

N Drills and Exercises

This section of the Plan describes the Drill and Exercise Program to be utilized by the South Texas Project Electric Generating Station to maintain emergency preparedness.

N.1 Drill and Exercise Program

The following Drill and Exercise Program shall be conducted at the Station in an effort to follow up on Emergency Plan Training and maintain Station Emergency Response Organization personnel emergency preparedness at a high level of competence.

N.1.1 Periodic Drills and Exercises

Drills and Exercises (called Drills or Combined Functional Drills) will be conducted periodically in accordance with Nuclear Regulatory Commission and Federal Emergency Management Agency criteria to ensure the adequacy of the planning and preparedness effort at the Station and to test the proficiency of the Station Emergency Response Organization personnel. Each exercise and drill shall have specific evaluation criteria that describe how to measure the degree of success or failure attained for each objective. A description of the drills and exercises to be conducted is provided in Addendum N-1. Conduct of drills and exercises is described in OPGP05-ZV-0001, Emergency Response Exercises and Drills.

N.1.2 Outside Organizations

Some drills conducted at the Station will involve outside support organizations.

N.1.3 Critique Evaluations

Critiques will be held following each drill to evaluate the overall ability of the Station Emergency Response Organization and support organizations to implement their respective duties and responsibilities. This critique will be held as soon as practical after the drill, and a formal written evaluation report will be generated from the controller/evaluator comments presented at the critique. The Drill Coordinator is responsible for conducting critiques after Drill/Exercises.

The Supervisor, Emergency Response or designee, is responsible for reviewing the comments, deficiencies, and problem areas and generating the written report. The Supervisor, Emergency Response Division, is responsible for assuring the Emergency Preparedness Program is upgraded adequately. Recommendations and comments will be factored into the Emergency Preparedness Program through this method.

N.1.4 Annual Drills

Drills and/or exercises will be conducted at least annually at the Station to demonstrate the effectiveness of the Station Emergency Preparedness effort.

On an annual basis, the County and State Emergency Response Organizations shall be invited to participate in the Station Emergency Preparedness Exercise/Drill. The county emergency response organization shall participate fully in an exercise at the Station every two years. The state emergency response organization shall participate fully in an offsite exercise at least once every two years.

A full participation exercise will include mobilization of the state and county emergency management organizations and their resources in keeping with the accident scenarios. Involvement by the support organizations will be as appropriate to the exercise objectives.

The ingestion exposure pathway measures shall be exercised by the state emergency response organization as a minimum every six (6) years. An off hours and an unannounced drill/exercise shall be performed at least once every six (6) years. Federal Emergency Management Agency objectives for the state and county emergency management organizations shall be exercised as required.

Drills will be held to demonstrate the abilities of the Station Emergency Response Organization to respond in different weather conditions. Drills should therefore be held in good or bad weather providing no life threatening situations occur.

N.2 Scenario Development

Scenarios for drills/exercises will be developed under the direction of the Supervisor, Emergency Response or designee.

N.2.1 Specific Objectives

Input from cognizant Station groups, State, and County authorities are required to define the specific objectives to be met during the drill/exercise.

N.2.2 Scenario Composition

Scenarios should include, but not be limited to:

- *Basic objectives,*
- *Support organization(s) involved,*
- *Chronological flow of initiating data,*
- *Time schedule of real and simulated actions,*
- *Summarizing narrative of appropriate response actions, and*
- *A listing of official evaluators and controllers.*

Scenarios governing the exercise will be varied each year, and confidentiality will be maintained on the scenario. The variation to the scenarios will allow all significant provisions in the Plan to be fully exercised. Provisions exist to allow exercises to be conducted during the off-hours at a minimum of once every six years.

The scenario preparation should include identifying the Control Room alarms, alarm sequences, and specific instrumentation readings throughout the drill.

Only officials of the Federal, State, and County support authorities involved in scenario development and approved Station controllers and evaluators will share advanced

knowledge of the scenario. Limiting the knowledge of the scenario allows for effective controllers' participation and evaluator judgment without significant compromise of scenario or drill confidentiality. This allows for significant free play during the drills by the participants. A description of the arrangements for the advance materials to be provided to official observers and participation in the evaluation critique is provided in OPGP05-ZV-0001, Emergency Response Exercises and Drills.

Addendum N-1 Drills and Exercises

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- 1.0 *Drills and exercises (called Drills, Combined Functional Drills, Dress Rehearsals, Evaluated or Graded Exercises) will be conducted periodically, in accordance with the criteria of NUREG-0654/FEMA-REP-1, Rev. 1 to ensure the adequacy of planning and preparedness and the proficiency of the Emergency Response Organizations to react to an actual situation in the Station. All drills shall be supervised and evaluated by a Drill Coordinator qualified to Station standards.*
- 2.0 *Critiques of drills will be held and recommendations and comments will be factored into the preparedness program. Drills conducted at the Station may involve outside support organizations.*
- 3.0 *COMMUNICATION TESTS - Communication tests with State and local governments within the Plume Exposure Pathway Emergency Planning Zone will be conducted monthly. Communications with Federal emergency response organizations and State within the ingestion pathway will be tested on a quarterly basis. Communications between the nuclear facility, State and County emergency response facilities, and field assessment teams shall be tested annually. Communications tests shall also include the aspect of understanding the content of messages.*
- 4.0 *FIRE DRILLS - Fire drills shall be conducted in accordance with Station Final Safety Analysis Reports 9.5.1.6 (Unit 1/2), 9A(Unit 3/4) Fire Hazard Analysis Report 4.1 and 4.2 (Units 1 and 2), and Title 10 Code of Federal Regulations Part 50 Appendix R. sec. I.3 to demonstrate fire-fighting readiness of assigned personnel (as applicable).*
- 5.0 *MEDICAL EMERGENCY DRILLS - A medical emergency drill involving a simulated contaminated individual that contains provisions for participation by the local support services as indicated in Section B of this Plan shall be conducted annually. The offsite portions of the medical drill may be performed as part of the required annual exercise at the discretion of the Plant General Manager. Emergency medical drills shall test medical personnel and site personnel on handling of radiologically involved victims with respect to radiation monitoring, contamination control and decontamination of the victim.*
- 6.0 *RADIOLOGICAL MONITORING DRILLS - Radiological Monitoring Drills shall be conducted at the Station annually. These drills shall provide for the monitoring of plant environs and radiological monitoring on site and offsite. These drills shall include collection and analysis of airborne activity, ground deposition surveys, and provide provisions for communications and record keeping. At least once every year collection and analysis will also include vegetation, soil and water. The State drills may not always be conducted at the Station. These drills will demonstrate the ability to coordinate with and make appropriate recommendations to the Department of State Health Services.*
- 7.0 **HEALTH PHYSICS DRILLS**
 - 7.1 *Health Physics Drills shall be conducted semi-annually which involve response to and analysis of simulated elevated airborne and liquid samples and direct radiation measurements in the environment.*

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- 7.2 *Analysis of inplant liquid samples with simulated elevated radiation levels shall be included in Health Physics drills annually. These drills will include appropriate radiation protection and contamination controls.*
- 8.0 *Terrorist-Event-Based Integrated Response Drill and Exercise*
- 8.1 *Once every six years the Emergency Response Organization shall integrate with security and demonstrate emergency responses to a range of terrorist events. The elements include activities applicable to security-based scenarios, such as accident detection and assessment, emergency classification, notification of onsite and offsite emergency responders, protective action recommendations, use of security personnel to provide prompt access for emergency equipment and support, evacuation of emergency response facilities and relocation to backup facilities, assembly and accountability, and use of fire control teams, first aid/rescue teams, and medical support personnel.*
- 9.0 *In addition to the scheduled drills and exercises, a program of simplified table top drills and training drills called walkthroughs will be conducted. The purpose of these table top drills and walkthroughs is to provide a controlled session of training at the assigned emergency response facility for emergency response personnel in the actions required during a declared emergency or during an exercise period.*
- 10.0 *Remedial exercises will be required if the emergency plan is not satisfactorily tested during the biennial exercise, such that NRC, in consultation with FEMA, cannot find reasonable assurance that adequate protective measures can be taken in the event of a radiological emergency. The extent of State and local participation in remedial exercises must be sufficient to show that appropriate corrective measures have been taken regarding the elements of the plan not properly tested in the previous exercises.*

