3 and 4 are shown in Table Annex V2 D-1, and the Initiating Condition Matrix for modes 5, 6, and de-fueled are shown in Table Annex V2 D-2.

Table V2D.2-1 ***Hot Initiating Condition Matrix, Modes 1, 2, 3, and 4***

	Categories / Subcategories													
	Radiological		Fission Product Barriers	System Malfunctions					ISFSI	Hazards					
	Release	Rad Levels		AC/DC Power	Rx and Core	Plant Monitoring	RCS	Communi cations		Natural/ Destructive	Fire/ Explosion	Toxic / Flammable	Security	CR Evacuation	ED Discretion
	RG1 - Offsite Dose Resulting from an Actual or IMMINENT Release of Gaseous Radioactivity Exceeds 1000 mR TEDE or 5000 mR Thyroid CDE for the Actual or Projected Duration of the Release Using Actual Meteorology.		**FG1** - Loss of ANY Two Barriers **AND** Loss, or Potential Loss, of the Third Barrier	**SG1** - Prolonged Loss of All Offsite and Onsite AC Power for greater than 72 hours.	**SG2** - Failure of the Reactor Protection System, Automatic AND Manual AND Indication of an Extreme Challenge to the Ability to Cool the Core.								**HG1** - HOSTILE ACTION Resulting in Loss Of Physical Control of the Facility.		**HG2** - Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of General Emergency
Site Area Emergency	**RS1** - Offsite Dose Resulting from an Actual or IMMINENT Release of Gaseous Radioactivity Exceeds 100 mR TEDE or 500 mR Thyroid CDE for the Actual or Projected Duration of the Release.		**FS1** - Loss or Potential Loss of ANY Two Barriers	**SS1** - Loss of All Offsite and Onsite AC Power for greater than 24 hours. **SS3** - Loss of All Vital DC Power	**SS2** - Failure of Reactor Protection System, Automatic AND Manual to reduce power below Safety System Design Limit.	**SS6** - Inability to Monitor a SIGNIFICANT TRANSIENT in Progress							**HS4** – Site Attack (Notification of HOSTILE ACTION within the Protected Area)	**HS2** - Control Room Evacuation Has Been Initiated **AND** Plant Control Cannot Be Established	**HS3** - Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of Site Area Emergency
Alert	**RA1** - Any UNPLANNED Release of Gaseous or Liquid Radioactivity to the Environment that Exceeds 200 Times the Offsite Dose Calculation Manual for 15 Minutes or Longer.	**RA2** - Damage to Irradiated Fuel **OR** Loss of Water Level that Has Resulted, or Will Result, in the Uncovering of Irradiated Fuel Outside the Reactor Vessel **RA3** Release of Radioactive Material or Rise in Radiation Levels Within the Facility That Impedes Operation of Systems Required to Maintain Safe Operations or to Establish or Maintain Cold Shutdown	**FA1** - ANY Loss or ANY Potential Loss of **EITHER** Fuel Clad **OR** RCS	**SA1** - Loss of all Offsite and Onsite AC power capability for greater than 60 minutes	**SA2** - Failure of Reactor Protection System, Automatic OR Manual to establish the reactor subcritical.	**SA4** – UNPLANNED Loss of Indicating and Monitoring Functions.				**HA1** - Natural or Destructive Phenomena Affecting the Plant VITAL AREA	**HA2** - FIRE **OR** EXPLOSION Affecting the Operability of Plant Safety Systems Required to Establish or Maintain Safe Shutdown	**HA3** - Required Access To a VITAL AREA Is Prohibited Due To Release of Toxic, Corrosive, Asphyxiant or Flammable Gases	**HA7** – Notification of an Airborne Attack **HA8** – Notification of HOSTILE ACTION within the OCA	**HA5** - Control Room Evacuation Has Been Initiated	**HA6** - Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of an Alert
Notification of Unusual Event	**RU1** - Any UNPLANNED Release of Gaseous or Liquid Radio-activity to the Environment that Exceeds Two Times the Offsite Dose Calculation Manual for 60 Minutes or Longer.	**RU2** - Unexpected Rise in Plant Radiation	**FU1** - ANY Loss **OR** ANY Potential Loss of Containment	**SU1** - Loss of All Offsite AC Power for Greater Than 30 Minutes	**SU2** - Inability to Reach Required Shutdown Within Technical Specification Limits **SU4** - Fuel Clad Degradation **SU8** - Inadvertent Criticality **SU9** - Failure of the Reactor Protection System, Automatic OR Manual and Subcriticality Was Achieved.		**SU5** - RCS Leakage	**SU6** - UNPLANNED Loss of All Onsite **OR** Offsite Communications Capabilities	**None**	**HU1** - Natural or Destructive Phenomena Affecting the PROTECTED AREA	**HU2** - FIRE Within PROTECTED AREA Boundary Not Extinguished In Less Than 15 Minutes of Detection **OR** Explosion within the Protected Area Boundary	**HU3** - Release of Toxic, Corrosive, Asphyxiant, or Flammable Gases Deemed Detrimental to NORMAL PLANT OPERATIONS.	**HU4** - Confirmed Security Event Which Indicates a Potential Degradation in the Level of Safety of the Plant		**HU5** - Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of a NOUE

Table V2D.2-1 *Cold Initiating Condition Matrix, - Modes 5, 6 and De-fueled*

	Categories / Sub-categories													
	Radiological		System Malfunctions					Hazards						
	Release	Rad levels	AC/DC Power	Rx and Core	Heat Removal	RCS	Communications	Natural/ Destructive	Fire/ Explosion	Toxic / Flammable	Security	CR Evacuation	ED Discretion
	RG1- Offsite Dose Resulting from an Actual or IMMINENT Release of Gaseous Radioactivity Exceeds 1000 mR TEDE **OR** 5000 mR Thyroid CDE for the Actual or Projected Duration of the Release Using Actual Meteorology.			**CG1** - Loss of RPV Inventory Affecting Fuel Clad Integrity with Containment Challenged with Irradiated Fuel in the RPV with CONTAINMENT CLOSURE NOT Established.							**HG1** - HOSTILE ACTION Resulting in Loss Of Physical Control of the Facility.		**HG2** - Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of General Emergency
Site Area Emergency	**RS1** - Offsite Dose Resulting from an Actual or IMMINENT Release of Gaseous Radioactivity Exceeds 100 mR TEDE **OR** 500 mR Thyroid CDE for the Actual or Projected Duration of the Release.			**CS2** - Loss of RPV Inventory Affecting Core Decay Heat Removal Capability with Irradiated Fuel in the RPV **Mode 6**		**CS1** - Loss of RPV Inventory Affecting Core Decay Heat Removal Capability. **Mode 5**					**HS4** – Site Attack (Notification of HOSTILE ACTION within the Protected Area)	**HS2** - Control Room Evacuation Has Been Initiated **AND** Plant Control Cannot Be Established	**HS3** - Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of Site Area Emergency
Alert	**RA1** - Any UNPLANNED Release of Gaseous or Liquid Radioactivity to the Environment that Exceeds 200 Times the Radiological Effluent Technical Specifications for 15 Minutes or Longer.	**RA2** - Damage to Irradiated Fuel **OR** Loss of Water Level that Has or Will Result in the Uncovering of Irradiated Fuel Outside the Reactor Vessel **RA3** - Release of Radioactive Material or Rises in Radiation Levels Within the Facility That Impedes Operation of Systems Required to Maintain Safe Operations or to Establish or Maintain Cold Shutdown			**CA4** - Inability to Maintain Plant in Cold Shutdown with Irradiated Fuel in the RPV.	**CA1** - Loss of RCS/RPV Inventory with Irradiated Fuel in the RPV.		**HA1** - Natural or Destructive Phenomena Affecting the Plant VITAL AREA	**HA2** - FIRE **OR** EXPLOSION Affecting the Operability of Plant Safety Systems Required to Establish or Maintain Safe Shutdown	**HA3** - Required Access To a VITAL AREA Is Prohibited Due To Release of Toxic, Corrosive, Asphyxiant or Flammable Gases	**HA7** - Notification of an Airborne Attack Threat **HA8** - Notification of HOSTILE ACTION within the OCA	**HA5** - Control Room Evacuation Has Been Initiated	**HA6** - Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of an Alert
Notification of Unusual Event	**RU1** – Any UNPLANNED Release of Gaseous or Liquid Radioactivity to the Environment that Exceeds Two Times the Radiological Effluent Technical Specifications for 60 Minutes or Longer.	**RU2** – Unexpected Rise in Plant Radiation	**CU3** – Loss of All Off-site and All On-site Power to PIP Busses for Greater Than 30 Minutes. **CU7** - Unplanned Loss of Required DC Power for Greater than 15 Minutes.	**CU8** - Inadvertent Criticality	**CU4** - Unplanned Loss of Decay Heat Removal Capability with Irradiated Fuel in the RPV.	**CU2** - Unplanned Loss of RCS Inventory with Irradiated Fuel in the RPV **Mode 6**	**CU6** - UNPLANNED Loss of All Onsite **OR** Offsite Communications Capabilities	**HU1** - Natural or Destructive Phenomena Affecting the PROTECTED AREA	**HU2** - FIRE Within PROTECTED AREA Boundary Not Extinguished In Less Than 15 Minutes of Detection OR Explosion within the Protected Area Boundary	**HU3** - Release of Toxic, Corrosive, Asphyxiant, or Flammable Gases Deemed Detrimental to NORMAL PLANT OPERATIONS.	**HU4** - Confirmed Security Event Which Indicates a Potential Degradation in the Level of Safety of the Plant		**HU5** - Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of a NOUE

V2E Notification Methods and Procedures

There are no specific features of Notifications Methods and Procedures unique to Units 3 and 4. Refer to the main section for details.

V2F Emergency Communications

There are no specific features of Emergency Communications unique to Units 3 and 4. Refer to the main section for details.

V2G Public Education and Information

There are no specific features of Public Education and Information unique to Units 3 and 4. Refer to the main section for details.

V2H Emergency Facilities and Equipment

V2H.1 Emergency Facilities

The OSC has been established to be consistent with NUREG 0696 guidelines as described below. The OSCs are located on the second floor of the Annex building adjacent to the Unit 3 and 4 Control Rooms. The OSC is where operational support personnel (such as instrument technicians, engineers, mechanics, electricians, chemical/radiation technicians, equipment operators, and incoming shift personnel) assemble to aid in the response to an emergency.

Status boards containing plant conditions and emergency classification will be available in the OSC. Emergency kits containing radiation monitoring equipment, first aid supplies, decontamination supplies, breathing apparatus, portable lighting, and hand-held radios are stored in the OSC. Emergency kit contents are listed in Appendix 1.

In the event that this facility becomes uninhabitable, the functions of the OSC will be conducted from the designated back-up OSC space in the ALARA briefing room. Evacuation of the OSC will be conducted according to emergency implementing procedures. These procedure will describe the method by which the OSC is evacuated and the movement of personnel to other facilities. The OSC manager will keep the TSC manager informed of the initiation, progress, and completion of the evacuation and relocation of the OSC personnel. Operations at this facility will be directed by the OSC manager.

V2H.2 News Center Facilities

There are no specific features of News Center Facilities unique to Units 3 and 4. Refer to the main section for details.

V2H.3 Activation and Staffing of Emergency Facilities

There are no specific features of Activation and Staffing of Emergency Facilities unique to Units 3 and 4. Refer to the main section for details.

V2H.4 Plant Monitoring and Data Handling Systems

V2H.4.1 Geophysical Phenomena Monitors

V2H.4.1.1 Meteorological (Applies to all four Units)

A meteorological monitoring program is in place at VEGP. Instruments are mounted on a 60-meter (m) high tower located to the south-southwest of the Unit 1 and 2 power block. Parameters measured and transmitted to the control room include:

- Windspeed (at 10 m and 60 m)
- Wind direction (at 10 m and 60 m)
- Standard deviation of horizontal wind direction (at 10 m)
- Vertical temperature difference (between 10 m and 60 m)
- Ambient temperature (at 10 m)
- Dewpoint temperature (at 10 m)
- Precipitation (at the tower base)

An equipment building which houses the recording, calibration, and amplification equipment is located near the base of the tower. The system is powered by an uninterruptible power supply consisting of wet cell batteries, a charger, and an inverter for high availability.

The important parameters for characterizing the transport of airborne radioactivity are windspeed, wind direction, and atmospheric stability (derived from the standard deviation of the horizontal wind direction or vertical temperature difference). These meteorological parameters are used in a calculational methodology to assess the offsite radiological consequences of accidental releases of airborne radioactivity. The methodology is described in Section I, Accident Assessment.

V2H.4.1.2 Hydrologic

The normal source of plant makeup water to the secondary plant for Units 3 and 4 is the Savannah River, which provides makeup to the circulating water system cooling towers. The probable maximum flood level has been determined to be about 140 ft mean sea level (MSL). However, since the access elevations to safety- related structures are at 220 ft MSL, high river level is not relevant to plant safety. The ultimate heat sink for VEGP Units 3 and 4 is the atmosphere. Because of these design features, hydrologic monitors will not be required for initiation of emergency actions; therefore, there will be no emergency levels based on hydrologic monitors.

V2H.4.1.3 Seismic

Seismic monitoring instrumentation for VEGP Units 3 and 4 will include triaxial acceleration sensors and a time-history analyzer. One of the four triaxial acceleration sensors will be located

in the free field, a second sensor will be located on the nuclear island basemat, a third sensor will be located on the shield building structure, and a fourth sensor will be located on the containment internal structure.

The triaxial acceleration sensors will provide a signal to the time-history analyzer located in a room near the control room. The time-history analyzer includes a dedicated computer for data storage, playback, and analysis. Activation of the time-history analyzer causes visual and audible annunciation in the control room to alert the plant operator that an earthquake has occurred.

V2H.4.1.4 Fire Detection

The fire-detection system at VEGP Units 3 and 4 will include smoke, flame, heat, and products of combustion detectors and manually activated fire alarms. Fire-detection systems are provided in all areas where required by the fire protection analysis. The fire detection system will provide audible and visual alarms in the main control room.

V2H.4.2 Radiation Monitoring System (RMS)

The radiation monitoring system (RMS) provides plant effluent monitoring, process fluid monitoring, airborne monitoring, and continuous indication of the radiation environment in plant areas where such information is needed. The radiation monitoring system is installed permanently and operates in conjunction with regular and special radiation survey programs to assist in meeting applicable regulatory requirements. The radiation monitoring system is designed in accordance with ANSI N13.1-1969, *Sampling Airborne Radioactive Materials.*

The radiation monitoring system is divided functionally into two subsystems:

- Process, airborne, and effluent radiological monitoring and sampling
- Area radiation monitoring
- The design objectives of the radiation monitoring system during postulated accidents monitoring. The scope of the radiation monitoring system for post-accident monitoring is set forth in General Design Criterion 64, *Monitoring Radioactive Releases*, and in the provisions of NRC Regulatory Guide 1.97, *Instrumentation for Light-Water-Cooled Nuclear Power Plants To Assess Plant and Environs Conditions During and Following an Accident.*

The radiation monitoring system is designed to support the requirements of 10 CFR 20 and to provide:

- Equipment to meet the applicable regulatory requirements for both normal operation and

transient events

- Data to aid plant health physics personnel in limiting release of radioactivity to the environment and limiting exposure of operation and maintenance personnel to meet ALARA (as-low-as-reasonably-achievable) guidance
- Early indication of a system or equipment malfunction that could result in excessive radiation dose to plant personnel or lead to plant damage
- Data collection and data storage to support compliance reporting for the applicable NRC requirements and guidelines, such as General Design Criterion 64 and Regulatory Guide 1.21, *Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants.*

The radiation monitoring system uses distributed radiation monitors, where each radiation monitor consists of one or more radiation detectors and a dedicated radiation processor.

Each radiation processor receives, averages and stores radiation data and transmits alarms and data to the plant control system (protection and safety monitoring system for safety-related monitors) for control (as required), display and recording. These alarms include: low (fail), alert, and high. Selected channels have a rate-of-rise alarm. Storage of radiation readings is provided.

Radiation monitoring data, including alarm status, are provided to operators via the plant control system (and the protection and safety monitoring system for Class 1E monitors). The information is available in either counts per minute (count rate), microCuries/cc (activity concentration), or R/hr (radiation dose rate).

Safety-related channels are environmentally qualified and are powered from the Class 1E DC and uninterruptible power supply system. Nonsafety-related channels are powered from the non-Class 1E DC and uninterruptible power supply (UPS) system.

V2H.4.3 Process Monitoring

Monitoring of process variables is performed through the Qualified Data Processing System (QDPS). The QDPS, a subsystem of the Protection and Monitoring System (PMS), provides safety-related display of selected parameters in the control room.

The QDPS subsystems are a redundant configuration consisting of sensors, QDPS hardware, and qualified displays.

The qualified data processing subsystems perform the following functions:

- Provide safety-related data processing and display
- Provide the operator with sufficient operational data to safely shut the plant down in the event of a failure of the other display systems
- Provide qualified and nonqualified data to the real-time data network for use by other systems in the plant
- Process data for main control room display, and to meet Regulatory Guide 1.97 requirements
- Provide data to the main control room, the remote shutdown workstation, the plant computer, other nonsafety-related devices, and nonqualified emergency response facilities in conformance with NUREG-0696

The QDPS hardware consists of safety-related modular data gathering units. The QDPS receives inputs from process sensors and safety-related digital systems. The QDPS consolidates the input data, performs conversions to process units, and formats the data for data link transmission.

Power is provided to the QDPS from the Class 1E DC and UPS system for 72 hours after a loss of all AC power (station blackout). After 72 hours, the ancillary diesel generators provide power for the QDPS. The QDPS is a two-train subsystem (Divisions B and C). The PMS, including the QDPS, is diverse from the Diverse Actuation System (DAS). Sensors are not shared between PMS and DAS.

Processing and display function are performed by equipment which is part of the protection and safety monitoring system, plant control system, and the data display and processing system.

The qualified data processing subsystems are divided into two separate electrical divisions. Each of the two electrical divisions is connected to a Class 1E DC uninterruptible power system with sufficient battery capacity to provide necessary electrical power for at least 72 hours. If all AC power sources are lost for a period of time that exceeds 72 hours, the power supply system will be energized from the ancillary diesel generator or from AC power sources which are brought to the site from other locations.

The VEGP Units 3 and 4 instrument and control architecture is shown on Figure Annex V2 H-1.

A list of processes variables available for display through the QDPS system is shown on Table Annex V2 H-1

V2H.4.4 Emergency Response Data System (ERDS)

In accordance with the requirements of 10 CFR 50, Appendix E, Section VI and NUREG 1394, Revision 1, *Emergency Response Data System (ERDS) Implementation*, means will be provided to transmit critical plant variables from the onsite computer system to the Nuclear Regulatory Commission Operations Center via a dedicated communications link. The installed system will consist of a computer which polls the QDPS for the required data, assigns the appropriate data quality value, formats the data stream, and periodically transmits the data stream over the dedicated telecommunications circuit to the NRC.

V2H.4.5 Safety Parameter Display System

For Units 3 and 4, the Safety Parameter Display System functions are integrated into the QDPS.

V2H.4.6 Post Accident Sampling

Liquid samples from the reactor coolant system and the containment sumps, and air samples from the containment atmosphere may be taken during accident conditions. Section I of this plan contains a more detailed description of these capabilities.

V2H.5 Out-of-Plant Monitoring

There are no specific features of Out-of-Plant Monitoring unique to Units 3 and 4. Refer to the main section for details.

V2H.6 Emergency Kits

There are no specific features of Emergency Kits unique to Units 3 and 4. Refer to the main section for details.

Table V2H-1 *Post Accident Monitoring Variables*

Variable	Range/Status
RCS pressure	0-3,300 psig
RCS T_H (Wide Range)	50-700°F
RCS T_C (Wide Range)	50-700°F
Steam generator water level (wide range)	0-100% of span
Steam generator water level (narrow range)	0-100% of span
Pressurizer level	0-100% of span
Pressurizer reference leg temperature	50-420°F
Neutron flux	10^{-6}- 200% power
Control rod position	0-267 steps
Containment water level	El. 72 ft. to 110 ft. in discrete steps
Core exit temperature	200-2,300°F
PRHR HX inlet temperature	50-650°F
PRHR HX outlet temperature	50-500°F
PRHR flow	700-3,000 gpm
IRWST water level	0-100% of span
RCS subcooling	200°F Sub- cooling to 35°F super heat
Passive containment cooling water flow	0-150 gpm
PCS storage tank water level	5-100% of tank height
IRWST surface temperature	50-300°F

Table V2H-1 (cont.) - *Post Accident Monitoring Variables*

IRWST bottom temperature	50-300°F
Steam line pressure	0-1,200 psig
Startup feedwater flow	0-1,000 gpm
Startup feedwater control valve status	Open/ Closed
Containment pressure	-5 to 10 psig
Containment pressure (extended range)	0 to 240 psig
Containment area radiation (high range)	10^0-10^7 R
Reactor vessel hot leg water level	0-100% of span
Plant vent radiation level (3 monitors - gas)	1.0E-7 to 1.0E+5 µCi/cc
Remotely operated containment isolation valve status	Open/ Closed
Hydrogen concentration	0-20%
Class 1E dc switchboard voltages	0-150 VDC
Diesel generator status	On/Off
Diesel generator load	0-6,000 kW
Voltage for diesel-backed buses	0-8,600 V
Power supply to diesel-backed buses	On/Off
RCP bearing water temperature	70-450°F
RCP breaker status	Open/ Closed
Reactor trip breaker status	Open/ Closed
MCR air storage bottle pressure	0-5,000 psig
Turbine stop valve status	Open/ Closed
Turbine control valve status	Open/ Closed

Table V2H-1 (cont.) - *Post Accident Monitoring Variables*

Pressurizer pressure	1,700- 2,500 psig
Pressurizer safety valve status	Open/ Closed
Pressurizer heater power (current)	0-800 amps
Steam generator PORV status	Open/ Closed
Steam generator PORV block valve status	Open/ Closed
Steam generator safety valve status	Open/ Closed
Main feedwater isolation valve status	Open/ Closed
Main feedwater flow	0-9x10^6 lb/hr
Main feedwater control valve status	Open/ Closed
Steam generator blowdown isolation valve status	Open/ Closed
Steam flow	0-9x10^6 lb/hr
Main steam line isolation valve status	Open/ Closed
Main steam line isolation bypass valve status	Open/ Closed
Main feedwater pump status	On/Off
Main to startup feedwater crossover valve status	Open/ Closed
Startup feed-water pump status	On/Off
Circulating water pump status	On/Off
Condenser backpressure	0-1 atm
Startup feedwater Isolation valve status	Open/ Closed
Condenser steam dump valve status	Open/ Closed
Condensate storage tank water level	0-100% of span

Table V2H-1 (cont.) - *Post Accident Monitoring Variables*

PCS water storage tank isolation valve status (Non-MOV)	Open/ Closed
PCS water storage tank series isolation valve status (MOV)	Open/ Closed
Containment temperature	32-400°F
CCS surge tank level	0-100% of span
CCS flow	0-15,000 gpm
CCS pump status	On/Off
CCS flow to RNS valve status	Open/ Closed
CCS flow to RCPs valve status	Open/ Closed
CCS pump inlet temperature	50-200°F
CCS heat exchanger outlet temperature	50-130°F
Containment fan cooler status	On/Off
Water-cooled chiller status	On/Off
Water-cooled chilled water pump status	On/Off
Water-cooled chilled water valve status	Open/ Closed
Spent fuel pool pump flow	0-1,500 gpm
Spent fuel pool temperature	50-250°F
Spent fuel pool water level	0-100% of span
CMT discharge isolation valve status	Open/ Closed
CMT inlet isolation valve status	Open/ Closed
CMT upper water level switch	Above/ Below
CMT lower water level switch	Above/ Below

Table V2H-1 (cont.) - *Post Accident Monitoring Variables*

IRWST injection isolation valve (Squib)	Open/ Closed
IRWST line isolation valve status (MOV)	Open/ Closed
ADS: first, second and third stage valve status	Open/ Closed
ADS fourth stage valve status (Non-MOV)	Open/ Closed
ADS fourth stage valve status (MOV)	Open/ Closed
PRHR HX inlet isolation valve status	Open/ Closed
PRHR HX control valve status	Position
IRWST gutter bypass isolation valve status	Open/ Closed
Accumulator pressure	100-800 psig
Accumulator isolation valve status	Open/ Closed
Accumulator vent valve status	Open/ Closed
Pressurizer spray valve status	Open/ Closed
Auxiliary spray line isolation valve status	Open/ Closed
Purification stop valve status	Open/ Closed
Containment recirculation isolation valve status (Non-MOV)	Open/ Closed
Containment recirculation isolation valve status (MOV)	Open/ Closed
Purification return line stop valve status	Open/ Closed
Boric acid tank level	0-100%
Demineralized water isolation valve status	Open/ Closed
Boric acid flow	0-300 gpm

Table V2H-1 (cont.) - *Post Accident Monitoring Variables*

Makeup blend valve status	Position
Makeup flow	0-300 gpm
Makeup pump status	On/Off
Makeup flow control valve status	Position
Letdown flow	0-250 gpm
RNS hot leg suction isolation valve status	Open/ Closed
RNS flow	0-3,000 gpm
IRWST to RNS suction valve status	Open/ Closed
RNS discharge to IRWST valve status	Open/ Closed
RNS pump status	On/Off
Reactor vessel head vent valve status	Open/ Closed
MCR return air isolation valve status	Open/ Closed
MCR toilet exhaust isolation valve status	Open/ Closed
MCR supply air isolation valve status	Open/ Closed
MCR differential pressure	-1" to +1" wg
MCR air delivery flowrate	0-80 cfm
MCR air delivery isolation valve status	Open/ Closed
Instrument air header pressure	0-125 psig
Service water flow	0-10,000 gpm
Service water pump status	On/Off
Service water pump discharge valve status	Open/ Closed
Service water pump discharge temperature	50-150°F

Table V2H-1 (cont.) - *Post Accident Monitoring Variables*

Main control room supply air radiation	1.0E-7 to 1.0E-2 µCi/cc
Plant vent air flow	0-110% design flow
Turbine island vent discharge radiation level	10^{-6} - 10^{+5} µCi/cc
Steam generator blowdown discharge radiation	10^{-6} - 10^{-1} µCi/cc
Steam generator blowdown brine radiation level	10^{-6} - 10^{-1} µCi/cc
Main steam line radiation level	10^{-1} - 10^{3} µCi/cc
Technical support center radiation	10^{-1} - 10^{4} mR/hr
Primary sampling station area radiation level	10^{-1} - 10^{7} mR/hr

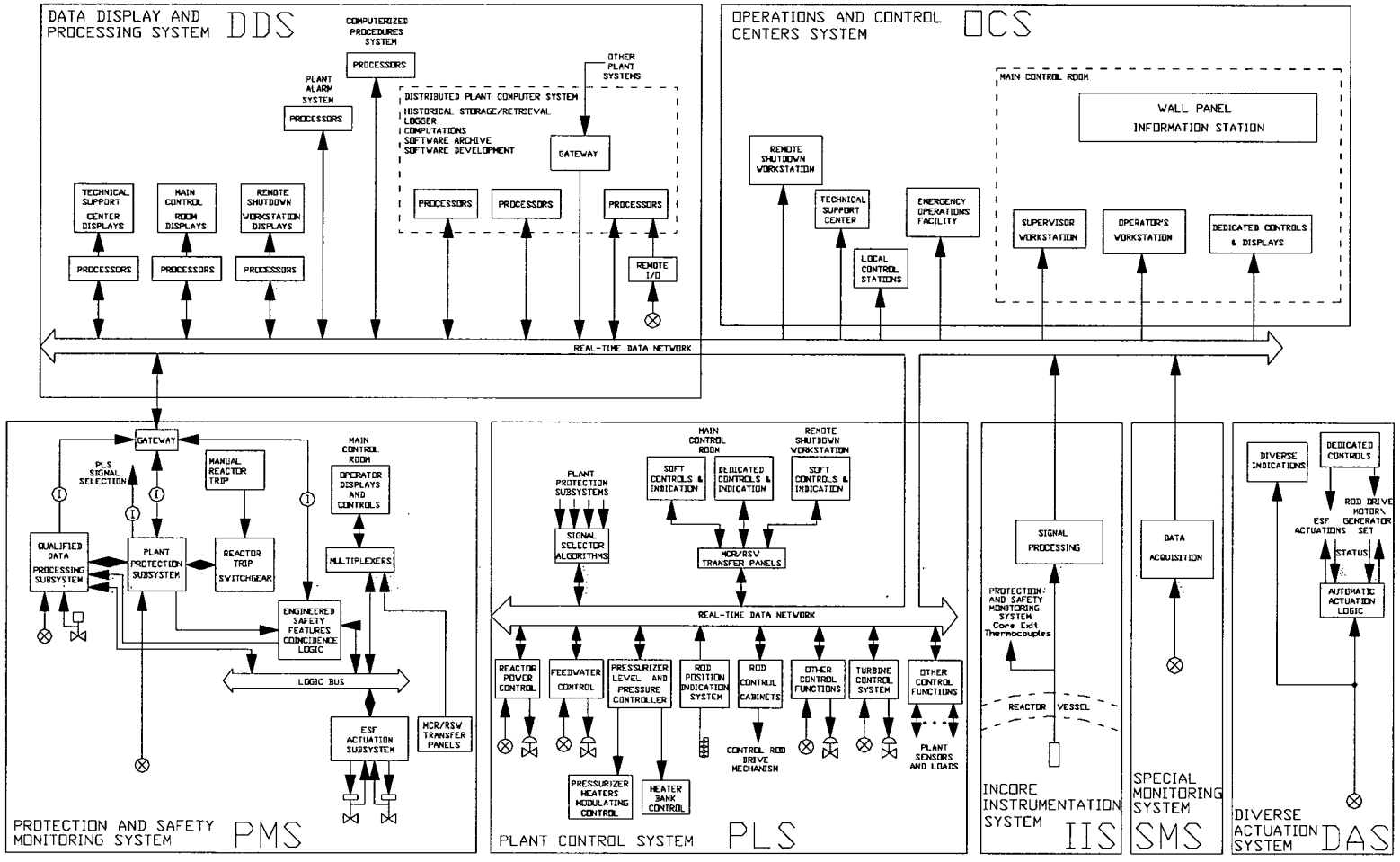

Figure V2H-1 ***Instrument and Control Architecture***

V2I Accident Assessment

There are no specific features of Accident Assessment unique to Units 3 and 4. Refer to the main section for details.

V2J Protective Response

There are no specific features of Protective Response unique to Units 3 and 4. Refer to the main section for details.

V2K Radiological Exposure Control

There are no specific features of Radiological Exposure Control unique to Units 3 and 4. Refer to the main section for details.

V2L Medical and Public Health Support

There are no specific features of Medical and Public Health Support unique to Units 3 and 4. Refer to the main section for details.

V2M Recovery and Reentry Planning and Post-Accident Operations

There are no specific features of Recovery and Reentry Planning and Post Accident Operations unique to Units 3 and 4. Refer to the main section for details.

V2N Exercises and Drills

There are no specific features of Exercise and Drills unique to Units 3 and 4. Refer to the main section for details.

V2O Radiological Emergency Response Training

There are no specific features of Radiological Emergency Response Training unique to Units 3 and 4. Refer to the main section for details.

V2P Responsibility for the Planning Effort

There are no specific features of Responsibility for the Planning Effort unique to Units 3 and 4. Refer to the main section for details.

V2 Appendix 1 Index of Procedures

Title
Estimating Offsite Does
Protective Action Guidelines
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Contaminated Injury
Assembly and Accountability
Site Dismissal
Recovery
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Control Room Instrumentation Output for Assessment of Core Damage
Core Inventory Determinations Using Reactor Power History
Emergency Preparedness Training
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Nuclear Management Procedures
EOF Activation
EOF Manager
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EOF Technical Supervisor
EOF Support Coordinator
EOF Security Coordinator
Offsite Response Coordinator

V2 Appendix 2 FSAR Postulated Transients

Table V2A2-1 *VEGP Units 3 and 4 SSAR Transient Table*

	Transient	Emergency Level
15.1 System	**Increase in Heat Removal From the Primary**	
15.1.1	Feedwater System Malfunctions that Result in a Decrease in Feedwater Temperature	No emergency
15.1.2	Feedwater System Malfunctions that Result in an Increase in Feedwater Flow	No emergency
15.1.3	Excessive Increase in Secondary Steam Flow	No emergency
15.1.4	Inadvertent Opening of a Steam Generator Relief or Safety Valve	No emergency
15.1.5	Steam System Piping Failure	NUE, Alert
15.1.6	Inadvertent Operation of the PRHR Heat Exchanger	No emergency
15.2 System	**Decrease in Heat Removal by the Secondary**	
15.2.1	Steam Pressure Regulator Malfunction or Failure that Results in Decreasing Steam Flow	Not applicable, not a valid transient for AP1000
15.2.2	Loss of External Electrical Load	Potential Alert if pressurizer safeties open as assumed in analysis
15.2.3	Turbine Trip	Potential Alert if pressurizer safeties open as assumed in analysis
15.2.4	Inadvertent Closure of Main Steam Isolation Valves	Potential Alert if pressurizer safeties open as assumed in analysis
15.2.5	Loss of Condenser Vacuum and Other Events Resulting in Turbine Trip	Potential Alert if pressurizer safeties open as assumed in analysis
15.2.6	Loss of AC Power to the Plant Auxiliaries	Potential NUE due to inability to achieve Cold Shutdown in specified time (i.e. loss of all AC for prolonged length of time
15.2.7	Loss of Normal Feedwater Flow	No emergency

Table V2A2-1 (Cont.) – *VEGP Units 3 and 4 SSAR Transient Table*

	Transient	Emergency Level
15.2.8	Feedwater System Pipe Break	Alert – due to pressurizer safeties opening
15.3	**Decrease in Reactor Coolant System Flow Rate**	
15.3.1	Partial Loss of Forced Reactor Coolant Flow	No emergency
15.3.2	Complete Loss of Forced Reactor Coolant Flow	No emergency
15.3.3	Reactor Coolant Pump Shaft Seizure (Locked Rotor)	NUE, ALERT, and Site Area Emergency (If all conservative conditions of analysis occur)
15.3.4	Reactor Coolant Pump Shaft Break	Potential Alert if pressurizer safeties open as assumed in analysis
15.4	**Reactivity and Power Distribution Anomalies**	
15.4.1	Uncontrolled Rod Cluster Control Assembly Bank Withdrawal from a Subcritical or Low-Power Startup Condition	NUE (Inadvertent criticality)
15.4.2	Uncontrolled Rod Cluster Control Assembly Bank Withdrawal at Power	No emergency
15.4.3	Rod Cluster Control Assembly Misalignment (System Malfunction or Operator Error)	No emergency
15.4.4	Startup of an Inactive Reactor Coolant Pump at an Incorrect Temperature	No emergency
15.4.5	A Malfunction or Failure of the Flow Controller in a Boiling Water Reactor Loop that Results in an Increased Reactor Coolant Flow Rate	Not applicable
15.4.6	Chemical and Volume Control System Malfunction that Results in a Decrease in the Boron Concentration in the Reactor Coolant	No emergency
15.4.7	Inadvertent Loading and Operation of a Fuel Assembly in an Improper Position	No emergency
15.4.8	Spectrum of Rod Cluster Control Assembly Ejection Accidents	Alert, Site Area Emergency, and General Emergency (if all conservative conditions of analysis occur)
15.5	**Increase in Reactor Coolant Inventory**	
15.5.1	Inadvertent Operation of the Core Makeup Tanks During Power Operation	Alert (Pressurizer safeties open)

Table V2A2-1 (Cont.) – *VEGP Units 3 and 4 SSAR Transient Table*

	Transient	Emergency Level
15.5.2	Chemical and Volume Control System Malfunction That Increases Reactor Coolant Inventory	Alert (Pressurizer safeties open)
15.6	**Decrease in Reactor Coolant Inventory**	
15.6.1	Inadvertent Opening of a Pressurizer Safety Valve or Inadvertent Operation of the ADS	Alert
15.6.2	Failure of Small Lines Carrying Primary Coolant Outside Containment	Alert, Site Area Emergency, and General Emergency (based on conservative dose analysis)
15.6.3	Steam Generator Tube Rupture	Alert, Site Area Emergency, and General Emergency (based on conservative dose analysis)
15.6.5	Loss-of-Coolant Accidents Resulting from a Spectrum of Postulated Piping Breaks Within the Reactor Coolant Pressure Boundary	NUE, Alert, Site Area Emergency, and General Emergency (based on conservative dose analysis)
15.7	**Radioactive Release from a Subsystem or Component**	
15.7.1	Gas Waste Management System Leak or Failure	No emergency
15.7.2	Liquid Waste Management System Leak or Failure (Atmospheric Release)	No emergency
15.7.4	Fuel Handling Accident	NUE, Alert, Site Area Emergency, and General Emergency (based on conservative dose analysis)
15.7.5	Spent Fuel Cask Drop Accident	Not applicable
15.8	**Anticipated Transients Without Scram**	
15.8	Anticipated Transients Without Scram	Not applicable (outside design bases)

V2 Appendix 3 Unit 3 ITAAC

Table V2A3-1 *Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)*

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
1.0 Emergency Classification System			
10 CFR 50.47(b)(4) – A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.	1.1 An emergency classification and emergency action level scheme must be established by the licensee. The specific instruments, parameters or equipment status shall be shown for establishing each emergency class, in the in-plant emergency procedures. The plan shall identify the parameter values and equipment status for each emergency class. [D.1]	1.1 An inspection of the control room, technical support center (TSC), and emergency operations facility (EOF) will be performed to verify that they have displays for retrieving system and effluent parameters specified in Table Annex V2 D.2-1, *Hot Initiating Condition Matrix, Modes 1,2,3, and 4,* Table V2 D.2-2, *Cold Initiating Condition Matrix, Modes 5,6, and De-fueled,* and EIPs (Emergency Implementing Procedures).	1.1 The parameters specified in Table Annex V2 H-1, *Post Accident Monitoring Variables,* are retrievable in the control room, TSC, and EOF. The ranges encompass the values specified in the emergency classification and EAL scheme
3.0 Emergency Communications			
10 CFR 50.47(b)(6) Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.	3.1 The means exists for communications between the control room, OSC, TSC, EOF, principal State and local emergency operations centers (EOCs), and radiological field monitoring teams. [F.1.d]	3.1 & 3.2 A test will be performed of the capabilities	3.1 Communications are established between the control room, OSC, TSC, and EOF. Communications are established between the control room, TSC, and Georgia Emergency Management Agency (GEMA) Operation Center; Burke County Emergency Operations Center (EOC); SRS Operations Center; South Carolina Warning Point; and Aiken, Allendale, and Barnwell County Dispatchers. Communications are established between the TSC and radiological

Table V2A3-1 (Cont.) *Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)*

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
			monitoring teams.
	3.2 The means exists for communications from the control room, TSC, and EOF to the NRC headquarters and regional office EOC (including establishment of the Emergency Response Data System (ERDS) between the onsite computer system and the NRC Operations Center. [F.1.f]		3.2 Communications are established between the control room, TSC, and EOF to the NRC headquarters and regional office EOCs and an access port for ERDS is provided.
5.0 Emergency Facilities and Equipment			
10 CFR 50.47(b)(8) - Adequate emergency facilities and equipment to support the emergency response are provided and maintained.	5.1 The licensee has established a technical support center (TSC) and an onsite operations support center (OSC). [H.1]	5.1 An inspection of the as-built TSC and OSC will be performed, including a test of the capabilities	~~5.1.1.~~5.1.1The TSC has at least 2,175 square feet of floor space ~~5.1.2.~~5.1.2 Communication equipment is installed in the TSC and OSC, and voice transmission and reception are accomplished ~~5.1.3.~~5.1.3 The plant parameters listed in Table Annex V2H-1, Post Accident Monitoring Values can be retrieved and displayed in the TSC ~~5.1.4.~~5.1.4 The TSC is located within the protected area and no major security barriers exist between the TSC and the control room

Table V2A3-1 (Cont.) ***Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)***

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
			~~5.1.5.~~5.1.6 The OSC is located adjacent to the passage from the annex building to the control room ~~5.1.6.~~5.1.7 The TSC ventilation system includes a high efficiency particulate air (HEPA) and charcoal filter and radiation monitore~~s~~d are installed
	5.2 The Licensee has established an emergency operations facility (EOF). [H.2]	5.2 An inspection of the EOF will be performed, including a test of the capabilities.	~~5.1.7.~~5.1.8 A reliable and back-up electrical power supply is available for the TSC. 5.2.3 Voice transmission and reception are accomplished between the EOF and the control room. 5.2.4 The plant parameters listed in Table Annex V2-1, Post Accident Monitoring Values can be retrieved and displayed in the EOF
6.0 Accident Assessment			
10 CFR 50.47(b)(9) - Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition	6.1 The means exist to provide initial and continuing radiological assessment throughout the course of an accident. [I.2]	6.1 A test of the emergency plan will be conducted by performing a drill to verify the capability to perform accident assessment.	6.1 Using selected monitoring parameters listed in Table Annex V2 H-1 of the VEGP emergency plan, simulated degraded plant conditions are assessed and protective actions are initiated in accordance with the

Table V2A3-1 (Cont.) *Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)*

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
are in use.			following criteria:~~as outlined in the drill scenario.~~ A. Accident Assessment and Classification 1. Demonstrate the ability to identify initiating conditions, determine emergency action levels (EAL) parameters and correctly classify the emergency throughout the drill. B. Radiological Assessment and Control 1. Demonstrate the ability to obtain onsite radiological surveys and samples. 2. Demonstrate the ability to continuously monitor and control radiation exposure to emergency workers. 3. Demonstrate the ability to assemble and deploy field monitoring teams in a timely manner. 4. Demonstrate the ability to satisfactorily collect and disseminate field team data. 5. Demonstrate the ability to develop dose projections. 6. Demonstrate the ability to make the decision whether to issue radio-protective drugs, KI, to emergency

Table V2A3-1 (Cont.) ***Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)***

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
			workers 7. Demonstrate the ability to develop appropriate protective action recommendations (PAR) and expeditiously notify appropriate authorities.
	6.2 The means exist to determine the source term of releases of radioactive material within plant systems, and the magnitude of the release of radioactive materials based on plant system parameters and effluent monitors. [I.3]	6.2 An analyses of the emergency plan implementing procedures and the Off Site Dose Calculation Manual (ODCM) will be completed to verify ability to determine the source term, magnitude of releases.	6.2 The administrative procedures and ODCM correctly calculate source terms and magnitudes of postulated releases.
	6.3 The means exist to continuously assess the impact of the release of radioactive materials to the environment, accounting for the relationship between effluent monitor readings, and onsite and offsite exposures and contamination for various meteorological conditions. [I.4]	6.3 An analyses of the emergency plan implementing procedures and the Off Site Dose Calculation Manual (ODCM) will be completed to verify the relationship between effluent monitor readings and offsite exposures and contaminations has been established.	6.3 The administrative procedures and ODCM calculate the relationship between effluent monitor readings and offsite exposure and contamination.
	6.4 The means exist to acquire and evaluate meteorological information. [I.5]	6.4 A test will be performed to verify the ability to access meteorological information in the TSC and control room.	

Table V2A3-1 (Cont.) *Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)*

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
			6.4 The following parameters are displayed in the TSC and control room. ~~The test will be successful upon meeting the acceptance criteria listed in the test procedure.~~ • Windspeed (at 10 m and 60 m) • Wind direction (at 10 m and 60 m) • Standard deviation of horizontal wind direction (at 10 m) • Vertical temperature difference (between 10 m and 60 m) • Ambient temperature (at 10 m) • Dewpoint temperature (at 10 m) • Precipitation (at the tower base)
	6.5 The means exist to make rapid assessments of actual or potential magnitude and locations of any radiological hazards through liquid or gaseous release pathways, including activation, notification means, field team composition, transportation, communication, monitoring equipment, and estimated deployment times. [I.8]	6.5 An analyses of the methodology contained in the EIP for estimating offsite dose and the ODCM will be performed to verify the ability to determine release rates and projected doses if instrumentation used for assessment are offscale or inoperable.	6.5 The EIP and ODCM estimate release rates and doses when monitors are offscale or inoperable.
	6.7 The means exist to estimate integrated dose from the projected and actual dose rates, and for comparing these estimates with the EPA protective action guides		

Table V2A3-1 (Cont.) *Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)*

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
	(PAGs). [I.10]	6.7 An analysis of the methodology contained in the EIPs for estimating dose, preparing protective action recommendations, and the ODCM will be performed to verify the ability to estimate an integrated dose from projected and actual dose rates.	6.7 The EIPs and ODCM estimate an integrated dose.
7.0 Protective Response			
10 CFR 50.47(b)(10) A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.	7.1 The means exists to warn and advise onsite individuals of an emergency, including those in areas controlled by the operator including: • Employees not having emergency assignments • Visitors • Contractor and construction personnel • Other persons who may be in the public access areas, on or passing through the site, or within the owner controlled area	7.1 A test of the onsite warning and communication capability EIPs including protective action guidelines, assemble and accountability and site dismissal will be performed during a drill.	7.1 The organization will satisfy the following objectives during the drill: ~~correctly implement the EIPs as described in the drill acceptance criteria.~~ 1. Demonstrate the capability to direct and control emergency operations. 2. Demonstrate the ability to transfer emergency direction from the Control Room (simulator) to the Technical Support Center (TSC) and from the TSC to the Emergency Operations Facility (EOF) in a timely manner. 3. Demonstrate the ability to prepare for around the clock staffing requirements. 4. Demonstrate the ability to perform

Table V2A3-1 (Cont.) *Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)*

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
			assembly and accountability in a timely manner. 5. Demonstrate the ability to perform site dismissal.
8.0 Exercises and Drills			
10 CFR 50.47(b)(14) Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.	8.1 The licensee conducts a full participation exercise to evaluate major portions of emergency response capabilities, which includes participation by each State and local agency within the plume exposure EPZ, and each State within the ingestion pathway EPZ.	8.1 A full participation exercise (test) will be conducted within the specified timer periods of 10 CFR Part 50, Appendix E.	8.1.1 The exercise is completed within the specified time periods of 10 CFR Part 50, Appendix E; onsite exercise objectives listed below~~identified in the scenario have~~ have been met, and there are no uncorrected onsite exercise deficiencies. A. Accident Assessment and Classification 1. Demonstrate the ability to identify initiating conditions, determine emergency action levels (EAL) parameters and correctly classify the emergency throughout the exercise. Standard Criteria: Determine the correct highest emergency classification level based on events which were in progress, considering past events, and their impact on the current conditions. This should be done within 15 minutes from the time the initiating condition(s) or EAL is identified.

Table V2A3-1 (Cont.) ***Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)***

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
			B. Notifications 1. Demonstrate the ability to alert, notify and mobilize site emergency response personnel. Standard Criteria: a.) Complete the designated checklist and perform the announcement within 5 minutes of the initial event classification for an Alert or higher. b.) Activate the emergency recall system within 5 minutes of the initial event classification for an Alert or higher. 2. Demonstrate the ability to expeditiously notify state, local and federal authorities (NRC) of emergency conditions. Standard Criteria: Transmit the designated checklist within 15 minutes of event classification. Transmit the designated checklist within 60 minutes of last transmittal for a follow-up notification to state and local authorities. Transmit information using the designated checklist within 60

Table V2A3-1 (Cont.) ***Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)***

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
			minutes of event classification for an initial notification of the NRC. 3. Demonstrate the ability to warn or advise onsite individuals of emergency conditions. Standard Criteria: Complete the designated checklist within 15 minutes of notification (via plant page or telephone) from control room. 4. Demonstrate the capability of the Prompt Notification System for the public to operate properly when required. Standard Criteria: Sirens: 90% of the sirens operate properly as indicated by the Whelen feedback system. NOAA Tone Alert Radios: A NOAA Tone Alert Radio is activated. C. Emergency Response 1. Demonstrate the capability to direct and control emergency operations. Standard Criteria: Subjective evaluation of the command and control

Table V2A3-1 (Cont.) ***Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)***

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
			demonstrated by the Control Room in the early phase and the TSC in the latter phase of the emergency. 2. Demonstrate the ability to transfer emergency direction from the Control Room (simulator) to the Technical Support Center (TSC) and from the TSC to the Emergency Operations Facility (EOF) in a timely manner. Standard Criteria: Subjective evaluation of briefings that were conducted prior to turnover responsibility. Personnel document transfer of duties. 3. Demonstrate the ability to prepare for around the clock staffing requirements. Standard Criteria: Complete 24-hour staff assignments. 4. Demonstrate the ability to perform assembly and accountability in a timely manner. Standard Criteria: Protected area personnel assembly and accountability completed within 30 minutes of the Alert or higher emergency

Table V2A3-1 (Cont.) ***Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)***

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
			declaration via public address announcement. D. Emergency Response Facilities 1. Demonstrate timely activation of the TSC, Operations Support Center (OSC), and EOF. Standard Criteria: TSC, EOF and OSC Activation: The TSC, EOF and OSC should be activated within about an hour of the initial notification. 2. Demonstrate the adequacy of equipment, security provisions, and habitability precautions for the TSC, OSC, EOF, and Emergency News Center (ENC) as applicable. Standard Criteria: Adequacy of the Emergency Equipment: Subjective evaluation of the adequacy of the emergency equipment in the emergency response facilities. Adequacy of the Security Provisions The Security Shift Captain should implement and follow applicable emergency implementing

Table V2A3-1 (Cont.) ***Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)***

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
			procedures. Adequacy of Habitability Precautions The Health Physics Supervisor (TSC) should implement the designated checklist an onsite/offsite release has occurred. 3. Demonstrate the adequacy of communications for all emergency support resources. Standard Criteria: The emergency response communications listed in emergency implementing procedures are available and operational. The communications systems are tested in accordance with TSC, OSC, and EOF Activation Checklists. The ERF personnel are able to operate all specified communication systems. Clear and timely communications links are established and maintained for the duration of the exercise. E. Radiological Assessment and Control 1. Demonstrate the ability to obtain onsite radiological surveys and

Table V2A3-1 (Cont.) ***Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)***

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
			samples. Standard Criteria: HP Technicians should demonstrate the ability to obtain appropriate instruments (range and type) and take surveys. In addition airborne samples should be taken when the conditions indicate the need for the information. 2. Demonstrate the ability to continuously monitor and control radiation exposure to emergency workers. Standard Criteria: Emergency workers should be issued self reading dosimeters when radiation levels require and exposure should be controlled to 10CFR20 limits unless the ED authorizes emergency limits. Exposure records should be available, either from the ALARA computer or a hard copy dose report. Emergency workers include Security and personnel within all emergency facilities. 3. Demonstrate the ability to assemble and deploy field monitoring

Table V2A3-1 (Cont.) ***Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)***

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
			teams in a timely manner. Standard Criteria: One Field Monitoring team should be ready to be deployed within 1 hour of being requested from the OSC, and no later than 90 minutes from the declaration of an Alert or higher emergency. 4. Demonstrate the ability to satisfactorily collect and disseminate field team data. Standard Criteria: Field data to be collected is dose rate or cpm from the plume, both open and closed window, and air sample gross/net cpm for particulate and iodine, if applicable. Satisfactory dissemination is from the field team to the Dose Assessment Supervisor via the field team communicator and field team coordinator. 5. Demonstrate the ability to develop dose projections. Standard Criteria: The on-shift HP/Chemistry Shared foreman or the Dose Assessment Supervisor should perform dose projections timely and accurately in accordance with

Table V2A3-1 (Cont.) ***Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)***

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
			emergency implementing procedures. 6. Demonstrate the ability to make the decision whether to issue radio-protective drugs, KI, to emergency workers. Standard Criteria: KI should be taken if the estimated dose to the thyroid will exceed 25 REM CDE. 7. Demonstrate the ability to develop appropriate protective action recommendations (PAR) and expeditiously notify appropriate authorities. Standard Criteria: TEDE and CDE dose projections from the dose assessment computer code should be compared to emergency implementing procedures. PARs are developed within 15 minutes of data availability. PAR's are transmitted via voice or fax within 15 minutes of event classification and/or PAR development. F. Public Information 1. Demonstrate the capability to develop and disseminate clear, accurate and timely information to

Table V2A3-1 (Cont.) ***Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)***

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
			the news media. Standard Criteria: Media information (e.g., press releases, press briefings, electronic media) should be made available within 60 minutes of notification of the On-Call Media Representative. Follow-up information should be provided at a minimum within 60 minutes of an emergency classification or protective action recommendation change. 2. Demonstrate the capability to establish and effectively operate rumor control in a coordinated fashion. Standard Criteria: Calls should be answered in a timely manner with the correct information. Calls should be returned or forwarded as appropriate to demonstrate responsiveness. Rumors should be identified and addressed. G. Evaluation 1. Demonstrate the ability to conduct a post-exercise critique to determine areas requiring improvement and corrective action.

Table V2A3-1 (Cont.) *Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)*

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
			Standard Criteria: An exercise timeline should be developed followed by an evaluation of the objectives. Significant problems in achieving the objectives should be discussed to ensure understanding of why the objective was not fully achieved. Recommendations for improvement in non-objective areas should also be discussed.
			8.1.2 Onsite emergency response personnel are mobilized in sufficient number to fill the emergency positions identified in the emergency plan Section B, and they successfully perform their assigned responsibilities as outlined in Criterion 8.1.1.D, Emergency Response Facilities. ~~the exercise scenario.~~
			8.1.3 The exercise is completed within the specified time periods of 10 CFR Part 50, Appendix E; offsite exercise objectives have been met; and there are no uncorrected offsite

Table V2A3-1 (Cont.) *Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)*

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
			deficiencies or a license condition requires offsite deficiencies to be corrected prior to operation above 5% of rated power.
9.0 Implementing Procedures			
10 CFR Part 50, Appendix E.V – No less than 180 days prior to the scheduled issuance of an operating license for a nuclear power reactor or a license to possess nuclear material, the applicant's detailed implementing procedures for its emergency plan shall be submitted to the Commission.	9.1 The licensee has submitted detailed implementing procedures for its emergency plan no less than 180 days prior to fuel load.	9.1 An inspection of the submittal letter will be performed.	9.1 The licensee has submitted detailed implementing procedures for the onsite emergency plan no less than 180 days prior to fuel load.

V2 Appendix 4 Unit 4 ITAAC

Table V2A4-1 *Unit 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)*

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
1.0 Emergency Classification System			
10 CFR 50.47(b)(4) – A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.	1.1 An emergency classification and emergency action level scheme must be established by the licensee. The specific instruments, parameters or equipment status shall be shown for establishing each emergency class, in the in-plant emergency procedures. The plan shall identify the parameter values and equipment status for each emergency class. [D.1]	1.1 An inspection of the control room will be performed to verify that it has the displays for retrieving system and effluent parameters specified in Table Annex V2 D.2-1, *Hot Initiating Condition Matrix, Modes 1,2,3, and 4,* Table V2 D.2-2, *Cold Initiating Condition Matrix, Modes 5,6, and De-fueled*, and Emergency Implementing Procedures (EIP)s.	1.1 The parameters specified in Table Annex V2 H-1, *Post Accident Monitoring Variables,* are retrievable in the control room. The ranges encompass the values specified in the emergency classification and EAL scheme
3.0 Emergency Communications			
10 CFR 50.47(b)(6) Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.	3.1 The means exists for communications between the control room, OSC, TSC, and EOF. [F.1.d]	3.1 & 3.2 A test will be performed of the capabilities	3.1 Communications are established between the control room, OSC, TSC, and EOF. – Communications are established between the control room, Georgia Emergency Management Agency (GEMA) Operation Center; Burke County Emergency Operations Center (EOC); SRS Operations Center; South Carolina Warning Point; and Aiken, Allendale, and Barnwell County Dispatchers.
	3.2 The means exists for communications from the control		3.2 Communications are established between the control room, TSC, and

Table V2A4-1 (Cont.) *Unit 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)*

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
	room to the NRC headquarters and regional office EOC. [F.1.f]		EOF, and NRC headquarters and regional office EOCs and an access port for ERDS is provided.
5.0 Emergency Facilities and Equipment			
10 CFR 50.47(b)(8) - Adequate emergency facilities and equipment to support the emergency response are provided and maintained.	5.1 The licensee has established a onsite operations support center (OSC). [H.1]	5.1 An inspection of the as-built OSC will be performed, including a test of the capabilities	5.1.1 Communication equipment is installed in the and OSC, and voice transmission and reception are accomplished 5.1.2 The plant parameters listed in Table Annex V2H-1, Post Accident Monitoring Values can be retrieved and displayed in the TSC 5.1.3 The OSC is located adjacent to the passage from the annex building to the control room
	5.2 The Licensee has established an emergency operations facility (EOF). [H.2]	5.2 An inspection of the EOF will be performed, including a test of the capabilities.	5.2.3 Voice transmission and reception are accomplished between the EOF and the control room. 5.2.4 The plant parameters listed in Table Annex V2-1, Post Accident Monitoring Values can be retrieved and displayed in the EOF
6.0 Accident Assessment			
10 CFR 50.47(b)(9) - Adequate	6.4 The means exist to acquire and	6.4 A test will be performed to verify	6.4 The following parameters are

Table V2A4-1 (Cont.) *Unit 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)*

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.	evaluate meteorological information. [I.5]	the ability to access meteorological information in the control room.	displayed in the control room. • Windspeed (at 10 m and 60 m) • Wind direction (at 10 m and 60 m) • Standard deviation of horizontal wind direction (at 10 m) • Vertical temperature difference (between 10 m and 60 m) • Ambient temperature (at 10 m) • Dewpoint temperature (at 10 m) • Precipitation (at the tower base)
7.0 Protective Response			
10 CFR 50.47(b)(10) A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. Guidelines for the choice of protective actions	7.1 The means exists to warn and advise onsite individuals of an emergency, including those in areas controlled by the operator including: • Employees not having emergency assignments • Visitors • Contractor and construction personnel	7.1 A test of the onsite warning and communication capability EIPs including protective action guidelines, assemble and accountability and site dismissal will be performed during a drill.	7.1 The organization will satisfy the following objectives during the drill: 1. Demonstrate the capability to direct and control emergency operations. 2. Demonstrate the ability to transfer emergency direction from the Control Room (simulator) to the Technical Support Center (TSC) and from the TSC to the Emergency Operations Facility (EOF) in a timely manner.

Table V2A4-1 (Cont.) *Unit 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)*

Planning Standard	EP Program Elements (From NUREG 0654/FEMA-REP-1)	Inspections, Tests, Analyses	Acceptance Criteria
during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.	• Other persons who may be in the public access areas, on or passing through the site, or within the owner controlled area		3. Demonstrate the ability to prepare for around the clock staffing requirements. 4. Demonstrate the ability to perform assembly and accountability in a timely manner. 5. Demonstrate the ability to perform site dismissal. ~~7.1 The organization will implement the EIPs as described in the drill acceptance criteria.~~

Southern Nuclear Operating Company

AR-07-0656

Enclosure 5

Miscellaneous Documents in Support of Responses to SSAR Section 13.3 RAIs

NOTE: This enclosure consists of the below documents in the number order specified.

1. Letter of Agreement with Radiation Management Corporation
2. Letter of Agreement with Doctors Hospital
3. Agenda from a Meeting with State and Local Emergency Preparedness Officials
4. VEGP Emergency Implementing Procedures
5. VEGP Emergency Information For Visitors To The Area
6. Georgia Emergency Operations Plan (GEOP)
7. Georgia DNR –EPD Procedures and Map
8. OHS – GEMA – REP Resource Contacts
9. GEMA SOP 3-5
10. South Carolina Map Diagram
11. South Carolina STRERP Appendix I
12. South Carolina STRERP Appendix V
13. Q2 – Aiken County
14. Q2 – Allendale County
15. Q2 – Barnwell County
16. Executive Order and Letter of Agreement for South Carolina
17. Letters of Agreement for Georgia
18. Figure Showing Preselected Radiological and Fixed Environmental Sampling and Monitoring Locations

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Enclosure 5
Miscellaneous Documents

No. 1 Letter of Agreement with Radiation Management Corporation

February 26, 2006

Lawrence E. Mayo
Emergency Preparedness Coordinator
Southern Nuclear Operating Company
Vogtle Electric Generating Plant
P. O. Box 1600
Waynesboro, GA 30830

RE: Emergency Medical Assistance Program for 2006

Dear Mr. Mayo:

This confirms an agreement between Radiation Management Consultants (RMC) and Southern Nuclear Operating Company, Inc., wherein RMC agrees to furnish certain services to Vogtle Electric Generating 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, 2006 through December 31, 2006. The EMAP program contains the following provisions:

1. Twenty-four hour per day availability of expert medical consultation on the 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. Availability of and assistance with transfer of patients to Definitive Care Centers established and maintained at Loyola University Medical Center, Chicago, IL (or any other qualified medical center at the client's discretion) 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 Facilities
   C. Experienced Certified Health Physicists and Physician Team for evaluation of radiation exposures.

5. Annual training for the plant personnel in the handling and treatment of injured/contaminated patient(s).

6. Annual training for EMS personnel in the rescue and transport of injured/contaminated patient(s).

7. Annual training for hospital personnel in the handling, treatment and evaluation of injured/contaminated patient(s).

8. Annual radiation emergency medical drill to include preparation of accident scenarios. A drill observer will be provided, who will furnish drill evaluation reports related to observations made at the plant, ambulance and hospital.

9. Annual inventories of support hospital radiation emergency medical supplies and equipment.

10. Performance of an annual telephone number verification as well as a review of the hospital procedure manual; revise and distribute changes to the manual under controlled document distribution system.

11. Accident Response: Consultation and laboratory services under RMC's employment and control are at no extra charge, except for travel, lodging and meals.

12. Preparation of incident/accident reports for NRC and other regulatory bodies at no additional charge.

13. Legal and medical appearances as required and requested by Southern Nuclear Operating Company/Vogtle Plant personnel.

RMC:jb

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Enclosure 5
Miscellaneous Documents

No. 2 Letter of Agreement with Doctors Hospital

DOCTORS HOSPITAL

3651 Wheeler Road
Augusta, Georgia 30909
(706) 651-3232

www.doctors-hospital.net

100 Top Hospitals

December 30, 2003

Mr. Lawrence E. Mayo
Emergency Preparedness Coordinator
Vogtle Electric Generating Plant
P. O. Box 1600
Waynesboro, GA 30830

Dear Mr. Mayo:

The purpose of this letter is to reconfirm that Doctors Hospital would accept the radiologically contaminated injured patients arising from incidents or emergencies at Plant Vogtle. We realize that Georgia Power Company or Southern Nuclear Operating Company would be financially responsible for any modifications to our facility that may be required by the Nuclear Regulatory Commission, or others, for the treatment of patients exposed to radioactive materials. This may also include special training of hospital personnel, as may be required, and also the cost of any special equipment, as may be required.

It is my understanding that your organization has shared with our staff written procedures prepared by Radiation Management Corporation, which would detail the actions that would be necessary to take care of these patients. Our personnel are available to receive instructions from Radiation Management Corporation regarding your proposed plan of action. We would also be willing to participate in periodic drills with respect to your plan of action.

Please feel free to contact me at 706-651-2451 concerning any questions that you may have.

Sincerely,

Terry J. Ginn
President/CEO

Copy: J. B. Beasley, Jr., General Manager
Martha Garner, R.N., Director of Emergency Department
Dell Oliver, Chief Nursing Officer
Mark Newton, M.D., Medical Director of Emergency Department
Ted Newton, R.N., Hospital Safety Officer

Enclosure

TJF/ds

Shayne George

October 21, 2005

~~Shayne Dunn~~ Larry Dunn

651-2041

Please review the attached letter of agreement. If the letter is correct, please sign and date in the space provided below. If you feel the letter needs updating please phone June McBride (706) 826-3945 let us know that this is being done.

All correspondence and/or questions should be directed to Lawrence Mayo, Emergency Preparedness Coordinator, (706) 826-3356. Your continued support of our Emergency Preparedness program is greatly appreciated.

June J. McBride
Administration Assistant for Emergency Preparedness Coordinator

JJMC/jjmc

The attached current letter of agreement with the Vogtle Electric Generating Plant is correct and needs no updating.

Signed _____, CEO (Title), 12/10/05 (Date)

Fax To: June J. McBride
Administration Assistant for
Emergency Preparedness Coordinator
Vogtle Electric Generating Plant
706-724-0654 — Fax #

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Enclosure 5
Miscellaneous Documents

No. 3 Agenda from a Meeting with State and Local Emergency Preparedness Officials

Central Savannah River Area (CSRA) Fixed Nuclear Facilities REP Meeting

Agenda

08/31/2006
10:00 AM EDT
Aiken County EOC
420 Hampton Avenue
Aiken. SC

Meeting called by:	Merrill Maddox
Facilitator:	Lawrence Mayo

Topics

Issues Update	Aiken Co.	David Ruth
	Allendale Co.	Linda Sanders
	Barnwell Co.	Roger Riley
	Burke Co.	Rusty Sanders
	SC EMD	Ernie Moore
	SC DHEC	Chris Staton
	W SRC	Deb Foutch
	DOE-SRS	Cindy Brizes
	GEMA	Stephen Clark
	GA DNR	Jim Hardeman
SNC Update	SNC	Merrill Maddox
		Walt Lee
Plant Vogtle Update	SNC	Lawrence Mayo
Annual EAL Review		
Roundtable Discussion		All

Special notes:	Lunch will be served following the meeting (12:00 to 1:00) courtesy of Aiken County
	The SRS quarterly meeting will begin at approximately 1:00 PM

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Enclosure 5
Miscellaneous Documents

No. 4 VEGP Emergency Implementing Procedures

- 91001-C
- 19200-C
- Draft 91001-C

PRB REVIEW REQUIRED

EMERGENCY CLASSIFICATION AND IMPLEMENTING INSTRUCTIONS

PROCEDURE USAGE REQUIREMENTS-		SECTIONS
Continuous Use:	Procedure must be open and readily available at the work location. Follow procedure step by step unless otherwise directed.	• Data Sheet 1
Reference Use:	Procedure or applicable section(s) available at the work location for ready reference by person performing steps.	• Figure 1 • Figure 2 • Figure 3 • Figure 4
Information Use:	Available on plant site for reference as needed.	**Remainder of Procedure**

Information Use

1.0 PURPOSE

1.1 The purpose of this procedure is to provide instructions in the classification of off-normal events into one of four emergency classification levels. (1986308683)

2.0 DEFINITIONS

2.1 CREDIBLE THREAT (2002342878)

A threat is considered credible when (1) physical evidence supporting the threat exists, or (2) information independent from the actual threat message exists that support the threat, or (3) a specific group or organization claims responsibility for the threat, or (4) a message (written or verbal) is received that contains specific information about plant locations, systems or device description an average person would most likely not know. The determination of credibility should be made by the Shift Manager with input from the Nuclear Security Captain or their designated representatives.

2.2 CIVIL DISTURBANCE

An organized demonstration by an individual or group of unexpected, unidentified, or unauthorized people within the Owner Controlled Area (OCA) which is used to promote a political or social issue or belief.

2.3 BARRIER INTEGERITY

As the plant moves through cold shutdown and refueling, modes 5 and 6, barriers to a fission product release are intentionally reduced. (i.e., RCS pressure boundary and containment may be open.) Under these plant operating modes, the evaluation of these barriers becomes more event based. For instance, containment is not considered breached or challenged when the containment equipment hatch is open unless there is a need for that barrier to restrict a significant release of radioactivity due to a radiological event. In addition, RCS is not considered breached or challenged when the system is depressurized and the pressurizer safeties or the reactor vessel head are removed unless there is a need for that barrier to restrict a significant release of radioactivity due to a radiological event.

2.4 HOSTILE ACTION

An act toward Plant Vogtle or its personnel that includes the use of violent force to destroy equipment, takes hostages, and /or intimidates the licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force. Other acts that satisfy the overall intent may be included. HOSTILE ACTION should not be construed to include acts of civil disobedience or felonious acts that are not part of a concerted attack on Vogtle. Non-terrorism-based EALs should be used to address such activities, (e.g., violent acts between individuals in the owner controlled area.)

2.5 HOSTILE FORCE

One or more individuals who are engaged in a determined assault, overtly or by stealth and deception, equipped with suitable weapons capable of killing, maiming, or causing destruction.

3.0 RESPONSIBILITIES

3.1 The Shift Manager is responsible for initial classification of events. The Shift Manager shall assume the responsibilities of the Emergency Director (ED) until relieved. The Shift Manager then becomes responsible for recognizing changes in plant conditions and advising the ED concerning classification of events. (1985304671)

3.2 The ED has the following non-delegable responsibilities relative to emergency classification:

3.2.1 Classifying and declaring the emergency. (1985304555)

3.2.2 Declaring changes in the emergency classification, including terminating.

3.3 The Technical Support Center (TSC) and the Emergency Operations Facility (EOF) Managers are responsible for:

3.1.1 Providing recommendations on emergency classifications to the ED.

4.0 PREREQUISITES

An off-normal event has occurred, or is in progress.

5.0 PRECAUTIONS

5.1 This procedure establishes minimum requirements for emergency classifications. The ED may use judgement as the final criterion for determining the classifications of off-normal events that are not included in this procedure.

6.0 PROCEDURE

6.1 CLASSIFICATION

6.1.1 Personnel and plant safety must be addressed as the highest priority; if necessary, prior to emergency classification.

NOTE

Classification should not be delayed in anticipation of either events being terminated or the threat to safety ending. The emergency should be assessed and classified within 15 minutes after it is recognized that the emergency action level has been exceeded.

6.1.2 Classify the event on Data Sheet 1, "Classification Determination" by assessing the barrier integrity.

6.1.2.1 Use Figure 1 to determine if the fuel cladding integrity is "Loss" or "Potential Loss". Enter loss, potential loss, or intact as applicable on Data Sheet 1, part 1a. (1985304601) (1986308699) (2002342935)

6.1.2.2 Use Figure 2 to determine if the reactor coolant system integrity is "Loss" or "Potential Loss". Enter loss, potential loss, or intact as applicable on Data Sheet 1, part 1b. (1985304601) (1986308699)

6.1.2.3 Use Figure 3 to determine if the containment is "Loss" or "Potential Loss". Enter loss, potential loss, or intact as applicable on Data Sheet 1, part 1c. (1985304601) (1986308699)

6.1.2.4 Use Figure 4, evaluate and determine the highest emergency classification level based on events which are in progress, considering past events, and their impact on the current plant conditions. Check-mark the applicable emergency classification level on Data Sheet 1, Part 2. For those events which are corrected, or the threat to the level of safety of the plant has ended prior to completion of classification/notification processes, it is permissible to classify the event and terminate the event with the initial emergency notification message. In this circumstance termination does not require consultation with off-site authorities. (1985304604) (1986308699) (1987314078)

6.1.2.5 Verify your assumption of the ED position by signing Data Sheet 1, part 4, and list the date and time of the emergency declaration.

6.1.3 The ED shall complete the Plant Page Announcement Checklist in Procedure 91002-C, "Emergency Notifications" and shall proceed with the appropriate checklist found in Procedure 91102-C, "Duties Of The Emergency Director".

6.2 PERIODIC REVIEW OF THE CLASSIFICATION LEVEL

6.2.1 The ED shall periodically review current or projected plant conditions to determine if the emergency should be upgraded.

6.2.2 The TSC Manager shall periodically review plant conditions, determine if the emergency should be upgraded based on current or projected status, and make recommendations to the ED. (1985304672)

6.2.3 The EOF Manager shall periodically review offsite radiological conditions, determine if the emergency should be upgraded based on current field surveys or projected releases, and make recommendations to the ED. (1985304672)

6.3 TERMINATING THE EMERGENCY CLASSIFICATION

6.3.1 For an NOUE or Alert, the ED may terminate the Emergency when plant conditions have stabilized and the reason for the NOUE or ALERT have been corrected. An NOUE or an Alert emergency can be terminated without coordination with offsite authorities.

6.3.2 For a Site Area Emergency or General Emergency, the ED may terminate the Emergency after discussions with plant management, applicable members of the VEGP emergency organization, the NRC, GEMA, Burke County EMA director, South Carolina EMD director and SRS emergency staff do not result in the identification of a valid reason for not terminating the emergency. (Reference Procedure 91501-C, "Recovery")

6.3.3 After the decision has been made to terminate the emergency, the ED shall proceed with the appropriate checklist found in "Procedure 91102-C, "Duties Of The Emergency Director".

7.0 <u>REFERENCES</u>

7.1 VEGP EMERGENCY PLAN

7.2 PROCEDURES

7.2.1 91002-C "Emergency Notifications"

7.2.2 91102-C "Duties Of The Emergency Director"

7.2.3 91304-C "Estimating Offsite Dose"

7.2.4 NMP-EP-109, "Protective Action Recommendations"

7.2.5 91501-C, "Recovery"

7.2.6 00152-C, "Federal And State Reporting Requirements"

7.2.7 00655-C, "Bombs Or Other Overt Threats"

7.2.8 00659-C, "Civil Disturbances"

7.2.9 18037-C, "Security Threat"

7.3 VEGP Technical Specifications

7.4 COMMITMENTS

1985304555, 1985304601, 1985304604, 1985304671, 1985304672, 1986308683, 1986308699, 1987314078, 2002342878, 2002342935

END OF PROCEDURE TEXT

Reference Use

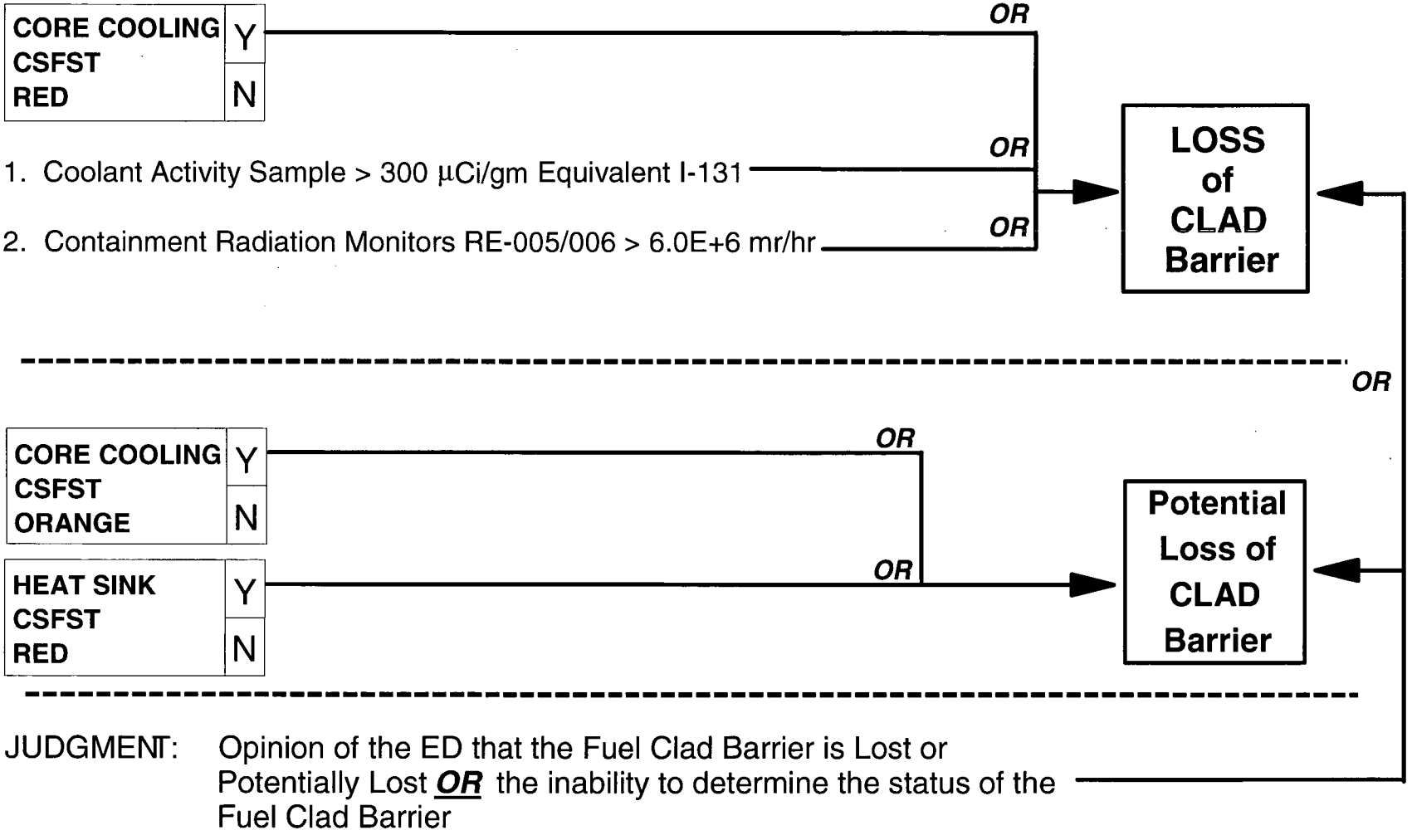


FIGURE 1 - FUEL CLADDING INTEGRITY

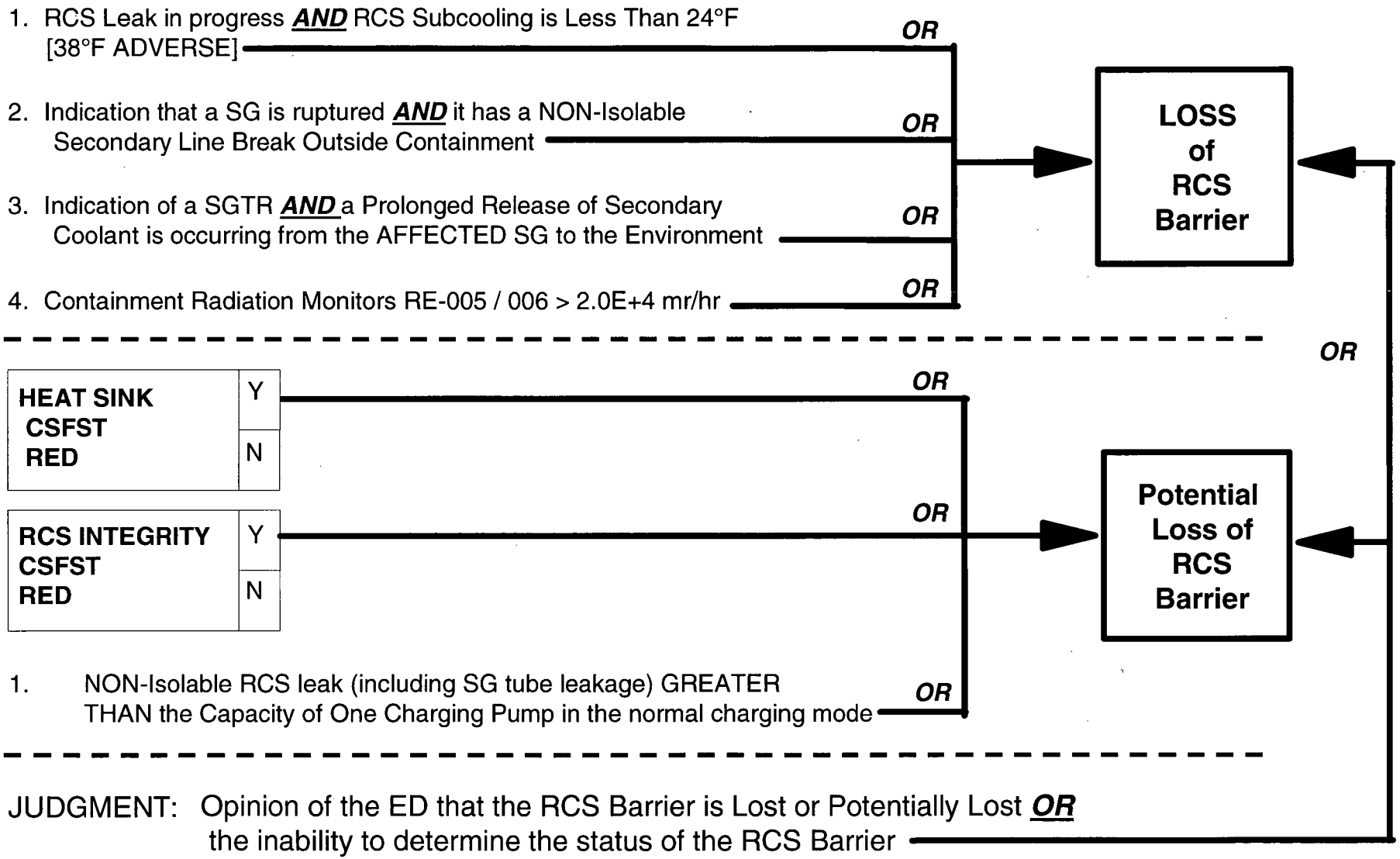


FIGURE 2 - REACTOR COOLANT SYSTEM (RCS) INTEGRITY

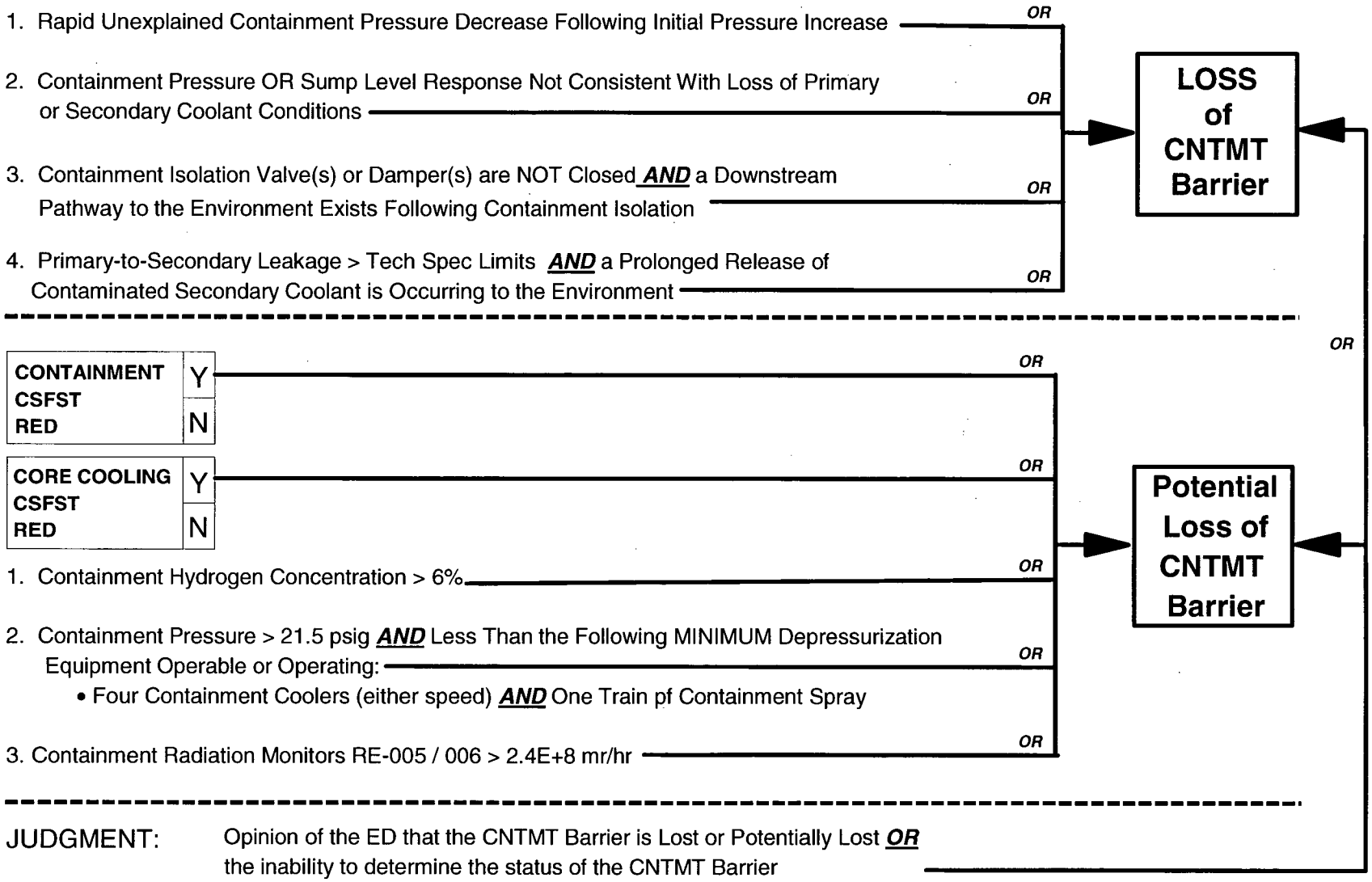


FIGURE 3 - CONTAINMENT INTEGRITY

	ELECTRICAL POWER	RADIOACTIVITY	PLANT SYSTEMS	NATURAL PHENOMENON	HAZARDS	SECURITY	BARRIERS	SHUTDOWN SYSTEMS	OTHER
GENERAL	Modes 1-4: Loss of AC power to BOTH AA02 AND BA03 ***AND*** EITHER: Restoration of at least one emergency bus NOT likely within 4 hrs of time of loss, OR Loss or Potential Loss of FUEL CLAD BARRIER determined from Fission Product Barrier EAL's (Figure 1/Data sheet 1)	Valid reading on RE-12444 that is > 30E+0 µci/cc for > 15 min. ***OR*** this value is expected to be exceeded for > 15 min. *(Note 1)* Valid site boundary dose assessment of release indicates > 1000 mrem TEDE ***OR*** > 5000 mrem CDE thyroid ***OR*** field survey results indicate > 1000 mrem/hr that is expected to continue for > 1 hr ***OR*** field survey samples indicate thyroid dose of 5000 mr CDE for 1 hr of inhalation				A HOSTILE FORCE has taken control of plant equipment such that plant personnel are unable to operate equipment required to maintain safety functions	Loss of THREE barriers Loss of ANY TWO barriers ***AND*** Potential Loss of the THIRD barrier Modes 1-2: Subcriticality CSFST is RED ***AND*** EITHER Core Cooling OR Heat Sink CSFST is RED		Other conditions exist which in the judgment of the EMERGENCY DIRECTOR indicate potential for uncontrolled radionuclide releases that can reasonably be expected to exceed 1000 mrem TEDE or 5000 mrem CDE thyroid dose levels outside the site boundary ***OR*** Actual or imminent substantial core degradation with potential for loss of containment
SITE AREA	Modes 1-4: Loss of AC power on BOTH AA02 **AND** BA03 for > 15 min. Modes 1-4: Unplanned loss of voltage on **ALL** Vital DC buses (AD1, BD1, CD1, and DD1) for > 15 min.	Valid reading on RE-12444 that is > 3E+0 µ ci/cc for > 15 min. ***OR*** on RE-12839 that is > 5E+2 µ ci/cc for > 15 min. ***OR*** these values are expected to be exceeded for > 15 min. *(Note 1)* Valid site boundary dose assessment of release indicates > 100 mrem TEDE ***OR*** > 500 mrem CDE thyroid ***OR*** field survey results indicate > 100 mrem/hr that is expected to continue for > 1 hr ***OR*** field survey samples indicate thyroid dose of 500 mrem CDE for 1 hr of inhalation	Mode 1-2: Automatic reactor trip set point was exceeded ***AND*** an automatic reactor trip did NOT occur ***AND*** a successful manual trip did NOT occur from the control room. Modes 1-4: Significant transient is in progress and ESF annunciators needed to monitor the transient are not available ***AND*** ESF control board AND compensatory non-alarming indications are NOT available		Control room evacuation has been initiated ***AND*** control of the plant CANNOT be established from remote shutdown panels within 15 min.	Security event in a plant VITAL AREA Site Attack (i.e..,) 1) A notification from the site security force that an armed attack, explosive attack, airliner impact, or other HOSTILE ACTION is occurring or has occurred within the PROTECTED AREA .	Loss of TWO barriers Loss of ONE barrier ***AND*** Potential Loss of a SECOND barrier Potential Loss of BOTH Fuel Clad ***AND*** RCS barriers Modes 1-4: The reactor is tripped ***AND*** Subcriticality CSFST is RED	Modes 5-6: Loss of reactor vessel water level as indicated by loss of RHR cooling as determined by AOP 18019-C ***AND*** any ONE of the following: Vessel level < 183 ft (< 62% RVLIS), OR Containment area rad monitors RE-002/003 valid high alarm (15 mr/hr) with vessel head removed, OR Core exit temperatures > 711° F with vessel head installed. Modes 1-4: Complete loss of function needed to achieve or maintain Hot Shutdown (EITHER Core Cooling OR Heat Sink CSFST is RED) ***AND*** no other Heat Sink available.	Other conditions exist which in the judgment of the EMERGENCY DIRECTOR indicate actual or likely major failures of plant functions needed for protection of the public.
ALERT	Modes 1-4: Loss of voltage on EITHER AA02 OR BA03 for > 15 min. ***AND*** the remaining energized 1-E bus does not have a backup power supply available. Modes 5, 6, or Defueled: Loss of AC power on BOTH AA02 **AND** BA03 for > 15 min.	Valid reading on RE-12444 that is > 2E-1 µci/cc for > 15 min. ***OR*** on RE-12839 that is > 6E+0 µci/cc for > 15 min. ***OR*** on RE-018 that is > 8E-1 µci/cc for > 15 min. *(Note 1)* Confirmed sample analysis for gaseous ***OR*** liquid release indicates concentrations or release rates > 200X ODCM limits for > 15 min. Radiation levels higher than normal in Fuel Handling or Containment Bldg ***AND*** irradiated fuel is uncovered, OR < 194 feet water level in refueling cavity, spent fuel pool, or fuel transfer canal that results in uncovering irradiated fuel. *(Note 2)* Damage to irradiated fuel causing a valid high alarm on one or more of the following: RE-008 (2.5 mr/hr), RE-2532/2533 A/B (5E-4 µci/cc), OR during Mode 6 fuel transfer RE-002/003 (15 mr/hr) Valid rad levels >15 mr/hr in the Control room ***OR*** >100 mr/hr in areas requiring infrequent access to maintain plant safety functions (e.g., local charging station)	Modes 1-3: Automatic reactor trip setpoint was exceeded ***AND*** an automatic reactor trip did NOT occur ***AND*** a successful manual trip occurred from the control room. Modes 1-4: Unplanned loss of most or all annunciators or indicators in the control room for plant safety systems ***AND*** EITHER a significant transient is in progress or compensatory non-alarming indications are NOT available.	Tornado striking plant vital area ***OR*** sustained hurricane force winds of 100 mph or greater on site as verified by meteorological instrumentation (15 minute average). Seismic monitoring system confirms seismic event > 0.12 g.	Aircraft crash confirmed to affect plant vital areas. Report or detection of toxic, flammable, or asphyxiant gasses within a facility structure in concentrations that requires evacuation of a room or area needed for safe operation of the plant. Major fire or explosion in a vital area ***AND*** affected safety system parameters show degraded performance or there is visible damage to permanent safety related structures or safety related equipment within the specified area. Report of visible structural damage (caused by natural or destructive phenomena) which threatens the ability of the structure to perform its safety related function to ANY of the following plant structures: Containment Auxiliary Building Control Building Fuel Handling Building Diesel Generator Building Condensate Storage Tank AFW Pumphouse NSCW Cooling Tower RWST Control Room evacuation has been initiated	Security Event in a Plant PROTECTED AREA Notification of an Airborne Attack Threat (i.e...) 1) A validated notification from NRC of an airliner attack threat less than 30 minutes away . Notification of HOSTILE ACTION within the OWNER CONTROLLED AREA (i.e...) 1) A notification from the site security force that an armed attack, explosive attack, airliner impact or other HOSTILE ACTION is occurring or has occurred within the OWNER CONTROLLED AREA.	Loss or Potential Loss of Fuel Clad barrier Loss or Potential Loss of RCS barrier	Modes 5-6: Unplanned loss of RHR cooling ***AND*** EITHER RCS temperature is > 200° F OR RCS temperature is increasing uncontrolled toward 200° F.	Other conditions exist which in the judgment of the EMERGENCY DIRECTOR indicate plant safety systems may be substantially degraded and that increased monitoring of plant functions is warranted.
NOUE	Loss of Off-Site power to BOTH AA02 AND BA03 for > 15 min. (neither bus is connected to an energized Off-Site source) ***AND*** BOTH AA02 AND BA03 are powered by Diesel Generators Modes 5-6: Unplanned loss of voltage on **ALL** Vital DC buses (AD1, BD1, CD1, and DD1) for > 15 min.	Valid reading on RE-12444/12442 that is > 2E-3 µci/cc for > 60 min. ***OR*** on RE-12839 that is > 6E-2 µci/cc for > 60 min. ***OR*** on RE-018 that is > 8E-3 µci/cc for > 60 min. *(Note 1)* Confirmed sample analysis for gaseous ***OR*** liquid release indicates concentrations or release rates > 2X ODCM limits for > 60 min. Radiation levels higher than normal in Fuel Handling or Containment Bldg ***AND*** uncontrolled water level decrease in refueling cavity, spent fuel pool, or fuel transfer canal, BUT all irradiated fuel assemblies remain covered with water. *(Note 2)* Valid area rad monitor readings increase 1000X over normal levels. *(Note 2)*	Modes 4-5: Automatic reactor trip setpoint was exceeded ***AND*** an automatic reactor trip did NOT occur ***AND*** a successful manual trip occurred from the control room. Modes 1-4: Unplanned loss of most or all annunciators or indicators in the control room for plant safety systems for > 15 min. ***AND*** compensating non-alarming indicators are available Loss of **ALL** of the following On-Site communications systems: In-plant telephone, Gaitronics, Sound powered phone, and Plant radio communications Loss of **ALL** of the following Off-Site communications systems: ENN and Telephone capability to Off-Site network	Report of tornado striking within protected area. Hurricane force winds of 74 mph or greater forecast by the National Weather Service (NWS- Columbia S.C. office) to be at the plant site in the next four hours. Seismic monitoring system indicates seismic event ***OR*** plant operators report an earthquake was "felt".	Aircraft crash causes damage to safety related plant structures or safety related systems within the protected area. Report or detection of toxic, flammable, or asphyxiant gasses that could enter the site area in amounts > life-threatening or flammable concentrations that could affect normal operation of the plant. Report of turbine failure resulting in casing penetration or damage to turbine or generator seals. Fire in an area contiguous or adjacent to a vital area that is not extinguished within 15 min. of control room notification by fire alarm or personnel report. Unanticipated explosion within protected area resulting in visible damage to permanent structures or equipment.	Confirmed Security Event which indicates a potential degradation in the level of safety of the plant. (i.e...) 1. A credible site specific security threat notification 2. A validated notification from NRC providing information of an aircraft threat. 3. Hostage situation within the PROTECTED AREA *(Note 3)* 4. Civil Disturbance on Plant Site that threatens to harm personnel or equipment inside the PROTECTED AREA. Notification by Local, County, or State officials of potential for evacuation of site personnel based on an Off-Site event.	Loss or Potential Loss of Containment barrier RCS Chemistry analysis indicates Dose equivalent I-131 > 1 µci/gm for > 48 hrs. or in excess of Tech Spec. figure 3.4.16-1 ***OR*** RCS specific activity > 100/E µci/gm gross radioactivity. RCS Unidentified leakage > 10 gpm ***OR*** RCS Pressure boundary leakage > 10 gpm ***OR*** RCS identified leakage > 25 gpm		Other conditions exist which in the judgment of the EMERGENCY DIRECTOR indicate potential degradation of the level of safety of the plant. Modes 1-4: Plant NOT brought to required operating mode within Tech Spec LCO ***OR*** TRM Technical Requirement required action completion time limit. Modes 1-4: Uncontrolled depressurization of one or more steam generators.

NOTE 1: Classification should be based on ODCM or Off-site Dose Calculation computer program results; however, if the monitor reading(s) is sustained for longer than the period indicated and release assessment has NOT or CANNOT be completed within this period, then declaration MUST be made based on the valid reading.

NOTE 2: "Normal levels" are the highest reading in the last 24 hours prior to the emergency, excluding the current peak value.

NOTE 3: See section 2.0 of this procedure.

Figure 4 - EMERGENCY CLASSIFICATION LEVEL DETERMINATION

Continuous Use

DATA SHEET 1
CLASSIFICATION DETERMINATION

NOTE

CSFST parameters should be allowed to stabilize and accurately represent plant conditions prior to classifying an event.

1. Considering events which are in progress, past events, and their impact on current plant conditions, evaluate the status of the fission product barriers.

NOTE

A situation could occur in which the loss or potential loss of one or more barriers has not yet happened, but appears to be IMMINENT (i.e.., likely to occur within 2 hours). In this situation, classify the event AS IF the loss or potential loss of the barrier has already occurred.

a.	Fuel Cladding Integrity (See Figure 1)	☐ LOSS	☐ POTENTIAL LOSS	☐ INTACT
b.	Reactor Coolant System Integrity (See Figure 2)	☐ LOSS	☐ POTENTIAL LOSS	☐ INTACT
c.	Containment Integrity (See Figure 3)	☐ LOSS	☐ POTENTIAL LOSS	☐ INTACT

2. Use Figure 4, evaluate and determine the highest emergency classification level based on events which are in progress, considering past events, and their impact on current plant conditions.

Check ☑ One:

- ☐ Notification Of Unusual Event
- ☐ Alert
- ☐ Site Area Emergency
- ☐ General Emergency

Comments: _____

_____

3. Maintain a log of the incident. (This may be delegated).

4. Assume the position of Emergency Director. (if not previously completed)

Signature: _____
Emergency Director

Date: ____/____/____

Time: _____

EMERGENCY OPERATING PROCEDURE

F-0 CRITICAL SAFETY FUNCTION STATUS TREES

PRB REVIEW REQUIRED

PURPOSE

This procedure provides rules of usage for monitoring the plant safety state in terms of critical safety function status. This procedure also provides hard copy reproduction of each CSFST for manual monitoring in the event of a Safety Parameter Display System (SPDS) failure or questionable validity of the SPDS display. (Applicable in Modes 1, 2, 3, and 4.)

ENTRY CONDITIONS

- 19000-C, E-0 REACTOR TRIP OR SAFETY INJECTION
- 19101-C, ECA-0.1 LOSS OF ALL AC POWER RECOVERY WITHOUT SI REQUIRED
- 19102-C, ECA-0.2 LOSS OF ALL AC POWER RECOVERY WITH SI REQUIRED

ACTION/EXPECTED RESPONSE | RESPONSE NOT OBTAINED

NOTE:

- If SPDS display of the Plant Computer is not operable or questionable, manual monitoring of CSFSTs should be performed by a licensed operator.
- CSFSTs should be monitored continuously if a RED or ORANGE condition is present or each 10 to 15 minutes if the highest priority CSFST is no higher than YELLOW.
- CSFSTs should be checked in order listed.
- Priority of operator action is given by the following:
  - Red (Solid) Path - Extreme challenge, in Tree Order per Step 1.
  - Orange (Dashed) Path - Severe challenge, in the Tree Order per Step 1.
  - Yellow (Dotted) Path - Not satisfied, in Tree Order per Step 1.
  - Green (Outlined) Path - Satisfied.
- If using the Plant Computer (if available) to monitor CSFSTs:
  - The mode indication of the Plant Computer CSFSTs should be indicating zero.
  - RCP breakers should be opened for RCPs NOT running in order to provide proper RVLIS indication.
  - If SPDS is operable, CSFSTs may be checked by scanning the display console for alarm conditions.
  - Color status of CSFSTs will also be indicated by letter R for red, O for orange, Y for yellow, G for green, and M for magenta.
  - CSFSTs will indicate active (alarming) paths as solid lines and non-active paths as empty or hollow lines.

1. Check CSFSTs - SATISFIED:
   - ☐ a. Subcriticality (F-0.1)
   - ☐ b. Core Cooling (F-0.2)
   - ☐ c. Heat Sink (F-0.3)
   - ☐ d. Integrity (F-0.4)
   - ☐ e. Containment (F-0.5)
   - ☐ f. Inventory (F-0.6)

☐ 1. IF a Red condition exists, THEN immediately go to FRP.

☐ IF an Orange condition exists, THEN go to FRP after completion of present pass thru CSFSTs.

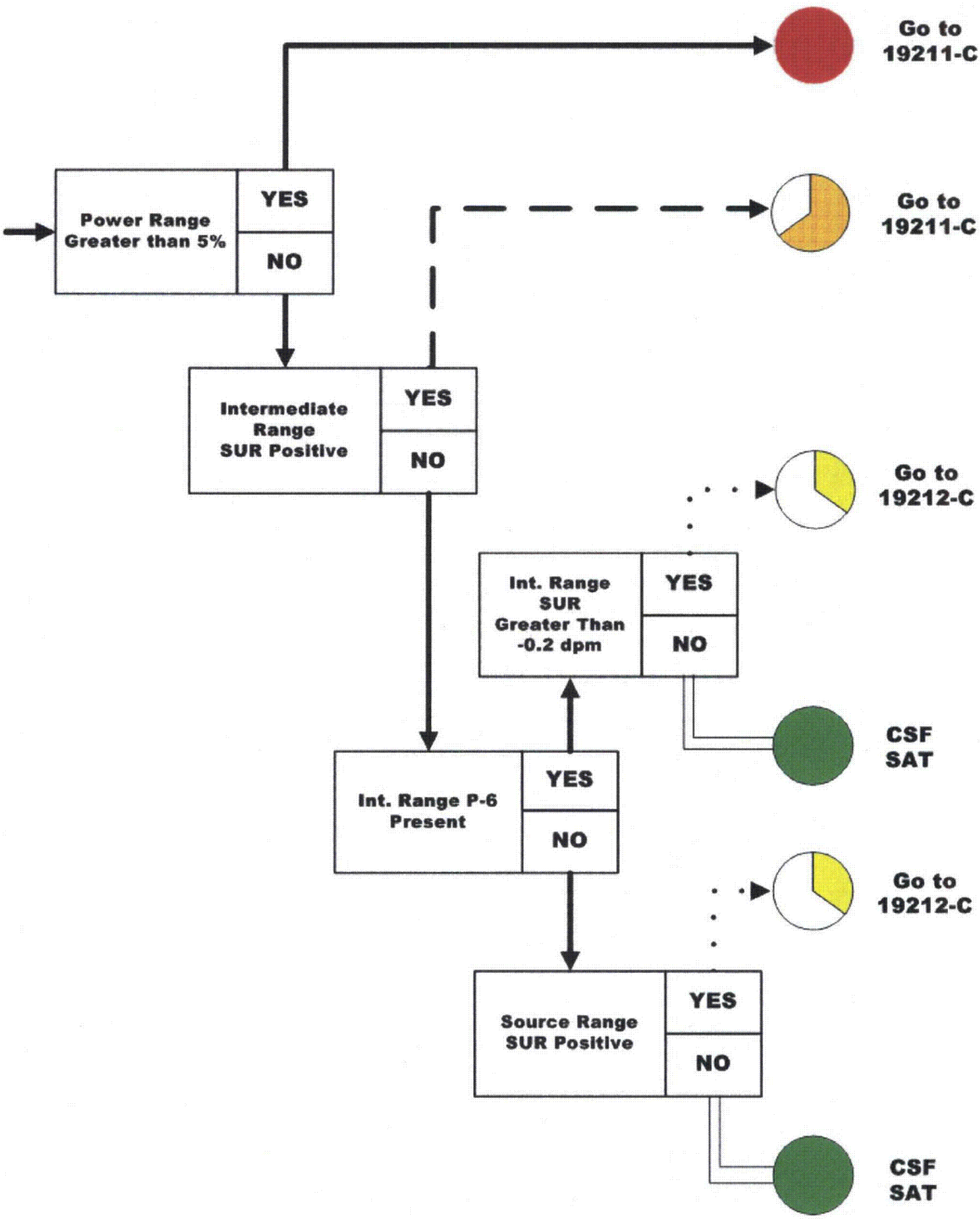
☐ IF a Yellow condition exists, THEN initiate FRP after evaluating plant conditions with Shift Supervisor's approval.

ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
☐ 2. Report change of status of any CSFST to the Shift Supervisor, if necessary (ie, change in status not understood).	
☐ 3. Check EOP usage - NO LONGER REQUIRED	☐ 3. Return to Step 1.
☐ 4. Monitoring of CSFSTs is no longer required.	

END OF PROCEDURE TEXT

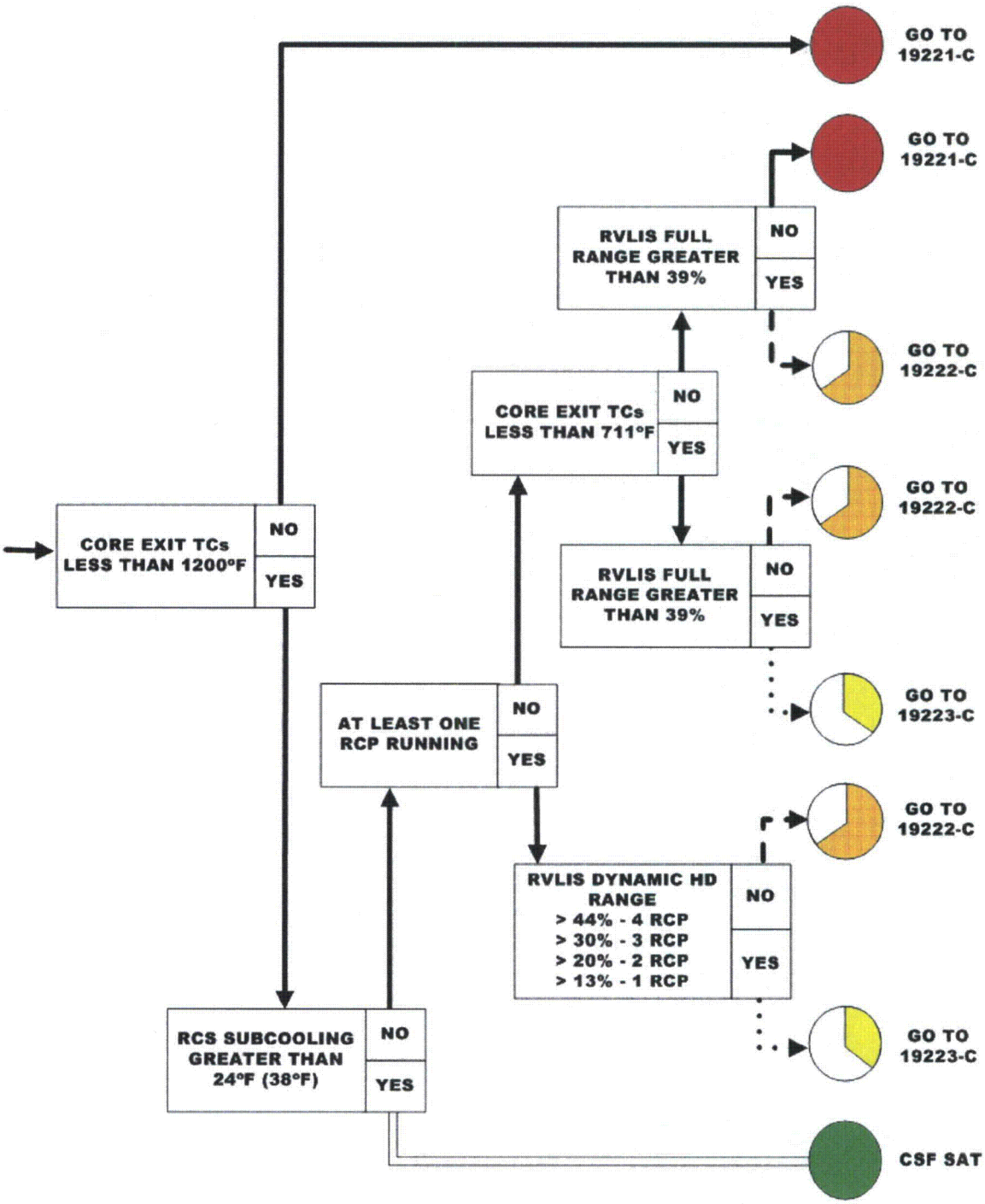
Sheet 1 of 1

F-0.1
SUBCRITICALITY



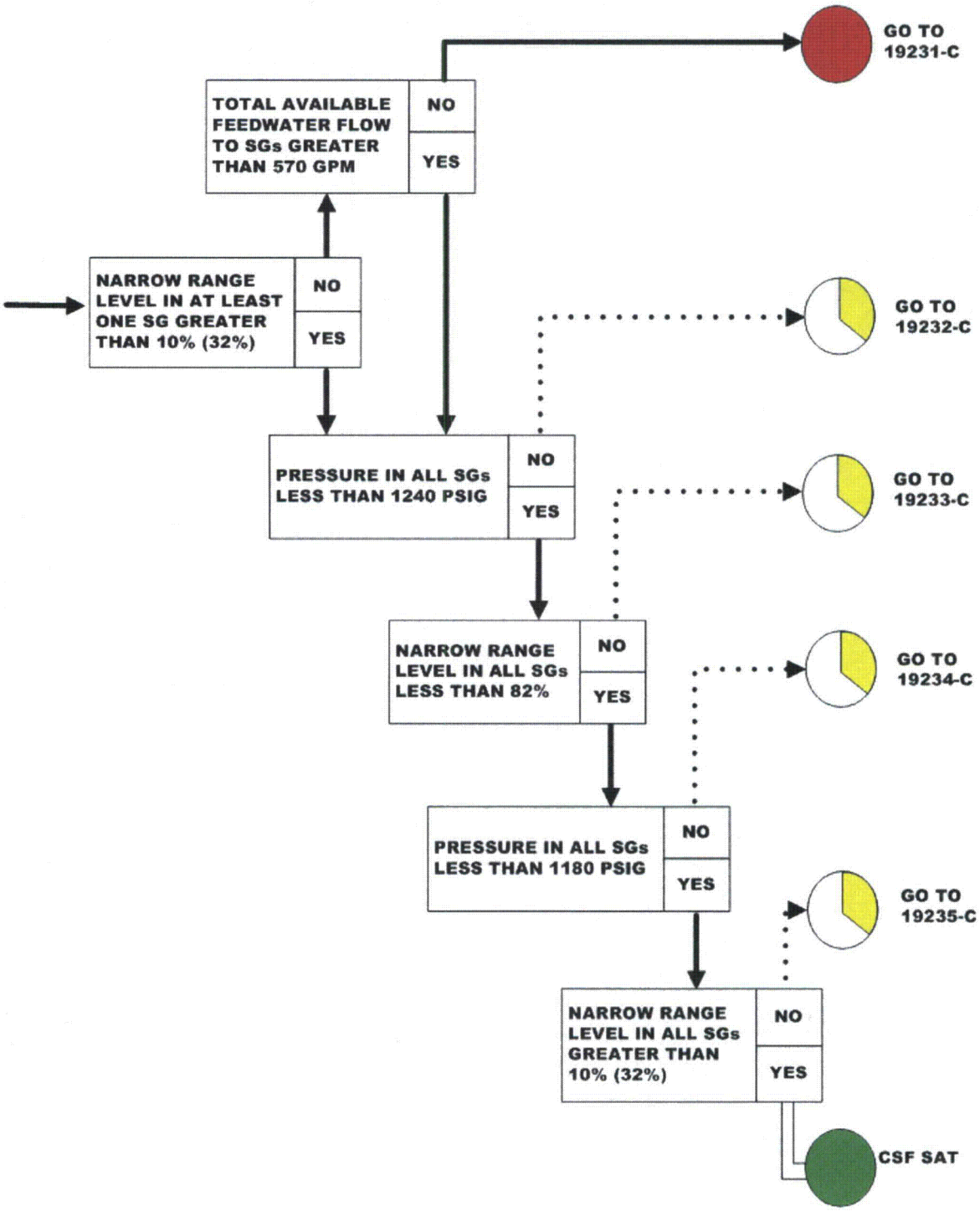
Sheet 1 of 1

F- 0.2
CORE COOLING



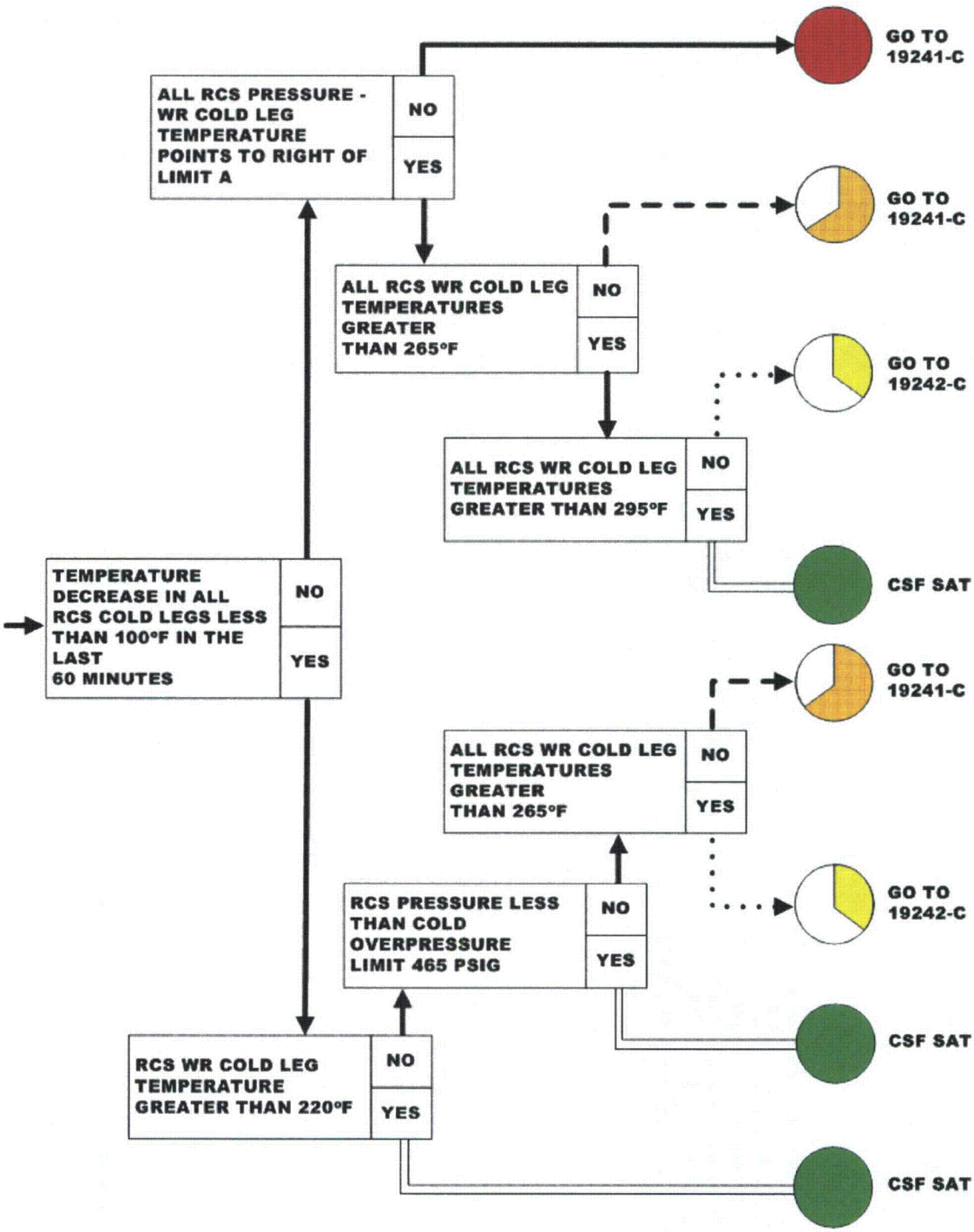
Sheet 1 of 1

F- 0.3
HEAT SINK



Sheet 1 of 1

F- 0.4
INTEGRITY



Sheet 1 of 1

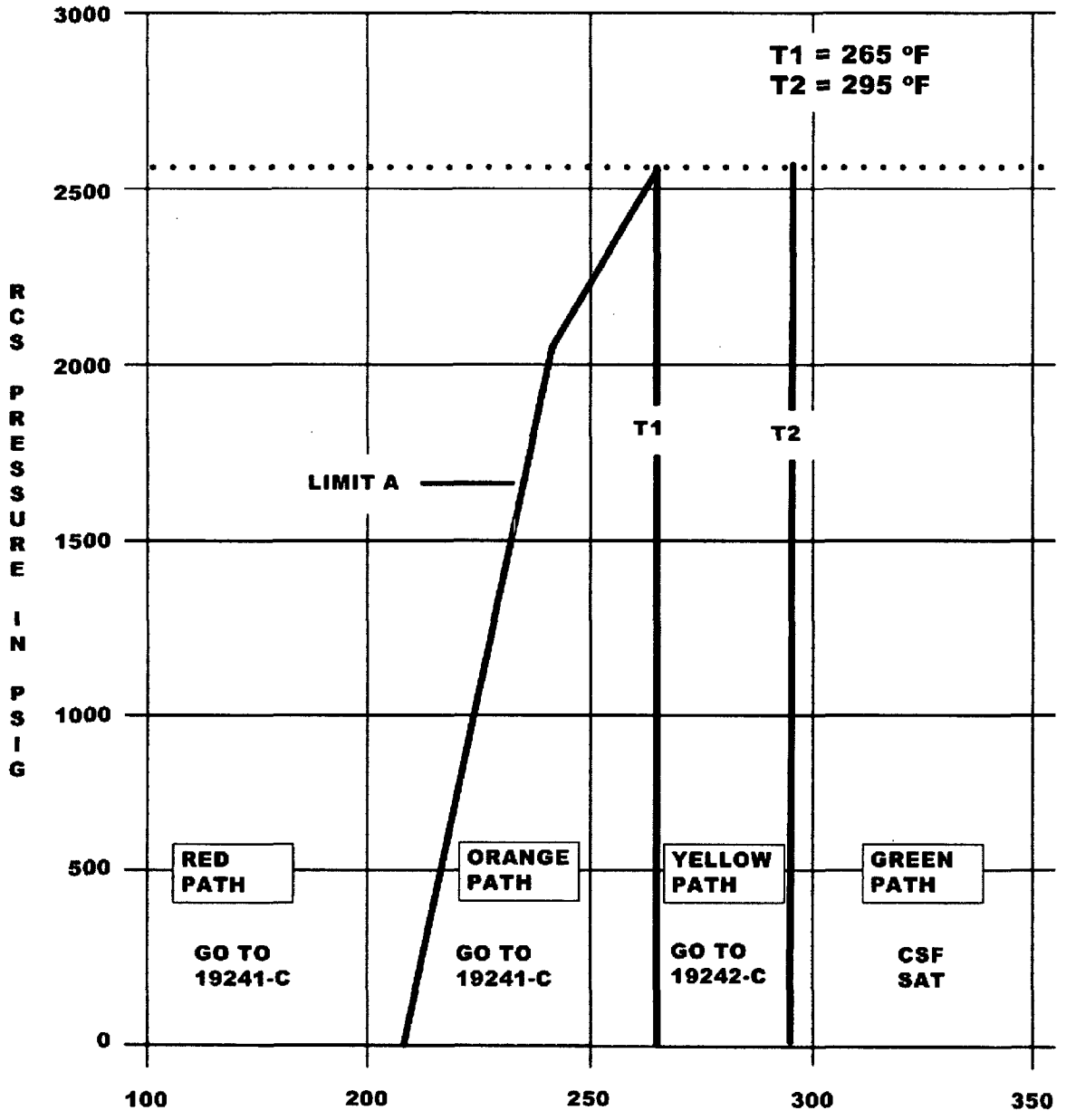
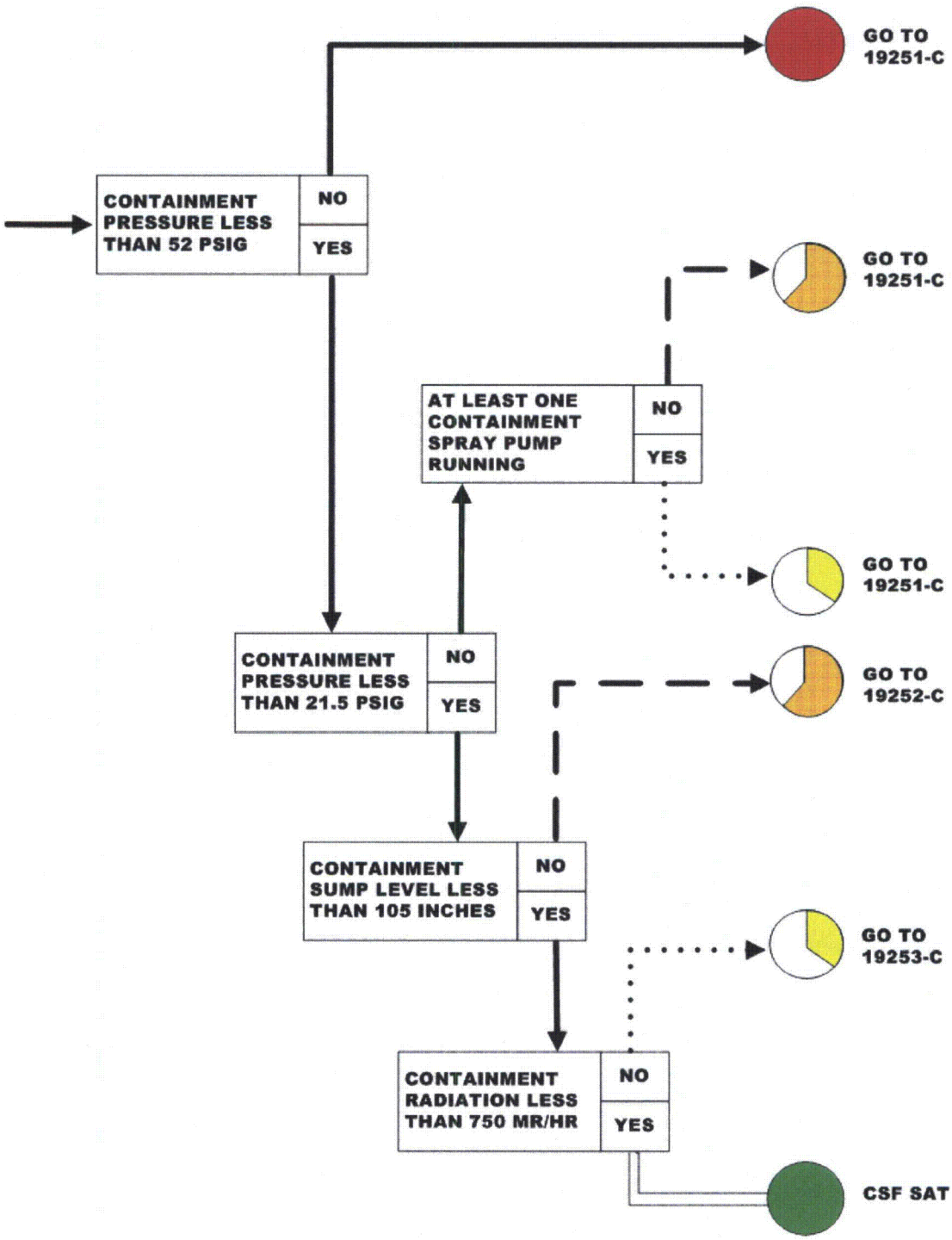


FIGURE 1

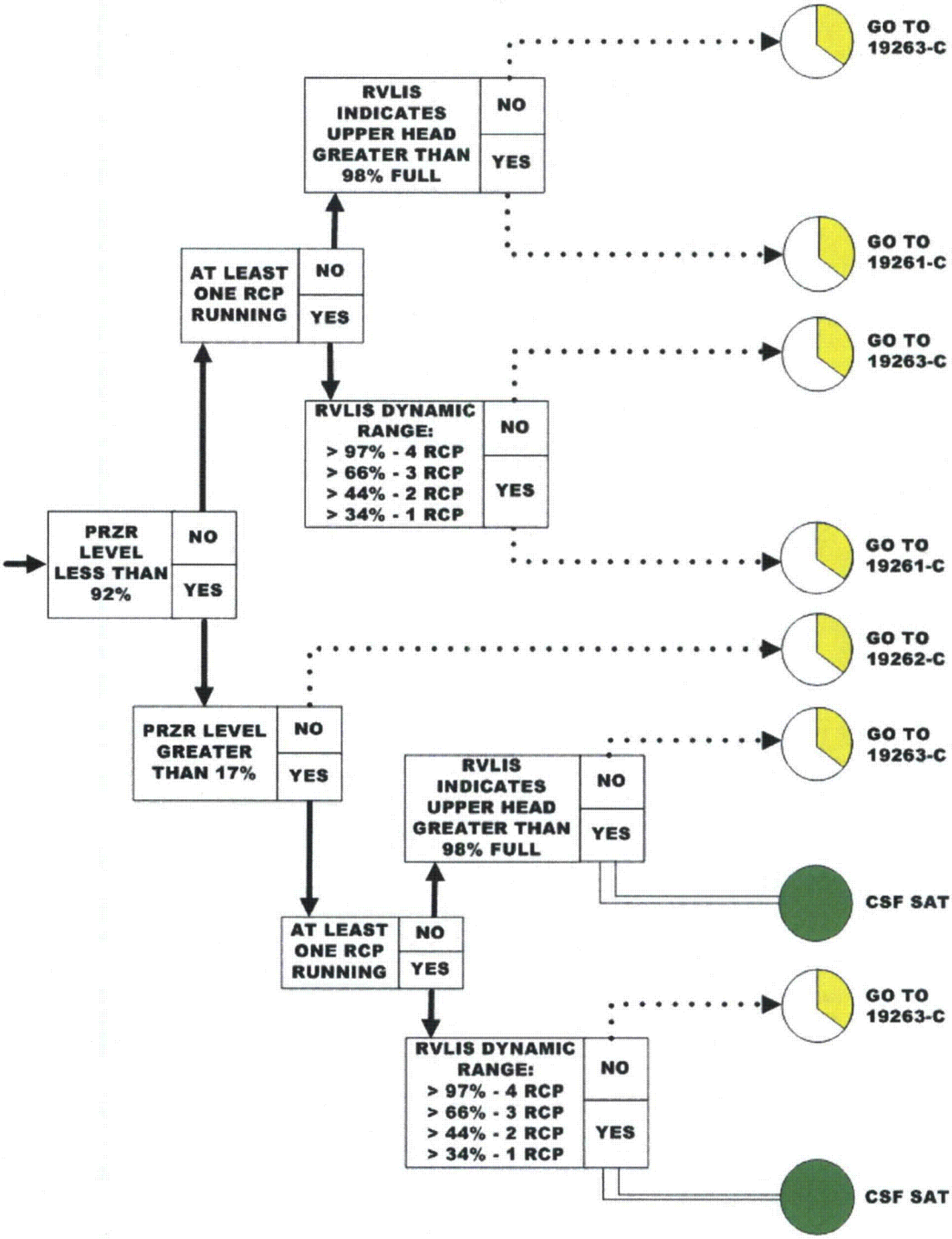
Sheet 1 of 1

F- 0.5
CONTAINMENT



Sheet 1 of 1

F- 0.6
INVENTORY



EMERGENCY CLASSIFICATION AND IMPLEMENTING INSTRUCTIONS

1.0 PURPOSE

1.1 The purpose of this procedure is to provide instructions in the classification of off-normal events into one of four emergency classification levels.

2.0 DEFINITIONS

2.1 CREDIBLE THREAT

A threat is considered credible when (1) physical evidence supporting the threat exists, or (2) information independent from the actual threat message exists that support the threat, or (3) a specific group or organization claims responsibility for the threat, or (4) a message (written or verbal) is received that contains specific information about plant locations, systems or device description an average person would most likely not know. The determination of credibility should be made by the Shift Manager with input from the Shift Captain or their designated representatives.

2.2 CIVIL DISTURBANCE

An organized demonstration by an individual or group of unexpected, unidentified, or unauthorized people within the Owner Controlled Area (OCA) which is used to promote a political or social issue or belief.

3.0 RESPONSIBILITIES

3.1 The Shift Manager is responsible for initial classification of events. The Shift Manager shall assume the responsibilities of the Emergency Director (ED) until relieved. The Shift Manager then becomes responsible for recognizing changes in plant conditions and advising the ED concerning classification of events.

3.2 The ED has the following non-delegable responsibilities relative to emergency classification:

3.2.1 Classifying and declaring the emergency.

3.2.2 Declaring changes in the emergency classification, including downgrading and terminating.

3.3 The Technical Support Center (TSC) and the Emergency Operations Facility (EOF) Managers are responsible for:

3.1.1 Providing recommendations on emergency classifications to the ED.

4.0 PREREQUISITES

An off-normal event has occurred, or is in progress.

5.0 PRECAUTIONS

5.1 This procedure establishes minimum requirements for emergency classifications. The ED may use judgement as the final criterion for determining the classifications of off-normal events that are not included in this procedure.

6.0 PROCEDURE

6.1 CLASSIFICATION

6.1.1 Personnel and plant safety must be addressed as the highest priority; if necessary, prior to emergency classification.

NOTE

Classification should not be delayed in anticipation of either events being terminated or the threat to safety ending. The emergency should be assessed and classified within 15 minutes after it is recognized that the emergency action level has been exceeded.

6.1.2 Classify the event on Data Sheet 1, "Classification Determination".

6.1.2.1 Use Figure 1 when in Modes 1, 2, 3 or 4, to determine if any fission product barrier meets or exceeds a "Loss" or "Potential Loss" Threshold Value. Enter loss, potential loss, or intact as applicable on Data Sheet 1, step 3a., 3b and 3c.

6.1.2.2 Use Figure 2 when the Unit is in Modes 1, 2 3, or 4 or use Figure 3 when the Unit is in Modes 5, 6 or Defueled to evaluate and determine the highest Initiating Condition based on events which are in progress, considering past events, and their impact on the current plant conditions. Refer to the Threshold Value page associated with the Initiating Condition chosen to ensure that the Threshold is met. If met, check-mark the applicable emergency classification level on Data Sheet 1, after step 5.

6.1.2.3 For those events which are corrected, or the threat to the level of safety of the plant has ended prior to completion of classification/notification processes, the condition should be reported using the guidance of NUREG 1022, Rev 1, Section 3.1.1. In this circumstance termination does not require consultation with off-site authorities.

6.1.2.5 Verify your assumption of the ED position by signing Data Sheet 1, part 4, and list the date and time of the emergency declaration.

6.1.3 The ED shall complete the Plant Page Announcement Checklist in Procedure 91002-C, "Emergency Notifications" and shall proceed with the appropriate checklist found in Procedure 91102-C, "Duties Of The Emergency Director".

6.2 PERIODIC REVIEW OF THE CLASSIFICATION LEVEL

6.2.1 The ED shall periodically review current or projected plant conditions to determine if the emergency should be upgraded or terminated.

6.2.2 The TSC Manager shall periodically review plant conditions, determine if the emergency should be upgraded or terminated based on current or projected status, and make recommendations to the ED.

6.2.3 The EOF Manager shall periodically review offsite radiological conditions, determine if the emergency should be upgraded or terminated based on current field surveys or projected releases, and make recommendations to the ED.

6.3 TERMINATING THE EMERGENCY CLASSIFICATION

6.3.1 For an NOUE or Alert, the ED may terminate the Emergency when plant conditions have stabilized and the reason for the NOUE or ALERT have been corrected. An NOUE or an Alert emergency can be terminated without coordination with offsite authorities.

6.3.2 For a Site Area Emergency or General Emergency, the ED may terminate the Emergency after discussions with plant management, applicable members of the VEGP emergency organization, the NRC, GEMA, Burke County EMA director, South Carolina EMD director and SRS emergency staff do not result in the identification of a valid reason for not terminating the emergency. (Reference Procedure 91501-C, "Recovery").

6.3.3 After the decision has been made to terminate the emergency, the ED shall proceed with the appropriate checklist found in "Procedure 91102-C, "Duties Of The Emergency Director".

7.0 REFERENCES

7.1 EMERGENCY PLAN

7.1.1 Emergency Action Level Technical Basis

END OF PROCEDURE TEXT

DATA SHEET 1
CLASSIFICATION DETERMINATION

1. IF the affected Unit is in Modes 1, 2, 3, or 4, go to step 3.

2. IF the affected Unit is in Modes 5, 6, or Defueled, go to step 5.

3. Evaluate the status of the fission product barriers using Figure 1.

   a. Fuel Cladding Integrity (See Figure 1) ☐ LOSS ☐ POTENTIAL LOSS ☐ INTACT

   b. Reactor Coolant System Integrity (See Figure 1) ☐ LOSS ☐ POTENTIAL LOSS ☐ INTACT

   c. Containment Integrity (See Figure 1) ☐ LOSS ☐ POTENTIAL LOSS ☐ INTACT

4. Use Figure 2 to evaluate and determine the Hot Initiating Condition based on events which are in progress, considering past events, and their impact on current plant conditions. Refer to the Threshold Value page associated with the Initiating Condition chosen to ensure that the Threshold is met.

5. Use Figure 3 to evaluate and determine the Cold Initiating Condition based on events which are in progress, considering past events, and their impact on current plant conditions. Refer to the Threshold Value page associated with the Initiating Condition chosen to ensure that the Threshold is met.

   Check ☑ One:
   - ☐ Notification Of Unusual Event
   - ☐ Alert
   - ☐ Site Area Emergency
   - ☐ General Emergency

   Comments: _____

   _____

6. Maintain a log of the incident. (This may be delegated).

7. Assume the position of Emergency Director.

   Signature: _____
   Emergency Director
   Date: _____/_____/_____

   Time: _____

Figure 1 - Fission Product Barrier Evaluation

General Emergency	Site Area Emergency	Alert	Unusual Event
FG1 Loss of ANY Two Barriers AND Loss or Potential Loss of Third Barrier	**FS1** Loss or Potential Loss of ANY Two Barriers	**FA1** ANY Loss or ANY Potential Loss of EITHER Fuel Clad OR RCS	**FU1** ANY Loss or ANY Potential Loss of Containment

Fuel Clad Barrier

Loss	Potential Loss
1. Critical Safety Function Status (p.44) Core-Cooling RED	**1. Critical Safety Function Status** (p.44) Core Cooling-ORANGE **OR** Heat Sink-RED
2. Primary Coolant Activity Level (p. 44) Indications of RCS Coolant Activity greater than 300 µCi/gm Dose Equivalent I-131	**2. Primary Coolant Activity Level** Not Applicable
3. Core Exit Thermocouple Readings (p. 44) 5th Hottest CETC greater than 1200°F	**3. Core Exit Thermocouple Readings** (p. 44) 5th Hottest CETC greater than 700°F
4. Reactor Vessel Water Level Not Applicable	**4. Reactor Vessel Water Level** (p. 44) RVLS PLENUM LEVEL less than 62%
5. Containment Radiation Monitoring (p. 45) Containment Radiation Monitor RE-005 **OR** 006 greater than 6E+6 mR/hr	**5. Containment Radiation Monitoring** Not Applicable
6. Other Indications Not applicable	**6. Other Indications** Not applicable
7. Emergency Director Judgment (p. 45) Judgment by the ED that the Fuel Clad Barrier is lost. Consider conditions not addressed and inability to determine the status of the Fuel Clad Barrier	**7. Emergency Director Judgment** (p. 45) Judgment by the ED that the Fuel Clad Barrier is potentially lost. Consider conditions not addressed and inability to determine the status of the Fuel Clad Barrier.

RCS Barrier

Loss	Potential Loss
1. Critical Safety Function Status Not Applicable	**1. Critical Safety Function Status** (p. 45) RCS Integrity-RED **OR** Heat Sink-RED
2. RCS Leak Rate (p. 45) RCS subcooling less than 24°F {less than 38° F Adverse} due to an RCS leak greater than Charging / RHR capacity	**2. RCS Leak Rate**(p. 45) Non-isolable RCS leak (including SG tube Leakage) greater than the capacity of One Charging Pump in the normal charging mode
3. SG Tube Rupture (p. 46) 19030-C entered due to SG tube rupture resulting in an ECCS actuation	3. SG Tube Rupture Not Applicable
4. Containment Radiation Monitoring (p. 46) CTMT Rad Monitor RE-005 **OR** 006 greater than 2.0E+4 mR/hr	4. Containment Radiation Monitoring Not Applicable
5. Other Indications Not applicable	5. Other Indications Not applicable
6. Emergency Director Judgment (p. 46) Judgment by the ED that the RCS Barrier is lost. Consider conditions not addressed and inability to determine the status of the RCS Barrier	**6. Emergency Director Judgment**(p. 46) Judgment by the ED that the RCS Barrier is potentially lost. Consider conditions not addressed and inability to determine the status of the RCS Barrier.

Containment Barrier

Loss	Potential Loss
1. Critical Safety Function Status Not Applicable	**1. Critical Safety Function Status** (p. 46) Containment-RED
2. Containment Pressure (p. 47) Rapid unexplained CTMT pressure lowering following initial pressure rise **OR** Intersystem LOCA indicated by CTMT pressure or sump level response not consistent with a loss of primary or secondary coolant	**2. Containment Pressure** (p. 47) CTMT hydrogen concentration greater than 6% **OR** CTMT pressure greater than 21.5 psig **AND** Less than the following minimum operable equipment: One CTMT fan cooler **AND** One train of CTMT spray
3. Core Exit Thermocouple Reading Not applicable	**3. Core Exit Thermocouple Reading** (p. 47) CORE COOLING CSF - RED **OR** - ORANGE for greater than 15min **AND** RVLS PLENUM LEVEL less than 26%
4. SG Secondary Side Release with Primary to Secondary Leakage (p. 48) RUPTURED S/G is also FAULTED outside of containment **OR** Primary-to-Secondary leakrate greater than 10 gpm with nonisolable steam release from affected S/G to the environment	**4. SG Secondary Side Release with P-to-S Leakage** Not applicable
5. CNMT Isolation Valves Status After CNMT Isolation (p. 48) CTMT isolation valve(s) **OR** damper(s) are **NOT** closed resulting in a direct pathway to the environment after containment isolation is required	**5. CNMT Isolation Valves Status After CNMT Isolation** Not Applicable
6. Significant Radioactive Inventory in Containment Not Applicable	**6. Significant Radioactive Inventory in Containment** (p. 48) CTMT Rad monitor RE-005 **OR** 006 greater than 2.4E+8 mR/hr
7. Other Indications Not applicable	**7. Other Indications** Not applicable
8. Emergency Director Judgment (p. 49) Judgment by the ED that the CTMT Barrier is lost. Consider conditions not addressed and inability to determine the status of the CTMT Barrier	**8. Emergency Director Judgment** (p. 49) Judgment by the ED that the CTMT Barrier is potentially lost. Consider conditions not addressed and inability to determine the status of the CTMT Barrier

Figure 2 - Hot Initiating Condition Matrix – Modes 1, 2, 3 and 4

Categories / Subcategories

	Radiological		Fission Product Barriers	System Malfunctions					Hazards					
	Release	Rad Levels		AC/DC Power	Rx and Core	Annunciators	RCS	Communications	Natural/ Destructive	Fire/ Explosion	Toxic / Flammable	Security	CR Evacuation	ED Discretion
General Emergency	**RG1**- (p.22) Offsite Dose Resulting from an Actual or Imminent Release of Gaseous Radioactivity Exceeds 1000 mR TEDE **OR** 5000 mR Thyroid CDE for the Actual or Projected Duration of the Release Using Actual Meteorology.		**FG1** - (p. 43) Loss of ANY Two Barriers **AND** Loss or Potential Loss of Third Barrier	**SG1** - (p. 93) Prolonged Loss of All Offsite Power **AND** Prolonged Loss of All Onsite AC Power	**SG2** - (p. 95) Failure of the R PS to Automatic Trip **AND** Manual Trip **AND** Indication of an Extreme Challenge to Cool the Core							**HG1** - (p. 74) Security Event Resulting in Loss Of Physical Control of the Facility		**HG2** - (p. 75) Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of General Emergency
Site Area Emergency	**RS1** - (p.20)Offsite Dose Resulting from an Actual or Imminent Release of Gaseous Radioactivity Exceeds 100 mR TEDE **OR** 500 mR Thyroid CDE for the Actual or Projected Duration of the Release.		**FS1** - (p. 43) Loss or Potential Loss of ANY Two Barriers	**SS1** - (p. 87) Loss of All Offsite Power **AND** Loss of All Onsite AC Power to Essential Busses **SS3** - (p. 89) Loss of All Vital DC Power	**SS2** - (p. 88) Failure of RPS to Automatic **AND** Manual Trip **SS4** - (p. 90) Complete Loss of Heat Removal Capability	**SS6** - (p. 91) Inability to Monitor a SIGNIFICANT TRANSIENT in Progress						**HS1** - (p. 69) Confirmed Security Event in a Plant VITAL AREA **HS4** – (p. 72) Site Attack	**HS2** – (p. 70) Control Room Evacuation Has Been Initiated **AND** Plant Control Cannot Be Established	**HS3** - (p. 71) Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of Site Area Emergency
Alert	**RA1** - (p. 14) Any UNPLANNED Release of Gaseous or Liquid Radioactivity to the Environment that Exceeds 200 Times the Radiological Effluent Technical Specifications for 15 Minutes or Longer.	**RA2** - (p. 16) Damage to Irradiated Fuel **OR** Loss of Water Level that Has or Will Result in the Uncovering of Irradiated Fuel Outside the Reactor Vessel **RA3** (p. 18) Release of Radioactive Material or Rises in Radiation Levels Within the Facility That Impedes Operation of Systems Required to Maintain Safe Operations or to Establish or Maintain Cold Shutdown	**FA1** - (p. 43) ANY Loss or ANY Potential Loss of **EITHER** Fuel Clad **OR** RCS	**SA5** - (p. 86) AC power to ESF busses reduced to a single power source for greater than 15 minutes.	**SA2** - (p. 83) Failure of RPS to Automatic Trip **AND** Manual Trip Was Successful	**SA4** - (p. 84) UNPLANNED Loss of Most or All Annunciation or Indication With **EITHER** a SIGNIFICANT TRANSIENT in Progress, **OR** Compensatory Non-Alarming Indicators are Unavailable			**HA1** - (p. 57) Natural and Destructive Phenomena Affecting the Plant VITAL AREA	**HA2** - (p. 59) FIRE **OR** EXPLOSION Affecting the Operability of Plant Safety Systems Required to Establish or Maintain Safe Shutdown	**HA3** - (p. 61) Release of Toxic Asphyxiant, or Flammable Gases Within VITAL AREAs Which Jeopardizes Operation of Systems Required to Maintain Safe Operations or Establish or Maintain Safe Shutdown	**HA4** - (p. 63) Other Security Events As Determined From The Safeguards Contingency Plan. **HA7** – (p. 66) Notification of an Airborne Attack **HA8** – (p. 67) Notification of HOSTILE ACTION within the OCA	**HA5** - (p. 64) Control Room Evacuation Has Been Initiated	**HA6** - (p. 65) Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of an Alert
Notification of Unusual Event	**RU1** - (p. 10) Any UNPLANNED Release to the Environment that Exceeds Two Times the TS for 60 Minutes or Longer	**RU2** - (p. 12) Unexpected Rise in Plant Radiation	**FU1** - (p. 43) ANY Loss **OR** ANY Potential Loss of Containment	**SU1** - (p. 76) Loss of All Offsite Power to Essential Busses for GREATER THAN 15 Minutes	**SU2** - (p. 77) Inability to Reach Required Shutdown Within Technical Specification Limits **SU4** - (p. 79) Fuel Clad Degradation **SU8** - (p. 82) Inadvertent Criticality	**SU3** - (p. 78) UNPLANNED Loss of Most or All Safety System Annunciation or Indication in The Control Room for Greater Than 15 Minutes	**SU5** - (p. 80) RCS Leakage	**SU6** - (p. 81) UNPLANNED Loss of All Onsite **OR** Offsite Communications Capabilities	**HU1** - Natural and Destructive Phenomena Affecting the PROTECTED AREA	**HU2** - (p. 52) FIRE Within PROTECTED AREA Boundary Not Extinguished Within 15 Minutes of Detection	**HU3** - (p. 53) Release of Toxic, Asphyxiant, **OR** Flammable Gases Deemed Detrimental to Normal Operation of the Plant	**HU4** - (p. 54) Confirmed Security Event Which Indicates a Potential Degradation in the Level of Safety of the Plant		**HU5** - (p. 56) Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of a NOUE

Figure 3 - Cold Initiating Condition Matrix – Modes 5, 6 and Defueled

Categories / Subcategories

	Radiological		System Malfunctions					Hazards					
	Release	**Rad levels**	**AC/DC Power**	**Rx and Core**	**Heat Removal**	**RCS**	**Communi-cations**	**Natural/ Destructive**	**Fire/ Explosion**	**Toxic / Flammable**	**Security**	**CR Evacuation**	**ED Discretion**
General Emergency	**RG1**- (p. 22) Offsite Dose Resulting from an Actual or Imminent Release of Gaseous Radioactivity Exceeds 1000 mR TEDE **OR** 5000 mR Thyroid CDE for the Actual or Projected Duration of the Release Using Actual Meteorology.			**CG1** - (p. 41) Loss of RPV Inventory Affecting Fuel Clad Integrity with Containment Challenged with Irradiated Fuel in the RPV.							**HG1** - (p. 74) Security Event Resulting in Loss Of Physical Control of the Facility		**HG2** - (p. 75) Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of General Emergency
Site Area Emergency	**RS1** - (p. 20) Offsite Dose Resulting from an Actual or Imminent Release of Gaseous Radioactivity Exceeds 100 mR TEDE **OR** 500 mR Thyroid CDE for the Actual or Projected Duration of the Release.			**CS2** - (p. 39) Loss of RPV Inventory Affecting Core Decay Heat Removal Capability with Irradiated Fuel in the RPV. **Mode 6**		**CS1** - (p. 38) Loss of RPV Inventory Affecting Core Decay Heat Removal Capability. **Mode 5**					**HS1** - (p. 69) Confirmed Security Event in a Plant VITAL AREA **HS4 –** (p. 72) Site Attack	**HS2** - (p. 70) Control Room Evacuation Has Been Initiated **AND** Plant Control Cannot Be Established	**HS3** - (p. 71) Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of Site Area Emergency
Alert	**RA1** - (p. 14) Any UNPLANNED Release of Gaseous or Liquid Radioactivity to the Environment that Exceeds 200 Times the Radiological Effluent Technical Specifications for 15 Minutes or Longer.	**RA2** - (p. 16) Damage to Irradiated Fuel **OR** Loss of Water Level that Has or Will Result in the Uncovering of Irradiated Fuel Outside the Reactor Vessel **RA3** - (p. 18) Release of Radioactive Material or Rises in Radiation Levels Within the Facility That Impedes Operation of Systems Required to Maintain Safe Operations or to Establish or Maintain Cold Shutdown	**CA3** - (p. 35) Loss of All Offsite Power **AND** Loss of All Onsite AC Power to Essential Busses.	**CA2** - (p. 34) Loss of RPV Inventory with Irradiated Fuel in the RPV. **Mode 6**	**CA4** - (p. 36) Inability to Maintain Plant in Cold Shutdown with Irradiated Fuel in the RPV.	**CA1** - (p. 33) Loss of RCS Inventory. **Mode 5**		**HA1** - (p. 57) Natural and Destructive Phenomena Affecting the Plant VITAL AREA	**HA2** - (p. 59) FIRE **OR** EXPLOSION Affecting the Operability of Plant Safety Systems Required to Establish or Maintain Safe Shutdown	**HA3** - (p. 61) Release of Toxic, Asphyxiant, or Flammable Gases Within VITAL AREAs Which Jeopardizes Operation of Systems Required to Maintain Safe Operations or Establish or Maintain Safe Shutdown	**HA4** - (p. 63) Other Security Events As Determined From The Safeguards Contingency Plan. **HA7** - (p. 66) Notification of an Airborne Attack Threat **HA8** - (p. 67) Notification of HOSTILE ACTION within the OCA	**HA5** - (p. 64) Control Room Evacuation Has Been Initiated	**HA6** - (p. 65) Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of an Alert
Notification of Unusual Event	**RU1** – (p. 10) Any UNPLANNED Release of Gaseous or Liquid Radioactivity to the Environment that Exceeds Two Times the Radiological Effluent Technical Specifications for 60 Minutes or Longer.	**RU2** – (p. 12) Unexpected Rise in Plant Radiation	**CU3** – (p. 26) Loss of All Offsite Power to Essential Busses for Greater Than 15 Minutes. **CU7** - (p. 31) Unplanned Loss of Required DC Power for Greater than 15 Minutes.	**CU5** - (p. 29) Fuel Clad Degradation. **CU8** - (p. 32) Inadvertent Criticality	**CU4** - (p. 27) Unplanned Loss of Decay Heat Removal Capability with Irradiated Fuel in the RPV.	**CU1** - (p. 24) RCS Leakage **Mode 5** **CU2** - (p. 25) Unplanned Loss of RCS Inventory with Irradiated Fuel in the RPV **Mode 6**	**CU6** - (p. 30) UNPLANNED Loss of All Onsite **OR** Offsite Communications Capabilities	**HU1** - (p. 50) Natural and Destructive Phenomena Affecting the PROTECTED AREA	**HU2** - (p. 52) FIRE Within PROTECTED AREA Boundary Not Extinguished Within 15 Minutes of Detection	**HU3** - (p. 53) Release of Toxic, Asphyxiant, **OR** Flammable Gases Deemed Detrimental to Normal Operation of the Plant	**HU4** - (p. 54) Confirmed Security Event Which Indicates a Potential Degradation in the Level of Safety of the Plant		**HU5** - (p. 56) Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of a NOUE

RU1

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Any UNPLANNED Release of Gaseous or Liquid Radioactivity to the Environment that Exceeds Two Times the Radiological Effluent Technical Specifications for 60 Minutes or Longer.

Operating Mode Applicability: All

Threshold Values: (1 **OR** 2 **OR** 3)

Note: *The Emergency Director should not wait until 60 minutes has elapsed, but should declare the event as soon as it is determined that the release duration has or will likely exceed 60 minutes.*

1. VALID reading on any effluent monitor that exceeds two times the alarm setpoint established by a current radioactivity discharge permit for 60 minutes **OR** longer.

Liquid Radwaste Effluent Line (RE-0018)	2.8×10^{-5} µCi/cc
SG Blowdown Effluent Line (RE-0021)	4.0×10^{-5} µCi/cc
Turbine Bldg Effluent Line (RE-0848)	3.5×10^{-5} µCi/cc
Gaseous Radwaste (ARE-0014)	2.4 µCi/cc
Turbine Bldg Vent, SJAE (RE-12839)	7.9×10^{-3} µCi/cc
Plant Vent (RE-12442C or 12444C)	1.2×10^{-3} µCi/cc

2. VALID reading on any of the following radiation monitors that exceeds the reading shown for 60 minutes **OR** longer:

Main Steam RE-13119 through RE-13122	8.6×10^{-3} µCi/cc

3. Confirmed sample analyses for gaseous **OR** liquid releases indicates concentrations **OR** release rates, with a release duration of 60 minutes **OR** longer, in excess of two times Technical Specification 5.5.4, as confirmed by the ODCM.

Basis:

UNPLANNED, as used in this context, includes any release for which a radioactivity discharge permit was not prepared, or a release that exceeds the conditions on the applicable permit. **The Emergency Director should not wait until 60 minutes has elapsed, but should declare the event as soon as it is determined that the release duration has or will likely exceed 60 minutes.** Also, if an ongoing release is detected and the starting time for that release is unknown, the Emergency Director should, in the absence of data to the contrary, assume that the release has exceeded 60 minutes.

This IC addresses a potential or actual decline in the level of safety of the plant as indicated by a radiological release that exceeds regulatory commitments for an extended period of time. Nuclear power plants incorporate features intended to control the release of radioactive effluents to the environment. Further, there are administrative controls established to prevent unintentional releases, or control and monitor intentional releases. The occurrence of extended, uncontrolled radioactive releases to the environment is indicative of a degradation in these features and/or controls.

Threshold Value #1 addresses radioactivity releases, that for whatever reason, cause effluent radiation monitor readings to exceed two times the Technical Specification limit and releases are not terminated within 60 minutes. This alarm setpoint may be associated with a planned batch release, or a continuous release path. Indexing the Threshold Value to the ODCM setpoints ensures that the Threshold Value will never be less than the setpoint established by a specific discharge permit.

Threshold Value #2 is intended for effluent monitoring on non-routine release pathways for which a discharge permit would not normally be prepared. The ODCM establishes a methodology for determining effluent radiation monitor setpoints. The ODCM specifies default source terms and, for gaseous releases, prescribes the use of pre-determined annual average meteorology in the most limiting downwind sector for showing compliance with the regulatory commitments. T

Threshold Value #3 addresses uncontrolled releases that are detected by sample analyses, particularly on unmonitored pathways, e.g., spills of radioactive liquids into storm drains, heat exchanger leakage in river water systems, etc.

RU2

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Unexpected Rise in Plant Radiation.

Operating Mode Applicability: All

Threshold Values: (1.a **AND** b. **OR** 2)

1. a. VALID indication of uncontrolled water level lowering in the reactor refueling cavity, spent fuel pool, **OR** fuel transfer canal with all irradiated fuel assemblies remaining covered by water.

Personnel report of low water level
LSHL-0625 offscale low
Personnel report of cavitation **OR** low discharge pressure for SFP (1/2-1213-P6-002 **OR** -005) **AND/OR** RHR (1/2-1205-P6-001 **OR** -002) Pumps

AND

b. UNPLANNED VALID Direct Area Radiation Monitor readings rise on any of the following:

RE-0008 in the fuel building
RE-0002, -0003, -0004 in containment
RE-0011 at the seal table
RE-0005, -0006 in containment

2. UNPLANNED VALID Direct Area Radiation Monitor readings rise by a factor of 1000 over normal* levels.

*Normal levels can be considered as the highest reading in the past twenty-four hours excluding the current peak value.

Basis:

UNPLANNED: a parameter change or an event that is not the result of an intended evolution and requires corrective or mitigative actions.

VALID: an indication, report, or condition, is considered to be VALID when it is verified by (1) an instrument channel check, or (2) indications on related or redundant indicators, or (3) by direct observation by plant personnel, such that doubt related to the indicator's operability, the condition's existence, or the report's accuracy is removed. Implicit in this definition is the need for timely assessment.

This IC addresses raised radiation levels as a result of water level lowering above the RPV flange or events that have resulted, or may result, in unexpected rises in radiation dose rates within plant buildings. These radiation rises represent a loss of control over radioactive material and may represent a potential degradation in the level of safety of the plant.

Classification as a NOUE is warranted as a precursor to a more serious event. Indications include instrumentation such as water level and local area radiation monitors, equipment parameters and personnel (e.g., refueling crew) reports. If available, video cameras may allow remote observation. Depending on available level instrumentation, the declaration threshold may need to be based on indications of water makeup rate or lowering in refueling water storage tank level.

For Threshold Value 1.a, the primary indicator is visual observation.

Threshold Value #2 addresses UNPLANNED rises in in-plant radiation levels that represent a degradation in the control of radioactive material, and represent a potential degradation in the level of safety of the plant.

RA1

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Any UNPLANNED Release of Gaseous or Liquid Radioactivity to the Environment that Exceeds 200 Times the Radiological Effluent Technical Specifications for 15 Minutes or Longer.

Operating Mode Applicability: All

Threshold Values: (1 **OR** 2 **OR** 3)

Note: *The Emergency Director should not wait until 15 minutes has elapsed, but should declare the event as soon as it is determined that the release duration has or will likely exceed 15 minutes.*

1. VALID reading on any effluent monitor that exceeds 200 times the alarm setpoint established by a current radioactivity discharge permit for 15 minutes **OR** longer.

Liquid Radwaste Effluent Line (RE-0018)	2.8×10^{-3} µCi/cc
SG Blowdown Effluent Line (RE-0021)	4.0×10^{-3} µCi/cc
Turbine Bldg Effluent Line (RE-0848)	3.5×10^{-3} µCi/cc
Gaseous Radwaste (ARE-0014)	2.4×10^{2} µCi/cc
Turbine Bldg Vent, SJAE (RE-12839)	7.9×10^{-1} µCi/cc
Plant Vent (RE-12444C)	1.2×10^{-1} µCi/cc

2. VALID reading on any of the following radiation monitors that exceeds the reading shown for 15 minutes **OR** longer:

Main Steam RE-13119 - RE-13122	8.6×10^{-1} µCi/cc

3. Confirmed sample analyses for gaseous or liquid releases indicates concentrations **OR** release rates in excess of 200 times Technical Specification 5.5.4 as confirmed by the ODCM , with a release duration of 15 minutes **OR** longer.

Basis:

UNPLANNED: a parameter change or an event that is not the result of an intended evolution and requires corrective or mitigative actions.

VALID: an indication, report, or condition, is considered to be VALID when it is verified by (1) an instrument channel check, or (2) indications on related or redundant indicators, or (3) by direct observation by plant personnel, such that doubt related to the indicator's operability, the condition's

existence, or the report's accuracy is removed. Implicit in this definition is the need for timely assessment.

This IC addresses a potential or actual decline in the level of safety of the plant as indicated by a radiological release that exceeds regulatory commitments for an extended period of time. The occurrence of extended, uncontrolled radioactive releases to the environment is indicative of a degradation in these features and/or controls.

UNPLANNED, as used in this context, includes any release for which a radioactivity discharge permit was not prepared, or a release that exceeds the conditions on the applicable permit. **The Emergency Director should not wait until 15 minutes has elapsed, but should declare the event as soon as it is determined that the release duration has or will likely exceed 15 minutes.** Also, if an ongoing release is detected and the starting time for that release is unknown, the Emergency Director should, in the absence of data to the contrary, assume that the release has exceeded 15 minutes.

Threshold Value #1 addresses radioactivity releases that for whatever reason cause effluent radiation monitor readings that exceed two hundred times the alarm setpoint established by the radioactivity discharge permit. This alarm setpoint may be associated with a planned batch release, or a continuous release path.

Threshold Value #2 is similar to Threshold Value #1, but is intended to address effluent or accident radiation monitors on non-routine release pathways for which a discharge permit would not normally be prepared.

Threshold Value #3 addresses uncontrolled releases that are detected by sample analyses, particularly on unmonitored pathways, e.g., spills of radioactive liquids into storm drains, heat exchanger leakage in river water systems, etc.

Threshold Values #1 and #2 directly correlate with the IC since annual average meteorology is required to be used in showing compliance with the RECP and is used in calculating the alarm setpoints. Threshold Values #4 and #5 are a function of actual meteorology, which will likely be different from the limiting annual average value.

The fundamental basis of this IC is NOT a dose or dose rate, but rather the degradation in the level of safety of the plant implied by the uncontrolled release.

Due to the uncertainty associated with meteorology, emergency implementing procedures should call for the timely performance of dose assessments using actual (real-time) meteorology in the event of a gaseous radioactivity release of this magnitude. The results of these assessments should be compared to the ICs RS1 and RG1 to determine if the event classification should be escalated..

RA2

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Damage to Irradiated Fuel **OR** Loss of Water Level that Has or Will Result in the Uncovering of Irradiated Fuel Outside the Reactor Vessel.

Operating Mode Applicability: All

Threshold Values: (1 **OR** 2)

1. UNPLANNED VALID alarm on any of the following radiation monitors:

Fuel Handling Building RE-008
CNMT BLDG Low Range** RE-002/003 **Mode 6 only during fuel transfer
Fuel Handling BLDG EFFL. ARE-2532 A/B
Fuel Handling BLDG EFFL. ARE-2533 A/B

2. Loss of water level that has or will result in the uncovering of irradiated fuel outside the Reactor Vessel as indicated by ANY of the following:

Personnel report of personnel during fuel assembly movements.	
Spent Fuel Pool Storage	Less than El 193'-5"
Transfer Canal Transit Elevation	Less than El 186'10"
Reactor Core Elevation	Less than El 181'-10" (62% on RVLIS)

Basis:

UNPLANNED: a parameter change or an event that is not the result of an intended evolution and requires corrective or mitigative actions.

VALID: an indication, report, or condition, is considered to be VALID when it is verified by (1) an instrument channel check, or (2) indications on related or redundant indicators, or (3) by direct observation by plant personnel, such that doubt related to the indicator's operability, the condition's existence, or the report's accuracy is removed. Implicit in this definition is the need for timely assessment.

This IC addresses specific events that have resulted, or may result, in unexpected rises in radiation dose rates within plant buildings, and may be a precursor to a radioactivity release to the environment. These events represent a loss of control over radioactive material and represent a degradation in the level of safety of the plant.

Threshold Value #1 addresses radiation monitor indications of fuel uncovery and/or fuel damage. Raised readings on ventilation monitors may be indication of a radioactivity release from the fuel, confirming that damage has occurred. Raised background at the monitor due to

water level lowering may mask raised ventilation exhaust airborne activity and needs to be considered. Application of these Initiating Conditions requires understanding of the actual radiological conditions present in the vicinity of the monitor.

In Threshold Value #2, indications include water level and personnel reports. Visual observation will be the primary indicator for spent fuel pool and fuel movement activities. Personnel report during fuel assembly movements is included to ensure that reports of actual or potential fuel uncovery is classified. If available, video cameras may allow remote observation. Depending on available level indication, the declaration threshold may need to be based on indications of water makeup rate or lowering in refueling water storage tank level.

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Release of Radioactive Material or Rises in Radiation Levels Within the Facility That Impedes Operation of Systems Required to Maintain Safe Operations or to Establish or Maintain Cold Shutdown

Operating Mode Applicability: All

Threshold Values: (1 **OR** 2)

1. VALID radiation monitor readings greater than 15 mR/hr in areas requiring continuous occupancy to maintain plant safety functions:

Control Room radiation monitor RE1A

2. UNPLANNED VALID radiation readings greater than 1 R/hr values in areas requiring infrequent access to maintain plant safety functions.

Turbine Building	South & North Main Steam Valve Rooms
Control Building	Fire Pump House
Aux Feed Water Pump House	Low Voltage Switchyard
Diesel Generator Buildings	NSCW Towers

Basis:

VALID: an indication, report, or condition, is considered to be VALID when it is verified by (1) an instrument channel check, or (2) indications on related or redundant indicators, or (3) by direct observation by plant personnel, such that doubt related to the indicator's operability, the condition's existence, or the report's accuracy is removed. Implicit in this definition is the need for timely assessment.

This IC addresses raised radiation levels that impede necessary access to operating stations, or other areas containing equipment that must be operated manually or that requires local monitoring, in order to maintain safe operation or perform a safe shutdown. It is this impaired ability to operate the plant that results in the actual or potential substantial degradation of the level of safety of the plant. The cause and/or magnitude of the rise in radiation levels is not a concern of this IC. The Emergency Director must consider the source or cause of the raised radiation levels and determine if any other IC may be involved.

This IC is not meant to apply to anticipated temporary rises due to planned events.

The area requiring continuous occupancy is the control room. The value of 15mR/hr is derived from the GDC 19 value of 5 rem in 30 days with adjustment for expected occupancy times.

For areas requiring infrequent access, the 1 R/hr (Locked High Rad Area) is be based on radiation levels which result in exposure control measures intended to maintain doses within normal occupational exposure guidelines and limits, and in doing so, will impede necessary access. As used here, *impede,* includes hindering or interfering provided that the interference or delay is sufficient to significantly threaten the safe operation of the plant.

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Offsite Dose Resulting from an Actual or Imminent Release of Gaseous Radioactivity Exceeds 100 mR TEDE **OR** 500 mR Thyroid CDE for the Actual or Projected Duration of the Release.

Operating Mode Applicability: All

Threshold Values: (1 **OR** 2 **OR** 3)

Note: *If dose assessment results are available at the time of declaration, the classification should be based on Threshold Value #2 instead of Threshold Value #1.While necessary declarations should not be delayed awaiting results, the dose assessment should be initiated / completed in order to determine if the classification should be subsequently escalated.*

Note: *The Emergency Director should not wait until 15 minutes has elapsed, but should declare the event as soon as it is determined that the release duration has or will likely exceed 15 minutes.*

1. VALID reading on any of the following radiation monitors that exceeds **OR** is expected to exceed the reading shown for 15 minutes **OR** longer:

RE-12839	1.4×10^4 µCi/cc
RE-12444	6.9×10^1 µCi/cc
RE-13119 thru 13122	3.0×10^4 µCi/cc

2. Dose assessment using actual meteorology indicates doses greater than 100 mR TEDE **OR** 500 mR thyroid CDE at **OR** beyond the site boundary.

3. Field survey results indicate closed window dose rates exceeding 100 mR/hr expected to continue for more than one hour; **OR** analyses of field survey samples indicate thyroid CDE of 500 mR for one hour of inhalation, at **OR** beyond the site boundary.

Basis:

VALID: an indication, report, or condition, is considered to be VALID when it is verified by (1) an instrument channel check, or (2) indications on related or redundant indicators, or (3) by direct observation by plant personnel, such that doubt related to the indicator's operability, the condition's existence, or the report's accuracy is removed. Implicit in this definition is the need for timely assessment.

This IC addresses radioactivity releases that result in doses at or beyond the site boundary that exceed a small fraction of the EPA Protective Action Guides (PAGs). Releases of this magnitude are associated with the failure of plant systems needed for the protection of the public.

The Emergency Director should not wait until 15 minutes has elapsed, but should declare the event as soon as it is determined that the release duration has or will likely exceed 15 minutes.

The monitor reading Threshold Values are determined using a dose assessment method that back calculates from the dose values specified in the IC. The meteorology and source term used is the same as those used for determining the monitor reading Threshold Values in ICs RU1 and RA1. This protocol maintains intervals between the EALs for the four classifications. Since doses are generally not monitored in real-time, a release duration of one hour is assumed, and that the Threshold Values be based on a site boundary (or beyond) dose of 100 mR/hour whole body or 500 mR/hour thyroid, whichever is more limiting.

The release rates which result in site boundary doses of 100 mR TEDE are in excess of the range of the monitors listed in RU1 and RA1.

Since dose assessment is based on actual meteorology, whereas the monitor reading Threshold Values are not, the results from these assessments may indicate that the classification is not warranted, or may indicate that a higher classification is warranted. For this reason, emergency implementing procedures call for the timely performance of dose assessments using actual meteorology and release information. If the results of these dose assessments are available when the classification is made (*e.g.*, initiated at a lower classification level), the dose assessment results override the monitor reading Threshold Values. Classification should not be delayed pending the results of these dose assessments.

Initiating Condition(Back to Cold IC p.9)(Back to Hot IC p.8)

Offsite Dose Resulting from an Actual or Imminent Release of Gaseous Radioactivity Exceeds 1000 mR TEDE **OR** 5000 mR Thyroid CDE for the Actual or Projected Duration of the Release Using Actual Meteorology.

Operating Mode Applicability: All

Threshold Values: (1 **OR** 2 **OR** 3)

Note: *If dose assessment results are available at the time of declaration, the classification should be based on Threshold Value #2 instead of Threshold Value #1.While necessary declarations should not be delayed awaiting results, the dose assessment should be initiated / completed in order to determine if the classification should be subsequently escalated.*

Note: *The Emergency Director should not wait until 15 minutes has elapsed, but should declare the event as soon as it is determined that the release duration has or will likely exceed 15 minutes.*

1. VALID reading on any of the following radiation monitors that exceeds **OR** expected to exceed the reading shown for 15 minutes **OR** longer:

RE-12839	1.4×10^5 µCi/cc
RE-12444	6.9×10^2 µCi/cc
RE-13119 thru 13122	3.0×10^5 µCi/cc

2. Dose assessment using actual meteorology indicates doses greater than 1000 mR TEDE **OR** 5000 mR thyroid CDE at **OR** beyond the site boundary.

3. Field survey results indicate closed window dose rates exceeding 1000 mR/hr expected to continue for more than one hour; **OR** analyses of field survey samples indicate thyroid CDE of 5000 mR for one hour of inhalation, at **OR** beyond site boundary.

Basis:

VALID: an indication, report, or condition, is considered to be VALID when it is verified by (1) an instrument channel check, or (2) indications on related or redundant indicators, or (3) by direct observation by plant personnel, such that doubt related to the indicator's operability, the condition's existence, or the report's accuracy is removed. Implicit in this definition is the need for timely assessment.

This IC addresses radioactivity releases that result in doses at or beyond the site boundary that exceed the EPA Protective Action Guides (PAGs). Public protective actions will be necessary. Releases of this magnitude are associated with the failure of plant systems needed for the protection of the public and

likely involve fuel damage. While these failures are addressed by other ICs, this IC provides appropriate diversity and addresses events which may not be able to be classified on the basis of plant status alone.

The Emergency Director should not wait until 15 minutes has elapsed, but should declare the event as soon as it is determined that the release duration has or will likely exceed 15 minutes.

The monitor reading Threshold Values are determined using a dose assessment method that back calculates from the dose values specified in the IC. The meteorology and source term used are the same as those used for determining the monitor reading Threshold Values in ICs RU1 and RA1. This protocol will maintain intervals between the EALs for the four classifications. Since doses are generally not monitored in real-time, a release duration of one hour is assumed, and that the Threshold Values are based on a site boundary (or beyond) dose of 1000 mR/hour whole body or 5000 mR/hour thyroid, whichever is more limiting.

Since dose assessment is based on actual meteorology, whereas the monitor reading Threshold Values are not, the results from these assessments may indicate that the classification is not warranted, or may indicate that a higher classification is warranted. For this reason, emergency implementing procedures call for the timely performance of dose assessments using actual meteorology and release information. If the results of these dose assessments are available when the classification is made, the dose assessment results override the monitor reading Threshold Values. Classification should not be delayed pending the results of these dose assessments.

CU1

Initiating Condition (Back to Cold IC p.9)

RCS Leakage.

Operating Mode Applicability: Cold Shutdown

Threshold Values: (1 **OR** 2)

1. RCS Unidentified **OR** pressure boundary leakage greater than 10 gpm.

2. RCS Identified leakage greater than 25 gpm.

Basis:

This IC is included as a NOUE because it is considered to be a potential degradation of the level of safety of the plant. The 10 gpm value for the unidentified and pressure boundary leakage was selected as it is sufficiently large to be observable via normally installed instrumentation or reduced inventory instrumentation such as level hose indication.

The Threshold Value for identified leakage is set at a higher value due to the lesser significance of identified leakage in comparison to unidentified or pressure boundary leakage. Though the referenced Technical Specification limits are mode dependent, it is appropriate that the Threshold Value's be applicable in this modes, as it indicate a potential degradation in the level of safety of the plant.

The difference between CU1 and CU2 deals with the RCS conditions that exist between cold shutdown and refueling mode applicability. In cold shutdown the RCS will normally be intact and RCS inventory and level monitoring means such as Pressurizer level indication and makeup volume control tank levels are normally available. In the refueling mode the RCS is not intact and RPV level and inventory are monitored by different means.

Initiating Condition (Back to Cold IC p.9)

UNPLANNED Loss of RCS Inventory with Irradiated Fuel in the RPV.

Operating Mode Applicability: Refueling

Threshold Values: (1 **OR** 2)

1. UNPLANNED RCS level lowering below 194' (RPV flange) for greater than 15 minutes

2. a. RPV level **CANNOT** be monitored

   AND

   b. A possible loss of RPV inventory may be occurring as indicated by unexplained level rise in Containment sump.

Basis:

UNPLANNED: a parameter change or an event that is not the result of an intended evolution and requires corrective or mitigative actions.

This IC is included as a NOUE because it may be a precursor of more serious conditions and, as result, is considered to be a potential degradation of the level of safety of the plant. Refueling evolutions that lower RCS water level below the RPV flange are carefully planned and procedurally controlled. An UNPLANNED event that results in water level decreasing below the RPV flange warrants declaration of a NOUE due to the reduced RCS inventory that is available to keep the core covered. The allowance of 15 minutes was chosen because it is reasonable to assume that level can be restored within this time frame using any of the redundant means of refill that should be available.

The difference between CU1 and CU2 deals with the RCS conditions that exist between cold shutdown and refueling modes. In cold shutdown the RCS will normally be intact and standard RCS inventory and level monitoring means are available. In the refueling mode the RCS is not intact and RPV level and inventory are monitored by different means.

In the refueling mode, normal means of core temperature indication and RCS level indication may not be available. Redundant means of RPV level indication will normally be installed to assure that the ability to monitor level will not be interrupted. Sump and tank level rises must be evaluated against other potential sources of leakage to ensure they are indicative of RCS leakage.

Threshold Value 1 involves a lowering in RCS level below the top of the RPV flange that continues for 15 minutes due to an UNPLANNED event.

Initiating Condition (Back to Cold IC p.9)

Loss of All Offsite Power to Essential Busses for Greater Than 15 Minutes.

Operating Mode Applicability: Cold Shutdown
Refueling

Threshold Value:

1. a. Loss of power to **OR** from transformers 1(2)NXRA **AND** 1(2)NXRB resulting in loss of all off-site electrical power to **BOTH** 1(2)AA02 **AND** 1(2)BA03 for greater than 15 minutes.

   AND

   b. One emergency diesel generator supplying power to **EITHER** AA02 **OR** BA03.

Basis:

Prolonged loss of AC power reduces required redundancy and potentially degrades the level of safety of the plant by rendering the plant more vulnerable to a complete Loss of AC Power. Fifteen minutes was selected as a threshold to exclude transient or momentary power losses.

CU4

Initiating Condition (Back to Cold IC p.9)

UNPLANNED Loss of Decay Heat Removal Capability with Irradiated Fuel in the RPV.

Operating Mode Applicability: Cold Shutdown
Refueling

Threshold Values: (1 **OR** 2)

Note: *The Emergency Director should not wait until 15 minutes has elapsed, but should declare the event as soon as it is determined that the duration has or will likely exceed 15 minutes.*

1. An UNPLANNED event results in RCS temperature exceeding 200°F.

2. Loss of all RCS temperature **AND** RPV level indication for greater than 15 minutes.

Basis:

UNPLANNED: a parameter change or an event that is not the result of an intended evolution and requires corrective or mitigative actions.

This IC is included as a NOUE because it may be a precursor of more serious conditions and, as a result, is considered to be a potential degradation of the level of safety of the plant. Operation of the systems that provide this forced cooling may be jeopardized due to the unlikely loss of electrical power or RCS inventory. In cold shutdown the decay heat available to raise RCS temperature during a loss of inventory or heat removal event may be significantly greater than in the refueling mode.

During refueling the level in the RPV will normally be maintained above the RPV flange. Refueling evolutions that lower water level below the RPV flange are carefully planned and procedurally controlled. Loss of forced decay heat removal at reduced inventory may result in more rapid rises in RCS/RPV temperatures depending on the time since shutdown.

Unlike the cold shutdown mode, normal means of core temperature indication and RCS level indication may not be available in the refueling mode. Redundant means of RPV level indication are therefore procedurally installed to assure that the ability to monitor level will not be interrupted. However, if all level and temperature indication were to be lost in either the cold shutdown of refueling modes, Threshold Value 2 would result in declaration of a NOUE if either temperature or level indication cannot be restored within 15 minutes from the loss of both means of indication.

The Emergency Director must remain attentive to events or conditions that lead to the conclusion that exceeding the Threshold Value is imminent. If, in the judgment of the

Emergency Director, an imminent situation is at hand, the classification should be made as if the threshold has been exceeded.

Initiating Condition (Back to Cold IC p.9)

Fuel Clad Degradation.

Operating Mode Applicability: Cold Shutdown
Refueling

Threshold Values: (1 **OR** 2)

1. a. Valid reading on RE-12444/12442 greater than 2E-3 µCi/cc for greater than 60 min.

   OR

   b. RE-12839 greater than 6E-2 µCi/cc for greater than 60 min.

   OR

   c. RE-018 greater than 8E-3 µCi/cc for greater than 60 min.

2. RCS coolant sample activity value indicating fuel clad degradation greater than Technical Specification allowable limits as indicated by ANY of the following:

Dose Equivalent I-131 greater than 1 µCi/gm for greater than 48 hours
Dose Equivalent I-131 greater than Technical Specification figure 3.4.16-1 limits
RCS specific activity greater than 100/E µCi/gm gross radioactivity

Basis:

This IC is included as a NOUE because it is considered to be a potential degradation in the level of safety of the plant and a potential precursor of more serious problems. Threshold Value #1 addresses radiation monitor readings that provide indication of fuel clad integrity.

Threshold Value #2 addresses coolant samples exceeding coolant technical specifications for iodine spike.

Initiating Condition (Back to Cold IC p.9)

UNPLANNED Loss of All Onsite **OR** Offsite Communications Capabilities.

Operating Mode Applicability: Cold Shutdown
Refueling

Threshold Values: (1 **OR** 2)

1. UNPLANNED loss of ALL of the following on-site communications capability affecting the ability to perform routine operations:

In plant telephones
Public address system
Sound powered phones
Plant radio systems

2. UNPLANNED loss of ALL of the following off-site communications capability:

ENN (Emergency Notification Network)
ENS (Emergency Notification System)
Commercial phones (Radio, PBX, Satellite, Wireless)
VOIP (Voice Over Internet Protocol)
OPX (Off Premise Extension)

Basis:

UNPLANNED: a parameter change or an event that is not the result of an intended evolution and requires corrective or mitigative actions.

The purpose of this IC and its associated Threshold Values is to recognize a loss of communications capability that either defeats the plant operations staff ability to perform routine tasks necessary for plant operations or the ability to communicate problems with offsite authorities.

The availability of one method of ordinary offsite communications is sufficient to inform state and local authorities of plant problems. This Threshold Value is intended to be used only when extraordinary means are being used to make communications possible.

Initiating Condition (Back to Cold IC p.9)

UNPLANNED Loss of Required DC Power for Greater Than 15 Minutes.

Operating Mode Applicability: Cold Shutdown
Refueling

Threshold Value:

1. a. UNPLANNED loss of Vital DC power to 125 VDC Buses AD1, BD1, CD1, **AND** DD1 indicated by bus voltage indications less than 105 VDC

   AND

   b. Failure to restore power to at least one DC bus within 15 minutes from the time of loss.

Basis:

UNPLANNED: a parameter change or an event that is not the result of an intended evolution and requires corrective or mitigative actions.

The purpose of this IC and its associated Threshold Values is to recognize a loss of DC power compromising the ability to monitor and control the removal of decay heat during Cold Shutdown or Refueling operations. This Threshold Value is intended to be anticipatory in as much as the operating crew may not have necessary indication and control of equipment needed to respond to the loss.

105 VDC bus voltage is based on the minimum bus voltage necessary for the operation of safety related equipment. This voltage value incorporates a margin of at least 15 minutes of operation before the onset of inability to operate those loads.

Initiating Condition (Back to Cold IC p.9)

Inadvertent Criticality.

Operating Mode Applicability: Cold Shutdown
Refueling

Threshold Values:

1. An UNPLANNED sustained positive startup rate observed on nuclear instrumentation.

Basis:

UNPLANNED: a parameter change or an event that is not the result of an intended evolution and requires corrective or mitigative actions.

This IC addresses criticality events that occur in Cold Shutdown or Refueling modes such as fuel mis-loading events and inadvertent dilution events. This IC indicates a potential degradation of the level of safety of the plant, warranting a NOUE classification.

The term "sustained" is used in order to allow exclusion of expected short term positive startup rates from planned fuel bundle or control rod movements during core alterations. These short term positive startup rates are the result of the rise in neutron population due to subcritical multiplication.

CA1

Initiating Condition (Back to Cold IC p.9)

Loss of RCS Inventory.

Operating Mode Applicability: Cold Shutdown

Threshold Values: (1 **OR** 2)

1. Loss of RCS inventory as indicated by RPV level less than elevation 185'-9.5" (70% on RVLIS)

2. a. RCS level **CANNOT** be monitored for greater than 15 minutes

   AND

   b. A possible loss of RCS inventory may be occurring as indicated by unexplained level rise in Containment sump.

Basis:

These Threshold Values serve as precursors to a loss of ability to adequately cool the fuel. The magnitude of this loss of water indicates that makeup systems have not been effective and may not be capable of preventing further RPV level lowering and potential core uncovery.

The Bottom ID of the RCS Loop Setpoint was chosen because at this level remote RCS level indication may be lost and loss of suction to decay heat removal systems has occurred. The inability to restore and maintain level after reaching this setpoint would therefore be indicative of a failure of the RCS barrier.

In the cold shutdown mode, normal RCS level and RPV level instrumentation systems will normally be available. However, if all level indication were to be lost during a loss of RCS inventory event, the operators would need to determine that RPV inventory loss was occurring by observing sump and tank level changes. Sump and tank level rises must be evaluated against other potential sources of leakage such as cooling water sources inside the containment to ensure they are indicative of RCS leakage. The 15-minute duration for the loss of level indication was chosen because it is half of the CS1 Site Area Emergency Threshold Value duration.

The difference between CA1 and CA2 deals with the RCS conditions that exist between cold shutdown and refueling mode applicability. In cold shutdown the RCS will normally be intact and standard RCS inventory and level monitoring means are available. In the refueling mode the RCS is not intact and RPV level and inventory are monitored by different means.

CA2

Initiating Condition (Back to Cold IC p.9)

Loss of RPV Inventory with Irradiated Fuel in the RPV.

Operating Mode Applicability: Refueling

Threshold Values: (1 **OR** 2)

1. Loss of inventory as indicated by RPV level less than 185'-9.5" (70% on RVLIS)

2. a. RPV level **CANNOT** be monitored for greater than 15 minutes

   AND

   b. A possible loss of RCS inventory may be occurring as indicated by unexplained level rise in Containment sump.

Basis:

These Threshold Values serve as precursors to a loss of heat removal. The magnitude of this loss of water indicates that makeup systems have not been effective and may not be capable of preventing further RPV level lowering and potential core uncovery. This condition will result in a minimum classification of Alert.

The Bottom ID of the RCS Loop Setpoint was chosen because at this level remote RCS level indication may be lost and loss of suction to decay heat removal systems may occur. The inability to restore and maintain level after reaching this setpoint would therefore be indicative of a failure of the RCS barrier.

In the refueling mode, normal means of RPV level indication may not be available. Redundant means of RPV level indication will be normally installed to assure that the ability to monitor level will not be interrupted. However, if all level indication were to be lost during a loss of RCS inventory event, the operators would need to determine that RPV inventory loss was occurring by observing sump and tank level changes. Sump and tank level rises must be evaluated against other potential sources of leakage such as cooling water sources inside the containment to ensure they are indicative of RCS leakage. The 15-minute duration allows CA2 to be an effective precursor to CS2.

The difference between CA1 and CA2 deals with the RCS conditions that exist between cold shutdown and refueling mode applicability. In cold shutdown the RCS will normally be intact and standard RCS inventory and level monitoring means are available. In the refueling mode the RCS is not intact and RPV level and inventory are monitored by different means.

Initiating Condition (Back to Cold IC p.9)

Loss of All Offsite Power **AND** Loss of All Onsite AC Power to Essential Busses.

Operating Mode Applicability: Cold Shutdown
Refueling
Defueled

Threshold Value:

1. a. Loss of power to **OR** from transformers 1(2)NXRA **AND** 1(2)NXRB resulting in loss of all off-site electrical power to **BOTH** 1(2)AA02 **AND** 1(2)BA03 for greater than 15 minutes.

   AND

   b. Failure of emergency generators to supply power to emergency busses.

   AND

   c. Failure to restore power to at least one emergency bus within 15 minutes from the time of loss of both offsite and onsite AC power.

Basis:

Loss of all AC power compromises all plant safety systems requiring electric power including RHR, ECCS, Containment Heat Removal, Spent Fuel Heat Removal and the Ultimate Heat Sink. When in cold shutdown, refueling, or defueled mode the event can be classified as an Alert, because of the significantly reduced decay heat, lower temperature and pressure, increasing the time to restore one of the emergency busses. Fifteen minutes was selected as a threshold to exclude transient or momentary power losses.

Consideration should be given to operable loads necessary to remove decay heat or provide Reactor Vessel makeup capability when evaluating loss of AC power to essential busses. Even though an essential bus may be energized, if necessary loads are not operable on the energized bus then the bus should not be considered operable.

CA4

Initiating Condition (Back to Cold IC p.9)

Inability to Maintain Plant in Cold Shutdown with Irradiated Fuel in the RPV.

Operating Mode Applicability: Cold Shutdown
Refueling

Threshold Values: (1 **OR** 2 **OR** 3)

Note: *The Emergency Director should not wait until 20 minutes has elapsed, but should declare the event as soon as it is determined that the duration has or will likely exceed 20 minutes.*

1. An UNPLANNED event results in RCS temperature exceeding 200°F with:

   a. CONTAINMENT CLOSURE **NOT** established

   AND

   b. RCS integrity **NOT** established

NOTE
If an RCS heat removal system is in operation within this time frame and RCS temperature is being reduced then this Threshold Value is not applicable.

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2. An UNPLANNED event results in RCS temperature exceeding 200°F for greater than 20 minutes (Note) with:

   a. CONTAINMENT CLOSURE established

   AND

   b. RCS integrity **NOT** established

3. An UNPLANNED event results in:

   a. RCS temperature exceeding 200°F for greater than 60 minutes (Note)

   OR

   b. RCS pressure increasing greater than 10 psig

Basis:

UNPLANNED: a parameter change or an event that is not the result of an intended evolution and requires corrective or mitigative actions.

CONTAINMENT CLOSURE: Per Operating Procedure 14210-1, Containment Building Penetrations Verification – Refueling.

Threshold Value 1 addresses complete loss of functions required for core cooling during refueling and cold shutdown modes when neither CONTAINMENT CLOSURE nor RCS integrity are established. RCS integrity is in place when the RCS pressure boundary is in its normal condition for the cold shutdown mode of operation. No delay time is allowed for Threshold Value1 because the evaporated reactor coolant that may be released into the Containment during this heatup condition could also be directly released to the environment.

Threshold Value 2 addresses the complete loss of functions required for core cooling for GREATER THAN 20 minutes during refueling and cold shutdown modes when CONTAINMENT CLOSURE is established but RCS integrity is not established or RCS inventory is reduced. As in Threshold Value 1, RCS integrity should be assumed to be in place when the RCS pressure boundary is in its normal condition for the cold shutdown mode of operation. The allowed 20 minute time frame was included to allow operator action to restore the heat removal function, if possible.

Threshold Value 3 addresses complete loss of functions required for core cooling for greater than 60 minutes during refueling and cold shutdown modes when RCS integrity is established. The status of CONTAINMENT CLOSURE in this Threshold Value is immaterial given that the RCS is providing a high pressure barrier to fission product release to the environment. The 60 minute time frame should allow sufficient time to restore cooling without there being a substantial degradation in plant safety. The 10 psig pressure rise covers situations where, due to high decay heat loads, the time provided to restore temperature control, should be less than 60 minutes.

The Emergency Director must remain alert to events or conditions that lead to the conclusion that exceeding the Threshold Value is imminent. If, in the judgment of the Emergency Director, an imminent situation is at hand, the classification should be made as if the threshold has been exceeded.

Initiating Condition (Back to Cold IC p.9)

Loss of RPV Inventory Affecting Core Decay Heat Removal Capability.

Operating Mode Applicability: Cold Shutdown

Threshold Values: (1 **OR** 2)

1. Loss of Reactor Pressure Vessel (RPV) inventory affecting core decay heat removal capability with CONTAINMENT CLOSURE **NOT** established as indicated by:

   a. RPV level less than 185'-3.5" [6" below Bottom ID of loop] (69% on RVLIS)
   OR

   b. RPV level **CANNOT** be monitored for greater than 30 minutes with a possible loss of RPV inventory as indicated by unexplained level rise in Containment sump.

2. Loss of RPV inventory affecting core decay heat removal capability with CONTAINMENT CLOSURE established as indicated by:

   a. RPV level less than 181'-10" [TOAF] (62% on RVLIS)
   OR

   b. RPV level **CANNOT** be monitored for greater than 30 minutes with a possible loss of RPV inventory as indicated by **EITHER** of the following:

Unexplained Containment sump level rise.
Erratic Source Range Monitor Indication

Basis:

CONTAINMENT CLOSURE: Per Operating Procedure 14210-1, Containment Building Penetrations Verification – Refueling.

Under the conditions specified by this IC, continued lowering in RPV level is indicative of a loss of inventory control. Inventory loss may be due to an RPV breach, pressure boundary leakage, or continued boiling in the RPV.

In the cold shutdown mode, normal RCS level and reactor vessel level indication systems (RVLIS) will normally be available. However, if all level indication were to be lost during a loss of RCS inventory event, the operators would need to determine that RPV inventory loss was occurring by observing sump and tank level changes. Sump and tank level rises must be evaluated against other potential sources of leakage such as cooling water sources inside the containment to ensure they are indicative of RCS leakage.

The 30 minute duration allows sufficient time for actions to be performed to recover needed cooling equipment. The effluent release path is not expected with closure established.

Initiating Condition (Back to Cold IC p.9)

Loss of RPV Inventory Affecting Core Decay Heat Removal Capability with Irradiated Fuel in the RPV.

Operating Mode Applicability: Refueling

Threshold Values: (1 **OR** 2)

1. **WITH** CONTAINMENT CLOSURE **NOT** established:

   a. RPV level less than elevation 185'-3.5" [6" below Bottom ID of loop] (69% on RVLIS)

   OR

   b. RPV level **CANNOT** be monitored **WITH** indication of core uncovery as evidenced by ANY of the following:

RE-002, 003, **OR** 004 greater than 3.1 mR/hr
Erratic Source Range Monitor Indication

2. **WITH** CONTAINMENT CLOSURE established

   a. RPV level less than elevation 181'-10" [TOAF] (62% on RVLIS)

   OR

   b. RPV level **CANNOT** be monitored **WITH** Indication of core uncovery as evidenced by ANY of the following:

RE-005 **OR** 006 greater than 162 R/hr
RE-0011 greater than 15 mR/hr
Erratic Source Range Monitor Indication

Basis:

CONTAINMENT CLOSURE: Per Operating Procedure 14210-1, Containment Building Penetrations Verification – Refueling.

Under the conditions specified by this IC, continued lowering in RPV level is indicative of a loss of inventory control. Inventory loss may be due to an RPV breach or continued boiling in the RPV.

As water level in the RPV lowers, the dose rate above the core will rise. The dose rate due to this core shine should result in up-scaled Containment High Range Monitor indication and possible alarm. Additionally, post-TMI studies indicated that the installed nuclear instrumentation will operate erratically when the core is uncovered and that this should be used as a tool for making such determinations.

For Threshold Value 2 in the refueling mode, normal means of RPV level indication may not be available. Redundant means of RPV level indication will be normally installed to assure that the ability to monitor level will not be interrupted.

This effluent release is not expected with closure established.

Initiating Condition (Back to Cold IC p.9)

Loss of RPV Inventory Affecting Fuel Clad Integrity with Containment Challenged with Irradiated Fuel in the RPV.

Operating Mode Applicability: Cold Shutdown
Refueling

Threshold Values: (1 **AND** 2 **AND** 3)

1. Loss of RPV inventory as indicated by unexplained Containment sump level rise.

AND

2. RPV Level:

   a. Less than elevation 181'-10" [TOAF] (62% on RVLIS) for greater than 30 minutes

   OR

   b. RPV level **CANNOT** be monitored **WITH** indication of core uncovery for greater than 30 minutes as evidenced by ANY of the following:

RE-005 **OR** 006	greater than162 R/hr
RE-0011	greater than 15 mR/hr
Erratic Source Range Monitor Indication	

AND

3. Containment challenged as indicated by ANY of the following:

Explosive mixture inside containment	greater than **OR** equal to 6% H_2
Containment Pressure	greater than **OR** equal to 3 psig **WITH** CONTAINMENT CLOSURE established
	greater than **OR** equal to 52 psig **WITH** Tech Spec containment integrity intact
CONTAINMENT CLOSURE **NOT** established	

Basis:

CONTAINMENT CLOSURE: Per Operating Procedure 14210-1, Containment Building Penetrations Verification – Refueling.

For Threshold Value 1 in the cold shutdown mode, normal RCS level and RPV level instrumentation systems will normally be available. However, if all level indication were to be lost during a loss of RCS inventory event, the operators would need to determine that RPV inventory loss was occurring by observing sump and tank level changes. Sump and tank level rises must be evaluated against other potential sources of leakage inside the containment to ensure they are indicative of RCS leakage.

For Threshold Value 1 in the refueling mode, normal means of RPV level indication may not be available. Redundant means of RPV level indication will be normally installed to assure that the ability to monitor level will not be interrupted. However, if all level indication were to be lost during a loss of RCS inventory event, the operators would need to determine that RPV inventory loss was occurring by observing sump and tank level changes. For both cold shutdown and refueling modes sump and tank level rises must be evaluated against other potential sources of leakage such as cooling water sources inside the containment to ensure they are indicative of RCS leakage.

Threshold Value 2 represents the inability to restore and maintain RPV level to above the top of active fuel. Fuel damage is probable if RPV level cannot be restored, as available decay heat will cause boiling, further reducing the RPV level.

Analysis indicates that core damage may occur within an hour following continued core uncovery therefore, conservatively, 30 minutes was chosen.

The GE is declared on the occurrence of the loss or imminent loss of function of <u>all three</u> barriers. Based on the above discussion, RCS barrier failure resulting in core uncovery for 30 minutes or more may cause fuel clad failure. With the CONTAINMENT breached or challenged then the potential for unmonitored fission product release to the environment is high. This represents a direct path for radioactive inventory to be released to the environment. This is consistent with the definition of a GE.

In the context of Threshold Value 3, CONTAINMENT CLOSURE is the action taken to secure containment and its associated structures, systems, and components as a functional barrier to fission product release under existing plant conditions. If the closure is re-established prior to exceeding the temperature or level thresholds of the RCS Barrier and Fuel Clad Barrier Threshold Values, escalation to GE would not occur.

In the early stages of a core uncovery event, it is unlikely that hydrogen buildup due to a core uncovery could result in an explosive mixture of dissolved gasses in CONTAINMENT. However, CONTAINMENT monitoring and/or sampling should be performed to verify this assumption and a General Emergency declared if it is determined that an explosive mixture exists.

Fission Product Barrier Degradation

FU1	FA1	FS1	FG1
ANY Loss or ANY Potential Loss of Containment *Op. Modes: Power Operation, Hot Standby, Startup, Hot Shutdown*	ANY Loss or ANY Potential Loss of **EITHER** Fuel Clad **OR** RCS *Op. Modes: Power Operation, Hot Standby, Startup, Hot Shutdown*	Loss or Potential Loss of ANY Two Barriers *Op. Modes: Power Operation, Hot Standby, Startup, Hot Shutdown*	Loss of ANY Two Barriers **AND** Loss or Potential Loss of Third Barrier *Op. Modes: Power Operation, Hot Standby, Startup, Hot Shutdown*

NOTES

1. The logic used for these initiating conditions reflects the following considerations:

   - The Fuel Clad Barrier and the RCS Barrier are weighted more heavily than the Containment Barrier. NOUE ICs associated with RCS and Fuel Clad Barriers are addressed under System Malfunction ICs.

   - At the Site Area Emergency level, there must be some ability to dynamically assess how far present conditions are from the threshold for a General Emergency. For example, if Fuel Clad and RCS Barrier "Loss" Threshold Values existed, that, in addition to offsite dose assessments, would require continual assessments of radioactive inventory and containment integrity. Alternatively, if both Fuel Clad and RCS Barrier "Potential Loss" Threshold Values existed, the Emergency Director would have more assurance that there was no immediate need to escalate to a General Emergency.

   - The ability to escalate to higher emergency classes as an event deteriorates must be maintained. For example, RCS leakage steadily increasing would represent an increasing risk to public health and safety.

Fission Product Barrier Basis

FUEL CLAD BARRIER Threshold Values: (Back to FPB p.7)

The Fuel Clad Barrier is the zircalloy or stainless steel tubes that contain the fuel pellets.

1. Critical Safety Function Status

RED path indicates an extreme challenge to the safety function. ORANGE path indicates a severe challenge to the safety function.

Core Cooling - ORANGE indicates subcooling has been lost and that some clad damage may occur. Heat Sink - RED indicates the ultimate heat sink function is under extreme challenge and thus these two items indicate potential loss of the Fuel Clad Barrier.

Core Cooling - RED indicates significant superheating and core uncovery and is considered to indicate loss of the Fuel Clad Barrier.

2. Primary Coolant Activity Level

The 300 μCi/gm I_{131} equivalent. Assessment by the NUMARC EAL Task Force indicates that this amount of coolant activity is well above that expected for iodine spikes and corresponds to less than 5% fuel clad damage. This amount of radioactivity indicates significant clad damage and thus the Fuel Clad Barrier is considered lost.

There is no equivalent "Potential Loss" Threshold Value for this item.

3. Core Exit Thermocouple Readings

Core Exit Thermocouple Readings are included in addition to the Critical Safety Functions to include conditions when the CSFs may not be in use.

The "Loss" Threshold Value of 1200 degrees F corresponds to significant superheating of the coolant. This value corresponds to the temperature reading that indicates core cooling - RED in Fuel Clad Barrier Threshold Value #1.

The "Potential Loss" Threshold Value of 700 degrees F corresponds to loss of subcooling. This value corresponds to the temperature reading that indicates core cooling - ORANGE in Fuel Clad Barrier Threshold Value #1.

4. Reactor Vessel Water Level

There is no "Loss" Threshold Value corresponding to this item because it is better covered by the other Fuel Clad Barrier "Loss" Threshold Values.
The 0% RVLIS value for the "Potential Loss" Threshold Value corresponds to the top of the active fuel. The "Potential Loss" Threshold Value is defined by the Core Cooling - ORANGE path.

5. Containment Radiation Monitoring

The greater than 80 R/hr reading is a value which indicates the release of reactor coolant, with elevated activity indicative of fuel damage, into the containment. The reading is calculated assuming the instantaneous release and dispersal of the reactor coolant noble gas and iodine inventory associated with a concentration of 300 μCi/gm dose equivalent I-131 into the containment atmosphere. Reactor coolant concentrations of this magnitude are several times larger than the maximum concentrations (including iodine spiking) allowed within technical specifications and are therefore indicative of fuel damage. This value is higher than that specified for RCS barrier Loss Threshold Value #4. Thus, this Threshold Value indicates a loss of both the fuel clad barrier and a loss of RCS barrier.

There is no "Potential Loss" Threshold Value associated with this item.

6. Emergency Director Judgment

This Threshold Value addresses any other factors that are to be used by the Emergency Director in determining whether the Fuel Clad barrier is lost or potentially lost. In addition, the inability to monitor the barrier is incorporated in this Threshold Value as a factor in Emergency Director judgment that the barrier may be considered lost or potentially lost.

RCS BARRIER Threshold Values: (Back to FPB p.7)

The RCS Barrier includes the RCS primary side and its connections up to and including the pressurizer safety and relief valves, and other connections up to and including the primary isolation valves.

1. Critical Safety Function Status

This Threshold Value uses the Critical Safety Function Status Tree (CSFST) monitoring and functional restoration procedures. An RCS Integrity RED path indicates an extreme challenge to the safety function derived from appropriate instrument readings, and these CSFs indicate a potential loss of RCS barrier.

There is no "Loss" Threshold Value associated with this item.

2. RCS Leak Rate

The "Loss" Threshold Value addresses conditions where leakage from the RCS is greater than available inventory control capacity such that a loss of subcooling has occurred. The loss of subcooling is the fundamental indication that the inventory control systems are inadequate in maintaining RCS pressure and inventory against the mass loss through the leak.

The "Potential Loss" Threshold Value is based on the inability to maintain normal liquid inventory within the Reactor Coolant System (RCS) by normal operation of the Chemical and Volume Control System which is considered as one centrifugal charging pump discharging to the charging header. A second charging pump being required is indicative of a substantial RCS leak providing the 120 GPM value.

3. SG Tube Rupture

This Threshold Value is intended to address the full spectrum of Steam Generator (SG) tube rupture events in conjunction with Containment Barrier "Loss" Threshold Value #4 and Fuel Clad Barrier Threshold Values. The "Loss" Threshold Value addresses RUPTURED SG(s) for which the leakage is large enough to cause actuation of ECCS (SI). This is consistent to the RCS Barrier "Potential Loss" Threshold Value #2. This condition is described by "19030-C entered. By itself, this Threshold Value will result in the declaration of an Alert. However, if the SG is also FAULTED (i.e., two barriers failed), the declaration escalates to a Site Area Emergency per Containment Barrier "Loss" Threshold Value #4.

There is no "Potential Loss" Threshold Value.

4. Containment Radiation Monitoring

The R-2 greater than 100 mR/hr and R-7 greater than 200 mR/hr threshold is a value which indicates the release of reactor coolant to the containment. The reading is calculated assuming the instantaneous release and dispersal of the reactor coolant noble gas and iodine inventory associated with normal operating concentrations (i.e., within T/S) into the containment atmosphere. This value is less than that specified for Fuel Clad Barrier Threshold Value #5. Thus, this Threshold Value would be indicative of a RCS leak only. If the radiation monitor reading rise to that specified by Fuel Clad Barrier Threshold Value #5, fuel damage would also be indicated.

There is no "Potential Loss" Threshold Value associated with this item.

5. Emergency Director Judgment

This Threshold Value addresses any other factors that are to be used by the Emergency Director in determining whether the RCS barrier is lost or potentially lost. In addition, the inability to monitor the barrier should also be incorporated in this Threshold Value as a factor in Emergency Director judgment that the barrier may be considered lost or potentially lost. (See also IC SG1, "Prolonged Loss of All Offsite Power and Prolonged Loss of All Onsite AC Power", for additional information.)

CONTAINMENT BARRIER Threshold Values: (Back to FPB p.7)

The Containment Barrier includes the containment building, its connections up to and including the outermost containment isolation valves. This barrier also includes the main steam, feedwater, and blowdown line extensions outside the containment building up to and including the outermost secondary side isolation valve.

1. Critical Safety Function Status

This Threshold Value uses Critical Safety Function Status Tree (CSFST) monitoring and functional restoration procedures. Containment RED path indicates an extreme challenge to the safety function derived from appropriate instrument readings and/or sampling results, and thus represents a potential loss of containment. Conditions leading to a containment RED path result from RCS barrier and/or Fuel Clad Barrier Loss. Thus, this Threshold Value is primarily a

discriminator between Site Area Emergency and General Emergency representing a potential loss of the third barrier.

There is no "Loss" Threshold Value associated with this item.

2. Containment Pressure

Rapid unexplained loss of pressure (i.e., not attributable to containment spray or condensation effects) following an initial pressure rise indicates a loss of containment integrity. Containment pressure and sump levels should rise as a result of the mass and energy release into containment from a LOCA. Thus, sump level or pressure not increasing indicates containment bypass and a loss of containment integrity.

Existence of an explosive mixture means a hydrogen and oxygen concentration of at least the lower deflagration limit (greater than 6%) curve exists. The indications of potential loss under this Threshold Value corresponds to some of those leading to the RED path in Threshold Value #1 above and may be declared. As described above, this Threshold Value is primarily a discriminator between Site Area Emergency and General Emergency representing a potential loss of the third barrier.

The second potential loss Threshold Value represents a potential loss of containment in that the containment heat removal/depressurization system (e.g., containment sprays, fan coolers, etc., but not including containment venting strategies) are either lost or performing in a degraded manner, as indicated by containment pressure greater than the setpoint at which the equipment was supposed to have actuated.

3. Core Exit Thermocouples

In this Threshold Value, the function restoration procedures are those emergency operating procedures that address the recovery of the core cooling critical safety functions. The procedure is considered effective if the temperature is decreasing or if the vessel water level is increasing. For units using the CSF status trees a direct correlation to those status trees can be made if the effectiveness of the restoration procedures is also evaluated as stated below.

Severe accident analyses (e.g., NUREG-1150) have concluded that function restoration procedures can arrest core degradation within the reactor vessel in a significant fraction of the core damage scenarios, and that the likelihood of containment failure is very small in these events. Given this, it is appropriate to provide a reasonable period to allow function restoration procedures to arrest the core melt sequence. Whether or not the procedures will be effective should be apparent within 15 minutes. The Emergency Director should make the declaration as soon as it is determined that the procedures have been, or will be ineffective. The reactor vessel level chosen should be consistent with the emergency response guides applicable to the facility.

The conditions in this potential loss Threshold Value represent an imminent core melt sequence which, if not corrected, could lead to vessel failure and an raised potential for containment failure. In conjunction with the Core Cooling and Heat Sink criteria in the Fuel and RCS barrier columns, this Threshold Value would result in the declaration of a General Emergency -- loss of two barriers and the potential loss of a third. If the function restoration procedures are ineffective, there is no "success" path.

There is no "Loss" Threshold Value associated with this item.

4. SG Secondary Side Release With Primary To Secondary Leakage

This "loss" Threshold Value recognizes that SG tube leakage can represent a bypass of the containment barrier as well as a loss of the RCS barrier. The "loss" Threshold Value addresses the condition in which a RUPTURED steam generator is also FAULTED. This condition represents a bypass of the RCS and containment barriers. In conjunction with RCS Barrier "loss" Threshold Value #3, this would always result in the declaration of a Site Area Emergency.

The other leakage "loss" Threshold Value addresses SG tube leaks that exceed 10 gpm in conjunction with a nonisolable release path to the environment from the affected steam generator. The threshold for establishing the nonisolable secondary side release is intended to be a prolonged release of radioactivity from the RUPTURED steam generator directly to the environment. This could be expected to occur when the main condenser is unavailable to accept the contaminated steam (i.e., SGTR with concurrent loss of offsite power and the RUPTURED steam generator is required for plant cooldown or a stuck open relief valve). If the main condenser is available, there may be releases via air ejectors, gland seal exhausters, and other similar controlled, and often monitored, pathways. These pathways do not meet the intent of a nonisolable release path to the environment. These minor releases are assessed using Abnormal Rad Levels / Radiological Effluent ICs.

5. Containment Isolation Valve Status After Containment Isolation

This Threshold Value addresses incomplete containment isolation that allows direct release to the environment. It represents a loss of the containment barrier.

The use of the modifier "direct" in defining the release path discriminates against release paths through interfacing liquid systems. The existence of an in–line charcoal filter does not make a release path indirect since the filter is not effective at removing fission noble gases. Typical filters have an efficiency of 95-99% removal of iodine. Given the magnitude of the core inventory of iodine, significant releases could still occur. In addition, since the fission product release would be driven by boiling in the reactor vessel, the high humidity in the release stream can be expected to render the filters ineffective in a short period.

There is no "Potential Loss" Threshold Value associated with this item.

6. Significant Radioactive Inventory in Containment

The greater than 2.4E+8 mR/hr value indicates significant fuel damage well in excess of the Threshold Values associated with both loss of Fuel Clad and loss of RCS Barriers. As stated in Section 3.8, a major release of radioactivity requiring offsite protective actions from core damage is not possible unless a major failure of fuel cladding allows radioactive material to be released from the core into the reactor coolant.

Regardless of whether containment is challenged, this amount of activity in containment, if released, could have such severe consequences that it is prudent to treat this as a potential loss of containment, such that a General Emergency declaration is warranted. NUREG-1228, "Source Estimations During Incident Response to Severe Nuclear Power Plant Accidents,"

indicates that such conditions do not exist when the amount of clad damage is less than 20%. A radiation monitor reading corresponding to 20% fuel clad damage is specified here.

There is no "Loss" Threshold Value associated with this item.

7. Emergency Director Judgment

This Threshold Value addresses any other factors that are to be used by the Emergency Director in determining whether the Containment barrier is lost or potentially lost. In addition, the inability to monitor the barrier should also be incorporated in this Threshold Value as a factor in Emergency Director judgment that the barrier may be considered lost or potentially lost.

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Natural and Destructive Phenomena Affecting the PROTECTED AREA.

Operating Mode Applicability: All

Threshold Value: (1 **OR** 2 **OR** 3 **OR** 4 **OR** 5 **OR** 7)

1. Seismic monitoring system indicates seismic event **OR** plant operators report an earthquake was "felt".

2. Report by plant personnel of tornado **OR** high winds greater than 100 mph striking within PROTECTED AREA.

3. Crash of vehicle, large enough to cause significant damage, into plant structures containing functions or systems required for safe shutdown within the PROTECTED AREA boundary.

4. Report by plant personnel of an unanticipated EXPLOSION within the PROTECTED AREA boundary resulting in VISIBLE DAMAGE to permanent structure **OR** equipment.

5. Report of turbine failure resulting in casing penetration **OR** damage to turbine **OR** generator seals.

6. Not applicable.

7. Sustained hurricane force winds greater than 73 mph forecast to be at the plant site in the next four hours in accordance with 11889-C, Severe Weather Checklist.

Basis:

PROTECTED AREA: the area which normally encompasses all controlled areas within the security protected area fence.

EXPLOSION: is a rapid, violent, unconfined combustion, or catastrophic failure of pressurized equipment that imparts energy of sufficient force to potentially damage permanent structures, systems, or components.

VISIBLE DAMAGE: is damage to equipment or structure that is readily observable without measurements, testing, or analysis. Damage is sufficient to cause concern regarding the continued operability or reliability of affected safety structure, system, or component. Example damage includes: deformation due to heat or impact, denting, penetration, rupture, cracking, paint blistering. Surface blemishes (e.g., paint chipping, scratches) should not be included.

These ICs are categorized on the basis of the occurrence of an event of sufficient magnitude to be of concern to plant operators. Areas identified in the Threshold Values define the location of the event based on the potential for damage to equipment contained therein.

Threshold Value #1 - As defined in the EPRI-sponsored "Guidelines for Nuclear Plant Response to an Earthquake", dated October 1989, a *"felt earthquake"* is:

> An earthquake of sufficient intensity such that: (a) the vibratory ground motion is felt at the nuclear plant site and recognized as an earthquake based on a consensus of control room operators on duty at the time, and (b) for plants with operable seismic instrumentation, the seismic switches of the plant are activated. For most plants with seismic instrumentation, the seismic switches are set at an acceleration of about 0.01g.

Threshold Value #2 is based on the assumption that a tornado striking or high winds within the PROTECTED AREA may have potentially damaged plant structures containing functions or systems required for safe shutdown of the plant. The high wind 100 mph value is based on FSAR design basis (110 mph design) as the highest meter reading available.

Threshold Value #3 addresses crashes of vehicle types large enough to cause significant damage to plant structures containing functions and systems required for safe shutdown of the plant.

For Threshold Value #4 only those EXPLOSIONs of sufficient force to damage permanent structures or equipment within the PROTECTED AREA should be considered. No attempt is made in this Threshold Value to assess the actual magnitude of the damage. The Emergency director also needs to consider any security aspects of the EXPLOSION, if applicable.

Threshold Value #5 addresses main turbine rotating component failures of sufficient magnitude to cause observable damage to the turbine casing or to the seals of the turbine generator. Of major concern is the potential for leakage of combustible fluids and gases to the plant environs. This Threshold Value is consistent with the definition of a NOUE while maintaining the anticipatory nature desired and recognizing the risk to non-safety related equipment.

Threshold Value #6 addresses the effect of flooding caused by internal events such as component failures, equipment misalignment, or outage activity mishaps. PROBABILISTIC RISK ASSESSMENT SUMMARY REPORT REVISION 2C 2001, 3.3.6 Internal Flooding Analysis Results :Based on the analysis, all of the flooding zones were eliminated from further consideration during the qualitative analysis. None of the zones were found to contribute significantly to core damage frequency as a result of a flooding or spray event. The results of this analysis are consistent with the previous VEGP flooding analysis that was performed as part of the VEGP licensing basis.

Threshold Value #7 covers site-specific phenomena of the hurricane based on the severe weather mitigation procedure.

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

FIRE Within PROTECTED AREA Boundary Not Extinguished Within 15 Minutes of Detection.

Operating Mode Applicability: All

Threshold Value:

1. FIRE in buildings **OR** areas contiguous to any of the following areas **NOT** extinguished within 15 minutes of control room notification **OR** verification of a control room alarm unless disproved by personnel observation:

Containment Building
NSCW Cooling Towers
Diesel Generator Building
Auxiliary Building
Fuel Handling Building
Control Building
Diesel Fuel Oil Storage Tank Pumphouse
Auxiliary Feedwater Pumphouse

Basis:

FIRE: is combustion characterized by heat and light. Sources of smoke such as slipping drive belts or overheated electrical equipment do not constitute FIREs. Observation of flame is preferred but is NOT required if large quantities of smoke and heat are observed.

PROTECTED AREA: the area which normally encompasses all controlled areas within the security protected area fence.

The purpose of this IC is to address the magnitude and extent of FIREs that may be potentially significant precursors to damage to safety systems. As used here, *Detection* is visual observation and report by plant personnel or sensor alarm indication.

The 15 minute time period begins with a credible notification that a FIRE is occurring, or indication of a VALID fire detection system alarm. Verification of a fire detection system alarm includes actions that can be taken with the control room or other nearby site-specific location to ensure that the alarm is not spurious. A verified alarm is assumed to be an indication of a FIRE unless it is disproved within the 15 minute period by personnel dispatched to the scene.

The intent of this 15 minute duration is to size the FIRE and to discriminate against small FIREs that are readily extinguished. The intent of this IC is not to include buildings or areas that are not contiguous to plant VITAL AREAs.

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Release of Toxic, Asphyxiant, or Flammable Gases Deemed Detrimental to Normal Operation of the Plant.

Operating Mode Applicability: All

Threshold Values: (1 **OR** 2)

1. Report **OR** detection of toxic, asphyxiant, **OR** flammable gas that has **OR** could enter the Owner Controlled Area in amounts greater than life threatening **OR** flammable concentrations that can affect NORMAL PLANT OPERATIONS.

2. Report by Local, County, **OR** State Officials for evacuation **OR** sheltering of site personnel based on an offsite toxic, asphyxiant, **OR** flammable gas event.

Basis:

NORMAL PLANT OPERATIONS: activities at the plant site associated with routine testing, maintenance, or equipment operations, in accordance with normal operating or administrative procedures. Entry into abnormal or emergency operating procedures, or deviation from normal security or radiological controls posture, is a departure from NORMAL PLANT OPERATIONs.

This IC is based on the existence of uncontrolled releases of toxic, asphyxiant, or flammable gas that may enter the site boundary and affect normal plant operations. It is intended that releases of toxic or flammable gases are of sufficient quantity, and the release point of such gases is such that normal plant operations would be affected. Offsite events are included through a warning by local officials as the resultant affect on NORMAL PLANT OPERATIONS would be the same. This would preclude small or incidental releases, or releases that do not impact structures needed for plant operation. The Threshold Values are not intended to require significant assessment or quantification. The IC assumes an uncontrolled process that has the potential to affect plant operations, or personnel safety.

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Confirmed Security Event Which Indicates a Potential Degradation in the Level of Safety of the Plant.

Operating Mode Applicability: All

Threshold Values: (1 **OR** 2 **OR** 3)

1. Security events with potential degradation in the level of safety of the plant as determined from the Safeguards Contingency Plan reported by security shift supervision.

2. A CREDIBLE site specific security THREAT notification.

3. A validated notification from NRC providing information of an aircraft threat.

Basis:

CREDIBLE THREAT: A threat is considered credible through use of 90321-C, Threat Assessment and Security Force Protection Recommendations

CIVIL DISTURBANCE: is a group of two or more persons violently protesting station operations or activities at the site.

STRIKE ACTION: is a work stoppage within the PROTECTED AREA by a body of workers to enforce compliance with demands. The STRIKE ACTION must threaten to interrupt NORMAL PLANT OPERATIONs.

Reference is made to security shift supervision because these individuals are the designated personnel on-site qualified and trained to confirm that a security event is occurring or has occurred. Training on security event classification confirmation is closely controlled due to the strict secrecy controls placed on the plant Safeguards Contingency Plan.

This Threshold Value #1 is based on the Safeguards Contingency Plan. Security events which do not represent a potential degradation in the level of safety of the plant, are reported under 10 CFR 73.71 or in some cases under 10 CFR 50.72. Examples of security events that indicate Potential Degradation in the Level of Safety of the Plant are CIVIL DISTURBANCE, and STRIKE ACTION when evaluating an event against the criteria of the Safeguards Contingency Plan.

The intent of Threshold Value 2 is to ensure that appropriate notifications for the security threat are made in a timely manner. This includes information of a CREDIBLE THREAT.

The intent of Threshold Value 3 is to ensure that notifications for the security threat are made in a timely manner and that Offsite Response Organizations and plant personnel are at a state of heightened awareness regarding the credible threat. This Threshold Value is met when a plant

receives information regarding an aircraft threat from the NRC. The status and size of the plane is provided by NORAD through the NRC.

A higher initial classification could be made based upon the nature and timing of the threat and potential consequences. The Emergency Director shall consider upgrading the emergency response status and emergency classification in accordance with the Safeguards Contingency Plan and Emergency Plan implementing Procedures.

HU5

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of a NOUE.

Operating Mode Applicability: All

Threshold Value:

1. Other conditions exist which in the judgment of the Emergency Director indicate that events are in process **OR** have occurred which indicate a potential degradation of the level of safety of the plant **OR** indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring offsite response **OR** monitoring are expected unless further degradation of safety systems occurs.

Basis:

This Threshold Value is intended to address unanticipated conditions not addressed explicitly elsewhere but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Director to fall under the NOUE emergency class.

From a broad perspective, one area that may warrant Emergency Director judgment is related to likely or actual breakdown of site-specific event mitigating actions. Examples to consider include inadequate emergency response procedures, transient response either unexpected or not understood, failure or unavailability of emergency systems during an accident in excess of that assumed in accident analysis, or insufficient availability of equipment and/or support personnel.

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Natural and Destructive Phenomena Affecting the Plant VITAL AREA.

Operating Mode Applicability: All

Threshold Values: (1 **OR** 2 **OR** 3 **OR** 4 **OR** 6)

1. Seismic monitoring system confirms seismic event greater than OBE Earthquake acceleration of 0.12 g.

2. Tornado **OR** high winds greater than 100 mph within the PROTECTED AREA boundary **AND** resulting in VISIBLE DAMAGE to any of the following plant structures/equipment **OR** the Control Room has indication of degraded performance of any listed systems:

Containment Building	Fuel Handling Building
NSCW Cooling Towers	Control Building
Diesel Generator Building	Diesel Fuel Oil Storage Tank Pumphouse
Auxiliary Building	Auxiliary Feedwater Pumphouse

3. Vehicle crash within PROTECTED AREA boundary **AND** resulting in VISIBLE DAMAGE to any of the following plant structures **OR** equipment therein **OR** control indication of degraded performance of those systems:

Containment Building	Fuel Handling Building
NSCW Cooling Towers	Control Building
Diesel Generator Building	Diesel Fuel Oil Storage Tank Pumphouse
Auxiliary Building	Auxiliary Feedwater Pumphouse

4. Turbine failure-generated missiles result in any VISIBLE DAMAGE to **OR** penetration of any area containing safety-related equipment, their controls **OR** their power supplies.

Containment Building	Fuel Handling Building
NSCW Cooling Towers	Control Building
Diesel Generator Building	Diesel Fuel Oil Storage Tank Pumphouse
Auxiliary Building	Auxiliary Feedwater Pumphouse

5. Not Applicable

6. Sustained hurricane winds onsite resulting in VISIBLE DAMAGE to plant structures within the PROTECTED AREA boundary containing equipment necessary for safe shutdown.

Basis:

PROTECTED AREA: the area which normally encompasses all controlled areas within the security protected area fence.

VISIBLE DAMAGE: is damage to equipment or structure that is readily observable without measurements, testing, or analysis. Damage is sufficient to cause concern regarding the continued operability or reliability of affected safety structure, system, or component. Example damage includes: deformation due to heat or impact, denting, penetration, rupture, cracking, paint blistering. Surface blemishes (e.g., paint chipping, scratches) should not be included.

The occurrence of VISIBLE DAMAGE and/or degraded system response is intended to discriminate against lesser events. The initial "report" should not be interpreted as mandating a lengthy damage assessment prior to classification. No attempt is made in this Threshold Value to assess the actual magnitude of the damage. The significance here is not that a particular system or structure was damaged, but rather, that the event was of sufficient magnitude to cause this degradation.

Threshold Value #1 is based on the OBE earthquake FSAR design basis of 0.12g horizontal acceleration. Seismic events of this magnitude can result in a plant VITAL AREA being subjected to forces beyond design limits, and thus damage may be assumed to have occurred to plant safety systems.

Threshold Value #2 should be based on the FSAR design basis. Wind loads greater than 110 mph can cause damage to safety functions.

Threshold Value #3 addresses crashes of vehicle types large enough to cause significant damage to plant structures containing functions and systems required for safe shutdown of the plant.

Threshold Value #4 addresses the threat to safety related equipment imposed by missiles generated by main turbine rotating component failures. This Threshold Value is consistent with the definition of an ALERT in that if missiles have damaged or penetrated areas containing safety-related equipment the potential exists for substantial degradation of the level of safety of the plant.

Threshold Value #5 not applicable.

Threshold Value #6 covers site-specific phenomena of a hurricane. The Threshold Value is based damage attributable to the wind.

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

FIRE **OR** EXPLOSION Affecting the Operability of Plant Safety Systems Required to Establish or Maintain Safe Shutdown.

Operating Mode Applicability: All

Threshold Value:

1. FIRE **OR** EXPLOSION in a plant VITAL AREA **AND** affected system parameter indications show degraded performance **OR** plant personnel report VISIBLE DAMAGE to permanent structures **OR** safety related equipment in any of the following:

Containment Building	Fuel Handling Building
NSCW Cooling Towers	Control Building
Diesel Generator Building	Diesel Fuel Oil Storage Tank Pumphouse
Auxiliary Building	Auxiliary Feedwater Pumphouse

Basis:

FIRE: is combustion characterized by heat and light. Sources of smoke such as slipping drive belts or overheated electrical equipment do not constitute FIREs. Observation of flame is preferred but is NOT required if large quantities of smoke and heat are observed.

EXPLOSION: is a rapid, violent, unconfined combustion, or catastrophic failure of pressurized equipment that imparts energy of sufficient force to potentially damage permanent structures, systems, or components.

VITAL AREA: any area, normally within the PROTECTED AREA, which contains equipment, systems, components, or material, the failure, destruction, or release of which could directly or indirectly endanger the public health and safety by exposure to radiation.

VISIBLE DAMAGE: is damage to equipment or structure that is readily observable without measurements, testing, or analysis. Damage is sufficient to cause concern regarding the continued operability or reliability of affected safety structure, system, or component. Example damage includes: deformation due to heat or impact, denting, penetration, rupture, cracking, paint blistering. Surface blemishes (e.g., paint chipping, scratches) should not be included.

The areas listed contain functions and systems required for the safe shutdown of the plant to determine if the FIRE or EXPLOSION is potentially affecting any redundant trains of safety systems.

This Threshold Value addresses a FIRE / EXPLOSION and not the degradation in performance of affected systems. The reference to damage of systems is used to identify the magnitude of the FIRE / EXPLOSION and to discriminate against minor FIREs / EXPLOSIONs. The significance here is not that a safety system was degraded but the fact that the FIRE /

EXPLOSION was large enough to cause damage to these systems. Thus, the designation of a single train was intentional and is appropriate when the FIRE / EXPLOSION is large enough to affect more than one component.

The inclusion of a "report of VISIBLE DAMAGE" should not be interpreted as mandating a lengthy damage assessment prior to classification. The occurrence of the EXPLOSION with reports of evidence of damage is sufficient for declaration. The Emergency Director also needs to consider any security aspects of the EXPLOSIONs, if applicable.

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Release of Toxic, Asphyxiant or Flammable Gases Within or Contiguous to a VITAL AREA Which Jeopardizes Operation of Systems Required to Maintain Safe Operations or Establish or Maintain Safe Shutdown.

Operating Mode Applicability: All

Threshold Values: (1 **OR** 2)

1. Report **OR** detection of toxic **OR** asphyxiant gas within **OR** contiguous to a VITAL AREA in concentrations that may result in an atmosphere IMMEDIATELY DANGEROUS TO LIFE AND HEALTH (IDLH).

2. Report **OR** detection of flammable gases in concentration greater than the LOWER FLAMMABILITY LIMIT within **OR** contiguous to a VITAL AREA.

Basis:

VITAL AREA: any area, normally within the PROTECTED AREA, which contains equipment, systems, components, or material, the failure, destruction, or release of which could directly or indirectly endanger the public health and safety by exposure to radiation.

IMMEDIATELY DANGEROUS TO LIFE AND HEALTH (IDLH): A condition that either poses an immediate threat to life and health or an immediate threat of severe exposure to contaminants which are likely to have adverse delayed effects on health.

LOWER FLAMMABILITY LIMIT (LFL): The minimum concentration of a combustible substance that is capable of propagating a flame through a homogenous mixture of the combustible and a gaseous oxidizer.

This IC is based on gases that affect the safe operation of the plant. This IC applies to buildings and areas contiguous to plant VITAL AREAs or other significant buildings or areas. The intent of this IC is not to include buildings or other areas that are not contiguous or immediately adjacent to plant VITAL AREAs.

Threshold Value #1 is met if measurement of toxic gas concentration results in an atmosphere that is IDLH within a VITAL AREA or any area or building contiguous to VITAL AREA. Exposure to an IDLH atmosphere will result in immediate harm to unprotected personnel, and would preclude access to any such affected areas.

Threshold Value #2 is met when the flammable gas concentration in a VITAL AREA or any building or area contiguous to a VITAL AREA exceed the LOWER FLAMMABILITY LIMIT. This Threshold Value addresses concentrations at which gases can ignite/support combustion. An uncontrolled release of flammable gasses within a facility structure has the potential to affect safe operation of the plant by limiting either operator or equipment operations due to the

potential for ignition and resulting equipment damage/personnel injury. Once it has been determined that an uncontrolled release is occurring, then sampling must be done to determine if the concentration of the released gas is within this range.

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Other Security Events As Determined From The Safeguards Contingency Plan

Operating Mode Applicability: All

Threshold Values:

1. Confirmed security event in the PROTECTED AREA as determined from the Safeguards Contingency Plan reported by security shift supervision.

Basis:

PROTECTED AREA: the area which encompasses all controlled areas within the security protected area fence.

The Safeguards Contingency Plan identifies numerous events/conditions that constitute a threat/compromise to a Station's security. Only those events that involve Actual or Potential Substantial degradation to the level of safety of the plant need to be considered. The following events would not normally meet this requirement: Failure by a Member of the Security Force to carry out an assigned/required duty, internal disturbances, or loss/compromise of safeguards materials.

Reference is made to the security shift supervision because these individuals are the designated personnel on-site qualified and trained to confirm that a security event is occurring or has occurred. Training on security event classification confirmation is closely controlled due to the strict secrecy controls placed on the plant Security Plan.

HA5

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Control Room Evacuation Has Been Initiated.

Operating Mode Applicability: All

Threshold Value:

1. Entry into 18038 – Operation From the Remote Shutdown Panels, procedure for Control Room evacuation.

Basis:

With the control room evacuated, additional support, monitoring and direction through the Technical Support Center and/or other emergency response facility is necessary. Inability to establish plant control from outside the control room will escalate this event to a Site Area Emergency.

HA6

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of an Alert.

Operating Mode Applicability: All

Threshold Value:

1. Other conditions exist which in the judgment of the Emergency Director indicate that events are in process **OR** have occurred which involve actual **OR** likely potential substantial degradation of the level of safety of the plant **OR** a security event that involves probable life threatening risk to site personnel or damage to site equipment because of intentional malicious dedicated efforts of HOSTILE ACTION. Any releases are expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels.

Basis:

HOSTILE ACTION: An act toward an NPP or its personnel that includes the use of violent force to destroy equipment, take hostages, and /or intimidate the licensee to achieve an end. This includes attack by air, land, or water using weapons, explosives, projectiles, vehicles, or other devices used to deliver destructive force. Other acts that satisfy the overall intent may be included. HOSTILE ACTION should not be construed to include acts of civil disobedience or felonious acts that are not part of a concerted attack on the NPP. Non-terrorism-based EALs should be used to address such activities, (e.g., violent acts between individuals in the owner controlled area.)

This Threshold Value is intended to address unanticipated conditions not addressed explicitly elsewhere but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Director to fall under the Alert emergency class.

HA7

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Notification of an Airborne Attack Threat.

Operating Mode Applicability: All

Threshold Value:

1. A validated notification from NRC of an airliner attack threat less than 30 minutes away.

Basis:

The intent of this Threshold Value is to ensure that notifications for the security threat are made in a timely manner and that Offsite Response Organizations and plant personnel are at a state of heightened awareness regarding the credible threat. Only the plant to which the specific threat is made need declare the Alert. This Threshold Value is met when a plant receives information regarding an airliner attack threat from NRC and the airliner is less than 30 minutes away from the plant.

This Threshold Value is intended to address the contingency of a very rapid progression of events due to an airborne hostile attack such as that experienced on September 11, 2001. This Threshold Value is not premised solely on the potential for a radiological release. Rather the issue includes the need for assistance due to the possibility for significant and indeterminate damage from such an attack. Although vulnerability analyses show NPPs to be robust, it is appropriate for Offsite Response Organizations to be notified and encouraged to activate (if they do not normally) to be better prepared should it be necessary to consider further actions. Airliner is meant to be a large aircraft with the potential for causing significant damage to the plant. The status and size of the plane is provided by NORAD through the NRC.

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Notification or HOSTILE FORCE within the OCA

Operating Mode Applicability: All

Threshold Value:

1. A notification from the site security force that an armed attack, explosive attack, airliner impact or other HOSTILE ACTION is occurring or has occurred within the OCA.

Basis:

HOSTILE ACTION: An act toward an NPP or its personnel that includes the use of violent force to destroy equipment, take hostages, and /or intimidate the licensee to achieve an end. This includes attack by air, land, or water using weapons, explosives, projectiles, vehicles, or other devices used to deliver destructive force. Other acts that satisfy the overall intent may be included. HOSTILE ACTION should not be construed to include acts of civil disobedience or felonious acts that are not part of a concerted attack on the NPP. Non-terrorism-based EALs should be used to address such activities, (e.g., violent acts between individuals in the owner controlled area.)

HOSTILE FORCE: One or more individuals who are engaged in a determined assault, overtly or by stealth and deception, equipped with suitable weapons capable of killing, maiming, or causing destruction.

This Threshold Value is intended to address the potential for a very rapid progression of events due to a hostile attack including:

- air attack (airliner impacting the OCA)
- land-based attack (HOSTILE FORCE progressing across licensee property or directing projectiles at the site)
- waterborne attack (HOSTILE FORCE on water attempting forced entry, or directing projectiles at the site)
- BOMBs

This Threshold Value is not intended to address incidents that are accidental or acts of civil disobedience, such as hunters or physical disputes between employees within the OCA or PA. That initiating condition is adequately addressed by other Threshold Values.

This Threshold Value is not premised solely on adverse health effects caused by a radiological release. Rather the issue is the immediate need for assistance due to the nature of the event and the potential for significant and indeterminate damage. Although NPP security officers are well trained and prepared to protect against HOSTILE ACTION, it is appropriate for Offsite

Response Organizations to be notified and encouraged to begin activation) to be better prepared should it be necessary to consider further actions.

This Threshold Value is intended to address the contingency for a very rapid progression of events due to an airborne hostile attack and the possibility for additional attacking aircraft. This Threshold Value is not premised solely on the potential for a radiological release. Rather the issue includes the need for assistance due to the possibility for significant and indeterminate damage from additional attack elements. It is imperative that Offsite Response Organizations be notified and to activate in order to be better prepared to respond should protective actions become necessary. If not previously notified by NRC that the aircraft impact was intentional, then it would be expected, although not certain, that notification by an appropriate Federal agency would follow. In this case, appropriate federal agency is intended to be NORAD, FBI, FAA or NRC. However, the declaration should not be unduly delayed awaiting Federal notification. Airliner is meant to be a large aircraft with the potential for causing significant damage to the plant. The status and size of the plane is provided by NORAD through the NRC.

This IC/Threshold Value addresses the immediacy of an expected threat arrival or impact on the site within a relatively short time. The fact that the site is an identified attack candidate with minimal time available for further preparation requires a heightened state of readiness and implementation of protective measures that can be effective (onsite evacuation, dispersal or sheltering) before arrival or impact.

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Confirmed Security Event in a Plant VITAL AREA.

Operating Mode Applicability: All

Threshold Values:

1. Confirmed security event in the VITAL AREA as determined from the Safeguards Contingency Plan reported by security shift supervision.

Basis:

VITAL AREA: any area, normally within the PROTECTED AREA, which contains equipment, systems, components, or material, the failure, destruction, or release of which could directly or indirectly endanger the public health and safety by exposure to radiation.

The Safeguards Contingency Plan identifies numerous events/conditions that constitute a threat/compromise to a Station's security. Only those events that involve Actual or Likely Major failures of plant functions needed for protection of the public need to be considered. The following events would not normally meet this requirement: Failure by a Member of the Security Force to carry out an assigned/required duty, internal disturbances, loss/compromise of safeguards materials or strike actions.

Reference is made to security shift supervision because these individuals are the designated personnel on-site qualified and trained to confirm that a security event is occurring or has occurred. Training on security event classification confirmation is closely controlled due to the strict secrecy controls placed on the plant Security Plan.

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Control Room Evacuation Has Been Initiated **AND** Plant Control Cannot Be Established.

Operating Mode Applicability: All

Threshold Value:

1. a. Control Room evacuation has been initiated

   AND

   b. Control of the plant **CANNOT** be established per 18038 – Operation From the Remote Shutdown Panels, within 15 minutes.

Basis:

Expeditious transfer of safety systems has not occurred but fission product barrier damage may not yet be indicated. The intent of this IC is to capture those events where control of the plant cannot be reestablished in a timely manner. Site-specific time for transfer based on analysis or assessments as to how quickly control must be reestablished without core uncovering and/or core damage. The determination of whether or not control is established at the remote shutdown panel is based on Emergency Director (ED) judgment. The ED is expected to make a reasonable, informed judgment within the site-specific time for transfer that the licensee has control of the plant from the remote shutdown panel.

The intent of the Threshold Value is to establish control of important plant equipment and knowledge of important plant parameters in a timely manner. Primary emphasis should be placed on those components and instruments that supply protection for and information about safety functions. These safety functions are reactivity control, RCS inventory, and secondary heat removal.

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of Site Area Emergency.

Operating Mode Applicability: All

Threshold Value:

1. Other conditions exist which in the judgment of the Emergency Director indicate that events are in process **OR** have occurred which involve actual **OR** likely major failures of plant functions needed for protection of the public **OR** HOSTILE ACTION that results in intentional damage **OR** malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) that prevent effective access to equipment needed for the protection of the public. Any releases are not expected to result in exposure levels that exceed EPA Protective Action Guideline exposure levels beyond the site boundary.

Basis:

HOSTILE ACTION: An act toward an NPP or its personnel that includes the use of violent force to destroy equipment, take hostages, and /or intimidate the licensee to achieve an end. This includes attack by air, land, or water using weapons, explosives, projectiles, vehicles, or other devices used to deliver destructive force. Other acts that satisfy the overall intent may be included. HOSTILE ACTION should not be construed to include acts of civil disobedience or felonious acts that are not part of a concerted attack on the NPP. Non-terrorism-based EALs should be used to address such activities, (e.g., violent acts between individuals in the owner controlled area.)

This Threshold Value is intended to address unanticipated conditions not addressed explicitly elsewhere but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Director to fall under the emergency class description for Site Area Emergency.

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Site Attack

Operating Mode Applicability: All

Threshold Value:

1. A notification that an armed attack, explosive attack, airliner impact, or other HOSITLE ACTION is occurring or has occurred within the PROTECTED AREA.

Basis:

HOSTILE ACTION: An act toward an NPP or its personnel that includes the use of violent force to destroy equipment, take hostages, and /or intimidate the licensee to achieve an end. This includes attack by air, land, or water using weapons, explosives, projectiles, vehicles, or other devices used to deliver destructive force. Other acts that satisfy the overall intent may be included. HOSTILE ACTION should not be construed to include acts of civil disobedience or felonious acts that are not part of a concerted attack on the NPP. Non-terrorism-based EALs should be used to address such activities, (e.g., violent acts between individuals in the owner controlled area.)

HOSTILE FORCE: One or more individuals who are engaged in a determined assault, overtly or by stealth and deception, equipped with suitable weapons capable of killing, maiming, or causing destruction.

This class of security events represents an escalated threat to plant safety above that contained in the Alert IC in that a HOSTILE FORCE has progressed from the Owner Controlled Area to the Protected Area.

Although NPP security officers are well trained and prepared to protect against HOSTILE ACTION, it is appropriate for Offsite Response Organizations to be notified and encouraged to begin preparations for public protective actions (if they do not normally) to be better prepared should it be necessary to consider further actions.
This Threshold Value is intended to address the potential for a very rapid progression of events due to a dedicated attack. It is not intended to address incidents that are accidental or acts of civil disobedience, such as hunters or physical disputes between employees within the OCA or PA. That initiating condition is adequately addressed by other Threshold Values. HOSTILE ACTION identified above encompasses various acts including:

- air attack (airliner impacting the protected area)
- land-based attack (HOSTILE FORCE penetrating protected area)
- waterborne attack (HOSTILE FORCE on water penetrating protected area)
- BOMBs breeching the protected area

This Threshold Value is intended to address the contingency for a very rapid progression of events due to an airborne hostile attack and the possibility for additional attacking aircraft. This Threshold Value is not premised solely on the potential for a radiological release. Rather the

issue includes the need for assistance due to the possibility for significant and indeterminate damage from additional attack elements. Although vulnerability analyses show NPPs to be robust, it is appropriate for Offsite Response Organizations to be notified and to activate in order to be better prepared to respond should protective actions become necessary. If not previously notified by NRC that the aircraft impact was intentional, then it would be expected, although not certain, that notification by an appropriate Federal agency would follow. In this case, appropriate federal agency is intended to be NORAD, FBI, FAA or NRC. However, the declaration should not be unduly delayed awaiting Federal notification. Airliner is meant to be a large aircraft with the potential for causing significant damage to the plant. The status and size of the plane is provided by NORAD through the NRC.

This Threshold Value addresses the immediacy of a threat to impact site vital areas within a relatively short time. The fact that the site is under serious attack with minimal time available for additional assistance to arrive requires ORO readiness and preparation for the implementation of protective measures.

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Security Event Resulting in Loss Of Physical Control of the Facility.

Operating Mode Applicability: All

Threshold Value:

1. A HOSTILE FORCE has taken control of plant equipment such that plant personnel are unable to operate equipment required to maintain safety functions.

Basis:

HOSTILE FORCE: One or more individuals who are engaged in a determined assault, overtly or by stealth and deception, equipped with suitable weapons capable of killing, maiming, or causing destruction.

This IC encompasses conditions under which a HOSTILE FORCE has taken physical control of VITAL AREAs (containing vital equipment or controls of vital equipment) required to maintain safety functions and control of that equipment cannot be transferred to and operated from another location. These safety functions are reactivity control, RCS inventory, and secondary heat removal. If control of the plant equipment necessary to maintain safety functions can be transferred to another location, then the above initiating condition is not met.

This Threshold Value should also address loss of physical control of spent fuel pool cooling systems if imminent fuel damage is likely (e.g., freshly off-loaded reactor core in pool).

Loss of physical control of the control room or remote shutdown capability alone may not prevent the ability to maintain safety functions per se. Design of the remote shutdown capability and the location of the transfer switches should be taken into account.

HG2

Initiating Condition (Back to Cold IC p.9)(Back to Hot IC p.8)

Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of General Emergency.

Operating Mode Applicability: All

Threshold Value:

1. Other conditions exist which in the judgment of the Emergency Director indicate that events are in process **OR** have occurred which involve actual **OR** imminent substantial core degradation **OR** melting with potential for loss of containment integrity **OR** HOSTILE ACTION that results in an actual loss of physical control of the facility.. Releases can be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the immediate site area.

Basis:

HOSTILE ACTION: An act toward an NPP or its personnel that includes the use of violent force to destroy equipment, takes hostages, and /or intimidates the licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force. Other acts that satisfy the overall intent may be included. HOSTILE ACTION should not be construed to include acts of civil disobedience or felonious acts that are not part of a concerted attack on the NPP. Non- terrorism-based EALs should be used to address such activities, (e.g., violent acts between individuals in the owner controlled area.)

This Threshold Value is intended to address unanticipated conditions not addressed explicitly elsewhere but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Director to fall under the General Emergency class.

Initiating Condition (Back to Hot IC p.8)

Loss of All Offsite Power to Essential Busses for Greater Than 15 Minutes.

Operating Mode Applicability:

Power Operation
Startup
Hot Standby
Hot Shutdown

Threshold Value:

1. a. Loss of power to **OR** from transformers 1(2)NXRA **AND** 1(2)NXRB resulting in loss of all off-site electrical power to **BOTH** 1(2)AA02 **AND** 1(2)BA03 for greater than 15 minutes

   AND

   b. Emergency diesel generators supplying power to **BOTH** 1(2)AA02 **AND** 1(2)BA03.

Basis:

Prolonged loss of AC power reduces required redundancy and potentially degrades the level of safety of the plant by rendering the plant more vulnerable to a complete Loss of AC Power (e.g., Station Blackout). Fifteen minutes was selected as a threshold to exclude transient or momentary power losses.

Initiating Condition (Back to Hot IC p.8)

Inability to Reach Required Shutdown Within Technical Specification Limits.

Operating Mode Applicability:

Power Operation
Startup
Hot Standby
Hot Shutdown

Threshold Value:

1. Plant is **NOT** brought to required operating mode within Technical Specifications LCO Action Statement Time limit.

Basis:

Limiting Conditions of Operation (LCOs) require the plant to be brought to a required shutdown mode when the Technical Specification required configuration cannot be restored. Depending on the circumstances, this may or may not be an emergency or precursor to a more severe condition. In any case, the initiation of plant shutdown required by the site Technical Specifications requires a one hour report under 10 CFR 50.72 (b) Non-emergency events. The plant is within its safety envelope when being shut down within the allowable action statement time in the Technical Specifications. An immediate NOUE is required when the plant is not brought to the required operating mode within the allowable action statement time in the Technical Specifications. Declaration of a NOUE is based on the time at which the LCO-specified action statement time period elapses under the site Technical Specifications and is not related to how long a condition may have existed. Other required Technical Specification shutdowns that involve precursors to more serious events are addressed by other System Malfunction, Hazards, or Fission Product Barrier Degradation ICs.

SU3

Initiating Condition (Back to Hot IC p.8)

UNPLANNED Loss of Most or All Safety System Annunciation or Indication in the Control Room for Greater Than 15 Minutes

Operating Mode Applicability:

Power Operation
Startup
Hot Standby
Hot Shutdown

Threshold Value:

1. UNPLANNED loss of most **OR** all of the MCB annunciators **OR** indicators associated with safety systems for greater than 15 minutes.

Basis:

UNPLANNED: a parameter change or an event that is not the result of an intended evolution and requires corrective or mitigative actions.

This IC and its associated Threshold Value are intended to recognize the difficulty associated with monitoring changing plant conditions without the use of a major portion of the annunciation or indication equipment.

Recognition of the availability of computer based indication equipment is considered.

Quantification of "Most" is arbitrary, however, it is estimated that if approximately 75% of the safety system annunciators or indicators are lost, there is a greater risk that a degraded plant condition could go undetected. It is not intended that plant personnel perform a detailed count of the instrumentation lost but use the value as a judgment threshold for determining the severity of the plant conditions.

It is further recognized that most plant designs provide redundant safety system indication powered from separate uninterruptible power supplies. While failure of a large portion of annunciators is more likely than a failure of a large portion of indications, the concern is included in this Threshold Value due to difficulty associated with assessment of plant conditions.

The annunciators or indicators for this Threshold Value include those identified in the Abnormal Operating Procedures, in the Emergency Operating Procedures, and in other Threshold Values. Fifteen minutes was selected as a threshold to exclude transient or momentary power losses.

SU4

Initiating Condition (Back to Hot IC p.8)

Fuel Clad Degradation.

Operating Mode Applicability:

Power Operation
Startup
Hot Standby
Hot Shutdown

Threshold Values: (1 **OR** 2)

1. VALID reading on ANY of the following:

RE-12444/12442	greater than 2E-3 µCi/cc for greater than 60 min.
RE-12839	greater than 6E-2 µCi/cc for greater than 60 min.
RE-018	greater than 8E-3 µCi/cc for greater than 60 min.

2. RCS coolant sample activity value indicating fuel clad degradation greater than Technical Specification allowable limits as indicated by ANY of the following:

Dose Equivalent I-131 greater than 1 µCi/gm for greater than 48 hours
Dose Equivalent I-131 greater than Technical Specification figure 3.4.16-1 limits
RCS specific activity greater than 100/E µCi/gm gross radioactivity

Basis:

VALID: an indication, report, or condition, is considered to be VALID when it is verified by (1) an instrument channel check, or (2) indications on related or redundant indicators, or (3) by direct observation by plant personnel, such that doubt related to the indicator's operability, the condition's existence, or the report's accuracy is removed. Implicit in this definition is the need for timely assessment.

This IC is included as a NOUE because it is considered to be a potential degradation in the level of safety of the plant and a potential precursor of more serious problems. Threshold Value #1 addresses the specific failed fuel monitor that provides indication of fuel clad integrity.

Threshold Value #2 addresses coolant samples exceeding coolant technical specifications for iodine spike. Escalation of this IC to the Alert level is via the Fission Product Barrier Degradation Monitoring ICs. Though the referenced Technical Specification limits are mode dependent, it is appropriate that the Threshold Value's be applicable in all modes, as they indicate a potential degradation in the level of safety of the plant.

SU5

Initiating Condition (Back to Hot IC p.8)

RCS Leakage.

Operating Mode Applicability: Power Operation
Startup
Hot Standby
Hot Shutdown

Threshold Values: (1 **OR** 2)

1. Unidentified **OR** pressure boundary leakage greater than 10 gpm.

2. Identified leakage greater than 25 gpm.

Basis:

This IC is included as a NOUE because it may be a precursor of more serious conditions and, as result, is considered to be a potential degradation of the level of safety of the plant. The 10 gpm value for the unidentified and pressure boundary leakage was selected as it is observable with normal control room indications. Lesser values must generally be determined through time-consuming surveillance tests (e.g., mass balances). The Threshold Value for identified leakage is set at a higher value due to the lesser significance of identified leakage in comparison to unidentified or pressure boundary leakage.

SU6

Initiating Condition (Back to Hot IC p.8)

UNPLANNED Loss of All Onsite **OR** Offsite Communications Capabilities.

Operating Mode Applicability:

Power Operation
Startup
Hot Standby
Hot Shutdown

Threshold Values: (1 **OR** 2)

1. UNPLANNED loss of ALL of the following on-site communications capability affecting the ability to perform routine operations:

In plant telephones
Public address system
Sound powered phones
Plant radio systems

2. UNPLANNED loss of ALL of the following off-site communications capability:

ENN (Emergency Notification Network)
ENS (Emergency Notification System)
Commercial phones (Radio, PBX, Satellite, Wireless)
VOIP (Voice Over Internet Protocol)
OPX (Off Premise Extension)

Basis:

UNPLANNED: a parameter change or an event that is not the result of an intended evolution and requires corrective or mitigative actions.

The purpose of this IC and its associated Threshold Values is to recognize a loss of communications capability that either defeats the plant operations staff ability to perform routine tasks necessary for plant operations or the ability to communicate problems with offsite authorities.

The availability of one method of ordinary offsite communications is sufficient to inform state and local authorities of plant conditions. This Threshold Value is intended to be used only when extraordinary means are being used to make communications possible. The list for onsite communications encompasses all means of routine communications. The list for offsite communications encompasses all means of communications with offsite authorities.

Initiating Condition (Back to Hot IC p.8)

Inadvertent Criticality.

OPERATING MODE APPLICABILITY Hot Standby
Hot Shutdown

Threshold Value:

1. An UNPLANNED sustained positive startup rate observed on nuclear instrumentation.

Basis:

UNPLANNED: a parameter change or an event that is not the result of an intended evolution and requires corrective or mitigative actions.

This IC addresses inadvertent criticality events. While the primary concern of this IC is criticality events that occur in Cold Shutdown or Refueling modes, the IC is applicable in other modes in which inadvertent criticalities are possible. This IC indicates a potential degradation of the level of safety of the plant, warranting a NOUE classification. This IC excludes inadvertent criticalities that occur during planned reactivity changes associated with reactor startups.

This condition is identified using the startup rate monitor. The term "sustained" is used in order to allow exclusion of expected short term positive startup rates from planned control rod movements. These short term positive startup rates are the result of the rise in neutron population due to subcritical multiplication.

Initiating Condition (Back to Hot IC p.8)

Failure of Reactor Protection System Instrumentation to Complete or Initiate an Automatic Reactor Trip Once a Reactor Protection System Setpoint Has Been Exceeded **AND** Manual Trip Was Successful.

Operating Mode Applicability: Power Operation
Startup
Hot Standby

Threshold Value:

NOTE

A successful manual trip for purposes of declaration is any action taken from the Main Control Board (MCB) that rapidly inserts the control rods, this can be accomplished by tripping the reactor using the Reactor Trip switches on the MCB **OR** by de-energizing both Rod Drive Motor Generator sets from the MCB.

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1. Automatic trip was **NOT** successful but manual trip was successful as indicated by:

   a. An automatic Reactor Protection System trip setpoint exceeded

   AND

   b. An automatic reactor trip did **NOT** occur

   AND

   c. A successful manual trip occurred from the Control Room (NOTE)

Basis:

This condition indicates failure of the automatic protection system to trip the reactor. This condition is more than a potential degradation of a safety system in that a front line automatic protection system did not function in response to a plant transient and thus the plant safety has been compromised, and design limits of the fuel may have been exceeded. An Alert is indicated because conditions exist that lead to potential loss of fuel clad or RCS. Reactor protection system setpoint being exceeded, rather than limiting safety system setpoint being exceeded, is specified here because failure of the automatic protection system is the issue. A manual reactor trip is considered to be a trip input to the automatic Reactor Protection System.

Initiating Condition (Back to Hot IC p.8)

UNPLANNED Loss of Most or All Safety System Annunciation or Indication in Control Room With **EITHER** (1) a SIGNIFICANT TRANSIENT in Progress, **OR** (2) Compensatory Non-Alarming Indicators are Unavailable.

Operating Mode Applicability:

Power Operation
Startup
Hot Standby
Hot Shutdown

Threshold Value: (1 **AND EITHER** 2.a **OR** b.)

1. UNPLANNED loss of most **OR** all MCB annunciators **OR** indicators associated with safety systems for greater than 15 minutes

   AND EITHER

2. a. A SIGNIFICANT TRANSIENT is in progress

   OR

   b. Compensatory non-alarming indications are **NOT** available

Basis:

UNPLANNED: a parameter change or an event that is not the result of an intended evolution and requires corrective or mitigative actions.

SIGNIFICANT TRANSIENT: is an UNPLANNED event involving one or more of the following: (1) automatic turbine runback >25% thermal reactor power, (2) electrical load rejection >25% full electrical load, (3) Reactor Trip, (4) Safety Injection Activation, or (5) thermal power oscillations >10%.

This IC and its associated Threshold Values are intended to recognize the difficulty associated with monitoring changing plant conditions without the use of a major portion of the annunciation or indication equipment during a transient. Recognition of the availability of computer based indication equipment is considered. A "planned" loss of annunciators or indicators includes scheduled maintenance and testing activities.

Quantification of "Most" is arbitrary, however, it is estimated that if approximately 75% of the safety system annunciators or indicators are lost, there is a greater risk that a degraded plant condition could go undetected. It is not intended that plant personnel perform a detailed count of the instrumentation lost but use the value as a judgment threshold for determining the severity of the plant conditions. It is also not intended that the Shift Supervisor be tasked with making a

judgment decision as to whether additional personnel are required to provide augmented monitoring of system operation.

It is further recognized that most plant designs provide redundant safety system indication powered from separate uninterruptible power supplies. While failure of a large portion of annunciators is more likely than a failure of a large portion of indications, the concern is included in this Threshold Value due to difficulty associated with assessment of plant conditions.

The annunciators or indicators for this Threshold Value include those identified in the Abnormal Operating Procedures, in the Emergency Operating Procedures, and in other Threshold Values.

"Compensatory non-alarming indications" in this context includes computer based information such as SPDS. This should include all computer systems available for this use depending on specific plant design and subsequent retrofits. If both a major portion of the annunciation system and all computer monitoring are unavailable, the Alert is required.

SA5

Initiating Condition (Back to Hot IC p.8)

AC power capability to essential busses reduced to a single power source for greater than 15 minutes such that any additional single failure would result in station blackout.

Operating Mode Applicability:

Power Operation
Startup
Hot Standby
Hot Shutdown

Threshold Value:

1. a. Loss of AC power capability to 1(2)AA02 **AND** 1(2)BA03 for greater than 15 minutes

   AND

   b. ANY additional single failure will result in station blackout.

Basis:

This IC and the associated Threshold Values are intended to provide an escalation from IC SU1, "Loss of All Offsite Power To Essential Busses for Greater Than 15 Minutes." The condition indicated by this IC is the degradation of the offsite and onsite power systems such that any additional single failure would result in a station blackout. This condition could occur due to a loss of offsite power with a concurrent failure of one emergency generator to supply power to its emergency busses. Another related condition could be the loss of all offsite power and loss of onsite emergency diesels with only one train of emergency busses being backfed from the unit main generator, or the loss of onsite emergency diesels with only one train of emergency busses being backfed from offsite power.

Initiating Condition (Back to Hot IC p.8)

Loss of All Offsite Power and Loss of All Onsite AC Power to Essential Busses.

Operating Mode Applicability:

Power Operation
Startup
Hot Standby
Hot Shutdown

Threshold Value:

1. Loss of all AC power indicated by:

   a. Loss of power to **OR** from transformers 1(2)NXRA **AND** 1(2)NXRB resulting in loss of all off-site electrical power to **BOTH** 1(2)AA02 **AND** 1(2)BA03 for greater than 15 minutes

   AND

   b. Failure of emergency generators to supply power to emergency busses.

   AND

   c. Restoration of at least one 4160V ESF bus, AA02 **OR** BA03, has **NOT** occurred within 15 minutes of time of loss of all AC power

Basis:

Loss of all AC power compromises all plant safety systems requiring electric power including RHR, ECCS, Containment Heat Removal and the Ultimate Heat Sink. Prolonged loss of all AC power will cause core uncovering and loss of containment integrity, thus this event can escalate to a General Emergency. The 15 minute time duration is selected to exclude transient or momentary power losses.

Consideration should be given to operable loads necessary to remove decay heat or provide Reactor Vessel makeup capability when evaluating loss of AC power to essential busses. Even though an essential bus may be energized, if necessary loads are not operable on the energized bus then the bus should not be considered operable.

Initiating Condition (Back to Hot IC p.8)

Failure of Reactor Protection System Instrumentation to Complete or Initiate an Automatic Reactor Trip Once a Reactor Protection System Setpoint Has Been Exceeded **AND** Manual Trip Was NOT Successful.

Operating Mode Applicability: Power Operation
Startup

Threshold Value:

NOTE

A successful manual trip for purposes of declaration is any action taken from the Main Control Board (MCB) that rapidly inserts the control rods, this can be accomplished by tripping the reactor using the Reactor Trip switches on the MCB **OR** by de-energizing both Rod Drive Motor Generator sets from the MCB.

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1. Automatic **AND** manual trip were **NOT** successful as indicated by:

   a. An automatic reactor trip setpoint was exceeded

   AND

   b. An automatic reactor trip did **NOT** occur

   AND

   c. A successful manual trip did **NOT** occur from the Control Room (NOTE)

Basis:

Automatic and manual trip are not considered successful if action away from the reactor control console was required to trip the reactor.

Under these conditions, the reactor is producing more heat than the maximum decay heat load for which the safety systems are designed. A Site Area Emergency is indicated because conditions exist that lead to imminent loss or potential loss of both fuel clad and RCS. Although this IC may be viewed as redundant to the Fission Product Barrier Degradation IC, its inclusion is necessary to better assure timely recognition and emergency response.

Initiating Condition (Back to Hot IC p.8)

Loss of All Vital DC Power.

Operating Mode Applicability:

Power Operation
Startup
Hot Standby
Hot Shutdown

Threshold Value:

1. Loss of Vital DC power to 125 VDC Buses AD1, BD1, CD1, **AND** DD1 indicated by bus voltage indications less than 105 VDC for greater than 15 minutes.

Basis:

Loss of all DC power compromises ability to monitor and control plant safety functions. Prolonged loss of all DC power will cause core uncovering and loss of containment integrity when there is significant decay heat and sensible heat in the reactor system.

105 VDC bus voltage is based on the minimum bus voltage necessary for the operation of safety related equipment. This voltage value incorporates a margin of at least 15 minutes of operation before the onset of inability to operate those loads.

Initiating Condition (Back to Hot IC p.8)

Complete Loss of Heat Removal Capability.

Operating Mode Applicability:

Power Operation
Startup
Hot Standby
Hot Shutdown

Threshold Value:

1. Complete Loss of Heat Removal Capability as indicated by:

   a. Core Cooling CSF - ORANGE

   AND

   b. Heat Sink CSF - RED

Basis:

This Threshold Value addresses complete loss of functions, including ultimate heat sink, required for hot shutdown with the reactor at pressure and temperature. Reactivity control is addressed in other Threshold Values.

Under these conditions, there is an actual major failure of a system intended for protection of the public. Thus, declaration of a Site Area Emergency is warranted.

Initiating Condition (Back to Hot IC p.8)

Inability to Monitor a SIGNIFICANT TRANSIENT in Progress.

Operating Mode Applicability: Power Operation
Startup
Hot Standby
Hot Shutdown

Threshold Value:

1. Inability to monitor a SIGNIFICANT TRANSIENT in progress as indicated by:

   a. Loss of most **OR** all of the MCB annunciators **OR** indicators associated with safety systems

   AND

   b. Compensatory non-alarming indications are **NOT** available

   AND

   c. Indications needed to monitor the Critical Safety Function Status Tree parameters are **NOT** available

Basis:

SIGNIFICANT TRANSIENT: is an UNPLANNED event involving one or more of the following: (1) automatic turbine runback >25% thermal reactor power, (2) electrical load rejection >25% full electrical load, (3) Reactor Trip, (4) Safety Injection Activation, or (5) thermal power oscillations >10%.

This IC and its associated Threshold Value are intended to recognize the inability of the control room staff to monitor the plant response to a transient. A Site Area Emergency is considered to exist if the control room staff cannot monitor safety functions needed for protection of the public.

The annunciators for this Threshold Value are limited to include those identified in the Abnormal Operating Procedures, in the Emergency Operating Procedures, and in other Threshold Values.

"Compensatory non-alarming indications" in this context includes computer based information such as SPDS.

The indications needed to monitor safety functions necessary for protection of the public must include control room indications, computer generated indications and dedicated annunciation capability. The specific indications are those used to determine such functions as the ability to

shut down the reactor, maintain the core cooled, to maintain the reactor coolant system intact, and to maintain containment intact.

"Planned" and "UNPLANNED" actions are not differentiated since the loss of instrumentation of this magnitude is of such significance during a transient that the cause of the loss is not an ameliorating factor.

Quantification of "Most" is arbitrary, however, it is estimated that if approximately 75% of the safety system annunciators or indicators are lost, there is a greater risk that a degraded plant condition could go undetected. It is not intended that plant personnel perform a detailed count of the instrumentation lost but use the value as a judgment threshold for determining the severity of the plant conditions. It is also not intended that the Shift Supervisor be tasked with making a judgment decision as to whether additional personnel are required to provide augmented monitoring of system operation.

Initiating Condition (Back to Hot IC p.8)

Prolonged Loss of All Offsite Power **AND** Prolonged Loss of All Onsite AC Power to Essential Busses.

Operating Mode Applicability: Power Operation
Startup
Hot Standby
Hot Shutdown

Threshold Value: (1 **AND EITHER** 2 **OR** 3)

1. Loss of ALL AC power indicated by:

   a. Loss of power to **OR** from transformers 1(2)NXRA **AND** 1(2)NXRB resulting in loss of all off-site electrical power to **BOTH** 1(2)AA02 **AND** 1(2)BA03 for greater than 15 minutes

   AND

   b. Failure of emergency diesel generators to supply power to emergency busses.

   AND EITHER

2. Restoration of at least one 4160V ESF bus, AA02 **OR** BA03, within 4 hr. of time of loss is **NOT** likely

   OR

3. Fuel Clad Barrier Evaluation indicates continuing degradation (Loss or Potential Loss) of core cooling

Basis:

Loss of all AC power compromises all plant safety systems requiring electric power including RHR, ECCS, Containment Heat Removal and the Ultimate Heat Sink. Prolonged loss of all AC power will lead to loss of fuel clad, RCS, and containment. The 4 hours to restore AC power is based on a site blackout coping analysis. Appropriate allowance for offsite emergency response including evacuation of surrounding areas should be considered. Although this IC may be viewed as redundant to the Fission Product Barrier Degradation IC, its inclusion is necessary to better assure timely recognition and emergency response.

This IC is specified to assure that in the unlikely event of a prolonged station blackout, timely recognition of the seriousness of the event occurs and that declaration of a General

Emergency occurs as early as is appropriate, based on a reasonable assessment of the event trajectory.

The likelihood of restoring at least one emergency bus should be based on a realistic appraisal of the situation since a delay in an upgrade decision based on only a chance of mitigating the event could result in a loss of valuable time in preparing and implementing public protective actions.

In addition, under these conditions, fission product barrier monitoring capability may be degraded. Although it may be difficult to predict when power can be restored, it is necessary to give the Emergency Director a reasonable idea of how quickly (s)he may need to declare a General Emergency based on two major considerations:

1. Are there any present indications that core cooling is already degraded to the point that Loss or Potential Loss of Fission Product Barriers is imminent?

2. If there are no present indications of such core cooling degradation, how likely is it that power can be restored in time to assure that a loss of two barriers with a potential loss of the third barrier can be prevented?

Thus, indication of continuing core cooling degradation must be based on Fission Product Barrier monitoring with particular emphasis on Emergency Director judgment as it relates to imminent Loss or Potential Loss of fission product barriers and degraded ability to monitor fission product barriers.

Initiating Condition (Back to Hot IC p.8)

Failure of the Reactor Protection System to Complete an Automatic Trip and Manual Trip was NOT Successful **AND** there is Indication of an Extreme Challenge to the Ability to Cool the Core.

Operating Mode Applicability: Power Operation
Startup

Threshold Value: **(1 OR 2)**

NOTE

Heat Sink CSF should not be considered – RED if total AFW flow is less than 570 gpm due to operator action.

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1. Subcriticality CSF - RED

   AND

   Core Cooling CSF - RED

   OR

2. Subcriticality CSF - RED

   AND

   Heat Sink CSF - RED

Basis:

Automatic and manual trip are not considered successful if action away from the reactor control console is required to trip the reactor. Under the conditions of this IC and its associated Threshold Values, the efforts to bring the reactor subcritical have been unsuccessful and, as a result, the reactor is producing more heat than the maximum decay heat load for which the safety systems were designed. Although there are capabilities away from the reactor control console, such as emergency boration, the continuing temperature rise indicates that these capabilities are not effective. This situation could be a precursor for a core melt sequence. This Threshold Value equates to a Subcriticality RED condition.

The extreme challenge to the ability to cool the core is intended to mean that the core exit temperatures are at or approaching 1200 degrees F or that the reactor vessel water level is below the top of active fuel. This Threshold Value equates to a Core Cooling RED condition.

Another consideration is the inability to initially remove heat during the early stages of this sequence. If emergency feedwater flow is insufficient to remove the amount of heat required by design from at least one steam generator, an extreme challenge should be considered to exist. This Threshold Value equates to a Heat Sink RED condition.

In the event either of these challenges exist at a time that the reactor has not been brought below the power associated with the safety system design (typically 3 to 5% power) a core melt sequence exists. In this situation, core degradation can occur rapidly. For this reason, the General Emergency declaration is intended to be anticipatory of the fission product barrier matrix declaration to permit maximum offsite intervention time.

F:\SNC Wall Charts\
vogtle Hot size D + Fl

F:\SNC Wall Charts\
Vogtle Hot size C.vsd

F:\SNC Wall Charts\
Vogtle FPB 11X17.vsc

F:\SNC Wall Charts\
Vogtle Cold size D.vsc

F:\SNC Wall Charts\
Vogtle Cold size C.vsc

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Enclosure 5
Miscellaneous Documents

No. 5 VEGP Emergency Information For Visitors To The Area

PLANT VOGTLE EMERGENCY INFORMATION

FOR VISITORS TO THE AREA

FIRST THINGS FIRST

If you are visiting within 10 miles of Plant Vogtle, we would like you to take a few minutes to read this brochure. Please read through it now.

Make sure that you and anyone with you understand what it says. In the event of an emergency, the best way to stay safe is to know what to do ahead of time.

Keep this brochure in a handy place.

If you have any questions about it, ask one of these offices for help.

Emergency Agency Phone Numbers	
County	**EMA**
Aiken	(803) 642-1623
Allendale	(803) 584-4081
Barnwell	(803) 259-7013
Burke	(706) 554-6651

Georgia Emergency Management Agency
Post Office Box 18055
Atlanta, Georgia 30316
Phone Number 1-800-TRY-GEMA (879-4362) or
Emergency Number (404) 635-7200

South Carolina Emergency Preparedness Division
1100 Fish Hatchery Road
West Columbia, South Carolina 21972
Phone Number (803) 737-8500

Vogtle Visitors Center
Post Office Box 1600
Waynesboro, Georgia 30830
Phone Number (706) 554-9407 or
Emergency Number 1-888-847-1186
www.georgiapower.com

When will an emergency affect you?

The Nuclear Regulatory Commission and the Environmental Protection Agency have studied this question. They have found you will probably never be affected. However, if you are as close as 10 miles from Plant Vogtle, you need to be prepared in case there is an emergency.

How will you be told about an emergency?

Outdoor sirens will warn you.

- A steady tone of three to five minutes will sound.
- In boating and recreational areas, local law enforcement officials will sound their sirens and loudspeakers to warn visitors.

Local Radio Stations		
County	**Station**	**Dial**
Burke	WYFA FM	107.1
Aiken	WKXC FM	99.5
Allendale	WDOG FM	93.5
	WDOG AM	1460
Barnwell	WBAW FM	99.1
All counties	WBBQ FM	104.3
	WEKL FM	102.3
	WBBQ AM	1340
	WGUS AM	1380

If there is an emergency, do not listen to rumors. Listen to one of the radio or TV Stations listed below for correct information.

TV Stations	
Station	**Channel**
WJBF	6
WRDW	12
WFXG	54
WAGT	26

EMERGENCY ACTIONS

What are the actions you might need to take?

The two actions you might be asked to take to protect yourself are called TAKE SHELTER and EVACUATE. They are described later. Be sure you understand them.

Follow these steps to be prepared for an emergency.

1. Look at the map and pick out the zone where you are. Pick out the evacuation route for your zone.
2. Keep your important papers together. That way you can gather them quickly when you need them.
3. Keep together other things you might use on a trip. Examples are a flashlight, a tool kit, a portable radio, medical needs and personal items.
4. Keep enough gas in your car for a short drive.

Emergency Response Plans.

If there is an accident at Plant Vogtle, experts will decide how serious it is. Federal, state, and county officials will be notified. Based on the plans described here, state and county officials will decide what – if anything – you need to do. Be sure you understand these plans. If you have any questions while reading this brochure, ask someone at one of the offices listed earlier for help now. That way you will be prepared if an emergency occurs.

There are four classes of emergencies at nuclear power plants. Local officials may use these terms:

Notification of Unusual Event. A minor problem has occurred. No release of radioactive material has taken place. No release of radioactive matter is expected. You will not have to do anything.

Alert. This is also a minor problem. Small amounts of radioactive material could be released inside the plant. All the officials will be told of this and will be asked to stand by. It is not likely that you will have to do anything.

Site Area Emergency. This is a more serious problem. Small amounts of radioactive material could be released into the area right around the plant. If action is needed, the sirens will be activated. Turn on your AM/FM radio for more information. TV stations may also broadcast information about the emergency. County officials will be ready to help you, if needed.

General Emergency. This is the most serious kind of problem. Radioactive material could be released outside the plant site. You may have to protect yourself. If action is needed, the sirens will be activated. Turn on your AM/FM radio for more information. TV stations may also broadcast information about the emergency. County officials will help you and tell you what you need to do.

If there is an emergency at Plant Vogtle, radio and TV stations will broadcast information about which zones and recreational areas might be affected.

WHAT IF YOU ARE TOLD TO TAKE SHELTER?

Taking shelter means protecting yourself by going inside a building and keeping out as much outside air as you can. The building could be a house, the place you work, or some other nearby building. Taking shelter will help keep you safe if there is a small amount of radiation in the air.

Take these steps to protect yourself if you are told to TAKE SHELTER.

- Go inside a nearby building. Close all windows and outside doors.
- Turn off heating or cooling systems and attic fans. Use heating and cooling systems only to protect life or health.
- Do not use fireplaces. Put out the fire. Close the dampers.
- Stay indoors until you receive official notice that it is safe to go out, or you are asked to leave the area.
- If you must go outside, protect your breathing. Place a damp cloth or towel over your nose and mouth. Fold the cloth over several times.

WHAT IF YOU ARE TOLD TO EVACUATE?

This means that you and anyone with you should move to a place more than 15 miles outside the emergency area. Go first to your Reception Center/Shelter.

Plans have been made to give you housing if you need it. You may also need to be checked for radiation. This will be done at the Reception Center/Shelter. Look at the map now and follow the steps to find your closest Reception Center/Shelter and how to get there.

Take these steps to get ready to evacuate.

1. Stay calm. If you already know where to go and what to take, that will help you. You will have time to do what you need to do.
2. Stay tuned to one of the radio or TV stations listed earlier for news about the emergency.
3. Follow the evacuation route as indicated on the enclosed map. Traffic control officials will help guide you on the trip.
4. Turn on your car radio for further information.
5. Close car windows and vents. Keep the air conditioner and heater off.
6. Drive carefully to your Reception Center/Shelter and sign in.

Ask these kinds of questions when you get to the Reception Center/Shelter.

- How to get checked for radiation.
- How to get medical or other help.
- How to get shelter if you need it.

FOLLOW THESE STEPS FOR USING THE MAP AND THE CHART

1. Find the zone on the map where you are. Look on the map to get the letter and number of that zone.
2. Find that same letter and number in the column in the chart headed "zone".
3. Find the evacuation route for your zone. Look across the chart to the next column headed "Evacuation Routes." This column tells you the number of the route to take to the Reception Center/Shelter. Each evacuation route is shown on the map. If more than one route number is listed in the second column for your zone, choose the one that is easiest for you to follow.

ZONE	EVACUATION ROUTES	RECEPTION CENTERS
A	Evacuation Route 2 or Evacuation Route 3	Burke Co. Comprehensive High School Perimeter Road Burke County
B-5	Evacuation Route 3 or Evacuation Route 4	
C-5	Evacuation Route 2 or Evacuation Route 3	Burke Co. Comprehensive High School Perimeter Road Burke County
D-5	Evacuation Route 2	
E-5	Evacuation Route 1 or Evacuation Route 2	Burke Co. Comprehensive High School Perimeter Road Burke County
F-5	Evacuation Route 1 or Evacuation Route 2	

ZONE	EVACUATION ROUTES	RECEPTION CENTERS
B-10	Evacuation Route 4	Burke Co. Comprehensive High School Perimeter Road Burke County
C-10	Evacuation Route 3 or Evacuation Route 4	
D-10	Evacuation Route 2, 3, or 4	Burke Co. Comprehensive High School Perimeter Road Burke County
E-10	Evacuation Route 1, 2, or 3	Burke Co. Comprehensive High School Perimeter Road Burke County
F-10	Evacuation Route 1	

ZONE	EVACUATION ROUTES	RECEPTION CENTERS
G-10	Evacuation Route 5 Cowden Plantation	South Aiken High School Pine Log Road Aiken County
H-10	Evacuation Route 6 Creek Plantation	Allendale Primary School U.S. 278 Allendale County
Savannah River Site	If directed north on South Carolina 125 to Highway 63, take Evacuation Route 5 or if directed south on South Carolina 125, take Evacuation Route 6 instead	South Aiken High School Pine Log Road Aiken County Allendale Primary School U.S. 278 Allendale County

Evacuation Route 1
- Ben Hatcher Road to Shell Bluff Spur to Georgia Highway 80, Georgia Highway 80 to Georgia Highway 56 to Perimeter Rd. to Burke Co. Comprehensive High School

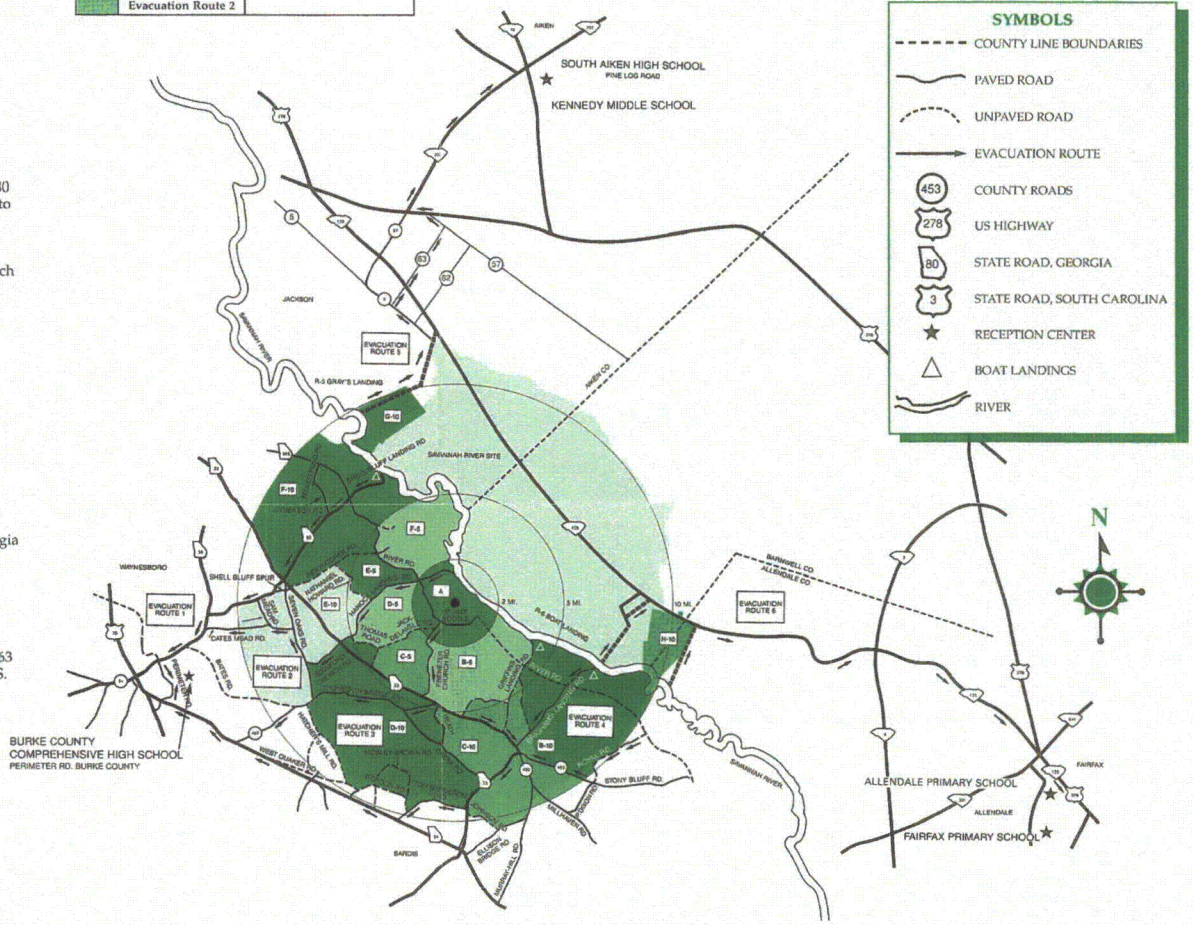
Evacuation Route 2
- Hancock Landing Road to Botsford Church Road to Seven Oaks Road to Cates Mead Road to Highway 56 to Perimeter Rd. to Burke Co. Comprehensive High School

Evacuation Route 3
- Ebenezer Church Road to Hwy 23 to Thompson Bridge Road to Georgia Highway 24 to Perimeter Rd. to Burke Co. Comprehensive High School

Evacuation Route 4
- Brigham's Landing Road to Georgia Highway 23 to Tom Bargeron Road to Georgia Highway 24 to Perimeter Rd. to Burke Co. Comprehensive High School
- Royal Road to Stoney Bluff Road to Georgia Highway 23 to Tom Bargeron Road to Georgia Highway 24 to Perimeter Rd. to Burke Co. Comprehensive High School

Evacuation Route 5 (Zone G-10, Cowden Plantation):
- West on County Road 5 to County Road 63 (North), to County Road 57 (West), to U.S. Highway 278 (North), to South Carolina Highway 302 (North) to South Aiken High School

Evacuation Route 6 (Zone H-10, Creek Plantation):
- South on South Carolina Highway 125. Continue South on U.S. Highway 278 to Allendale Primary School



RADIATION INFORMATION

Q. What is radiation?

A. It is a form of energy. It is released when an atom splits.

Q. Where does does radiation come from?

A. Radiation is a natural part of our daily world. It has been present since the world began. Most of the natural radiation we receive is from the sun. Very small amounts of natural radiation are also present in the food we eat. It is also in the the air we breathe and the water we drink. It is even in the materials we build with.

We are also exposed to radiation from man-made sources. These include medical and dental x-rays and color TV sets. The amount of radiation dose that a person gets is measured in "millirems." Here are some examples. This is the average amount of radiation received by the general public in one year and where it comes from:

	Millirems/Year [1]
Food and Water	40
Diagnostic X-Ray	40
Soil and Rocks	29
Cosmic Rays	27
Building Materials	7
Water Supply	3
Mining and Farming	2
Burning Fuels	2
Color TV	less than 1
Living Next to a Nuclear Power Plant	less than 1

[1] from: The National Council on Radiation Protection and Measurements, 8/91.

Q. What about radiation from nuclear power plants?

A. All working nuclear power plants emit some radiation. But it is important to remember that the amount is very small compared to other man-made and natural sources. Nuclear power plants have many protective layers to prevent the release of radiation from the plant.

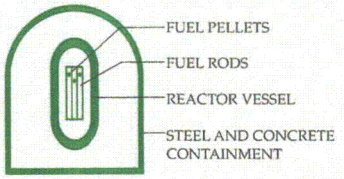
Q. Can we be protected from radiation?

A. Yes. Just going inside a building will help a lot. The building itself will provide some protection against radiation. You should also shut off anything that could pull in outside air. You might be asked to take one of two actions to protect yourself: take shelter or evacuate.

Q. What kind of protection does a nuclear power plant offer?

A. A nuclear power plant has a series of barriers to keep radiation inside the plant. The nuclear fuel is inside pellets that are covered with metal. They are placed inside the reactor vessel, which is 5 1/2 -inch-thick steel. This vessel is inside a building with walls made of steel and concrete which are several feet thick.

RADIATION BARRIERS



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AR-07-0656
Enclosure 5
Miscellaneous Documents

No. 6 Georgia Emergency Operations Plan (GEOP)

Georgia Emergency Operations Plan

Updated
February 2006

PREFACE

This comprehensive state emergency operations plan is developed to ensure mitigation and preparedness, appropriate response and timely recovery from natural and man-made hazards which may affect residents of Georgia. All actions undertaken by emergency management focus on the protection of lives and property, with special sensitivity toward victims and their families. The Georgia Emergency Management Agency encourages education and training to prepare the citizens of Georgia to respond to an emergency or disaster in the most cost-efficient manner.

The Georgia Emergency Operations Plan (GEOP) is organized based on the authority of the state government for emergency management and contains specific Emergency Support Functions (ESFs). Standard Operating Procedures (SOPs) are the responsibility of the primary state agency or organization for each ESF in coordination with other supporting agencies and organizations.

The plan consists of four sections:

1. *Basic Plan*—outlines the legal basis, situations and assumptions, responsibilities, concept of operations, direction and coordination of emergency operations;

2. *Appendices*—provide support information referenced in the plan;

3. *Emergency Support Function Annexes*—state specific assistance, describes each primary agency's responsibility and authority, including each support agency's and organization's responsibilities and indicates the direction and coordination of each function;

Additionally, in accordance with the National Response Plan (NRP) Support and Incident Annexes will be published as additions to the GEOP as developed.

Support Annexes – provide guidance and describe the functional processes and administrative requirements necessary to ensure efficient and effective of the GEOP incident management objective; and

Incident Annexes – address contingency or hazard situations requiring specialized application of the GEOP. The Incident Annexes describe the missions, policies, responsibilities, and coordination processes that govern the interaction of public and private entities engaged in incident management and emergency response operations across many potential hazards. These annexes are typically augmented by a variety of supporting plans and operational supplements.

THE STATE OF GEORGIA

EXECUTIVE ORDER

BY THE GOVERNOR:

WHEREAS: The State of Georgia may be subjected to emergencies and disasters of all types and of various magnitudes; and

WHEREAS: The State of Georgia should be prepared to respond to the effects of such emergencies and disasters to protect public peace, health and safety and to preserve lives and property of the people; and

WHEREAS: The effects of such emergencies and disasters may have a harmful effect upon the citizens of Georgia; and

WHEREAS: The effects of such emergencies and disasters may be mitigated by effective planning and operations; and

WHEREAS: Such planning and operations should be a coordinated effort of all State Boards, Departments, Agencies, Associations, Institutions and Authorities; and

WHEREAS: The coordinated effort may best be obtained through the Georgia Emergency Management Agency; and

WHEREAS: The coordinated effort may include functions that cut across normal departmental or agency lines and may include comparable functions of federal agencies and of other states, local jurisdictions, private sector agencies, and volunteer disaster relief organizations.

NOW, THEREFORE, BY THE AUTHORITY VESTED IN ME AS GOVERNOR OF THE STATE OF GEORGIA, IT IS HEREBY

ORDERED: That on behalf of the Governor, the Director of the Georgia Emergency Management Agency shall be authorized to exercise overall direction and coordination of emergency and disaster planning and operations, as stated in the Georgia Emergency Management Act of 1981, as amended, and in accordance with the Governor's Executive Order issued August 25, 2004, establishing the Homeland Security Central Command;

IT IS FURTHER

ORDERED: That on behalf of the Governor, the Director of the Georgia Emergency Management Agency shall be authorized to activate and deactivate the State

Operations Center, or other GEMA Command and Control Facilities to exercise overall direction and control of emergency or disaster planning operations. All State Boards, Departments, Agencies, Associations, Institutions and Authorities will support any emergency or disaster as directed;

IT IS FURTHER

ORDERED: That a decision to fully activate the State Emergency Operations Center shall constitute implementation of the Georgia Emergency Operations Plan;

IT IS FURTHER

ORDERED: The Georgia Emergency Operations Plan shall be the framework for operations should an emergency or disaster strike anywhere in the State;

IT IS FURTHER

ORDERED: That the Plan shall be binding on all local emergency management programs and on all State Boards, Departments, Agencies, Associations, Institutions and Authorities, and the Plan shall serve as the basis to assist all local governments in times of emergency or disaster;

IT IS FURTHER

ORDERED: That the Director of the Georgia Emergency Management Agency shall coordinate the activities of all organizations for emergency management in the State and shall perform other duties as prescribed herein;

IT IS FURTHER

ORDERED: The primary and support function responsibilities for emergency management services and resources are as follows:

EMERGENCY SUPPORT FUNCTION	**Agency/Organization**
1. TRANSPORTATION	**PRIMARY** Department of Transportation Department of Public Safety **SUPPORT** Board of Regents of the University System of Georgia Department of Administrative Services Department of Agriculture Department of Corrections Department of Defense Department of Driver Services Department of Education Department of Human Resources Department of Natural Resources Georgia Building Authority Georgia Emergency Management Agency

	Georgia Forestry Commission
2. COMMUNICATIONS	**PRIMARY** Georgia Emergency Management Agency
	SUPPORT American Radio Relay League, Inc. Board of Regents of the University System of Georgia Department of Administrative Services Department of Defense Department of Natural Resources Department of Public Safety Department of Revenue Department of Transportation Georgia Bureau of Investigation Georgia Forestry Commission Georgia Public Broadcasting Georgia Technology Authority Public Service Commission
3. PUBLIC WORKS & ENGINEERING	**PRIMARY** Department of Natural Resources Department of Transportation
	SUPPORT Board of Regents of the University System of Georgia Department of Administrative Services Department of Agriculture Department of Community Affairs Department of Corrections Department of Defense Georgia Building Authority Georgia Environmental Facilities Authority Georgia Forestry Commission Public Service Commission
4. FIREFIGHTING	**PRIMARY** Georgia Forestry Commission
	SUPPORT Board of Regents of the University System of Georgia Department of Administrative Services Department of Agriculture Department of Corrections Department of Defense Department of Human Resources Department of Natural Resources Department of Public Safety

	Department of Transportation Georgia Bureau of Investigation Georgia Emergency Management Agency Office of the Commissioner of Insurance and Fire Safety
5. EMERGENCY MANAGEMENT SERVICES	**PRIMARY** Georgia Emergency Management Agency **SUPPORT** Board of Regents of the University System of Georgia Department of Administrative Services Department of Agriculture Department of Audits and Accounts Department of Community Affairs Department of Corrections Department of Defense Department of Economic Development Department of Education Department of Human Resources Department of Natural Resources Department of Public Safety Department of Transportation Georgia Building Authority Georgia Bureau of Investigation Georgia Forestry Commission Governor's Office of Consumer Affairs Office of the Commissioner of Insurance and Fire Safety Office of Planning and Budget Georgia Public Safety Training Center Public Service Commission
6. MASS CARE, HOUSING, & HUMAN SERVICES	**PRIMARY** Department of Human Resources **PRINCIPAL VOLUNTEER AGENCY** American Red Cross **SUPPORT** American Red Cross Board of Regents of the University System of Georgia Department of Administrative Services Department of Community Affairs Department of Corrections Department of Defense Department of Education Department of Natural Resources

	Department of Public Safety Department of Technical and Adult Education Department of Transportation Department of Veterans Services Georgia Baptist Convention Georgia Building Authority Georgia Forestry Commission Georgia Public Safety Training Center Office of Planning and Budget Prosecuting Attorneys Council of Georgia The Salvation Army
7. RESOURCE SUPPORT	**PRIMARY** Department of Administrative Services **SUPPORT** Board of Regents of the University System of Georgia Criminal Justice Coordinating Council Department of Community Affairs Department of Defense Department of Education Department of Human Resources Georgia Emergency Management Agency Georgia Environmental Facilities Authority Georgia Ports Authority Georgia Public Safety Training Center Office of Planning and Budget
8. PUBLIC HEALTH & MEDICAL SERVICES	**PRIMARY** Department of Human Resources **SUPPORT** American Red Cross Board of Regents of the University System of Georgia Department of Administrative Services Department of Agriculture Department of Corrections Department of Defense Department of Education Department of Labor Department of Natural Resources Department of Public Safety Department of Technical and Adult Education Department of Transportation Georgia Building Authority Georgia Bureau of Investigation Georgia Forestry Commission Georgia Hospital Association

	Georgia Nurse Association Georgia Pharmacy Association Georgia Technology Authority Prosecuting Attorneys Council of Georgia
9. SEARCH AND RESCUE	**PRIMARY** Georgia Emergency Management Agency
	SUPPORT Department of Administrative Services Department of Corrections Department of Defense Department of Human Resources Department of Natural Resources Department of Public Safety Department of Transportation Georgia Bureau of Investigation
10. HAZARDOUS MATERIALS	**PRIMARY** Department of Natural Resources Georgia Emergency Management Agency
	SUPPORT Department of Administrative Services Department of Agriculture Department of Corrections Department of Defense Department of Human Resources Department of Public Safety Department of Transportation Georgia Forestry Commission Georgia Public Safety Training Center Public Service Commission
11. AGRICULTURE& NATURAL RESOURCES	**PRIMARY** Department of Agriculture Department of Natural Resources
	SUPPORT Board of Regents of the University System of Georgia Department of Administrative Services Department of Corrections Department of Defense Department of Education Department of Human Resources Department of Labor Department of Public Safety Department of Transportation

	Georgia Building Authority Georgia Bureau of Investigation Georgia Emergency Management Agency Georgia Forestry Commission Georgia Public Safety Training Center Georgia Voluntary Organizations Active in Disasters
12. ENERGY	**PRIMARY** Department of Agriculture Public Service Commission **SUPPORT** Board of Regents of the University System of Georgia Department of Administrative Services Department of Defense Department of Natural Resources Department of Public Safety Department of Transportation Georgia Environmental Facilities Authority Georgia Forestry Commission Georgia Power Company Georgia Transmission Corporation
13. PUBLIC SAFETY & SECURITY SERVICES	**PRIMARY** Department of Public Safety Georgia Bureau of Investigation Governor's Office of Consumer Affairs **SUPPORT** Board of Regents of the University System of Georgia Department of Administrative Services Department of Corrections Department of Defense Department of Human Resources Department of Natural Resources Department of Transportation Department of Veterans Service Georgia Emergency Management Agency Georgia Forestry Commission Georgia Public Safety Training Center Public Service Commission State Board of Pardons and Parole
14. LONG TERM RECOVERY & MITIGATION	**PRIMARY** Georgia Emergency Management Agency **SUPPORT** Department of Administrative Services

Department of Audits
Department of Community Affairs
Department of Natural Resources
Department of Transportation
Georgia Building Authority
Georgia Environmental Facilities Authority
Georgia Forestry Commission
Georgia Residential Finance Authority
Office of the Commissioner of Insurance and Fire Safety
Office of Planning and Budget
Public Service Commission

15. EXTERNAL AFFAIRS

PRIMARY
Georgia Emergency Management Agency
Office of the Governor

SUPPORT
American Red Cross
Association of County Commissioners of Georgia
Board of Regents of the University System of Georgia
Criminal Justice Coordinating Council
Department of Administrative Services
Department of Agriculture
Department of Community Affairs
Department of Defense
Department of Education
Department of Human Resources
Department of Economic Development
Department of Labor
Department of Natural Resources
Department of Public Safety
Department of Technical and Adult Education
Department of Transportation
Georgia Bureau of Investigation
Georgia Forestry Commission
Georgia Municipal Association
Georgia Public Broadcasting
Georgia Public Safety Training Center
Peace Officers Standards and Training Council
Public Service Commission

IT IS FURTHER

ORDERED: That all other State Boards, Departments, Agencies, Associations, Institutions and Authorities not assigned a primary or support role in emergency services will carry out whatever duties or services as may be specified or directed by the Governor;

IT IS FURTHER

ORDERED: Each state agency assigned primary Emergency Support Function responsibilities shall provide assistance in preparation and revision of such functions, collaborate with support agencies and maintain supporting plans and accompanying Standard Operating Procedures;

IT IS FURTHER

ORDERED: That supporting plans prepared by local governments and by heads of State Boards, Departments, Agencies, Associations, Institutions and Authorities will conform to the guidance issued herein

IT IS FURTHER

ORDERED: That in the event the Governor declares a State of Emergency or Disaster, the Department of Public Safety, assisted by other state law enforcement agencies, including the Georgia Department of Defense, shall, at the direction of the Governor, be authorized to enforce any and all criminal laws of this State, such enforcement not being limited to the enforcement of traffic laws, and said State Boards, Departments, Agencies, Associations, Institutions and Authorities shall assist with evacuations in the State, if required;

IT IS FURTHER

ORDERED: That any Executive Order in conflict with this document is hereby rescinded.

This 14th day of February, 2006.

Sonny Perdue

GOVERNOR

ATTEST:

John K. Hall

EXECUTIVE SECRETARY

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F. Glossary
G. Authorities and References

GEOP AT-A-GLANCE

GEOP Revised 2005			GEOP 2000	NRP 2004
ESF #	**ESF Title**	**Primary Agency**	**ESF # - ESF Title**	**ESF # - ESF Title**
ESF – 1	Transportation	DOT, DPS	ESF 1 – Transportation	ESF 1 – Transportation
ESF – 2	Communications	GEMA	ESF 2 – Communications	ESF 2 – Communications
ESF – 3	Public Works and Engineering	DNR, DOT	ESF 3 – Public Works and Engineering	ESF 3 – Public Works and Engineering
ESF – 4	Firefighting	GFC	ESF 4 – Firefighting	ESF 4 – Firefighting
ESF – 5	Emergency Management	GEMA	ESF 16 – Evacuation ESF 20 – Damage Assessment	ESF 5 – Emergency Management
ESF – 6	Mass Care, Housing, and Human Services	DHR; ARC	ESF 6 – Mass Care	ESF 6 – Mass Care, Housing and Human Services
ESF – 7	Resource Support	DOAS	ESF 7 – Resource Support	ESF 7 – Resource Support
ESF – 8	Public Health & Medical Services	DHR	ESF 8 – Health and Medical	ESF 8 – Public Health and Medical Services
ESF – 9	Search and Rescue	GEMA	ESF 9 – Search, Rescue and Recovery	ESF 9 – Urban Search and Rescue
ESF -- 10	Hazardous Materials	DNR, GEMA	ESF 10 – Hazardous Materials	ESF 10 – Oil and Hazardous Materials
ESF – 11	Agriculture and Natural Resources	GDA, DNR	ESF 11 - Food ESF 14 – Animals & Animal Industry	ESF 11 – Agriculture and Natural Resources
ESF – 12	Energy	GDA, PSC	ESF 12 – Energy	ESF 12 – Energy
ESF – 13	Public Safety and Security Services	DPS, GBI, OCA	ESF 15 – Law Enforcement ESF 19 – Deceased Identification and Mortuary Services	ESF 13 - Public Safety and Security Services
ESF – 14	Long Term Recovery and Mitigation	GEMA		ESF 14 – Long Term Recovery and Mitigation
ESF – 15	External Affairs	GEMA, Ofc. of the Governor	ESF 5 – Information and Planning ESF 17 – Public Information	ESF 15 –External Affairs

DISTRIBUTION LIST

AGENCY	NUMBER OF COPIES
Department of Administrative Services	3
Department of Agriculture	4
Department of Audits and Accounts	1
Department of Banking and Finance	2
Department of Community Affairs	1
Department of Corrections	3
Department of Defense	1
Department of Driver Services	1
Department of Economic Development	3
Department of Education	2
Department of Human Resources	25
Department of Juvenile Justice	1
Department of Labor	2
Department of Law	1
Department of Medical Assistance	1
Department of Natural Resources	3
Department of Public Safety	2
Department of Revenue	1
Department of Technical and Adult Education	1
Department of Transportation	12
Department of Veterans Service	1
Adventist Community Services	1
Agency for the Removal of Hazardous Materials	1
American Radio Relay League, Inc	1
American Red Cross	13
Association County Commissioners of Georgia	1
Board of Regents of the University System of Georgia	1
Church of World Services	1

BASE PLAN

I. Introduction

This plan establishes guidelines for emergency management preparedness and response within the State of Georgia to: prevent emergency situations, reduce vulnerability, establish capabilities to protect residents from effects of crisis, respond effectively and efficiently to emergencies, and provide for rapid recovery from an emergency or disaster.

Emergency Support Functions (ESFs) and accompanying services in Georgia will be maintained to save lives, protect health, prevent or minimize property damage and provide assistance to people and communities threatened by an emergency or disaster.

State personnel and resources will be available when emergency or disaster response and recovery operations exceed local government capabilities. Assistance will be coordinated with local governments, private agencies/organizations, other states and the federal government.

The Georgia Emergency Management Agency Director, on behalf of the Governor, will determine the level and duration of resource commitment. The Governor will declare a State of Emergency and request a Presidential declaration when appropriate.

II. Purpose

The purpose of this plan is to prevent or minimize injury to people and damage to property resulting from emergencies or disasters of natural or man-made origin.

III. Situations and Assumptions

A. Situations—the state identifies hazards that have the potential to disrupt day-to-day activities and/or cause extensive property damage, personal injury and/or casualties. Priority for emergency management planning is based on the Hazard Profile contained in Appendix A.

1. Vulnerability Analysis (Demographics)

According to 2001 Census figures, Georgia's population is approximately 8.5 million people. In addition to residents, the state welcomes millions of tourists to the mountain and coastal areas each year. Georgia is one of the fasting growing states in the United States. Emergencies or disasters regardless of

their origin have the potential to result in significant loss of life and property within the state. The following statistics illuminate the vulnerability of Georgia's population:

- Approximately 50% of Georgia's total population lives in the metro Atlanta area.
- Almost 10% of Georgia's total population is 65 and older.
- There are 1.5 million Georgians with disabilities.
- Ten percent of Georgians speak a language other than English at home.
- Twelve percent of Georgia's residents live in mobile homes.
- There are almost 100,000 Georgians without telephone service.
- There are 378 nursing homes in Georgia.
- Georgia has 2069 public and 558 private schools.
- Georgia has 14 military bases
  - Albany Marine Corps Logistics Base
  - Athens Navy Supply Corps School
  - Atlanta Naval Air Station
  - Dobbins Air Reserve Base
  - Fort Benning
  - Fort Gillem
  - Fort Gordon
  - Fort McPherson
  - Fort Stewart
  - Hunter Army Airfield
  - Kings Bay Submarine Base
  - Marine Aircraft Group 42, Atlanta
  - Moody Air Force Base
  - Robins Air Force Base
- 357 of the 500 Fortune 500 companies have headquarters or operations in Georgia

2. Hazard Analysis

Georgia faces a number of natural hazards including floods, hurricanes, tornadoes, wild fires, winter storms, drought, and earthquakes. These natural disasters can impact areas from a local neighborhood to the entire state.

a. Tropical Systems – Including Hurricanes, Tropical Storms, and Tropical Depressions

Tropical systems can impact the entire state of Georgia depending on a storm's track and its forward motion. Even the weakest of systems can produce tornadoes and major flooding. Georgia is vulnerable to tropical systems coming from both the Gulf of Mexico and the Atlantic coast. Hurricanes bring the greatest threats to Georgia's six coastal counties and immediate adjacent seven inland risk counties. The threats from a major hurricane include storm surge, high winds, flooding, and tornadoes.

Although coastal Georgia has not experienced a landfall from a major hurricane (category 3 or stronger) since 1900, many major hurricanes have impacted the state.

b. Tornadoes

Georgia usually ranks in the top 15 states in relation to the number of tornadoes reported each year. Between 1950 and 1994, Georgia reported 888 tornadoes, ranking the state 13th in the U.S. with an average of 20 per year. Although tornadoes have been reported in every month, most occur in the March to May time frame. There are also a greater number of tornadoes reported in the fall from October to November caused by late fall cold fronts. Although Georgia rarely experiences the most devastating F-4 and F-5 tornadoes experienced in the Midwest, some have occurred in the past. More common are F-0 to F-3 tornadoes with winds in excess of 200 mph. Tornado outbreaks in the past have killed hundreds of Georgians, including storms in Hall County (1936, 203 killed) and Houston County (1953, 18 killed).

c. Floods

Georgia's greatest natural disaster was caused from inland freshwater flooding from Tropical Storm Alberto in 1994 when, Georgia, by some accounts, experienced its worst flooding in modern times. Some areas of Georgia received more than 20 inches of rain from Alberto. An estimated 1700 roads and 600 bridges were forced out of service, and several towns were largely under water. Over 40,000 people were evacuated due to the rising waters, and about 12,000 homes and businesses were destroyed or severely damaged by the flooding. Thirty people were killed—many of these vehicle-related.

Approximately 11,500 Georgians applied for federal disaster assistance, as 55 counties in Georgia were declared disaster areas.

d. Wildfires

Wildfires in Georgia are impacted by long-term drought conditions. A wild fire threat can increase after a hard freeze, when tender vegetation dies and becomes additional fuel for fires. Wildfire risks increase in the fall when the combination of low humidity, freezes, and freshly fallen leaves provide the greatest amount of fire material. Wildfires can become disastrous when they threaten and damage residential and business areas. In some, major evacuations may be required to protect citizens.

Careless burning of debris such as leaves and household garbage, farm machine usage, and lightning strikes causes most wildfires.

e. Winter Storms

Although winter weather is a greater probability in North Georgia's higher elevations, snow and ice storms have threatened south and central Georgia. Ice storms pose some of the greatest risks of long-term damage to the state. A major ice storm, caused by a long period of freezing rain, can devastate the impacted areas with widespread power outages and fallen trees.

f. Droughts

Long-term lack of rainfall can cause major concerns for Georgia's agricultural industry and water supply. When dry conditions persist for more than 1 to 2 years, soil moisture levels decrease dramatically and impact agriculture, trees, and drinking water reservoirs. As previously discussed, long-term drought also increases the threat for wildfires in Georgia.

g. Earthquakes

Earthquakes in Georgia are rare, particularly when they are compared to the long history of damaging earthquakes which are associated with California's active San Andreas fault zone. Georgia, like all the other states east of the Rocky Mountains, does not have active faults, and is not on a tectonic plate boundary. However, damaging earthquakes do occur in the interior of tectonic plates and these intraplate earthquakes can be an important consideration for emergency managers.

Damages from the great eastern United States earthquakes are largely forgotten because the last great earthquake was over 100 years ago. Although large earthquakes are less frequent, some seismologists argue that earthquakes cause damage over much larger areas in the eastern United States than earthquakes of similar size in the western United States. Hence, in Georgia, as in most of the eastern United States, calculations of seismic hazard indicate that large distant earthquakes are likely to cause as much damage in Georgia as earthquakes of any size with epicenters within Georgia. No area in Georgia is immune from the earthquake threat, but northern Georgia has experienced the most earthquakes in recent history. Earthquakes large enough to cause damage could be felt in most if not all of Georgia's Counties. When a damaging earthquake occurs, it will affect an area covering many surrounding counties.

h. Terrorism

The catastrophic attacks on the World Trade Center Building in New York

City and the Alfred P. Murrah Federal Building in Oklahoma City shocked the nation into the reality that there are no domestic safe havens from acts of terrorism. Historically, Georgia has learned first hand of the effects of domestic terrorism from insidious and deliberate attacks at the 1996 Summer Olympic Games and bombings targeting first responders. All of these apparently unrelated events punctuate our state and nation's vulnerability to both international and domestic terrorism, and highlight Georgia's risk of similar attack against its public officials, private and multi-national corporations, public infrastructure, and government facilities.

Georgia is affected by two in-state nuclear power plants and three out-of-state nuclear facilities, is home to a nuclear submarine base, and has the headquarters or offices of 357 of the Fortune 500 companies. Georgia ports are responsible for national and international imports and exports and critical military load-outs. The Atlanta metropolitan area is home to the nation's second busiest airport, is the third largest convention center in the United States, hosts CNN, a global news source, and contains numerous, vital military installations, and military contractors as well as the headquarters for the Centers for Disease Control and Prevention (CDC). There is no question that Georgia is at risk from terrorism.

B. Assumptions—state agencies and/or support organizations assume responsibility for emergency management operations and commit available resources to save lives and to minimize personal injury and property damage. Assistance from other states and the federal government may be available when emergency or disaster response and recovery operations exceed state and local government capabilities.

IV. Concept of Operations

The plan encompasses three levels of government: local, state and federal. The private sector is also a part of this planning process. However, all local and state operations will be in compliance with the National Response Plan (NRP) and National Incident Management System (NIMS) legislation. Emergency operations are initiated at the local jurisdiction. GEMA will process requests for state assistance and request assistance from the Federal Emergency Management Agency (FEMA) for disasters resulting in a Presidential Declaration.

A. Phases of Emergency Management

1. Mitigation activities may prevent an emergency or disaster, reduce a community's vulnerability and/or minimize the adverse impact of disasters and emergencies.
2. Preparedness activities occur prior to an emergency or disaster to support and enhance response. Planning, training, exercises, community awareness and education are among such activities.

3. Response activities address the immediate and short-term effects of an emergency or disaster. These activities help to reduce casualties and damage and to speed recovery. Response includes coordination and direction, communications and warning, evacuation and specific ESF responsibilities.
4. Recovery activities involve restoring communities to a day-to-day state. Short-term recovery activities include damage assessment and the return of vital functions to minimum operating standards (i.e., utility and emergency services). Long-term recovery activities may continue for years (i.e., reconstruction and relocation, water treatment plant replacement and well testing on private property).

B. Local Government Responsibilities

1. Local governments are responsible for emergency management activities within their jurisdiction in order to save lives and protect property. The local Emergency Management Agency (EMA) assumes responsibility for the development and implementation of the Local Emergency Operations Plan (LEOP).
2. Local governments are encouraged to establish mutual aid agreements with neighboring jurisdictions for emergencies and disasters.
3. The EMA will utilize all available resources from within the jurisdiction, including voluntary and private assets, before requesting state assistance. Documentation of personnel, equipment and resources will be maintained in time of an emergency or disaster for local, state and/or federal purposes.

C. State Government

1. The State of Georgia implements the National Incident Management System (NIMS) when responding to and managing multi-agency and/or multi-jurisdictional emergencies and disasters, including terrorist incidents, within Georgia. All state agencies must use NIMS.

   NIMS facilitates priority setting, interagency cooperation, and the efficient flow of resources and information. It is important to remember that NIMS is an operational framework. Agencies have not been assigned new authorities or responsibilities for terrorist incidents under this plan.

2. After an emergency or disaster exceeds the local government's capacity to respond, assistance may be requested from other jurisdictions and GEMA. Thus, GEMA has designated areas to target state assistance. *(Appendix B contains a Map of GEMA Areas.)* The Governor may declare a State of Emergency to activate necessary state resources. If the emergency or disaster exceeds the state's capacity, assistance may be requested through the Emergency Management Assistance Compact (EMAC). The Governor may also request assistance from the President. Upon a Presidential

Declaration, assistance as requested by the state, will be provided through federal ESFs.

3. State services and resources are supplements to local governments and are identified in the ESFs of this plan. State agencies and organizations serve as primary and support agencies/organizations for functional responsibilities. *(Appendix C contains a Chart of Primary and Support Agencies.)*

D. Federal Government

On February 28, 2003, President Bush issued Homeland Security Presidential Directive-5. HSPD-5 directed the Secretary of Homeland Security to administer a National Incident Management System (NIMS). In accordance with the NIMS process, resource and policy issues are addressed at the lowest organizational level practicable. If the issues cannot be resolved at that level, they are forwarded up to the next level of resolution. Reflecting the NIMS construct, the NRP includes the following command and coordination structures:

- Incident Command Posts (ICP) on-scene using the Incident Command System (ICS) and, possibly, the Unified Command;
- Area Command (if needed);
- State, local, and private sector EOCs;
- Joint Field Office (JFO)
- Regional Response Coordination Center (RRCC) and Homeland Security Operations Center (HSOC)
- Interagency Incident Management Group (IIMG)
- Homeland Security Council (HSC) and other White House organizations

1. Federal assistance will supplement state and local governments and shall be provided under governing authorities. Examples of agencies providing assistance are FEMA, Small Business Administration (SBA) and United States Department of Agriculture (USDA). Assistance from federal agencies is provided through public laws and regulations.
2. Federal assistance made available to relieve the effects of an emergency or disaster will be coordinated by the Governor's authorized representative (GAR).
3. Upon a Presidential Declaration, federal regulations require the appointment of the following Joint Field Office (JFO) Coordination group representatives:

   a. A Principal Federal Official (PFO) The Secretary of Homeland Security designates the PFO to facilitate Federal support to the established ICS/Unified Command structure and to coordinate overall Federal incident management and assistance activities across the spectrum of prevention, responses, and recovery. Depending on the magnitude of the disaster a PFO may not always be designated, in which case the FCO will provide the Federal lead.
   b. A Federal Coordinating Officer (FCO) FEMA will appoint an FCO to serve

as a liaison to the state working in coordination with the GAR.

c. A State Coordinating Officer will serve as the State's counterpart to the FCO and manage the State's incident management programs and activities, along with the GAR.
d. A Governor's Authorized Representative (GAR) The GEMA Director or designee will serve in this capacity and execute on behalf of the state necessary documents for federal assistance following a disaster.
e. Senior Federal Officials (SFO) Officials representing other Federal departments or agencies with primary statutory responsibility for certain aspects of incident management. SFOs utilize existing authorities, expertise, and capabilities to assist in management of the incident working in coordination with members of the JFO Coordination Group.

V. Direction and Coordination

A. Responsibilities of GEMA and state agencies and organizations:

1. Under provision of the Georgia Emergency Management Act of 1981, as amended, subject to the direction and control of the Governor, the GEMA Director shall be responsible for the program of emergency management in the state. The Director shall coordinate emergency management activities of all agencies/organizations within the state and serve as a liaison with other states and the federal government.
2. The GEMA Director assumes responsibility for direction and coordination of ESFs at the State Operations Center (SOC), 935 East Confederate Avenue, Building 2, Atlanta, Georgia. At the discretion of the GEMA Director and in concurrence with the Governor, a designated alternate SOC may become operational. Each ESF is assigned to a primary state agency and support agencies through the Executive Order of the Governor. All primary and support agencies responding to an emergency or disaster will be coordinated by GEMA. In addition, other assistance through private agencies/organizations will be coordinated as a part of this process.
3. A Forward Emergency Operations Center (FEOC), Mobile Communications Vehicle (MCV) and/or a Mobile Command Post (MCP) may be established at or near an emergency or disaster site. In the event a local jurisdiction is unable to perform responsibilities, the GEMA Director may provide support to assist during an emergency or disaster.
4. ESFs are matched with the National Response Plan (NRP) to assure efficient and effective response. State agencies and organizations with primary ESF responsibilities shall develop and maintain, in coordination with support agencies and organizations, Standard Operating Procedures (SOPs).
5. Disaster preparedness information, training and exercises will be provided by GEMA.
6. GEMA Communications provides warnings and other emergency information of actual, imminent and impending danger or threats to the lives and property

of the citizens of Georgia.

7. Upon escalation of an emergency or disaster, the GEMA Director may require partial or full activation of the SOC with representation of primary and/or support agencies and organizations. The SOC is the primary coordination point for state response. The Emergency Coordinator and/or Alternate authorized to act on behalf of the state agency/organization will perform SOC functional responsibilities. Briefings on the situation will be provided in the SOC. Situation reports will be provided to state and local officials.
8. If Georgia requires additional assistance with an emergency or disaster, GEMA may seek mutual aid from sister states through Emergency Management Assistance Compact (EMAC).
9. The GEMA Director and/or authorized representative will work with FEMA. If the situation appears to be approaching disaster status, FEMA will be requested to send a liaison to the SOC. Upon a Presidential Declaration, federal assistance will be provided as requested to the state in accordance with the NRP and as required by The Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended. An FCO will be assigned to work with the state upon Presidential Declaration.
10. Public information briefings, news releases and all other emergency information generated by state agencies and organizations will be coordinated and/or released through GEMA Public Affairs.
11. Expenditure reports that include personnel, travel, supplies and equipment costs must be in accordance with state and federal laws and regulations.
12. The GEMA Director will reduce the Activation Level and close the SOC, as appropriate. Emergency operations will cease when the situation can be managed by the local jurisdiction(s). Follow-up with local governments will continue until submission of final reports.

B. Responsibilities of the GEMA Director include the following:

1. Coordinate execution of ESFs with state agencies/organizations, local and federal governments, other state governments and private agencies/organizations;
2. Maintain surveillance of potentially threatening conditions and direct appropriate communications, warning and preparedness actions;
3. Initiate and/or encourage emergency management agreements with state agencies, private agencies/organizations, local and federal governments and other state agencies;
4. Provide training, technical assistance and planning guidance to state agencies and local governments/agencies;
5. Conduct and participate in periodic exercises to evaluate state and local plans in order to maintain a high standard of preparedness;
6. Maintain, update and distribute all revisions and initiate other actions deemed necessary for effective implementation; and
7. Advise the Governor, state agencies, private agencies/organizations, local governments and federal agencies of the severity and magnitude of an

emergency situation as necessary.

C. Responsibilities of State Agency Heads include the following:

1. Appoint a primary and alternate Emergency Coordinator with the authority to commit agency personnel and resources to expedite the provision of services in emergencies and disasters;
2. Assume responsibility for preparing and maintaining ESF planning and operational responsibilities as designated by the Governor;
3. Prepare and maintain SOPs for ESF responsibilities;
4. Assign personnel to augment the SOC, in accordance with emergency and disaster requirements, upon request by the GEMA Director;
5. Mobilize and utilize state personnel and resources to meet emergency and disaster requirements as necessary;
6. Support and/or conduct training and exercises for state personnel assigned to execute respective ESF responsibilities;
7. Coordinate, conduct and support workshop and conference participation of local government and private agency personnel on respective ESF responsibilities;
8. Maintain a 24-hour response team and internal notification system for emergency management;
9. Collaborate with federal agency representatives on respective ESF responsibilities and assist during a disaster; and
10. Review and update respective ESF responsibilities and SOPs.

VI. Funding and Accountability

A. State Funds

Expenditures of state funds will be in accordance with state laws and regulations and subject to state and federal audits. Utilizing emergency powers, the Governor may mobilize all available state resources as necessary to cope with an emergency or disaster. State agencies, local governments and private agencies/organizations are responsible for collecting, reporting and maintaining records of expenditures, including costs for personnel, incurred as a result of an emergency or disaster. These records shall serve as supporting data in order to determine the need for and preparation of requests for federal assistance.

B. Federal Funds

Federal funds provided to the state as a result of a Presidential Declaration will be coordinated through the Governor or his designee. Use of federal funds is subject to verification and state and federal audit. State agencies, local governments and private agencies/organizations are responsible for establishing reporting and accounting systems for emergency and disaster purposes.

Federal law prohibits the duplication of benefits. Individuals, businesses or other entities shall not receive federal disaster assistance when compensation for the loss has been received from insurance or other sources.

Discrimination against persons on the basis of age, color, economic status, nationality, race, religion, sex or handicap in the administration of emergency services or disaster relief is prohibited.

C. State Agency Accountability

The Governor's Office of Consumer Affairs will monitor emergency/disaster response and recovery and provide protection to consumers.

The Georgia Department of Natural Resources maintains information on the protection of the environment. All actions taken pursuant to repair and restoration will be in compliance with state and federal environmental laws and regulations.

VII. Plan Development and Maintenance

This plan is the principal source of documentation for state emergency management responsibilities. Each primary state agency has the responsibility for developing and maintaining the respective ESF(s) for this plan. Overall coordination of the planning process resides with the Georgia Emergency Management Agency. This responsibility extends to timely plan updates and revisions.

EMERGENCY SUPPORT FUNCTION ANNEX 1
TRANSPORTATION

Primary Agencies

Department of Transportation (DOT)
Department of Public Safety (DPS)

Support Agencies

AGENCY	RESOURCE
Board of Regents of the University System of Georgia	Personnel, Vehicles
Department of Administrative Services	Fuel, Maintenance, Personnel, Procurement, Vehicles
Department of Agriculture	Fuel, Personnel
Department of Corrections	Fuel, Maintenance, Personnel, Vehicles
Department of Defense	Aircraft, Fuel, Mobile Communications, Personnel, Vehicles
Department of Driver Services	Communications, Personnel, Facilities, Technical Assistance
Department of Education	Personnel, Vehicles
Department of Human Resources	Personnel, Vehicles
Department of Natural Resources	Aircraft, Boats, Mobile Communications, Personnel, Vehicles
Georgia Building Authority	Personnel, Vehicles
Georgia Emergency Management Agency	Personnel, Vehicles
Georgia Forestry Commission	Personnel, Vehicles

I. Introduction

A. Purpose

This Emergency Support Function (ESF) supports National Response Plan ESF 1 (Transportation). The Department of Transportation (DOT) is responsible for coordination of state transportation resources, assisting with evacuation and mobilizing transport of supplies and equipment. The Department of Public Safety (DPS) is responsible for air transportation resources. DOT and DPS assume primary responsibility for this function.

B. Scope

To provide coordination of state ground, air and water transportation resources in order to assist state agencies, local jurisdictions and volunteer organizations with evacuation and transport of supplies and equipment during an emergency or disaster.

II. Policies

A. Direction and Control

The agencies with primary responsibility shall provide an Emergency Coordinator and Alternate to meet the responsibilities of the agencies. The designee(s) shall represent the agencies in an emergency or disaster and provide operational support in the State Operations Center when requested.

B. Federal Response

1. The United States Department of Transportation (U. S. DOT) will coordinate emergency or disaster response as authorized through a Presidential Declaration to assist state and local governments with personnel, equipment, operations and maintenance.
2. U. S. DOT will provide financial assistance to state or local agencies for transportation services and issue necessary rules and regulations.

C. Notifications

1. Local

   Local agencies should coordinate with their local emergency management agencies. This will ensure that reimbursements are available if the event is labeled as a State or Federal disaster.

   All requests for State assistance shall be routed through Georgia's State Operations Center using the 1-800-TRY-GEMA telephone number. GEMA personnel will notify the primary agencies. The primary agencies will notify support agencies as needed.

2. State

   All requests for Federal assistance will be coordinated by GEMA. All public notifications will be addressed in External Affairs (ESF 15).

3. Federal

   All notifications of Federal agencies will be provided for in the National Response Plan.

III. Concept of Operations

A. Strategy

1. DOT will coordinate with appropriate state agencies to ensure operational readiness. DOT will develop and maintain Standard Operating Procedures (SOPs).
2. Transportation will be coordinated with the Public Works and Engineering Emergency Support Function (ESF 3) to ensure the transportation infrastructure is adequate to meet transport needs.
3. All designated agencies and organizations will provide personnel, equipment, operations and maintenance at the request of the DOT Emergency Coordinator.

B. Actions

1. Mitigation/Preparedness

   a. Identify available transportation resources;
   b. Establish a system to respond to requests for transportation assistance;
   c. Implement a coordinated approach among and between designated state agencies and organizations; and
   d. Participate in and/or conduct training exercises and tests.

2. Response/Recovery

   a. Respond to assistance requests from local governments and state agencies and organizations requiring transportation support;
   b. Assist local governments in determining the most viable available transportation networks to, from and within the emergency or disaster area;
   c. Coordinate the movement and flow of land, air and marine traffic in and to the disaster area for effective transport of relief supplies, personnel and equipment;
   d. Obtain volunteer transportation services to meet additional transportation needs;
   e. Coordinate public information and provide updates for ESF 15, External Affairs.
   f. Continue to render transportation support as long as the situation exists; Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA upon request; and
   g. Resume day-to-day operations.

IV. References

The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended. (http://www.fema.gov/library/stafact.shtm)

V. Terms and Definitions

Transportation network: System of ground, air and marine routes available for use in disaster response.

EMERGENCY SUPPORT FUNCTION ANNEX 2
COMMUNICATIONS

Primary Agency

Georgia Emergency Management Agency (GEMA)

Support Agencies

AGENCY	RESOURCE
American Radio Relay League, Inc.	Equipment, Personnel
Board of Regents of the University System of Georgia	Facilities, Personnel, Videoconferencing
Department of Administrative Services	Vehicles, Communications
Department of Defense	Communications, Personnel, Infrastructure Repair
Department of Natural Resources	Communications, Facilities, Personnel
Department of Public Safety	Communications, Facilities, Mobile Command Post, Personnel
Department of Revenue	Communications, Personnel
Department of Transportation	Communications, Equipment, Facilities
Georgia Bureau of Investigation	Communications, Personnel
Georgia Forestry Commission	Communications
Georgia Public Broadcasting	Facilities, Radio, Television
Georgia Technology Authority	Personnel, Procurement
Public Service Commission	Personnel

I Introduction

A. Purpose

This Emergency Support Function (ESF) supports National Response Plan ESF 2 (Communications). The Georgia Emergency Management Agency assumes primary responsibility for this function.

The purpose of this ESF is two-fold: First, to provide emergency telecommunications systems and support for use in disaster or emergency situations; and second, to provide for the receipt and dissemination of emergency notifications that include but are not limited to enemy attack, natural and technological disasters, hazardous materials incidents, nuclear fallout and any other large scale emergencies that will affect the state and local governments of Georgia.

B. Scope

To provide communications and warnings to state agencies, first responders and

the public. The following functional values frame the concept of operations for these systems. Communications and warnings systems and their output should be:

- Accurate: Must be correct
- Audience specific: Must reach the intended audience, for example, first responders, state agencies, public or all
- Available: Must reach audience no matter where they are
- Accessible: Must reach all populations, disabled, elderly, hearing impaired, vision impaired, children, and those with literacy limitations.
- Action oriented: Must suggest actions to protect from threat
- Timely: Must deliver information in time to act
- Reliable: Systems must actually deliver information
- Safe: Must not inadvertently create risk to the intended audience
- Secure: Must be able to authenticate that information is from valid, trusted source
- Widely recognized: Need to use system(s) that are familiar to the intended audience

This ESF describes the communications, surveillance and warning systems that will be utilized by federal, state and local agencies and organizations in the event of an emergency. Telecommunications technologies included are radio, television, satellite, land line, cellular and special telephonic capability, fax, Internet, other modem communications, and the Emergency Alert System (EAS) that coordinates all broadcast and cable medium. These systems will be used in support of Georgia's State Operations Center, local governments and the response community.

II. Policies

A. Direction and Control

1. This ESF will be activated by the Georgia Emergency Management Agency prior to or following an emergency or disaster. GEMA will serve as the primary agency.
2. The primary agency will notify the support agencies as needed.

B. Federal Response

1. Federal response may be initiated by a request from the Governor to FEMA or by special Memorandum of Understanding (MOU) by GEMA.

2. When required, the federal government will implement ESF 2 of the National Response Plan to provide communications support to state and/or local jurisdictions. Assistance will be discontinued when state and local requirements no longer exist.
3. The Regional Director of FEMA is authorized during or in anticipation of an emergency to establish temporary communications and make these resources available to state and local government officials and other persons deemed appropriate.
4. The Federal Emergency Management Agency (FEMA) operates the Federal National Alert Radio that is available for state use. FEMA Region IV has a number of portable radios and the Mobile Emergency Response System which may be used to augment state communications resources.
5. The Federal Communications Commission (FCC) has limited technology resources but can declare communications emergencies. It is also available for technical assistance.
6. The Department of Defense (DOD) has military installations throughout Georgia, and may be called upon for local emergencies.
7. The National Aeronautics and Space Administration (NASA) has a wide range of satellite telecommunications technologies which should operate in any emergency regardless of the geographical constraints of the local terrain.
8. The General Services Administration (GSA) administers the Federal Telephone System as well as data and radio systems.
9. The National Weather Service (NWS) has six (6) forecast offices with responsibilities within Georgia. The locations of the forecast offices include: Peachtree City, Georgia; Tallahassee, Florida; Jacksonville, Florida; Greer, South Carolina; Charleston, South Carolina; and Columbia, South Carolina.
10. The United States Forest Service (USFS) has a network of repeaters and mobiles.
11. The Department of the Interior (DOI) oversees the National Park Service which administers telecommunications within its jurisdictions.
12. The Department of Justice (DOJ) has access to the telecommunications resources of the Federal Bureau of Investigation and the Drug Enforcement Agency which include repeaters and mobiles. Because of the sensitive nature of DOJ resources, they are not considered viable except in cases of national security.

C. Other

1. If GEMA Communications becomes overburdened or destroyed, other resources shall be used to: augment state communication and warning systems; assist with local law enforcement, fire fighting, search and rescue and lifesaving services; and disseminate instructions and operational guidance.
2. When possible, information such as damage reports and resource lists should be transmitted via email or fax to reduce the traffic on voice communications technologies. However in an effort to adequately assess damages to facilitate

the appropriate response, all communications technologies will be used.

D. Notifications

1. Local

   Administer all warnings to the public and maintain connection point with 24-hour warning facility to be able to receive and distribute information. Local agencies should coordinate with their local emergency management agencies. This will ensure that reimbursements are available if the event is labeled as a State or Federal disaster.

2. State

   All requests for Federal assistance will be coordinated by GEMA. All public notifications will be addressed in External Affairs (ESF 15).

3. Federal

   All notifications of Federal agencies will be provided for in the National Response Plan.

III. Concept of Operations

A. Communications

1. Strategy

   a. GEMA Communications Center serves as the 24 hour State Warning Point for receiving and disseminating alerts and warnings to other state agencies, local governments and the public
   b. Maintain channels of communication with locals and federal government to ensure optimal information flow.
   c. Coordinate with appropriate agencies and organizations to ensure operational readiness before, during and after an emergency or disaster. GEMA will develop and maintain Standard Operating Procedures (SOPs) and resource deployment.
   d. Initiate actions appropriate to the functions of communications before, during and after an emergency.
   e. Maintain capability of the Mobile Communications Vehicle (MCV) to provide on-the-scene coordination of state emergency communications during an emergency or disaster.
   f. Maintain agreements and contracts to ensure equipment and system maintenance on a 24-hour-a-day basis. Alternate communications systems shall be maintained and tested on a weekly or monthly basis as

appropriate for back up capability.

2. Actions

   a. Mitigation/Preparedness

      i. Identify and document resources to supplement local communications capabilities. Resources include personnel, equipment, vehicles, and supplies available for use in an emergency;
      ii. Maintain full staff of communications officers to operate equipment in the Communications Center and Mobile Communications Vehicle (MCV);
      iii. Maintain communications system in operational condition at all times;
      iv. Provide the necessary training and equipment for all support agencies;
      v. Provide reliable communication links for federal, state and local emergency and disaster warning systems to ensure an integrated communication network;
      vi. Maintain a continuity of operations plan for the Combined Communications Center;
      vii. Monitor Activation Levels;
      viii. Participate and/or conduct federal, state and local training exercises and tests as needed. Evaluate performance as required;
      ix. Conduct regular testing on communications equipment; and
      x. Define future goals for operational growth.

   b. Response/Recovery

      i. Coordinate two-way communication with appropriate state agencies and local governments;
      ii. Serve as coordinator for Emergency Alert System (EAS) to facilitate statewide warnings or alerts;
      iii. Provide communication personnel for the MCV; when possible, support MCV operations. Other 911 resources will be used to supplement the MCV in times of disaster;
      iv. Deploy or arrange for deployment of alternate communication system to replace systems that become inoperable in order to maintain contact with Emergency Operations Centers (e.g., Federal Regional Center, other states, local emergency management agencies), as capabilities allow;
      v. Collect and provide updates to public information for ESF 15, External Affairs;
      vi. Disseminate intelligence information to state agencies as appropriate;
      vii. Complete event specific financial records on personnel, supplies and other resources utilized and report expenditures upon request; and
      viii. Resume day-to-day operations.

B. Warning

1. Strategy

   a. Serve as the 24-hour State Warning Point for receiving and disseminating alerts and warnings to other state agencies, local governments and the public
   b. Disseminate accurate, understandable, specific, action-oriented, and locally controlled warning messages. Communicate what, where, when, and how severe the hazard is, how likely the hazard is to occur and what action, if any, should be taken
   c. Utilize all available communications to verify and disseminate warnings.
   d. Disseminate advisories through state and local communication networks to alert local governments and county Warning Points to changing conditions. Warnings include but are not limited to National Weather Service and Levi's Call.
   e. Maintain communications with the Federal Emergency Management Agency (FEMA), other states and local Emergency Management Agencies to coordinate and provide guidance and assistance regarding national threats or emergencies.

2. Actions

   a. Mitigation/Preparedness

      i. Maintain the state's warning system;
      ii. Develop and maintain SOPs including feedback channels for alerting state agencies, local governments and the public;
      iii. Inventory and review County Warning Points and their capabilities on a regular basis to ensure optimal functionality in an emergency or disaster;
      iv. Assist local emergency responders in developing their SOPs for implementing warnings;
      v. Provide reliable communication links for federal, state and local emergency and disaster warning systems to ensure an integrated communication network; and
      vi. Participate and/or conduct training exercises and tests.

   b. Response/Recovery

      i. Prepare warning message such that it is accurate, audience specific, available, accessible, action oriented, timely, reliable, safe, secure, and widely recognized;
      ii. Implement warning procedures to deliver message utilizing NAWAS; the Georgia Crime Information Center; and the EAS;
      iii. Send redundant messages via NAWAS, GCIC and EAS to assure

warning delivery;

iv. Implement feedback mechanism to ensure messages are being delivered accurately and completely;
v. Notify audiences as appropriate of subsequent warnings;
vi. Evaluate execution after immediate crisis has passed. Implement improvements as needed; and
vii. Resume day-to-day operations.

IV. References

A. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended.(http://www.fema.gov/library/stafact.shtm)
B. Radiological Plan
C. Executive Order 3/13/03
D. "A National Strategy for Integrated Public Warning Policy and Capability, Partnership for Public Warning, February 2003.
E. "National Strategy for Homeland Security," Office of Homeland Security, July 2002. (http://www.homelandsecurity.org/hls/features/hlsstrategy.pdf)

V. Terms and Definitions

Alert: Three to five minutes of steady sound. Sirens, whistles and other devices are used to activate an alert mode.

EAS: Emergency Alert System: A system coordinated among Federal Communications Commission, National Weather Service, Georgia Emergency Management Agency and local broadcasters to alert the general public to emerging weather conditions.

NAWAS: The National Warning System is a 24-hour private line telephone system used to convey warning to Federal state and local governments, as well as military and citizen populations. It is operated by FEMA.

Public warning: A communication that directs attention to new information about a hazard or a threat. It should communicate what, where, when, and how severe the hazard is, how likely the hazard is to occur and what action is appropriate. It should communicate clearly and succinctly the risk people face and instruct them with specific actions as available.

EMERGENCY SUPPORT FUNCTION ANNEX 3
PUBLIC WORKS AND ENGINEERING

Primary Agencies

Public Works – Department of Natural Resources (DNR)
Engineering – Department of Transportation (DOT)

Support Agencies

AGENCY	RESOURCE
Board of Regents of the University System of Georgia	Engineering Equipment, Personnel, Vehicles
Department of Administrative Services	Communications, Procurement, Supplies Vehicles
Department of Agriculture	Chemicals, Emergency Water, Engineering Equipment, Personnel
Department of Community Affairs	Personnel
Department of Corrections	Equipment, Personnel
Department of Defense	Communication Equipment, Generators Vehicles, Personnel, Water Purification
Georgia Building Authority	Personnel, Technical Expertise
Georgia Environmental Facilities Authority	Personnel
Georgia Forestry Commission	Debris Removal, Equipment, Personnel
Public Service Commission	Communications, Personnel

I. Introduction

A. Purpose

This Emergency Support Function (ESF) supports National Response Plan (NRP) ESF 3 (Public Works and Engineering). "Public Works" refers to water and sewer services, including temporary restoration of water systems and provision of water for firefighting. The Department of Natural Resources (DNR) assumes the public works responsibility. Engineering activities include: supporting ice, snow and debris removal; determining structural safety of damaged buildings, bridges and highways; and coordinating repairs to public facilities and appropriate construction service (i.e. electrical, plumbing and soils). The Department of Transportation (DOT) assumes the engineering responsibility for this function.

B. Scope

To establish priorities for the control of water resources and use of sewer facilities and provide for coordination of engineering resources and expertise in an emergency or disaster.

II. Policies

A. Direction and Control

The agencies with primary responsibility shall provide an Emergency Coordinator and Alternate Coordinator to meet the responsibilities of the agency. The designees shall represent the agencies in an emergency or disaster and provide operational support in the State Operations Center when requested.

B. Federal Response

Federal disaster assistance programs available with or without a Presidential Declaration have been identified in FEMA Manual 8600.2, Digest *of Federal Assistance Program*. Requests for assistance will be made through the GEMA Director. For federal assistance for highways, disaster requests will be directly submitted to the United States Department of Transportation.

Federal assistance for debris clearance is made available under The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended. Section 403 of this law provides authorization by the President to clear debris and wreckage from a major disaster on publicly and privately owned land and water through federal agencies. Grants may be provided to state and local governments for this purpose.

Under a Presidential Declaration, FEMA may provide emergency debris clearance to protect health and safety, save lives and protect property. This may include debris clearance from roads and facilities necessary to perform emergency tasks and for restoration of essential services.

Through such a Presidential Declaration, a federal agency may perform work or request reimbursement for local/state governments and non-profit organizations as stated in Section 402 (b) of Public Law 93-288, Removal of Debris or Wreckage. The affected local or state government must first arrange an unconditional authorization for removal of such debris or wreckage from public and private property and agree to indemnify the federal government against any claim arising from such removal. All emergency debris and wreckage clearance shall be performed without delay and completed as rapidly as possible.

Federal reimbursement will be made only to local and state governments and

nonprofit organizations as stated in The Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, for the cost of debris removal. Salvage value of debris or wreckage cleared shall be deducted from federal reimbursement for such expenses.

C. Notifications

1. Local

Local agencies should coordinate with their local emergency management agencies. This will ensure that reimbursements are available if the event is labeled as a State or Federal disaster. All requests for State assistance shall be routed through the Georgia's State Operations Center using the 1-800-TRY-GEMA telephone number. GEMA personnel will notify the primary agencies. The primary agencies will notify support agencies as needed.

2. State

All requests for Federal assistance will be coordinated by GEMA. All public notifications will be addressed in External Affairs (ESF 15).

3. Federal

All notifications of Federal agencies will be provided for in the National Response Plan.

III. Concept of Operations

A. Public Works (Water/Sewer)

1. Strategy

a. DNR will coordinate with appropriate agencies and organizations to ensure operational readiness. DNR will develop and maintain Standard Operating Procedures (SOPs).
b. DNR will provide overall guidance concerning water supply matters, sewage treatment and disposal. Protection of health will be an overriding consideration in water conservation and treatment/disposal of sewage.
c. Essential water needs will be identified, along with measures for conservation, distribution and use of water. Regulatory standards for the treatment and disposal of waste will be maintained.
d. DNR divisions and district offices will provide personnel, supplies, equipment and facilities at the request of the DNR's Emergency Coordinator.

2. Actions

a. Mitigation/Preparedness

i. Develop policies for conservation, distribution and use of water;
ii. Identify, locate and maintain a list of chemicals and/or stockpile chemicals for portability of water supply;
iii. Establish and enforce sewage treatment and disposal standards; and
iv. Participate in and/or conduct exercises and tests.

b. Response/Recovery

i. Establish priorities to repair damaged water/sewer systems and coordinate provision of temporary, alternate or interim sources of water/sewer;
ii. Identify supporting products and services such as casing, pipes, pumps, valves, generators, cables, staff and transportation to facilitate industry response;
iii. Implement requirements for water priorities and allocations;
iv. Assist water suppliers with obtaining specialized personnel, equipment and transportation to repair or restore water systems;
v. Provide technical assistance on water and sewer systems;
vi. Advise local governments on building temporary oxidation lagoons for utilization of silt latrines and other expedients;
vii. Monitor repair and restoration of water/sewer systems;
viii. Maintain coordination with support agencies and organizations for emergency priorities, repair and restoration;
ix. Monitor restoration operations until services are restored;
x. Coordinate public information and provide updates for ESF 15, External Affairs;
xi. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA upon request; and
xii. Resume day-to-day operations.

B. Engineering

1. Strategy

a. DOT will coordinate with appropriate agencies and organizations to ensure operational readiness of engineering services. DOT will develop and maintain Standard Operating Procedures (SOPs).

b. Assistance includes: provision of personnel and equipment to: save lives; protect health and safety throughout response; emergency clearance of debris in damaged areas; temporary designation/ construction of access routes (roads, streets, bridges, ports, waterways, airfields and facilities)

necessary for rescue personnel; technical assistance and evaluation for demolition of unsafe structures; engineering services, construction management and inspection; and emergency contracting.

2. Actions

a. Mitigation/Preparedness

i. Develop SOPs;
ii. Establish liaison with support agencies and organizations;
iii. Maintain an inventory of equipment and supplies required to sustain emergency operations and respective suppliers;
iv. Establish operational priorities for restoration of services and resources; and
v. Participate in and/or conduct exercises and tests.

b. Response/Recovery

i. Participate in rapid damage assessment to determine potential workload;
ii. Maintain liaison with support agencies and organizations regarding repair and restoration priorities;
iii. Obtain necessary response resources and arrange for engineering and construction resources;
iv. Provide engineering, contracting and procurement assistance for emergency debris clearance, demolition, public works repair and water supply;
v. Monitor restoration operations;
vi. Coordinate public information and provide updates for ESF 15, External Affairs; and
viii. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA upon request;

IV. References

A. Georgia Water Quality Control Act, Official Code of Georgia Annotated (O.C.G.A.) § 12-5-20 *et seq.*

B. Georgia Comprehensive Solid Waste Management Act, O.C.G.A. § 12-8-20 *et seq.*

EMERGENCY SUPPORT FUNCTION ANNEX 4
FIREFIGHTING

Primary Agencies

Georgia Forestry Commission (GFC)

Support Agencies

AGENCY	RESOURCE
Board of Regents of the University System of Georgia	Personnel
Department of Administrative Services	Communications, Equipment, Vehicles
Department of Agriculture	Equipment, Personnel
Department of Corrections	Equipment, Personnel, Vehicles
Department of Defense	Aircraft, Equipment, Personnel
Department of Human Resources	Emergency Medical Services, Equipment
Department of Natural Resources	Equipment, Personnel, Search and Rescue
Department of Public Safety	Aircraft, Escort, Personnel, Search and Rescue, Traffic Control
Department of Transportation	Aircraft, Personnel, Traffic Control, Vehicles
Georgia Bureau of Investigation	Investigations
Georgia Emergency Management Agency	Communications, Equipment, Personnel
Office of the Commissioner of Insurance and Safety Fire	Investigators, Personnel

I. Introduction

A. Purpose

This Emergency Support Function (ESF) supports National Response Plan ESF 4 (Firefighting).

State program assistance for fire fighting shall include actions taken through the application of equipment, staffing and technical expertise to suppress fires. Georgia Forestry Commission (GFC) is responsible for administering this function and suppression of all fires. Assistance is coordinated through the GFC Emergency Coordinator assigned to the State Operations Center. The Georgia Forestry Commission assumes primary responsibility for this function.

B. Scope

To provide comprehensive fire suppression services and assist local governments in their efforts to control rural and wildland/urban interface fires.

II. Policies

A. Direction and Control

The agency with primary responsibility shall provide an Emergency Coordinator and Alternate to meet the responsibilities of the agency. The designee(s) shall represent the agency in an emergency or disaster and provide operational support in the State Operations Center when requested.

B. Federal Response

1. Firefighting

The Department of Agriculture, Forest Service provides the lead federal role in firefighting activities. The Director for Operations, Fire and Aviation Management, Forest Service provides direction. The Forest Service and the Department of Interior Fire Directors at the National Interagency Fire Center (NIFC) will provide assistance as necessary.

C. Notifications

1. Local

Local agencies should coordinate with their local emergency management agencies. This will ensure that reimbursements are available if the event is labeled as a State or Federal disaster.

All requests for State assistance shall be routed through Georgia's State Operations Center using the 1-800-TRY-GEMA telephone number. GEMA personnel will notify the primary agencies. The primary agencies will notify support agencies as needed.

2. State

All requests for Federal assistance will be coordinated by GEMA. All public notifications will be addressed in External Affairs (ESF 15).

3. Federal

All notifications of Federal agencies will be provided for in the National Response Plan.

III. Concept of Operations

A. Firefighting

1. Strategy

a. GFC will coordinate with appropriate agencies and organizations to ensure operational readiness. GFC will develop and maintain Standard Operating Procedures (SOPs) and include county, district and state agencies.
b. The Chief Forest Ranger will initiate fire services at the lowest operational level. The District Forester at the request of the Chief Forest Ranger will coordinate escalating emergencies. Coordination with the Georgia Emergency Management Agency (GEMA) and other agencies and organizations will begin when a fire reaches a State of Emergency. The GFC Emergency Coordinator through an Incident Command System Fire Team will coordinate fires approaching a State of Emergency or Presidential Declaration.
c. Fire situation reports for the affected area(s) will be directed to GFC. The Emergency Coordinator and/or State Forester will:

i. Inform the GEMA Director of imminent fire emergency/disaster situations;
ii. Implement mutual aid agreements as the situation dictates;
iii. Monitor fire suppression activities in the affected area(s);
iv. Provide fire and weather forecasts;
v. Coordinate deployment of available fire control resources;
vi. Local governments are responsible for fire prevention and control within the designated jurisdictions and development of mutual aid agreements. GFC county resources are considered as local resources for responses to fires. Local governments are responsible for requesting state support when a fire exceeds local capabilities; and
vii. GFC is responsible for the development, implementation and administration of all state programs, as well as mutual aid agreements, State of Emergency and/or Presidential Declaration assistance. Execution of the Federal/State Agreement for fire management is shared with the GEMA Director.

2. Actions

a. Mitigation/Preparedness

i. Keep fully informed on weather and fire danger;
ii. Keep personnel and equipment in a state of readiness;
iii. Perform fire prevention activities; and
iv. Participate in and/or conduct exercises and tests.

b. Response/Recovery

i. Fight fires with available resources;
ii. Coordinate fire services with appropriate agencies and organizations;
iii. Monitor and "mop-up" all fire until completely suppressed;
iv. Coordinate public information and provide updates for ESF 15, External Affairs;
v. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA upon request;
vi. Provide damage assessment in burned area(s); and
vii. Resume day-to-day operations.

IV. References

A. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-299, as amended

EMERGENCY SUPPORT FUNCTION ANNEX 5
EMERGENCY MANAGEMENT

Primary Agency

Georgia Emergency Management Agency (GEMA)

Support Agencies

AGENCY	RESOURCE
Board of Regents of the University System of Georgia	Facilities, Vehicles
Department of Administrative Service	Communications Repair, Procurement
Department of Agriculture	Economic Analysis, Personnel
Department of Audits and Accounts	Accounting, Personnel
Department of Community Affairs	Personnel
Department of Corrections	Equipment, Personnel, Traffic Control, Vehicles
Department of Defense	Communications, Equipment, Personnel, Vehicles
Department of Economic Development	Notification
Department of Education	Facilities, Personnel, Vehicles
Department of Human Resources	Communications, Personnel, Shelters, Vehicles
Department of Natural Resources	Communications, Facilities, Law Enforcement, Personnel, Traffic Control, Vehicles
Department of Public Safety	Aircraft, Communications, Facilities, Personnel, Vehicles
Department of Transportation	Aircraft, Notification, Traffic Control, Vehicles,
Georgia Building Authority	Economic Analysis, Personnel
Georgia Bureau of Investigations	Law Enforcement
Georgia Forestry Commission	Communications, Law Enforcement, Vehicles
Governor's Office of Consumer Affairs	Investigations
Georgia Public Safety Training Center	Personnel, Facilities, Equipment
Office of the Commissioner Insurance and Safety Fire	Investigations
Office of Planning and Budget	Economic Analysis, Personnel
Public Service Commission	Economic Analysis, Personnel

I. Introduction

A. Purpose

This Emergency Support Function (ESF) supports National Response Plan (NRP) ESF 5 (Emergency Management). This ESF involves supporting the overall activities of the State government for all state disaster management efforts. The Georgia Emergency Management Agency (GEMA) assumes

primary responsibility for this function.

The function of evacuation does not correspond to any ESF in the NRP. Evacuation is the controlled movement and relocation of persons and property made necessary by the threat or occurrence of an emergency or disaster. GEMA assumes primary responsibility for this function.

The function of damage assessment does not correspond to any ESF in the NRP. Damage assessment includes assessing, recording and reporting damages to public and private property. Assistance includes the application of available personnel, equipment and technical expertise necessary to assess damage to state and/or local facilities and property. GEMA assumes primary responsibility for this function.

B. Scope

The scope of the Emergency Management Services ESF is to provide assistance to local governments for evacuation procedures; and facilitate the assessment of total damages including a formulated estimate of initial government expenditures resulting from an emergency or disaster.

II. Policies

A. Direction and Control

GEMA is the agency with primary responsibility.

B. Federal Response

1. Federal assistance for evacuation is available from the United States Department of Energy (DOE), Department of Defense (DOD), United States Coast Guard, Department of Health and Human Services (HHS) - United States Public Health Service (USPHS) and Nuclear Regulatory Commission (NRC) through coordination with the Federal Emergency Management Agency.
2. The Federal Emergency Management Agency (FEMA) may provide representatives to accompany State Damage Assessment Teams.
3. Provide financial assistance to state or local agencies for services or training of disaster workers and issue such rules and regulations as may be necessary to effectuate this delegation.

C. Notifications

1. Local

Local agencies should coordinate with their local emergency management agencies. This will ensure that reimbursements are available if the event is

labeled as a State or Federal disaster.

All requests for State assistance shall be routed through Georgia's State Operations Center using the 1-800-TRY-GEMA telephone number. GEMA personnel will notify the primary agencies. The primary agencies will notify support agencies as needed.

2. State

All requests for Federal assistance will be coordinated by GEMA. All public notifications will be addressed in External Affairs (ESF 15).

3. Federal

All notifications of Federal agencies will be provided for in the National Response Plan.

III. Concept of Operations

A. Coordination

1. Strategy

a. GEMA will coordinate with appropriate agencies and organizations to ensure operational readiness. GEMA will develop and maintain Standard Operating Procedures (SOPs).
b. GEMA will continue to maintain, revise, and provided training for the Georgia Emergency Operations Plan (GEOP).
c. GEMA will coordinate the Governor's request for disaster assistance to the Federal government.
d. GEMA will coordinate disaster operations.
e. GEMA will provide support infrastructure in the affected GEMA area for prevention, response, and recovery disaster initiatives.

2. Actions

a. Mitigation/Preparedness

i. Establishes field facilities, supplies, and equipment to support State activities related to the management of disaster operations;
ii. Monitors potential or developing incidents and supports the efforts of operations;
iii. Support the implementation of mutual aid agreements;
iv. Develops the schedule for staffing and operating the State Operations Center from activation to stand-down; and

v. Participate in and/or conduct exercises and tests.

b. Response/Recovery

i. Activates State Operations Center (SOC) when an incident occurs or has the potential to occur;
ii. Provide personnel to support positions in the State Operations Center (SOC);
iii. Coordinates operations and situational reporting to the Governor's office while the SOC is operational;
iv. Provides immediate, short-term planning functions with other agencies operating under a declaration of emergency;
v. Track and record data necessary for state or federal declaration;
vi. Coordinates the responsible and orderly termination of State assistance;
vii. Prepare information for after-action reports; and
viii. Resume day-to-day operations.

B. Evacuation

1. Strategy

a. GEMA will coordinate with appropriate agencies and organizations to ensure operational readiness. GEMA will develop and maintain Standard Operating Procedures (SOPs).
b. GEMA will monitor conditions that have the potential to require evacuation within the state and implement changes in activation levels.
c. GEMA will assist with coordination of evacuation, routing to shelters, personnel, transportation and public information to deal effectively with the situation.
d. GEMA will establish priorities for the return of evacuees upon determination of safe conditions.

2. Actions

a. Mitigation/Preparedness

i. Assist communities with development of a system that allows people to move in an orderly fashion;
ii. Pre-establish feasible evacuation routes;
iii. Establish a system of management and control to regulate the access of roads for evacuation;
iv. Plan for and coordinate the basic needs of emergency medical and social services required during and after evacuation; and
v. Participate in and/or conduct exercises and tests.

b. Response/Recovery

i. Make recommendations concerning evacuation to local jurisdictions;
ii. Alert state and local agencies/organizations involved in evacuation operations;
iii. Provide support for movement of people, including individuals with special needs, through coordination with appropriate agencies/organizations;
iv. Maintain close coordination with Law Enforcement, Mass Care, Food, Health and Medical ESFs, as well as with other agencies/ organizations caring for people with special needs;
v. Provide public information on protective actions in the event people cannot or will not evacuate;
vi. Coordinate public information and provide updates;
vii. Coordinate provision of emergency medical and social services support along the return routes and within the affected area;
viii. Provide for traffic control coordination along returning routes;
ix. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA upon request; and
x. Resume day-to-day operations.

C. Damage Assessment

1. Strategy

a. Timely and accurate information collection, recording and reporting are critical during and after an emergency or disaster to determine the need for state and/or federal assistance and to document local response and recovery expenditures.
b. GEMA will coordinate with appropriate agencies and organizations to ensure operational readiness. GEMA will develop and maintain Standard Operating Procedures (SOPs).
c. Coordination of damage assessment and reporting by private and cooperative utility firms located in the affected area will be handled through State Operations Center (SOC).
d. Maximum use will be made of private agencies/organizations such as businesses, insurance companies and associations. Coordination of these assets will be accomplished through GEMA.

2. Actions

a. Mitigation/Preparedness

i. Establish, organize, train, equip and provide for the deployment of damage assessment teams into affected area;

ii. Establish procedures for agencies, organizations and local governments to maintain expenditure and obligation records as required in the GEMA SOP; and
iii. Participate in and/or conduct exercises and tests.

b. Response/Recovery

i. Dispatch Damage Assessment Coordinator(s) and joint teams to the affected area after an emergency or disaster;
ii. Collect, evaluate and disseminate damage assessment reports;
iii. Collect, evaluate and disseminate expenditure and obligation reports submitted by local governments and state agencies;
iv. Coordinate state and local damage assessment operations with related federal activities;
v. Consult with appropriate support agencies/organizations concerning emergency or disaster program implementation;
vi. Direct and coordinate state damage assessment activities through the SOC and coordinate with local governments on operations;
vii. Assure that damage assessment teams coordinate reports with local governments in the area of operations;
viii. Provide benefits to eligible agencies;
ix. Follow up until approved projects are completed;
x. Coordinate public information and provide updates for the Public Affairs Officer;
xi. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA upon request; and
xii. Resume day-to-day operations.

IV. References

A. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended.

EMERGENCY SUPPORT FUNCTION ANNEX 6
MASS CARE, HOUSING, AND HUMAN SERVICES

Primary Agency

Department of Human Resources (DHR)

Principal Voluntary Agency

American Red Cross

Support Agencies

AGENCY	RESOURCE
Board of Regents of the University System of Georgia	Facilities, Personnel
Department of Administrative Services	Procurement
Department of Community Affairs	Emergency Funding, Inventory and Site Preparation, Loan Consultation, Temporary Housing Coordination
Department of Corrections	Equipment, Personnel, Vehicles
Department of Defense	Emergency Food, Equipment, Facilities, First Aid, Personnel
Department of Education	Facilities
Department of Natural Resources	Health and Sanitation Consultation, Personnel, Water Quality Control
Department of Public Safety	Security
Department of Technical and Adult Education	Facilities, Personnel
Department of Transportation	Equipment, Personnel, Vehicles
Department of Veterans Services	Facilities, Personnel
Georgia Baptist Convention	Food, Personnel, Child Care
Georgia Building Authority	Food
Georgia Forestry Commission	Equipment Supplies, Vehicles
Georgia Public Safety Training Center	Storage Facilities
Office of Planning and Budget	Procurement, Funding
Prosecuting Attorney's Council of Georgia	Personnel, Technical Assistance
The Salvation Army	Donated Goods, Food

I. Introduction

A. Purpose

This Emergency Support Function (ESF) supports National Response Plan (NRP) ESF 6 (Mass Care, Housing, and Human Services). Mass care encompasses: sheltering, feeding, first aid at designated sites, and Disaster Welfare Inquiry (DWI) to reunite families or inform family members outside the disaster area. The Department of Human Resources (DHR) has primary state

agency responsibility for this function. The American Red Cross (ARC) is the principal voluntary organization to support this plan.

B. Scope

The scope of this ESF is to provide a coordinated approach for collection, analysis and dissemination of information in order to facilitate the overall provision of services and resources during an emergency or disaster. This includes a coordinated effort to provide mass care services such as shelter, food and first aid.

II. Policies

A. Direction and Control

The agency with primary responsibility shall provide an Emergency Coordinator and Alternate to fulfill the responsibilities of the agency. The designee(s) shall represent the agency in an emergency or disaster and provide operational support in the State Operations Center when requested.

B. Federal Response

1. In a Presidential Declaration, FEMA will provide information and planning support to the state.
2. FEMA will collect, analyze and disseminate information from respective federal agencies with ESF responsibilities.
3. The General Service Administration (GSA) will provide federal government support for procurement activities. Procurement will be made in accordance with federal laws and regulations.
4. Federal laws and regulations authorize emergency purchasing under any "situation of unusual and compelling urgency." All procurement actions made at the request of federal agencies in support of the plan will be in accordance with GSA statutory and administrative requirements and accomplished using appropriate Federal Emergency Management Agency (FEMA) fund citation/reimbursement procedures.
5. Federal assistance for evacuation is available from the United States Department of Energy (DOE), Department of Defense (DOD), United States Coast Guard, Department of Health and Human Services (HHS) - United States Public Health Service (USPHS) and Nuclear Regulatory Commission (NRC) through coordination with the Federal Emergency Management Agency.
6. FEMA - Public and Intergovernmental Affairs is responsible for initiating actions required to implement federal activities in response operations.
7. FEMA may provide representatives to accompany State Damage Assessment Teams.

8. The American Red Cross (ARC) Vice President of Operations, National Headquarters, will direct the activities of the National Mass Care (ESF 6) and represent ARC on the Catastrophic Disaster Response Group (CDRG) at FEMA.
9. The Governor may request federal Individual and Households Program funding to assist individuals and families who, as a result of a major disaster, are unable to meet necessary or serious needs. GEMA/FEMA provide administrative oversight for this program, with staff from DHR. In a disaster, federal agencies are authorized through a Presidential Declaration to provide state and local governments with equipment, facilities, personnel and supplies essential for emergency assistance to disaster victims.
10. Provide financial assistance to state or local agencies for services or training of disaster workers and issue such rules and regulations as may be necessary to effectuate this delegation.

C. Notifications

1. Local

   Local agencies should coordinate with their local emergency management agencies. This will ensure that reimbursements are available if the event is labeled as a state or federal disaster.

   All requests for state assistance shall be routed through Georgia's State Operations Center using the 1-800-TRY-GEMA telephone number. GEMA personnel will notify the primary agencies. The primary agencies will notify support agencies as needed.

2. State

   All requests for federal assistance will be coordinated by GEMA. All public notifications will be addressed in External Affairs (ESF 15).

3. Federal

   All notifications of federal agencies will be provided for in the National Response Plan.

III. Concept of Operations

A. Mass Care

1. Strategy

a. Department of Human Resources (DHR) and American Red Cross (ARC) will coordinate with appropriate agencies and organizations to ensure operational readiness. DHR and ARC will develop and maintain Standard Operating Procedures (SOPs).
b. ARC provides mass care to disaster victims, including fixed site and mobile feeding, management of congregate shelters for the general population, and bulk distribution of supplies. The ARC will not be responsible for establishing and managing shelters for special needs populations. DHR will be responsible for the operation of special needs shelters, whether co-located with general population shelters managed by the ARC or established in separate locations.
c. Emergency shelter, mass shelter or other shelters are provided during and after an emergency or disaster where individuals are housed as a result of evacuation or, on a limited scale, pending repair of owner dwellings. An emergency shelter is not intended for prolonged periods of occupancy. The provision of emergency shelter for victims includes: the use of pre-disaster designated shelter sites in existing structures, creation of temporary facilities and use of similar facilities outside the affected area.
d. The ARC designee will represent the organization in mass care and shelter administrative and operation responsibilities in conjunction with DHR Division of Family and Children Services (DFCS). DFCS will maintain the statewide shelter list and coordinate and implement the Disaster Food Stamp Program.
e. The provision for feeding disaster victims and emergency workers via fixed sites, mobile feeding units and bulk food distribution will be accomplished in coordination with ARC; Departments of Agriculture, Corrections, Defense and Education; Georgia Building Authority; Georgia Baptist Convention; and other volunteer organizations. Operations will be based on nutritional standards and include special dietary requirements of persons with special needs. DHR will coordinate requests for issuance and distribution of the Disaster Food Stamp Programs through the United States Department of Agriculture (USDA).
f. Emergency first aid services will be provided to disaster victims and workers at all mass care facilities and designated sites within the disaster area. First aid will be available to supplement emergency health and medical services established to meet victims' needs.
g. ARC Disaster Welfare Information services will be provided to aid in reunification of family members within the affected area who are separated at the time of emergency or disaster.
h. Requests for emergency clothing, bedding and other items lost, damaged or destroyed as a result of an emergency or disaster will be forwarded to volunteer organizations.
i. Mass care shelter facilities will receive priority consideration for logistical and accessibility support requirements and structural inspections to ensure health and safety of victims.

2. Actions

a. Mitigation/Preparedness

i. Develop memorandums of understanding with volunteer organizations
ii. Identify and survey shelters to ensure sufficient space and services for victims and essential workers;
iii. Maintain a list of shelter managers and train personnel in all phases of shelter management;
iv. Prepare shelter management kits (e.g., registration forms and logs);
v. Develop public information materials to support shelter operations; and
vi. Participate in and/or conduct exercises and tests.

b. Response/Recovery

i. Manage and operate general population shelters through ARC and DHR DFCS in coordination with local emergency management agencies (EMAs);
ii. Provide mobile feeding and meals at fixed feeding locations;
iii. Distribute donated goods and potable water;
iv. Provide Disaster Welfare Information services;
v. Secure personnel and operate shelters, feeding units, emergency first aid services and Disaster Welfare Information;
vi. Secure transportation;
vii. Establish communications between shelters, feeding units, emergency first aid services and volunteer location(s);
viii. Administer the federal Individuals and Households Program;
ix. Close and restore shelters to pre-emergency conditions;
x. Coordinate public information and provide updates for ESF 15, External Affairs;
xi. Maintain financial records on personnel, supplies and other resources utilized and report to GEMA upon request; and
xii. Resume day-to-day operations.

IV. References

A. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended.

B. ARC Board of Governors' Disaster Services Policy Statement of July 1977.

EMERGENCY SUPPORT FUNCTION ANNEX 7
RESOURCE SUPPORT

Primary Agency

Department of Administrative Services (DOAS)

Support Agencies

AGENCY	RESOURCE
Board of Regents of the University System of Georgia	Consultation, Equipment, Facilities, Laboratory, Personnel
Criminal Justice Coordinating Council	Personnel
Department of Community Affairs	Building Design, Construction Standards, Housing Specifications, Property Information, Purchase Consultations, Technical Assistance
Department of Defense	Aircraft, Helicopters, Personnel, Staging Facilities, Supplies, Vehicles
Department of Education	Communications, Facilities, Personnel
Department of Human Resources	Personnel, Technical Assistance
Georgia Emergency Management Agency	Personnel
Georgia Environmental Facilities Authority	Fuel
Georgia Ports Authority	Storage Facilities
Georgia Public Safety Training Center	Storage Facilities
Office of Planning and Budget	Procurement

I. Introduction

A. Purpose

This Emergency Support Function (ESF) supports National Response Plan (NRP) ESF 7 (Resource Support). There may be shortages of supplies and equipment necessary for responding to an emergency or disaster. This ESF addresses the necessity to evaluate, locate, procure and provide essential materials and resources. The Department of Administrative Services (DOAS) assumes primary responsibility for this function.

B. Scope

To provide an expedient approval and purchase of supplies and equipment essential to emergency or disaster operations.

II. Policies

A. Direction and Control

The agency with primary responsibility shall provide an Emergency Coordinator and Alternate to fulfill the responsibilities of the agency. The designee(s) shall represent the agency in an emergency or disaster and provide operational support in the State Operations Center when requested.

B. Federal Response

1. FEMA will collect, analyze and disseminate information from respective federal agencies with ESF responsibilities.
2. The General Service Administration (GSA) will provide federal government support for procurement activities. Procurement will be made in accordance with federal laws and regulations.
3. Federal laws and regulations authorize emergency purchasing under any "situation of unusual and compelling urgency." All procurement actions made at the request of federal agencies in support of the plan will be in accordance with GSA statutory and administrative requirements and accomplished using appropriate Federal Emergency Management Agency (FEMA) fund citation/reimbursement procedures.

C. Notifications

1. Local

Local agencies should coordinate with their local emergency management agencies. This will ensure that reimbursements are available if the event is labeled as a state or federal disaster.

All requests for state assistance shall be routed through Georgia's State Operations Center using the 1-800-TRY-GEMA telephone number. GEMA personnel will notify the primary agencies. The primary agencies will notify support agencies as needed.

2. State

All requests for federal assistance will be coordinated by GEMA. All public notifications will be addressed in External Affairs (ESF 15).

3. Federal

All notifications of federal agencies will be provided for in the National Response Plan.

III. Concept of Operations

A. Resource Support

1. Strategy

   a. GEMA will coordinate with appropriate agencies and organizations to ensure operational readiness. GEMA will develop and maintain Standard Operating Procedures (SOPs).
   b. State assistance will consist of a cooperative effort between GEMA and each state agency with primary and support ESF responsibilities in order to facilitate borrowing, renting, leasing and purchasing emergency items.
   c. GEMA is responsible for the implementation and administration of procurement activities necessary to support emergency operations of state agencies.
   d. All other state agencies will be responsible for requirements to maintain emergency operations and inventory.
   e. The Emergency Coordinator for each agency will provide information on purchase request needs and will assume responsibility for reimbursement of items utilized by the agency in an emergency or disaster. The cost will be absorbed by the agency through budget approval or reimbursement arrangements made with the Office of Planning and Budget (OPB). All requested logistical resource support will be provided for immediate emergency operations.
   f. Reasonable efforts will be made to borrow, rent or lease equipment. Purchases will be made only with the joint approval of the appropriate Emergency Coordinator and GEMA Emergency Coordinator and at the discretion of the Georgia Emergency Management Agency (GEMA) Director.
   g. Each state support agency will prepare Standard Operating Procedures (SOPs) for implementation utilizing available personnel, equipment and resources.

2. Actions

   a. Mitigation/Preparedness

      i. Develop procedures for recording expenditures for personnel and resources;
      ii. Enter agreements to ensure prompt resource support where necessary; and
      iii. Participate in and/or conduct exercises and tests.

   b. Response/Recovery

i. Provide procurement support for logistical requirements of agencies responding;
ii. Alert agencies whose personnel, equipment or other resources may be available;
iii. Locate, procure and issue necessary resources to state agencies;
iv. Coordinate public information and provide updates for Public Information;
v. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA upon request;
vi. Continue to conduct procurement activities as long as necessary; and
vii. Resume day-to-day operations.

IV. References

None

EMERGENCY SUPPORT FUNCTION ANNEX 8
PUBLIC HEALTH AND MEDICAL SERVICES

Primary Agency

Department of Human Resources (DHR)

Support Agencies

AGENCY	RESOURCE
American Red Cross	First Aid, Mental Health, Volunteers
Board of Regents of the University System of Georgia	Facilities, Personnel
Department of Administrative Services	Procurement, Vehicles
Department of Agriculture	Animal Disease and Injury, Laboratory Support, Technical Assistance-Food
Department of Corrections	Equipment, Personnel, Vehicles
Department of Defense	Aircraft, Equipment, Helicopters, Personnel, Site Security, Supplies
Department of Education	Facilities, Food
Department of Labor	Employment Counseling, Personnel
Department of Natural Resources	Water Quality Control, Waste Treatment
Department of Public Safety	Aircraft, Communications Equipment, Escort/Traffic Control, Site Security
Department of Technical and Adult Education	Equipment, Personnel
Department of Transportation	Aircraft, Escort/Traffic Control, Technical Assistance-Construction, Vehicles
Georgia Building Authority	Building Design, Construction, Maintenance
Georgia Bureau of Investigation	Investigations, Laboratory Facilities
Georgia Forestry Commission	Vehicles
Georgia Hospital Association	Medical Facilities, Personnel
Georgia Nurse Association	Personnel
Georgia Pharmacy Association	Personnel, Pharmaceuticals, Supplies
Georgia Technology Authority	Communications, Information Technology Support
Prosecuting Attorneys Council of Georgia	Personnel

I. Introduction

A. Purpose

This Emergency Support Function (ESF) supports National Response Plan (NRP) ESF 8 (Public Health and Medical Services). Although the function of *medical care* does not correspond to any unique ESF found in the NRP, it is addressed within ESF 8, Health and Medical Services. This function includes emergency medical services (EMS), hospitals, clinics, first aid stations, facilities,

and medical care, including doctors, nurses, allied health professionals, technicians and support staff, supplies, pharmaceuticals, vaccines, equipment, immunizations and related services. The Department of Human Resources (DHR) assumes primary responsibility for this function.

Public Health, which also does not correspond to any unique ESF found in the NRP, is addressed within ESF 8, Health and Medical Services. This function includes staff, equipment, supplies and services used in the detection, investigation and control of diseases and health conditions. The DHR assumes primary responsibility for this function.

Similarly, the function of *environmental health* does not correspond to any unique ESF in the NRP; however, it is addressed within ESF 8, Health and Medical Services. This function includes staffing, supplies and equipment essential to: (1) prevent communicable diseases and contamination of food and water and (2) develop and monitor health information, inspection and control of sanitation measures, inspection of individual water supplies, disease vector and epidemic control, laboratory testing, and facility and shelter inspections. The DHR assumes primary responsibility for this function.

The functions of *Crisis Counseling, Grief Assistance and Rehabilitation Services* also do not correspond to any unique ESF in the NRP; however, they are addressed within ESF 8, Health and Medical Services. These functions include professional personnel; services and facilities to address mental health concerns and conditions of victims and responders caused or exacerbated by an emergency or disaster or the associated aftermath. The DHR assumes primary responsibility for this function.

B. Scope

To coordinate and/or deliver public health, environmental health, medical services and mental health services; to facilitate the provision of support and services by private resources; and to coordinate the supplementation of disrupted or overburdened service resources and personnel to relieve suffering and/or trauma of victims.

II. Policies

A. Direction and Control

1. This ESF will be activated by the Georgia Emergency Management Agency prior to, during, or following an emergency or disaster. GEMA will notify the primary agency.
2. The agency with primary responsibility shall provide an Emergency Coordinator and Alternates to coordinate the responsibilities of the ESF. The

designee(s) shall represent the agency in an emergency or disaster and provide operational support in the State Operations Center when requested.
3. The primary state agency, working with GEMA, will notify the support agencies as needed.

B. Federal Response

1. It is understood that the next level of response available to the state is a Federal Regional response.
2. In a Presidential Declaration, federal agencies are authorized to provide states and local governments with emergency personnel, equipment, facilities and supplies essential to save lives and to preserve or protect public health and safety.
3. Through an interagency agreement with the Federal Emergency Management Agency (FEMA), Center for Mental Health Services staff helps to ensure that victims of Presidentially declared disasters receive immediate, short-term crisis counseling, as well as ongoing support for emotional recovery.

C. Other

1. In compliance with Health Insurance Portability and Accountability Act, to ensure the protection of patient confidentiality, medical information on individual patients will not be released to the general public. Information necessary for medical treatment and the control of diseases and health conditions may be shared among health providers and with Public Health.
2. In circumstances in which a disease or condition is suspected of rapid transmission, the protocols developed within ESF 15 will be employed to disseminate information and risk communication to the public regarding symptoms and appropriate preventative and protective actions.

D. Notifications

1. Local

   Local agencies should coordinate with their local emergency management agencies. This will ensure that reimbursements are available if the event is labeled as a state or federal disaster.

   All requests for state assistance shall be routed through Georgia's State Operations Center using the 1-800-TRY-GEMA telephone number. GEMA personnel will notify the primary agency. The primary agency will notify support agencies as needed.

2. State

   All requests for federal assistance will be coordinated with GEMA. All public

notifications will be addressed in External Affairs (ESF 15).

3. Federal

   All notifications of federal agencies will be provided for in the National Response Plan.

III. Concept of Operations

A. Medical Care

1. Strategy

   a. DHR will coordinate with appropriate agencies and organizations to ensure operational readiness. DHR will develop and maintain Standard Operating Procedures (SOPs).
   b. Upon state request, local agencies of DHR units will report to the local emergency management agency (EMA) to assess health and medical services needs associated with the emergency and coordinate assistance through the local Emergency Operations Center (EOC).

2. Actions

   a. Mitigation/Preparedness

      i. Develop and/or maintain relationships with professional associations and private agencies/organizations, including hospitals, that may be of assistance in providing medical services;
      ii. Identify and document resources to supplement local emergency medical care. Resources include facilities, personnel, equipment, vehicles, and supplies available for use in a medical emergency;
      iii. Plan for temporary medical facilities where hospitals and medical centers are not available;
      iv. Assist hospitals and long-term health care facilities, including nursing homes and assisted living centers, in patient evacuation and relocation planning;
      v. Continue development of the DHR Emergency Management Team and identification of accompanying resources within DPH, MH/DD/AD and private agencies/organizations resources;
      vi. Identify, train and provide technical assistance to professional staff and volunteers of emergency medical services; and
      vii. Participate in and/or conduct training, exercises and tests.

   b. Response/Recovery

i. Coordinate, deliver and/or manage emergency medical personnel, facilities, vehicles, equipment and supplies for victims, including people with special needs;
ii. Maintain the DPH and GEMA debris removal agreement for disposal of potential health and safety hazards from private property;
iii. Maintain laboratory facilities capable of analyses necessary for emergency support of health activities;
iv. Implement plan for temporary medical facilities where hospitals and medical centers are not available;
v. Assist hospitals and long-term health care facilities, including nursing homes and assisted living centers, in patient evacuation and relocation;
vi. Provide personnel to designated shelters and other facilities for the provision of health and medical services to disaster victims;
vii. Coordinate disaster-related public information and risk communication, and provide updates according to ESF 15, External Affairs;
viii. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA, upon request; and
ix. Resume day-to-day operations.

B. Public Health

1. Strategy

a. DHR will coordinate with the appropriate agencies and organizations to ensure operational readiness for public health activities. DHR will develop and maintain planning and operations documents to support preparedness and response.

b. DHR will assist with staffing, supplies and equipment essential to: detection, identification, investigation, and control and prevention of diseases.

2. Actions

a. Mitigation/Preparedness

i. Develop and/or maintain relationships with professional associations and private agencies/organizations, including hospitals, that may be of assistance in providing public health services;
ii. Identify and document resources to supplement local emergency public health services. Resources include facilities, personnel, equipment, vehicles, and supplies available for use in such an emergency;

iii. Assist hospitals and long-term health care facilities, including nursing homes and assisted living centers, in planning for patient evacuation and relocation planning;
iv. Continue development of the DHR Emergency Management Team and identification of accompanying resources within DPH, MH/DD/AD and private agencies/organizations resources;
v. Develop emergency immunization protocols and develop protocols for identification of disease, vector and epidemic control;
vi. Identify, train and provide technical assistance to professional staff and volunteers of emergency public health services; and
vii. Participate in and/or conduct training, exercises and tests of public health capabilities.

b. Response/Recovery

i. Coordinate, deliver and/or manage public health activities to include epidemiologic investigations, environmental health response, and laboratory support to assist in the detection, identification, investigation, and control and prevention of diseases;
ii. Maintain the DPH and GEMA debris removal agreement for disposal of potential health and safety hazards from private property;
iii. Maintain laboratory facilities capable of analyses necessary for emergency support of health activities;
iv. Implement plan for temporary medical facilities where needed;
v. Assist hospitals and long-term health care facilities, including nursing homes and assisted living centers, in coordination of patient evacuation and relocation;
vi. Provide personnel to designated shelters and other facilities for the provision of health services and the coordination of medical services to disaster victims;
vii. Coordinate disaster-related public information and risk communication, and provide updates according to ESF 15, External Affairs;
viii. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA, upon request; and
ix. Resume day-to-day operations.

C. Environmental Health

1. Strategy

a. DHR will coordinate with appropriate agencies and organizations to ensure operational readiness. DHR will develop and maintain planning

and operations documents to support preparedness and response Standard Operating Procedures (SOPs).

b. DHR will assist with staffing, supplies and equipment essential to:

i. Prevent communicable diseases and contamination of food and water and;
ii. Develop and monitor health information, inspection and control of sanitation measures, inspection of individual water supplies, disease vector and epidemic control, laboratory testing, and facility and shelter inspections. The DHR assumes primary responsibility for this function.

2. Actions

a. Mitigation/Preparedness

i. Foster and/or maintain relationships with professional associations and private agencies/organizations that may be of assistance in environmental health services;
ii. Identify and document resources to supplement local emergency care. Resources include facilities, personnel, equipment, vehicles, and supplies available for use in an environmental health emergency;
iii. Cooperate with public information officers and other staff to educate the general public regarding environmental health concerns;
iv. Monitor and evaluate air, well water and food quality control;
v. Develop procedures to control unsanitary conditions;
vi. Identify laboratory testing facilities;
vii. Continue development of the DHR Emergency Management Team and identification of accompanying resources within DPH and private agencies/organizations resources;
viii. Identify, train and provide technical assistance to professional staff and volunteers of emergency environmental health services; and
ix. Participate in and/or conduct training exercises and tests.

b. Response/Recovery

i. Coordinate, deliver and/or manage emergency environmental health services for victims;
ii. Work with administrators of public information to notify the general public of response actions to the environmental health emergency;
iii. Maintain DPH and GEMA debris removal agreement for disposal of potential health and safety hazards from private property;
iv. Monitor and evaluate air, water and food quality control;
v. Maintain laboratory facilities capable of analyses necessary for emergency support of environmental and health activities;
vi. Provide representation to designated shelters and other facilities for

the provision of health and medical services to disaster victims;
vii. Coordinate disaster-related public information and provide updates according to ESF 15, External Affairs;
viii. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA, upon request; and
ix. Resume day-to-day operations.

D. Crisis Counseling

1. Strategy

a. Offer mental health care to disaster victims, survivors, bystanders, responders and their families and other community care-givers.
b. DHR will coordinate with appropriate agencies and organizations to ensure operational readiness. DHR will develop and maintain Standard Operating Procedures (SOPs).
c. DHR will assess the immediate and long - term mental health needs following an emergency or disaster.
d. DHR - Division of Mental Health/Developmental Disabilities/Addictive Diseases (MH/DD/AD) will manage crisis counseling and mental health assistance in coordination with the American Red Cross (ARC), local religious organizations and private agencies/organizations. In the case of an airline accident, federal law designates the ARC as the coordinator of crisis counseling and mental health services. In this case, DHR - MH/DD/AD will coordinate with the ARC and render assistance as requested.

2. Actions

a. Mitigation/Preparedness

i. Develop and/or maintain relationships with professional associations and private agencies/organizations that may be of assistance in mental health and rehabilitation services;
ii. Identify and document resources to supplement local emergency care. Resources include facilities, personnel, equipment, vehicles, and supplies available for use in a medical emergency;
iii. Provide mental health education on critical incident stress and stress management techniques;
iv. Continue development of the DHR Emergency Management Team and identification of accompanying resources within DPH, MH/DD/AD, and private agencies/organizations resources;
v. Identify, train and provide technical assistance to professional staff and volunteers of emergency mental health and rehabilitation services; and

vi. Participate in and/or conduct training exercises and tests.

b. Response/Recovery

i. Coordinate, deliver and/or manage emergency mental health and rehabilitation services for victims including medical services for people with special needs;
ii. Provide representation to designated shelters and other facilities for the provision of health and medical services to disaster victims;
iii. Provide stress management training support to mental health teams responding to disaster survivors and responders;
iv. Manage crisis counseling and mental health assistance including disaster grant programs;
v. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA, upon request; and
vi. Resume day-to-day operations.

IV. References

A. Georgia Emergency Management Act of 1981, as amended, Official Code of Georgia Annotated § 38-3-22(b)(6) http://www.legis.state.ga.us/cgi-bin/gl_codes_detail.pl?code=38=3=22)

EMERGENCY SUPPORT FUNCTION ANNEX 9
SEARCH AND RESCUE

Primary Agency

Georgia Emergency Management Agency (GEMA)

Support Agencies

AGENCY	RESOURCE
Department of Administrative Services	Personnel, Vehicles
Department of Corrections	Equipment, Personnel, Tracking Dogs
Department of Defense	Helicopters, Personnel, Search and Rescue, Vehicles
Department of Human Resources	Emergency Medical Services
Department of Natural Resources	Boats, Helicopters, Search and Rescue, Vehicles
Department of Public Safety	Aircraft, Escort, Identification, Personnel, Search and Rescue, Traffic Control
Department of Transportation	Aircraft, Search and Rescue, Vehicles
Georgia Bureau of Investigation	Identification, Investigations

I. Introduction

A. Purpose

This Emergency Support Function (ESF) supports National Response Plan ESF 9 (Urban Search and Rescue).

Search and Rescue includes air, ground and water searches for lost or missing persons and rescue of endangered, sick or injured people. The Georgia Emergency Management Agency (GEMA) assumes primary responsibility for this function.

B. Scope

To provide coordination of state resources for search and rescue operations during an emergency or disaster that is beyond the capabilities of local governments within affected areas.

II. Policies

A. Direction and Control

The agency with primary responsibility shall provide an Emergency Coordinator and Alternate to meet the responsibilities of the agency. The designee(s) shall represent the agency in an emergency or disaster and provide operational support in the State Operations Center when requested.

B. Federal Response

1. Search and Rescue

The Federal Emergency Management Agency (FEMA) is authorized to provide federal assistance as emergency protective measures under the provisions of The Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended. The GEMA Director will consult with the FEMA Regional Director on federal assistance requests. Upon federal approval, assistance will be coordinated through GEMA.

C. Notifications

1. Local

Local agencies should coordinate with their local emergency management agencies. This will ensure that reimbursements are available if the event is labeled as a state or federal disaster.

All requests for state assistance shall be routed through Georgia's State Operations Center using the 1-800-TRY-GEMA telephone number. GEMA personnel will notify the primary agencies. The primary agencies will notify support agencies as needed.

2. State

All requests for federal assistance will be coordinated by GEMA. All public notifications will be addressed in External Affairs (ESF 15).

3. Federal

All notifications of Federal agencies will be provided for in the National Response Plan.

III. Concept of Operations

A. Search and Rescue

1. Strategy

   a. GEMA will coordinate with appropriate agencies and organizations to ensure operational readiness. GEMA will develop and maintain Standard Operating Procedures (SOPs).
   b. GEMA is responsible for the coordination of state search and rescue activities. GEMA will integrate personnel and resources available from other state agencies, local governments and organizations.
   c. If there is an emergency or disaster, local governments are responsible for the activation of plans and appropriate use of personnel and equipment for search and rescue before requesting state assistance.
   d. Every effort will be made to support local personnel and resources for regional or statewide response.
   e. The state will assist local governments in training and certifying personnel and licensing rescue organizations.

2. Actions

   a. Mitigation/Preparedness

      i. Establish and maintain Search, Rescue and Recovery (SRR) standards for personnel and canine teams who may participate in SRR efforts;
      ii. Recruit, train, certify and license SRR personnel and canine teams;
      iii. Develop record reporting procedures to reflect local and state assistance;
      iv. Establish and maintain search and rescue support and reporting procedures;
      v. Develop awareness information to local and state organizations about SRR protocols and operations;
      vi. Promote a survival education program for the public; and
      vii. Participate in and/or conduct exercises and tests.

   b. Response/Recovery

      i. Support search and rescue requests from other local and state agencies and organizations;
      ii. Modify aspects of this ESF as deemed necessary;
      iii. Coordinate public information and provide updates for ESF 15, External Affairs;
      iv. Maintain financial records on personnel, supplies and other resources utilized and report expenditures as requested; and

v. Resume day-to-day operations.

IV. References

A. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended.

EMERGENCY SUPPORT FUNCTION ANNEX10
HAZARDOUS MATERIALS

Primary Agencies

Department of Natural Resources (DNR)
Georgia Emergency Management Agency (GEMA)

Support Agencies

AGENCY	RESOURCE
Department of Administrative Services	Communications, Equipment, Procurement, Vehicles
Department of Agriculture	Containment, Disposal, Equipment, Investigation, Personnel, Substance Identification, Technical Advice
Department of Corrections	Equipment, Personnel, Vehicles
Department of Defense	Aircraft, Containment, Control Access to Contaminated Areas, Disposal, Equipment, Helicopters, Investigation, Personnel, Vehicles
Department of Human Resources	Equipment, Health Services, Personnel, Shelters
Department of Public Safety	Aircraft, Communications Equipment, Control Access to Contaminated Areas, Escort of Hazardous Materials, Public Notification, Report Verification, Transportation Assistance, Vehicles
Department of Transportation	Aircraft, Escort of Hazardous Materials, Instruments, Vehicles
Georgia Forestry Commission	Aircraft, Burn Investigations, Communications, Containment, Equipment, Fire Suppression, Personnel, Vehicles
Georgia Public Safety Training Center	Personnel
Public Service Commission	Escort of Hazardous Materials, Instruments

I. Introduction

A. Purpose

This Emergency Support Function (ESF) supports National Response Plan ESF 10 (Hazardous Materials).

An emergency or disaster could result from hazardous and radiological materials being released into the environment. Fixed facilities (e.g., chemical plants, nuclear power plants and facilities, tank farms, laboratories, operating hazardous waste sites) which produce, generate, use, store or dispose of hazardous materials, including radioactive materials, could be damaged so that spill control apparatus and containment measures are not effective. Hazardous materials that are transported may be involved in rail accidents, highway collisions and

waterway and airline mishaps. In the event of a radiological emergency, the primary agencies have the authority to protect the health and safety of Georgia citizens by evacuating people from private property, controlling public and private transportation corridors and utilizing all public facilities in support of efforts to protect life and property. The Department of Natural Resources (DNR) and Georgia Emergency Management Agency (GEMA) assume responsibility for this function.

B. Scope

To provide a coordinated response by local, state and federal resources to minimize adverse effects on the population and environment resulting from the release of or exposure to hazardous or radiological materials.

II. Policies

A. Direction and Control

The agency with primary responsibility shall provide an Emergency Coordinator and Alternate to meet the responsibilities of the agency. The designee(s) shall represent the agency in an emergency or disaster and provide operational support in the State Operations Center when requested.

B. Federal Response

1. Hazardous Materials

Upon a Presidential Declaration, the GEMA Director will consult with the Regional Director of the Federal Emergency Management Agency (FEMA) concerning assistance. Assistance related to hazardous materials incidents is available from, but not limited to, the following federal agencies:

a. Environmental Protection Agency (EPA)
b. Department of Defense (DOD)
c. United States Coast Guard (USCG)
d. Nuclear Regulatory Commission (NRC)
e. Department of Energy (DOE)
f. Department of Health and Human Services – United States Public Health Service (USPHS)
g. Federal Emergency Management Agency (FEMA)
h. Other

If an emergency or other disaster does not cause actual releases of hazardous materials, there may be concern about facilities located in or near the affected area. These facilities will need to be assessed and monitored.

Information submitted in compliance with Title III of the Superfund Amendments and Reauthorization Act (SARA Title III), Clean Air Act Amendments of 1990, Oil Pollution Act (OPA) of 1990 and Hazardous Materials Transportation Uniform Safety Act of 1990 will be useful in identifying such facilities.

C. Notifications

1. Local

Local agencies should coordinate with their local emergency management agencies. This will ensure that reimbursements are available if the event is labeled as a state or federal disaster.

All requests for state assistance shall be routed through Georgia's State Operations Center using the 1-800-TRY-GEMA telephone number. GEMA personnel will notify the primary agencies. The primary agencies will notify support agencies as needed.

2. State

All requests for federal assistance will be coordinated by GEMA. All public notifications will be addressed in External Affairs (ESF 15).

3. Federal

All notifications of federal agencies will be provided for in the National Response Plan.

III. Concept of Operations

A. Hazardous Materials

1. Strategy

a. DNR and GEMA will coordinate with appropriate agencies and organizations to ensure operational readiness. DNR and GEMA will develop and maintain Standard Operating Procedures (SOPs).
b. DNR will coordinate, integrate and manage overall state efforts to detect, identify, contain, clean up, dispose of or minimize releases of oil or hazardous substances and prevent, mitigate or minimize the threat of potential releases. DNR Environmental Protection Division (EPD) will provide expertise on environmental effects of oil discharges, releases of hazardous substances, pollutants, contaminants and environmental pollution control techniques. In order to ensure efficient response, damage information must be gathered quickly, analyzed and response

priorities established as soon as possible.

c. GEMA is responsible for coordination of agencies in response to an incident involving a nuclear power plant. All activities will be in accordance with procedures as outlined in the Georgia Radiological Emergency Base Plan.
d. GEMA is also responsible for training first responders for the Waste Isolation Pilot Plant (WIPP) provided through the United States Department of Energy.
e. This program includes personnel, equipment and technical expertise necessary to contain, counteract and supervise clean up of hazardous materials.
f. Private industries with hazardous materials must comply with SARA Title III and advise DNR of spills, accidents and other situations that cannot be controlled effectively.
g. Local government assumes responsibility for the protection and well being of residents. However, owners, shippers and utility companies are responsible for clean up and containment. Local governments, through designated response agencies, will respond to hazardous materials incidents of all types and sizes, make initial assessments as to severity/magnitude of the situation and take appropriate first responder protection measures to prevent or minimize injuries and property damage.

2. Actions

a. Mitigation/Preparedness

i. Prepare an inventory, location of existing threats and facilities list;
ii. Plan for responses to hazardous materials incidents;
iii. Develop detailed procedures for identification, control and clean up of hazardous materials;
iv. Identify training for response personnel through GEMA, Georgia Public Safety Training Center - Fire Academy and manufacturers and transporters of hazardous materials;
v. Provide for or obtain training in radiological monitoring for hospital and emergency personnel in self-protection;
vi. Maintain a listing of private contractors capable of performing emergency and/or remedial actions associated with a hazardous materials incident;
vii. Develop mutual aid agreements with local agencies, other state agencies, contiguous state agencies, federal agencies and private agencies/organizations;
viii. Collect and utilize licensing, monitoring and/or transportation information from the local, state or federal agencies and/or private organizations to facilitate emergency response; and
ix. Participate in and/or conduct exercises and tests.

b. Response/Recovery

i. Assess the situation to protect life, health and the environment;
ii. Review initial reports of an incident and maintain surveillance over reported incidents that may require state personnel and resources;
iii. Request additional information necessary to evaluate a hazardous materials or radiological incident;
iv. Provide 24-hour response team capability and dispatch personnel to the incident scene;
v. Consult with support agencies to determine assistance necessary and/or available to mitigate health and environmental effects;
vi. Recommend evacuation or other protective measures;
vii. Determine the extent of the contaminated area and consult with support agencies/organizations to provide access and egress control to contaminated areas;
viii. Consult with local, state or federal agencies and/or private agencies/organizations about the need for decontamination;
ix. Coordinate decontamination activities with local, state and federal agencies;
x. Coordinate with local, state and federal agencies to ensure proper disposal of wastes associated with hazardous materials and assist in monitoring of such shipments to disposal facilities;
xi. Seek cooperation of response teams, owner/shipper and federal environmental personnel during clean up operations;
xii. Provide area security and prohibit all unauthorized personnel from entering area;
xiii. Determine, in coordination with appropriate agencies/organizations, guidelines for reentry of emergency personnel and residents;
xiv. Conclude clean up operations when all danger is past and the area has been declared safe by responsible personnel and restored to the best condition possible;
xv. Coordinate public information and provide updates for ESF 15, External Affairs;
xvi. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA upon request; and
xvii. Resume day-to-day operations.

IV. References

A. Georgia Air Quality Control Act
B. Hazardous Materials Transportation Uniform Safety Act of 1990
C. Official Code of Georgia Annotated (OCGA) §12-8
D. The Clean Air Act Amendments of 1990
E. The Oil Pollution Act (OPA) of 1990
F. Title III of the Superfund Amendments and Reauthorization Act (SARA)
G. Water Quality Control Act

EMERGENCY SUPPORT FUNCTION 11 AGRICULTURE AND NATURAL RESOURCES

Primary Agency

Department of Agriculture (GDA)
Department of Natural Resources (DNR)

Support Agencies

AGENCY	RESOURCES
Board of Regents of the University System of Georgia	Consultation, Equipment, Facilities, Laboratories, Personnel, Research and Development, Training
Department of Administrative Services	Personnel, Procurement, Vehicles
Department of Corrections	Equipment, Facilities, Food, Helicopters, Personnel, Vehicles
Department of Defense	Aircraft, Biosecurity, Facilities, Food, Perimeter Control, Personnel, Quarantine Enforcement, Security, Surveillance, Disposal, Specialized Equipment and Communications, Supplies, Tents, Vehicles, Water
Department of Education	Consultation, Facilities, Food, Personnel, Training, Water
Department of Human Resources	Food, Food Stamps, Distribution and Preparation, Environmental Health Inspections, Health and Medical, Information Sharing, Personnel, Pet Shelter Site Identification,, Training, Women, Infants and Children Program, Vehicles
Department of Labor	Personnel
Department of Transportation	Aircraft, Construction, Equipment, Food Distribution, Food Escort, Technical Assistance, Traffic Control, Vehicles
Georgia Building Authority	Food
Georgia Bureau of Investigation	Intelligence, Laboratory Facilities, Specialized Communications
Georgia Emergency Management Agency	Facilitation, Communication, Coordination, Equipment, Logistics, Technical Assistance, Administration
Georgia Forestry Commission	Equipment, Personnel, Vehicles. Logistics
Georgia Public Safety Training Center	Food, Personnel
Georgia State Patrol	Aircraft, Communication Equipment, Crisis Management, Escort, Law Enforcement, Quarantine Enforcement, Security, Traffic and Perimeter Control, Transportation
Georgia Volunteer Organizations Active in Disaster (VOAD)	Emergency Animal Sheltering, Equipment, Food, Personnel, Supplies, Facilities, Technical Assistance, Veterinary Medical Triage, Water

I. Introduction

A. Purpose

The Georgia Agriculture and Natural Resources Emergency Support Function ESF 11 corresponds with the National Response Plan ESF 11 and addresses (1) the provision of nutrition assistance; (2) control and eradication of an outbreak of a highly contagious or economically devastating animal disease, highly infective exotic plant disease, or economically devastating plant pest infestation; (3) assurance of food safety and food defense; (4) assistance during a natural disaster affecting animals, production agriculture, animal industry, aquaculture, marine, aquatic and terrestrial wildlife; (5) protection of natural and cultural resources and historic properties resources prior to, during, and/or after an incidence of State significance.

The Georgia Department of Agriculture (GDA) has the statutory and regulatory authority to provide for the safety and availability of the food in wholesale, retail and processor stocks. The GDA coordinates with the U.S. Department of Agriculture (USDA), U.S. Food and Drug Administration (FDA), and the Georgia Department of Human Resources to meet the requirements of this ESF.

B. Scope and Functional Responsibilities

To provide for the following functional responsibilities: identify, secure, and distribute food, bottled beverages, and supplies, and support the provision for sanitary food storage, distribution, and preparation during emergency or disaster; provide for mitigation, response and recovery to natural disasters, and/or acts of terrorism, affecting animals, production agriculture, and the food sector; assist agriculture in an outbreak of a highly infectious/contagious or economically devastating animal/zoonotic disease, or a highly infective exotic plant disease or an economically devastating plant pest infestation; assist production agriculture, animal industry, aquaculture, the seafood industry, and wildlife adversely affected by a disaster, either natural or man-made; and conserve, rehabilitate, recover and restore natural, cultural, and historic properties prior to, during, and after a man-made or natural disaster.

II. Policies

A. General

1. The GDA, as the coordinator of ESF 11 for Agriculture and Natural Resources, organizes the ESF staff based on the Scope and Functional Responsibilities outlined above in Section I.B. ESF 11 organizes and coordinates the capabilities and resources of state government to facilitate the delivery of services, technical assistance, expertise, and other support for incidents that impact Georgia.
2. ESF 11 provides for an integrated federal, state, and local response to an outbreak of a highly contagious; an economically devastating animal/zoonotic disease; an outbreak of a highly infective exotic plant disease; an economically devastating plant or animal pest infestation; or a natural disaster affecting Georgia.

3. ESF 11 identifies, secures, and arranges for the transportation of food and/or food stamp benefits to affected areas.
4. ESF 11 ensures the safety and security of the State's commercial food supply following a potential or actual incident and mitigates the effect of the incident on all affected parts of the State's population and environment.
5. The GDA and DNR will coordinate veterinary and wildlife services in areas affected by disease or a natural disaster.
6. The GDA and DNR will coordinate with ESF 8 on animal/veterinary wildlife issues in zoonotic diseases and natural disaster issues to save human life and property.
7. As the primary agency for NCH (natural, cultural, and historical) resources, the DNR organizes and coordinates the capabilities and resources of the State government to facilitate the delivery of services, technical assistance, expertise, and other support for the protection, conservation, rehabilitation, recovery, and restoration of NCH resources in prevention of, preparedness for, response to, and recovery from an incident of State importance.

B. Direction and Control
1. The GDA and DNR shall provide Emergency Coordinators and Alternates for the responsibilities of the agencies. The designees shall represent the agencies in an emergency or disaster and provide operational support in the State Operations Center when requested.
2. The GDA, in the event of an animal health emergency, an infective exotic plant disease, an economically devastating plant pest infestation, or a catastrophic event involving harvested, processed, wholesale, retail, warehoused or stored foods and water, may request activation of the state emergency operations plan in support of such an emergency, including acts of terrorism. This may or may not occur in conjunction with an extraordinary declaration of emergency by the U.S. Secretary of Agriculture. The GDA will respond to meet responsibilities of the ESF and its Annexes in a declaration of disaster for any catastrophic or "all hazard" event. In all of these situations the National Incident Management System (NIMS), using the Incident Command System (ICS) structure, will be utilized. In addition, State Agriculture Response Teams (GA-SARTs) may be mobilized.
3. The organizational structure utilized during the activation of ESF 11 is as follows:

    a. In the event of an outbreak of a highly infectious/contagious or economically devastating animal and/or zoonotic disease:

        i. The State Veterinarian serves as the principal point of contact with the USDA-APHIS-VS, represented by the USDA Area Veterinarian in Charge in Georgia.
        ii. The emergency management agencies will activate the State, regional, or local emergency operations centers as needed to be the State's base of operations for interfacing with local governments, State

agencies, and the private sector. Incident Commander(s) may be requested to communicate directly with the EOC and Area Command Staff.

iii. The State Veterinarian and Area Veterinarian in Charge will establish a Joint Area Command at a designated location to serve as the focal point for coordinating the disease management decision process. The Joint Area Command and the EOC will be staffed by GDA and USDA personnel and supplemented by other state agencies as required. OHS-GEMA will provide communications and logistical support, and the USDA and the University of Georgia will provide diagnostic technical expertise, as required including point detection capability.

iv. The Joint Area Command may deploy one or more GA-SARTs to assist in managing the incident.

b. In the event of an outbreak of a highly infective exotic plant disease or economically devastating plant pest infestation:
   i. The State Plant Health Director of the GDA serves as the principal point of contact with the USDA-APHIS Plant Protection and Quarantine (PPQ), represented by the State PPQ Director.
   ii. The emergency management agencies will activate the State, regional, or local emergency operations centers as needed, as the State's base of operations for interfacing with local governments, State agencies, and the private sector.
   iii. The State Plant Health Director and the State PPQ Director establish a Joint Area Command at a designated location to serve as the focal point for coordinating the disease or pest management decision-making process.
   iv. The Joint Area Command may deploy one or more GA-SARTs to assist in managing the incident.

c. Regardless of the nature of the disease or pest emergency the EOC may establish a Joint Information Center (JIC) that functions as the principal source of information about the disease outbreak or pest infestation response in the State. The State JIC coordinates closely with federal officials to ensure consistency in the information released to the communications media and the public.

d. In assisting with disease response, the local or county government may activate its EOC to provide a local base of operations. A county emergency declaration may be needed to initiate county response activities. The State Agriculture Response Teams (GA-SARTs) will lead the planning and operations functions in any agricultural emergency, and possibly other functions (i.e. incident command, logistics, administration) as determined necessary.

e. In the event of a food safety emergency, the GDA Consumer Protection Division will be the primary point of contact with the Georgia Food Safety Task Force. However, in the event of a food safety emergency that

pertains to a facility licensed by the GDA Meat Inspection Section, then the State Meat Inspection Director will be the primary point of contact with the Georgia Food Safety Task Force.

C. Federal Response

1. In a disaster or catastrophic event, federal agencies are authorized through a Presidential Declaration to provide state and local governments with equipment, facilities, personnel and supplies essential for emergency assistance to disaster victims.
2. With an outbreak of a highly infectious/contagious or economically devastating animal disease, highly infective exotic plant disease, or economically devastating plant pest infestation federal agencies are authorized through an extraordinary declaration of emergency by the U.S. Secretary of Agriculture to provide state and local governments with assistance to eradicate such diseases or pests.
3. The Georgia Area Veterinarian in Charge (AVIC) will coordinate activities of the United States Department of Agriculture Animal and Plant Health Inspection Service Veterinary Services (USDA-APHIS-VS) in the event of an animal emergency.
4. The Georgia USDA PPQ Director will coordinate activities of the USDA PPQ in the event of a plant emergency.
5. The Georgia Food Safety Task Force will coordinate activities of the USDA Food Safety Inspection Service and the U.S. Department of Health and Human Services (i.e. FDA and CDC) in the event of a food safety or food security incident.
6. Acts of terrorism may be directed to the nation's food supply, livestock herds or poultry flocks either as the target or as a vehicle for weapons of mass destruction. Acts of terrorism are a federal crime, and the response to such events are authorized and outlined in the U.S. Terrorism Incident Law Enforcement and Investigation Annex of the NRP.

D. Notifications

1. Local

Local agencies should coordinate with their local emergency management agencies. This will ensure that reimbursements are available if the event is labeled as a State or Federal disaster. All requests for State assistance shall be routed through the OHS-GEMA Emergency Operations Center using the 1-800-TRY-GEMA telephone number. GEMA personnel will notify the primary agencies. The primary agencies will notify support agencies as needed.

2. State

All Presidential requests for federal assistance will be coordinated by GEMA. All public notifications will be addressed in Public Information and Planning

(GEOP ESF 15).

3. Federal

   All notifications of federal agencies will be provided for in the NRP.

III. Concept of Operations

A. Animal and Plant Diseases and Pests

1. Strategy

   a. GDA will coordinate with appropriate agencies and organizations to ensure operational readiness.
   b. GDA, in coordination with primary federal agencies and support agencies, will develop and maintain Standard Operating Procedures (SOPs) for prevention, mitigation, response and recovery for agriculture and food incidents.
   c. These procedures will relate to catastrophic incidents that pose a significant impact on human life, property, or the economy.

2. Response Actions

   a. Mitigation/Preparedness

      i. Develop mutual aid agreements with government agencies, professional associations, and private agencies/organizations.
      ii. Train first responders, community leaders and the agricultural industry at the awareness level in agrosecurity and agroterrorism.
      iii. Organize, train, and equip State Agriculture Response Teams (GA-SARTs) in GEMA All Hazards Council Areas.
      iv. Organize, train and equip specialists to operate within the NIMS.
      v. Provide for surveillance for foreign animal diseases or an animal disease, syndrome, chemical, poison, or toxin that may pose a substantial threat to the animal industries, aquaculture or seafood industries, the economy, or public health of the state.
      vi. Provide for surveillance for pests which may pose a potential or substantial threat to agriculture, horticulture, economy, or public health of the state.
      vii. Develop county and local plans and resources to enhance awareness of surveillance for early detection of animal health emergencies and agroterrorism.
      viii. Conduct training sessions and workshops to assist local communities and support agencies and organizations.
      ix. Participate in and/or conduct exercises and tests.
      x. Encourage support agencies to develop emergency operations plans that detail their support functions for ESF 11.

b. Response/Recovery

i. Collect samples, ensure proper packing and handling, and deliver them to designated laboratories for appropriate testing
ii. Manage the crisis response and the resulting consequences, as well as cooperate with law enforcement officials in criminal investigations, if a terrorist act is suspected in connection with an agriculture and food incident
iii. Oversee the decontamination and/or destruction of animals, plants, cultured aquatic products, food, and their associated facilities as determined necessary.
iv. Quarantine, stop sale, stop movement and place other restrictions under GDA authority of animals, plants, equipment, and products as necessary to control and eradicate diseases and pests.
v. Secure supplies, equipment, personnel and technical assistance from support agencies, organizations and other resources to carry out the response plans associated with animal health emergency management or any act of agroterrorism that may pose a substantial threat to the state.
vi. Manage and direct evacuation of animals from risk areas and provide technical assistance to prevent animal injury and disease dissemination.
vii. Coordinate County Agriculture Response Teams (CARTs) and other local emergency response teams with the statewide support network and the State Agriculture Response Team(s) (GA-SART(s)).
viii. Support both intrastate and interstate mutual aid agreements such as the Emergency Management Assistance Compact (EMAC).
ix. Coordinate Veterinary Medical Assistance Team (VMAT) assistance. Take reasonable measures to provide veterinary treatment and humane care of animals.
x. Provide consultation and coordinate response with the Department of Human Resources on animal and plant issues which may impact public health.
xi. Provide for the inspection and assessment of food animals, aquaculture, and seafood production facilities and product storage facilities through the Georgia Department of Agriculture meat and poultry inspection, seafood inspection, and related food protection units in order to protect public health.
xii. Coordinate operations to assure occupational safety measures are followed.
xiii. Coordinate with support agencies that have been assigned tasks such as the removal and proper disposal of animal waste and dead animals including cultured aquatic products, seafood, and wildlife.
xiv. Coordinate response activities with associated federal agriculture, food agencies, and local public health agencies.

xv. Continue response activities, augment services to affect rapid recovery, and provide for veterinary medical services through the GA-SART(s).
xvi. Coordinate damage assessment with the regional coordinator, agricultural and food agencies, and the private sector.
xvii. Restore equipment and supplies to normal state of operational readiness.
xviii. Coordinate public information and provide updates for ESF 15 - Public Information and Planning.
xix. Maintain financial records on personnel, supplies, and other resources utilized and report to OHS-GEMA upon request.
xx. Resume day-to-day operations.

B. Natural Disaster and Animals, Animal Industry, and Wildlife

1. Strategy

a. The GDA and the DNR will coordinate with appropriate agencies and organizations to ensure operational readiness. The GDA will develop and maintain Standard Operating Procedures to include, but not limited to poultry, cattle, swine, dairy, equine, goats, sheep, and companion animal industries for a natural disaster. DNR will develop and maintain Standard Operating Procedures regarding aquaculture, seafood, wildlife, and exotic animals for natural disaster and the preservation of natural, cultural and historic resources.
b. DNR has the authority to close seafood harvest areas in the event of natural disasters or emergencies which make seafood unfit for human consumption.
c. GDA shall coordinate and support the appropriate agencies to protect the public from disease or injury from animals, animal industry, production agriculture, or aquaculture that have been negatively impacted by a natural disaster. This will also include, but not be limited to, facilitating the evacuation and sheltering of animals and their owners.
d. GDA, DNR and support agency offices, divisions and districts will provide personnel, supplies, equipment and facilities at the request of GDA and/or DNR. The GDA and DNR will facilitate and coordinate with support agencies and organizations such as Georgia VOAD (Volunteer Organizations Active in Disaster).
e. The GDA will mobilize and deploy one or more GA-SART(s) as required to respond to the emergency.
f. The GDA will facilitate and coordinate with support agencies and organizations such as the County Agricultural Response Teams (CARTs), Georgia Veterinary Medical Association, Humane Association of Georgia, Inc., Georgia Equine Rescue League, Inc., animal rescue groups, and other private sector entities to meet emergency responsibilities.
g. These procedures will relate to catastrophic disasters, both natural and

man-made, that pose a significant impact on human life, property, or the economy.

2. Response Actions
   a. Mitigation/Preparedness
      i. Develop mutual aid agreements with professional associations and private agencies/organizations.
      ii. Coordinate with the Department of Human Resources and American Red Cross (ESF 6) in identifying potential pet friendly shelters near approved emergency American Red Cross shelters.
      iii. Develop a plan for training state and county animal emergency coordinators and other interested persons. This plan will coordinate with the GEMA All Hazards Councils.
      iv. Develop and maintain a database of all county agricultural emergency plans and a list of all county agricultural emergency coordinators.
      v. GDA to develop, maintain, and regularly update lists of Georgia animal shelters and confinement areas for dogs, cats and horses. To the extent possible, maintain lists of shelters or confinements for exotic and zoo animals. This data will include personnel and resource information.
      vi. GDA to assist GA VOAD and county agricultural emergency coordinators in identifying suitable facilities for animal shelter and confinement areas.
      vii. Encourage support agencies to develop emergency operations plans that support their Emergency Support Function 11 assignments.
      viii. Conduct training sessions and workshops to assist local communities and support agencies/organizations to develop County Agricultural Response Teams (CARTs) or similar organizations and capabilities.
      ix. Participate in and/or conduct exercises and tests regularly, to validate this ESF and supporting emergency operations plans.

   b. Response/Recovery
      i. Support the disaster response and recovery with all available resources appropriate to the disaster.
      ii. Coordinate local emergency response teams with the statewide support network.
      iii. Secure supplies, equipment, personnel, and technical assistance from support agencies/organizations and other resources.
      iv. Coordinate the assignment of relief personnel and the distribution of supplies from supply areas or staging areas.
      v. Provide assistance and care for livestock and other animals impacted by the disaster.
      vi. Close harvest areas in a situation of wild stock seafood potentially contaminated by toxin, pathogen, chemical, oil/petroleum, or other harmful agent through DNR, pursuant to O.C.G.A. Section 27-1-4 (3); 27-4-133 (d) and (h); 27-4-151 (j) and/or 27-4-195, as appropriate.

vii. Utilize the license database, UGA Marine Extension Service, broadcast media, and the United States Coast Guard assets to notify the fishing public of emergency closures through DNR.
viii. Assist in determining external resources that may be needed to assess the damage and impact to wildstock, and formulate remediation/restoration strategies through DNR.
ix. Respond to marine life emergencies utilizing protocols established in DNR Coastal Regional Headquarters' Coastal On-Call Manual to address fish kills and injured or dead sea-turtles, manatees, dolphins, and whales through DNR's Coastal Resources Division and Wildlife Resources Division coordination.
x. Coordination of specialized personnel and equipment, as well as assessment of oil-soaked birds or other marine life in response to injured or dead wildlife reports.
xi. Provide damage assessment personnel to assist in determining external response resources that may be needed and formulate remediation/rehabilitation strategies.
xii. Track the activities of all available animal shelter facilities and confinement areas identified before, during, and after the disaster. This tracking will be based on information provided by the local emergency coordinator, GA VOAD, or GA-SART(s).
xiii. Manage and direct evacuation of animals from risk areas and provide technical assistance to prevent animal injury and disease dissemination.
xiv. Coordinate public information with ESF 6 on the location and availability of shelter space, food, and water for animals.
xv. Coordinate rescue and transport to shelters through GA-SART(s).
xvi. Coordinate with supporting agencies and Volunteer Organizations Active in Disaster (VOAD) for additional emergency animal sheltering and stabling for both large and small animals.
xvii. Provide assistance to the existing licensed animal shelters.
xviii. Coordinate the animal medical services needed for animal shelter and confinement areas with the GVMA, the University of Georgia College of Veterinary Medicine (UGA CVM), and the University of Georgia College of Agriculture and Environmental Sciences (UGA CAES).
xix. Organize triage and follow-up medical care with supporting agencies, the GVMA, and the UGA CVM.
xx. Organize and publicize lost/found data to achieve animal/owner reunion in conjunction with GA VOAD.
xxi. Assist support agencies for long term maintenance, placement, or disposition of animals which cannot be returned to their normal habitat or which have been separated from their owners.
xxii. Coordinate the consolidation or closing of animal shelters and/or confinement areas, personnel, and supplies as the need diminishes.
xxiii. Continue to augment services to establish rapid recovery
xxiv. Restore equipment and supplies to a normal state of operational

readiness.

xxv. Coordinate public information and provide updates for ESF 15, Public Information and Planning.

xxvi. Maintain financial records on personnel, supplies, and other resources utilized and report to OHS-GEMA upon request.

xxvii. Resume day-to-day operations.

C. Nutrition Assistance and Food Safety

1. Strategy

a. GDA will coordinate with appropriate agencies and organizations to ensure operational readiness. GDA will develop and maintain Standard Operating Procedures (SOPs).

b. Food and supplies will be transported to designated staging areas. If necessary, the Emergency Food Stamp Program will be requested through the appropriate federal agency. Requests for food, including types, amounts and distribution, will be coordinated through the State Operations Center (SOC). State and local agencies will review inventories, equipment, and transportation.

c. GDA is responsible for state controlled wholesale and processor stocks. GDA may access food through these resources.

d. All GDA offices, divisions, and districts will provide personnel, supplies, equipment, and facilities at the request of the Emergency Coordinator.

e. GDA's Consumer Protection Division will coordinate the surveillance for the natural or man-made chemical or biological adulteration of food stuffs in the harvesting, wholesale, retail, and processing portion of the food chain. GDA will coordinate with appropriate law enforcement when such events may be acts of terrorism.

f. GDA's Consumer Protection Division will act as the expert point of contact for law enforcement Information Sharing and Analysis Centers (GISAC) when such information may be related to agroterrorism in the wholesale, retail, and/or processing portion of the food chain.

g. GDA will coordinate with and support ESF 8 during acts of agroterror to protect human life and property. GDA will coordinate with and support DHR and Environmental Health in surveillance and response to adulteration of the food chain whether natural or man-made.

h. GDA will partner with the University of Georgia Cooperative Extension Service to develop consumer education information in coordination with ESF 15 including, for example, the proper handling and disposal of food stocks and also the cleaning of food storage and preparation equipment.

2. Response Actions

a. Mitigation/Preparedness

i. Coordinate the development of an operational plan that will ensure timely distribution of food and drinking water.
ii. Participate in and/or conduct exercises and tests with all appropriate agencies and organizations.
iii. Assess the availability of food supplies and storage facilities capable of storing dry, chilled, or frozen food.
iv. Assess the availability of handling equipment and personnel for support.
v. Develop notification procedures for mobilizing food services, personnel, and resources.
vi. Coordinate the development of policy and procedures with the Georgia Food Safety Task Force for reducing the risk and vulnerability of food to acts of agroterror.
vii. Coordinate the development of policy and procedures with the Georgia Food Safety Task Force to provide for an efficient and swift response to agroterror in order to protect public health.

b. Response/Recovery

i. Establish linkages with private agencies/organizations involved in congregate meal services.
ii. Determine needs of the affected population inclusive of the location of food preparation facilities for congregate feeding.
iii. Evaluate available resources relative to need and location.
iv. Secure food, transportation, equipment, storage, and distribution facilities.
v. Initiate procurement of essential food and supplies not available from existing inventories.
vi. Refer victims needing additional food to private agencies/organizations.
vii. Coordinate with appropriate law enforcement, as provided in the Terrorism Incident Law Enforcement and Investigation Annex of the NRP, in events where contamination of the food supply with a chemical or biological agent may have been suspicious or intentional.
viii. Designate certain individuals to serve as expert points of contact for law enforcement.
ix. Provide for a high state of alert for coordination of communication, surveillance, and response to such credible threats.
x. Provide for communication, surveillance, and response with all appropriate agencies in response to an act of agroterror. Coordinate with and support where appropriate ESF 8, the Joint Operations Command (JOC) and Joint Information Command (JIC).
xi. Replace products transferred from existing inventories.
xii. Phase down feeding operations as victims return home.
xiii. Coordinate public information and provide updates for ESF 15, Public Information and Planning.

xiv. Maintain financial records on personnel, supplies, and resources utilized and report expenditures to OHS-GEMA upon request.
xv. Resume day-to-day operations.

D. Resources Protection

1. Strategy

a. Georgia Department of Natural Resources (DNR) will coordinate with the appropriate agencies and organizations to insure operational readiness.
b. DNR will coordinate with public natural, historic, and cultural properties to develop Standard Operating Procedures (SOPs) for disaster prevention, preparedness, and recovery.

2. Response Actions

a. Mitigation/ Preparedness

i. Participate in mutual aid agreements with government agencies, professional organizations, private agencies, and organizations.
ii. Develop inventory of natural, historical, and cultural resources that will be covered by this plan.
iii. Participate in and/or conduct workshops for historical and cultural properties to encourage developmental plans for disaster prevention, preparedness, and recovery.

b. Response/Recovery

i. Support the disaster recovery with all available resources.
ii. If criminal activity is suspected, DNR will cooperate with the criminal investigation jointly with appropriate State and Federal law enforcement agencies.
iii. Coordinate public information and provide updates for ESF 15, Public Information and Planning.
iv. Provide technical assistance to public natural, historic, and cultural properties in damage assessment and requests for assistance from OHS-GEMA and/or FEMA.
v. Reopen public natural, historic, and cultural properties as soon as safely possible to the public.
vi. Maintain financial records on personnel, supplies and resources utilized and report expenditures to OHS-GEMA upon request.
vii. Resume day-to-day operations.

IV. References

A. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended.
B. Official Code of Georgia Annotated (O.C.G.A.), Titles 4, 26, and 27.
C. Homeland Security Presidential Directive 9.
D. National Response Plan ESF 11.
E. National Response Plan and U. S. Terrorism Incident Law Enforcement and Investigation Annex 2004.

V. Terms and Definitions

Aquaculture: The extensive or intensive farming of aquatic animals and plants.

Agroterrorism: The intentional use of any chemical, biological, radiological, nuclear, or explosive (CBRNE) weapon against agricultural or food industries with the intent of destroying these resources and causing serious economic harm.

Bioterrorism: The intentional creation or use of any microorganism, virus, infectious substance, or any component thereof, whether naturally occurring or bioengineered, to cause death, illness, disease, or other biological malfunction in a human, animal, plant, or other living organism in order improperly or illegally influence the conduct of government, to interfere with or disrupt commerce, or to intimidate or coerce a civilian population.

Exotic Plant Disease: Plant disease foreign to Georgia's agricultural ecosystems that has potential significant impact on the State's economy, agriculture, and/or natural resources.

Foreign Animal Disease: An infectious disease in livestock or poultry that results in high morbidity, high mortality, or serious economic harm to animal industries and is not known to exist in the United States or its territories. The disease has the potential to significantly impact Georgia's economic and/or animal health which could restrict the intrastate, interstate, or international movement of livestock or animal products. The diseases of concern are listed by the Office des International Epizooties and the USDA Veterinary Accreditation Reference Guide for Practitioners. A report of a foreign animal disease (FAD) necessitates the dispatch of a Foreign Animal Disease Diagnostician (FADD).

Natural Disaster: Any ecological or environmental event such as, but not limited to, hurricanes, blizzards, ice storms, tornadoes, earthquakes, forest fires, power outages, mud slides, and/or chemical/oil spills that adversely affect or threaten animals.

Seafood: Marine and estuarine fauna or flora used as food or of a kind suitable for food and specifically includes, but is not limited to, shrimp taken for bait and horseshoe crabs taken for bait.

Wildlife: Any vertebrate or invertebrate animal life indigenous to this state, or any species introduced or specified by the board and includes fish, except domestic fish

produced by aquaculturists registered under Code Section 27-4-255, mammals, birds, fish, amphibians, reptiles, crustaceans, and mollusks or any part thereof.

Zoonotic Disease: A disease of animals that may be transmitted to humans.

EMERGENCY SUPPORT FUNCTION ANNEX 12
ENERGY

Primary Agencies

Department of Agriculture (GDA)
Public Service Commission (PSC)

Support Agencies

AGENCY	RESOURCE
Board of Regents of the University System of Georgia	Personnel, Vehicles
Department of Administrative Services	Communications Equipment, Fuel, Vehicles
Department of Defense	Communications Equipment, Fuel Equipment, Generators, Personnel
Department of Natural Resources	Communications Equipment, Personnel
Department of Public Safety	Communications Equipment, Fuel Transport, Security
Department of Transportation	Architectural and Engineering Services, Construction Equipment, Fuel Equipment, Generators, Personnel, Vehicles
Georgia Environmental Facilities Authority	Fuel
Georgia Forestry Commission	Fuel
Georgia Power Company	Electric Power, Personnel
Georgia Transmission Corporation	Electric Power, Personnel

I. Introduction

A. Purpose

This Emergency Support Function (ESF) supports National Response Plan ESF 12 (Energy). Energy includes producing, refining, transporting, generating, transmitting, conserving, building and maintaining energy systems and system components.

An emergency or disaster can jeopardize energy lifelines; constrain supply in impacted areas or in areas with supply links to impacted areas and affect transportation, communication and other lifelines necessary for health and safety. There may be widespread and prolonged electrical power failure. Without electrical power, communications will be interrupted, traffic signals will not operate and surface movement may gridlock. Such outages will impact emergency health and safety, access to petroleum products and emergency power. There may be pollution from leaking oil. Fires may ignite on floating oil. Natural gas lines may break, and fire may erupt. Energy services include actions

required for the allocation and distribution of bulk fuels stored or purchased by state agencies in an emergency or disaster. Energy services address the acquisition and restoration of natural gas and electric power services and arrangements for temporary sources of electrical power following an emergency or disaster. The Public Service Commission (PSC) assumes responsibility for coordination of electric power and natural gas. The Department of Agriculture (GDA) – Fuel and Measures Division assumes the responsibility to coordinate petroleum products and liquefied petroleum gas (LPG).

B. Scope

To coordinate the provision of emergency power and fuel for support of immediate response operations and restoration of electric and fuel supply to normal after an emergency or disaster.

II. Policies

A. Direction and Control

The Executive Director of the PSC and the GDA Commissioner shall each provide an Emergency Coordinator and Alternate to meet the emergency responsibilities of the agency. The PSC and GDA designees shall represent the agencies in an emergency or disaster and provide operational support in the State Operations Center when requested.

B. Federal Response

Federal disaster assistance programs available with or without a Presidential Declaration have been identified in FEMA Manual 8600.2, *Digest of Federal Assistance Program*. Requests for assistance will be made through the GEMA Director. For federal assistance for highways, disaster requests will be directly submitted to the United States Department of Transportation.

Federal assistance for debris clearance is made available under The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended. Section 403 of this law provides authorization by the President to clear debris and wreckage from a major disaster on publicly and privately owned land and water through federal agencies. Grants may be provided to state and local governments for this purpose.

Under a Presidential Declaration, FEMA may provide emergency debris clearance to protect health and safety, save lives and protect property. This may include debris clearance from roads and facilities necessary to perform emergency tasks and for restoration of essential services.

Through such a Presidential Declaration, a federal agency may perform work or request reimbursement for local/state governments and nonprofit organizations as stated in Section 402 (b) of Public Law 93-288, Removal of Debris or Wreckage. The affected local or state government must first arrange an unconditional authorization for removal of such debris or wreckage from public and private property and agree to indemnify the federal government against any claim arising from such removal. All emergency debris and wreckage clearance shall be performed without delay and completed as rapidly as possible.

Federal reimbursement will be made only to local and state governments and nonprofit organizations as stated in The Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, for the cost of debris removal. Salvage value of debris or wreckage cleared shall be deducted from federal reimbursement for such expenses.

The United States Department of Energy (U. S. DOE) has federal cognizance for energy industries. U. S. DOE assists the military, civilian population, defense industry and allied energy requirements following significant disasters.

U. S. DOE will monitor energy system damage, supply and demand; deploy response teams to repair or restore energy systems; and obtain claim-supporting resources, such as transportation.

C. Notifications

1. Local

   Local agencies should coordinate with their local emergency management agencies. This will ensure that reimbursements are available if the event is labeled as a state or federal disaster.

   All requests for State assistance shall be routed through Georgia's State Operations Center using the 1-800-TRY-GEMA telephone number. GEMA personnel will notify the primary agencies. The primary agencies will notify support agencies as needed.

2. State

   All requests for federal assistance will be coordinated by GEMA. All public notifications will be addressed in External Affairs (ESF 15).

3. Federal

   All notifications of federal agencies will be provided for in the National Response Plan.

III. Concept of Operations

A. Electric Power/Natural Gas

1. Strategy

a. PSC will coordinate with appropriate agencies and organizations to ensure operational readiness. PSC will develop and maintain Standard Operating Procedures (SOPs).
b. PSC is responsible for implementation and administration of the electric power and natural gas function.
c. Owners and operators of private and public utilities systems shall be responsible for activation of plans, allocation of resources, personnel,equipment and services to maintain or restore utility service.
d. State program assistance shall include coordination with public and privately owned and operated utility services to ensure equitable provision and/or restoration of services to the public.

2. Actions

a. Mitigation/ Preparedness

i. Develop and maintain listings of suppliers, services, products and locations;
ii. Establish liaison with support agencies and organizations;
iii. Determine priorities to repair damaged energy systems and coordinate sources of temporary, alternate or interim sources of emergency fuel and power; and
iv. Participate in and/or conduct exercises and tests.

b. Response/ Recovery

i. Analyze affected areas to determine operational priorities and emergency repair needed;
ii. Assist in acquisition of specialized personnel from areas not affected by the emergency or disaster to alleviate problems;
iii. Coordinate rebuilding processes to restore petroleum and LPG services to affected individuals;
iv. Maintain coordination with support agencies and organizations to ensure response and recovery priorities;
v. Allocate personnel and resources in accordance with established priorities;
vi. Assist energy suppliers in obtaining product, equipment, specialized personnel and transportation to repair or restore energy systems;

vii. Assist agencies and organizations in obtaining fuel for transportation, communications and disaster operations;
viii. Obtain security as required;
ix. Coordinate public information and provide updates for ESF 15, External Affairs;
x. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA upon request; and
xi. Resume day-to-day operations.

B. Petroleum and Liquefied Petroleum Gas

1. Strategy

a. GDA will coordinate with appropriate agencies and organizations to ensure operational readiness. GDA will develop and maintain Standard Operating Procedures (SOPs).
b. GDA may seek assistance through the Georgia Environmental Facilities Authority (GEFA) in the location of alternative fuel sources and establishment of distribution priorities.
c. State program assistance includes state-controlled resources of petroleum and liquefied petroleum gas (LPG) to minimize disruption of normal activities in an affected area. This ESF will be implemented when an emergency or disaster is severe enough to prevent normal replenishment of petroleum or when LPG supplies require redistribution.

2. Actions

a. Mitigation/ Preparedness

i. Maintain directories of commercial and industrial petroleum and LPG fuel storage handling and distribution facilities within the state;
ii. Establish contacts based on location, distribution territory and operating capacity;
iii. Establish fuel distribution priorities based on established directories of fuel storage, handling and distribution;
iv. Develop mutual aid agreements with the private petroleum and LPG fuel industries; and
v. Participate in and/or conduct exercises and tests

b. Response/ Recovery

i. Analyze affected areas to determine operational priorities and emergency repair needed;
ii. Assist in acquisition of specialized personnel from areas not affected by the emergency or disaster to alleviate problems;

iii. Coordinate rebuilding processes with support agencies to restore petroleum and LPG services to affected individuals;
iv. Maintain coordination with support agencies and organizations to ensure response and recovery priorities;
v. Allocate personnel and resources in accordance with established priorities;
vi. Assist energy suppliers in obtaining product (coordinating with fuel regulatory agencies regarding restrictions), equipment, specialized personnel and transportation to repair or restore energy systems;
vii. Assist agencies and organizations in obtaining fuel for transportation, communications and disaster operations;
viii. Obtain security as required;
ix. Coordinate public information and provide updates for ESF 15, External Affairs;
x. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA upon request; and
xi. Resume day-to-day operations.

IV. References

A. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended (http://www.fema.gov/library/stafact.shtm)

EMERGENCY SUPPORT FUNCTION ANNEX 13
PUBLIC SAFETY AND SECURITY SERVICES

Primary Agencies

1. Law Enforcement (Uniform Patrol, Traffic Control and Security) – Department of Public Safety (DPS)
2. Victim Recovery and Investigative Support – Georgia Bureau of Investigation (GBI)
3. Deceased Identification – Georgia Bureau of Investigation (GBI)
4. Fraud and Price Gouging – Governor's Office of Consumer Affairs (OCA)

Support Agencies

AGENCY	RESOURCES
Board of Regents of the University System of Georgia	Personnel, Vehicles, Temporary Morgues
Department of Administrative Services	Communications, Personnel, Procurement, Supplies
Department of Corrections	Equipment, Personnel
Department of Defense	Aircraft, Education Facility, Equipment, Facilities, Personnel, Technical Assistance, Temporary Morgues, Training
Department of Human Resources	Health/ Medical and Mental Health Services, Notifications
Department of Natural Resources	Equipment, Facilities, Personnel
Department of Transportation	Equipment, Facilities, Personnel
Department of Veterans Service	Burial Assistance
Georgia Emergency Management Agency	Coordination of Personnel and K9 Teams, Recovery Operations
Georgia Forestry Commission	Equipment, Personnel, Temporary Morgues, Vehicles
Georgia Public Safety Training Center	Equipment, Personnel, Training
Public Service Commission	Equipment Assistance, Transportation
State Board of Pardons and Parole	Equipment, Personnel, Transportation

I. Introduction

A. Purpose

This Emergency Support Function (ESF) as it relates to uniform patrol, traffic control and security supports National Response Plan (NRP) ESF 13 (Public Safety and Security Services). Effective law enforcement is essential during emergencies or disasters to minimize confusion and turmoil. Local law enforcement officials are responsible for enforcement of laws, traffic control, investigation of crimes and other public safety activities within their jurisdictions. The Department of Public Safety (DPS) has primary responsibility for this function as it relates to assisting local law enforcement with uniform patrol duties,

traffic control, and security. The Georgia Bureau of Investigation (GBI) will assist local law enforcement with the investigation of crimes if requests are made pursuant to O.C.G.A Title 35, Chapter 3.

Victim recovery does not correspond to any ESF in the NRP. This function includes air, ground and water searches for deceased persons. The Georgia Bureau of Investigation assumes primary responsibility for this function.

The function of deceased identification does not correspond to any ESF in the NRP. In an emergency or disaster, the potential exists for injuries as well as fatalities. When fatalities occur, there is a need to establish the coordination and direction necessary for the identification and disposition of deceased victims. The Georgia Bureau of Investigation (GBI) has primary responsibility for this function. Federal assistance for burial is available for eligible victims through the Veterans and Social Security Administrations. Federal assistance is also available through the implementation of the Individual and Family Grant (IFG) Program.

Price gouging does not correspond to any ESF in the NRP. Under a state of emergency, businesses may not sell any goods or service at prices higher than the prices at which the goods or services were offered before the declaration of the state of emergency. Nor may a business raise the price of supplies or services for the purpose of salvaging, repairing or rebuilding structures damaged as a result of the natural disaster. The Governor's Office of Consumer Affairs (OCA) has primary responsibility for this function; and investigates allegations of illegal pricing. The GBI will support this function when requests are made pursuant to O.C.G.A Title 35, Chapter 3.

All operations will follow the National Incident Management System and Incident Command Protocols.

B. Scope

To provide coordination of state resources to maintain law and order during an emergency or disaster, including traffic and crowd control. Law enforcement supervises the search and rescue operations as well as deceased identification during an emergency or a disaster that are beyond capabilities of local governments within affected areas. In addition, law enforcement investigates criminal allegations relating to consumer complaints of fraud and price gouging.

II. Policies

A. Direction and Control

The agency with primary responsibility shall provide an Emergency Coordinator and Alternate to fulfill the responsibilities of the agency. The designee(s) shall

represent the agency in an emergency or disaster and provide operational support in the State Operations Center when requested.

B. Federal Response

1. The Federal Emergency Management Agency (FEMA) is authorized to provide federal assistance as emergency protective measures under the provisions of The Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended. The GEMA Director will consult with the FEMA Regional Director on federal assistance requests. Upon federal approval, assistance will be coordinated through GEMA.
2. Federal assistance is available from the Federal Bureau of Investigation (FBI), the United States Department of Justice and other federal agencies and will be identified by the GSP in SOPs. Resources will be accessed accordingly.
3. Federal assistance for this function, under The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended, is limited to Presidential Declaration under Section 408, IFG. This assistance is only financial and may be extended to eligible individuals or families for purposes of burial or mortuary expenses.
4. United States military veteran victims may be eligible for mortuary and burial services provided by the United States Veterans Administration on an individual basis whether or not a declaration is established.
5. Social Security Administration burial benefits are available for victims meeting eligibility requirements.

C. Notifications

1. Local

   Local agencies should coordinate with their local emergency management agencies. This will ensure that reimbursements are available if the event is labeled as a state or federal disaster.

   All requests for state assistance shall be routed through Georgia's State Operations Center using the 1-800-TRY-GEMA telephone number. GEMA personnel will notify the primary agencies. The primary agencies will notify support agencies as needed.

2. State

   All requests for federal assistance will be coordinated by GEMA. All public notifications will be addressed in External Affairs (ESF 15).

3. Federal

All notifications of Federal agencies will be provided for in the National Response Plan.

III. Concept of Operations

A. Law Enforcement - Uniform Patrol, Traffic Control and Security

1. Strategy

   a. Department of Public Safety (DPS) will coordinate with appropriate agencies and organizations to ensure operational readiness. DPS will develop and maintain Standard Operating Procedures (SOPs).
   b. Primary state resources available in the state for support of law enforcement activities during an emergency include Georgia Bureau of Investigation (GBI), Department of Natural Resources (DNR) and Department of Corrections (DOC). During an emergency or disaster, these agencies may operate collectively, with GBI providing support as needed. Support will be provided through the normal chain of command, mobilizing resources through Emergency Coordinators.
   c. DPS has uniformed patrol personnel and radio equipped patrol vehicles assigned to troops located throughout the state. Fixed and rotary wing aircraft are available. These resources will be available in an emergency or disaster.
   d. GBI will perform functions related to the prevention and investigation of criminal acts when requested pursuant to O.C.G.A. Title 35, Chapter 3.
   e. The local law enforcement agency in command will retain direction and coordination.
   f. Only when local resources are exhausted should state law enforcement personnel and equipment be requested. At that time, DPS will coordinate state activities relating to uniform patrol, traffic control and security with the local law enforcement having primary jurisdiction.
   g. State law enforcement resources will continue to be regulated through the normal chain of command. However, these resources will be responsive to the needs of the Georgia Emergency Management Agency (GEMA) Director in conjunction with the Emergency Coordinator for GSP. State law enforcement resources will be made available to local law enforcement upon request, depending upon availability.
   h. The Governor may authorize use of Department of Defense - Georgia National Guard resources to provide law enforcement services should an emergency or disaster situation warrant such action.
   i. Private security agencies or organizations must be trained and sworn as deputies or auxiliary police for use during an emergency or disaster. Such personnel will be the responsibility of the appointing public safety agency.

2. Action

a. Mitigation/Preparedness

i. Analyze hazards and determine law enforcement requirements;
ii. Identify agencies, organizations and individuals capable of providing support services;
iii. Train regular and support personnel in emergency duties; and
iv. Participate in and/or conduct exercises and tests.

b. Response/Recovery

i. Provide assistance in support of ESF 2, Communications;
ii. Coordinate security for critical facilities, as needed;
iii. Support evacuation plans with traffic control, communications, area patrols and security for shelters;
iv. Control entry and exit to the emergency or disaster area;
v. Control vehicle and individual access to restricted areas;
vi. Continue operations necessary to protect people and property;
vii. Coordinate public information and provide updates for ESF 15, External Affairs;
viii. Assist in return of evacuees;
ix. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA; and
x. Resume day-to-day operations.

B. Victim Recovery

1. Strategy

a. GBI will coordinate with appropriate agencies and organizations to ensure operational readiness. GBI will develop and maintain Standard Operating Procedures (SOPs) for the recovery of human remains.
b. GEMA is responsible for the coordination of state search and rescue activities while GBI is responsible for the search and recovery efforts of human remains. GEMA and GBI will integrate personnel and resources available from other state agencies, local governments and organizations.
c. If there is an emergency or disaster, local governments are responsible for the activation of plans and appropriate use of personnel and equipment for search and rescue before requesting state assistance.
d. Every effort will be made to support local personnel and resources for regional or statewide response.
e. The state will assist local governments in training and certifying personnel and licensing rescue organizations.

2. Actions

a. Mitigation/Preparedness

i. Establish and maintain standards for human remains recovery operations;
ii. Develop record reporting procedures to reflect local and state assistance;
iii. Establish and maintain human remains recovery support and reporting procedures;
iv. Participate in and/or conduct exercises and tests.

b. Response/Recovery

i. Support search and rescue requests from other local and state agencies and organizations;
ii. Modify aspects of this ESF that prove impractical;
iii. Coordinate public information and provide updates for ESF 15, External Affairs;
iv. Maintain financial records on personnel, supplies and other resources utilized and report expenditures as requested; and
v. Resume day-to-day operations.

C. Deceased Identification and Mortuary Services

1. Strategy

a. GBI will coordinate with appropriate agencies and organizations to ensure operational readiness. GBI will develop and maintain Standard Operating Procedures (SOPs).
b. GBI is responsible for the implementation and administration of this function as related to emergency or disaster assistance. The Deputy Director of the Investigative Division or his designee will coordinate operations for this function.
c. GBI shall be responsible for identification of deceased victims upon request of the local government through the Chief Medical Examiner or designee.
d. When deaths have been reported, the Chief Medical Examiner or designee shall contact local government(s) and the Department of Human Resources Division of Public Health (DPH) to assess the magnitude of need and to determine appropriate location for mortuary facilities and specify equipment or materials deemed necessary. Every effort shall be made to coordinate GBI procedures with the support of other state and federal agencies and organizations.
e. The coordination of refrigeration units, body bags, stretchers, embalming supplies, and other equipment and supplies relating to this function shall be assured. Use of existing morgues and medical examiner personnel will be coordinated with state personnel and dental/medical teams, local resources, volunteer resources, and/or federal resources when applicable.

2. Actions

a. Mitigation/Preparedness

i. Develop plans for recovery, transportation, examination, identification and disposition of the deceased victims;
ii. Establish a communications center for information regarding possible victims;
iii. Identify agencies, organizations and individuals capable of providing support services for deceased victim identification; and
iv. Participate in and/or conduct exercises and tests.

b. Response/Recovery

i. Support state agencies/organizations and notify National Transportation Safety Board (NTSB) and other federal agencies, if applicable;
ii. Initiate the notification of the disaster mortuary response teams for assistance in the identification of the deceased if applicable;
iii. Document location of bodies at the scene;
iv. Authorize removal of bodies;
v. Examine and identify victims;
vi. Notify next-of-kin in accordance with state and federal requirements;
vii. Provide for release or final disposition of bodies;
viii. Continue operations necessary for identification and disposition of the deceased and property;
ix. Provide a final fatality assessment;
x. Coordinate with the coroner who is legally responsible for signing death certificates;
xi. Receive required death reports;
xii. Coordinate public information and provide updates for ESF 15, External Affairs;
xiii. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA upon request; and
xiv. Resume day-to-day operations.

D. Fraud and Price Gouging

1. Strategy

a. Governor's Office of Consumer Affairs (OCA) will coordinate with appropriate agencies and organizations to ensure operational readiness. OCA will develop and maintain Standard Operating Procedures (SOPs).
b. OCA is responsible for the implementation and administration of the prohibition of price gouging during a declared state of emergency.

c. OCA will provide overall guidance concerning pricing practices during a state of emergency.
d. Owners and operators of private and public businesses shall be responsible for services to maintain prices or increases that accurately reflect the cost of goods or services.
e. State program assistance shall include coordination with public and privately owned and operated businesses to ensure equitable provision of services.

2. Actions

a. Mitigation/ Preparedness

i. Develop SOPs;
ii. Establish liaison with support agencies and organizations;
iii. Train regular and support personnel in emergency duties;
iv. Establish operational priorities for notification; and
v. Participate in and/or conduct exercises and tests.

b. Response/Recovery

i. Support state agencies/organization in notifying local businesses of the declared state of emergency and price gouging laws;
ii. Receive reports of discrepancies in prices for goods or services;
iii. Investigate complaints of price inflation;
iv. Provide an assessment of the claim;
v. Coordinate public information and provide updates for ESF 15, External Affairs; and
vi. Resume day-to-day operations.

IV. References

A. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended
B. Official Code of Georgia Annotated (O.C.G.A.) § 35-3-151
C. Georgia Death Investigation Act
D. Aviation Disaster Family Assistance Act of 1996
E. Official Code of Georgia Annotated (O.C.G.A.) § 10-393-4

EMERGENCY SUPPORT FUNCTION ANNEX 14
LONG-TERM COMMUNITY RECOVERY AND MITIGATION

Primary Agency

Georgia Emergency Management Agency

Support Agencies

AGENCY	RESOURCE
Department of Administrative Service	Personnel, Procurement
Department of Audits	Personnel, Technical Assistance
Department of Community Affairs	Data, Personnel
Department of Natural Resources	Data, Personnel
Department of Transportation	Personnel, Vehicles
Georgia Building Authority	Personnel
Georgia Environmental Facilities Authority	Funding, Personnel, Procurement
Georgia Forestry Commission	Data, Personnel
Georgia Residential Finance Authority	Personnel
Office of the Commissioner of Insurance and Safety Fire	Personnel
Office of Planning and Budget	Funding, Procurement
Public Service Commission	Notification, Funding, Personnel

I. Introduction

A. Purpose

This Emergency Support Function supports National Response Plan (NRP) ESF 14 Long-Term Recovery and Mitigation. Recovery encompasses assistance to state agencies, local governments, and eligible private nonprofit organizations to repair or replace damaged public facilities after a Presidential emergency or major disaster declaration. It also provides for emergency work including debris removal and protective measures to protect public health, safety and improved property. Mitigation is a long-term and ongoing process which includes the development of plans and projects that will reduce or eliminate hazard exposure, thereby reducing potential damages to life and property. GEMA assumes primary responsibility for these functions.

B. Scope

To provide the implementation procedures for public assistance and hazard mitigation following a presidential declaration of an emergency or major disaster in Georgia. This includes the ongoing effort to lessen the impact disasters have on people's lives and property through such items as damage prevention and

flood insurance. Currently hazard mitigation projects can be federally funded under certain types of public assistance, and specific types of hazard mitigation assistance, which includes, but is not limited to: Hazard Mitigation Grant Program (HMGP), Flood Mitigation Assistance Program (FMAP) and the Pre-Disaster Mitigation (PDM) Program.

II. Policies

A. Direction and Control

The agency with primary responsibility shall provide an Emergency Coordinator and Alternate to the responsibilities of the agency. The designee(s) shall represent the agency in an emergency or disaster and provide operational support in the State Operations Center when requested.

B. Federal Response

1. When FEMA Region IV receives the Governor's request for a declaration, the Regional Director will provide written acknowledgment to the Governor.
2. Based on information provided by joint Preliminary Damage Assessments (PDA) and consultations with state and federal officials, the FEMA Regional Director will prepare a summary of the PDA findings. FEMA Region IV will submit the request with a recommendation to the FEMA Director through the Associate Director. The Director will forward the request with a recommendation to the President.
3. The Governor's request for a major disaster declaration may result in either a Presidential Declaration of a major disaster or emergency declaration, or denial. The Governor will be promptly notified as to the decision.
4. After the President's Declaration, the FEMA Associate Director designates the types of assistance to be made available (as directed by the President in his declaration letter) or as he determines necessary. He may authorize all or only particular types of assistance requested by the Governor.
5. The President designates the disaster area and the affected governmental jurisdictions eligible for federal assistance.
6. After a declaration, the Governor or the Governor's Authorized Representative (GAR) may request additional federal assistance. Such requests must be accompanied by appropriate commitments by state and local governments and assessments to justify the additional assistance. The Governor or the GAR must also provide assurance that the immediate needs are beyond local and state capabilities. The Governor or the GAR may also request that the Regional Director designate additional counties. Both of these supplemental requests must be submitted within 30 days after the incident in order to be considered.
7. Upon the declaration of a major disaster or an emergency, the Governor and the FEMA Regional Director will execute a FEMA-State Agreement. This

agreement imposes binding legal obligations on FEMA and the state as to the conditions for assistance. No FEMA funding will be authorized until this agreement is signed.

8. Six months after the date of federal declaration, the state will be notified by FEMA of a "lock-in" amount of federal funds that will be eligible to state and local governments.

C. Notifications

1. Local

Local agencies should coordinate with their local emergency management agencies. This will ensure that reimbursements are available if the event is labeled as a state or federal disaster.

All requests for state assistance shall be routed through Georgia's State Operations Center using the 1-800-TRY-GEMA telephone number. GEMA personnel will notify the primary agencies. The primary agencies will notify support agencies as needed.

2. State

All requests for federal assistance will be coordinated by GEMA. All public notifications will be addressed in External Affairs (ESF 15).

3. Federal

All notifications of federal agencies will be provided for in the National Response Plan.

III. Concept of Operations

A. Recovery

1. Strategy

a. Georgia Emergency Management Agency (GEMA) will coordinate with appropriate agencies and organizations to ensure readiness. GEMA will develop and maintain Standard Operating Procedure (SOPs).
b. GEMA is responsible for the implementation and administration of this function as related to emergency disaster assistance. The GEMA Director or designee, through Public Assistance, will coordinate operations for this function.
c. GEMA will request qualified personnel from other state agencies to assist in with the DFO, PDA and Project Identification worksheet preparation.

2. Actions

a. Mitigation/Preparedness

i. Develop and maintain state administrative plan for public assistance;
ii. Identify key staff positions for emergency assistance;
iii. Identify agencies, organizations and individuals to support public assistance recovery operations;
iv. Prescribe the administrative procedures to deliver disaster assistance; and
v. Participate in and/or conduct exercises and tests.

b. Response/Recovery

i. Coordinate and conduct joint federal, state and local Preliminary Damage Assessments (PDAs);
ii. Administer and supervise those state responsibilities in public assistance not specifically assigned to other agencies;
iii. Publicize program availability;
iv. Notify potential applicants of applicant briefings;
v. Schedule and conduct applicant briefings;
vi. Review and validate eligibility and submit the requests for Public Assistance to FEMA;
vii. Coordinate and schedule a Kickoff Meeting with each applicant;
viii. Coordinate with each state and local applicant and the Public Assistance Coordinator (PAC) the preparation of the Project Worksheet (PW); the Summary of Small and Large Projects; Project Summary Report; Special Considerations; and Immediate Needs Funding (INF);
ix. Prepare, process and approve grant applications;
x. Administer grant funds;
xi. Prepare reports;
xii. Process appeals and time extensions;
xiii. Provide GEMA staff to the Disaster Field Office (DFO);
xiv. Notify state agencies to provide personnel to the DFO;
xv. Supervise the operations and activities of the state component of the DFO;
xvi. Coordinate public information and provide updates for ESF 15, External Affairs;
xvii. Maintain financial records on personnel, supplies and other resources utilized and report to GEMA upon request; and
xviii. Resume day-to-day operations.

B. Mitigation

1. Strategy

a. Georgia Emergency Management Agency (GEMA) will coordinate with appropriate agencies and organizations to ensure readiness. GEMA will develop and maintain Standard Operating Procedure (SOPs).
b. GEMA is responsible for the implementation and administration of this function as related to emergency disaster assistance. The GEMA Director or designee, through Hazard Mitigation, will coordinate operations for this function.

c. GEMA will request qualified personnel from other state agencies to assist in with the DFO and Project Identification worksheet preparation, as appropriate.

2. Actions

a. Mitigation/Preparedness

i. Develop and maintain state administrative plan for multi-hazard mitigation;
ii. Maintain state hazards data to determine overall hazard, risk, and vulnerability exposure;
iii. Determine and analyze capabilities and current policies to address hazard, risk, and vulnerability;
iv. Establish goals, objectives and projects to reduce risk;
v. As part of ongoing roles and responsibilities mentioned in items (a) (i-iv) above, produce and maintain federally approved state level Disaster Mitigation Act of 2000 (DMA2K) plan to ensure state and local eligibility for federal disaster assistance;
vi. Develop comprehensive statewide mitigation plan and strategy based on both local and state level hazard assessments;
vii. Prioritize future funding opportunities based upon hazard exposure and selected criteria;
viii. Serve as lead contact for providing technical support to local government on local planning efforts;
ix. Develop public information materials to support mitigation operations; and
x. Participate in and/or conduct briefings, reports, plans, data, analysis, product deliverables related to hazard, risk and vulnerability exposure to disasters.

b. Response/Recovery

i. Administer and supervise those state responsibilities in hazard mitigation not specifically assigned to other agencies;
ii. Develop state and local projects to reduce hazard exposure or reduce future disaster damages. These may include, but are not limited to, projects such as: acquisition of damaged property, relocation of

residents of damaged property, retrofitting damaged property, drainage projects, wind retrofit projects, earthquake projects, planning, further data analysis, and warning and communication improvements;

iii. Make recommendations for any or all of the types of mitigation measures listed above;
iv. Analyze the structural hazard control or protection measures;
v. Evaluate the effectiveness of past projects, including losses avoided, and overall cumulative benefits;
vi. Coordinate public information and provide updates for ESF 15, External Affairs;
vii. Maintain financial records on personnel, supplies and other resources utilized and report to GEMA upon request; and
viii. Resume day-to-day operations.

IV. References

A. Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 93-288, as amended by PL 106-390 dated October 30, 2000
B. The Disaster Relief Act of 1970, as amended (the following Sections only: 231, 233, 234, 235, 236, 237, 301, 302, 303 and 304)
C. Disaster Assistance Programs, Digest of Federal Disaster Assistance Programs, DAP 21, Federal Emergency Management Agency, June 26, 1989
D. Federal Civil Defense Act of 1950, as amended (PL 81-920)
E. Title 44, CFR, Part 206 et seq
F. Title 44 CFR; Part 13 (Final FEMA Common Rule)
G. Flood Disaster Protection Act of 1973 (PL 93-234)
H. Presidential Executive Order 12612, dated October 28, 1987(Federalism)
I. Presidential Executive Order 11990, dated May 24, 1977 (Protection of Wetlands)

EMERGENCY SUPPORT FUNCTION ANNEX 15
EXTERNAL AFFAIRS

Primary Agency

Georgia Emergency Management Agency
Office of the Governor

Support Agencies

AGENCY	RESOURCE
American Red Cross	Information Assistance
Association County Commissioners of Georgia	Notification
Board of Regents of the University System of Georgia	Equipment, Facilities, Personnel
Criminal Justice Coordination Council	Personnel
Department of Administrative Services	Information, Vehicles
Department of Agriculture	Information
Department of Community Affairs	Personnel
Department of Defense	Aircraft, Equipment, Personnel, Vehicles
Department of Education	Personnel
Department of Human Resources	Information, Personnel
Department of Economic Development	Personnel
Department of Labor	Personnel
Department of Natural Resources	Information, Personnel, Technical Assistance
Department of Public Safety	Aircraft, Information, Personnel, Vehicles
Department of Technical and Adult Education	Facilities, Personnel
Department of Transportation	Aircraft, Information, Personnel
Georgia Bureau of Investigation	Information
Georgia Forestry Commission	Information
Georgia Municipal Association	Notification
Georgia Public Broadcasting	Equipment, Facilities, Personnel
Georgia Public Safety Training Center	Equipment, Personnel
Peace Officers Standards and Training Council	Personnel
Public Service Commission	Information

I. Introduction

A. Purpose

This Emergency Support Function (ESF) supports National Response Plan (NRP) ESF 15 (External Affairs). This ESF involves collection and dissemination of information by the Georgia Emergency Management Agency (GEMA). All primary state agencies or organizations with Emergency Support Functions will

provide information to assist with this function during an emergency or disaster. During activation of the State Operations Center (SOC), this function is considered Intelligence (Intel).

The function of providing public information does not correspond to any ESF in the NRP. Before, during and after an emergency or disaster, the public will be apprised through reports to the news media, the GEMA Web site and the Emergency Alert System (EAS). State services and assistance shall include the delineation of emergency responsibilities and actions to provide the public with essential information and documentation by written, verbal or photographic means.

The function includes a provision for providing information in a clear, concise and accurate manner on actions to be taken by local and state governments and actions to be taken by the public. Every effort shall be made to prevent and counter rumors and inaccurate information. Likewise, the appropriate local, state and Congressional elected officials will be notified on the status of response and recovery activities and assisted with constituent inquiries directed to their offices. The Georgia Emergency Management Agency (GEMA) assumes primary responsibility for these functions.

B. Scope

To provide a coordinated approach for collection, analysis and dissemination of information in order to facilitate the overall provision of services and resources during an emergency or disaster. This includes providing communications inform news media about emergency preparedness and response for distribution to the public, to assure appropriate agency and organization preparedness and response for protection of life and property and to convey additional information including restrictions and limitations due to an emergency or disaster.

II. Policies

A. Direction and Control

The agency with primary responsibility shall provide an Emergency Coordinator and Alternate to fulfill the responsibilities of the agency. The designee(s) shall represent the agency in an emergency or disaster and provide operational support in the State Operations Center when requested.

B. Federal Response

1. In a Presidential Declaration, FEMA will provide information and planning support to the state.
2. FEMA will collect, analyze and disseminate information from respective

federal agencies with ESF responsibilities.

3. FEMA - Public and Intergovernmental Affairs is responsible for initiating actions required to implement federal activities in response operations.

C. Notifications

1. Local

Local agencies should coordinate with their local emergency management agencies. This will ensure that reimbursements are available if the event is declared as a state or federal disaster.

All requests for state assistance shall be routed through Georgia's State Operations Center using the 1-800-TRY-GEMA telephone number. GEMA personnel will notify the primary agencies. The primary agencies will notify support agencies as needed.

2. State

All requests for federal assistance will be coordinated by GEMA. All public notifications will be addressed in External Affairs (ESF 15).

3. Federal

All notifications of federal agencies will be provided for in the National Response Plan.

III. Concept of Operations

A. Information and Planning

1. Strategy

a. GEMA will coordinate overall information and planning activities for state agencies and organizations.

b. GEMA will coordinate with appropriate agencies to ensure operational readiness of the Intel Function for the State Operations Center (SOC).

2. Actions

a. Mitigation/Preparedness

i. Develop a briefing and reporting system to include an SOC briefing, situation report, public information and federal request format for the

SOC Intel Function;
ii. Share Intel formats with agencies and organizations that have primary functional responsibilities;
iii. Update the information and planning system as required; and
iv. Participate in and/or conduct exercises.

b. Response/Recovery

i. Begin Intel Function upon activation of the SOC;
ii. Collect and process information from state agencies and organizations with primary Emergency Support Function responsibilities;
iii. Prepare SOC briefings, situation reports and geographic data for mapping to keep state and federal agencies and organizations, officials, local governments and local Emergency Management Agencies (EMAs) abreast of the severity and magnitude and provide updates to Public Affairs for media release;
iv. Provide technical assistance information and analysis to the GEMA Director and SOC Chief, upon request;
v. Track and record data necessary for federal declaration;
vi. Maintain financial records on personnel, supplies and other resources utilized and report expenditures upon request;
vii. Prepare information for after-action reports; and
viii. Resume day-to-day operations.

B. Public Information

1. Strategy

a. Georgia Emergency Management Agency (GEMA) will coordinate with appropriate agencies and organizations to ensure emergency operational readiness. GEMA will develop and maintain Standard Operating Procedures (SOPs).
b. The GEMA Director or designee(s), through Public Affairs, is responsible for informing the public of emergency and disaster information in the state. Assistance will be provided by public information offices of other state agencies or organizations. GEMA will inform the Governor's Press Secretary of events on a continuing and timely basis.
c. GEMA will request qualified personnel from other state agencies to assist as media representative escorts either at the emergency site or at the State Operations Center. State agencies and organizations will provide public information personnel and equipment resources when requested.
d. Georgia EAS will be utilized in cooperation with the Federal

Communications Commission, Federal Emergency Management Agency (FEMA), GEMA, National Weather Service (NWS), broadcast industry and EAS operational areas. The Georgia EAS Plan will be considered part of the National EAS Plan and activated according to established area, state and federal procedures.

e. A coordinated effort to report and document the emergency or disaster will be conducted at the State Operations Center (SOC) and scene.
f. Situation briefings, press conferences, taped messages, photography, news accounts, injury and fatality statistics and other information will be provided to the news media.
g. GEMA will provide information and briefings for state and federal agencies and will coordinate state and local information and news releases.
h. GEMA will post disaster related information on the agency's Web site: www.ohs.state.ga.us.

2. Actions

a. Mitigation/Preparedness

i. Build public confidence and good will in emergency preparedness;
ii. Educate the public as to the mental and physical stress that may accompany an emergency or disaster;
iii. Develop plans to coordinate with major state level news media for emergency operations before, during and after an emergency or disaster;
iv. Coordinate with all state agency Public Information Offices and develop a coordinated state news policy;
v. Inform the news media that GEMA – Public Affairs is the information center for any emergency or disaster; and
vi. Participate in and/or conduct exercises and tests.

b. Response/Recovery

i. Promote the welfare of residents by disseminating emergency information to news media that will foster efficient and positive actions, help prevent public unrest and build morale;
ii. Supplement efforts of the local Emergency Management Agencies (EMAs) that do not have emergency public information capability;
iii. Establish and staff an Emergency Information Center;
iv. Continue dissemination of accurate/timely information to counteract misinformation and public unrest;
v. Coordinate public information and provide updates for Public Information;
vi. Maintain financial records on personnel, supplies and other resources utilized and report expenditures to GEMA upon request; and
vii. Resume day-to-day operations.

IV. References

None

Appendix A
Hazard Analysis Summary

Georgia has experienced natural disasters such as floods, tornadoes, and hurricanes. The primary goal of emergency management in the State of Georgia is to ensure preparation to respond and recover from the consequences generated by a hazard. This section of the plan offers a summary of the major hazards for which the state is vulnerable.

I. Natural Disasters Frequent to Georgia

A. Flooding

Overflow of rivers and streams due to severe storms or torrential rains may result as a secondary effect to a tropical storm or hurricane. Different variables impact flooding such as topography, ground saturation, previous rainfall, soil types, drainage, basin size, drainage patterns of streams and vegetative cover. Georgia's red clay contributes to the problem in the piedmont area of the state. Flooding may occur slowly or become a flash flood, such as in the case of a dam failure. Mitigation of this hazard includes mapping of flood plain areas. Preparedness is the process of identifying warning systems, evacuation routes and shelters outside the flood plain. Response and recovery may encompass evacuation, search and rescue, sheltering, food, clothing, health and medical services, damage assessment, debris removal, dam repair and temporary housing.

B. Hurricanes

A tropical cyclone above 74 miles per hour is considered a hurricane and poses threats such as storm surge, high winds, and rainfall. A cyclone develops over tropical waters, generally far removed from land areas and usually moves westward under the influence of easterly winds. Over the Atlantic, Caribbean and Gulf of Mexico, a storm may move westward until it strikes land, moving under the influence of westerly winds of middle latitude and recurring northeastward. Most storms in Georgia approach from the southeast or southwest. Secondary effects, such as tornadoes and flooding, can result from a hurricane and greatly impact inland communities. The period of vulnerability extends from June through November. Mitigation includes activities to lessen the damage from such storms, including identification of flood plains for preservation of lives and property. The development of a plan to evacuate and shelter people ahead of the storm is a component of preparedness. Response and recovery involve assisting with damage assessment, debris removal, securing the perimeter, search and rescue and providing health-related services along with reentry into the community. (*Refer to the Hurricane Plan for the State of Georgia prepared by the Georgia*

Emergency Management Agency.)

C. Tropical Storms

A well-organized counterclockwise circulation of clouds and winds below 74 miles per hour constitutes a tropical storm. Severe flooding often accompanies a tropical storm. Mitigation includes identification of critical facilities and mapping of flood plains to protect people and property. Identification of shelters and other critical facilities outside the flood plain in order to move people to protective areas is considered preparation. Response is the evacuation and protection of people and property from the path of a severe storm. Reentry into the affected disaster area may include water testing, dam repair, housing relocation and business reconstruction as a part of the recovery process.

D. Tornadoes

Violent whirling wind accompanied by a funnel-shaped cloud is classified as a tornado. Severe weather conditions, such as a thunderstorm or hurricane, can produce a tornado. The extension may be up to 50 miles and move at speeds of 10 to 50 miles per hour. Through combined action of strong rotary winds and the impact of wind-born debris, destruction occurs. The official tornado season begins in March and continues through August, but may occur throughout the year. Weather band radios, tie-downs for mobile homes and warning systems are mitigating activities. Search and rescue damage assessment and public information training are preparedness areas. Safe shelter-in-place is a key to response as well as assistance to persons injured and prevention of fires and looting. After the tornado strikes, search and rescue, sheltering, provision of food and clothing to victims, and damage assessment are essential. Recovery may require total support to clear debris, repair utilities, rebuild and return to a life of normality.

E. Severe Weather (thunderstorms, lightening, hail)

A thunderstorm is a storm with lightning caused by changes in air pressure. In the United States, there are an estimated 20 million cloud-to-ground lightning strikes per year from approximately 100,000 thunderstorms. A thunderstorm may be preceded by dark clouds and sudden wind shifts. These storms may last from several minutes to several hours. Severe thunderstorms can bring heavy rains that can cause flash flooding, strong winds, hail and tornadoes. Some damage to lives and property can be prevented by adequately warning the public about impending storms and educating them about what precautions to take.

F. Winter Weather (snow & ice)

A freezing rain or ice storm occurs when the surface temperature falls below

freezing. High winds accompanied by freezing rain are more likely to become an ice storm. Liquid that falls and freezes on impact results in a coat of ice glazed on exposed objects. An ice storm may range from a thin glaze to a heavy coating. A heavy accumulation of ice, especially when accompanied by high winds, devastates trees and power lines. Streets and highways become extremely hazardous to motorists and pedestrians, trees fall and power outages occur. Mitigation of winter storm damage is best accomplished by using protective construction techniques, such as installation of power lines underground. Plans for large-scale power outages, emergency transportation and delivery of necessities to persons with special needs are among preparations required for this hazard. Response and recovery include deicing roads, clearing debris, repairing power lines and transporting stranded victims out of harm's way. Usually, this hazard is short-term in nature.

G. Wildfires

Seldom do urban fires require state assistance. Rather, localities rely upon mutual aid from neighboring jurisdictions. Wildfires impact timber and forest land. These fires are generally the result of dry conditions combined with lightning or carelessness and spread unconstrained through the environment. Public awareness helps to mitigate such fires. Preparedness may include banning outdoor burning during the dry season. Local fire departments may be required to respond along with forestry services. Recovery may include debris removal and replanting of trees. The period of recovery may vary in scope depending on the devastation of the fire.

H. Heat

High temperatures sustained over an extended period of time may cause heat-related injuries or deaths, especially to infants and young children, elderly residents, persons with disabilities and migrant and/or seasonal farm workers. Mitigation may include: initiating state/community awareness and public education; working with the media to develop warning systems; and requesting that utility companies reduce shut off during a severe heat wave to prevent injury, illness or death. Preparedness involves identification of resources, such as fans, water and ice. Response and recovery include the protection of people from a severe heat index through the distribution of resources and care of individuals.

I. Drought

A drought is a prolonged period without rain, particularly during the planting and growing season in agricultural areas. It can range from two weeks to six months or more and affects water availability and quality. In Georgia, droughts affect municipal and industrial water supplies, stream water quality, recreation at reservoirs, hydropower generation, navigation and agricultural and forest

resources. Farmland irrigation is a means of mitigation and preparedness. Additional sources of water may be identified to assist with individual and family consumption during time of response and recovery.

J. Earthquakes

A sudden, violent shaking or movement of the earth's surface caused by the abrupt displacement of rock masses, usually within the upper 10 to 20 miles of the earth's surface, is considered an earthquake. Shaking and vibration of the ground are the most far-reaching effects and cause the most damage to people, buildings and other structures. In Georgia, shaking is the most common phenomenon. Surface faulting, ground failures, landslides and tectonic uplifts are other causes of earthquake damage. Consequences of an earthquake may include fire, hazardous materials release and/or dam failure. Mitigation and preparedness may encompass a vulnerability assessment to determine potential damage to critical facilities, loss of utilities and medical needs. During response and recovery, urban search and rescue, debris removal, restoration of utilities and lifeline repairs and condemnation/demolition of buildings must take place before community rebuilding.

II. Technological Hazards Frequent to Georgia

A. Dam Failure

The possibility of dam failure without warning is extremely remote. Any unsafe condition would normally be detected early and appropriate action initiated. If a controlled release from the spillway should be required or if any possibility of dam failure is indicated, the dam owner or operator will notify the local government and Georgia Emergency Management Agency (GEMA). In turn, GEMA will contact the local Emergency Management Agency and Department of Natural Resources -Safe Dams Program to determine if state assistance is necessary. Failure of a dam may result in imminent danger of flooding. Weathering, mechanical changes and chemical agents can impact a dam. Reservoir sedimentation can significantly reduce flood control capability. Protective construction techniques of dams may assist in mitigating such a hazard. Planning and training to ensure adequate warning communication, identification of evacuation routes and movement to high ground are considered preparedness.

B. Hazardous Materials

Major sources of hazardous materials accidents are spills along roadways, railways, pipelines, rivers and port areas. Hazardous materials are substances that are harmful to the health and/or safety of people and property. Jurisdictions with facilities that produce, process or store hazardous materials

are at risk, as are facilities that treat, store or dispose of hazardous wastes. Mitigation of this hazard may be accomplished by adherence to federal, state and manufacturers' safety standards. Proper packaging, storage and handling will assist in elimination of hazardous materials incidents. Preparation of specialized equipment and training of personnel may be considered preparedness. Response may include a coordinated reaction to fires; injuries; environmental impacts; and nuclear, biological and chemical incidents. The rescue of injured or endangered persons, prevention of container failure, neutralization of the hazard, extinguishing an ignited material and protection against exposure are considered responses. Salvage of materials, debris removal and returning evacuees are a part of recovery.

C. Radiological Incidents/Nuclear Power Plant Accident

The ingestion exposure pathway is within a 50-mile Ingestion Pathway Zone (IPZ) of the Nuclear Power Plant. The IPZ defines the area for which emergency plans are specifically needed to outline and describe actions necessary to protect the health and safety of the population in case of a facility accident. Radioactive materials are produced in the operation of nuclear reactors. Transportation of radiological materials and substances is critical to ensure the safety and protection of the local population. In order to mitigate or eliminate the effects of such an accident, protective measures are necessary. Planning, training and coordination of local, state, federal and utility responsibilities are described in existing plans and SOPs. (*These plans include the ten-mile Emergency Planning Zone [EPZ] as a part of the State Base Radiological Emergency Preparedness Plan [REP] and the IPZ, as well as transportation of radioactive materials.*) Response may include monitoring for contaminated water, food, livestock and environmental monitoring and/or decontamination of people living in the area. Duration may range from hours to months. The recovery phase ensures that the environment and community are safe to resume normal living. In Georgia, three commercial nuclear power plants affect the state. Six Georgia counties contain a ten-mile EPZ that surrounds these plants.

III. Man-made

A. Civil Disturbance

Public crisis may occur with or without warning resulting in adverse impacts on the population. Civil disturbances may require law enforcement agencies to maintain intelligence on areas prone to uprisings in order to mitigate the hazard. Crowd control, riot, gang and security training may be considered preparedness. Traffic control, security and emergency medical assistance may be necessary to respond. Recovery includes the process of returning to normal, while continuing operations necessary to protect people and property.

B. Transportation Accident

A passenger accident involving an airplane, train, bus or other vehicle is transportation-related. Mitigation is accomplished by proper maintenance of roads, railroad tracks, traffic control devices, training of operators, inspection of vehicles to eliminate safety deficiencies and by careful routing on the safest highways. In such an accident, outlining responsibilities and developing operational plans are encompassed in preparedness. A coordinated approach is critical to response. The recovery phase includes debris removal, repairs to transportation facilities and vehicles and determination of the cause of the accident to prevent reoccurrence. A cargo accident involving chemicals or radiological materials may also be considered as transportation-related.

In Georgia, airports range in size from one of the busiest airports in the United States to small airports with one runway. These airports transport passengers, cargo and equipment over populated areas throughout the state. Although there may be a greater probability of an aircraft accident at or near a major airport, no segment, county or region of Georgia can escape the possibility of an aircraft crash. Local Emergency Management Agency (EMA) staff can handle many accidents involving small aircraft with few passengers. In the case of an airline accident on non-military property that results in mass casualties, the *Aviation Disaster Family Assistance Act of 1996* places primary responsibility for identification and recovery of deceased with the National Transportation Safety Board and coordination for family assistance with the American Red Cross.

C. Terrorism

Often, a terrorist attack is based on a political agenda or national cause. Terrorism is the use of violence to elicit fear and effect change. Terrorists take innocent civilians hostage at gunpoint, plot to assassinate prominent figures, detonate bombs or utilize chemical and/or biological agents in populated areas. Through intelligence, surveillance and sharing of terrorist activities, law enforcement agencies can mitigate such plans. Specialized training in the areas of surveillance, disaster medicine, bomb disposal, decontamination, stress management and grief assistance are included in preparedness. Response must be immediate, coordinated and comprehensive at all levels to include bomb and explosive ordinance disposal, intelligence, security, aviation, transit, traffic and emergency medical and mental health services. The process of recovery may take an extended period of time for the healing of people affected and the recovery of the community.

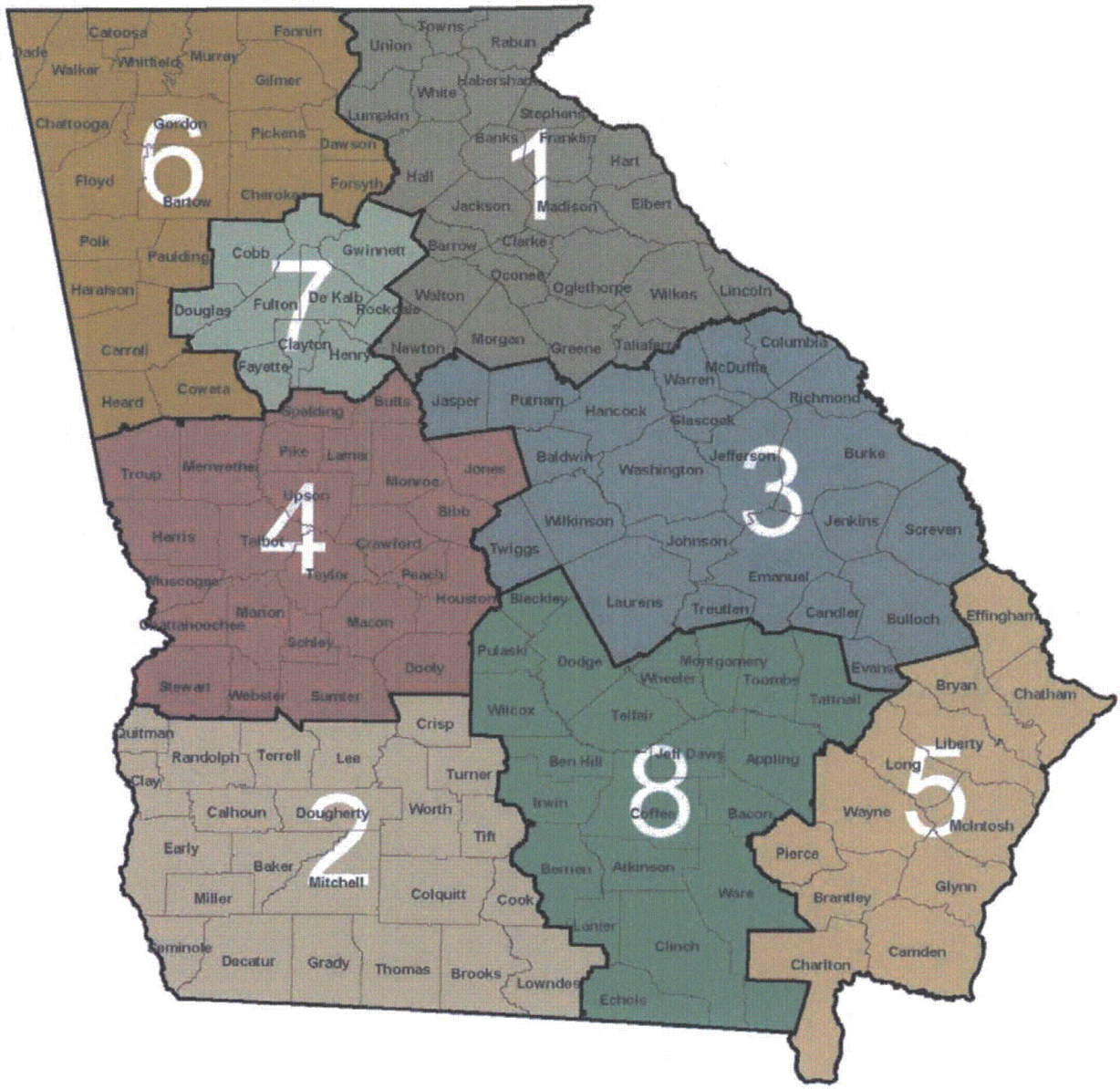
FREQUENCY TABLE

The following is a table of disaster event probabilities, based on historical data. The frequency time frame is an average of all the recorded occurrences of a given event and should not be considered an absolute indicator of when the next occurrence of an emergency or disaster event will happen.

Hazard	# of Events in Historic Record	#r of Years in Historic Record	# of Events in Past 10 Years	# of Events in Past 20 Years	# of Events in Past 50 Years	Historic Recurrence Interval (years)	Historic Frequency % chance/year	Past 10 Year Record Frequency Per Year	Past 20 Year Record Frequency Per Year	Past 50 Year Record Frequency Per Year
Hurricane Surge - Cat 1	INC	INC	INC	INC	INC	Unknown	Unknown	0	0	0
Hurricane Surge - Cat 2	INC	INC	INC	INC	INC	Unknown	Unknown	0	0	0
Hurricane Surge - Cat 3	INC	INC	INC	INC	INC	Unknown	Unknown	0	0	0
Hurricane Surge - Cat 4	INC	INC	INC	INC	INC	Unknown	Unknown	0	0	0
Hurricane Surge - Cat 5	INC	INC	INC	INC	INC	Unknown	Unknown	0	0	0
Hurricane Wind	8	54	8	8	8	6.75	15.0	0.8	0.4	0.16
Floods	591	54	571	591	591	0.09	1094.0	57.1	29.55	11.82
Wildfire	5	54	5	5	5	10.80	9.0	0.5	0.25	0.1
Earthquake	INC	INC	INC	INC	INC	Unknown	Unknown	0	0	0
Tornado	1199	54	262	451	1167	0.05	2220.0	26.2	22.55	23.34
Thunderstorm Wind	8381	54	4313	7002	8381	0.01	15520.0	431.3	350.1	167.62
Lightning	468	54	448	468	468	0.12	867.0		23.4	9.36
Hail	4298	54	3231	3910	4298	0.01	7959.0	323.1	195.5	85.96
Drought	57	54	57	57	57	0.95	106.0	5.7	2.85	1.14
Extreme Temperature	66	54	66	66	66	0.82	122.0	6.6	3.3	1.32
Snow & Ice	114	54	108	114	114	0.47	211.0	10.8	5.7	2.28
Landslide	INC	INC	INC	INC	INC	Unknown	Unknown	0	0	0
Dam Failure	INC	INC	INC	INC	INC	Unknown	Unknown	0	0	0

State of Georgia Source: NCDC Hazard Database – http://nndc.noaa.gov/?home.shtml

Appendix B
Map of OHS-GEMA Areas



Appendix C
Chart of Primary and Support Agencies

PRIMARY AND SUPPORT AGENCIES /ORGANIZATIONS P=Primary Agency S=Support Agency	Transportation	Communications	Public Works & Engineering	Firefighting	Emergency Management	Mass Care, Housing & Human Services	Resource Support	Public Health & Medical Services	Search and Rescue	Hazardous Materials	Agriculture and Natural Resources	Energy	Public Safety & Security Services	Long Term Recovery & Mitigation	External Affairs
Emergency Support Function	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
American Radio Relay League, Inc.		S													
American Red Cross						**P**		S							S
Association County Commissioners of Georgia															S
Board of Regents of the University System of Georgia	S	S	S	S	S	S	S	S			S	S	S		S
Criminal Justice Coordinating Council							S								S
Department of Administrative Services	S	S	S	S	S	S	**P**	S	S	S	S	S	S	S	S
Department of Agriculture	S		S	S	S			S		S	**P**	**P**			S
Department of Audits and Accounts					S									S	
Department of Community Affairs			S		S	S	S							S	S
Department of Corrections	S		S	S	S	S		S	S	S	S		S		

PRIMARY AND SUPPORT AGENCIES /ORGANIZATIONS P=Primary Agency S=Support Agency	Transportation	Communications	Public Works & Engineering	Firefighting	Emergency Management	Mass Care, Housing & Human Services	Resource Support	Public Health & Medical Services	Search and Rescue	Hazardous Materials	Agriculture and Natural Resources	Energy	Public Safety & Security Services	Long Term Recovery & Mitigation	External Affairs
Department of Defense	S	S	S	S	S	S	S	S	S	S	S	S	S		S
Department of Economic Development					S										S
Department of Driver Services	S														
Department of Education	S				S	S	S	S			S				S
Department of Human Resources	S			S	S	**P**	S	**P**	S	S	S		S		S
Department of Labor								S			S				S
Department of Natural Resources	S	S	**P**	S	S	S		S	S	**P**	**P**	S	S	S	S
Department of Public Safety	**P**	S		S	S	S		S	S	S	S	S	**P**		S
Department of Revenue		S													
Department of Technical and Adult Education						S		S							S
Department of Transportation	**P**	S	**P**	S	S	S		S	S	S	S	S	S	S	S
Department of Veterans Service						S							S		
Georgia Baptist Convention						S									
Georgia Building Authority	S		S		S	S		S			S			S	

PRIMARY AND SUPPORT AGENCIES /ORGANIZATIONS P=Primary Agency S=Support Agency	Transportation	Communications	Public Works & Engineering	Firefighting	Emergency Management	Mass Care, Housing & Human Services	Resource Support	Public Health & Medical Services	Search and Rescue	Hazardous Materials	Agriculture and Natural Resources	Energy	Public Safety & Security Services	Long Term Recovery & Mitigation	External Affairs
Georgia Bureau of Investigation		S		S	S			S	S		S		**P**		S
Georgia Emergency Management Agency	S	**P**		S	**P**		S		**P**	**P**	S		S	**P**	**P**
Georgia Environmental Facilities Authority			S				S							S	
Georgia Forestry Commission	S	S	S	**P**	S	S		S		S	S	S	S	S	S
Georgia Hospital Association								S							
Georgia Municipal Association															S
Georgia Nurse Association								S							
Georgia Pharmacy Association								S							
Georgia Ports Authority							S								
Georgia Power Company												S			
Georgia Public Broadcasting		S													S
Georgia Public Safety Training Center					S	S	S			S	S		S		S
Georgia Residential Finance Authority														S	

PRIMARY AND SUPPORT AGENCIES /ORGANIZATIONS P=Primary Agency S=Support Agency	Transportation	Communications	Public Works & Engineering	Firefighting	Emergency Management	Mass Care, Housing & Human Services	Resource Support	Public Health & Medical Services	Search and Rescue	Hazardous Materials	Agriculture and Natural Resources	Energy	Public Safety & Security Services	Long Term Recovery & Mitigation	External Affairs
Georgia Technology Authority		S						S							
Georgia Transmission Corporation												S			
Governor's Office of Consumer Affairs					S								**P**		
Office of Planning and Budget					S	S	S							S	
Office of the Commissioner of Insurance and Fire Safety				S	S									S	
Office of the Governor															**P**
Peace Officers Standards and Training Council															S
Prosecuting Attorneys Council of Georgia						S		S							
Public Service Commission		S	S		S					S		**P**	S	S	S
State Board of Pardons and Paroles													S		
The Salvation Army						S									
Volunteer Organizations Active in Disaster											S				

Appendix D
Summary of Agency/Organizational Emergency Responsibilities

Agency / Organization
American Radio Relay League, Inc. (ARRL)

Mission
The purposes for which our corporation is formed are the following: the promotion of interest in Amateur Radio communication and experimentation; the establishment of Amateur Radio networks to provide electronic communications in the event of disasters or other emergencies; the furtherance of the public welfare; the advancement of the radio art; the fostering and promotion of noncommercial intercommunication by electronic means throughout the world; the fostering of education in the field of electronic communication; the promotion and conduct of research and development to further the development of electronic communication; the dissemination of technical, educational and scientific information relating to electronic communication; and the printing and publishing of documents, books, magazines, newspapers and pamphlets necessary or incidental to any of the above purposes.

Primary Agency / Organization
None

Support Agency / Organization

Emergency Support Function	Resource
ESF 2 – Communications	Equipment, Personnel

Agency Information
ARRL Headquarters
225 Main Street
Newington, CT 06111-1494

Voice: 860-594-0200
Fax: 860-594-0259
Web-page: http://www.arrl.org

Agency / Organization

American Red Cross (ARC)

Mission

The American Red Cross, a humanitarian organization led by volunteers and guided by its Congressional Charter and the Fundamental Principles of the International Red Cross Movement, will provide relief to victims of disasters and help people prevent, prepare for and respond to all emergencies.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 8 – Public Health and Medical Services	First Aid, Mental Health, Volunteers
ESF 15 – External Affairs	Information Assistance

Agency Information

American Red Cross Metropolitan Atlanta
Chapter 1955 Monroe Drive, NE Atlanta, GA
30324-4828

Voice: 404-876-3302
Fax: 404-575-3080
Web-page: http://www.redcrossatlanta.org (or http://www.redcross.org)

Agency / Organization

Association County Commissioners of Georgia (ACCG)

Mission

It is the mission of the Association County Commissioners of Georgia to enhance the role, stature and responsiveness of county government in Georgia. Since counties are the level of government closest to the people and serve all the people of the state, ACCG will promote the ability of Georgia counties to provide public services responsibly, efficiently and cost effectively through cooperative legislative action, education of public officials, provision of quality member services and technical assistance, and increasing public awareness of critical local government issues.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 15 – External Affairs	Notifications

Agency Information

Association County Commissioners of Georgia
50 Hurt Plaza, Suite 1000
Atlanta, GA 30303

Voice: 404-522-5022 or 800-858-2224
Fax: 404-525-2477
Web-page: http://www.accg.org

Agency / Organization

Board of Regents of the University System of Georgia (BOR)

Mission

The mission of the University System of Georgia is to contribute to the educational, cultural, economic, and social advancement of Georgia by providing excellent undergraduate general education and first-rate programs leading to associate, baccalaureate, masters, professional, and doctorate degrees; by pursuing leading-edge basic and applied research, scholarly inquiry, and creative endeavors; and by bringing these intellectual resources, and those of the public libraries, to bear on the economic development of the State and the continuing education of its citizens.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 1 – Transportation	Personnel, Vehicles, Videoconferencing
ESF 2 – Communications	Facilities, Personnel, Videoconferencing
ESF 3 – Public Works & Engineering	Engineering Equipment, Personnel, Vehicles
ESF 4 – Firefighting	Personnel
ESF 5 – Emergency Management	Facilities, Vehicles
ESF 8 – Public Health & Medical Services	Facilities, Personnel
ESF 11 – Agriculture	Consultation, Equipment, Facilities, Laboratories, Personnel, Research and Development, Training
ESF 13 – Public Safety & Security Services	Personnel, Temporary Morgues, Vehicles

Agency Information

Board of Regents University System of Georgia
270 Washington St., SW
Atlanta, GA 30334

Voice: 404-656-2250
Fax: 404-651-9301
Web-page: http://www.usg.edu

Agency / Organization

Criminal Justice Coordinating Council (CJCC)

Mission

The mission of the Council is to serve as a statewide body providing leadership to coordinate, intensify and make more effective the components of the criminal justice system at all levels of government.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 7 – Resource Support	Personnel

Agency Information

Criminal Justice Coordinating Council
503 Oak Place, Suite 540
Atlanta, GA 30349

Voice: 404-559-4949
Fax: 404-559-4960
Web-page: http://www.state.ga.us/cjcc

Agency / Organization

Department of Administrative Services (DOAS)

Mission

To provide consistent, cost-effective, and efficient consolidated services so Georgia government can more effectively serve the public. We do this by:

- aggregating purchases to obtain best value;
- centralizing business support services to achieve economies of scale; and
- establishing business practices to achieve fairness and equity.

Primary Agency / Organization

ESF 7 – Resource Support

Support Agency / Organization

Emergency Support Function	Resource
ESF 1 – Transportation	Fuel, Maintenance, Personnel, Procurement, Vehicles
ESF 2 – Communications	Communications, Vehicles,
ESF 3 – Public Works & Engineering	Communications, Equipment, Fuel, Procurement, Supplies, Vehicles
ESF 4 – Firefighting	Communications, Equipment, Vehicles
ESF 5 – Emergency Management	Communications Repair, Procurement
ESF 6 – Mass Care, Housing, Human Services	Procurement
ESF 8 – Public Health & Medical Services	Procurement, Vehicles
ESF 9 – Search & Rescue	Personnel, Vehicles
ESF 10 – Hazardous Materials	Communications, Equipment, Procurement, Vehicles
ESF 11 – Agriculture and Natural Resources	Personnel, Procurement, Vehicles
ESF 12 – Energy	Communications, Equipment, Fuel, Vehicles
ESF 13 – Public Safety & Security Services	Communications, Personnel, Procurement, Supplies
ESF 14 – Long-Term Community Recovery & Mitigation	Personnel, Procurement
ESF 15 – External Affairs	Information, Vehicles

Agency Information

Department of Administrative Services
200 Piedmont Avenue, Suite 1804, West Tower
Atlanta, GA 30334-9010

Voice: 404-656-5514
Fax: 404-651-9595
Web-page: http://doas.georgia.gov

Agency / Organization

Department of Agriculture (GDA)

Mission

Our mission is to provide excellence in services and regulatory functions, to protect and promote agriculture and consumer interests, and to ensure an abundance of safe food and fiber for Georgia, America and the world by using state-of-the-art technology and a professional workforce.

Primary Agency / Organization

ESF 11 – Agriculture and Natural Resources
ESF 12 – Energy

Support Agency / Organization

Emergency Support Function	Resource
ESF 1 – Transportation	Fuel, Personnel
ESF 4 – Firefighting	Equipment, Personnel,
ESF 8 – Public Health & Medical Services	Animal Disease and Injury, Laboratory Support, Technical Assistance – Food

Agency Information

Georgia Department of Agriculture
19 Martin Luther King, Jr., Dr., SW
Atlanta, GA 30334

Voice: 404-656-3685
Fax: 404-651-7957
Web-page: http://www.agr.state.ga.us

Agency / Organization

Department of Audits and Accounts

Mission

The Department of Audits and Accounts exists to provide decision-makers with credible management information to promote improvements in accountability and stewardship in state and local government.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 5 – Emergency Management	Accounting, Personnel
ESF 14 – Long-Term Community Recovery & Mitigation	Personnel, Technical Assistance

Agency Information

Department of Audits and Accounts
254 Washington St., S.W.
Atlanta, GA 30334-8400

Voice: 404-656-0493
Fax: 404-657-5538
Web-page: http://www.audits.state.ga.us

Agency / Organization

Department of Community Affairs (DCA)

Mission

Establishing partnerships between state government, local governments, and the private sector to create opportunities to improve the quality of life in Georgia.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 3 – Public Works & Engineering	Personnel
ESF 5 – Emergency Management	Personnel
ESF 6 – Mass Care, Housing and Human Services	Emergency Funding, Inventory and Site Preparation, Loan Consultation, Temporary Housing Coordination
ESF 7 – Resource Support	Building Design, Construction Standards, Housing Specifications, Property Information, Purchase Consultations, Technical Assistance
ESF 14 – Long-Term Community Recovery & Mitigation	Data, Personnel
ESF 15 – External Affairs	Personnel

Agency Information

Department of Community Affairs
60 Executive Park South, N.E.
Atlanta, GA 30329

Voice: 404-679-4940
Fax: 404-679-0589
Web-page: http://www.dca.state.ga.us

Agency / Organization

Department of Corrections (DOC)

Mission

Protect the public, victims of crime, and agency staff and reduce crimes committed by sentenced offenders by holding offenders accountable and providing safe and secure facilities, effective community supervision, and effective methods of self-improvement for offenders.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 1 – Transportation	Fuel, Maintenance, Personnel, Vehicles
ESF 3 – Public Works & Engineering	Equipment, Personnel
ESF 4 – Firefighting	Equipment, Personnel, Vehicles
ESF 5 – Emergency Management	Equipment, Personnel, Traffic Control, Vehicles
ESF 6 – Mass Care, Housing, and Human Services	Equipment, Personnel, Vehicles
ESF 8 – Public Health & Medical Services	Equipment, Personnel, Vehicles
ESF 9 – Search And Rescue	Equipment, Personnel, Tracking Dogs,
ESF 10 – Hazardous Materials	Equipment, Personnel, Vehicles
ESF 11 – Agriculture & Natural Resources	Equipment, Facilities, Food, Helicopters, Personnel, Vehicles
ESF 13 – Public Safety & Security Services	Equipment, Personnel

Agency Information

Department of Corrections
2 Martin Luther King, Jr. Drive Twin Towers – East, Room 854
Atlanta, GA 30334

Voice: 404-656-9772
Fax: 404-656-6434
Web-page: http://www.dcor.state.ga.us

Agency / Organization

Department of Defense (DOD)

Mission

Federal – To train, equip, and lead forces capable of mobilizing and deploying as directed by the National Command Authority.

State – To provide military support to civil authorities during emergency situations such as civil disturbances and natural or man-made disasters.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 1 – Transportation	Aircraft, Fuel, Mobile Communications, Personnel, Vehicles
ESF 2 – Communications	Communications, Infrastructure Repair, Personnel
ESF 3 – Public Works & Engineering	Communications Equipment, Generators, Personnel, Vehicles, Water Purification
ESF 4 – Firefighting	Aircraft, Equipment, Personnel,
ESF 5 – Emergency Management	Communications, Equipment, Personnel, Vehicles
ESF 6 – Mass Care, Housing, & Human Services	Emergency Food, Equipment, Facilities, First Aid, Personnel
ESF 7 – Resource Support	Aircraft, Helicopters, Personnel, Staging Facilities, Supplies, Vehicles
ESF 8 – Public Health & Medical Services	Aircraft, Equipment, Helicopters, Personnel, Site Security, Supplies
ESF 9 – Search and Rescue	Helicopters, Personnel, Search and Rescue, Vehicles
ESF 10 – Hazardous Materials	Aircraft, Containment, Control Access to Contaminated Areas, Disposal, Equipment, Helicopters, Investigation, Personnel, Vehicles
ESF 11 – Agriculture & Natural resources	Aircraft, Biosecurity, Facilities, Food, Perimeter Control, Personnel, Quarantine Enforcement, Security, Specialized Equipment, Supplies, Tents, Vehicles, Water
ESF 12 - Energy	Communications Equipment, Fuel Equipment, Generators, Personnel
ESF 13 – Public Safety & Security Services	Aircraft, Education Facility, Equipment, Facilities, Personnel, Technical Assistance, Temporary Morgues, Training,
ESF15 – External Affairs	Aircraft, Equipment, Personnel, Vehicles

Agency Information

Georgia Department of Defense
P.O. Box 17965
Atlanta, GA 30316-0965

Voice: 404-624-6001
Fax:
Web-page: http://www.dod.state.ga.us

Agency / Organization

Department of Driver Services (DDS)

Mission

The mission of the Georgia Department of Driver Services is to continuously be the most customer-focused, results-driven, best managed organization by instilling values and demonstrating that **"We C.A.R.E."** while ensuring public trust and safeguarding the integrity of our services.

Values - "We C.A.R.E."

Communication - Provide information in a consistent, courteous manner.
Accountability - Empower employees and measure our performance.
Respect - Listen attentively and assist customers in a timely and professional manner.
Ethics - Demonstrate integrity and honesty in our actions and decisions.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 1 – Transportation	Communications, Personnel, Mobile Command Post

Agency Information

Georgia Department of Driver Services
Post Office Box 80447
2206 Eastview Parkway
Conyers, Georgia 30013
Voice: 678-413-8650
Fax:
Web-page: http://dds.ga.gov

Agency / Organization

Department of Economic Development

Mission

The primary objective of the department is to create jobs, and therefore economic well being, through the promotion of Georgia as a business location or a tourist destination.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 5 – Emergency Management	Notification
ESF 15 – External Affairs	Personnel

Agency Information

Georgia Department of Economic Development
75 Fifth St., N.W., Suite 1200
Atlanta, GA 30308

Voice: 404-656-3545
Fax: 404-651-8579
Web-page: http://www.georgia.org

Agency / Organization

Department of Education (DOE)

Mission

It is the mission of the Department of Education to function as a service-oriented and policy-driven agency that meets the needs of local school systems as they go about the business of preparing all students for college or a career in a safe and drug-free environment where we ensure that no child is left behind.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 1 – Transportation	Personnel, Vehicles
ESF 5 – Emergency Management	Facilities, Personnel, Vehicles
ESF 6 – Mass Care, Housing, & Human Services	Facilities
ESF 7 – Resource Support	Communications, Facilities, Personnel
ESF 8 – Public Health & Medical Services	Facilities, Food
ESF 11 – Agriculture & Natural Resources	Consultations, Facilities, Food, Personnel, Training, Water
ESF 15 – External Affairs	Personnel

Agency Information

Georgia Department of Education
2066 Twin Towers East
Atlanta, GA 30334

Voice: 404-656-2800
Fax: 404-651-8737
Web-page: http://www.doe.k12.ga.us

Agency / Organization

Department of Human Resources (DHR)

Mission

The Georgia Department of Human Resources, in partnership with others, will effectively deliver compassionate, innovative, and accountable services to individuals, families and communities.

Primary Agency / Organization

ESF 6 – Mass Care, Housing, & Human Services
ESF 8 – Public Health & Medical Services

Support Agency / Organization

Emergency Support Function	Resource
ESF 1 – Transportation	Personnel, Vehicles
ESF 4 – Firefighting	Emergency Medical Services, Equipment
ESF 5 – Emergency Management	Communications, Equipment, Shelters, Vehicles
ESF 7 – Resource Support	Personnel, Technical Assistance
ESF 9 – Search & Rescue	Emergency Medical Services
ESF 10 – Hazardous Materials	Equipment, Health Services, Personnel, Shelters
ESF 11 – Agriculture & Natural Resources	Distribution and Preparation, Environmental Health Inspections, Food, Food Stamps, Health and Medical, Information Sharing, Personnel, Pet Shelter Site Identification, Training, Women, Infants and Children Program, Vehicles
ESF 13 – Public Safety & Security Services	Health/Medical and Mental Health Services, Notifications
ESF 15 – External Affairs	Information, Personnel

Agency Information

Georgia Department of Human Resources
2 Peachtree St., N.W. Suite 29-213
Atlanta, GA 30303

Voice: 404-651-6316
Fax: 404-651-6815
Web-page: http://dhr.georgia.gov

Agency / Organization

Department of Labor (DOL)

Mission

To work with public and private partners in building a world-class workforce system that contributes to Georgia's economic prosperity. We will accomplish this by creating opportunities and providing services that:

- Assist individuals to attain their work goals and increase self-sufficiency through employment, training, comprehensive rehabilitation, and support services, and
- Assist employers to meet their business needs through employee recruitment and selection services, workforce information, and technical support.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 8 – Public Health & Medical Services	Employment Counseling, Personnel
ESF 11 – Agriculture & Natural Resources	Personnel
ESF 15 – External Affairs	Personnel

Agency Information

Department of Labor
148 Andrew Young International Boulevard, NE
Atlanta, GA 30303-1751

Voice: 404-232-3001
Fax: 404-232-3017
Web-page: http://www.dol.state.ga.us

Agency / Organization

Department of Natural Resources (DNR)

Mission

The mission of the Department of Natural Resources is to sustain, enhance, protect and conserve Georgia's natural, historic and cultural resources for present and future generations, while recognizing the importance of promoting the development of commerce and industry that utilize sound environmental practices.

Primary Agency / Organization

ESF 3 – Public Works & Engineering
ESF 10 – Hazardous Materials
ESF 11 – Agriculture & Natural Resources

Support Agency / Organization

Emergency Support Function	Resource
ESF 1 – Transportation	Aircraft, Boats, Mobile Communications, Personnel, Vehicles
ESF 2 – Communications	Communications, Facilities, Personnel
ESF 4 – Firefighting	Equipment , Personnel, Search & Rescue
ESF 5 – Emergency Management	Communications, Facilities, Law Enforcement, Personnel, Traffic Control, Vehicles,
ESF 6 – Mass Care, Housing, and Human Services	Health and Sanitation Consultation, Personnel, Water Quality Control
ESF 8 – Public Health & Medical Services	Water Quality Control, Waste Treatment
ESF 9 – Search & Rescue	Boats, Helicopters, Search & Rescue, Vehicles
ESF 12 – Energy	Communications Equipment, Personnel
ESF 13 – Public Safety & Security Services	Equipment, Facilities, Personnel
ESF 14 – Long-Term Community Recovery & Mitigation	Data, Personnel
ESF 15 – External Affairs	Information, Personnel, Technical Assistance

Agency Information

Georgia Department of Natural Resources
2 Martin Luther King, Jr. Drive, S.E., Suite 1252 East Tower
Atlanta, GA 30334

Voice: 404-656-3500
Fax: 404-656-0770
Web-page: http://www.gadnr.org

Agency / Organization

Department of Public Safety (DPS)

Mission

The mission of the Georgia Department of Public Safety is to work cooperatively with all levels of government to provide a safe environment for residents and visitors to our state.

Primary Agency / Organization

ESF 1 – Transportation

Support Agency / Organization

Emergency Support Function	Resource
ESF 2 – Communications	Communications, Facilities, Mobile Command Post, Personnel
ESF 4 – Firefighting	Aircraft, Escort, Personnel, Search and Rescue, Traffic Control
ESF 5 – Emergency Management	Aircraft, Communications, Facilities, Personnel, Vehicles
ESF 6 – Mass Care, Housing, & Human Services	Security
ESF 8 – Public Health & Medical Services	Aircraft, Communications Equipment, Escort / Traffic Control, Site Security
ESF 9 – Search and Rescue	Aircraft, Escort, Identification, Personnel, Search and Rescue, Traffic Control
ESF 10 – Hazardous Materials	Aircraft, Communications Equipment, Control Access to Contaminated Areas, Escort of Hazardous Materials, Public Notification, Report Verification, Transportation Assistance, Vehicles
ESF 11 – Agriculture & Natural Resources	Aircraft, Communications Equipment, Crisis Management, Escort, Law Enforcement, Quarantine Enforcement, Security, Traffic Control, Transportation
ESF 12 - Energy	Communications Equipment, Fuel, Transport, Security
ESF 13 – Public Safety & Security Services	Aircraft, Communications Equipment, Crisis Management, Escort, Law Enforcement, Quarantine Enforcement, Security, Traffic Control, Transportation
ESF 15 – External Affairs	Aircraft, Information, Personnel

Agency Information

Department of Public Safety
Post Office Box 1456
959 East Confederate Avenue
Atlanta, Georgia 30371

Voice: 404-624-7710
Fax: 404-624-6706
Web-page: http://www.dps.ga.gov

Agency / Organization

Department of Revenue (DOR)

Mission

The Georgia Department of Revenue - as the primary revenue-producing agency for the State - will administer Georgia's tax laws in a manner that promotes confidence in our competence, fairness, and integrity.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 2 – Communications	Communications, Personnel

Agency Information

Department of Revenue
1800 Century Center Blvd., N.E., Suite 2225
Atlanta, GA 30345-3205

Voice: 404-417-4477
Fax: 404-417-4327
Web-page: http://www.gatax.org

Agency / Organization

Department of Technical and Adult Education (DTAE)

Mission

The mission of the Department of Technical and Adult Education is to contribute to the economic, educational, and community development of Georgia by providing quality technical education, adult literacy education, continuing education, and customized business and industry workforce training to the citizens of Georgia.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 6 – Mass Care, Housing, & Human Services	Facilities, Personnel
ESF 8 – Public Health & Medical Services	Equipment, Personnel
ESF 15 – External Affairs	Facilities, Personnel

Agency Information

Department of Technical and Adult Education
1800 Century Plaza, Suite 400
Atlanta, GA 30345

Voice: 404-679-1600
Fax: 404-679-1610
Web-page: http://www.dtae.org

Agency / Organization

Department of Transportation (DOT)

Mission

The Georgia Department of Transportation provides a safe, seamless and sustainable transportation system that supports Georgia's economy and is sensitive to its citizens and environment.

Primary Agency / Organization

ESF 1 – Transportation
ESF 3 – Public Works & Engineering

Support Agency / Organization

Emergency Support Function	Resource
ESF 2 – Communications	Communications, Equipment, Facilities
ESF 4 – Firefighting	Aircraft, Personnel, Traffic Control, Vehicles
ESF 5 – Emergency Management	Aircraft, Notification, Traffic Control, Vehicles
ESF 6 – Mass Care, Housing, & Human Services	Equipment, Personnel, Vehicles
ESF 8 – Public Health & Medical Services	Aircraft, Escort/Traffic Control, Technical Assistance – Construction, Vehicles
ESF 9 – Search and Rescue	Aircraft, Search and Rescue, Vehicles
ESF 10 – Hazardous Materials	Aircraft, Escort of Hazardous Materials, Instruments, Vehicles
ESF 11 – Agriculture & Natural Resources	Aircraft, Construction, Equipment, Food Distribution, Food Escort, Technical Assistance, Traffic Control, Vehicles
ESF 12 – Energy	Architectural and Engineering Services, Construction Equipment, Fuel Equipment, Generators, Personnel, Vehicles
ESF 13 – Public Safety & Security Services	Equipment, Facilities, Personnel
ESF 14 – Long-Term Community Recovery & Mitigation	Personnel, Vehicles
ESF 15 – External Affairs	Aircraft, Information , Personnel

Agency Information

Georgia Department of Transportation
No. 2 Capitol Square, S.W.
Atlanta, GA 30334
Voice: 404-656-5267
Fax: 404-463-6336
Web-page: http://www.dot.state.ga.us

Agency / Organization

Department of Veterans Services (DVS)

Mission

The mission of the Department of Veterans Service is to serve the some 700,000-plus veterans residing in Georgia, their dependents and survivors in all matters pertaining to veterans benefits.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 6 – Mass Care, Housing, & Human Services	Facilities, Personnel
ESF 13 – Public Safety & Security Services	Burial Assistance

Agency Information

Department of Veterans Services
Suite E970
Floyd Veterans Memorial Building
Atlanta, GA 30334-4800

Voice: 404-656-2300
Fax: 404-656-7006
Web-page: http://www.vs.state.ga.us

Agency / Organization

Georgia Baptist Convention

Mission

The Disaster Relief Ministry of the Georgia Baptist Convention is ready to respond to the ministry needs of disaster victims in Georgia and across the nation whenever a disaster strikes. They can respond with feeding units, clean up, recovery units and communication units and child care unit. Volunteers are trained in Disaster Relief and are ready to serve in times of disaster.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 6 – Mass Care, Housing & Human Services	Child Care, Food, Personnel

Agency Information

Georgia Baptist Convention
2930 Flowers Road South
Atlanta, GA 30341

Voice: 770-455-0404
Fax:
Web-page: http://www.gabaptist.org

Agency / Organization

Georgia Building Authority (GBA)

Mission

Georgia Building Authority ...providing the highest quality property management and other related services for the citizens of Georgia.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 1 – Transportation	Personnel, Vehicles
ESF 3 – Public Works & Engineering	Personnel, Technical Expertise
ESF 5 – Emergency Management	Economic Analysis, Personnel,
ESF 6 – Mass Care, Housing, & Human Services	Food
ESF 8 – Public Health & Medical Services	Building Design, Construction, Maintenance
ESF 11 – Agriculture & Natural Resources	Food
ESF 14 – Long-Term Community Recovery & Mitigation	Personnel

Agency Information

Georgia Building Authority
1 Martin Luther King, Jr. Drive
Atlanta, GA 30334

Voice: 404-656-3253
Fax: 404-657-0337
Web-page: http://www.state.ga.us/gba

Agency / Organization

Georgia Bureau of Investigation (GBI)

Mission

The Mission of the Georgia Bureau of Investigation is to provide the highest quality investigative, scientific, and information services and resources to the criminal justice community and others as authorized by law, for the purpose of maintaining law and order and protecting life and property. A team of skilled and dedicated employees, utilizing innovative programs and state of the art technology, will achieve the Mission.

Primary Agency / Organization

ESF 13 – Law Enforcement Services

Support Agency / Organization

Emergency Support Function	Resource
ESF 2 – Communications	Communications, Personnel
ESF 4 – Firefighting	Investigations
ESF 5 – Emergency Management	Law Enforcement
ESF 8 – Public Health & Medical Services	Investigations, Laboratory Facilities
ESF 9 – Search and Rescue	Identification, Investigations
ESF 11 – Agriculture & Natural Resources	Intelligence, Laboratory Facilities, Specialized Communication
ESF 15 – External Affairs	Information

Agency Information

Georgia Bureau of Investigation

3121 Panthersville Road

P.O. Box 370808
Decatur, GA 30037-0808

Voice: 404-244-2600
Fax:
Web-page: http://www.ganet.org/gbi

Agency / Organization

Georgia Emergency Management Agency (GEMA)

Mission

GEMA's mission is to provide a comprehensive and aggressive all-hazards approach to homeland security initiatives, mitigation, preparedness, response, recovery, and special events. The purpose of our mission is to protect life and property and to prevent and/ or reduce the negative impact of natural and manmade events in Georgia.

Primary Agency / Organization

ESF 2 – Communications
ESF 5 – Emergency Management
ESF 9 – Search and Rescue
ESF 10 – Hazardous Materials
ESF 14 – Long-Term Community Recovery & Mitigation
ESF 15 – External Affairs

Support Agency / Organization

Emergency Support Function	Resource
ESF 1 – Transportation	Personnel, Vehicles
ESF 4 – Firefighting	Communications, Equipment, Personnel
ESF 7 – Resource Support	Personnel
ESF 11 – Animals & Natural Resources	Communication, Coordination, Equipment, Facilitation, Logistics, Technical Assistance
ESF 13 – Public Safety & Security Services	Coordination of Personnel and K9 Teams, Recovery Operations

Agency Information

Georgia Emergency Management Agency
P.O. Box 18055
Atlanta, GA 30316-0055

Voice: 1-800-TRY-GEMA (or 404-635-7000)
Fax: 404-635-7205
Web-page: http://www.gema.state.ga.us

Agency / Organization

Georgia Environmental Facilities Authority (GEFA)

Mission

Provide financing and other support services for infrastructure improvements, energy programs and fuel storage systems that result in a cleaner environment for all Georgians.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 3 – Public Works & Engineering	Personnel
ESF 7 - Resource Support	Fuel
ESF 12 – Energy	Fuel
ESF 14 – Long-Term Community Recovery & Mitigation	Funding, Personnel, Procurement

Agency Information

Georgia Environmental Facilities Authority
100 Peachtree St., N.W., Suite 2090
Atlanta, GA 30309-1911

Voice: 404-656-0938
Fax: 404-656-6416
Web-page: http://www.gefa.org

Agency / Organization

Georgia Forestry Commission (GFC)

Mission

The GFC provides leadership, service, and education in protection, management, and wise use of Georgia's forest resources.

Primary Agency / Organization

ESF 4 – Firefighting

Support Agency / Organization

Emergency Support Function	Resource
ESF 1 – Transportation	Personnel, Vehicles
ESF 2 – Communications	Communications
ESF 3 – Public Works & Engineering	Debris Removal, Equipment, Personnel
ESF 5 – Emergency Management	Communications, Law Enforcement, Vehicles
ESF 6 – Mass Care, Housing & Human Services	Equipment, Supplies, Vehicles
ESF 8 – Public Health & Medical Services	Vehicles
ESF 10 – Hazardous Materials	Aircraft, Burn Investigations, Communications, Containment, Equipment, Fire Suppression, Personnel, Vehicles
ESF 11 – Agriculture & Natural Resources	Equipment, Personnel, Vehicles
ESF 12 – Energy	Fuel
ESF 13 – Public Safety & Security Services	Equipment, Personnel, Temporary Morgues, Vehicles
ESF 14 – Long-Term Community Recovery & Mitigation	Data, Personnel
ESF 15 – External Affairs	Information

Agency Information

Georgia Forestry Commission
5645 Riggins Mill Road
Dry Branch, GA 31020

Voice: 1-800-GATREES (or 478-751-3500)
Fax: 478-751-3465
Web-page: http://www.gfc.state.ga.us

Agency / Organization

Georgia Hospital Association (GHA)

Mission

The mission of the Georgia Hospital Association is to advocate for and assist members to improve the delivery of accessible, quality, comprehensive and cost-effective hospital and health services and to improve the overall health status of the community.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 8 – Public Health & Medical Services	Medical Facilities, Personnel

Agency Information

Georgia Hospital Association
1675 Terrell Mill Rd
Marietta, GA 30067

Voice: 770-249-4500
Fax: 770-955-5801
Web-page: http://www.gha.org

Agency / Organization

Georgia Municipal Association (GMA)

Mission

Our purpose is to anticipate and influence the forces shaping Georgia's communities and to provide leadership, tools and services that assist local governments in becoming more innovative, effective and responsive.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 15 – External Affairs	Notification

Agency Information

Georgia Municipal Association
201 Pryor Street, SW
Atlanta, GA 30303

Voice: 404-688-0472
Fax: 678-686-6289
Web-page: http://www.gmanet.com

Agency / Organization

Georgia Nurses Association (GNA)

Mission

"Nurses Shaping the Future of Professional Nursing and Advocating for Quality Health Care"

Founded nearly a century ago for the purpose of uniting our profession, GNA is the state's largest professional nursing association for registered nurses in all practice settings. GNA has provided enormous support to advance the profession as a whole and nurses as individuals. Because the health care arena is in a continuing state of flux, nurses must speak with a collective voice. GNA is positioned to advocate for you while you advocate for your patients. Linked together, we can ensure nursing's agenda is heard in every arena.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 8 – Public Health & Medical Services	Personnel

Agency Information

Georgia Nurses Association
3032 Briarcliff Road
Atlanta, GA 30329-2655

Voice: 404-325-5536
Fax: 404-325-0407
Web-page: http://www.georgianurses.org

Agency / Organization

Georgia Pharmacy Association (GPhA)

Mission

GPhA is committed to promoting and enhancing the profession of pharmacy and the practice standards of its practitioners. Further, the Association endeavors to heighten the public's perception of the profession of pharmacy and pharmacists, and to promote the value of pharmacy services to the health and welfare of the general public.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 8 – Public Health & Medical Services	Personnel, Pharmaceuticals, Supplies

Agency Information

Georgia Pharmacy Association
50 Lenox Point, N.E.
Atlanta, GA 30324

Voice: 404-231-5074
Fax: 404-237-8435
Web-page: http://www.gpha.org

Agency / Organization

Georgia Ports Authority

Mission

The Georgia Ports Authority's mission is to develop, maintain and operate ocean and inland river ports within Georgia; foster international trade and new industry for state and local communities; promote Georgia's agricultural, industrial and natural resources; and maintain the natural quality of the environment.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 7 – Resource Support	Storage Facilities

Agency Information

Georgia Ports Authority
GPA Administration Building
P.O. Box 2406
Savannah, GA 31402
Voice: 912-964-3811
Fax: 912-964-3921
Web-page: http://www.gaports.com

Agency / Organization

Georgia Power Company

Mission

Georgia Power, the largest of five electric utilities that make up Southern Company, has been providing electricity to Georgia for more than a century. Georgia Power is an investor-owned, tax-paying utility that serves customers in 57,000 of the state's 59,000 square miles. The company's 2 million customers are in all but six of Georgia's 159 counties. Georgia Power has approximately 8,800 employees throughout the state.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 12 – Energy	Electric Power, Personnel

Agency Information

Georgia Power Company
241 Ralph McGill Boulevard, NE
Atlanta, GA 30308

Voice: 404-506-6526
Fax:
Web-page: http://www.southernco.com/gapower

Agency / Organization

Georgia Public Broadcasting (GPB)

Mission

To create, produce and distribute high quality programs and services that educate, inform and entertain our audiences and enrich the quality of their lives.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 2 – Communications	Facilities, Radio, Television
ESF 15 – External Affairs	Equipment, Facilities, Personnel

Agency Information

Georgia Public Broadcasting
260 14th Street, NW
Atlanta, GA 30318

Voice: 404-685-2400
Fax: 404-685-2431
Web-page: http://www.gpb.org

Agency / Organization

Georgia Public Safety Training Center (GPSTC)

Mission

The primary objective of the Training Center is to provide high quality, cost effective training to law enforcement, fire service, correctional, emergency medical service, and judicial personnel.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 6 – Mass Care, Housing, and Human Services	Storage Facilities
ESF 7 – Resource Support	Storage Facilities
ESF 10 – Hazardous Materials	Personnel
ESF 11 – Agriculture & Natural Resources	Food, Personnel
ESF 13 – Public Safety & Security Services	Equipment, Personnel, Training
ESF 15 – External Affairs	Equipment, Personnel

Agency Information

Georgia Public Safety Training Center
1000 Indian Springs Drive
Forsyth, GA 31029

Voice: 478-993-4000
Fax: 478-993-4303
Web-page: http://www.state.ga.us/gpstc

Agency / Organization

Georgia Technology Authority (GTA)

Mission

GTA's purpose is to deliver secure, reliable technology services and solutions, and provide guidance and oversight that lead to sound decisions for Georgia government.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 2 – Communications	Personnel, Procurement
ESF 8 – Public Health & Medical Services	Communications, Information Technology Support

Agency Information

Georgia Technology Authority
100 Peachtree Street, Suite 2300
Atlanta, GA 30303-3404

Voice: 404-463-2300
Fax:
Web-page: http://gta.georgia.gov

Agency / Organization

Georgia Transmission Corporation (GTC)

Mission

Georgia Transmission Corporation will provide the best in reliable, cost-effective service for its Members.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 12 – Energy	Electrical Power, Personnel

Agency Information

Georgia Transmission Corporation
2100 East Exchange Place
Tucker, GA 30084

Voice: 770-270-7400
Fax:
Web-page: http://www.gatrans.com

Agency / Organization

Georgia Volunteer Organizations Active in Disaster (GVOAD)

Mission

The mission of Georgia VOAD is to coordinate planning efforts by many voluntary organizations responding to disaster. Member organizations provide more effective and less duplication in service by getting together before disasters strike. Once disasters occur, Georgia VOAD encourages members and other voluntary agencies to convene on site. This cooperative effort has proven to be the most effective way for a wide variety of volunteers and organizations to work together in a crisis.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 11 – Agriculture & Natural Resources	Emergency Animal Sheltering, Equipment, Facilities, Food, Personnel, Supplies, Technical Assistance, Veterinary Medical Triage, Water

Agency Information

Georgia Volunteer Organizations Active in Disasters (GaVOAD)
4439 Parkspring Terrace
Norcross, GA 30092

Voice: 404-725-6328
Fax: 404-447-1581
Web-page: http://www.geocities.com/gavoad/

Agency / Organization

Governor's Office of Consumer Affairs (OCA)

Mission

The Office of Consumer Affairs protects consumers and legitimate business enterprises from unfair and deceptive activities through the enforcement of the Fair Business Practices Act and other related consumer protection statutes.

Primary Agency / Organization

ESF 13 Public Safety & Security Services

Support Agency / Organization

Emergency Support Function	Resource
ESF 5 – Emergency Management	Investigations

Agency Information

Governor's Office of Consumer Affairs
2 Martin Luther King, Jr. Drive, Suite 356
Atlanta, GA 30334

Voice: 404-651-8600
Fax: 404-651-9018
Web-page: http://www2.state.ga.us/GaOCA

Agency / Organization

Office of Planning and Budget (OPB)

Mission

The mission of the Office of Planning and Budget is to improve state government operations and services by leading and assisting in the evaluation, development and implementation of budgets, plans, programs, and policies. OPB will accomplish this mission with leadership from the Governor and in cooperation with the General Assembly, state agencies, and other public and private organizations.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 5 – Emergency Management	Economic Analysis, Personnel
ESF 6 – Mass Care, Housing and Human Services	Funding, Procurement
ESF 7 – Resource Support	Procurement
ESF 14 – Long-Term Community Recovery & Mitigation	Funding, Procurement

Agency Information

Office of Planning and Budget
270 Washington Street, SW
Atlanta, GA 30344

Voice: 404-656-3820
Fax: 404-656-3828
Web-page: http://www.opb.state.ga.us

Agency / Organization

Office of the Governor

Mission

- Ensure that in all endeavors, stewards of state are mindful of these basic principles:
- Returning Public Trust in Government
- Ensure that in all business matters, strict codes of conduct and ethics are enforced and the leadership throughout state government provides an impeccable example for others to follow.
- Eliminate public doubt in the integrity of state government leadership and business dealings by actively eliminating questionable business practices and activity.
- Ensuring a Public Voice and a Responsive Government
- Bring decision-making closer to those citizens who are affected through local control and recognition of public sentiment on the issues of great concern to the citizens of Georgia.
- Create an open and responsive government that truly serves the needs of Georgia's citizens and actively seeks to provide solutions to chronic problems.
- Inspiring and Empowering Innovation and Productivity
- Inspire innovation and productivity by empowering our state employees on the frontlines by cutting unnecessary bureaucracy, cutting unnecessary regulation, and providing incentives for an effective and efficient state government.
- Ensure that the state is a good steward of the public treasury by creating a results-oriented government where productivity and results carry a higher priority than the politics-of-the-day.

Primary Agency / Organization

ESF 15 – External Affairs

Support Agency / Organization

None

Agency Information

Office of the Governor
Georgia State Capitol
Atlanta, GA 30334

Voice: 404-656-1776
Web-page: http://www.gov.state.ga.us

Agency / Organization

Office of the Commissioner of Insurance and Safety Fire

Mission

The mission of the Office of Commissioner of Insurance is to ensure that the public's interests are served through professional oversight of regulated industries, consumer protection, and broad-based educational activities.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 4 – Firefighting	Investigators, Personnel
ESF 5 – Emergency Management	Investigations
ESF 14 – Long-Term Community Recovery & Mitigation	Personnel

Agency Information

Office of the Commissioner of Insurance and Safety Fire
2 Martin Luther King, Jr. Drive West Tower, Suite 704
Atlanta, GA 30334

Voice: 404-656-2070
Fax: 404-657-8542
Web-page: http://www.gainsurance.org

Agency / Organization

Peace Officers Standards and Training Council (POST)

Mission

It is the mission of the Georgia Peace Officer Standards and Training Council to provide the citizens of Georgia with qualified, professionally trained, ethical and competent peace officers and criminal justice professionals.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 15 – External Affairs	Personnel

Agency Information

The Georgia Peace Officers Standards and Training Council
5000 Austell-Powder Springs Road, Suite 261
Austell, GA 30106

Voice: 770-732-5974
Fax: 770-732-5952
Web-page: http://www.gapost.org

Agency / Organization

Prosecuting Attorneys' Council of Georgia (PAC)

Mission

The Prosecuting Attorneys' Council of Georgia assists the prosecuting attorneys of Georgia who seek justice with honor in their efforts against criminal activity.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 8 – Public Health & Medical Services	Personnel

Agency Information

Prosecuting Attorneys' Council of Georgia
104 Marietta Street
Suite 400
Atlanta, GA 30303-2743

Voice: 404-969-4001
Fax: 404-969-0020
Web-page: http://www.pacga.org

Agency / Organization

Public Service Commission (PSC)

Mission

The mission of the Georgia Public Service Commission is to ensure that consumers receive the best possible value in telecommunications, electric and natural gas services and to improve transportation and pipeline safety.

Primary Agency / Organization

ESF 12 – Energy

Support Agency / Organization

Emergency Support Function	Resource
ESF 2 – Communications	Personnel
ESF 3 – Public Works & Engineering	Communications, Personnel
ESF 4 – Firefighting	Escort of Hazardous Materials, Instruments, Transportation Assistance
ESF 5 – Emergency Management	Economic Analysis, Personnel
ESF 10 – Hazardous Materials	Escort of Hazardous Materials, Instruments
ESF 13 – Public Safety & Security Services	Equipment Assistance, Transportation
ESF 14 – Long-Term Community Recovery & Mitigation	Funding, Notification, Personnel
ESF 15 – External Affairs	Information

Agency Information

Public Service Commission
244 Washington St., SW
Atlanta, GA 30334

Voice: 404-656-4501
Fax: 404-656-2341
Web-page: http://www.psc.state.ga.us

Agency / Organization

State Board of Pardons and Paroles

Mission

The mission of the State Board of Pardons and Paroles is to:

- Protect the public by thoroughly investigating and processing inmate cases and making responsible, just, and equitable parole decisions while balancing punishment and rehabilitation;
- Respond to the needs and concerns of crime victims and their families
- Use agency and community resources as a bridge to help parolees reach self-sufficiency and stable citizenship
- Supervise parolees skillfully and return to prison those who demonstrate they will not by choice abide by their release conditions.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 13 – Public Safety & Security Services	Equipment, Personnel, Transportation

Agency Information

State Board of Pardons and Paroles
2 Martin Luther King, Jr. Drive, SE
Suite 458, Balcony Level, East Tower
Atlanta, GA 30334-4909

Voice: 404-656-5651
Fax: 404-651-8502
Web-page: http://www.pap.state.ga.us

Agency / Organization

The Salvation Army

Mission

Whether it be a local incident or a major disaster, Salvation Army staff and volunteers are often the first on the scene and the last to depart, honoring a century-old commitment to serve those in need, at the time of need, and at the place of need.

The red shield continues to be a beacon of compassion; of immediate aid, psychological support and spiritual counsel to individuals and families whose lives have been disrupted or shattered by forces beyond their control.

Salvation Army disaster response teams, coordinated and directed by commissioned officers and trained personnel, supported by volunteers, are "on call" to serve at all disasters and civil disorders which place a community or its populace at risk or which may disrupt or destroy family security and well-being.

Primary Agency / Organization

None

Support Agency / Organization

Emergency Support Function	Resource
ESF 6 – Mass Care, Housing, and Human Services	Donated Goods, Food

Agency Information

The Salvation Army USA Southern Territory Headquarters
1424 Northeast Expressway
Atlanta, GA 30329-2088

Voice: 404-728-1300
Fax: 404-728-1331
Web page: http://www.salvationarmyusa.org

ACRONYMS

ARRL	American Radio Relay League, Inc.
ARC	American Red Cross
ACCG	Association of County Commissioners of Georgia
BOR	Board of Regents of the University System of Georgia
CJCC	Criminal Justice Coordinating Council
DOAS	Department of Administrative Services
GDA	Department of Agriculture
DCA	Department of Community Affairs
DOC	Department of Corrections
DOD	Department of Defense
DDS	Department of Driver Services
DOE	Department of Education
DHR	Department of Human Resources
DOL	Department of Labor
DMVS	Department of Motor Vehicle Safety
DNR	Department of Natural Resources
DOR	Department of Revenue
DTAE	Department of Technical and Adult Education
DOT	Department of Transportation
DVS	Department of Veterans Services
GBA	Georgia Building Authority
GBI	Georgia Bureau of Investigation
GEMA	Georgia Emergency Management Agency
GEFA	Georgia Environmental Facilities Authority
GFC	Georgia Forestry Commission
GHA	Georgia Hospital Association
GMA	Georgia Municipal Association
GNA	Georgia Nurses Association
GphA	Georgia Pharmacy Association
GPA	Georgia Ports Authority
GPC	Georgia Power Company
GPB	Georgia Public Broadcasting
GPSTC	Georgia Public Safety Training Center
GSP	Georgia State Patrol
GTA	Georgia Technology Authority
GTA	Georgia Telephone Association
GTC	Georgia Transmission Corporation
GaVOAD	Georgia Volunteer Organizations Active in Disasters
OCA	Governor's Office of Consumer Affairs
OPB	Office of Planning and Budget
PAC	Prosecuting Attorneys' Council of Georgia
POST	Peace Officers Standards and Training Council
PSC	Public Service Commission

APPENDIX E
GEORGIA VOLUNTARY ORGANIZATIONS ACTIVE IN DISASTER (VOAD)
STATE ASSOCIATIONS AND PRIVATE SECTOR SUPPORT

VOAD

Adventist Community Services
American Family Foundation
American Red Cross
Atlanta-Fulton County Emergency Management Agency (Affiliate Member)
Church World Service
Corporate Response
Federal Emergency Management Agency (Affiliate Member)
Georgia Association of Food Banks
Georgia Baptist Convention
Georgia Emergency Management Agency (Affiliate Member)
Georgia Department of Agriculture (Affiliate Member)
Georgia Department of Human Resources
Georgia Pharmacy Foundation
Habitat for Humanity International
Humane Associations of Georgia, Inc.
Lutheran Ministries of Georgia
Mennonite Disaster Service
Mormon Disaster Service
National VOAD
Saint Vincent DePaul Society
The Salvation Army
United Methodist – North Georgia Conference – Disaster Response Ministry
United Methodist Volunteers in Mission
United Way 211 (Affiliate Member)

STATE ASSOCIATIONS

Association County Commissioners of Georgia (ACCG)
Georgia Association of Chiefs of Police
Georgia Municipal Association (GMA)
Georgia Sheriffs' Association

PRIVATE SECTOR

AT&T
BellSouth
Georgia Power Company
Georgia Transmission Corporation

APPENDIX F
GLOSSARY

Alternate State Operations Center - a site located away from the Primary Emergency Operations Center (EOC) from which civil government officials exercise direction and coordination in an emergency situation.

Damage Assessment -the appraisal or determination of the actual effects on human, economic and natural resources resulting from man-made or natural disasters.

Decontamination (Radiological) - the reduction or removal of contaminating radioactive material from a structure, area, object or person.

Direction and Coordination -the assignment and collaboration of missions, tasks and procedures to operate government during emergency operations.

Disaster -a major occurrence that results in a Presidential Declaration to assist with property damage, public and/or individual assistance.

Emergency -an occurrence or a situation that may threaten lives and/or damage property and results in a State of Emergency being signed into effect by the Governor.

Emergency Alert System (EAS) -a system coordinated among Federal Communications Commission, National Weather Service, Georgia Emergency Management Agency and local broadcasters to alert the general public to emerging weather conditions.

Emergency Management -an organized planning, decision making and assignment process along with coordination of available resources to mitigate, prepare, respond and recover from man-made or natural emergencies or disasters.

Emergency Operations Center (EOC) -a protected site from which government officials (municipal, county, state and federal) exercise direction and coordination in an emergency.

Emergency Support Function (ESF) -a functional area of activity established to facilitate the delivery of assistance required during the immediate response phase of a disaster to save lives, protect health and property and maintain public safety. ESFs represent assistance which a state or local jurisdiction will most likely need because of the impact of an emergency/disaster on its own resources and response capabilities or because of the specialized assistance required.

Exercise - a simulated condition of man-made or natural emergency or disaster operations involving planning, preparedness and response.

Evacuees -all persons removed or moving from areas threatened or struck by a disaster.

Federal Emergency Management Agency (FEMA) -the agency responsible for implementing the Federal Response Plan during a Presidential Declaration and coordinating federal assistance through Emergency Support Functions.

Hazard - a dangerous event or circumstance that may or may not lead to an emergency

or disaster.

Hazardous Materials -a substance or material in a quantity or form that may pose an unreasonable risk to health, safety or property when released in the environment.

Hazardous Materials Incident (Fixed Facility) -any occurrence resulting in the uncontrolled release of materials from a fixed site capable of posing a risk to health, safety and property as determined in the Environmental Protection Agency Resource Conservation and Recovery Act regulations.

Local Emergency Operations Plan (LEOP) - a clear and concise document describing local actions to be taken stating what action will be taken and who is responsible in the event of an anticipated emergency.

Mitigation -activities that prevent a disaster, reduce the chance of a disaster from happening or reduce the damaging effects of unavoidable disasters.

Mobile Command Post (MCP) - an emergency management vehicle which serves as a base of operation for command and control during an emergency.

Mobile Communications Vehicle (MCV) -an emergency management vehicle which can augment communications ability.

Mobilization - the process of marshaling appropriate personnel to manage resources.

Mutual Aid Agreements - written or unwritten understandings among jurisdictions, agencies or organizations which cover methods and types of assistance available during an emergency or disaster.

Nuclear Power Plant - an electrical generating facility using a nuclear reactor as a power (heat) source.

Preparedness -activities, programs and assistance that exist prior to an emergency that are used to prevent, support and/or enhance response to an emergency or disaster.

Presidential Declaration - a disaster that exceeds the state's capacity to respond, resulting in the Governor's request for federal assistance.

Primary Responsibility - the agency which is assigned to respond to a specific emergency support function during an emergency or disaster.

Public Service Announcements (PSAs) - announcements made by broadcast media, free of charge, for the good of the public.

Recovery - long term activities and programs beyond the initial crisis period of an emergency or disaster designed to return all systems to normal status or to reconstitute these systems to a new condition that is less vulnerable.

Response - activities and programs designed to address the immediate and short-term effects of the onset of an emergency or disaster.

Shelter - a facility that provides temporary care for individuals and families who have been evacuated from their homes by an emergency or disaster.

Shelter Management - an internal organization, administration and operation of a

shelter facility by trained personnel or volunteers.

Shelter Manager - a trained individual who provides for internal organization, administration and operation of a shelter facility.

Site Hardening - actions (e.g., construction, security checks, extended perimeters) taken to make a facility less vulnerable to attack.

Standard Operating Procedures (SOPs) - instructions and directives covering operations and standardized procedures.

Support Responsibility - the agency/organization that is assigned to provide assistance to the primary agency with emergency support function responsibility

APPENDIX G
AUTHORITIES AND REFERENCES

1. "A National Strategy for Integrated Public Warning Policy and Capability", Partnership for Public Warning, February 2003.
2. ARC Board of Governors' Disaster Services Policy Statement of July 1977
3. Aviation Disaster Family Assistance Act of 1996
4. Executive Order 3/13/03
5. Georgia Air Quality Control Act
6. Georgia Death Investigation Act
7. Georgia Emergency Management Act of 1981, as amended, Official Code of Georgia Annotated § 38-3-22(b)(6) (http://www.legis.state.ga.us/cgibin/gl_codes_detail.pl?code=38-3-22)
8. Georgia Water Quality Control Act, Official Code of Georgia Annotated (O.C.G.A.) § 12-8-20 *et seq.*
9. Hazardous Materials Transportation Uniform Safety Act of 1990.
10. "National Strategy for Homeland Security", Office of Homeland Security, July 2002. (http://www.homelandsecurity.org/hls/features/hlsstrategy.pdf)
11. Official Code of Georgia Annotated (O.C.G.A.) § 4; 12-8; 26; 35-3-151
12. Radiological Plan
13. The Clean Air Act Amendments of 1990
14. The Oil Pollution Act (OPA) of 1990
15. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended. (http://www.fema.gov/library/stafact.shtm)
16. Title III of the Superfund Amendments and Reauthorization Act (SARA)
17. Water Quality Control Act
18. Official Code of Georgia Annotated (O.C.G.A.) § 10-393-4
19. Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 93-288, as amended by PL 100-707 dated November 23, 1988.
20. The Disaster Relief Act of 1970, as amended (the following Sections only: 231, 233, 234, 235, 236, 237, 301, 302, 303 and 304).
21. Disaster Assistance Programs, Digest of Federal Disaster Assistance Programs, DAP 21, Federal Emergency Management Agency, June 26, 1989.
22. Federal Civil Defense Act of 1950, as amended (PL 81-920).
23. Title 44, CFR, Part 200 et seq.
24. Title 44 CFR; Part 13 (Final FEMA Common Rule).
25. Flood Disaster Protection Act of 1973 (PL 93-234).
26. Presidential Executive Order 12612, dated October 28, 1987(Federalism).
27. Presidential Executive Order 11990, dated May 24, 1977 (Protection of Wetlands).

AR-07-0656
Enclosure 5
Miscellaneous Documents

No. 7 Georgia DNR –EPD Procedures and Map

Radiological Emergency Preparedness Procedures
Georgia Department of Natural Resources
Environmental Protection Division
Environmental Radiation Program

DNR-EPD-ERP 1.0	Off-Site Field Monitoring Operations
DNR-EPD-ERP 2.0	Ingestion Pathway/Re-entry Field Monitoring Operations
DNR-EPD-ERP 3.0	Radiation Emergency Coordinator Operations
DNR-EPD-ERP 4.0	Field Team Coordinator Operations
DNR-EPD-ERP 5.0	Deleted
DNR-EPD-ERP 6.0	Radiation Exposure Control and Thyroid Blocking Agent Procedures for Personnel Entering The Plume Exposure Pathway Area
DNR-EPD-ERP 7.0	Determination of Airborne I-131 from Field Measurements of Silver Zeolite Cartridges
DNR-EPD-ERP 8.0	Packaging, Transport and Receipt of Emergency Environmental Samples

Title: Off-Site Field Monitoring Operations

1.0 **Purpose** - To provide instructions for performing necessary off-site surveys and sampling during a response to emergency conditions at a fixed nuclear facility.

2.0 **Scope** - this procedure is applicable to all RERT personnel, and is intended for use at all fixed nuclear facilities in or affecting Georgia.

3.0 **Required Equipment, Documentation, References**

3.1 Required Equipment (per team) - (1) Field Radiological Monitoring Kit, (3) Protective Clothing Kits, (1) Vehicle, (1) Southern Linc radio and/or cell phone, (1) Field Environmental Sampling Kit and Supplies, and low range survey instruments as necessary.

3.2 Documentation - 10-mile EPZ map, 50-mile EPZ map, DOT county map(s), Direct Radiation Measurement and Air Sampling Results Form(s), Chain of Custody Form(s) and Sample Receipt and Transfer Form(s).

3.3 References – Georgia Emergency Operations Plan (GEOP), Georgia Radiological Emergency Plan (REP)

4.0 **Limits and Precautions** - all operations are to be conducted in accordance with the Department of Natural Resources Exposure Control Procedures for Workers Entering the Affected Area. Limits for abandonment of post/mission as stated in that procedure must be used.

5.0 **Responsibilities**

5.1 Radiological Emergency Coordinator (REC) - The REC will determine the need for field monitoring, and will coordinate this function with other radiological emergency response functions.

5.2 Field Team Coordinator (FTC) - The FTC is responsible for formation of the monitoring teams, for providing the direct guidance to the monitoring teams, for coordinating field monitoring activities with the utilities counter part, for oversight of field monitoring team radiation exposures, and for insuring that field monitoring results are transmitted to the REC in a timely fashion.

5.3 Radio Operator - The Radio Operator is responsible for transmitting general information and specific directives from the FTC to the field monitoring teams, for receiving and recording field monitoring results, and for providing backup communications between the REC and the FTC.

5.4 Field Monitoring Teams (FMT) - The FMT's are responsible for conducting direct radiation surveys, airborne sampling, and environmental sampling activities as directed by the FTC, for recording data on appropriate forms, and for communicating monitoring results via radio to the FTC.

6.0 **Operational Procedures**

6.1 Team Formation

6.1.1 The REC, or the FTC as directed by the REC, shall instruct an appropriate number of properly trained State Employees to report to the FEOC, and may request an appropriate number of Local Personnel from the County Emergency Management Director(s).

6.1.2 The REC or the FTC shall secure the services of an appropriate number of vehicles and Southern Linc radios and/or cellular phones.

6.1.3 The FTC shall form an appropriate number of teams, composed of a minimum of two (2) persons, and shall assign a field team leader (FTL) for each team. It is desirable to have a 3-person field team consisting of a driver, navigator/recorder and instrument reader; but this is not mandatory. The FTC shall also provide each team with a short situation briefing.

6.1.4 The FTL shall obtain a field monitoring kit, maps, and one (1) protective clothing kit per team member. The FTL shall also insure that the following actions are performed prior to departure.

6.1.4.1 Obtain the dosimetry equipment and KI specified in DNR procedures and complete the necessary forms (refer to Appendix B).

6.1.4.2 Perform visual inspection, battery checks and source response checks on all instrumentation in the emergency kit (refer to Appendix B).

6.1.4.3 Perform operability check of air sample pump with particulate filter in place (refer to Appendix B). After operability check, discard the particulate filter and prepare the sampler for operation by installing a new cartridge and filter. Cover the sample head with a ziplock bag to prevent contamination while in transport.

6.1.4.4 Determine instrument calibrations factors (if necessary) and provide these factors to the FTC or the REC.

6.1.4.5 Receive the initial assignment from the FTC.

6.1.4.6 Perform rudimentary vehicle safety and readiness checks, and perform vehicle radio check (refer to Appendix B).

6.2 Direct Radiation Measurements

6.2.1 All direct radiation survey equipment (i.e. RO-2A, ASP-2, etc.) shall be in the "on" position at all times. Instruments or probes should be bagged to prevent contamination.

6.2.2 The REC, or the FTC as directed by the REC, may require the FMT's to use low range direct radiation instruments (Micro-R meters) in addition to the instrumentation provided in the field radiological monitoring kits. These instruments will measure direct radiation fields less than 5 mR/hr. The instruments and their operating instructions will be provided to the FMT's as required.

6.2.3 While in route to the designated monitoring locations, the passenger will observe the direct radiation instrumentation (RO-2A or other instruments as required), and will advise the driver to call out the odometer reading at every one-tenth mile after observing a direct radiation reading in excess of 5 mR/hr. In transit readings shall be taken until the designated location is reached, or the radiation level drops below 5 mR/hr. The HP-270 probe should be initially installed on the ASP-2 instrument and used with the audible indicator to indicate entrance into an area with higher radiation levels.

6.2.4 Upon arrival at the designated monitoring location remain inside the vehicle unless directed to collect air or environmental media samples. One or more team members will perform the following activities:

6.2.4.1 Using dose rate survey instrument (RO-2A or as required), allow meter reading to stabilize, and record direct radiation reading on the Direct Radiation Measurement and Air Sampling Results form.

6.2.4.2 Upon direction by the FTC, perform air sampling activities (Section 6.3) and/or environmental media sampling activities (Section 6.4).

6.2.4.3 Record direct reading pocket or digital dosimeter reading(s) of each team member on the Radiological Exposure Control Form.

6.2.4.4 Communicate data to FTC per section 6.5 of this procedure.

6.2.4.5 Proceed to the next assigned monitoring location or await further direction, as required.

6.3 Air Samples

6.3.1 Air samples shall be performed at designated locations only upon the direction of the FTC.

6.3.2 Air samples shall be taken as follows:

6.3.2.1 It is preferable that the air sampler be prepared before initial departure on the field mission or while in a "clean" area. In any case the air sample pump shall be treated as if it is contaminated and contamination controls shall be used. To start put on a fresh pair of latex gloves, to prevent personnel contamination and cross contamination of samples.

6.3.2.2 Separate the body of the sample head, and insert a silver zeolite (AgZ) cartridge (blue label) into the sample head with the arrow on the label in the direction of airflow.

6.3.2.3 Hand tighten the top of the sample head onto the bottom. Remove the retaining ring on top of the sample head, center a particulate filter (rough side out) over the screen, and reinstall the retaining ring.

6.3.2.4 Install the sample head onto the air pump. If the air sample is not to be taken immediately, place a zip lock bag over the head to prevent contamination. Also at this time, pre-label a large zip lock bag for use in collecting the air sample. Use one each of the two sets of labels provided in the field notebooks.

6.3.2.5 Hold survey instrument (ASP-2 with black HP-270) probe at waist level (approximately 1 meter), allow the meter reading to stabilize, and record the reading in CPM for both window open and window closed orientations (window facing up) on the Direct Radiation Measurement and Air Sampling Results form. The purpose for this is to verify whether the sample is being taken inside the plume or not. A significantly higher radiation level with the window open than with the window closed indicates that you are inside the plume; virtually identical readings indicates that you are not within the plume boundaries.

6.3.2.6 Connect air sample leads to vehicle battery while vehicle is running, insuring proper polarity. Place the air sampler onto the front end of the truck or an available surface above ground level. Remove zip lock bag from air sample head (if necessary). Take a direct radiation reading with the RO-2A or other instruments as required. Record location, date, and team name, direct radiation reading, start time, and start flow rate on the pre-labeled sample bag and Direct Radiation Measurement and Air Sampling Results Form. Remain in vehicle when not performing duties or when waiting for time to elapse.

6.3.2.7 Utilizing the start flow rate calculate the amount of time required to collect at least 10 cubic feet of air.

6.3.2.8 Half way through the calculated sampling time, take a direct radiation reading with the RO-2A or other instruments as required and record on the pre-labeled sample bag and Direct Radiation Measurement and Air Sampling Results Form.

6.3.2.9 AT the end of the calculated sampling time, record the ending flow rate and time on the pre-labeled sample bag and Direct Radiation Measurement and Air Sampling Results Form. Disconnect the sampler from the battery. Take a direct radiation reading with the RO-2A or other instruments as required and record on the pre-labeled sample bag and Direct Radiation Measurement and Air Sampling Results Form. Place a zip lock bag over the sample head with the head still attached to the sampler and place the sampler into the vehicle.

6.3.2.10 Proceed with assignment as directed by the FTC. At the prescribed destination, replace the HP-270 side window probe with the bagged HP-210 shielded pancake probe and take background reading, at waist level with the window facing down, in CPM with the ASP-2 instrument. Record the reading on the pre-labeled sample bag and Direct Radiation Measurement and Air Sampling Results Form.

6.3.2.11 Remove the bag from the sample head. Set up and run the sampler as before to purge the sample head of any remaining noble gases with fresh air (minimum of 1 minute). Record the actual purge time in minutes on the pre-labeled sample bag and Direct Radiation Measurement and Air Sampling Results Form.

6.3.2.12 Using a fresh pair of latex gloves, separate the top and bottom sections of the sample head. Hold the bagged HP-210 pancake probe just above the surface of the AgZ cartridge and record the reading from the ASP-2 in cpm on the pre-labeled sample bag and Direct Radiation Measurement and Air Sampling Results Form. Remove the cartridge and place it in a zip lock bag. Place the HP-210 pancake probe just above the surface of the particulate filter retaining ring in the top section of the sample head and record the reading from the ASP-2 in on the pre-labeled sample bag and Direct Radiation Measurement and Air Sampling Results Form. Remove the particulate filter (using provided tweezers if needed) and place it into a zip lock bag.

6.3.2.13 On the cartridge and particulate filter bags, using a marker, write the sample start time and the sample location. Place both closed zip lock bags in the pre-labeled sample bag and close the sample bag. Replace the HP-210 pancake probe with the HP-270 side window probe.

6.3.2.14 Communicate the recorded data to the FTC as per section 6.5 of this procedure.

6.3.2.15 Wipe the sample head clean with a paper towel or Kim-wipe and with a fresh pair of latex gloves, prepare the sample head as in 6.3.2.2 and 6.3.2.3.

6.3.2.16 Properly dispose of all used latex gloves, probe bags and cleaning materials into the contaminated waste bag.

6.4 Soil, Vegetation, Surface Water, Milk, Smears and Deposition Measurements

6.4.1 Soil, vegetation, surface water, and milk samples shall only be collected upon the direction of the FTC. Normally this type of sample collection will not be requested during plume passage.

6.4.2 Extreme care shall be taken to prevent cross contamination of samples. Use fresh latex gloves before collecting samples. After sample collection, discard gloves in the contaminated waste bag.

6.4.3 Soil Samples

6.4.3.1 Locate an area of bare undisturbed soil.

6.4.3.2 Put on a fresh pair of latex gloves. Using a hand spade scribe a square in the soil approximately 1 foot on each side.

6.4.3.3 Use the spade to break up the soil within the square to a depth of 1 inch.

6.4.3.4 Mix the broken soil to make sure that soil from the surface is evenly distributed in the sample.

6.4.3.5 Remove all rocks, glass, and other foreign matter such as grass or plant roots.

6.4.3.6 Using the hand spade, fill a clean 500 cc "cottage cheese" or screw top container with mixed soil. Make sure that there are no air pockets in the sample by patting the soil with the back of the hand spade.

6.4.3.7 Place the lid on the container and secure with masking tape. Label the container with the date, time, location and any other information requested by the FTC.

6.4.3.8 Place the labeled container in a zip lock bag. A team member who has not handled the sample should hold the bag open.

6.4.3.9 Clean the hand spade with a paper towel, Kim-wipe, etc. Place the paper towel in the contaminated waste bag.

6.4.3.10 Remove latex gloves and place into the contaminated waste bag.

6.4.4 Vegetation Sampling

6.4.4.1 Any green, growing ground vegetation may be used, unless directed otherwise by the FTC. If a specific crop sample is requested, be sure to get the permission of the landowner (if area is not evacuated).

6.4.4.2 Locate a suitable area of vegetation. Put on a fresh pair of latex gloves.

6.4.4.3 Use shears to cut the vegetation to approximately 1 inch above ground level, taking precautions not to contaminate vegetation with ground soil.

6.4.4.4 Place cut vegetation into a cottage cheese container or a wide mouth screw top jar. Fill container and pack tightly.

6.4.4.5 Place top on container and seal with masking tape. Label the container with date, time, location and any other information requested by the FTC.

6.4.4.6 Place the labeled container in a zip lock bag. A team member who has not handled the sample should hold the bag open.

6.4.4.7 Clean shears with a paper towel, Kim-wipe, etc. Place the paper towel into the contaminated waste bag.

6.4.4.8 Remove latex gloves, and place into contaminated waste bag.

6.4.5 Surface Water Sampling

6.4.5.1 If requested to collect from a stream, locate a convenient area where water is flowing. From ponds or lakes, water may be collected wherever convenient.

6.4.5.2 Put on a fresh pair of latex gloves. Remove the cap from a one-gallon cubitainer. Use fingers to extend the neck of the container.

6.4.5.3 A team member who is not collecting the sample should assemble and label the cardboard container. The label should include date, time, location, and any other information requested by the FTC. If a cardboard container is not available, labeling should be done on the plastic container before the container gets wet.

6.4.5.4 The cubitainer may be dipped in the water to fill or a dipper may be used if available. Fill cubitainer to the bottom of the neck. Replace cap onto container.

6.4.5.5 Use a paper towel or Kim-wipe to remove water from the outside of the cubitainer. Place the cubitainer into the prepared cardboard box (if available). Use a paper towel or Kim-wipe to remove water from exposed skin. Place paper towels or Kim-wipes into the contaminated waste bag.

6.4.5.6 Remove latex gloves and place into the contaminated waste bag.

6.4.6 Milk Samples

6.4.6.1 Locate the owner of the dairy, and secure permission to obtain a sample.

6.4.6.2 Prepare a 1-gallon cubitainer as in section 6.4.5.2 and 6.4.5.3. Provide the container to the dairy owner, with instructions to fill the container to the bottom of the neck.

6.4.6.3 The container may be filled either directly from the spout, if practical, or from a transfer jug.

6.4.6.4 If necessary wipe down the outside of the container with a paper towel or Kim-wipe and place in the contaminated waste bag. Place the container inside the cardboard box and again wipe down the outside.

6.4.7 Smear Samples

6.4.7.1 Write time, date, and location on outside of smear envelope.

6.4.7.2 Put on fresh latex gloves, and rub smear paper firmly over approximately a 100-cm2 area (about the size of a dollar bill) of a hard surface (roadway, mailbox, car, etc.)

6.4.7.3 Place clean ziplock bag over detector probe.

6.4.7.4 Hold the smear up to the probe window; record the reading on the outside of a clean ziplock bag, along with the date, time and location.

6.4.7.5 Place closed smear envelope in the clean ziplock bag, and place with other samples.

6.4.7.6 Dispose of the ziplock bag covering the detector probe and latex gloves as contaminated waste.

6.4.8 Deposition Samples and Measurements

6.4.8.1 Deposition Measurements shall be made at each location that a soil, vegetation, or smear sample is collected or as directed by the FTC. Measurements shall be recorded on the Direct Radiation Measurements and Air Sampling Results Form.

6.4.8.2 Measurements shall be made using a GM with pancake probe (ASP-2 and HP-210 or equivalent)

6.4.8.3 Place clean ziplock bag over detector probe.

6.4.8.4 Hold probe approximately one (1) meter above ground with window facing up and record background reading in cpm.

6.4.8.5 Hold probe approximately 2" above ground with window facing **DOWN**, and record reading in cpm.

6.4.8.6 Dispose of used ziplock bag as contaminated waste. Remove latex gloves and dispose of as contaminated waste.

6.5 Communications

6.5.1 At a minimum provide data via Southern Linc (cell phone as back up) to the Field Team Coordinator every 30 minutes, or as directed by the FTC.

6.5.2 Report all direct radiation readings in excess of 50 mR/hr or air cartridge measurements greater than 100 net cpm to the FTC IMMEDIATELY!

6.5.3 When reporting data include all data taken since the last report, including personnel dosimetry.

6.5.4 Await further instructions from the FTC.

6.6 Sample Transport

6.6.1 Samples should be transported to the Mobile Radiation Laboratory (MRL) within eight (8) hours of collection or as directed by the FTC.

6.6.2 Packaging samples for transport and transport of samples should be accomplished in the manner prescribed in DNR-EPD-ERP 8.0.

6.7 Ending Tour of Duty

6.7.1 Report to the local emergency vehicle decontamination center for vehicle and personnel decontamination.

6.7.2 Using a "clean" instrument, survey all instruments and equipment. Decontaminate if necessary.

6.7.3 Transport any remaining samples to the Mobile Radiation Laboratory.

6.7.4 Provide all data recording forms to the REC or his/her assistant.

6.7.5 Seal contaminated waste bag and place in pre-designated contaminated waste area.

6.7.6 Return all equipment and supplies obtained at the beginning of the tour of duty to the FEOC.

APPENDIX A - EQUIPMENT LIST

Environmental Sampling Kit Inventory
(6) - "Cubitainer" fluid sample container
(6) - Boxes for "Cubitainer"
(6) - "Cottage Cheese" or "screw top" soil and vegetation sample containers
(1) - Roll of masking tape
(1) - Marker
(2) - Boxes, Zip Lock bags
(1) - Air Sampler
(1) - Box of particulate filters
(5) - Air sample bags
(1) - Pair of tweezers
(3) - Sample transport bags
(1) – Package of smears
(1) - Contaminated waste bag
(1) - Box of latex gloves
(1) - Box of Kim-wipes
(5) - Silver Zeolite (AgZ) Cartridges (Charcoal for exercise purposes).
Protective Clothing Kit Inventory - Three Sets per Kit
(3) - Pair of gauze gloves
(3) - Tyvek coveralls with hoods
(3) - Pair of shoe covers
Field Radiological Monitoring Kit
(1) - Eberline RO-2A
(1) - Eberline ASP-2 with cable
(1) - HP-270 Side window probe (black) or equivalent
(1) - HP-210 Shielded pancake probe or equivalent
(1) - HP-260 pancake probe or equivalent
(1) - Pencil dosimeter charger
(1) - Cs-137 check source
(3) - D-cell batteries
(4) - 9 volt batteries
(3) - C-cell batteries
Miscellaneous Supplies
(2) - Pens
(1) - Pad of paper
(1) - Procedure DNR-EPD-ERP 1.0, "Off-Site Field Monitoring Operations"
(1) - Procedure DNR-EPD-ERP 2.0, "Ingestion Pathway/Re-entry Field Monitoring Operations"
(6) - "Direct Radiation Measurement and Air Sampling Results" forms

Note: If the footlockers containing the supplies contain a security seal that has not been broken, it is not necessary to inventory the contents. If seal is not present or is broken, the contents must be inventoried.

Appendix B - Checklist for Field Teams

Equipment Checks

Verify that all equipment listed in Appendix A, is present and in good condition or working order. If a security seal is present on the field kit, see note in Appendix A. ___

All radiological instruments shall be checked to verify battery condition. Operational condition should be verified using the check source included in the instrument kit. ___

Verify that all instrument cables are in good condition and work properly. ___

All radiological instruments shall be checked to verify that they have been calibrated within the last year and that a label verifying this calibration is attached to the instrument. ___

The air sample pump shall be checked to verify that it has been calibrated within the last year and that a label verifying this calibration is attached top the instrument. ___

The air sample pump should be hooked up to a car battery and turned on to verify operability. A particulate filter should be installed while performing this operation to prevent damage to the air flow meter and verify operation of this meter. ___

Vehicle Checks

Perform a vehicle safety check to verify that vehicle is roadworthy. ___

Verify that the vehicle has an adequate fuel supply to carry out the mission. ___

Verify that Southern Linc radios and cell phones are operational. ___

Dosimetry

Obtain necessary dosimetry and documentation (to include KI tablet if issued.) ___

Verify that self-reading dosimetry is zeroed properly. ___

Verify that all documentation has been properly completed. ___

Assignment

Insure that the FTC has issued the assignment for your team and that you understand it completely. ___

Insure that the FTC has briefed you. Briefing should include, plant status, weather conditions and any other information, which may be pertinent to the mission. ___

Before leaving on mission, decide team member responsibilities and job tasks. ___

Notify FTC or REC upon departure for mission. ___

Title: **Ingestion Pathway/Re-entry Field Monitoring Operations**

1.0 **Purpose** - To provide instructions for performing off-site sampling and surveys necessary to determine levels of residual radioactivity in the environment and in food products as a result of a radioactive materials release from fixed nuclear facilities.

2.0 **Scope** - This procedure is applicable to all State of Georgia personnel and all personnel under the control and/or supervision of the State of Georgia during the conduct of re-entry and/or ingestion pathway monitoring at any fixed nuclear facility in or affecting the State of Georgia.

3.0 **Required Equipment, Documentation, References**

3.1 Required Equipment (per team) - (1) Field Radiological Monitoring Kit, (3) Protective Clothing Kits, (1) Vehicle, (1) Field Environmental Sampling Kit and supplies, (1) Low range survey instrument (Micro-R Meter).

3.2 Documentation - 10 mile EPZ map, 50 mile EPZ map, DOT County map(s), Direct Radiation Measurement and Air Sampling Results Form(s), Chain of Custody Form(s) and Sample Receipt and Transfer Form(s).

3.3 References – Georgia Emergency Operations Plan (GEOP), Georgia Radiological Emergency Plan (REP), DNR Procedure DNR-EPD-ERP-1.0 (Off-Site Field Monitoring Operations).

4.0 **Limits and Precautions**

4.1 All persons utilized in monitoring within evacuated areas must be properly trained and qualified to perform all activities cited in DNR-EPD-ERP-1.0.

4.2 Monitoring teams within evacuated areas must utilize vehicles with operable Southern Linc and/or cell phones and must confirm the ability to communicate with the State Forward Emergency Operations Center.

4.3 Monitoring teams within evacuated areas must follow the personnel and vehicle decontamination procedures found is section 6.7 of DNR-EPD-ERP-1.0.

5.0 **Responsibilities**

5.1 Radiological Emergency Coordinator (REC) - The REC will determine the need for re-entry/ingestion pathway monitoring, and will coordinate this activity with all functions leading to the resumption of normal activities in the affected area(s).

5.2 Field Team Coordinator (FTC) - The FTC is responsible for formation of the monitoring teams, for providing direct guidance to the monitoring teams, for oversight of monitoring team radiation exposures, and for insuring that monitoring team results are transmitted to the REC in a timely fashion.

5.3 Radio Operator - The radio operator is responsible for maintaining radio contact with monitoring teams working in evacuated areas and for transmitting directives and data between the FTC and the monitoring teams.

5.4 Field Monitoring Team (FMT) - The FMT's are responsible for conducting direct radiation surveys and/or for performing environmental sampling activities as directed by the FTC, for recording data on appropriate forms, and communicating monitoring results to the FTC upon request.

6.0 **Operational Procedures**

6.1 Team Formation - Formation of field monitoring teams will be accomplished as described in Section 6.1 of DNR-EPD-ERP-1.0 with the following exceptions:

- The REC may establish a different mix of state/local personnel, and may include, if necessary, personnel from other state agencies.
- Only monitoring teams working within evacuated areas will be issued Field Monitoring Kits, low range survey meters, and dosimetry equipment.

6.2 Direct Radiation Measurements - Measurements will be performed using the low range survey meter (Micro-R meter) using the procedures outlined in Section 6.2 of DNR-EPD-ERP-1.0, excepting that en-route measurements are not required.

6.3 Communications

6.3.1 FMT's in evacuated areas should maintain contact with the FEOC radio operator on at least 30-minute intervals.

6.4 Sample Transport - Samples should be provided to the Mobile Radiation Laboratory (MRL) at the end of the tour of duty. If earlier sample transport is required, the FTC will make arrangements similar to those in Section 6.6 of DNR-EPD-ERP-1.0, and the team(s) will be advised of the sample transfer point to be used.

6.5 Packaging Samples for Transport - see DNR-EPD-ERP-8.0.

6.6 Ending Tour of Duty

6.6.1 Teams within evacuated areas - see Section 6.7 of DNR-EPD-ERP-1.0.

6.6.2 Teams outside Evacuated Areas:

6.6.2.1 Provide all samples to Mobile Radiation Laboratory.

6.6.2.2 Provide all data recording forms to the REC or his/her assistant.

6.6.2.3 Seal contaminated waste container and place in pre-designated contaminated waste area.

6.6.2.4 Return all equipment and supplies to the FEOC.

Title: **Radiation Emergency Coordinator Operations**

1.0 **Purpose** - To provide guidance to persons fulfilling the role of Radiation Emergency Coordinator (REC) or Assistant REC.

2.0 **Scope** - This procedure is applicable during emergency operations at fixed nuclear facilities in or affecting Georgia.

3.0 **Required Equipment, Documentation, References**

3.1 Equipment - Telephone, facsimile transmission/receipt equipment, Emergency Notification Network (ENN) terminal.

3.2 Documentation - 10 mile EPZ map, 50 mile EPZ map, DOT county map(s).

3.3 References – Georgia Emergency Operations Plan (GEOP), Georgia Radiological Emergency Plan (REP), EPA Protective Action Guides (PAGs).

4.0 **Limits and Precautions**

4.1 In order to insure an effective response to a radiological incident at a fixed nuclear facility the Radiation Emergency Coordinator (REC) must insure that all functions outlined in this procedure are fully staffed by trained personnel.

4.2 All operations are to be conducted in accordance with DNR-EPD-ERP-6.0 and using accepted health physics practices.

5.0 **Responsibilities**

5.1 The REC is responsible for coordinating and managing all radiological aspects of the state response to an incident at a fixed nuclear facility.

5.2 The REC is responsible for providing recommended protective actions for the general public to the Governor, or his designee, normally the Governor s Authorized Representative (GAR).

5.3 The REC is responsible for requesting additional radiological resources from either the Federal government or other State governments, to insure that necessary emergency response functions can continue on an around-the-clock basis for the duration of the incident.

6.0 **Procedures**

6.1 Physical Location

6.1.1 Upon notification of a radiological incident, the REC will report to the State EOC, unless conditions warrant immediate transit to the facility.

6.1.2 The REC, in conjunction with the GAR, will establish a Forward Emergency Operations Center (FEOC) near the incident site, and will exercise command and control of all radiological activities from the FEOC.

6.1.2.1 The FEOC's for four facilities (Hatch, Vogtle, Savannah River Plant, and Farley) are pre-established, with power and telephone hookups for the EPD Mobile Radiation Laboratory (MRL) and the Georgia Emergency Management Agency (GEMA) Mobile Command Post (MCP).

6.1.2.2 For facilities not listed, the REC and the GAR will determine at the time of the incident the location of the MRL and the MCP. This location will be the de facto FEOC.

6.1.2.3 Under normal circumstances, the FEOC will not be activated until the Site Area Emergency Classification has been reached. However, the REC or the GAR may request FEOC activation at the Alert Classification, should conditions warrant.

6.2 Radiological Operations - Emergency Phase

6.2.1 Field Monitoring

6.2.1.1 The REC will assign a Field Team Coordinator (FTC), who will exercise direct command and control of radiological field monitoring teams pursuant to DNR-EPD-ERP-4.0.

6.2.1.2 The REC may supercede or countermand any directive given to field monitoring teams, provided that orders to cease operations based on health physics procedures can only be countermanded after consultation with the Health Physics Coordinator (HPC).

6.2.1.3 The REC may authorize the collection of more than one (1) air sample by an individual monitoring team during a single plume traversal, and may also authorize the collection of soil, vegetation, surface water and milk samples, if necessary.

6.2.2 Dose Projection

6.2.2.1 The REC will assign a Dose Assessment Coordinator (DAC), who will perform an independent assessment of off-site radiological conditions.

6.2.2.2 The REC will correlate dose projections and field monitoring results.

6.2.3 Protective Action Recommendations:

6.2.3.1 Upon the advice of the DAC and the FTC, and after consultation with the HPC, the REC

will recommend protective actions for the general public to the Governor or the GAR, should the need for such actions arise.

6.2.3.2 The REC, upon the advice of the DAC, the FTC, the HPC, and Federal agencies (NRC, DOE, EPA) may modify or rescind protective action recommendations, if no significant threat to public health and safety still exists.

6.2.4 Mobile Radiation Laboratory

6.2.4.1 The REC will assign a Radiation Laboratory Coordinator (RLC), who will exercise direct command and control over Mobile Radiation Laboratory operations.

6.2.4.2 The REC will use the results of the laboratory analysis of field samples in the determination of recommended protective actions, and any decision to rescind protective action recommendations.

6.2.5 Health Physics Control

6.2.5.1 The Department of Natural Resources (DNR) will provide a Health Physics Coordinator (HPC), who will work with the REC to insure that all RERT operations are conducted in accordance with DNR health physics procedures.

6.2.5.2 The REC may authorize State worker exposures in excess of DNR health physics procedures only upon the consent of the HPC.

6.2.6 Assistant Radiation Emergency Coordinator

6.2.6.1 The REC may, at his/her discretion, assign one (1) or more assistant REC(s), whose duties will consist of assisting the REC in management of the Radiological response to a fixed nuclear facility incident.

6.2.6.2 The Assistant REC(s) may be assigned overnight responsibilities over certain aspects of the overall response. However, the REC may not delegate the responsibility of recommending protective actions.

6.3 Radiological Operations - Re-Entry Phase

6.3.1 The REC, in conjunction with officials from other state agencies, shall establish a Recovery organization, the purpose of which will be to insure the safety of persons returning to previously evacuated areas, and to determine any necessary long-term protective actions, such as agricultural or property use restrictions.

6.3.2 Recovery operations will be conducted in conjunction with Federal agencies (EPA, DOE, NRC), other State agencies, and local government agencies.

6.4 Public Relations

6.4.1 The REC will be responsible for providing the DNR spokesman with timely, accurate information regarding the RERT activities.

6.4.2 The REC may agree to press interviews at such time as his/her absence would have no detrimental effect on the radiological response.

6.5 Request for Additional Resources

6.5.1 At such time as the REC determines that extended operations (i.e. greater than 12 hours) will be necessary to adequately respond to an incident, the REC shall request additional resources as follows:

6.5.1.1 Federal Government (DOE)

6.5.1.2 Georgia State Government (University System)

6.5.1.3 Radiological Programs in adjacent States, pursuant to SMRAP agreement.

6.5.2 The REC or the GAR may request Federal activation of a Federal Radiological Monitoring and Assessment Center (FRMAC), to aid in the assessment of the off-site consequences.

Title: **Field Team Coordinator Operations**

1.0 **Purpose** - To provide guidance to persons fulfilling the role of Field Team Coordinator.

2.0 **Scope** - This procedure is applicable during emergency operations at all fixed nuclear facilities in or affecting Georgia.

3.0 **Required Equipment, Documentation, and References**

3.1 Equipment – Southern Linc Radio, telephone (hardwired or cellular), copying equipment, facsimile transmission equipment.

3.2 Documentation - 10 mile EPZ map (with pre-designated monitoring locations), 50 mile EPZ map, DOT county map(s).

3.3 References – Georgia Emergency Operations Plan (GEOP), Georgia Radiological Emergency Plan (REP), DNR Procedures DNR-EPD-ERP-1.0 (Off-Site Field Monitoring Operations).

4.0 **Limits and Precautions**

4.1 All operations are to be conducted in accordance with DNR-EPD-ERP-6.0 and using accepted health physics practices.

4.2 Every effort should be made to coordinate the assignment of field monitoring missions with the utility, to avoid unnecessary duplication of effort.

5.0 **Responsibilities**

5.1 The FTC is responsible for formation, briefing, equipping, dispatching, and controlling teams for field monitoring, upon the instructions provided by the Radiological Emergency Coordinator (REC).

5.2 The FTC is responsible for providing periodic general information updates (i.e. plant status, emergency classification, current meteorological conditions, and projected dose rates) to the field teams.

5.3 The FTC is responsible for providing basic health physics control for field team members, and is responsible for directing field teams to cease monitoring operations if their exposures meet or exceed DNR administrative guidelines.

5.4 The FTC is responsible for transmitting field monitoring data and field team radiation exposure data, either by facsimile or by telephone, to the REC.

6.0 **Procedures**

6.1 Team Formation

6.1.1 Upon the direction of the REC, the FTC shall instruct an appropriate number of properly trained State personnel to report to the FEOC. He/She shall also request an appropriate number of local personnel from the County Emergency Management Director.

6.1.2 Upon the direction of the REC, the FTC shall secure the services of an appropriate number of vehicles equipped with Southern Linc (hand held or vehicular mounted) and/or cellular phones.

6.1.3 The FTC shall establish an appropriate number of monitoring teams, each composed of a minimum of two (2) personnel.

6.1.4 The FTC shall assign a team designation to each team.

6.1.5 The FTC shall provide the teams with an initial pre-departure briefing, to include but not be limited to:

6.1.5.1 Current plant status and emergency classification.

6.1.5.2 Current meteorological conditions and release status.

6.1.5.3 Designated survey and sample locations.

6.1.5.4 Suggested routes and sample pick-up locations.

6.1.5.5 Operational procedures for communication equipment.

6.1.5.6 Initial assignment(s)

6.1.5.7 Procedures for relaying data to the REC while FTC is in transit to the utility EOF (if appropriate).

6.2 Field Team Control

6.2.1 Upon the direction of the REC, the FTC and a radio operator shall proceed to the facility designated for command and control of the teams.

6.2.2 The FTC shall coordinate the dispatch of the field monitoring with his/her utility counterpart, as permitted.

6.2.3 The FTC shall provide directions for the field monitoring teams, subject to the following:

6.2.3.1 The FTC, under his/her own initiative, may direct the field monitoring teams to traverse the plume, take direct radiation measurements, and collect air samples.

6.2.3.2 The FTC **shall not**, without approval of the REC, direct a field monitoring team to collect more than one (1) air sample per plume traversal.

6.2.3.3 The FTC, under the direction of the REC, shall direct the field monitoring teams to collect soil, vegetation, surface water and/or milk samples, or samples of other media as required.

6.2.4 The FTC shall maintain an awareness of field team radiation exposure levels, and shall take appropriate actions if and when field team exposures reach DNR administrative limits. Suggested actions are as follows:

6.2.4.1 The FTC shall direct affected team(s) to cease monitoring operations, to report to a designated traffic control point, outside the plume, and to await further instructions.

6.2.4.2 The FTC shall contact the REC or the Health Physics Coordinator (HPC) and advise of the situation and the directives given the affected team(s).

6.2.4.3 The FTC shall receive further directives for the affected team(s) from the REC or the HPC, and shall assure that these directives are transmitted to the affected team(s).

6.2.5 Upon the direction of the REC, the FTC may direct one or more teams to report to the vehicle decontamination center as termination of their current assignment.

6.3 Coordination of Sample Transport

6.3.1 Upon notification by one or more field teams that samples are ready for transport, the FTC shall arrange for courier pick-up of the samples.

6.3.2 If the REC cannot be reached, or if the courier service is currently unavailable, the FTC shall instruct the team(s) as follows, and shall inform the REC of his/her actions:

6.3.2.1 Proceed to a designated traffic control point.

6.3.2.2 Leave the samples in the custody of the law enforcement officer present until the courier arrives to transport the sample to the Mobile Radiation Laboratory (MRL).

6.3.2.3 Inform the FTC of the completion of sample delivery.

6.4 Reporting of Field Monitoring Data

6.4.1 The FTC shall compile the field monitoring data recorded by the radio operator, and shall transmit this data to the REC in a timely manner (at least once every thirty minutes or upon the availability of new information) by facsimile or by telephone.

6.4.2 The FTC shall coordinate with his/her utility counterpart, to insure that each organization has full and unlimited access to all field monitoring data. The FTC shall transmit, or shall insure the transmission of, utility field monitoring data to the REC as in Section 6.4.1.

Title: Radiation Exposure Control and Thyroid Blocking Agent Procedures for Personnel Entering The Plume Exposure Pathway Area

1.0 Instructions for Personnel entering the plume exposure pathway

1.1 **All personnel entering the plume exposure pathway must report to the local EOC and receive an emergency services Personnel Dosimetry Kit including TLD from the Radiological Protection Officer (RPO) prior to beginning duties.**

1.2 **Declared pregnant females shall be given the opportunity to refuse an assignment as an emergency worker.**

1.3 Each team member must complete a Radiological Exposure Control Form prior to leaving the local EOC. The RPO shall record in a ledger; name and social security number of worker and time dosimetery was issued; and time dosimetry and exposure form were returned.

1.4 **When away from the local EOC, each team member shall read their self-reading dosimeter at least every 30 minutes and report the readings to their team captain.** When the dosimeter reading increases from the previous reading, the worker shall record the reading and time on the exposure control form.

1.5 The team captain or the individual shall inform the EOC Dispatcher or the EOF/FEOC Radio Operator via radio each time a 200 milliRoentgen increment is reached or exceeded; or 1 roentgen on any direct reading dosimeter is exceeded. Also, request the radio operator relay this information to the RPO.

1.6 If the team captain is unable to communicate dosimeter readings for any reason to the radio operator and any team member's direct reading dosimeter has exceeded 1 roentgen, the team captain shall immediately instruct all team members to depart the area unless protecting valuable property or a lifesaving situation is involved. (If a team is involved in protecting valuable property or a lifesaving mission and dosimetry readings have exceeded 1 roentgen, the team captain shall report dosimeter readings every five minutes.) **During a lifesaving mission, when a dosimeter reading of 5 roentgens is obtained, the mission becomes voluntary on the part of the responder. The responder may withdraw at on their own at anytime or the RPO may direct the responder to withdraw. If a responder volunteers to continue a life saving mission beyond the 5 roentgen limit, the individual must be informed fully of the risk involved, and acknowledge an understanding of the risk, prior to continuing the life saving mission.**

1.7 All team members will report to the nearest open decontamination center after their assignments. At the center, all team members shall be monitored for contamination.

1.8 After monitoring and decontamination, if necessary, all team members shall return their dosimeters and Radiological Exposure Control Form to the RPO at the local EOC.

2.0 KI DISTRIBUTION AND ADMINISTRATION PROCEDURES

2.1 Potassium Iodide (KI) is pre-positioned at the locations indicated in Appendix B.

2.2 When any incident at a fixed nuclear facility is upgraded to the Alert status, the Emergency Management Agency (EMA) Director or representative shall obtain KI for distribution to emergency workers from the county's designated storage location.

2.3 All emergency workers must report to a local EOC and receive KI from the local EMA Director or representative prior to entering any affected area(s).

2.4 Emergency Workers shall be issued a 24-hour supply (1 tablet) of KI and written instructions for the use of KI (Thyroid Blocking Agent) (see Appendix C). All emergency workers shall report back to their respective EOCs to receive additional KI, if necessary, within 24 hours.

2.5 The emergency worker must complete the required information on the Thyroid Blocking Agent Control Form. (See Appendix C).

2.6 **Emergency Workers shall be instructed, prior to entering the EPZ, not to take KI until authorized by the State Forward EOC.**

2.7 The recommendation to give KI to emergency workers will be made to GEMA by DNR personnel in accordance with the Memorandum of Understanding between the Department of Natural Resources and the Department of Human Resources. GEMA, acting in behalf of the Governor, will assure this directive is communicated to all state and local agencies.

2.8 The EMA Director and DNR official or their representative shall assure that any KI, which was not distributed, is returned to the appropriate storage location (i.e., medical facility, State office(DNR or GEMA) or County EMA office).

Appendix A

Radiological Exposure Control Form

Name:	Social Security Number:
Organization:	Date of Birth:
Dosimeter Model:	Serial Number:

Date	Time	Dosimeter Reading (Roentgens)	Date	Time	Dosimeter Reading (Roentgens)

Note: If a Roentgen dosimeter exceeds 1 Roentgen and you are unable to contact the EOC or FEOC by radio, cease work and leave the area immediately, unless protecting valuable property or life saving work is being performed.

Appendix B
DISTRIBUTION LIST FOR POTASSIUM IODIDE

Potassium Iodide (Thyroid Blocking Agent) is pre-positioned at the following locations for emergency workers only.

Hospital/Agency	Contact	# Doses
Toombs County EMA Lyons, Georgia	Lynn Moore, Director EMA 912/526-6021 Sheriff 912/526-6350	1400
Tattnall County EMA Reidsville, Georgia	Walt Rogers, Director EMA 912/557-6820	1400
Appling County EMA Baxley, Georgia	Dayne Bruce, Director EMA 912/367-8111	1400
Jeff Davis EMA Hazlehurst, Georgia	James Dunn, Director 912/375-6628	1400
Department of Natural Resources Environmental Radiation Program Atlanta, Georgia	Jim Hardeman, Manager 404/362-2675	1400
Early County EMA Blakely, Georgia	Ray Jarrett, Director 912/723-3029	1400
Burke County EMA Waynesboro, Georgia	Rusty Sanders, Director 706-554-6666	1400

Appendix C

Thyroid Blocking Agent Control Form		
Name:	Date of Birth:	
Social Security Number:		
Address for next 10 days:		
Dosage Received: 1 Tablet	Date:	Lot No:
Dosage Taken:	Date:	Time:
Expiration Date:		
Signature:	24 Hr. Supply:	
	Date:	

GUIDANCE FOR USE OF THYROID BLOCKING AGENT BY EMERGENCY RESPONSE PERSONNEL

In the event of an incident at a nuclear power reactor, which involves a sudden airborne release of radioisotopes, it is considered appropriate that authorities be prepared to take effective measures to prevent or markedly curtail the accumulation of one of the radioisotopes, radioiodine, by the thyroid gland of the off-site emergency response workers. This is accomplished by taking a thyroid-blocking agent prior to exposure to airborne radioisotopes. The thyroid blocking agent, non-radioactive potassium iodide (KI), when taken about thirty minutes prior to entering an area of airborne contamination, will fill up or saturate the thyroid gland; thus, if any radioiodine=s are taken into the body they pass on through as waste material instead of being taken up by the thyroid gland. Please be aware that KI provides protection only against radioactive iodine to the thyroid gland. It does not protect the individual from skin or lung doses from radioiodine, nor does it protect the individual against doses to any part of the body from any other radionuclide. For this reason, it is important that you stay in the area of airborne contamination only long enough to accomplish your assigned tasks.

The thyroid blocking agent that we use has been approved for over-the-counter distribution by the Food and Drug Administration; however, it is not readily available due to the limited need. The KI has been pre-positioned with your agency but authorization to take the material must still come from State health authorities.

The dosage is one (1) tablet every 24 hours for ten days unless directed otherwise by State public health authorities. Do not take the material more often. More than one tablet per day will not increase the protection.

Individuals who know they are allergic to iodine should not take the potassium iodide. Possible side effects include skin rashes, swelling of the salivary glands, metallic taste, burning mouth and throat, sore teeth and gums, symptoms of a head cold and sometimes stomach upset and diarrhea. A few people have experienced allergic reactions with more serious symptoms such as fever and joint pains, swelling of parts of the face and body and, at times, severe shortness of breath requiring immediate medical attention.

Remember: Only one KI tablet taken 30 minutes before entering the affected area will provide the needed protection. All individuals who take KI must complete this form upon return from the field.

Note: KI is still effective if administered after the exposure; however, if administration is delayed by four hours, its effectiveness is decreased by 50 percent.

Title: **Determination of Airborne I-131 from Field Measurements of Silver Zeolite Cartridges**

1.0 Purpose: To provide instructions for calculations of airborne I-131 concentrations (uCi/cc) and thyroid dose commitment rates based on field measurements with a pancake-type GM probe and counter.

2.0 Scope: This procedure is applicable to responses to fixed nuclear facility incidents in or affecting Georgia, and is intended to be used primarily by the Dose Assessment Coordinator (DAC), the Field Team Coordinator (FTC), the Radiological Emergency Coordinator (REC) or the DHR Health Physics Coordinator (HPC).

3.0 Required Equipment, Documentation, and References

3.1 Required Equipment - computer or calculator capable of entry and display of numbers in scientific notation.

3.2 References - Attachment A (Default I-131 fractions)

4.0 Limits and Precautions

4.1 Measured isotopic concentrations, either inside reactor containment, or at the point of release, should be used if available. The iodine to noble gas ratio provided by the utility should be used, if available, correcting for decay and in-growth of noble gases, and for decay of radioiodines.

4.2 Values calculated using this procedure are to be considered order of magnitude estimates only until verified by analysis of silver zeolite (AgZ) cartridges in the Mobile Radiation Laboratory (MRL).

5.0 Responsibilities - primary responsibility for reduction of air monitoring data shall rest with the Dose Assessment Coordinator (DAC). However, the other personnel listed in Section 2.0 are authorized to perform such estimates, if necessary.

6.0 Calculations

6.1.1 Iodine to Noble Gas Ratio: The iodine to noble gas ratio (I/N) shall be assumed to be 0.1% (1.0E-3) unless measured by the utility. Measured I/N ratios may be used for two hours after the measurement was made.

6.1.2 Isotopic Mixture: Isotopic mixtures are assumed to be100% power equilibrium concentrations, decay corrected for time since shutdown. Default I-131 fractions as a function of time since shutdown (Attachment A) are calculated with this mixture.

6.1.3 Noble Gas Retention: 0.1% (1.0E-3) of noble gas activity in air is assumed to be retained on silver zeolite cartridges, per manufacturers specifications, and per NUREG/CR-1599 (February 1983). If purge is performed prior to counting, noble gas retention is assumed to be 1.0E-5.

6.1.4 Iodine Retention: 5% (5.0E-2) of total iodine activity is assumed to be retained on the particulate filter, until actual particulate retention is verified by laboratory analysis. 100% (1.0E0) of iodine activity passing through the cartridge is assumed to be retained in the cartridge.

6.1.5 Detector-Probe Efficiency: The beta efficiency of a HP-210 or similar pancake GM probe is assumed to be 1% (1.0E-2) unless measured prior to field analysis of cartridge.

6.2 Nomenclature

6.2.1 Count Rate (background) in cpm - C_B

6.2.2 Count Rate (cartridge) in cpm - C_C

6.2.3 Iodine to Nobel Gas Ratio - (I/N)

6.2.4 Iodine Fraction - I_F

6.2.5 Iodine-131 Fraction - I_{F131}

6.2.6 Total Concentration in Cartridge - C_T

6.2.7 Iodine-131 Concentration in Cartridge - C_{131C}

6.2.8 Total Iodine-131 Concentration - C_{131}

6.2.9 Filter Efficiency for Iodine - F_{EF}

6.2.10 Detector Probe Efficiency - P_{EF}

6.2.11 Volume of Air Samples - $V_{(cc)}$

6.2.12 Flow Rate (average) - $/_{cfm}$

6.2.13 Sample Time (minutes) - T

6.2.14 Dose Rate to Child Thyroid (mRem/hr) D_{THY}

6.3 Calculations

6.3.1 Volume of Air Sampled: (cc)
$V = /_{cfm} * T * 2.832E4$

6.3.2 Total Concentration (uCi/cc) in Cartridge
$C_T = (C_C - C_B)/(V * E_F * 2.22E6)$

6.3.3 Fraction of Activity Due to Iodine
$I_F = 1/[(I/N)^{-1} * (10E-3)+1]$ if sample has not been purged
$I_F = 1/[(I/N)^{-1} * (10E-5)+1]$ if sample has been purged

6.3.4 Fraction of Activity due to I-131
$I_{F131} = F_{131(t)} * IF$
$F_{131(t)}$ = the ratio of I-131 to total iodine ratio at t hours after shutdown (Attachment A or provided due to isotopic concentrations measured by utility)

6.3.5 I-131 Concentration in Cartridge (uCi/cc)
$C_{131C} = I_{F131} * C_T$

6.3.6 Total I-131 Concentration (uCi/cc)
$C_{131} = C_{131C}/(1-F_{EF})$

6.3.7 Child Thyroid Dose Rate
$D_{THY} = 1.1 * C_{131} * 3.424E9$

6.3.8 Field Concentration Dose Factor
$D_{FC} = D_{THY}/C_T$ (mRem-cc/uCi-hr)

6.3.9 Field Count Rate Dose Factor
$D_{FR} = D_{THY}/(C_C - C_B)$ mRem/hr-cpm)

6.4 Application

6.4.1 When air sample data is received, calculate D_{THY}, D_{FC}, and D_{FR}, using field count rates, flow rate, sample time, detector efficiency, I/N ratio and I-131 fraction.

6.4.2 D_{FC} and D_{FR} may be used to estimate thyroid dose rates if they have been calculated within one hour prior to the time at which the current sample was collected.

6.5 Sample Calculations

6.5.1 Input Data

$/_{cfm}$ = 2 cfm
T = 5 min
t = 4 hours post shutdown F131(t) = 0.22
I/N = 1.0E-3
C_B = 100 cpm
C_C = 2000 cpm
P_{Ef} = 0.01
F_{EF} = 0.05

6.5.2 Calculations

6.5.2.1 Sample Volume

6.5.2.2 Total Activity

C_T = (200 - 100)/(2.832E5*0.01*2.22E6)
C_T = 1900/6.287E9
C_T = 3.022E-7 uCi/cc

6.5.2.3 Iodine Fraction

I_F = 1/((1.0E-3)E-1*(10E-3) +1)
I_F = 1/[1.0E3*10E-3+1]
I_F = 1/(1+1) = 1/2 = 0.50

6.5.2.4 I-131 Fraction

I_{F131} = 0.22*0.50
I_{F131} = 0.11

6.5.2.5 I-131 Concentration in Cartridge

C_{131C} = 0.11 * 3.022E-7
C_{131C} = 3.324E-8 uCi/cc

6.5.2.6 Total Iodine Concentration

C_{131} = 3.324E-8/(1.0-0.05)
C_{131} = 3.499E-8 uCi/cc

6.5.2.7 Thyroid Dose Rate

D_{THY} = 1.1*3.49E-8*3.424E9
D_{THY} = 131.786 mRem/hr

6.5.2.8 Field Concentration Dose Factor

D_{FC} = 131.786/3.022E-7
D_{FC} = 4.368E8 mRem-cc/uCi-hr

6.5.2.9 Field Count Dose Rate
D_{FR} = 131.786/1900
D_{FR} = 6.94E-2 mRem/hr-cpm

Attachment A	
Time (hr)	F_{131}
0	0.12
1	0.15
2	0.17
3	0.20
4	0.22
5	0.23
6	0.25
7	0.26
8	0.28
9	0.29
10	0.30
11	0.32
12	0.33
13	0.34
14	0.35
15	0.36
16	0.38
17	0.39
18	0.40
19	0.41
20	0.42
21	0.43
22	0.44
23	0.45
24	0.46

Title: **Packaging, Transport and Receipt of Emergency Environmental Samples**

1.0 **Purpose** - To provide instructions for packaging, transportation to, and receipt of environmental samples at the Environmental Radiation Laboratory (ERL) (or other laboratory, as appropriate) to determine levels of residual radioactivity in the environment and in food products as a result of a radioactive materials release from fixed nuclear facilities.

2.0 **Scope** - This procedure is applicable to all State of Georgia personnel and all personnel under the control and/or supervision of the State of Georgia during the conduct of field monitoring, re-entry and/or ingestion pathway monitoring resulting from a significant release of radioactive materials from any fixed nuclear facility in or affecting Georgia.

3.0 **Required Equipment, Documentation, References**

3.1 **Required Equipment** (per team) - (1) Vehicle, (1) Field Environmental Sampling Kit and supplies, (1) Low range survey instrument (Micro-R Meter or Eberline w/ pancake probe), Coolers and/or Boxes for packing samples, absorbent medium for liquid samples, sample transportation - one (1) Department of Natural Resources (DNR) vehicle and driver.

3.2 **Documentation** - Field Measurement and Sampling Form(s), Sample Control and Chain of Custody Form.

3.3 **References**-Georgia Radiological Emergency Plan (REP), DNR Procedure DNR-EPD-ERP-1.0 (Off-Site Field Monitoring Operations), DNR Procedure DNR-EPD-ERP-2.0 (Ingestion Pathway and Re-entry Operations).

4.0 **Limits and Precautions**

4.1 All persons utilized in packaging and transport of samples must be properly trained and qualified to perform all activities cited in DNR-EPD-ERP-1.0

4.2 The outside surfaces of samples leaving the EPZ must meet the personnel and vehicle decontamination limits found in section 6 of this procedure.

5.0 **Responsibilities**

5.1 **Radiological Emergency Coordinator (REC)** - The REC will determine the need for sample transport, will determine the destination of samples to be transported and will coordinate this activity with all personnel required to complete this function.

5.2 **Field Team Coordinator (FTC)** - The FTC is responsible for providing direct guidance to the monitoring/sampling teams and for coordination of sample pickup with the REC and the FMT=s. In the absence of the REC, the FTC may also perform the duties specified in section 5.1 above.

5.3 **Field Monitoring Team (FMT)** - The FMT's are responsible for performing environmental sampling activities as directed by the FTC, for properly packaging samples, for recording data on appropriate forms, and for delivering samples to a designated location or person as directed by the FTC.

5.4 **Mobile Radiation Laboratory (MRL)** - The MRL is the primary receiving point for environmental samples and the performance of required radiological analyses, particularly on samples with contact radiation levels deemed too high for other radiological laboratories. The MRL may also be used to perform repackaging of environmental samples. Should the MRL be unavailable, or should the sample load exceed the capacity of the MRL as determined by the REC, samples will be screened and sent to other radiological laboratories.

5.5 **Environmental Radiation Laboratory (ERL)** - Under most circumstances, the ERL will be responsible for performing radiological analyses on samples which cannot be handled by the Mobile Radiation Laboratory (either due to sample volume or radiation levels approaching environmental levels) and reporting analytical results to the REC. The ERL is located on the campus of the Georgia Institute of Technology in Atlanta, Georgia.

6.0 **Operational Procedures**

6.1 **Team Formation** - Formation of field monitoring teams will be accomplished as described in DNR-EPD-ERP-1.0 with the following exceptions: the REC may establish a different mix of state/local personnel, and may include, if necessary, personnel from other state agencies.

6.2 **Radiation Surveys**

6.2.1 Direct Radiation Measurements of samples will be performed using a low range survey meter (micro-R meter) or a GM survey meter with an energy-compensated beta-gamma probe. Measurements will be made at contact with the outside of the sample container and/or shipping container.

6.2.2 Contamination surveys will be performed using a GM survey meter with a shielded pancake type probe.

6.3 **Smear Samples**

6.3.1 Write time, date, and location on outside of smear envelope.

6.3.2 Place closed smear envelope in a clean ziplock bag, and place with other samples. Information on the smear should be visible through the bag, if not the information should be written on the bag as well.

6.4 **Vegetation Samples**

6.4.1 Write time, date, and location on outside of sample container.

6.4.2 Place sealed sample container into a clean ziplock bag and seal it. Information on the container should be visible through the bag, if not the information should be written on the bag as well.

6.5 Soil Samples

6.5.1 Write time, date, and location on outside of sample container.

6.5.2 Place sealed container in a clean ziplock bag, and place with other samples. Information on the container should be visible through the bag, if not the information should be written on the bag as well.

6.6 Water and Milk Samples

6.6.1 After cubitainer is placed into cover box, write the time, date, and location on the outside of the box.

6.6.2 Place box inside a plastic bag and seal it. Information on the box should be visible through the bag, if not the information should be written on the bag as well.

6.7 Air Samples

6.7.1 Complete Air Sample Information label and place on the outside of large ziplock bag.

6.7.2 Place particulate filter inside of a small ziplock bag, seal it and place it into the labeled ziplock bag.

6.7.3 Place air cartridge inside of a small ziplock bag, seal it and place it into the labeled ziplock bag.

6.8 **Sample Transport** - Samples should be provided to the Mobile Radiation Laboratory (MRL) at the end of the tour of duty. If earlier sample transport is required, the FTC will make arrangements similar to those in Section 6.6 of DNR-EPD-ERP-1.0, and the team(s) will be advised of the sample transfer point to be used.

6.9 Packaging Samples for Transport

6.9.1 When samples are picked up by a courier or turned in by FMT's complete the Sample Control and Chain of Custody Form and attach it to the sample. Sample Control and Chain of Custody Form's will be updated and signed off on each time the sample changes possession.

6.9.2 When samples are picked up and/or transported from the field, the samples shall be taken to the MRL or a designated controlled location where they can be surveyed for contamination.

6.9.3 Record sample receipt at the MRL or screening area on the Sample Control and Chain of Custody Form. A separate form should be used to record each sample to be included in a single shipment of multiple samples to a radiological laboratory. Sign the Sample Control and Chain of Custody Form indicating receipt of each sample.

Note: The final name on the Sample Control and Chain of Custody Form for each sample in a shipment MUST be the same. The same individual should receive all samples in a single shipment.

6.9.4 Remove and discard (as radioactive waste) the external plastic bag from the sample container. Wipe the exterior surfaces of the sample container (except for smear samples) with an absorbent paper or cloth, and dispose of the medium (as radioactive waste).

6.9.5 Smear approximately 100 cm^2 (about the size of a dollar bill) of the exterior surface of the sample container, and verify that the removable activity is less than 2200 dpm/100cm^2. If activity is greater than 2200 dpm/100 cm^2, repeat steps 6.9.4 - 6.9.5 as required.

6.9.6 Upon the direction of the REC or his designee repackage the sample into other containers suitable for laboratory analysis. The type(s) of containers to be used will be designated by the receiving laboratory prior to transport.

Note: Samples which are repackaged should have a duplicate Sample Control and Chain of Custody Form attached to the repackaged sample. This form should contain all of the information listed on the original and note that it is a repackaged sample. The original should be maintained with the original sample container until time of disposal, and then sent to the REC.

6.9.7 Assign a sequential sample identifier to each individual sample (e.g. VEGP-1) and record the sample identifier on the Sample Control and Chain of Custody Form. If the sample has been repackaged, record the sample identifier on the original Sample Control and Chain of Custody Form, and a sub-identifier (e.g. VEGP-1a) on the Sample Control and Chain of Custody Form for the repackaged sample. Write the sample identifier on the top of the sample container with an indelible marker.

6.9.8 Place the sample inside a clean clear plastic bag. Sample identifier should be visible through the bag; if not, write the sample identifier on the plastic bag with an indelible marker.

6.9.9 Measure the direct radiation level at contact with the outside of the sample container.

Note: Samples with a contact radiation level greater than 1 mR/hr may only be shipped with the express written permission of the REC. Such samples may not be shipped to the ERL.

6.9.10 Enter sample collection and radiation survey information for the individual sample onto the Shipping Container Log.

6.9.11 Place the sample into a durable, watertight shipping container (i.e. plastic cooler, toughbin, etc.).

Note: If liquid samples are placed into the shipping container, an absorbent medium (such as vermiculite, kitty liter, disposable diapers, etc.) should be placed into the bottom of the container to absorb the liquid, should one of the samples leak or spill.

6.9.12 If the shipping container is not lockable, tape and seal it so that it is not easily opened and that tampering will be readily apparent. If the shipping container is lockable, lock it and tape the container so that tampering will be readily apparent.

6.9.13.1 Prepare the shipping container for shipment as a Limited Quantity Radioactive Materials Package by placing the following statement on the outside of the shipping container:

RADIOACTIVE

Consignee:	
Consignor:	Georgia Department of Natural Resources
This package conforms to the conditions and limitations specified in 49 CFR 173.421 for excepted radioactive material, limited quantity, N.O.S. UN 2910; 49 CFR 173.422 for excepted radioactive material, instruments and articles, UN 2911; 49 CFR 173.424 for excepted radioactive material, articles manufactured from natural or depleted uranium or natural thorium, UN 2909; or 49 CFR 173.427 for excepted radioactive material; empty packages, UN 2908.1.	

Note: Assuming a representative mix of radionuclides following an incident at a nuclear power plant, up to one hundred (100) individual samples may be shipped in a single container as limited quantity.

6.9.13.2 Verify that the dose rate on the external surface of the shipping container does not exceed 0.5 mR/hr.

6.9.13.3 Smear approximately 100 cm^2 (about the size of a dollar bill) of the exterior surface of the shipping container, and verify that the removable activity is less than 2200 dpm/100 cm^2.

Note: Removable activity must be less than 2200dpm/100 cm^2 on the outside of the shipping container. External surfaces of shipping containers with removable activity in excess of this limit MUST be decontaminated prior to shipment.

6.9.13.4 Record the results of radiation surveys of the shipping container on the Shipping Container Log.

6.9.13.5 Write the name of the consignee on the shipping container label and on the Shipping Container Log.

6.9.13.6 Attach the Sample Control and Chain of Custody Form(s) to the Shipping Container Log.

6.10 Sample Transportation

6.10.1 The REC or FTC shall secure the services of an enclosed DNR vehicle (i.e. sedan, station wagon, pickup truck with camper to, helicopter, etc.) to transport samples.

6.10.2 Place sample container into the transport vehicle as far away from the operator as is reasonably achievable.

6.10.3 Sign and date the Sample Control and Chain of Custody Form(s) and have the individual who will be transporting the samples sign that they have received the samples.

6.10.4 Make a copy of the Sample Control and Chain of Custody Form(s) and the Shipping Container Log. Provide a set to the individual who will be transporting the samples and retain a set for record keeping purposes.

6.11 Sample Receipt

6.11.1 Personnel at the receiving facility shall survey the shipping container and individual samples upon receipt in accordance with procedures of the receiving facility.

6.11.2 Personnel at the receiving facility shall indicate receipt of each sample by checking the appropriate box on the Sample Control and Chain of Custody Form. Individual receiving the sample should also sign the Sample Control and Chain of Custody Form.

6.11.3 Personnel at the receiving facility shall decontaminate and re-smear any sample container found to have loose contamination in accordance with procedures of the receiving facility.

6.11.4 Personnel at the receiving facility shall survey each sample container for contact radiation levels to determine acceptability by the receiving laboratory.

6.11.5 Personnel at the receiving facility shall log and assign a laboratory identifier to each sample in accordance with **laboratory** procedures.

6.11.6 Personnel at the receiving facility shall survey, process, and analyze samples utilizing normal laboratory contamination control procedures. Samples with elevated radiation levels shall be processed and analyzed utilizing strict contamination control measures.

6.11.7 Personnel at the receiving facility shall insure that the Sample Control and Chain of Custody Form is properly completed each time a sample changes hands.

6.11.8 Personnel at the receiving facility shall sign the Sample Control and Chain of Custody Form indicating receipt of samples, and transmit the completed form to the REC by fax as soon as possible.

RECEPTION CENTER/SHELTER OPERATIONS

The purpose of these procedures are to provide guidance to the reception center and shelter staff if an evacuation is recommended due to an incident at the nuclear power facility. NOTE: If a precautionary evacuation is recommended prior to a release of radioactive material from the nuclear power facility, the evacuees should be registered and provided shelter care only.

1. RECEPTION/SHELTER MANAGER/ASSISTANT

1.1. Request reception center supplies from EMA to include: radiation survey instruments, and TLD's; step-off pads; shoe covers; soap, and towels; monitoring and shelter registration forms.

1.2. Assure staff from various local agencies are present at the center. (County School System, Health Department, Dept. of Family and Children Services, and Local Law Enforcement.

1.3. Assure center is properly prepared to receive evacuees per attached layout.

1.4. Inform county agency representatives at the Emergency Operation Center of additional needs or problems at the reception center.

1.5. Periodically inform the County Emergency Operations Center of the number of evacuees at the reception center and shelter.

2. RADIOLOGICAL MONITORING PERSONNEL

2.1. Assist with preparing the reception center for receiving potentially contaminated evacuees by installing rope barricades, setting-up desks, step-off pads, soap and towels, and change of clothing (i.e. tyvek suits).

2.2. Obtain radiation survey instrumentation from the shelter manager. Cover radiation detector probe with a transparent plastic bag or latex glove. Perform operability checks on all radiation survey instrumentation and establish a background (bkg.) radiation level in counts per minutes (cpm). **NOTE: This number will be approximately in range of 50 to 100 cpm.**

2.3. Issue personal dosimetry (TLD's) to all individuals working inside the reception center.

2.4. Assure all radiological monitoring personnel and any other individuals who may be required to physically touch potentially contaminated individuals or their clothing wear disposable gloves.

2.5. Assure gloves are changed after surveying any contaminated individual or touching/handling any contaminated item(s).

2.6. Perform a radiological survey of the soles of all evacuees' shoes at the entrance to the reception center. If contamination is suspected/ present on the sole(s) of an individual's shoe have the individual place a pair of disposable shoe covers over their shoes before entering the building.

2.7. Perform a complete radiological radiation survey of all individuals pay close attention to head, shoulders, hands, front of thighs, and shoes at the designated initial monitoring location inside the gym. Report readings in counts per minute (cpm) to the individual recording results. NOTE: Any radiation measurements equal to or exceeding twice the background reading (ex. 100cpm bkg. X 2 = 200 cpm) will be considered an indication of radiological contamination.

2.8. Perform another radiological survey of all individuals requiring decontamination after the individual has showered or washed any areas indicating presence of contamination. NOTE: Pay close attention to areas, which were noted as being contaminated during the initial monitoring. If the survey does not indicate the level is less than twice background ask the individual to repeat washing. Do not scrub skin until raw.

2.9. If the contaminated individual cannot be decontaminated below a level of 10,000 cpm, they should be transported to the nearest primary or secondary MS-1 medical facility (as designated in the plan for the affected nuclear facility) for evaluation.

3. <u>RECORDERS FOR INITIAL MONITORING RESULTS</u>

3.1. Record radiation measurements in counts per minute (cpm) on Monitoring/Decontamination Form in the "Before Column."

3.2. Provide the completed Monitoring/Decontamination Form to non-contaminated individuals after the radiation survey is complete. Instruct the individual to give the form to the individual at the desk in the shelter. **NOTE: Individuals without the form will not be allowed inside shelter.**

3.3. Provide the completed Monitoring/Decontamination Form to a Form Runner for any individual found to be contaminated.

4. <u>DECONTAMINATION RECORDERS</u>

4.1. Record radiation measurements in count per minute (cpm) on the Monitoring/Decontamination Form in the "After Column."

4.2. Provide the completed Monitoring/Decontamination Form to decontaminated individuals after the radiation survey is complete. Instruct the individual to give the form to the individual at the desk in the shelter. **NOTE: Individuals without the form will not be allowed inside shelter.**

5. <u>FORM RUNNERS</u>

5.1. Escort the contaminated evacuees to the decontamination area (i.e. locker room or shower area) and give the Monitoring/Decontamination Form to the Decontamination Recorder in that area.

5.2. Obtain a plastic bag and hold the bag open. Request any individual requiring shower to place any personal items in the bag. Close and seal the bag with a label or piece of tape containing the individuals name and birthday. Label should be placed in such a manner as to show any tampering with the bag. Give the bag to the Decontamination Recorder.

6. <u>REGISTRARS (D.F.C.S.)</u>

6.1. Assure that each evacuee has a Monitoring/Decontamination Form prior to obtaining information for the Reception/Shelter Registration Form.

6.2. Obtain and record the required information on the Reception/Shelter Registration Form. Staple the Monitoring/Decontamination Form to the registration form, to complete the individual's file.

6.3. Provide identification tags/badges for each evacuee.

7. <u>Nurses</u>

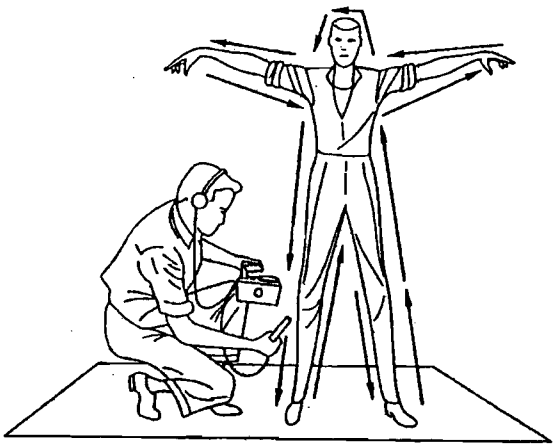
7.1. Apprise the Shelter Manager or Assistant Manager of any medical supply needs of incoming evacuees (i.e. any medications or special needs which the evacuee may not have been able to bring with them.)

7.2. Apprise the Shelter Manager or Assistant Manager of any ambulance support or additional medical support that is or may be needed.

Monitoring of Potentially Radioactively Contaminated Individuals

1. Locate an area free of radioactive contamination and with a low background.
2. Use a G-M type survey meter. Attach headphone (if available) or turn on speaker because this allows the monitor to visually follow and better control the position of the detector probe while monitoring. The headphones or speaker respond more quickly to changes in radiation levels than the meter.
3. Check the operation of the survey meter according to instructions provided with the meter.
4. Place the survey meter probe in a transparent plastic bag to prevent contamination. For maximum sensitivity, the open (exposed) window of the detector probe should be used. The window is usually a rotatable cylinder on the probe, which exposes or covers the detector tube. Replace the bag periodically or whenever it is suspected that the bag may have become contaminated.
5. Note the background reading of the meter. When performing surveys, routinely check this background level. If the background rises significantly, change the probe cover to prevent false readings due to contamination of the cover.
6. Radiation readings that are twice background indicate that the individual may be contaminated.
7. Monitor the individual as follows:
   a) Have the individual being monitored stand on a step off pad or some form of removable covering. This will reduce the possibility of contaminating the monitoring site.
   b) Place the survey meter probe about 1 inch from the person's body, being careful not to touch the person.
   c) Instruct the person to stand straight, feet spread slightly, arms extended with palms up and fingers straight out.

d) Starting at the top of the head, cover the entire front of the body, monitoring carefully the head, neckline, trunk, legs, crotch and armpits (as indicated in the drawing).



e) Have the individual turn around, standing the same as in c) above, except with the hands and arms turned over palms down.

f) Repeat the monitoring on the backside of the body in the same manner as indicated above.

g) Once the individual's hands have been determined to be contamination free, have the individual hold onto the back of a chair and raise each foot to be surveyed. Survey the top and bottom of each shoe as the individual raises it.

h) As each shoe is determined to be contamination free have the person place that foot down across the designated "hot line". Do not allow the individual to step across this line or off of the "Step off" pad until you are sure the person is free of contamination.

8. If an individual is found to be contaminated (above twice background), they should be decontaminated. The individual should be taken to an area where they can shower or have the contamination removed.

9. Monitor the individual after decontamination to determine that contamination has been effectively removed. Repeat the decontamination procedure if required.

10. Note background reading of meter before proceeding with another individual.

RECEPTION/SHELTER CENTER – STAFFING

Reception/Shelter Center Manger	
Assistant Manager	

I	Radiological Monitoring	II	Nurses
A		A	
B		B	
C		C	
D		D	
E		E	
F		F	

III	Form Recorders	IV	Form Runners
A		A	
B		B	
C		C	
D		D	
E		E	
F		F	

V	Registration	VI	Additional Staff
A		A	
B		B	
C		C	
D		D	
E		E	
F		F	

RECEPTION/SHELTER CENTER REGISTRATION FORM

_____ County Reception/Shelter Center

_____

Last Name First Name MI

Date of Birth: _____ SSN: _____

Male _____ Female _____ Number in Family: _____
Adult _____ Child _____

Home Address: _____
_____
_____

Medical Problems: _____
_____
_____

Special Needs: _____
_____
_____

Location at time of Evacuation: _____
_____
_____

_____ Entered Reception Center: Date _____ Time _____

_____ Relocated To: _____

Date _____ Time _____

_____ Voluntary Relocation (i.e. to a relatives home, hotel etc.)

Address (if known): _____
_____
_____

RECEPTION/SHELTER CENTER
MONITORING/DECONTAMINATION FORM

Last Name First Name MI

Date of Birth: _____

Areas To Survey	Radiation Measurements		Note Specific Locations Where Any Contamination Found
	Before	After	
Hair			
Face			
Arms			
Hands			
Chest			
Back			
Legs			
Feet			

Decontamination Methods Used For:

Skin (intact) _____ Water _____ Soap _____ Phisoderm
_____ Other _____

Hair _____ Soap and Water _____ Other: _____

Eyes _____ Potable Water _____ Other: _____

Ears _____ Potable Water _____ Other: _____

Nose/Mouth _____ Normal Saline _____ Potable Water
Other:

Indicate Date and Time which decontamination was completed.

Date: _____ Time: _____

SHELTER MANAGER STATUS REPORT

Date: _____ Date: _____

Time: _____ Time: _____

Reception/Shelters for General Public		Shelters Designated for Schools within Plume Exposure Area	
Number of Individuals:		Number of Students and Faculty:	
Received		Received	
Physically Handicapped		Requiring special care or medical assistance	
Requiring special care or medical assistance (infants and elderly)		Total daily student enrollment	
Contaminated with radioactive material		Picked-up by relatives from the shelter	
Assigned to shelter facility		Contaminated with radioactive material	
Acquiring own accommodations outside the plume exposure area			

List of Concerns: _____

Field Team Briefing Log

This is: _____ A Drill _____ An actual emergency

Time and Date of Briefing: _____

Person Conducting Briefing: _____

Facility Name and Affected Unit: _____

Plant Conditions

Emergency Classification Level

	_____ NOUE	_____ Alert	_____ Site Area	_____ General
Plant Condition or Status:	_____ Stable	_____ Degrading	_____ Unknown	
Release in Progress:	_____ Yes	_____ No	_____ Unknown	
Type of Release:	_____ Airborne	_____ Liquid	_____ None	

Weather Conditions

Wind Direction (from): _____ Wind Speed (mph): _____

Stability Class (A-F): _____ Precipitation (type): _____

Protective Actions

KI Authorized: _____ Yes _____ No Date: _____ Time: _____

Additional Protective Actions: _____

Assignments

Field Team A: _____

Field Team B: _____

Field Team C: _____

Additional Remarks/Comments/Information

_____

_____

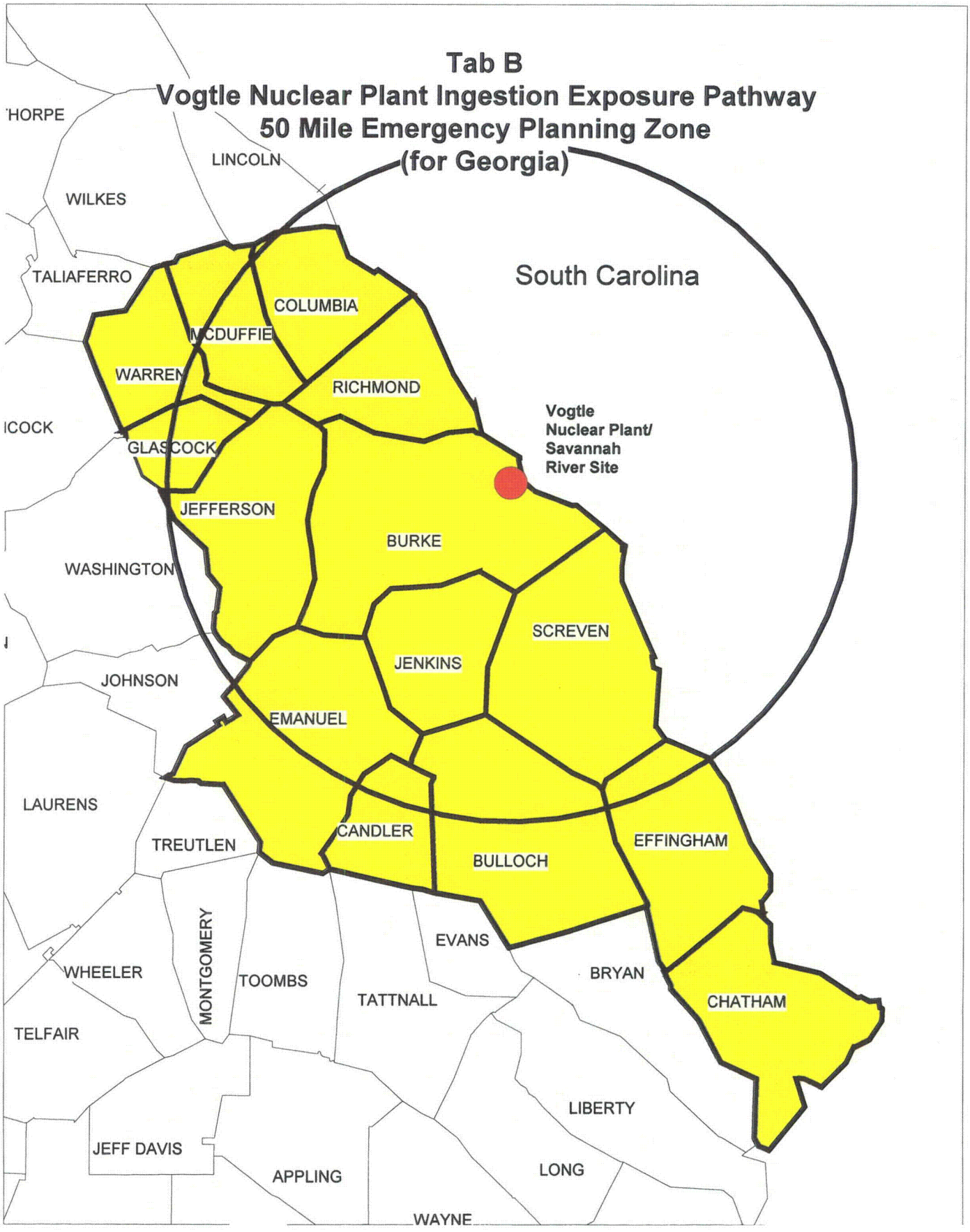
_____

_____

_____

_____

_____


Tab B
Vogtle Nuclear Plant Ingestion Exposure Pathway
50 Mile Emergency Planning Zone
(for Georgia)
THORPE
LINCOLN
WILKES
TALIAFERRO
South Carolina
COLUMBIA
MCDUFFIE
WARREN
RICHMOND
ICOCK
GLASCOCK
Vogtle
Nuclear Plant/
Savannah
River Site
JEFFERSON
BURKE
WASHINGTON
SCREVEN
JENKINS
JOHNSON
EMANUEL
LAURENS
CANDLER
EFFINGHAM
TREUTLEN
BULLOCH
EVANS
WHEELER
MONTGOMERY
TOOMBS
BRYAN
TATTNALL
CHATHAM
TELFAIR
LIBERTY
JEFF DAVIS
APPLING
LONG
WAYNE

AR-07-0656
Enclosure 5
Miscellaneous Documents

No. 8 OHS – GEMA – REP Resource Contacts

V. ADDITIONAL RESOURCES

RESPONSE RESOURCES CHART

Resources Available	State	Local	Utility	NRC[a]	FEMA[b]	DOE[c]	EPA[d]	USDA[e]	HHS[f]	ANI[g]
Access Control	●	●	●							
Agricultural Protective Measures	●	●						●■		
Communications	●	●	●		●□	●■				
Crisis Counseling	●	●							●□	
Damage Assessment	●	●	●	●	●■□			●■		
Decontamination	●	●	●				●			
Dispersion Predictions	●		●	●		●				
Disposal of Contaminated Materials	●	●	●			●■	■	●■		
Dose Reduction	●		●	●		σ	σ	●σ		
Environmental Cleanup	●		●			■	■			
Evacuation Implementation	●	●			σ□					
Evacuation Recommendation	●	●	●	●	σ					
Exposure Control	●		●	●		■	■			
Financial Assistance	●	●	●	●	●□					●
Food Embargoes and Assistance	●	●			□			●□	σ□	
Food Safety	●	●						●□	●□	
Law Enforcement	●	●								
Long-Term Health Registries Plan	●								●□	
Long-Term Radiation Monitoring	●	●	●	σ	σ	σ	σ	σ	σ	
Medical Assistance	●	●			●□	●□			●□	
Protective Action Guidance				●			σ	σ	σ	
Protective Action Implementation	●	●								
Protective Action Recommendations	●	●	●	●	σ		σ	σ	σ	
Public Information	●	●	●O	●O	●O	σO	σO	σO	σO	●O
Radiation Monitoring	●■			■		■	■	■	■	
Recovery Plan	●	●	●	●	σ	σ	σ	σ	σ	
Reentry	●	●	●	●	□	■	■	■	■	
Relocation Assistance	●	●	●	σ□	σ□	σ□	σ□	σ□	σ□	
Response Management	●	●	●	●	σ□					
Return	●	●	●	●		■	■	■	■	
Sampling/Analysis	●■			■		■	■	■	■	
Shelter and Housing	●	●			●□			●□		●

[a] Nuclear Regulatory Commission
[b] Federal Emergency Management Agency
[c] United States Department of Energy
[d] United States Environmental Protection Agency
[e] United States Department of Agriculture
[f] Health and Human Services
[g] American Nuclear Institute

LEGEND:

●Provided directly by **Agency**
σProvided through the **LEAD FEDERAL AGENCY** (LFA)
■Obtained through the **FEDERAL RADIOLOGICAL MONITORING AND ASSISTANCE CENTER** (FRMAC)
□Obtained through **DISASTER FIELD OFFICE** (DFO)
OObtained through **JOINT INFORMATION CENTER** (JIC)

AR-07-0656
Enclosure 5
Miscellaneous Documents

No. 9 GEMA SOP 3-5

STATE OF GEORGIA
OFFICE OF HOMELAND SECURITY- GEORGIA EMERGENCY MANAGEMENT AGENCY
STANDARD OPERATING PROCEDURE

ACTIVATION OF THE PLANT ALVIN W. VOGTLE PROMPT NOTIFICATION SYSTEM

I. PURPOSE

To set forth procedures and responsibilities for activation of the Alvin W. Vogtle Electric Generating Plant (VEGP) Prompt Notification System (PNS), as required by Appendix 3 of NUREG-0654, FEMA-REP, Rev. 1.

II. GENERAL

The VEGP PNS is a composite system consisting of the National Oceanic and Atmospheric Administration (NOAA) Weather Radio (NWR) and the VEGP Siren System. The NWR is capable of providing an alerting signal and an instructional message as required by NUREG 0654/FEMA-REP-1, Rev. 1. The VEGP Siren System complements the PNS with 47 rotating electronic sirens strategically located throughout the affected area.

III. CONCEPT OF OPERATIONS

A. Because of the varying emergency responsibilities of the Office of Homeland Security - Georgia Emergency Management Agency (OHS-GEMA), South Carolina Emergency Management Division (SCEMD), and Burke County Emergency Management Agency, together with interlocking operational and maintenance responsibilities, this Standard Operating Procedure (SOP) is subdivided into two parts as follows:

1. OHS-GEMA SOP 3-5A/SCEMD SOP, addressing the activation of the activation of the NWR.

2. OHS-GEMA/Burke County EMA SOP 3-5B, addressing the activation of the VEGP Siren System.

B. While these components may be operated independently, for radiological emergency purposes they usually will be operated sequentially to provide maximum warning to the public. The sequence will be activation of the NWR first, followed as soon as possible by activation of the VEGP Siren System.

C. Authorization for activation of the PNS is reserved to only those individuals listed in **ATTACHMENT # 1** to this SOP (3-5). On the specific authorization of any of those Office of Homeland Security-Georgia Emergency Management Agency (OHS-GEMA) personnel listed in the attachment, the National Weather Service Forecast Office (CAEWX) in Columbia South Carolina will activate the PNS. The request will specify the message to be transmitted, the conditions of broadcast, and will be verified.

IV. ADMINISTRATION

A. The Radiological Program Manager for OHS-GEMA will coordinate and publish changes to this SOP as required.

B. This SOP supersedes OHS-GEMA SOP 3-5 that was dated January 2005.

MICHAEL G. SHERBERGER
Director
Office of Homeland Security-Georgia Emergency Management Agency

1/3/2006
Date

Authority for activation of the PLANT ALVIN W. VOGTLE PROMPT NOTIFICATION SYSTEM (PNS) is limited to the following OHS-GEMA personnel:

GROUP 1

CHARLEY ENGLISH, Deputy Director

CHARLIE DAWSON, Director of Operations

PATRICK COCHRAN, Program Director, Radiological Emergency Preparedness

Upon receipt of authorization from any of those in GROUP 1, the following OHS-GEMA staff members are authorized to activate the Plant Vogtle PNS.

GROUP 2

RAY ROMAN, Radiological Emergency Planner

NOTE: The National Weather Service (NWS) office in Columbia, South Carolina is authorized to activate the Plant Vogtle PNS upon direction from any of the names listed in GROUP 1 and GROUP 2 above. **If the call is from a GROUP 2 designee, it is with the authority of a GROUP 1 member and is therefore authorized.**

OHS-GEMA
SOP 3-5A
SCEMD SOP
JANUARY 2006

STATE OF GEORGIA/STATE OF SOUTH CAROLINA
OFFICE OF HOMELAND SECURITY-GEORGIA EMERGENCY MANAGEMENT AGENCY/
SOUTH CAROLINA EMERGENCY MANAGEMENT DIVISION
STANDARD OPERATING PROCEDURE

ACTIVATION of the VOGTLE ELECTRIC GENERATING PLANT NOAA WEATHER RADIO

I. PURPOSE

To set forth procedures and responsibilities for activation of the Vogtle Electric Generating Plant NOAA Weather Radio (NWR), as required in Appendices A and B of the "Agreement for the Operation of a NOAA Weather Radio Transmitter by a Cooperator" (Agreement for Activation and use of NOAA Weather Radio in Response to an Emergency Condition at Georgia Power's Alvin W. Vogtle Electric Generating Plant, effective December 1, 1994).

II. CONCEPT OF OPERATIONS

A. Georgia

Authorization for Georgia activation of the NWR is reserved to only those individuals listed in **Attachment # 1** to OHS-GEMA SOP 3-5. On the specific authorization of any of those Office of Homeland Security-Georgia Emergency Management Agency (OHS-GEMA) personnel listed in the attachment, the Columbia, South Carolina Weather Service (CAEWX) will activate the PNS. The request will specify the message to be transmitted, the conditions of broadcast, and will be verified.

B. South Carolina

It is the intention of SCEMD to defer to OHS-GEMA for activation of NWR barring unusual circumstances.

III. PROCEDURES

A. Georgia

1. Prior to activation of the National Weather Service Tone Alert Radio (NWR), OHS-GEMA will coordinate message content with SCEMD. Coordination will ensure that SCEMD Emergency Alerting System messages are consistent with the NWR message.

2. Coordination with SCEMD will be accomplished by one of the means listed below, directly when conditions allow, or by patch call through the OHS-GEMA Radio Operator, if necessary.

   a. Commercial telephone
      803-737-8500
      During non-duty hours, request call back from SCEMD Duty Officer.

   b. Emergency Notification Network (ENN)

   c. FEMA High Frequency (HF) Radio Network (3.975.00)

   d. Any means possible.

3. On the direction as outlined above, the authorized OHS-GEMA Staff Member will instruct the OHS-GEMA Radio Operator to contact the National Weather Service Office (CAEWX) in Columbia, South Carolina for activation of the National Weather Radio (NWR). The OHS-GEMA Radio Operator will be provided a telephone number to reach the OHS-GEMA Staff Member (SOC, FEOC, home) who will request CAEWX to activate the NWR.

   The OHS-GEMA Radio Operator will call CAEWX on the NAWAS circuit with the following message:

   "Request Emergency Call to OHS-GEMA"

   In the event of NAWAS malfunction or the urgency of the situation dictates immediate action, the OHS-GEMA Staff Member can contact CAEWX at one of the following commercial numbers:

   803-822-8038 - primary number
   803-822-8133 - backup number
   803-822-8037 - backup number

803-822-8188 - fax number

4. In response to NAWAS (or telephone) contact, CAEWX will call the OHS-GEMA Radio Operator at the following number:

404-635-7200

The OHS-GEMA Radio Operator will ensure one of the telephone lines connected to the above number remains available to receive the call from CAEWX.

The OHS-GEMA Radio Operator will patch the CAEWX call to the number previously provided by the OHS-GEMA staff member who will request activation of the NWR. The Radio Operator will remain on the line for any assistance required.

When the CAEWX call is patched, the OHS-GEMA staff member will state that the purpose of the contact is to request activation of the NWR, then give his or her name. CAEWX will verify the authenticity of the request by checking the name given against the list of authorized personnel in **Attachment # 1** to OHS-GEMA SOP 3-5. (Note: If time is of the essence, the OHS-GEMA staff member may elect to contact CAEWX directly by commercial telephone and request activation as specified here and in Paragraph III.A.4 below.)

5. The OHS-GEMA staff member will request broadcast on the NWR of one of the prescripted messages attached and will specify the desired message by color code and script name.

-**YELLOW** Script/First Alert (Attachment #1)

-**BLUE** Script/Shelter Notice (Attachment #2)

-**RED** Script/Evacuation Notice (Attachment #3)

-**GREEN** Script/All Clear (Attachment #4)

-**WHITE** Script/Test Message (Attachment #5)

Information needed to complete the wording of the scripts will also be provided to CAEWX, together with the number of times the message is to be automatically repeated on the NWR.

6. The OHS-GEMA staff member may request the broadcast of brief non-prescripted messages during the duration of the emergency. Exact wording and repetition instructions will be determined by OHS-GEMA as the situation develops.

7. CAEWX will conduct weekly tests of the NWR equipment to ensure operational capability in accordance with NWS Instructions.

B. South Carolina (See Paragraph II.B and III.A 1. above)

IV. This SOP supersedes OHS-GEMA SOP 3-5A dated January, 2005 with ensuing changes.

MICHAEL G. SHERBERGER — Date: 1/3/2006
Director
Office of Homeland Security-Georgia Emergency Management Agency

RONALD C. OSBORNE — Date: 1/24/06
Director
South Carolina Emergency Management Division