

## **G Emergency Response Facilities**

*This section of the Plan describes the location of equipment and facilities maintained by the Station for use in the event of an emergency at the Station. The design of the Station's Emergency Response Facilities meets the intent of Supplement 1 to NUREG-0737, Clarification of Three Mile Island Action Plan Requirements, and NUREG-0696, Functional Criteria for Emergency Response Facilities. The locations of the Emergency Response Facilities are indicated on Figures G-1, G-4 and G-8. A typical listing of emergency supplies and equipment maintained by the Station is given in Table G-1. Plant records necessary to perform the functions of each onsite facility are available in and/or at each onsite facility listed in Table G-2. A detailed list of Control Room equipment and instrumentation is provided in Chapter 7 of the Final Safety Analysis Reports. The equipment and facilities comprising the Operations Support Center, Technical Support Center, and Emergency Operations Facility do not perform any safety-related functions. Their design assures that any fault or malfunction does not compromise any safety-related equipment, components or structures.*

### **G.1 Control Room**

*The Station Operations staff will function from the Control Room for each level of emergency at the Station. The Control Room is radiologically hardened and seismically designed to withstand all credible events that could occur at the Station.*

*The Control Room is the primary facility at the Station in which Station conditions are monitored and controlled and where corrective actions are initiated to mitigate any abnormal occurrence. In the event the Control Room must be evacuated, a remote Auxiliary Shutdown Panel has been provided for safe shutdown of the Station. Control Room habitability and radiation monitoring capabilities, as well as Auxiliary Shutdown capability, are discussed in detail in the Final Safety Analysis Reports.*

### **G.2 Operations Support Center**

*The Operations Support Center is the onsite emergency response staging area, separate from the Control Room and the Technical Support Center. The Operations Support Center is used for assembling the plant emergency response teams and other Station personnel. A typical layout for each Unit 1 and 2 Operations Support Center is provided in Figure G-2, a typical layout of each Unit 3 and 4 Operations Support Center is provided in Figure G-6. If the Operations Support Center must be evacuated, the personnel from the Operations Support Center will relocate to the Operations Support Center of the similar Reactor Type unaffected unit. Communications are provided between the Operations Support Center, Technical Support Center, Control Room and the Emergency Operations Facility. Personnel are assigned duties in support of emergency response operations by the Operations Support Center Coordinator, located in the Operations Support Center. An emergency Assembly Area is located in the Work Control Center of the Maintenance Operations Facility. This emergency Assembly Area is utilized for the accountability of Station personnel, other than non-essentials, without Emergency Response Organization assignments during the assembly and accountability process.*

*The Operations Support Center is designed to be activated within approximately 75 minutes after declaration of an Alert, in conjunction with the Technical Support Center. Radiation levels in and around the Operations Support Center are assessed during radiological events.*

### **G.3 Technical Support Center**

*The Technical Support Center is the onsite technical support facility for emergency response. The Station provides one Technical Support Center for each unit. Unit 1 and 2 facility is located on the 72-foot elevation of the respective unit's Electrical Auxiliary Building, Unit 3 and 4 facility is located in the respective unit's Service Building and are within a two minute walking distance from the units' Control Room as described in the Final Safety Analysis Reports. In the event of a non-unit specific emergency, the Unit 1 Technical Support Center will be activated. Otherwise, the Technical Support Center in the affected unit will be activated. These facilities are equipped to enable response personnel to monitor the course of an accident and plan corrective and recovery actions. Personnel access to the activated Technical Support Center is controlled. During periods of activation, the affected Technical Support Center is staffed continuously to provide plant management and technical support to plant operations personnel and to relieve the reactor operators of peripheral duties and communications not directly related to reactor system manipulations. The typical layout of each Unit 1 and 2 Technical Support Center is provided in Figure G-3. The typical layout of each Unit 3 and 4 Technical Support Center is provided in Figure G-7.*

*Each Technical Support Center is provided sufficient radiological protection and monitoring equipment to assure that radiation exposure to any person working in the activated Technical Support Center will not exceed five (5) rem TEDE or twenty-five (25) rem thyroid CDE during the duration of a declared accident. Should the affected unit's Technical Support Center become uninhabitable, the Emergency Response personnel within the Technical Support Center can relocate to other emergency response facilities and resume their assigned functions.*

*The Heating, Ventilation and Air Conditioning (HVAC) for each Technical Support Center is designed to provide a suitable environment during normal and post-accident operation, including protection from post-accident radiological releases. The Technical Support Center HVAC System will be verified when positioned in the recirculation mode. Each respective Technical Support Center HVAC system is normally powered from a non-class 1E Motor Control Center. Each respective Technical Support Center emergency non-class 1E diesel generator can provide full load capability should power be lost. Each respective Technical Support Center diesel generator has the capability of continuous operation for a minimum of seven days.*

*Radiation monitoring and smoke detection capability, alarms and indications are provided in each respective Technical Support Center. Detection of high airborne levels of radioactive materials causes each respective Technical Support Center HVAC to automatically switch over to activated charcoal filtration. Detection of smoke levels above tolerance causes the system to automatically isolate.*

Each Technical Support Center is designed to be activated within approximately 75 minutes after declaration of an Alert, in conjunction with activation of the Operations Support Center. The Technical Support Center may activate simultaneously with activation of the Operations Support Center.

#### G.4 Emergency Operations Facility

~~The Emergency Operations Facility is located approximately one-half mile East of the center line of Unit One, adjacent and connected to the Nuclear Training Facility. The location of the Emergency Operations Facility and evacuation routes from the Facility are defined on Figure G-4. The floor plan of the Emergency Operations Facility is depicted on Figure G-5. When activated, the Emergency Operations Facility also serves as the primary location for the following typical functions:~~

The Emergency Operations Facility is located in Bay City, Texas at 4000 Avenue F, approximately 12.5 air miles north-northeast of the Station. Figure G-4 depicts the location compared to the site. The floor plan of the Emergency Operations Facility is depicted on Figure G-5. When activated, the Emergency Operations Facility serves as the primary location for the following typical functions:

- Coordination between Station and non-station organizations, such as the Department of State Health Services;
- A coordination center for the preparation and approval of news releases and bulletins for release of information to the media and notifications to offsite agencies;
- A central point for coordinating all Station offsite dose projection and radiological monitoring activities at the time of the emergency; and
- The primary location for coordinating both technical and non-technical support activities of personnel brought in to assist Station personnel.

The Emergency Operations Facility provides for management of overall Station emergency response, coordination of radiological and environmental assessment, determination of recommended offsite protective actions, and coordination of emergency response activities with Federal, State, and County authorities. The Emergency Operations Facility can be activated within approximately 75 minutes of declaration of Site Area Emergency or higher. When activated, the Emergency Operations Facility will be staffed by Emergency Response personnel.

A qualified Emergency Operations Facility Director will manage activities in the Emergency Operations Facility.

Resources are provided in the Emergency Operations Facility for the acquisition, display, and evaluation of radiological and meteorological data and containment conditions necessary to perform accident assessment and determine protective measures. This equipment and instrumentation is described in Section H of this Plan.

The Emergency Operations Facility provides for occupancy by Nuclear Regulatory Commission, Federal Emergency Management Agency, State, County, American Nuclear Insurers, and Station Emergency Response Organization personnel.

The Emergency Operations Facility provides sufficient radiological protection and monitoring equipment to assure that radiation exposure to any person working in the Emergency Operations Facility will not exceed five (5) rem TEDE or twenty-five (25) rem thyroid CDE during the duration of a declared emergency. ~~The Emergency Operations Facility design affords a minimum protection factor of five, as defined for attenuation of 0.7 MeV gamma radiation in the Emergency Operations Facility work/operations areas. The Emergency Operations Facility has the capability for decontaminating personnel and providing protective clothing. Should the Emergency Operations Facility become uninhabitable, necessary personnel will move to the Alternate Emergency Operations Facility.~~

~~The HVAC for the Emergency Operations Facility is designed to provide a suitable environment during normal and post accident operation, including protection from post accident radiological releases via a series of enclosed High Efficiency Particulate Air filters. The Emergency Operations Facility HVAC system is normally powered from a non-Class 1E Motor Control Center. The Emergency Operations Facility emergency non-Class 1E diesel generator can provide full load capability for approximately 14 days should power be lost. Radiation monitoring and smoke detection capability, alarms and indications are provided in the Emergency Operations Facility. Detection of high airborne levels of radioactive materials causes an alarm to sound allowing for manual isolation of the HVAC from non-filtered to filtered mode of operation. Detection of smoke levels above tolerance causes an alarm to allow manual isolation of the HVAC system.~~

### G.5 ~~Alternate Emergency Operations Facility~~

~~The Alternate Emergency Operations Facility is located in Bay City, Texas, 7th and Avenue M, approximately 14 air miles north northeast of the Station, in the Bay City Service Center. Activation of the Alternate Emergency Operations Facility can be accomplished within four hours. Typical equipment and instrumentation that can be transported to the Alternate Emergency Operations Facility when it is activated includes, but is not limited to, the following:~~

- ~~■ Telephone system, radios and other data communication equipment.~~
- ~~■ Information displays, including status boards.~~
- ~~■ Miscellaneous office supplies and other equipment.~~

~~The Alternate Emergency Operations Facility contains office spaces of approximately 1000 square feet, and an auditorium space of approximately 4500 square feet.~~

~~Emergency Response personnel will relocate and activate the Alternate Emergency Operations Facility if the Station Emergency Operations Facility is uninhabitable or inoperable per the direction of the Emergency Operations Facility Director.~~

### G.5 Alternate TSC/OSC

For emergencies where the site is under threat of, or experiencing, hostile actions, Emergency Response Organization (ERO) members may not be able to safely access the on-site Technical Support Center (TSC) or Operations Support Center (OSC). Under these conditions, ERO members are directed to a staging area at an Alternative Facility located in the Emergency Operations Facility / Joint Information Center (EOF/JIC), which is located in Bay City, Texas at 4000 Avenue F, approximately 12.5 air miles north-northeast of the Station. Alternative Facility and Alternate TSC/OSC may be used interchangeably in this document or its implementing procedures. Use of the Alternative Facility by TSC and OSC ERO members will minimize delays in overall site response and allow for a swift, coordinated augmentation response when the site is deemed accessible. The EOF/JIC and Alternate TSC/OSC have equipment for communicating with the control room, and plant security. The EOF is capable of performing offsite notifications of a plant emergency. TSC and OSC personnel at the Alternate TSC/OSC have the capability to perform engineering assessment activities, including damage control team planning and preparation prior to returning to the site.

### G.6 Joint Information Center

The Joint Information Center is where South Texas Project Nuclear Operating Company and Co-Owners, State, County and Federal Public Information personnel will coordinate information, issue news bulletins and participate jointly in news briefings. ~~The Joint Information Center is located at the Best Western Matagorda Hotel and Conference Center, located in Bay City on Texas Highway 35 West, approximately 14 air miles north/northwest of the Station~~ The Joint Information Center is located in Bay City, Texas at 4000 Avenue F, approximately 12.5 air miles north-northeast of the Station. The Joint Information Center shall function as a single authoritative source for disseminating information to the news media and the public. Once activated, the Joint Information Center will be capable of operating 24 hours per day for the duration of the declared emergency.

The Joint Information Center encompasses a working space of approximately ~~9500~~8000 square feet which accommodates approximately 250 people, including Station spokespersons and support staff, designated State, County and Federal Public Information personnel, communications equipment, and ~~200~~120 news media representatives. In addition to the large work areas of the Joint Information Center, other smaller rooms will be made available for non-utility agencies to have private, separate working spaces. Figure K-1 provides a layout of the Joint Information Center. Procedure 0ERP01-ZV-OF02, Joint Information Center Activation, Operation and Deactivation describes the Joint Information Center layout and operation in detail.

### G.7 State Operations Center and County Emergency Operations Centers

The State Operations Center and County Emergency Operations Center are activated by the respective authority to support State and County operations during a declared emergency. At the request of the appropriate State or County authorities, the State of Texas Liaison and Matagorda County EOC Liaison both of whom are familiar with Station operations and the Station Emergency Plan may be dispatched to the State Operations Center or County Emergency Operations Center. The Governor's Division

of Emergency Management State Operations Center, which serves as a communication hub for the Division and other elements of the Department of Public Safety, is staffed 24 hours a day. In the event of an emergency, including an incident at a nuclear generating plant, the State Operations Center can be partially or fully activated in a short time to coordinate the State's response to the incident. The State Operations Center is located in Austin, Texas, in the Department of Public Safety Headquarters building. The Matagorda County Emergency Operations Center is located in the Matagorda County Sheriff's Office. The liaisons function as advisor to the Emergency Operations Center Managers and could act as liaisons between those Managers and the Station Emergency Response Organization. These representatives will not act as spokespersons for the Station.

### **G.8 Nuclear Regulatory Commission Emergency Operations Center**

The Nuclear Regulatory Commission will activate its Emergency Operations Center in Rockville, Maryland, and in Arlington, Texas in the event of a declared emergency classification of a Site Area Emergency or higher classification at the Station. Nuclear Regulatory Commission personnel can also be expected to arrive at the Station. Designated co-locations for Nuclear Regulatory Commission personnel have been established in the Operations Support Center, Technical Support Center and the Emergency Operations Facility. Space has been provided and allocated in the Station Emergency Operations Facility for use as the Nuclear Regulatory Commission Emergency Operations Center onsite. Basic roles provided by the NRC are as follows:

- Monitor the Licensee to assure appropriate Protective Action is being taken with respect to offsite recommendations.
- Support the Licensee (Technical Analysis and Logistic Support)
- Support offsite authorities, including confirming the Licensee's recommendation to offsite authorities.
- Keep other Federal Agencies and Entities informed of the status of the incident.
- Keep the Media informed of the NRC's knowledge of the status of the incident, including coordination with other Public Affairs Groups.
- Intervene in a limited fashion to direct the licensee's on-site response in some unusual and very rare situations.

### **G.9 Laboratory Facilities**

The Station has radiological and radiochemistry laboratories located in each unit. The facilities are designed to provide quick and efficient analyses of samples from the Station process systems, Reactor Coolant System, and secondary systems. The specific instruments that are incorporated in the systems utilized for core damage assessment are certified to perform their intended functions in an accident environment with abnormal chemistry and radiation parameters. Environmental monitoring sample analysis can also be performed in either unit's facilities. The physical separation of the units will allow the facilities in the unaffected unit to be used

as a backup. The Station radiological and radiochemical laboratory facilities may be supplemented by the use of the following:

- A mobile radiological laboratory set up at the staging area at the Bay City Civic Center and operated by the Department of State Health Services;
- The laboratory facilities of neighboring nuclear facilities as coordinated by the Institute of Nuclear Power Operations;
- ~~Areva NP-ING~~ Gel Laboratories LLC.; and
- ~~TXU Power~~ Luminant (Letter of Agreement).

### **G.10 Personnel Decontamination Facilities**

Personnel decontamination facilities are located near the Station Radiologically Controlled Area egress point and in the Emergency Operations Facility. Personnel decontamination is performed at the Station using normal Radiation Protection Procedures

### **G.11 First Aid**

A first aid station is located on the first floor of the Nuclear Support Center (NSC) Building and has provisions for treatment of minor injuries.

### **G.12 Maintenance/Damage Control**

The Station is equipped to maintain and repair mechanical, structural, electrical and control instrumentation and equipment in the Station. Additional equipment may be requested from other utility facilities or contractors.

### **G.13 Emergency Response Facilities Data Acquisition and Display System (Units 1 and 2 only)**

The Emergency Response Facilities Data Acquisition and Display System is an integrated system that performs the following functions:

- Implementation of the Safety Parameter Display System as described in NUREG-0696 and NUREG-0737, Supplement 1;
- Data acquisition and signal processing for the Engineered Safety Features Status Monitoring System; and,
- Data acquisition and signal processing for other normal plant monitoring systems including the plant annunciators and the plant computer.

The Emergency Response Facilities Data Acquisition and Display System (called the System) functions are performed by several subsystems. The System is described in Table G-3. All displays provided for each facility are identical. The "Safety Parameter Display System" described in NUREG-0696 is implemented via the System. The design of the System is integrated with the implementation of Regulatory Guide 1.97 and the Control Room Design Review.

**G.14 Plant Information & Control System- PICS (Units 3 and 4 only)**

*The information needed to support the Emergency Response Facilities will be provided through the Plant Information & Control System (PICS). PICS is the primary integration point for most plant control and monitoring systems and serves as the primary interface for the control room operator. The system provides the functions of the Safety Parameter Display System in accordance with NUREG-0696 and NUREG-0737, Supplement 1 through displays on the main control panels and various video display units in the main control room, TSC and EOF. The system also makes the full complement of plant status information available to all users. This includes the status of the reactor protection and ESF systems and the various process, area and environmental release point radiation monitors.*



**Table G-1 Emergency Supplies and Equipment  
Typical Category Listing**

**Page 1 of 6**

*Emergency equipment used at the Station will be inspected, operationally checked, and inventoried in accordance with Emergency Plan Administrative Procedure OPGP05-ZV-0009, Emergency Facility Inventories and Inspections. Sufficient reserves of instruments and equipment will be maintained to replace those removed for calibration or repair.*

*The Technical Support Center Emergency Equipment and Supplies shall include but not be limited to the following:*

*ITEM*

- *Portable Radiological Survey Meters (Ion Chamber and Geiger Mueller) including friskers*
- *Portable Air Samplers with silver zeolite or activated charcoal filter canisters and particulate filters*
- *Radiation Monitoring System terminal*
- *Protective Clothing*
- *Check Source*

**Table G-1 Emergency Supplies and Equipment  
Typical Category Listing**

**Page 2 of 6**

The Operations Support Center Emergency Equipment and Supplies should include but not be limited to the following:

*ITEM*

- *Auxiliary Lighting*
- *Radios (two way radio transceivers)*
- *First Aid Equipment*
- *Respiratory Protection Devices*
- *Portable Radiological Survey Meters (Ion Chamber and Geiger Mueller) including friskers*
- *Personnel Monitoring Devices including thermoluminescent dosimeters and pocket self reading dosimeters.*
- *Office Supplies*
- *Protective Clothing*
- *Portable air samplers with silver zeolite or activated charcoal filter canisters and particulate filters.*
- *Check Source*
- *Self Contained Breathing Apparatus*

**Table G-1 Emergency Supplies and Equipment  
Typical Category Listing**

**Page 3 of 6**

The Emergency Operations Facility Emergency Equipment and Supplies should include but not be limited to the following:

*ITEM*

- *First Aid Kit and decontamination supplies.*
- *Site Boundary Map, 10 mile and 50 mile Emergency Planning Zone Maps*
- *Status boards*
- *Office Supplies*
- *Portable Radiological Survey Meters (Ion Chamber and Geiger Mueller)*

- *Portable Air Sampler with silver zeolite or activated charcoal filter canisters and particulate filters.*
- *Personnel Monitoring Devices including thermoluminescent dosimeters and pocket self reading dosimeters (including high range self reading dosimeters)*
- *Check Source*
- *Protective clothing*
- *Dose calculation manual and associated tables.*

**Table G-1 Emergency Supplies and Equipment**  
**Typical Category Listing**  
**Page 4 of 6**

The Control Room Envelope Emergency Equipment and Supplies should include but not be limited to:

ITEM

- *\*\*\*Portable Air Sampler with silver zeolite or activated charcoal filter canisters and particulate filters*
- *Respiratory Protection Devices*
- *Protective Clothing*
- *Self-Contained Breathing Apparatus*
- *Radiation Monitoring System Terminal and Dose Assessment Computer*

*\*\*\*This equipment is available at the Unit 1 and 2 41' Access Control Point at the Operations Support Center Unit 1 and 2.*

*This equipment is available in the Service Buildings for Unit 3 and 4.*

**Table G-1 Emergency Supplies and Equipment**  
**Typical Category Listing**

**Page 5 of 6**

Matagorda ~~General~~ Regional Medical Center and Palacios Community Medical Center  
Emergency Rooms

*ITEM*

*Decontamination Supplies*

- Cotton Applicators
- Abrasive Soap
- Decon Soap
- Hand Brush

*Radiation Survey Equipment and Supplies*

- Portable Geiger Mueller. Survey Meter
- Radiation Warning Signs and Tape

*Clothing and Miscellaneous*

- Gowns
- Caps
- Shoe Covers
- Gloves

*Documents and Procedures*

- Matagorda County Hospital District Radiological Emergency Preparedness Plan

**Table G-1 Emergency Supplies and Equipment**  
**Typical Category Listing**  
**Page 6 of 6**

The Field Monitoring Equipment and Supplies should include but not be limited to the following:

*ITEM*

- *Portable Radiological Survey Meters (Ion chamber and Geiger Mueller).*
- *Portable Air Sampler (12 Volt) with silver zeolite or activated charcoal filter canisters and particulate filters.*
- *Radios (two way radio transceivers)*
- *Personnel Monitoring Devices including thermoluminescent dosimeters, self-reading pocket chambers and lapel-type air sampler (s).*
- *Check Source*
- *First Aid Kit*
- *Area Map with pre-selected monitoring/reference points*
- *Gloves and Shoe Covers*
- *Sampling Supplies (labels, smears, bags, pens, etc.)*
- *Respiratory Protection Devices*

**Table G-2 Typical Emergency Response Facility Records**  
**Plant Records Storage**

**Page 1 of 1**

Plant records necessary to perform the functions of the onsite Emergency Response Facilities will be available in and/or at the facilities. The records include:

<b>RECORDS DESCRIPTION</b>	<b>CONTROL ROOM</b>	<b>TECHNICAL SUPPORT CENTER</b>	<b>OPERATIONS SUPPORT CENTER</b>	<b>EMERGENCY OPERATIONS FACILITY</b>
<i>Plant design documents such as Piping &amp; Instrumentation, Control Logic, and Electrical Elementary Diagrams</i>	✓	✓	✓	✓
<i>Radiation Zone Drawings</i>	✓	✓	✓	✓
<i>Updated Final Safety Analysis Report</i>	✓	✓	✓	✓
<i>Emergency Operating Procedures</i>	✓	✓	✓	✓
<i>Emergency Plan and Procedures</i>	✓	✓	✓	✓
<i>Demographic Information</i>	✓	✓		✓
<i>Maps of the Emergency Planning Zone</i>	✓	✓		✓
<i>Plant Technical Specifications</i>	✓	✓		✓
<i>Plant Operating Procedure and Records</i>	✓	✓		✓
<i>Plant Curves Manual</i>	✓	✓		✓

**Table G-3 Emergency Response Facilities Data Acquisition and Display System Units 1/2****Page 1 of 3**

*Integrated Computer System (ICS) - ERFDADS Subsystem - The ERFDADS functions are performed by several subsystems. Data acquisition is provided by the ICS through distributed processing units and through high speed datalinks from Qualified Display Processing System (QDPS), the Meteorological System (MET), and the Radiation Monitoring System (RMS). ERFDADS performs the required data processing for offsite datalinks to the NRC ERDS. ICS work stations (i.e. CRT, CPU, & keyboard) are provided in the Control Room (CR), Technical Support Center (TSC), Auxiliary Shutdown Panel (ASP), and Emergency Operations Facility (EOF).*

*The ERFDADS is a distributed subsystem of ICS that performs the following functions:*

- *Implementation of the Safety Parameter Display System (SPDS) as described in NUREG-0696 and supplement 1 to NUREG-0737.*
- *Data acquisition and signal processing for the normal plant monitoring systems, including portions of the plant annunciator.*
- *Data acquisition and signal processing for the ESF Status Monitoring System.*

*Safety Parameter Display – The SPDS, as described in NUREG-0696 and NUREG-0737 Supplement 1, is implemented via the ERFDADS. The design of the ERFDADS is integrated with the implementation of RG 1.97.*

- *The ERFDADS provides plant and environmental data to aid operators and management in the CR, TSC, and EOF to respond quickly to abnormal operating conditions and mitigate the consequences of an accident. The ERFDADS functions during normal operations and emergencies to provide the following services:*
- *Provide plant and environmental data required for the reactor operators to quickly assess the safety status of the plant.*
- *Allow technical personnel access to comprehensive plant data, enabling them to assist operators without adding to the number of personnel in the control room.*
- *Provide reliable plant data to the CR, TSC, ASR, and EOF.*
- *Aid the operators in the detection of abnormal operating conditions.*
- *Assist in the identification of the causes leading to any abnormalities.*



**Table G-3 Emergency Response Facilities Data Acquisition and Display System Units 1/2**  
**Page 2 of 3**

- *Monitor plant response to corrective actions.*
- *Provide grouping of parameters to enhance the operators' ability to assess plant status quickly without surveying all CR displays.*
- *Provide human factors engineered display formats (simple and consistent display patterns and coding).*
- *Provide display information on a real-time basis, along with validation of data and functional comparison capability.*

*Provide display information on a real-time basis for monitoring the RG 1.97 variables, these variables are utilized to monitor the critical safety functions of:*

- *Subcriticality*
- *Reactor coolant system integrity*
- *Reactor coolant inventory*
- *Reactor core cooling*
- *Heat sink maintenance*
- *Containment environment*

*Distributed Processors - The ICS-ERFDADS subsystem consists of non-Class 1E equipment that is utilized to receive field inputs from the RG 1.97 -defined analog and digital variables and other supplementary information directly from the QDPS, MET, and RMS via redundant high speed datalinks.*

*The ICS performs any data processing required beyond that performed by the remote data acquisition equipment. Redundant distributed processing units are provided with adequate memory capacity to support ICS data acquisition, management, and transmission functions on a real time basis.*

*Man/Machine Interface - ICS workstations (CRT, CPU & keyboard) are located in the CR, TSC, ASP, and EOF to present ICS information (i.e. ERFDADS and Plant Computer) to operators and management in a concise, easily intelligible format.*

**Table G-3 Emergency Response Facilities Data Acquisition and Display System Units 1/2****Page 3 of 3**

*The primary SPDS display page is available on all ICS workstations.*

*Power Supply - The ERFDADS related equipment, located within the power block including peripherals, is provided with power from a dedicated non-Class 1E uninterruptable power supply (UPS) capable of maintaining system operation for two hours. All ERFDADS equipment normal AC power to the UPS is provided from a non-Class 1E diesel generator-backed bus. The subject equipment is defined and controlled in accordance with plant procedures for the associated design documentation.*

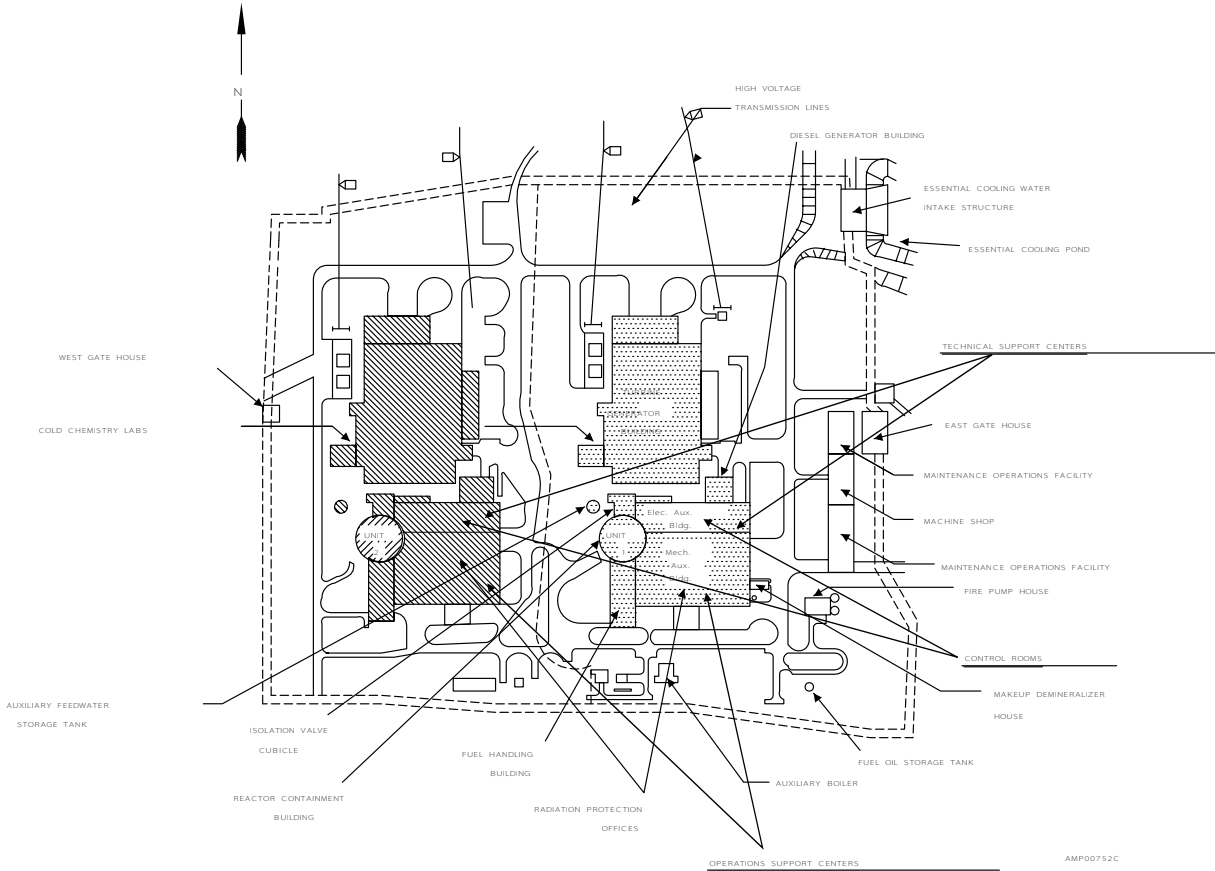
*ERFDADS equipment located within the EOF and equipment used to support communication with the EOF, is provided with reliable 120 vac power that includes a generator backed source ~~from a non-Class 1E diesel generator backed bus.~~*

*System Operational Requirements - The ERFDADS data channels meet the 99-percent-availability requirement defined in NUREG-0696 Section 1.5 under pressure and temperature conditions exceeding cold shutdown conditions. The SPDS system meets an 80-percent-availability requirement during plant cold shutdown conditions.*

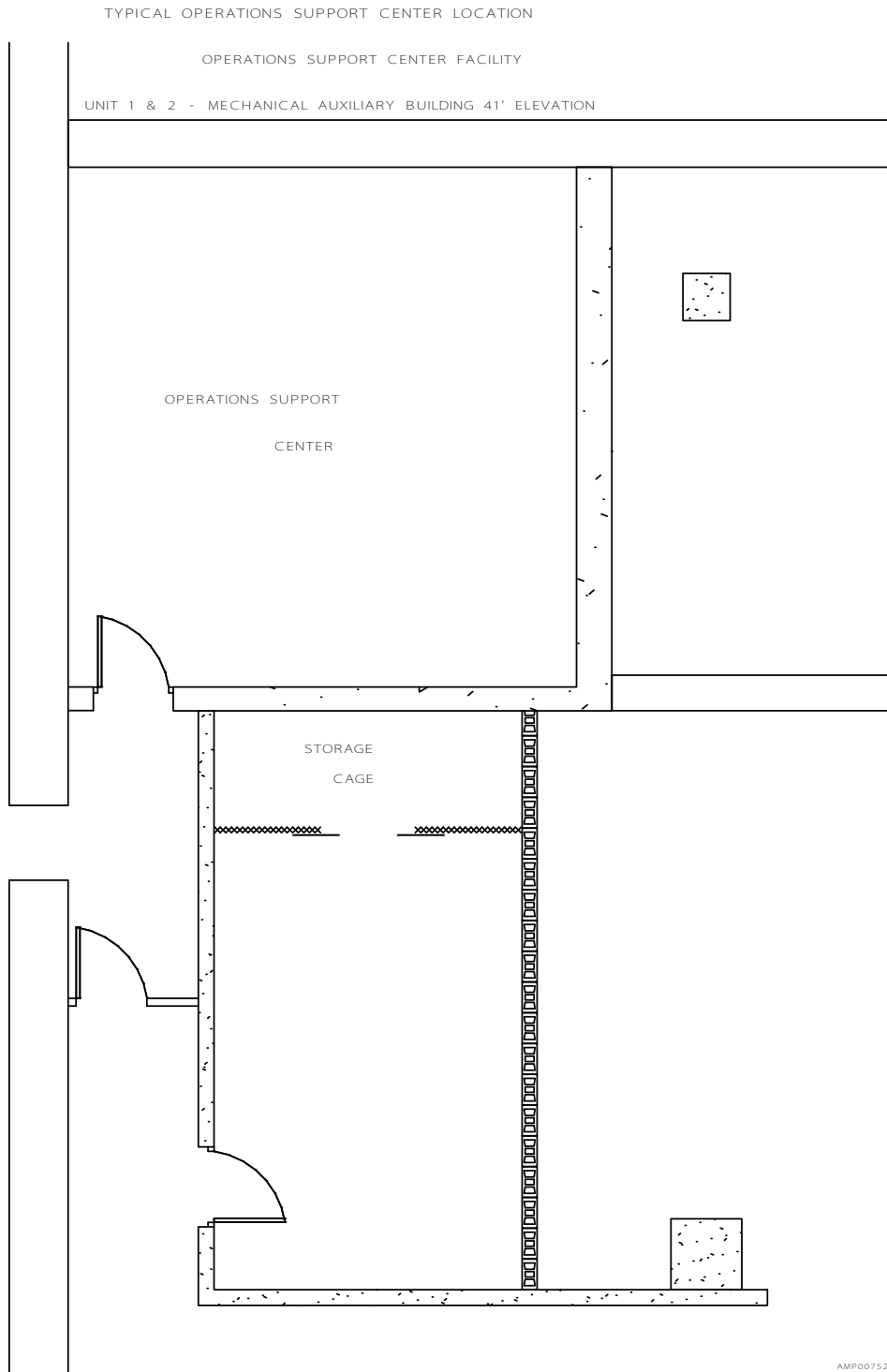
*Data processing through ICS is qualitatively comparable with other Post-Accident Monitoring System, RMS, and QDPS data displayed in the CR with respect to accuracy and response time.*

*ICS, PICS, and ERFDADS are further described in the Final Safety Analysis Report (FSARs).*

CONTROL ROOM, TECHNICAL SUPPORT CENTER, AND OPERATIONS SUPPORT CENTER

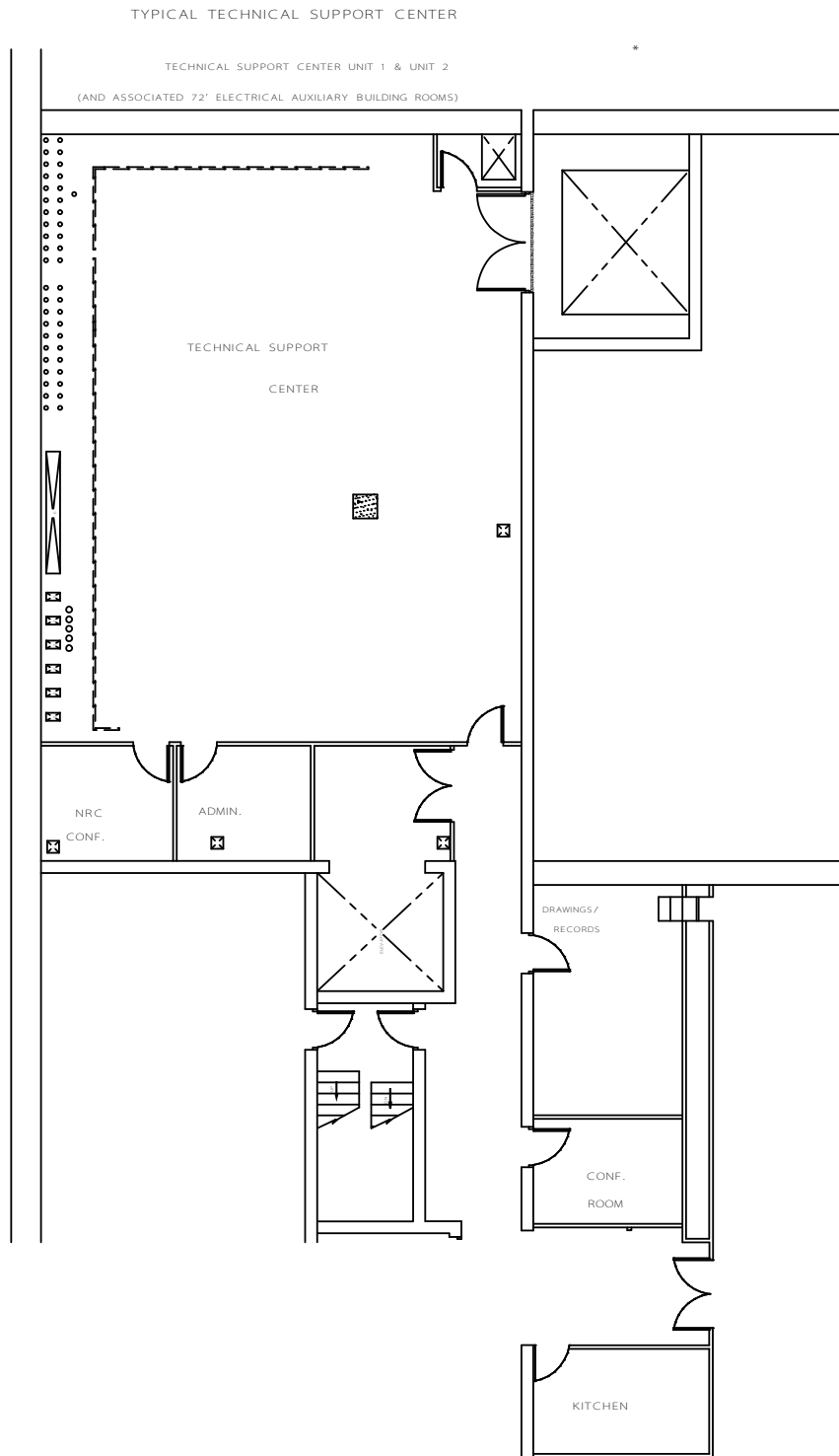


**Figure G-1 Control Room, Technical Support Center, and Operations Support Center Locations Units 1 and 2**  
**Page 1 of 1**



**Figure G-2 Typical Operations Support Center\***  
**Page 1 of 1**

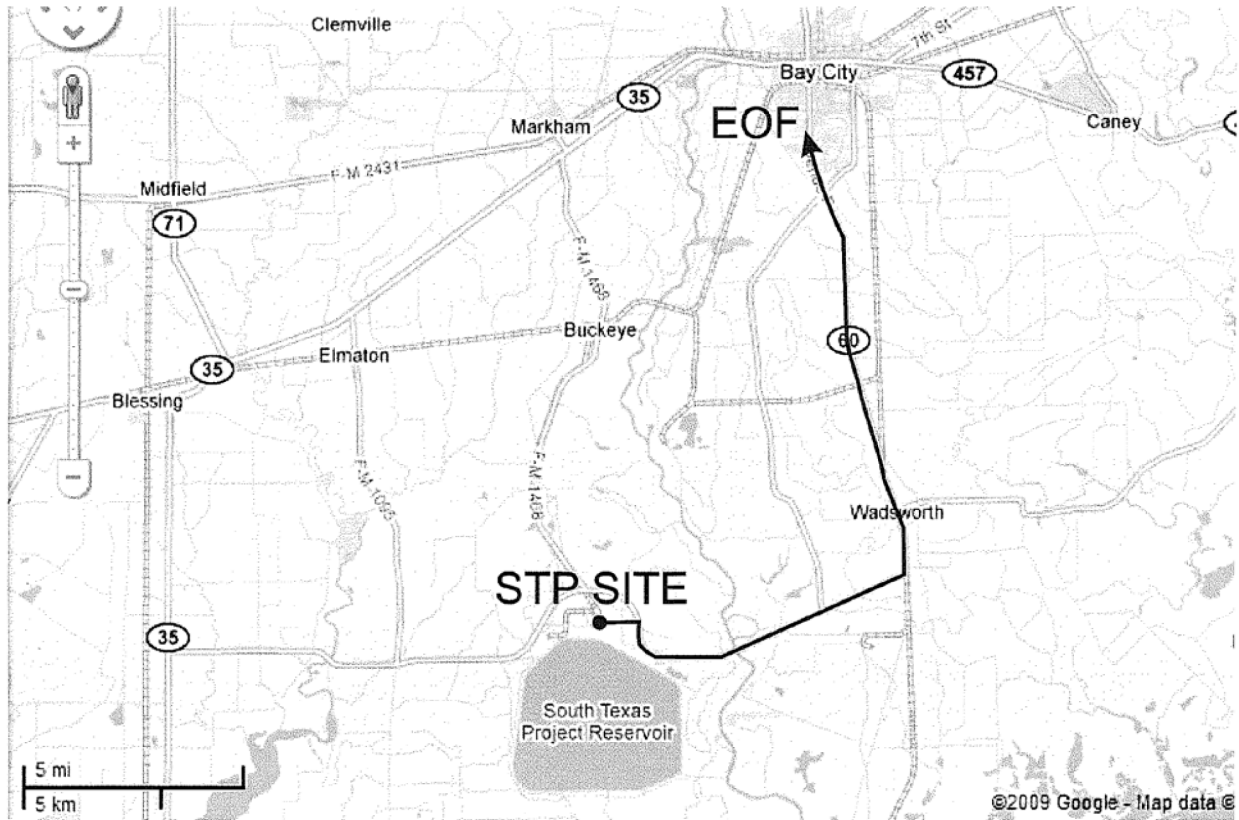
*\*This layout applies to Unit 1 and Unit 2 Operations Support Centers*



\*This layout applies to Unit 1 and Unit 2 Technical Support Centers.

AMP0075211

**Figure G-3 Typical Technical Support Center\***  
Page 1 of 1



**Figure G-4 ~~Site Layout And Evacuation Routes~~**  
**Location of Emergency Operations Facility Relative to**  
**South Texas Project Site**

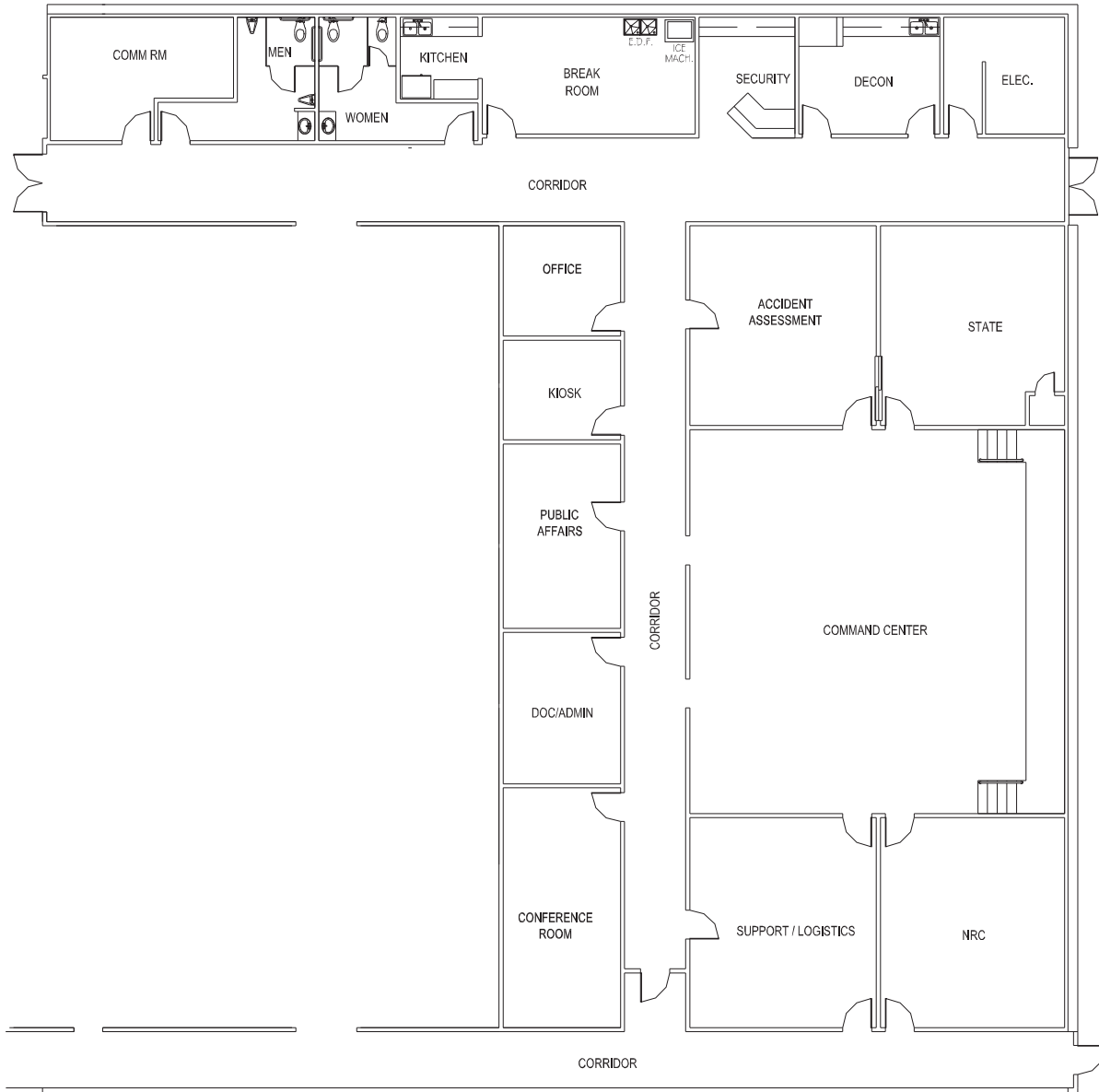
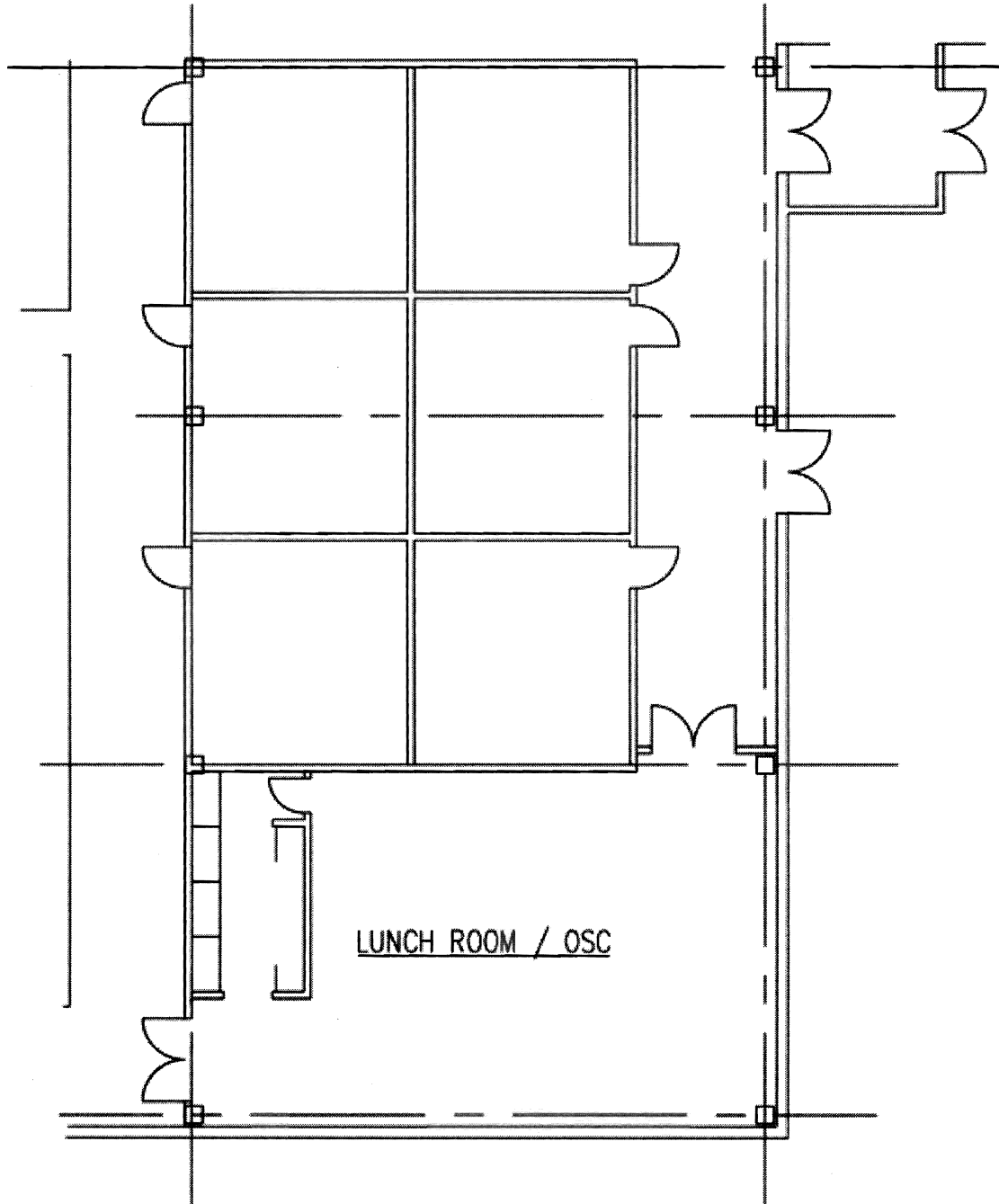


Figure G-5 Typical Emergency Operations Facility  
Page 1 of 1

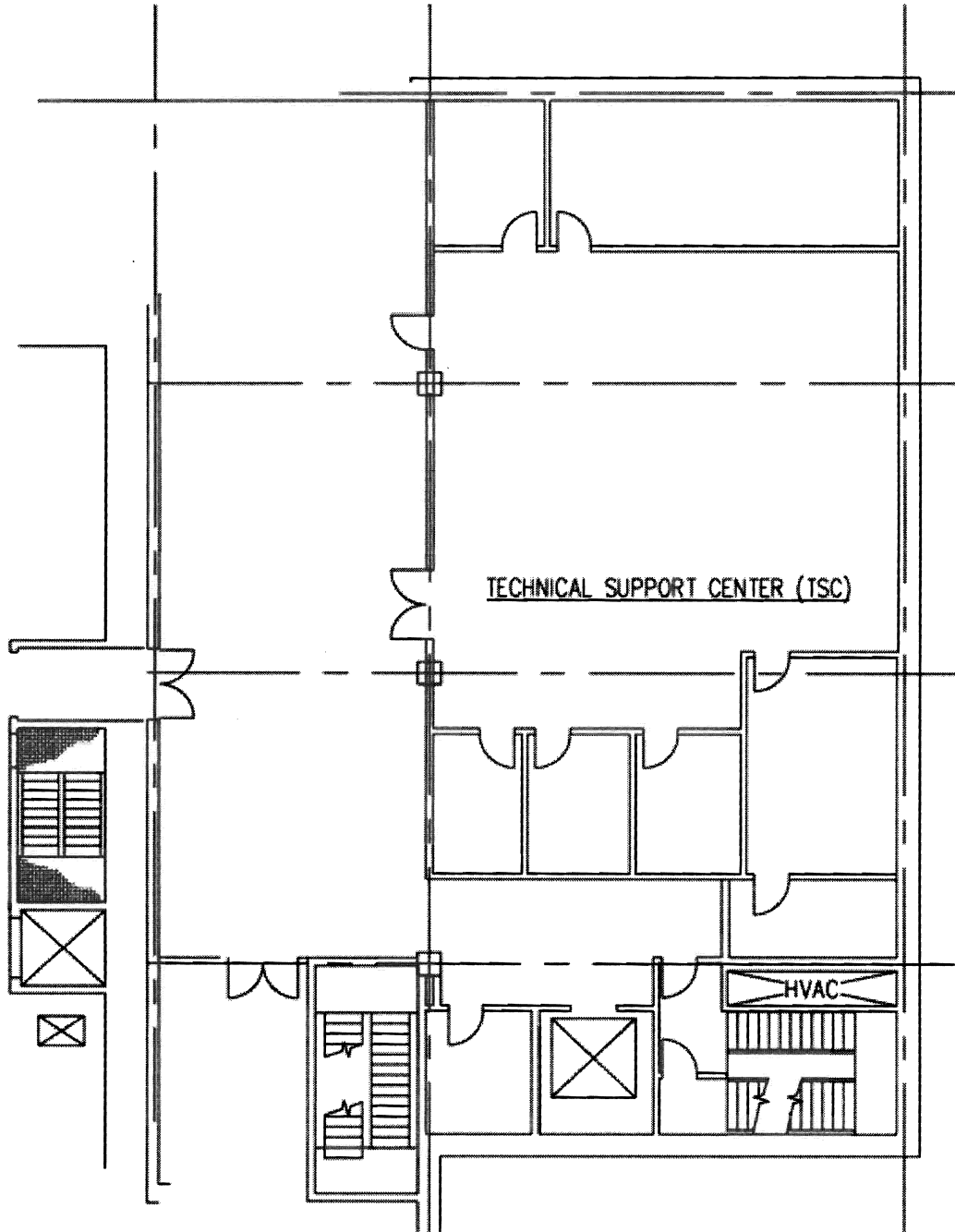
*\*This layout applies to Unit 3 and Unit 4 Operations Support Centers located in the Service Buildings.*



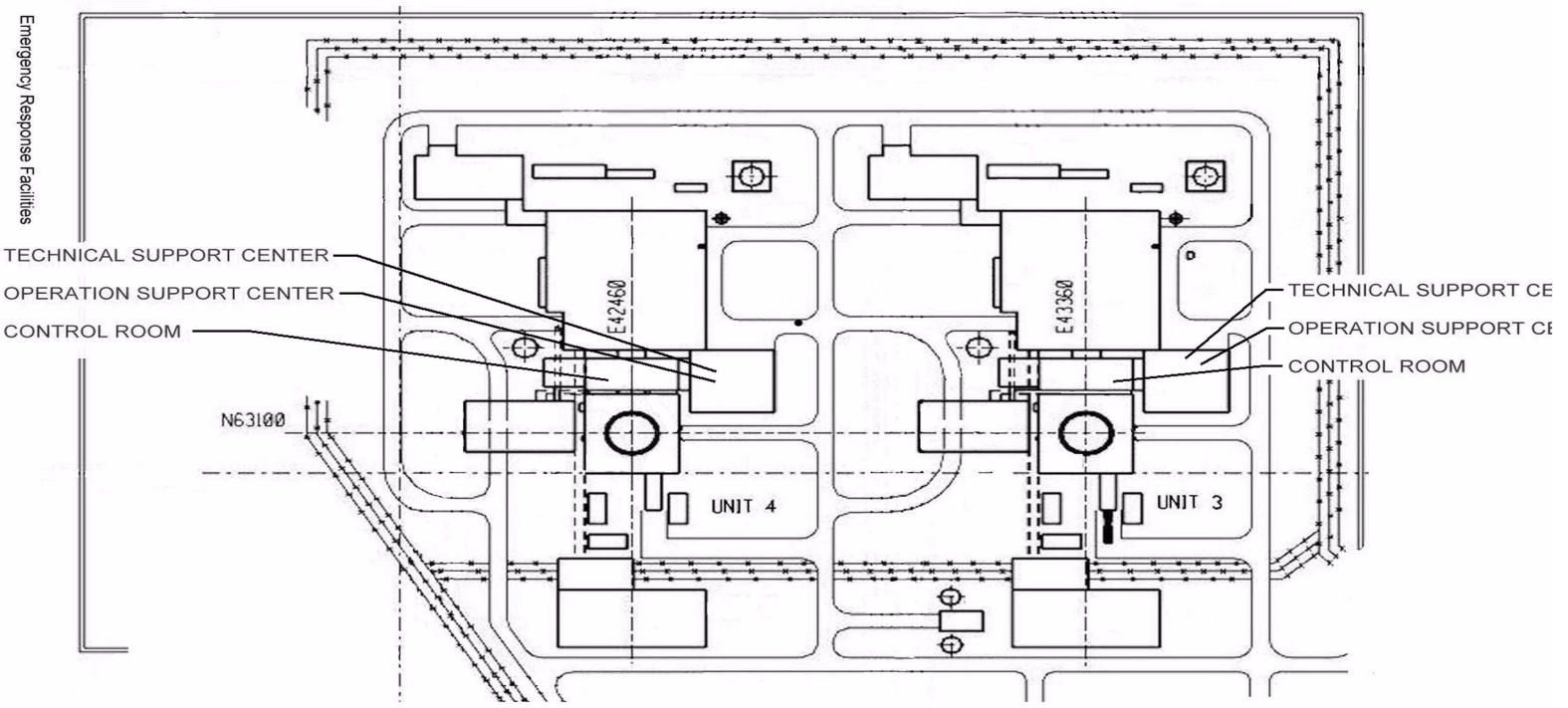
**Figure G-6 Typical Operations Support Center\***  
Page 1 of 1



*\*This layout applies to Unit 3 and Unit 4 Technical Support Centers located in the Service Buildings.*



**Figure G-7 Typical Technical Support Center\***  
Page 1 of 1



**Figure G-8 Control Room, Technical Support Center, and Operations Support Center Locations Units 3 and 4**  
**Page 1 of 1**