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AUTOMATED RECORD MANAGEMENT  
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DRILLS AND EXERCISES

Revision Summary

- 1) Added OSC to drill component A.5 on the Drill/Exercise Component Checklist (Attachment 3).
- 2) Added File Numbers to each attachment.

Implementation Plan

- 1) This procedure goes into effect upon approval.
- 2) Procedures Coordination will send a sitewide Notice of New/Revised Procedures describing this change upon approval.
- 3) No new training required.

Attachments

- |   |        |                                    |
|---|--------|------------------------------------|
| 1 | 101790 | Monthly Communications Check       |
| 2 | 101790 | Drill/Exercise Critique Form       |
| 3 | 101790 | Drill/Exercise Component Checklist |

Enclosures - None

ARMS - INFORMATION SERVICES

Date approved: 10-30-90 Release authorized by: Daisy Shelton  
Change numbers incorporated: 90-1777  
DSN RAP-EM1-04 Rev 5 Date Oct 31, 1990  
DTC TPRAP File 1703.10 Recipient 935

CONTROLLED

## 1.0 PURPOSE

To prescribe the methods for planning and conducting drills and exercises for Radiological Emergency Response Preparedness (RERP).

## 2.0 SCOPE

This procedure applies to personnel who are assigned to develop, plan, schedule, conduct or evaluate RERP drills and exercises.

## 3.0 RESPONSIBILITIES

3.1 The Supervisor, RERP has the primary responsibility for implementing this procedure.

3.2 The following organizations or individuals are also required to take actions by this procedure:

3.2.1 Process Control Computer Department (PCCD)

3.2.2 RERP Staff

## 4.0 USE REFERENCES

4.1 EP 290, Emergency Notifications

## 5.0 GENERAL REQUIREMENTS

5.1 The purpose of drills and exercises is to train and test emergency response personnel and to assist in evaluating the practicality and effectiveness of the RERP Plan and supporting procedures.

5.2 The following terms are used in this document as defined:

5.2.1 DRILL - A supervised instruction period intended to train, develop, and maintain skills in a particular operation.

5.2.2 EXERCISE - An event that tests the integrated capability and a major portion of the basic elements existing within emergency preparedness plans and organizations. An exercise is evaluated by NRC observers.

5.2.3 CONTROLLER - Indicates a member of an exercise control group. Each controller may be assigned to one or more activities or functions for the purpose of maintaining the action in accordance with the scenario, resolving differences (acting as an umpire), supervising, and otherwise assisting as needed.

5.2.4 EVALUATOR - Indicates a member of an exercise evaluation group. An evaluator may also serve in a dual capacity as both a controller and evaluator. Each evaluator shall be assigned to one or more activities or functions for the purpose of evaluating, recording, critiquing, and making recommendations for improvement.

### 5.3 Schedules for Drills/Exercises

- 5.3.1 Fermi 2 shall exercise its emergency preparedness plan annually.
- 5.3.2 Fermi 2 shall exercise with offsite authorities biennially.
- 5.3.3 Fire drills shall be conducted quarterly. A fire drill involving the Frenchtown Fire Department shall be conducted annually.
- 5.3.4 Onsite medical emergency drills, which simulate contaminated injured individuals and may include offsite support from ambulance and hospital services, shall be conducted annually.
- 5.3.5 Radiological monitoring drills shall be conducted annually. These drills shall include collection and analysis of samples such as water, grass, soil, and air. These drills shall contain provisions for communications and recordkeeping.
- 5.3.6 Health Physics drills, which involve analysis of simulated elevated airborne and liquid samples as well as direct radiation measurements in the environment, shall be conducted semi-annually. Analysis of in-plant liquid samples with a simulated elevated radiation level shall be conducted annually.
- 5.3.7 Drills involving response to a simulated high radiation alarm on a plant Area Radiation Monitor shall be conducted annually.
- 5.3.8 Additional drills shall be scheduled as necessary to provide adequate training of personnel to ensure an adequate level of emergency preparedness.

### 5.4 Communication Drills

**NOTE (1):** Communication drills test the applicable circuits (hardware linkages). The ability of communicators to understand and transfer messages is evaluated during the annual exercise.

**NOTE (2):** If any problems are detected in the Emergency Notification System (ENS) or the Health Physics Network (HPN), refer to NRC Information Notices (IN) 86-97 and 89-19.

- 5.4.1 Shall be conducted monthly between Fermi 2 Emergency Response Facilities (ERFs) and:
  - 1. Michigan State Police
  - 2. Monroe County Central Dispatch
  - 3. Wayne County Communication Center
  - 4. Province of Ontario
  - 5. Nuclear Regulatory Commission (NRC) Headquarters
  - 6. NRC Region III

5.4.2 Shall be documented using Attachment 1.

5.5 Shift Staffing and Augmentation

5.5.1 Activation of EP-290, Emergency Notifications, shall be conducted semi-annually.

1. Key emergency response personnel from Table B-1 of the RERP Plan are contacted and demonstrate the intent to activate the Technical Support Center (TSC) within 30 minutes and the Emergency Operations Facility (EOF) within 60 minutes.
2. Once each calendar year, activation of the emergency notification procedure shall be demonstrated during off hours. Satisfactory demonstration of off-hours shift staffing and augmentation may be:
  - a. By reporting to the appropriate emergency facility if the emergency plan is activated during casualties, exercises, or drills

or

- b. By telephone call back to the number provided during emergency notification. Personnel contacted are not required to assemble at their respective ERF. However, the following information shall be provided to the individual answering the telephone:

- 1) Name
- 2) Position in Emergency Response Organization
- 3) Estimated time to arrive at the emergency facility

5.6 An actual emergency event which meets the criteria of a required drill or exercise may be used to substitute for a required drill or exercise.

5.7 At a minimum, the general format for drill and exercise scenarios shall contain the following:

- 5.7.1 Basic objectives of the drill or exercise and appropriate evaluation criteria (controller checklists)
- 5.7.2 Time period, location, and the participating organizations
- 5.7.3 Simulated events
- 5.7.4 Time schedule of real and simulated initiating events
- 5.7.5 Assignments of qualified drill or exercise controllers and evaluators
- 5.7.6 Messages and evaluation forms for use by the drill or exercise controllers/evaluators
- 5.7.7 List of observers from federal, state, and local government agencies, as appropriate

5.7.8 Narrative summary which describes the conduct of the exercise or drill and includes such items as:

1. Simulated casualties
2. Offsite fire department or medical assistance
3. Rescue of personnel
4. Drill simulations
5. Deployment of radiological emergency teams
6. Public information activities

5.8 In addition to the requirements listed in 5.7, the following additional requirements are pertinent for exercise scenarios:

5.8.1 Scenarios shall be varied from year to year so that over a five year period all major portions of the RERP Plan and emergency response organization are tested.

5.8.2 Once every five years, the annual exercise shall be initiated between 6:00 p.m. and 4:00 a.m.

5.8.3 Exercises shall be conducted under various weather conditions.

5.8.4 Exercise scenarios shall allow for free play and decision-making by participants. This may require optional flowpaths to be written into the scenario.

5.8.5 Information transmitted offsite during drills and exercises shall be clearly marked as drill information to indicate that the event is simulated. Additional distinctions i.e. "Drill" labels or colored paper may be used for any communication or notification forms during a drill or exercise.

## 6.0 PROCEDURE

6.1 The Supervisor, RERP:

6.1.1 Ensures that, if the safety of personnel or equipment is jeopardized, the drill or exercise shall be terminated until a safe condition exists.

6.1.2 Ensures accomplishment of the minimum number of drills required by the RERP Plan.

6.1.3 Coordinates with the appropriate organizations for planning and scheduling drills and exercises.

6.1.4 Coordinates with appropriate organizations to ensure adequate participation of personnel to maintain a proper level of emergency preparedness.

- 6.1.5 Coordinates with appropriate organizations to ensure adequate participation of personnel to maintain a proper level of emergency preparedness.
- 6.1.6 Assigns follow-up and corrective actions resulting from drills and exercises.
- 6.1.7 Ensures completion of the following:
  - 1. Pre-drill/exercise conference is held with controllers, evaluators, representatives of participating offsite organizations, and other drill staff personnel. A conference is not required for communications drills. The scenario shall be discussed, as well as the conduct of the drill, necessary precautions, and safety considerations.
  - 2. As soon as possible after the drill/exercise is completed, a Post-Drill/Exercise Critique is held and Attachment 2 completed.
  - 3. Assignment of responsibilities for corrective actions is made to ensure that such corrective actions are made within the established deadlines.

6.3 The RERP Staff:

- 6.3.1 Ensures the development of drill and exercise scenarios and developing necessary support materials.
- 6.3.2 Identifies names of qualified personnel to control and evaluate drills and exercises to the Supervisor, RERP.
- 6.3.3 Plans, conducts, and critiques assigned drills.
- 6.3.4 Supervises and/or participates as drill controllers and evaluators.
- 6.3.5 Monitors progress of the drill or exercise and approves temporary changes to the scenario as appropriate to ensure meaningful training.
- 6.3.6 Completes drill and exercise records.

6.4 Drill/Exercise Controllers:

- 6.4.1 Initiate drills and exercise events as specified in the scenario.
- 6.4.2 Observe the drill with specific attention to possible hazardous or unsafe conditions and prevent hazardous or unsafe conditions from occurring.
- 6.4.3 During drills, coach personnel to ensure maximum training effectiveness from the drill.
- 6.4.4 Ensure that no plant equipment is operated without the knowledge and permission of the Main Control Room (not the Simulator Control Room)

6.5 Drill/Exercise Evaluators:

- 6.5.1 Conduct observations of drills/exercises.

6.5.2 Record evaluation comments as required on the applicable evaluation form of Attachment 2.

6.6 PCCD Personnel:

6.6.1 Shall complete the following steps, before the initiation of a drill, to allow Emergency Response Information Systems (ERIS) in the TSC and EOF to receive simulated data:

1. Install TSC/Simulator 1 multiplexor in TSC and connect Data Link to Simulator Computer Room.
2. Install TSC/Simulator 2 multiplexor in TSC and connect dataline to Simulator Computer Room.
3. Install Ribbon cables to each of the following terminals from TSC/Simulator 1:
  - a. TSC 1 to Channel 1
  - b. TSC 2 to Channel 2
  - c. TSC 3 to Channel 3
  - d. TSC 4 to Channel 4
4. Install Ribbon cable to each of the following terminals from TSC/Simulator 2:
  - a. TSC 5 to Channel 1
  - b. TSC Versatec to Channel 2
5. Connect EOF 1/Simulator modem to EOF 1 Terminal.
6. Connect EOF 2/Simulator modem to EOF 2 Terminal.
7. Connect EOF 3/Simulator modem to EOF 3 Terminal.
8. Connect EOF 4/Simulator modem to EOF Versatec.

6.6.2 Shall perform the following upon completion of a drill to ensure ERIS terminals of TSC/EOF are connected to the plant system and receiving plant data:

1. Remove EOF 1/Simulator modem and connect cable from EOF multiplexor Channel 1 to EOF 1 Terminal.
2. Remove EOF 2/Simulator modem and connect cable from EOF multiplexor Channel 2 to EOF 2.
3. Remove EOF 3/Simulator modem and connect cable from EOF multiplexor Channel 3 to EOF 3.

4. Remove EOF 4/Simulator modem and connect cable from EOF modem to Versatec.
5. Remove ribbon cables from each of the following terminals from TSC/Simulator multiplexor and reterminate associated cable.
  - a. TSC 5 to Channel 1
  - b. TSC Versatec to Channel 2
6. Remove ribbon cables from each of the following terminals from TSC/Simulator 2 multiplexor and reterminate associated cable
  - a. TSC 1 to Channel 1
  - b. TSC 2 to Channel 2
  - c. TSC 3 to Channel 3
  - d. TSC 4 to Channel 4
7. Remove TSC/Simulator 1 multiplexor in TSC and disconnect data link to Simulator Computer Room.
8. Remove TSC/Simulator 2 multiplexor in TSC and disconnect data link to Simulator Computer Room.

**7.0 FOLLOW UP ACTIONS - None**

**8.0 RECORDS**

8.1 The following are required records and shall be retained:

8.1.1 Master Drill/Exercise File, containing records for each drill or exercise conducted, shall include:

1. Objectives for Drill/Exercise
2. Sequence of events
3. Applicable completed Drill/Exercise Critique Form (Attachment 2)
4. Drill participant lists
5. Formal written evaluations
6. Applicable completed Drill/Exercise Component Checklist (Attachment 3)

8.1.2 Either a clear copy or original documentation of the Master Drill/Exercise File shall be forwarded to Information Services for retention.

1. Drill files shall be retained as a non-QA record for a period of 2 years following package turnover.
  2. Exercise files shall be retained as a non-QA record for a period of 7 years following package turnover.
  3. Any record generated from an actual emergency shall be retained as an elective record for life-of-plant. It should be clearly designated where credit for a required drill or exercise is taken.
- 8.2 A duplicate of the Master File shall be retained internally by the RERP Staff.
- 8.2.1 Access to the file shall be controlled to ensure that file material is not removed from the immediate vicinity.
- 8.2.2 Copies of the material shall be made if the file is to be removed from the immediate vicinity.
- 8.3 Radiation Protection or fire drills that are not part of an RERP exercise or drill are written, controlled, and retained by the responsible department in accordance with their own established records retention requirements.

**END OF TEXT**

MONTHLY COMMUNICATIONS DRILL

1. Date Completed: \_\_\_\_\_
2. Coordinator: \_\_\_\_\_
3. Communications Drill results: \_\_\_\_\_ Sat \_\_\_\_\_ Unsat
4. Discrepancies (list any telephone systems or telephones found inoperable during the communications drill):
  
5. Corrective Actions (document corrective actions taken and the date discrepancies were corrected):

Approved: \_\_\_\_\_  
Supervisor, RERP

(To be placed in Master file)

DRILL/EXERCISE CRITIQUE

\*\*\*\*\*  
PART 1. OVERALL DRILL/EXERCISE CRITIQUE (All Evaluators)

1. Drill/Exercise Implementation:

Scenario \_\_\_\_\_ Date Implemented \_\_\_\_\_ Coordinator \_\_\_\_\_  
Control Room \_\_\_\_\_ ERO Team \_\_\_\_\_  
Shift \_\_\_\_\_

2. Post Drill Critique held:

Date/Time \_\_\_\_\_ Location \_\_\_\_\_

3. Assignment of Controllers/Evaluators (attach copy of names and locations assigned)

4. Participating offsite organizations:

5. Emergency Plan or Emergency Procedure deficiencies identified during conduct of drill/exercise.

6. Equipment deficiencies (equipment failure, lack of emergency equipment, improper storage, inadequacy of equipment or tools, etc.).

7. Deficiencies in drill/scenario (number or placement of controllers, monitoring or management of drill/exercise, communications between controllers and Drill/Exercise Coordinator, etc.).

\*\*\*\*\*  
PART 2: CONTROL ROOM PERFORMANCE (CR Evaluator)

1) Overall performance rating

SAT

UNSAT

2) All objectives were met

YES

NO

3) General comments and observations

4) Areas needing improvement

\*\*\*\*\*  
**PART 3: OSC PERFORMANCE (OSC Evaluator)**

1) Overall performance rating

SAT

UNSAT

2) All objectives were met

YES

NO

3) General comments and observations

4) Areas needing improvement

\*\*\*\*\*  
**PART 4: TSC PERFORMANCE (TSC Evaluator)**

1) Overall performance rating

SAT

UNSAT

2) All objectives were met

YES

NO

3) General comments and observations

4) Areas needing improvement

\*\*\*\*\*  
**PART 5: EOF PERFORMANCE (EOF Evaluator)**

1) Overall performance rating

SAT

UNSAT

2) All objectives were met

YES

NO

3) General comments and observations

4) Areas needing improvement

\*\*\*\*\*

PART 6: JPIC PERFORMANCE (JPIC Evaluator)

1) Overall performance rating  SAT  UNSAT

2) All objectives were met  YES  NO

3) General comments and observations

4) Areas needing improvement

\*\*\*\*\*

PART 7: OVERALL DRILL/EXERCISE EVALUATION

1) Overall Drill/Exercise Evaluation

[ ] SAT

[ ] UNSAT

(Attach written summary)

2) Corrective Action Followup

Item

Action

Assigned To

Approved \_\_\_\_\_

Supervisor, RERP

# DRILL/EXERCISE COMPONENT CHECKLIST

Completed

Yes No

**A. Communications (must include the aspect of understanding content of messages)**

- |                          |                          |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Facility and State EOC (or MSP Ops)      |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. Facility and Wayne County Communications |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. Facility and Monroe Central Dispatch     |
| <input type="checkbox"/> | <input type="checkbox"/> | 4. Facility and Offsite Field Teams         |
| <input type="checkbox"/> | <input type="checkbox"/> | 5. Control Room, TSC, OSC, and EOF          |

**B. Fire**

- |                          |                          |                                      |
|--------------------------|--------------------------|--------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Fire requiring offsite assistance |
|--------------------------|--------------------------|--------------------------------------|

**C. Medical**

- |                          |                          |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Onsite medical emergency drill involving a simulated contaminated individual requiring ambulance transport |
|--------------------------|--------------------------|---|

**D. Radiological Monitoring (must include communications and recordkeeping)**

- |                          |                          |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Collection and analysis of water sample      |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. Collection and analysis of vegetation sample |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. Collection and analysis of air sample        |
| <input type="checkbox"/> | <input type="checkbox"/> | 4. Collection and analysis of soil sample       |

**E. Health Physics**

- |                          |                          |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Airborne and liquid sample analysis  |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. Direct radiation measurement   |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. Inplant liquid samples analysis with simulated elevated radiation levels including the use of PASS |

**F. Shift Staffing and Augmentation**

- |                          |                          |  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Key emergency personnel from Table B-1 of RERP Plan contacted and demonstrated the intent to activate the TSC within 30 minutes and the EOF within 60 minutes |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. Key emergency personnel activated during off hours (1800 - 0400 hours)  |

\_\_\_\_\_  
Drill/Exercise Coordinator

\_\_\_\_\_  
Date