

Maine Yankee

RELIABLE ELECTRICITY SINCE 1972

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Region I
UNITED STATES NUCLEAR REGULATORY COMMISSION
Office of Inspection and Enforcement
475 Allendale Road
King of Prussia, PA 19406

Attention: Mr. Richard R. Keimig, Chief
Emergency Preparedness Section, DRSS

Reference: (a) License no. DPR-36 (Docket No. 50-309)
(b) NRC Inspection Manual Procedure 82302 (3/18/94)

Gentlemen:

Subject: EMERGENCY PREPAREDNESS EXERCISE OBJECTIVES


Please find enclosed two copies of the objectives developed for the Maine Yankee emergency preparedness exercise scheduled for Wednesday, 21 September 1994.

The enclosed on-site objectives for this year's full-participation exercise are designed to demonstrate the major emergency response elements and address the follow-up items from the 1993 exercise. The detailed exercise scenario evaluation document will be submitted in accordance with Exhibit 1 of Reference (b).

Our point of contact for emergency preparedness activities is Stephen D. Evans, Emergency Preparedness and Environmental Engineering Section Head, Maine Yankee, 329 Bath Road, Brunswick ME 04011. His phone number is (207) 798-4203.

Should you have any comments or questions, please feel free to contact Mr. Evans at any time.

Very truly yours,



James R. Hebert, Manager
Licensing & Engineering Support Department

SDE/mwf

Enclosures

c: (Letter only): Mr. Thomas T. Martin
Mr. Jimi Yerokun
Mr. E. H. Trottier
Mr. Patrick J. Dostie, State Nuclear Safety Inspector
Mr. David D. Brown, Director, MEMA

c: (w/enc.): Mr. John H. Lusher, NRC RI/DRSS

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MAINE YANKEE
EMERGENCY PREPAREDNESS EXERCISE
94-08

2.1 EXERCISE OBJECTIVES AND EXTENT OF PLAY - MAINE YANKEE

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Extent of Play

A. Emergency Classification and Accident Assessment

1. Demonstrate the ability of Control Room personnel to recognize emergency initiating events and properly classify the condition in accordance with pre-established emergency action levels.
 2. Demonstrate the ability of Control Room personnel and TSC staff to coordinate the assessment of plant conditions and corrective actions to mitigate accident conditions.
 3. Demonstrate that information concerning plant conditions and operations, including activities outside of established procedural guidance (i.e. 10CFR50.54(x) issues) can be transmitted, as appropriate, between the Control Room, TSC, OSC, EOF and Emergency Director in a timely manner. {93-08-06}
 4. Demonstrate the ability of the TSC staff to initiate and coordinate corrective actions in an efficient and timely manner.
 5. Demonstrate the ability of the Managers in the TSC and EOF to participate with the Emergency Director in emergency classification and EAL discussions.
- A.1 Scenario events initiated on the simulator will provide the operational and radiological data to allow personnel to demonstrate this objective in accordance with Procedure 2-50-0, Emergency Classification.
 - A.2 The scenario will provide technical information to players which will allow them to analyze plant conditions and propose corrective actions. Shift Auxiliary Operators (AOs) will be stationed in the Simulator Control Room (SCR) instructor station booth. All communications from the SCR to the shift AOs will be received and transmitted by the Simulator Computer Operator. The Simulator Computer Operator will direct the shift AOs to demonstrate by simulating selected plant operations. These selected plant operations will be simulated in the plant and controlled by miniscenarios.
 - A.3 Telephone communications and/or SPDS terminal link will be established between the Simulator Control Room, TSC, OSC, EOF and Emergency Director in order to transmit key information and data. The Emergency Director will be informed of any 10CFR50.54(x) conditions by the TSC Manager.
 - A.4 Scenario events will enable the TSC to coordinate in-plant corrective actions through the use of OSC personnel.
 - A.5 Scenario events will allow the appropriate TSC and EOF Managers to assist the Emergency Director with emergency classifications and EAL discussions.

Extent of Play

6. Demonstrate the ability to analyze plant critical safety functions and to assess data from appropriate chemistry samples in support of accident assessment activities and plant conditions.
7. Demonstrate the ability to effectively use the Safety Parameter Display System (SPDS) in the assessment and trending of plant conditions.

B. Notification and Communication

1. Demonstrate the ability to notify Maine Yankee emergency response personnel. {193-08-07}
2. Demonstrate the capability to notify federal and state authorities of emergency classification in accordance with established procedures.
3. Demonstrate that messages are transmitted in an accurate and timely manner and that information and messages are properly logged and documented.
4. Demonstrate that adequate emergency communication systems are in place to facilitate transmittal of data between emergency response facilities and federal and state authorities.
5. Demonstrate the ability to communicate station status, radiological conditions, and emergency response actions to off-site authorities.

- A.6 Scenario events will require Chemistry and Rad Control technicians located at the OSC to simulate taking reactor coolant, containment air, or plant vent stack samples to assess plant conditions. Sample results will be provided by Observers who accompany the technicians during their sampling activities.
- A.7 Safety Parameter Display System (SPDS) terminals in the TSC and EOF will be linked to the Simulator Control Room to display scenario data within the limitations of the simulator process computer. (Some data will be provided by cue cards.) This will allow Emergency Response Facility staff personnel the opportunity to demonstrate the effectiveness of SPDS under simulated emergency conditions.

- B.1 Maine Yankee staff, NRC, and state authorities shall
- B.2 be notified in accordance with established procedures.
- B.3 NRC will be notified by utilizing the NRC ENS telephone.
- B.4
- B.5 The State authorities (Maine State Police and Maine Emergency Management Agency) will be notified through the dedicated hotline telephone system.

Various communications links will be established between emergency response facilities in order to transmit information and data. Record keeping and documentation will be demonstrated in accordance with established procedures.

Communications and transfer of data between facilities will be evaluated for timeliness and completeness.

Extent of Play

C. Direction and Control

1. Demonstrate the proper transfer of accident management responsibilities for classification and protective action decision-making from the Control Room to the Emergency Director as appropriate.

- C.1 Scenario events require the activation of the Emergency Response Organization. As each position of authority is activated, responsibilities associated with that position will be assumed from the PSS up to the Emergency Director.

Extent of Play

2. Demonstrate the capability of key emergency response facility management personnel to direct and coordinate their respective emergency response activities in an efficient and timely manner.
3. Demonstrate the ability to conduct timely and effective briefings throughout the duration of the exercise. (93-08-02)
4. Demonstrate appropriate coordination of activities with federal and state government agencies.

- C.2 All emergency response facilities have designated managers who will direct and coordinate emergency response activities in their particular area of responsibility.
- C.3 Emergency Response Facility briefings will be conducted in accordance with established procedures. Briefings will be evaluated based on frequency, content and effectiveness relative to staff attentiveness.
- C.4 The Control Room will initially contact federal and state agencies, providing them with appropriate information on plant conditions and emergency status. This function will be conducted by the EOF after the facilities are activated.

D. Emergency Response Facilities

1. Demonstrate the ability of station personnel to activate and staff the emergency response facilities in a timely manner.
2. Demonstrate and test the adequacy and effectiveness of emergency response facilities, operations, and equipment.
3. Demonstrate that appropriate status boards are utilized to display pertinent accident information at the various emergency response facilities.

- D.1 Scenario events will require activation and operation of all Maine
- D.2 Yankee emergency response facilities. The Simulator Control
- D.3 Room, TSC, OSC and EOF will be activated in accordance with established procedures. Designated plant and corporate emergency response personnel will participate in the exercise. Status boards will be utilized to display pertinent information in each facility.

E. Plant Augmentation and Staffing

1. Demonstrate the adequacy of plant emergency notification methods and procedures to augment plant staff and resources.
2. Demonstrate the ability to maintain shift staffing and manpower to provide for future manpower and logistics needs.

- E.1 Shift personnel will demonstrate the use of the emergency call-in system to augment plant staff (with exercise-designated personnel) as may be required by scenario events.
- E.2 Available resources will be evaluated and assigned to support extended operations.

Extent of Play

F. Radiological Exposure Control

1. Demonstrate the ability to control on-site contamination.
2. Demonstrate the ability to perform on-site and in-plant surveys and sampling.
3. Demonstrate the ability to monitor and control the exposure of emergency workers, including the administration of potassium iodide (KI), if necessary.
4. Demonstrate the ability to monitor radiological conditions of Emergency Response Facilities and implement appropriate habitability controls.
5. Demonstrate the ability of emergency workers to keep track of their individual exposures.
6. Demonstrate the use of protective clothing and respiratory protection equipment, if necessary.

- F.1 Scenario events will require OSC emergency teams to be dispatched to investigate problems with associated plant equipment. Investigation and repair activities in the plant will require implementation of radiation controls which include monitoring and tracking of radiation exposure of OSC emergency teams. In addition, the exposure of the off-site monitoring teams will be monitored and tracked. Any directive to ingest KI will be simulated.
- F.2
- F.3
- F.4 Habitability surveys of the Emergency Response Facilities will be conducted in accordance with established procedures (refer to Procedure 2-50-12, "Radiological Controls Coordination"). Results of the habitability surveys will be evaluated, and appropriate controls will be implemented as required by scenario events.
- F.5
- F.6

G. In-Plant Corrective and Repair Actions

1. Demonstrate the ability to deploy OSC emergency teams in a timely fashion, consistent with plant conditions and assigned function.
2. Demonstrate the ability of the TSC to direct in-plant corrective action through the OSC.
3. Demonstrate the ability to provide adequate briefings and debriefings to OSC emergency teams. {93-08-03}
4. Demonstrate that OSC emergency teams can adequately and effectively communicate with the OSC.

- G.1 OSC emergency teams should be dispatched to investigate problems associated with plant equipment. Briefings should be conducted with emergency teams to ensure that responsibilities are clear and understood. Briefing sheets (Procedure 2-50-8, Attachment D) should be used to brief and debrief teams on work assignments. All information should be documented in accordance with established procedures. Plant personnel will be given the opportunity to perform corrective actions associated with damaged plant equipment.
- G.2
- G.3
- G.4

Extent of :

H. Radiological Assessment

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| 1. Demonstrate that radiological assessment personnel at the EOF can obtain radiological and meteorological data in a timely manner. | H.1 The scenario will provide information on plant conditions |
| 2. Demonstrate that adequate dose assessment procedures can be performed to determine off-site radiological consequences. | H.2 and in-plant radiological conditions to players that will |
| 3. Demonstrate the ability to assess potential off-site radiological consequences based on plant conditions. | H.3 allow them to evaluate off-site potential radiological |
| 4. Demonstrate the ability to perform timely assessment of off-site radiological conditions to support the formulation of protective action recommendations for the plume exposure pathway. ¹ (93-08-05) | H.4 consequences. The scenario will postulate an off-site radiological release that will allow players to evaluate off-site radiological conditions. Players will implement appropriate sections of Procedures 2-50-11, "Radiological Assessment;" 2-50-13, "Dose Projection;" 2-50-14, "Off-Site Radiological Coordination;" and 2-50-15, "Off-Site Radiological Monitoring." |
| 5. Demonstrate adequate staffing, equipment readiness check, and deployment (if necessary) of off-site monitoring teams. | H.5 Off-site monitoring teams will be assigned at the EOF. Players will implement appropriate sections of Procedure 2-50-15, "Off-Site Radiological Monitoring." |

I. Protective Action Decision Making

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| 1. Demonstrate the ability to formulate and implement on-site protective action measures, as necessary. | I.1 On-site protective action measures will include radiation exposure control and plant evacuation of nonessential personnel. After plant evacuation and accountability has been completed, all plant personnel and contractors not directly involved in the exercise may be allowed to return to work. |
| 2. Demonstrate the ability to evaluate monitoring data, off-site radiological dose projections, and plant conditions to make appropriate protective action recommendations. | I.2 Protective action decision making will be demonstrated in accordance with Procedure 2-50-16, "Protective Action Recommendations". |

¹Indicates NRC identified item from the 1993 exercise (Number indicates NRC IFI from exercise report).

Extent of Play

J. Parallel and Other Actions

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| 1. Demonstrate the licensee's capability for self-critique and ability to identify areas needing improvement. | J.1 | Exercise critique will be conducted with exercise controllers, observers, and players. Critique items will be compiled and documented by the Exercise Coordinator. |
| 2. Demonstrate the effective use of mock-ups for mini-scenario repair activities. (93-08-04) | J.2 | Equipment mock-ups will be available, consistent with the established simulation list, to allow demonstration of repair activities. |
| 3. Demonstrate the ability to initiate the transfer of data via the Emergency Response Data System (ERDS). | J.3 | Simulator computer data will be linked to the ERDS. Data transmission will be accomplished as described in Procedure 2-50-5, "Emergency Notification". |
| 4. Demonstrate the ability maintain accurate facility logs, describing pertinent actions and decisions for each Emergency Response Facility. (93-08-01) | J.4 | Each facility shall maintain a log of pertinent actions initiated by the facility during the exercise. These logs shall contain key events relative plant operation, event classification and facility activities. |