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## GEORGIA POWER POWER GENERATION DEPARTMENT VOGTLE ELECTRIC GENERATING PLANT

#### TRAINING STUDENT HANDOUT

EMERGENCY PLAN IMPLEMENTING	NUMBER:	LO-HO-40101-001-0
LICENSED OPERATOR TRAINING	REVISION:	5
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CHAPTER VI-3, EMERGENCY PLAN IMPLEMENTATION, OF THE VOGTLE TRAINING TEXT IS INCLUDED AS A REFERENCE IN THIS HANDOUT.

#### EMERGENCY CLASSIFICATIONS

#### Notification of Unusual Event

Events which indicate a potential degradation of the level of safety of the plant.

#### Alert

Events which involve an actual or potential substantial degradation of the level of safety of the plant.

#### Site Area Emergency

Events which involve actual or likely major failures of plant functions needed for protection of the public.

#### General Emergency

Events which involve actual or imminent substantial core degradation or melting with the potential for loss of containment integrity.

#### KEY EPIPS

## Duties of the Emergency Director (91102-C)

Provides instructions to the ED in fulfilling his responsibility for overall coordination and direction of the Emergency Response Organization

## Emergency Classification (91001-C)

Provides instructions for the classification of off-normal events into one of four emergency classification levels. It also provides initial implementing instructions to the ED.

#### Emergency Motifications (91002-C)

Provides instructions to complete initial and follow up notifications to GPC on-site and off-site emergency response personnel and to Georgia, South Carolina, local counties and NRC officials.

#### Site Evacuation (91402-C)

Provides instructions for the early dismissal or evacuation of non-essential personnel from the plant site in the event of an emergency assembly and accountability (91401-0).

#### Assembly and Accountability (91401-C)

Provides instructions for the assembly of non-essential personnel to their designated assembly area and the accounting of personnel to identify those who may be missing.

#### Protective Action Guidelines (91305-C)

Provides instructions for the on-site and off-site protective actions alternatives to ensure plant and off-site personnel safety in the event of an EMERGENCY.

#### Recovery (91501-C)

Provides instructions for determining when the emergency condition will be terminated and the recovery phase initiated. It also describes the process used to notify and activate the recovery organization for immediate and long term recovery operations.

#### Core Damage Assessment (91502-C)

Provides a method to classify and estimate the extent of core damage through core fission product release measurements, reactor vessel level indications, and core exit thermocouple temperatures along with other auxiliary readings.

#### FUNCTIONS OF THE TCS GROUP

- Provide inplant radiological assessment and protective actions recommendations.
- 2. Engineering and technical analysis for control room support.
- 3. Liaison between TSC and CR.
- 4. Coordination of emergency maintenance.
- Direction of post accident and plant chemistry sampling and analyses, evaluation of chemistry data, core damage assessment.
- 6. Planning and implementation of logistical support.
- 7. Assess control and accountability in TSC.
- 8. The TSC is considered uninhabitable when:
  - a. Whole body dose is greater than 100 mr/h in TSC
  - b. Iodine activity is greater than 2.7 EO7 Ci/cc in TSC

9. The TSC Monager then relocates to the backup location of the Control Room or the EOF.

#### FUNCTIONS OF THE OSC

- Serve as the assembly and staging area for personnel pooled for emergency response.
- Respond to request from the ED and the TSC concerning deployment of RETs.
- 3. Management of emergency equipment and supplies.
- Coordination of movement of personnel on-site, except those assigned to the TSC and Control Room.
- 5. The FOC is uninhabitable when:
  - a. Whole body lose to greater than 100 mr/hr in the osc.
  - b. Iodine activity is greater than 2.7 E-7 Ci/cc in the OSC.
- 6. The backup OSC is in the TSC.

## FUNCTIONS OF THE RADIOLOGICAL EMERGENCY TEAMS (RET's)

- Search and Rescue Team Performs emergency search and rescue of individuals who are unaccounted for or disabled.
- First Aid Team Performs first aid for radiological and non-radiological injuries.
- Damage Assessment/Control Team A selected group of personnel who perform damage assessment and control activities as needed.
- 4. Repair and Modification Team A selected group of personnel who perform repair work and modify systems, equipment, etc., as needed.
- In Plant Monitoring Team Performs in plant sampling and surveys. The HP supv. uses this information when making Protective Action recommendations to the ED.
- Rack-Up Fire Brigade Back up support to the normal shift fire brigade.

FUNCTIONS OF THE EOF UROUP

- 1. Direction and control of GPC off-site emergency response.
- 2. Assistance to the ED and supervision of EOF.
- Communication of radiological information of State and Local emergency response agencies.
- 4. Support for initial activities associated with planning for re-entry or recovery operations.
- 5. Access control for FOF.
- Processing of personnel who require authorization to enter site.
- 7. Requesting assistance from local law authorities.
- 8. Performance of off-site close calculations.
- 9. Direction of Field Moditoring Teams
- 10. Coordination with State and Federal Groups performing radiological assessment.
- 11. Development of protective action recommendations.
- 12. Assumption of logistics support functions from the TSC.
- 13. Providing press releases when authorized by the ED.
- 14. The EOF is considered uninhabitable when:
  - a. Whole body dose is greater than 100 mr/hr in the EOF.
  - b. lodine activity is greater than 2.7 E-7 Ci/cc in the EOF.
- 15. The Backup MOF is located at the GPC District Office in Waynesboro.

## ED RESPONSIBILITIES THAT CANNOT BE DELEGATED

- Classifying and declaring the emergency, including upgrading, downgrading or termination.
- 2. Recommending protect we actions to off-site authorities.
- 3 Deciding to evacuate non-essential personnel from the site for on-site protective actions.

- Authorizing personnel radiation exposures in excess of 100FR20 limits, if necessary.
- 5. Deciding to request asristance from feueral support groups.
- Deciding to make emergency notifications to off-site authorities responsible for emergency measures.

## TEGORIES THAT ARE CONSIDERED WHEN CLASSIFYING AN EMERGENCY

- 1. Plant Power
- 2. Technical Specifications
- 3. Radioactivity
- 4. Plant Systems atus
- 5. Natural Phenomenon
- 6. Man Made Hazardr
- /. Security
- 8. Fission Product Barrier
- 9. Shutdown Systems
- 10. Other

#### EMERGENCY CLASSIFICATION

## A. Notification of Unusual Event

- 1. Plant Power
  - a. Loss of all off-site and on-site AC power
  - b. Lose of all vital DC power
- 2. Technical Specifications
  - a. Loss of ESF, PERMS monitor or Effluent Flow Rate instrument requiring plant shutdown per Technical Specifications.
  - b. Excluding RCS leak rates per Toch Specs.
  - c. Exceeding RCS activity per Technical Specifications.

- d. Any Tech Specs safety limit violations.
- 3. Radioactivity
  - a. Transportation off-site of a contaminated injured victim.
  - b. Gross failed fuel monitor exceed 2 E+4 cpn above normal.
  - c. Radioactive effluent Tech Specs exceeded.
- 4. Plant Systems
  - a. Rapid depressurization of the mecondary system.
  - b. Turbine rotating component failure causing rapid plant shutdown.
  - c. ECCS discharge to reactor versel.
  - d. Reactor protection actuacion without subcriticality.
  - e. Failure of a safety or relief valve to reclose in a safety related system.
- 5. Natural Phenomenon
  - a. Any earthquake felt or defected on-sits.
  - b. Any tornado or hurricane on-site.
  - c. Fire in the plant lasting longer than 10 minutes.
- 6. Man Made Hazards
  - a. Aircraft crash on-site.
  - b. Train derailment on-site.
  - c. On-site explosion.
  - d. On-site toxic gas release.
- 7. Security
  - c. Unusual aircraft activity overhead.
  - b. Security threat or attempted sabotage.
- 8. Fission Product Barrier
  - a. Not considered for this classif cation.

- 9. Shutdown Systams
  - a. Not considered for this classification.
- 10. Other
  - a. Loss of all meteorological data.
  - b. Loss of both site telephone and ENIX communication systems.

#### B. Alert

- 1. Plant Power
  - a. Loss of all off-site and on-site AC power.
  - b. Loss of all vital DC power.
- 2. fechnical Specifications

Not considered for this classification.

- 3. Radioactivity
  - a. Site boundary dose rate greater than .5 mrem/h whole body or 1.5 mrem/h thyroid.
  - Radiation level or airborne contamination which indicates degradation in the control of radioactive material (x 1,000 increase).
- 4. Plant Systems
  - a. Turbine Failure causing casing penetration and damage to safety systems.
  - b. Evacuation of Control Room anticipated or required with control of shutdown established from shutdown panels.
- 5. Natural Phanomenon
  - a. Rarthquake greater than .12g.
  - b. Hurricane winds sustained are greater than 90 mph.
  - c. Yornado striking plant structure or the protected area.
- 6. Man Made Hazards
  - a. Aircraft crash or missile impact inside the protested area.
  - b. Explosion damage effecting safety system.

c. Uncontrolled toxic or flammable gases entering the protected area.

#### 7. Security

- a. Ongoing security compromise which results in intruders within the protected area.
- 8. Fission Product Barrier
  - a. Breach or challenge of one of three fission product barriers.
- 9. Shutdown Systems
  - a. Complete loss of any function needed for plant cold shutdown.

#### 10. Other

a. Precautionary activation of the TSC.

#### C. Site Area Emergency

- 1. Plant Power
  - a. Loss of all off-site and all on-site AC power for more than 15 minutes.
  - b. Loss of all vital DC power for more than 15 minutes.
- 2. Technical Specifications

Not considered for this classification.

- 3. Radioactivity
  - a. Site boundary dose rates projected or measured greater than 50 mrem/h whole body or greater than 230 mrem/hr thyroid.
- 4. Plant Systems
  - a. Evacuation of the Control Room and control of shutdown systems not established from shutdown panels in 15 minutes.
- 5. Natural Phenomenon
  - a. Plant not in cold shutdown and sarthquake greater than .2g or sustained winds greater than 100 mph.
  - b. Fire resulting in the loss or excessive degradation of any safety related function.

#### 6. Man Made Hazards

- a. Plant not in cold shutdown and:
  - Aircraft crash affecting vital structures by impact or fire.
  - Severe damage to safe shutdown & pulpment from missile or explosion.
  - 3) Uncon\*rolled flammable gases entering the vital area.
  - 4) Uncontrolled toxic gases in the vital area restricting access causing a safety problem.

#### 7. Security

Al.

- a. Ongoing security compromise which results in intruders in the vital area.
- 8. Fission Product Barrier
  - a. Breach or challenge of two of three fission product barriers.
  - b. Known LOCA greater than make-up capacity.
- 9. Shutdown Systems
  - a. Complete loss of any function needed for plant hot shutdown.
- 10. Other
  - a. Major damage to spent fuel in the containment or fuel handling building.

#### D. General Emergency

1. Plant Power

Not considered for this classification.

2. Technical Specifications

Not considered for this classification.

- 3. Radioactivity
  - a. Site boundary projected or actual dose rate greater than one rem/hr whole body or 5 rem/h thyroid.

- 4. Plant Systems
  - a. Loss of physical control of the plant.
- 5. Natural Phenomenon

Not considered

6. Man Made Hazards

Not considered

- 7. Security
  - a. Loss of physical control of plant.
- 8. Fission Product Barrier
  - a. Breach of challenge of three of three fission product barriers.
- 9. Shutdown Systems

Not considered

10. Other

Not considered

#### EMERGENCY NOTIFICATIONS

Georgia and South Carolina state and country official must be notified with 15 minutes of amergency declaration. Followup messages must be sent when a significant change occurs or every 30 minutes.

The NAC must be notified as soon as possible after state and county agencies are notified, not to exceed 60 minutes from smergency declaration. Pollowup messages must occur whenever there is any further plant dugradation, any change of one class to another, or termination of the emergancy.

## EMERGENCY NOTIFICATIONS COMMUNICATIONS

The primary means of notifications to State and County officials is the ENN (Black phone in CR and TSC).

The primary means of notification to the NRC is the ENS (red phone).

#### EMERGENCY TERMINATION CRITERIA

- 1. Plant radiation levels are sta'le or decreasing with time.
- The affected reactor is in a stable condition and can be main sined indefinitely in a stable condition.
- Fire or other similar emergency conditions no longer substitute a hazard to safety-related systems, equipment, or personnel.
- Radioactive releases to the environment have ceased or been controlled to within permissible licensed limits.
- Discussions with GPC management, VECP Emergency Response organisation, and off-site authorities do not result in identification of any valid reason for no terminating the emergency.

#### COMPUTE OFF-SITE DOSF CALCULATION

Input Data

- A. Wind speed and direction (from ERF computer)
- S. Plant radiologist and effluent date (from ERF computer)
- C. Page of released material (usually time since shutdown)
  Output Data
- A. Plume arrival rate
- B. Direction (X/A)
- C. Whole body dose
- D. Infant thyroid doses
- 1. Doses at preset downwind distances

MANUAL OFFSITE DOSE CALCULATION

input Data

RE 12444C Unit 1 Plant Vent

RE 12444C Unit 5 Plant Vent

RE 12839C Unit 1 and 2 Turbine Building

RE U05/006 Containment Bldg Unper Level Area Rad-High Range

RE 13119 S/G (4) Main Steam Line

RE 13120 S/G (1) Main Steam Line

RE 13121 S/G (2) Main Steam Line

RE 13122 S/G (3) Main Steam Line

Output Data

- A. Iodine dose at site boundary
- B. Emergency Classification
- C. Protective action recommendations

#### EMERGENCY PLAN IMPLEMENTATION

#### 1. EVENT CLASSIFICATION

As each accident has been discussed in this text, the factors affecting the event classification were presented. This section will look primarily at how the Emergency Plan is implemented once the level of emergency has been determined

First, the meanings of the different emergency classes should be clearly understood.

#### Notification of Unusual Event

Unusual events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant. We raleases of radioactive material requiring off site response or monitoring are expected unless further degradation of safety systems occurs.

#### Alert

Events are in progress or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant. Any releases are expected to be limited to small fractions of the Environmental Protection Agency (EPA) Protective Action Guidelines (PAG) exposure levels.

#### Site Area Emergency

Events are in progress or have occurred which involve actual or likely major failure of plant functions needed for protection of the public. Any releases are not expected to exceed EPA PAG exposure levels, except on-size or near site boundary.

#### General Emergency

Events are in progress or have occurred which involve actual or imminent substantial coro degradation or melting with potential for loss of containment integrity. Release can be reasonably expected to exceed EPA PAG exposure levels off-site for more than the immediate site area.

The NUE and Alert classes give early notification of relatively minor events that could lead to more serious consequences. A site area emergency reflects conditions in which some significant releases are likely or are occurring but core melt is unlikely. A General Emergency involves actual or imminent substantial core degradation or melting with the potential for loss of containment.

Figure 4 of procedure 91001 lists various plant conditions that would require classification. Also, Alert. Site Area Emergency, and General Emergency are based on the degradation of fission product barriers. Regardless of the initiating event, the health and safety of the public is ensured by the harriers that protect against fission product release:

- a. Fuel matrix and cladding
- b. Reactor coolant system pressure boundary
- c. Containment system

The operations staff used the CSFSTs or 19200-C to ensure a timely event diagnosis and classification. Beyond the NUE class, the event is determined by the number of barriers challenged.

- a. The challenge to or breach of a single fission product barrier results in an "Alert" classification.
- b. The challenge to or breach of any two barriers results in a "Site Area Emergency" classification.
- c. The challunge 'o or breach of all three barriers results in a "General Emergency" classification.

Apart from barrier challenge, actual radiation levels are also used by procedure 91001 to determine appropriate event classification. Also if the status of a barrier cannot be monitored, that barrier shall be assumed to be breached for

classification purposes. Furthermore, if the emergency director determines that plant conditions are such that escalation of the emergency classification is warranted, he may classify the situation as ne deems appropriate.

## 2. THE VEGP EMENGENCY RESPONSE ORGANIZATION

Initial staffing of the on-site emergency response organization will be by personnel normally employed by Plant Vogtle. The principle elements of the organization are shown in Figure 1. The emergency director has the responsibility to classif; an event in accordance with the emergency classification system (described in Section D). Classification of an event into one of the four emergency categories (Notification of Unusual Event (NUE), Alart, Site area Emergency, or General Emergency) activates the VECP emergency organization. The extent to which the emergency organization is activated depends on the severity of the situation.

The emergency director has the authority, management obility, and knowledge to assume the overall responsibility for directing VEGP staff in an emergency situation. Initially this position will be filled by the onshift operations supervisor or the shift supervisor if the tashift operations supervisor is not immediately available until the general manager, vice president-nuclear operation, or other alternate arrives at the site and assumes the position of emergency director.

The emergency director manages the following activities for the duration of the emergency:

- Notification and communication: directs the notification of VEGP and GPC rersonnel and notifies and maintains open communications with off-site authorities regarding all aspects of emergency response.
- Energency response facilities: oversees the activation and staffing and requests additional assistance as needed.
- -Emergency operations: has authority over those actions taken to mitigate the emergency condition or reduce the threat to the safety of plant personnel or the public, including the recommendation of protective actions to off-site authorities.
- Emergency services: provides overall direction for management of producement of site-needed materials, equipment, and supplies; documentation; accountability; and security functions.
- EFFICENCY operations planning: provides overall direction for the management of planning for procedure, equipment, and

system development to support emergency operations.

- Discretionary authority: can modify emergency implementing procedures in accordance with plant Technical Specifications; may tailor the emergency organization to fit the specific staffing needs on a case-by-case basis.

The emergency director may not delegate the following responsibilities:

- The decision to notify off-site authorities responsible for emergency measures.
- The decision to recommend protective actions to off-site authorities and content of message.
- Classifying and declaring the emergency, including upgrade, downgrade, or termination.
- Authorization for plant personnel to exceed 10CFR20 radiation exposure limits.
- Deciding to evacuate non-essential personnel from the site at the Alert classification level.
- Decision to request assistance from federal support groups.

The emergency director may operate from the Control Room, TSC, or EOF at his discretion. He may act as the TSC manager during the early phases of emergency response until the EOF is

#### 3. EMERGENCY RESPONSE FACILITIES

The three principal emergency response facilities (ERF) are the Technical Support Center (TSC), the Operations Support Center (OSC) and the Emergency Operations Facility (EOF). The TSC is shared by both units and is located adjacent to the Unit 1 Central Room on Level 1 of the Control suilding.

The TSC structure and ventilation system provide radiological protection to the same degree as the Control Room. It is equipped with area radiation moultons, respiratory protection devices, and protective clothing. The ERF terminal as described in Chapter 5C is located in the TSC as well as the Done Alsessment computer. The documents and records storage area is shared with the Control Room.

The TSC is designed to accommodate a minimum of 25 people, five of whom are to be NRC personnel. The key VEGF staffing complement is shown on the organizational chart in Figure 2. The physical layout of the TSC is shown in Figures 3 and 4.

The alternate location for the TSC would be the control room of the unit not under emergency status.

The Operations Support Center (OSC) is located on the second floor of the maintenance building. It is the point for support personnel such as mechanics, I&C technicians, etc. to assemble and respond for assignment to specific emergency tasks. It contains emergency kits with rad monitoring equipment, first aid supplies, de-contamination supplies, respiratory protection equipment, protective clothing, portable lighting, and hand-held radios. The layout of the OSC is shown in Figure 5 and the organization is shown in Figure 6. In the event that the OSC becomes uninhabitable its functions will be conducted from the TSC.

The Emergency Operations Facility is located in the south wing of the training center, about 1.5 miles southeast of the plant. It is provided with a reinforced structure and ventilation system to provide radiological protection. The EOF provides a point to monitor the off-site radiological consequences of an event and make appropriate recommendations to the general public. The facility is equipped with portable radiation monitors and emergency kits for environmental survey teams. ERF computer terminals are located in the facility as well as a dose assessment computer. A document and records facility will be continually updated by document control personnel. Several channels of communication are possible from the EOF to ensure an effective means of controlling information. The layout of the EOF is shown in Figure 7.

The EOF is sized to accommodate a minimum of 35 persons, including 25 persons designated by GPC, nine NRC representatives, and one person from the Federal Emergency Management Agency (FEMA). The GPC designess will include representatives from Burke County and the State of Georgia. The organization of the EOF staff is shown in Figure 3. Should the EOF become uninhabitable, resources and personnel will be transferred to the alternate EOF, located in the GPC district office in Waynesboro. Procedures provide for continuity of dose assessment and docision-making functions by temporarily transferring these activities to the ISC.

The structure of the Emergency Response Organization will be determined by the level of emergency declared.

For a Notification of Unusual Event (NUE), the emergency organization is not activated. Note, however, that certain notifications and, possibly, mitigating actions will be required and that the Emergency Director is responsible for seeing that these actions are taken.

For an Alert, only the TSC and OSC will be activated. The EOF will be brought to a standby status. (All actions required to make the EOF operational will be taken but it will not be officially activated.)

For a Site Area Emergency or a General Emergency the emergency organization is fully activated.

#### 4. NOTIFICATIONS - ON-SITE

The emergency director is responsible for classifying an event and then notifying on-site personnel accordingly. This notification will involve sounding the appropriate plant emergency alarm signal, making announcements over the plant public address system, and using the plant telephone system. The primary means for notification of personnel within the protected area is the PA system. Tone signals for each class of emergency are as follows:

a. NUE: Verbal Page Announcement

b. Alert: Warble Tone
c. Site Area Emergency: Pulse Tone
d. General Emergency: Yelp Tone

The emergency director is also responsible for notifying the following:

a. Security Department

b. Plant Wilson

c. Training Center

d. Plant Operations Du y Officer

e. VEGP Emergancy Response Personnel

Note that the emergency director will direct that a number of notifications be made. He will not actually make calls - communicator/recorders will do that for him.

The Vogtle Operations Duty Officer is responsible for notifying:

- a. Corporate Duty Officer
- b. Plant Hatch Duty Ofricer

#### 5. NOTIFICATIONS - OFF-SITE

There are two primary level agencies with which Vogtle will interface in an emergency condition. These are the Burke County Emergency Management Agency, which plans and coordinates Burke County emergency response activities, and the Sher.ff's Department, which provides support for Surke County emergency response activities. There are also two primary agencies at the stats level. The Georgia Emergency Management Agency

(GEMA) is a functional unit within the State of Georgia Department of Defense. GEMA is responsible for general state emergency planning and exercises control over emergency response operations. The Department of Natural Resources (DNR) has primary responsibility for implementation of the State radiological emergency response function. And there are two Federal agencies which need to be advised of Vogtle's amergency statue. One is the Department of Energy, Savannah River (DOE-SR). About half of the VEGP plume exposure pathway EPZ falls within the site boundary of the Savannah River Plant (SRP). The U.S. Department of Energy - Savannah River Operations Office (DOL-SR) - is the responsible authority over the SRP site, which consists of lands owned and leased by the Federal government. As such, DOX-SR is responsible for the direction and control of all emergency response actions on the SRP site. The Nuclear Regulatory Commission (NRC) provides technical support for emergency response activities upon request. The notification scheme is illustrated in Figure 9.

Following declaration of the emergency condition per procedure 91001, the Emergency Director is responsible for completing attachment 2 of 91002, the "Initial Meusage Form", and for notifying the following with 15 minutes:

- a. Georgia Emergency Management Agency (GEMA) . Burks County Emergency Management Agency
- c. Dept. of Energy Savannah River (DOE-SR)

A dedicated telephone system, known as the Energency Notification Network (EFN) will normally be used to accomplish these notifications. The ENN is a dedicated telephone network with five termination points. VEGP, DOE-SR, GRMA, State of South Carolina, Burke County EOC. When one handset is lifted from its receiver, all other phones ring and a conference call is established. The backup for South Carolina is the Sackup ENN (with two digit phone number).

Backup communications can be provided by the commercial telephone system or through radio contact.

The emergency director is responsible for ordering notification of the TRC Incident Response Center (IRC) via the Emergency Notification System (ENS). The ENS is a dedicated hotline to the NRC TRC in Bethesda, MD (24 hours basis). It will also rusch the Trace II NRC office in Atlanta, GA., during normal business hours. Notification of the NRC must be accomplished within one hour of the emergency declaration. Actual methods and sequencing of notifications are discussed in implementation procedures 91002 (Notification) and 91204 (Communications).

5. PROTECTIVE RESPONSE FOR THE PUBLIC

The VEGP Emergency Director is responsible for notifying state and local authorities of emergency declarations at Plant Vogtle. He will recommend protective actions for the public to such authorities based upon EPA protective action guidelines.

Although GPC is responsible for providing an adequate means for notifying the public, State and local agencies are responsible for activating the Public Notification System. (DOR-SR will notify all persons on the SRP site within VEGP's Plume Exposure Pathway, 2PZ.)

All commercial radio stations within the plume exposure pathway EPZ and three Augusta, Georgia commercial television stations have agreed to broadcast emergency instructions and information in cooperation with off-site officials. Each of these commercial stations is a member of the Emergency Broadcasting System (EBS). State and local officials are authorized to activate the EBS. The National Weather Service has agreed to activate the National Oceanic and Atmospheric Administration (NOAA) Alert System in the plant vicinity when requested by appropriate governmental officials. The NOAA weather radio broadcasts 24 hours per day. None of the local commercial radio stations broadcasts 24 hours a day. In the event of an emergency, all of the local stations have agreed to come on the air; their FCC licenses permit off hour broadcasts in case of an emergency. Local stations expect to be ready for broadcasting in a half hour or so following notification.

The primary means for alerting and providing initial instructions to the public is by the NOAA Alert System. GPC provides NOAA radio receivers for all establishments (residences, businesses, schools, etc.) within the plume exposure pathway EPZ. The emergency message will be broadcast on the NOAA weather radio immediately after completion of an acoustic alerting signal. NOAA will periodically broadcast short, updated messages as warranted. Detailed information and instructions may be broadcast on local commercial radio and television stations. State and local officials will provide and coordinate the messages to be broadcast by NOAA weather radio. ESS, and local radio and television stations.

The primary alerting mechanism will be augmented by secondary means using State and local resources.

- a. Vehicles equipped with sirens and/or loudspeakers ravelling the road network. These vehicles would be supplied by the Burke County Sheriff's Department, the Georgia State Patrol and/or the County Emergency Management Agency.
- b. Boats equipped with a voice or sound device travelling the Savannah River to notify sportsmen or recreationers. These boats would be supplied locally by the Georgia Department

of Natural Resources, Game and Fish Division, and the Burke County Emergency Management Agency.

As directed by procedure 91001, the emergency director is responsible for completing a "Followup Emergency Hessage" form to provide periodic updates to off-site Federal, State and local authorities.

#### 7. PROTECTIVE RESPONSE

Although protective response recommendations will be made by the VEGP emergency director to state and local agencies, implementation of protective actions for the public is the responsibility of state and local officials and will not be discussed here. Protective actions for on-site personnel will be implemented to varying degrees for Alert, Site Area, and General Emergency classifications. Protective response at the NUE level may be taken at the discretion of the emergency director.

Upon activation of the plant emergency alarm, plant personnel assigned specific emergency responsibilities proceed to their designated emergency response location, where they are logged in and accounted for. Accountability reports for the control room, operations support center (OSC), and technical support center (TSC) are provided to the Security Department as soon as possible. Thereafter, personnel emergency assignment tracking procedures in place at the TSC are used to account for all on-site individuals throughout the emergency.

Nonessential plant personnel, visitors, and contractors located within the protected area leave the protected area upon hearing the emergency alarm.

Plant personnel, visitors, and contractors located inside the protected area, as well as those leaving the protected area as described above, assemble at assembly locations outside the protected area. Two areas, GPC's Plant Wilson and the Voqtle Electric Generating Plant (VEGP) recreation areas, have been designated as assembly areas.

If protected area accountability reveals a missing person, the emergency director assembles a search and rescue team per emergency response procedures. The search and rescue team obtains information on last known location from the computer system or reports from other personnel. A search of likely areas is conducted until the missing individual is located.

Evacuation of nonessential personnel (if feasible) is ordered by the emergency director whenever:

- a. It is determined that a threat to the safety of on-site personnel exists.
- b. A site area or general emergency is declared.

Nonessential station personnel, visitors, and contractors proceed to the designated assembly area. The appropriate assembly area and evacuation routes are determined by the emergency director based upon radiological conditions, wind direction, and weather.

Plant emergency kits and other supplies are used to provide dosimetry, monitoring equipment, protective clothing, and respiratory protection gear for individuals arriving or remaining on site during the emergency. A supply of potassium iodide is available for use in accordance with emergency response procedures.

## VEGP EMERGENCY RESPONSE ORGANIZATION

## EMERGENCY DIRECTOR

OVERALL RESPONSIBILITY FOR DIRECTING VEGP STAFF IN AN EMERGENCY SITUATION

EMERGENCY OPERATIONS FACILITY (EOF) OVERALL MANAGEMENT OF EMERGENCY RESPONSE, OFFSITE RADIOLOGICAL ASSESSMENT, COORDINATION WITH OFFSITE AUTHORITIES, AND RECOVERY OPERATIONS.

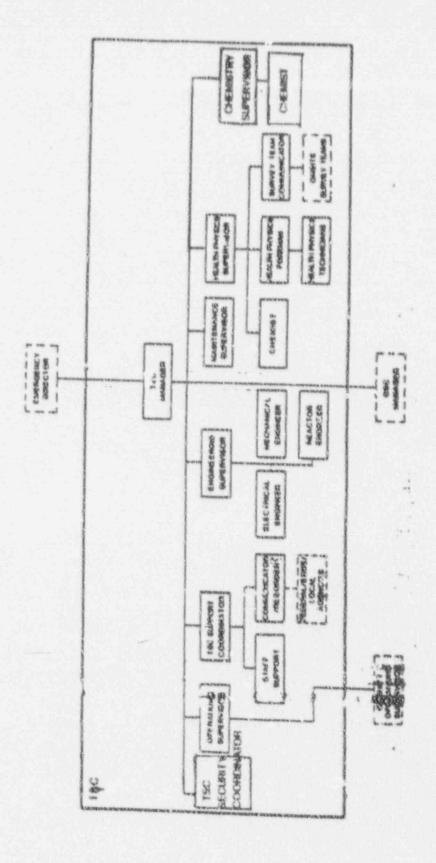
TECHNICAL SUPPORT CENTER (TSC) PROVIDES TECHNICAL SUPPORT FOR OPERATIONS PERSONNEL IN AMALYSIS OF ABNORMAL PLANT CONDITIONS.

CONTROL ROOM

OPERATIONS SUPPORT CENTER
OPERATIONAL SUPPORT PERSONNEL
(TECHNICIANS, MECHANICS, ETC.)
ASSEMBLE TO SUPPORT EMERGENCY
RESPONSE.

FIGURE 1

LU-HO-40101-001



O

- - COOMSIBATION/THPORMATION FLOW

ZEROWING RESPONSIBILITY COCKEINATION/THFORMATION FLOW

FIGURE 2 LO-HO-A0101-001

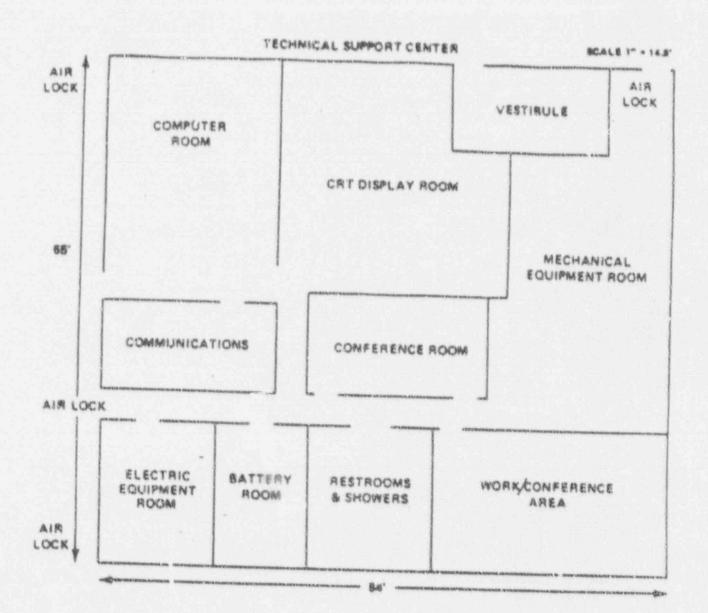


FIGURE 3

LO-HO-40101-001

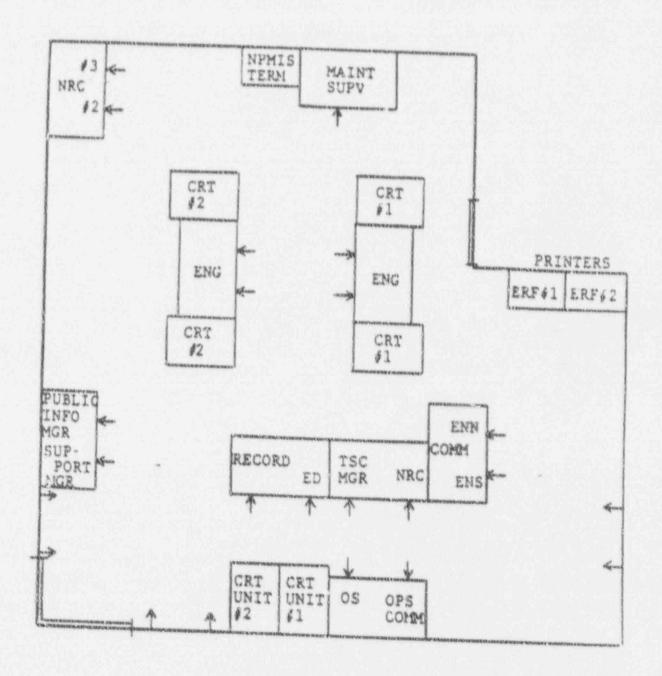
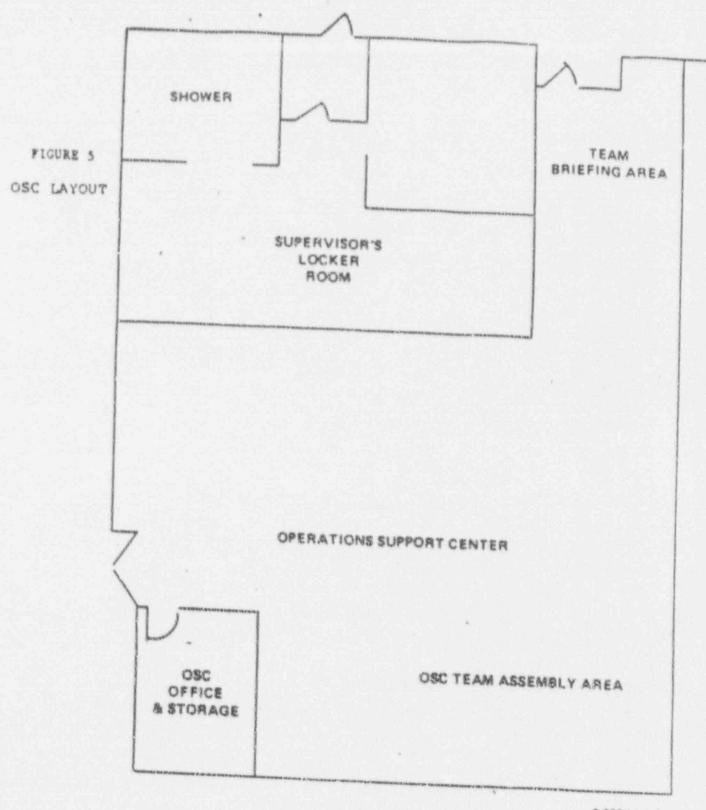


FIGURE 4

LO-HO-40101-001

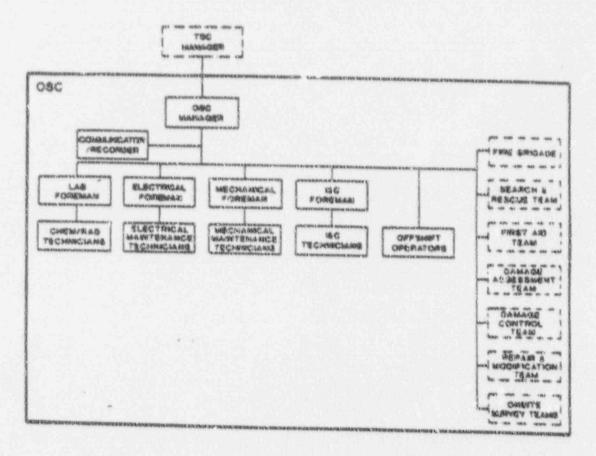


0.225" - 1.0

MAINTENANCE BUILDING SECOND FLOOR

FIGURE 5

## OSC ORGANIZATION CHART

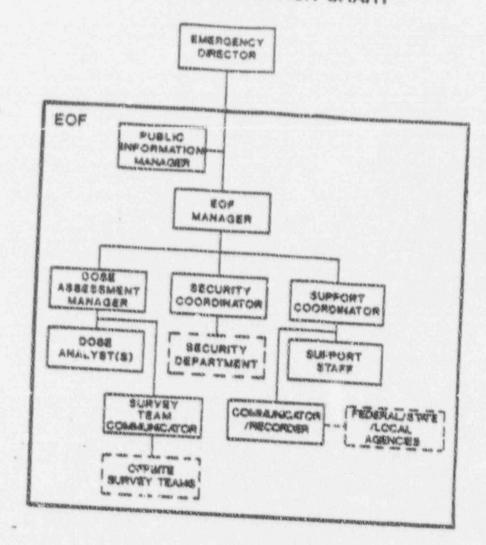


--- GOORDBUTTON/SUFORMATION FLOW
L--- GOORDBUTTON/SUFORMATION FLOW
L---- BUDGGETER LOCATION OVITED FACE EX

FICURE 6

FIGURE 7

## EOF ORGANIZATION CHART



REPORTING RESPONSIBILITY

COORDINATION/INFORMATION FLOW

INDICATES LOCATION OUTSIDE FACILITY

FKLEE &

LO-HO-40101 001

## MOTIFICATION SCHENE

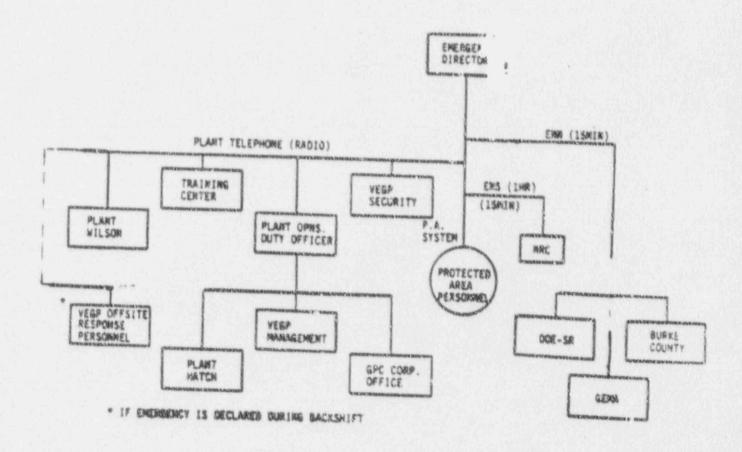


FIGURE 9 LD-HD-40101-001