F Emergency Actions and Measures

This section of the Plan describes the actions to be taken and the organization required to mitigate the emergency commensurate with each classification.

The planning, training, and communications for Station and offsite personnel, including the general public, are established for each classification of emergency. The personnel, the organizations, and the expertise required to manage each classification of emergency are different. The resources established for the most severe classification are available for the other three classified events. Personnel required for the composition of the Emergency Response Organization will come primarily from Station personnel who are specifically trained for the positions that they are to fill. The persons requested to staff the Emergency Response Facilities will normally assume emergency responsibilities that are directly related to their normal Station duties. Assignment to the Emergency Response Organization is described in Station Procedure 0PGP05-ZV-0003, Emergency Response Organization. The relief and turnover of Emergency Response Organization position responsibilities will be accomplished in accordance with Emergency Response Procedures. Relief staff will possess the required qualifications and training, personnel may be appointed or assigned a position or duties by the Emergency Director to meet unforeseen circumstances. The Shift Supervisor will maintain the position of Emergency Director until relieved by the Technical Support Center Manager or Emergency Operations Facility Director. Responding Emergency Response Organization personnel will assume positions from the onshift emergency workers after turnover briefings. A description of the Station Emergency Response Organization is contained in Section C of this Plan.

F.1 Initiating Actions

In an emergency, immediate response actions are directed toward mitigating the consequences of the event in a manner that will afford protection to Station personnel and the general public. Once corrective actions have restored the Station to a safe, stable condition, recovery actions may be initiated. Recovery actions are fully discussed in Section L of this Plan. The Station is responsible for performing recovery measures to restore the Station to normal operating conditions.

In the beginning minutes of a declared emergency, many actions are initiated. The Plant Operations staff begins immediate steps to restore the Station to a stable condition in accordance with approved Station Emergency Operating Procedures. Offsite protective action recommendations are issued at a General Emergency Declaration. Radiological surveys are started as needed. The Onshift Emergency Response Organization assumes the Station emergency positions as required.

F.2 Offsite Agency Notifications

Emergency Response Procedure 0ERP01-ZV-IN02, Notifications to Offsite Agencies, describes the initial and follow-up messages to the State and County authorities, Nuclear Regulatory Commission, and others of the classification, escalation, de-escalation or termination of the declared Station emergency. In accordance with this

emergency response procedure, the following information is provided to State and local governments. This information includes but is not limited to:

- *Station status,*
- *Release status and dose projections,*
- *meteorological conditions,*
- *results of Offsite Field Team monitoring, and*
- *protective action recommendations.*

F.3 Assembly and Accountability

The assembly and accountability of Protected Area personnel will be accomplished in accordance with Emergency Response Procedure 0ERP01-ZV-IN04, Assembly and Accountability. Personnel in the Protected Area will be monitored for contamination. The Emergency Director initiates the Assembly and Accountability process by directing the sounding of the Assembly Alarm and providing assembly instructions over the plant public address system. Personnel shall assemble in predetermined assembly areas identified in 0ERP01-ZV-IN04, Assembly and Accountability.

Personnel assembling in the Protected Area of the Station are accounted for by the security computer system. Backup methods are provided in the event the security computer fails. The Emergency Response Procedure 0ERP01-ZV-IN04, Assembly and Accountability, is designed to achieve this emergency action within 30 minutes. A list of missing personnel compiled by the Security Force Supervisor will be provided to the Security Manager for dissemination to the Emergency Director. A Search and Rescue team will be dispatched to locate and, if necessary, rescue missing Station personnel.

Evacuated personnel will be monitored at an offsite Reception Center, if required by radiological conditions.

F.4 Access Control to Site Areas

Access control to site areas is the overall responsibility of the Security Manager. During an Alert, Site Area Emergency, or General Emergency, individuals entering or leaving the site may be directed to one gatehouse or the Emergency Operations Facility which may serve as the alternate facility for access control operations.

F.5 Site Evacuation

Site evacuation may be implemented at any time under the authority of the Emergency Director and shall be implemented after personnel accountability for a Site Area Emergency or General Emergency. The Emergency Director orders the evacuation of Station personnel after careful consideration of the benefits and risks involved. The detailed responsibilities and functions of the Station personnel during an evacuation are contained in Emergency Response Procedure 0ERP01-ZV-IN05, Site Evacuation.

When site evacuation is ordered and contamination monitoring cannot be performed onsite due to a radiological release, personnel from the affected area(s) will report to designated Offsite Reception Center(s), activated by the Matagorda County Emergency Management Director, for radiological monitoring and decontamination, if required.

A site evacuation is considered when the conditions that require an area evacuation are not confined to a Station building or when general area radiation levels outside the Radiologically Controlled Area exceed Emergency Plan limits as stated in Section J of this Plan. In addition, a site evacuation could be initiated following an area evacuation if a hazard continues to increase in severity or spreads to other areas, or the Emergency Director deems it necessary that nonessential personnel be evacuated from the Station. Emergency Response Procedure 0ERP01-ZV-IN05, Site Evacuation takes into consideration evacuation routes and alternatives for inclement weather and radiological conditions. A site evacuation may be delayed by the Emergency Director if any of the following conditions exist:

- *Severe weather conditions which would threaten safe transport;*
- *A significant radiological hazard which would be encountered;*
- *A security threat occurring which would have an adverse impact on personnel leaving the site*
- *A condition similar to these in magnitude which, in the opinion of the Emergency Director would adversely affect site personnel.*

F.6 Onsite Shelter

Shelter may be implemented under the authority of the Emergency Director at any time. All hazards are monitored by the Emergency Response Organization (ERO) and appropriate protective actions given to emergency workers. The Emergency Director orders onsite shelter of station nonessential personnel after careful consideration of the benefits and risks involved. The responsibilities and functions of the station nonessential personnel during onsite shelter are contained in Emergency Response Procedure 0ERP01-ZV-IN05, Site Evacuation.

F.7 Medical Assistance

Medical assistance for offsite treatment of radiologically contaminated personnel is described in Station Procedure 0PGP03-ZA-0106, Emergency Medical Response Plan and 0POP04-ZO-0004, Personnel Emergencies, and in Section J of this Plan.

F.8 Emergency Classification Actions

The following subsections describe the emergency actions to be taken during any of the four declared emergency classifications. The resources described are what is normally expected to be used for a particular classification, but are available to any emergency classification.

F.8.1 Unusual Event

Typical actions for an Unusual Event emergency classification are as follows:

- *Improve station conditions;*
- *Alert the onshift personnel;*
- *Notify the State, County and Nuclear Regulatory Commission agencies;*
- *Terminate or mitigate the consequences of the event.*

The Control Room is the primary control center for emergency response, notifications, Station control, and monitoring of process parameters for this class of emergency. A functional diagram of communication links for an Unusual Event is depicted in Figure F-1.

Actions for an Unusual Event are normally handled by the onshift Emergency Response Organization personnel complement and usually require no outside assistance. Additional Emergency Response Organization personnel are available through Emergency Response Procedure 0ERP01-ZV-IN03, Emergency Response Organization Notification.

State and County authorities will not be required to take any action unless requested by their respective Emergency Directors or the Station Emergency Director.

Information concerning the Unusual Event will be provided to Public Affairs for dissemination to the general public. The Unusual Event emergency classification will be maintained until an escalation or termination occurs.

There are normally no Recovery actions for an Unusual Event emergency classification. Termination will usually be declared for an Unusual Event emergency classification.

F.8.2 Alert

Typical actions for Alert classification are as follows:

- *Alert the onshift personnel of the emergency classification;*
- *Terminate or mitigate the consequences of the event;*
- *Augment the onshift complement by activating the Technical Support Center and Operations Support Center Emergency Response Facilities;*
- *The Emergency Operations Facility will be fully staffed and may be activated at the discretion of the Emergency Director or Facility Director;*
- *Provide dose estimates and projections and meteorological assessments to State and County authorities if radioactive material is being released or may be released;*

- *Provide Station status to State and County authorities;*
- *Make specified immediate and follow-up notifications to State and County authorities and the Nuclear Regulatory Commission; and,*
- *Staff the Joint Information Center*

The initial recognition of an emergency condition, the classification of the emergency, and the immediate and follow-up actions by the Onshift Emergency Response Organization are performed in accordance with Emergency Response Procedures. The Control Room is the primary control center for accident mitigation supplemented by the Technical Support Center for emergency management and monitoring of process parameters. Notifications, Station status updates, meteorological assessments, dose estimates and projections, and offsite protective action recommendations are normally provided offsite from the Technical Support Center or the Emergency Operations Facility. A functional diagram of communication links for an Alert is depicted in Figure F-2. The Technical Support Center is used to monitor selected Station parameters for assessment of Station conditions. The Technical Support Center also functions to provide the Control Room Shift Supervisor prompt relief as the Emergency Director so that he can place his primary focus on returning the plant to a stable condition. The Operations Support Center is used as a staging area for Emergency Response Teams and backup personnel. The Technical Support Center will be organized and coordinated by the Technical Support Center Manager and the Operations Support Center will be organized and coordinated by the Operations Support Center Coordinator. The Operations Support Center's priorities are established by the Technical Support Center Manager. The Maintenance Manager functions as the Technical Support Center interface for all repairs requested of the Operations Support Center. Further staffing will be dependent on the duration of the emergency. Emergency Response Organization personnel other than the onshift complement are available to staff the Technical Support Center, Operations Support Center and the Emergency Operations Facility. The Technical Support Center Manager is the Station authority for emergency management and has Emergency Director responsibility and authority. Data links between the Technical Support Center, Operations Support Center, Control Room, and the Emergency Operations Facility will provide process data, radiological data, Emergency Response Team status, and Station status to the Technical Support Center. An exception to the above facility staffing occurs when an Alert is declared due to a hurricane. In this case, the Emergency Operations Facility personnel can be dismissed at the discretion of the Technical Support Center Manager.

Onsite radiological exposure control is described in Emergency Response Procedure 0ERP01-ZV-IN06, Radiological Exposure Guidelines, and Section J of this Plan.

The Alert will be maintained until escalated, downgraded or terminated by the Emergency Director.

Offsite dose calculations will be performed in accordance with Emergency Response Procedure 0ERP01-ZV-TP01, Offsite Dose Calculations if radioactive releases occur. Offsite protective action recommendations are not required at an Alert.

F.8.3 Site Area Emergency

Typical actions for the Site Area Emergency classification are as follows:

- *Alert the onshift personnel of the emergency classification;*
- *Terminate or mitigate the consequences of the event;*
- *Augment the onshift complement by activating all Emergency Response Facilities;*
- *Provide dose estimates and projections and meteorological assessments to State and County authorities if radioactive material is being released or may be released;*
- *Provide Station status to State and County authorities;*
- *Conduct assembly and accountability of Protected Area*
- *Evacuate the site as required;*
- *Make specified immediate and follow up notifications to State and County authorities and the Nuclear Regulatory Commission; and,*
- *Monitor the environs of the Station to determine doses.*

The initial recognition of an emergency condition, the classification of a Site Area Emergency, and the immediate and follow up actions by the onshift Emergency Response Organization are performed in accordance with Emergency Response Procedures. The Technical Support Center is the primary control center for direction of the Emergency with technical expertise, Station control, and monitoring of process parameters. At the Site Area Emergency, activation of the Emergency Operations Facility and the Joint Information Center occurs. A functional diagram of communication links for a Site Area Emergency is depicted in Figure F-2. Further staffing will be dependent on the duration of the emergency.

Personnel from the Station Emergency Response Organization are available to staff the Technical Support Center, the Operations Support Center, and the Emergency Operations Facility. Upon assumption of command and control, the Emergency Operations Facility Director is the Station authority for emergency management and has Emergency Director responsibility and authority. Data links between the Emergency Operations Facility, Technical Support Center, Operations Support Center, and the Control Room will provide process data, radiological data, emergency response team status, and Station status to the Emergency Operations Facility. An exception to the above facility staffing occurs when a Site Area Emergency is declared due to a hurricane. In this case, the Emergency Operations Facility and Joint Information Center activation can be delayed at the discretion of the Technical Support Center Manager.

A Site Area Emergency requires close coordination of activities between the State and County authorities and the Station Emergency Director. Protection of the site personnel will be directed toward assessing the doses and plant conditions and implementing appropriate protective actions. Personnel at the Station are the responsibility of the Emergency Director. State and County authorities will activate emergency centers and place key personnel on emergency position status.

No offsite protective action recommendations are expected for a Site Area Emergency.

The Emergency Operations Facility Director will provide management level interface with the Nuclear Regulatory Commission and the State and County authorities. Provisions are made in the Emergency Operations Facility to accommodate various State, County, and Federal personnel. To ensure the consistency of actions and information, the Emergency Operations Facility Director shall remain the single onsite source for managing the emergency.

The Joint Information Center will be used for briefing the news media. Media relations are described in Section K of this Plan.

The Site Area Emergency will be maintained until escalation, downgrading, recovery or termination occurs.

A Recovery organization will be established commensurate with the cleanup effort required. Recovery actions for a Site Area Emergency are described in Section L of this Plan.

Management of the Site Area Emergency may continue for an extended period and relief of personnel may be required. Due to the possible length of time required to recover or terminate this emergency classification, food, lodging and transportation may be required for emergency personnel. The logistics to support the Site Area Emergency are depicted in Emergency Response Procedures, i.e., 0ERP01-ZV-EF09, Procurement/Resources Supervisor, 0ERP01-ZV-EF28, Assistant Support Organization Director, and 0ERP01-ZV-TS09, Administrative Manager.

F.8.4 General Emergency

Typical actions for the General Emergency classification are as follows:

- *Alert the onshift personnel of the emergency classification;*
- *Terminate or mitigate the consequences of the event;*
- *Augment the onshift complement by activating all Emergency Response Facilities;*
- *Provide dose estimates and projections and meteorological assessments to State and County authorities if radioactive material is being released or may be released;*
- *Provide Station status to State and County authorities;*
- *Evacuate the site as required;*

- *Make specified immediate and follow up notifications to State and County authorities and the Nuclear Regulatory Commission;*
- *Monitor the environs of the Station to determine doses;*
- *Make protective action recommendations to State and County authorities; and*
- *Provide information to the Joint Information Center for press releases.*

The initial recognition of a General Emergency condition, the classification of the emergency, and the immediate and follow-up actions by the onshift Emergency Response Organizations are performed in accordance with Emergency Response Procedures. The Emergency Operations Facility is the primary control center for direction of the emergency. Technical expertise is provided from the Technical Support Center for emergency management, Station control, and monitoring of process parameters. Notifications, Station status updates, and meteorological assessments of dose estimates and projections are provided from the Emergency Operations Facility. A functional diagram of communication links for a General Emergency is depicted in Figure F-2. The Operations Support Center is used as a staging area for Emergency Response Teams and backup personnel. The Technical Support Center actions and personnel are organized and coordinated by the Technical Support Center Manager, and the Operations Support Center personnel and actions are coordinated by the Operations Support Center Coordinator. Further staffing will be dependent on the duration of the emergency. Personnel from the Station Emergency Response Organization are available to staff the Emergency Operations Facility, Technical Support Center, Operations Support Center and the Joint Information Center. The Emergency Operations Facility Director is the Station authority for emergency management. Data links between the Emergency Operations Facility, Technical Support Center, Operations Support Center, and the Control Room will provide process data, radiological data, emergency response team status and Station status to the Emergency Operations Facility. In the unlikely event that the Emergency Operations Facility becomes uninhabitable, an Alternate Emergency Operations Facility has been established in Bay City, Texas, at the Bay City Service Center, 7th and Avenue M. Emergency Response Facilities are further described in Section G of this Plan.

The General Emergency requires close coordination of activities between the State and County authorities and the Station Emergency Director. Protection of site personnel and the public will be directed toward assessing the doses and plant conditions and recommending appropriate protective actions. The alerting, sheltering, and/or evacuation of the public is the responsibility of County authorities. Personnel at the Station are the responsibility of the Emergency Director. State and County authorities will activate emergency centers and place key personnel on emergency position status. The State may provide confirmatory offsite radiation monitoring.

Section I provides additional details on offsite protective action recommendations. State and County authorities have formulated plans to alert, shelter and/or evacuate

persons who may be subject to an exposure in excess of Environmental Protection Agency Protective Action Guidelines.

Onsite radiological exposure control is described in Emergency Response Procedure 0ERP01-ZV-IN06, Radiological Exposure Guidelines, and Section J of this Plan.

The Emergency Operations Facility Director will interface with the Nuclear Regulatory Commission and the State and County authorities. Provisions are made in the Emergency Operations Facility to accommodate various State, County, and Federal personnel. To ensure the consistency of actions and information, the Emergency Operations Facility Director shall remain the single onsite source for managing the emergency.

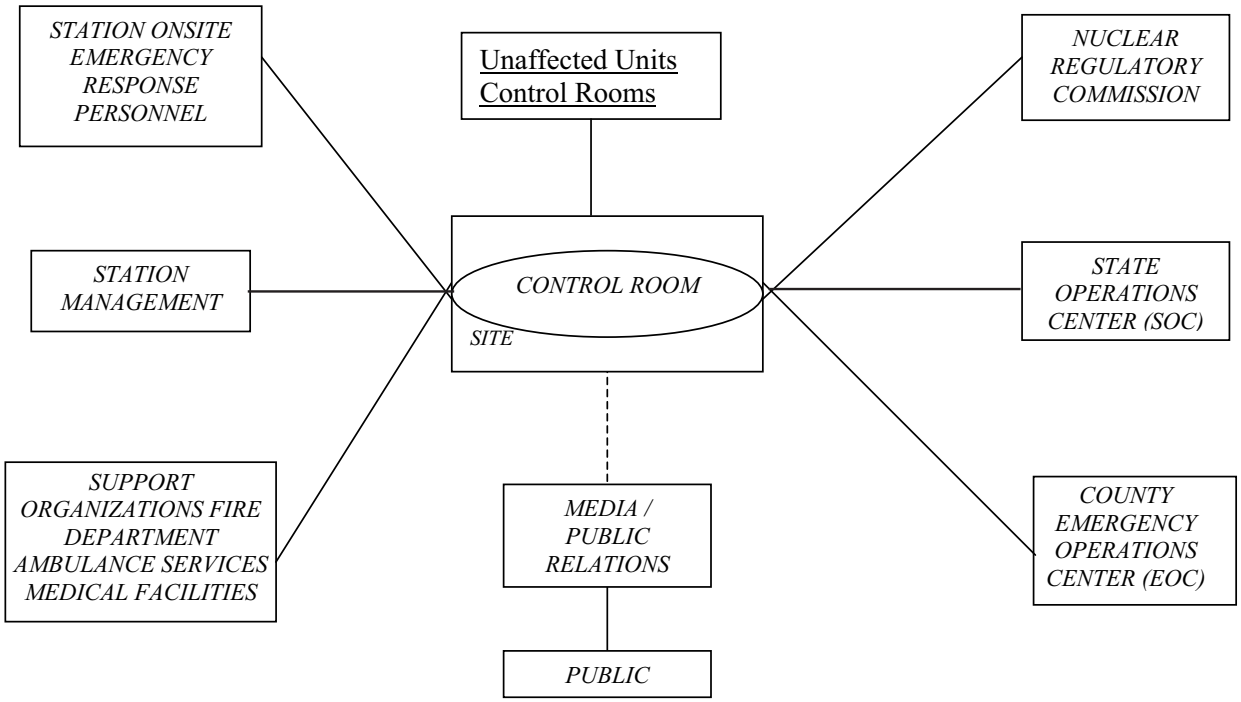
The Joint Information Center will be used for briefing the news media. Media relations are described in Section K of this Plan.

The General Emergency will be maintained until de-escalation, recovery, or termination occurs.

Recovery actions for a General Emergency are described in 0ERP01-ZV-RE01, Recovery Operations and Section L of this Plan.

An estimate of the exposure to the public near the Station because of an emergency condition will be performed in accordance with procedure 0ERP01-ZV-TP01, Offsite Dose Calculations.

Management of the General Emergency may continue for an extended period and relief of personnel will be required. Due to the possible length of time required to terminate this emergency classification, food, lodging, and transportation may be required for emergency personnel. These items are planned for in the General Emergency as depicted in Section C of this Plan and appropriate Emergency Response Procedures.



Legend: —— Primary Interface ------ Coordination Interface

Figure F-1 Emergency Response Facilities Communications Pathway Typical Functional Diagram Unusual Event

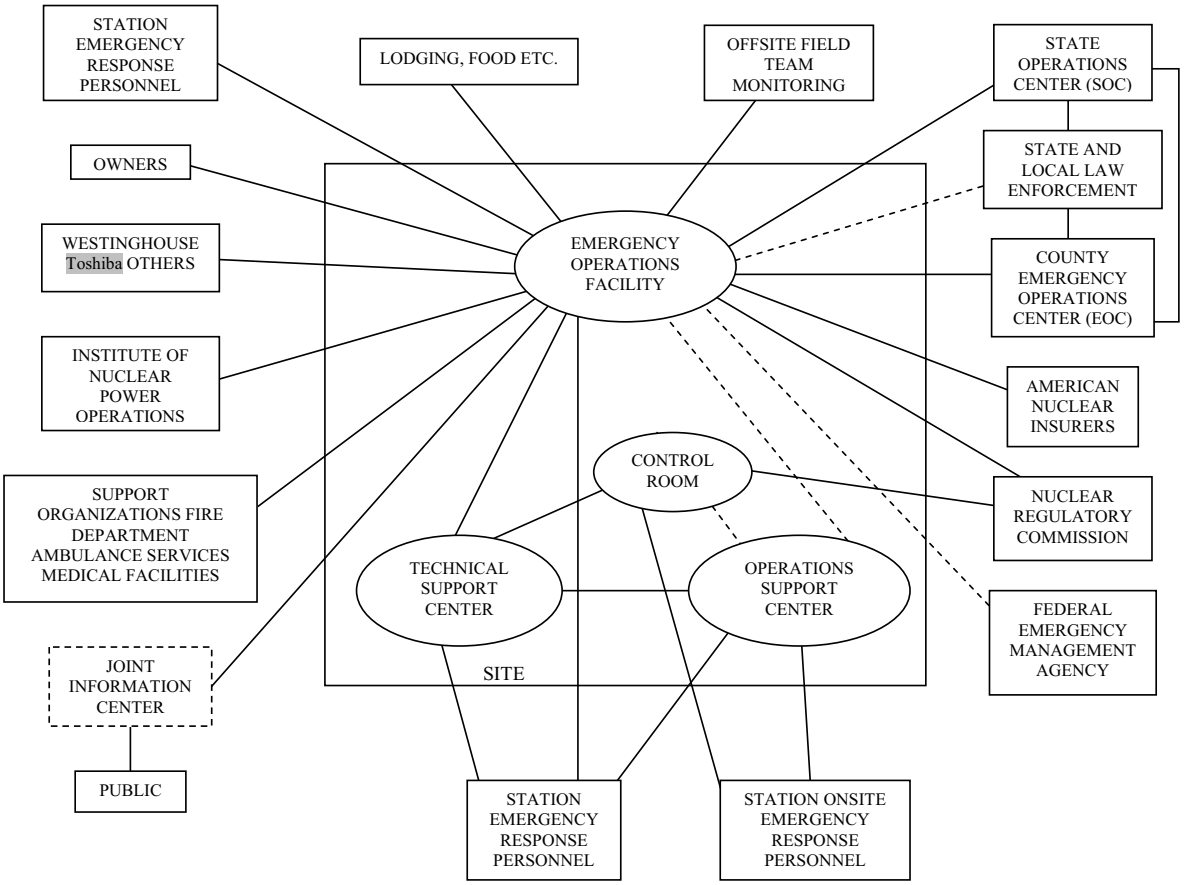


Figure F-2 Emergency Response Facilities Communications Pathway Typical Functional Diagram Alert, Site Area, and General Emergencies