



Entergy Nuclear Northeast
Vermont Yankee
P.O. Box 0500
185 Old Ferry Road
Brattleboro, VT 05302-0500
Tel 802 257 5271

January 9, 2003
BVY 03-03

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Subject: Vermont Yankee Nuclear Power Station
License No. DPR-28 (Docket No. 50-271)
2003 Vermont Yankee Emergency Exercise Objectives

Enclosed are Vermont Yankee's objectives for the 2003 full-participation biennial exercise scheduled for Tuesday, April 8, 2003. The enclosure provides the scope of the exercise and the objectives to be fulfilled. Where appropriate, specific objectives are included to demonstrate the effectiveness of corrective actions taken with regard to areas previously identified as needing improvement.

We trust that the information provided is acceptable; however, should you have any questions or require additional information, please contact Mr. Michael Empey at (802)-258-4174.

Sincerely,



Gautam Sen
Manager, Licensing

Attachments

cc: USNRC Region 1 Administrator
USNRC Resident Inspector – VYNPS
USNRC Project Manager – VYNPS
Richard J. Conte, Chief, Operations Safety Branch
Division of Reactor Safety, USNRC Region 1
David M. Silk, Senior Emergency Preparedness Specialist,
USNRC Region 1
Vermont Department of Public Service
Robert Poole – FEMA Region 1

~~EX-49~~

DF01

ML030130000

SUMMARY OF VERMONT YANKEE COMMITMENTS

BVY NO.: 03-03

The following table identifies commitments made in this document by Vermont Yankee. Any other actions discussed in the submittal represent intended or planned actions by Vermont Yankee. They are described to the NRC for the NRC's information and are not regulatory commitments. Please notify the Licensing Manager of any questions regarding this document or any associated commitments.

COMMITMENT	COMMITTED DATE OR "OUTAGE"
None	N/A

VYAPF 0058.04
AP 0058 Original

**VERMONT YANKEE NUCLEAR POWER STATION
EMERGENCY PREPAREDNESS ANNUAL EXERCISE
2003**

2.1 VERMONT YANKEE - EXERCISE OBJECTIVES AND EXTENT OF PLAY

INTRODUCTION

In order to demonstrate the emergency response preparedness of the Vermont Yankee Nuclear Power Station, an emergency preparedness exercise will be conducted on **Tuesday, APRIL 8, 2003**. This year's exercise is a full participation exercise, which will involve full participation from Vermont Yankee, the State of Vermont, State of New Hampshire, Commonwealth of Massachusetts, and local communities within the plume exposure emergency planning zone (EPZ).

The primary objective of this exercise is to demonstrate the fundamental areas of Vermont Yankee's emergency response capabilities. To accomplish this, exercise objectives will be established, with an appropriate extent of play that will provide a basis to evaluate specific elements of Vermont Yankee's emergency preparedness program. Some of the objectives are based on previous inspection items from the NRC, corrective actions identified/implemented by Vermont Yankee staff and current industry initiatives. The objectives are used to ascertain the required input to the scenario sequence of events and to establish the evaluation criteria. Exercise objectives and extent of play are presented on the following pages.

2003 VERMONT YANKEE ANNUAL EXERCISE - OBJECTIVES AND EXTENT OF PLAY

A. Emergency Classification and Accident Assessment	Extent of Play
<p>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 (EALs). (CORNERSTONE PERFORMANCE INDICATOR)</p>	<p>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 AP 3125, Emergency Plan Classification and Action Level Scheme.</p>
<p>2. Demonstrate the ability of Control Room personnel and Technical Support Center (TSC) staff to coordinate the assessment of plant conditions and corrective actions to mitigate accident conditions.</p>	<p>A.2 The scenario will provide technical information to players that will allow them to analyze plant conditions and initiate corrective actions in accordance with established procedures. Early in-plant actions normally performed by the Control Room support personnel may be controlled and performed by Simulator Controllers until after the Alert classification when the Emergency Response Organization (ERO) is fully activated. Demonstrations of in-plant corrective actions will be controlled in accordance with defined mini-scenarios and as specified in the ground rules (including extent of simulation, etc.).</p>
<p>3. Demonstrate that information concerning plant conditions can be transmitted between the Control Room and the TSC in a timely manner.</p>	<p>A.3 Telephone communications and the Simulated Plant Process Computer System (SPPCS) data link will be established between the Simulator Control Room and the various Emergency Response Facilities in order to transmit key information and data.</p>
<p>4. Demonstrate the ability of the TSC staff to initiate and coordinate corrective actions in an efficient and timely manner.</p>	<p>A.4 Scenario events will enable the TSC to coordinate in-plant corrective actions using Operations Support Center (OSC) personnel.</p>
<p>5. Demonstrate the ability of appropriate staff in the TSC, Simulator Control Room (SCR) and the Emergency Operations Facility/Recovery Center (EOF/RC) to discuss EALs and event classifications.</p>	<p>A.5 Scenario events will allow for discussion between SCR, TSC and EOF/RC staff regarding EALs and emergency classification decisions.</p>

<p>6. Demonstrate the ability to assess data from appropriate chemistry samples and radiation protection surveys in support of accident assessment activities and plant conditions.</p>	<p>A.6 Scenario events will allow Chemistry and Radiation Protection technicians to simulate taking reactor coolant, containment air, or plant vent stack samples to assess plant conditions. Actual sampling and manipulation of sampling system components will be simulated. Time frame to provide sample results will be controlled and compressed. Controllers will provide sample results after sampling activities are discussed by players.</p>
<p>7. Demonstrate the ability to effectively use the Emergency Response Facility Information System (ERFIS) in the assessment and trending of plant conditions.</p>	<p>A.7 ERFIS workstations in the TSC and EOF will be connected to the SCR using the SPPCS to receive and display scenario-related data. (Controllers may also provide additional data to players as necessary.) This will allow Emergency Response Facility (ERF) staff the opportunity to demonstrate the use of ERFIS under simulated emergency conditions.</p>

<p>B. Notification and Communication</p>	<p>Extent of Play</p>
<p>1. Demonstrate the ability of Control Room personnel to complete timely plant announcements of declared emergency classifications.</p>	<p>B.1 Scenario events will allow Control Room personnel to make plant announcements for declared emergency classifications.</p>
<p>2. Demonstrate that messages are transmitted in an accurate and timely manner that decisions, information, and messages are properly logged and documented.</p>	<p>B.2 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.</p>
<p>3. Demonstrate the capability to notify federal and state authorities of emergency classification and significant changes in plant status in accordance with established procedures. (CORNERSTONE PERFORMANCE INDICATOR)</p>	<p>B.3 Vermont Yankee staff, NRC, and state authorities shall be notified in accordance with established procedures. NRC will be notified by using the FTS ENS telephone. The State authorities will be notified through the Nuclear Alert System (Orange Phone).</p>

<p>4. Demonstrate that appropriate status boards are used to display pertinent accident information at various emergency response facilities.</p>	<p>B.4 Status Boards (where provided) will be used by response personnel to display pertinent information. Status Board Caretakers will be assigned by facility coordinators to maintain the status boards with current information.</p>
<p>5. Demonstrate that adequate emergency communication systems are in place to facilitate transmittal of data between emergency response facilities and federal and state authorities.</p>	<p>B.5 Communications will be demonstrated between the various Emergency Response Facilities using established communications systems as described in Procedure OP 3504, "Emergency Communications."</p>
<p>6. Demonstrate that off-site monitoring teams can appropriately identify their location when reporting sample results to the EOF.</p>	<p>B.6 Off-site Monitoring Teams will be dispatched to the field and directed to specific sample locations for monitoring activities.</p>
<p>7. Demonstrate the ability to provide adequate briefings to off-site monitoring teams as conditions and information change.</p>	<p>B.7 During the period that the Off-Site Monitoring Teams will be in the field, scenario events may require that periodic updates be provided to them.</p>
<p>8. Demonstrate the ability to adequately communicate plant updates to plant personnel (including ERF Staff) as plant conditions and status information change.</p>	<p>B.8 Scenario events will allow the TSC to update plant personnel on changing plant conditions and plant status information. Periodic plant announcements should be made to brief plant personnel on plant conditions and emergency status information. Each ERF coordinator should provide periodic general information status updates to their respective ERF Staff.</p>
<p>C. Direction and Control</p>	<p>Extent of Play</p>
<p>1. Demonstrate the proper transfer of responsibilities from Shift Supervisor/Plant Emergency Director (SS/PED) to the Duty & Call Officer (DCO), and subsequently to the TSC Coordinator and Site Recovery Manager (SRM) as appropriate.</p>	<p>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 transferred from the SS/PED eventually to the SRM.</p>
<p>2. Demonstrate the capability of key ERF management staff to direct and coordinate their respective emergency response activities in an efficient and timely manner.</p>	<p>C.2 All emergency response facilities have designated coordinators who will direct and coordinate emergency response activities in their particular area of responsibility.</p>

<p>3. Demonstrate appropriate coordination of activities with federal and state government agencies.</p>	<p>C.3 The SCR will initially contact the federal and state agencies, providing them with appropriate information on plant conditions and emergency status. This function will pass to the TSC and EOF/RC when those facilities are activated. Communications will only be attempted with those organizations that have agreed to participate in the drill. This information will be provided to the ERO as necessary.</p>
--	--

D. Emergency Response Facilities	Extent of Play
<p>1. Demonstrate the ability of station personnel to activate and staff the emergency response facilities in a timely manner.</p>	<p>D.1 Scenario events will require activation, in real time, of each ERF. Each facility will be fully staffed in accordance with the Emergency Plan. Timely activation should be accomplished within 60 minutes of being notified of the Alert (or higher EAL). The SCR, Control Room (communication functions only), TSC, OSC, EOF/RC and Joint News Center will be activated in accordance with established procedures. Designated plant and corporate emergency response personnel will participate in the drill. "Pre-staging" of facility staff should not be encouraged, unless agreed upon in advance with the E-Plan organization.</p>
<p>2. Demonstrate and test the adequacy and effectiveness of emergency response facilities, operations, and equipment.</p>	<p>D.2 Each ERF has been designed/arranged to provide adequate space for assigned staff to perform their respective tasks. Equipment is available to fulfill the various functions of each facility.</p>
E. Plant Augmentation and Staffing	Extent of Play
<p>1. Demonstrate the adequacy of plant emergency notification methods and procedures to augment plant staff and resources.</p>	<p>E.1 Shift personnel will demonstrate the use of the emergency call-in system to augment plant staff as may be required by scenario events. Community Alert Network (CAN) <u>will not</u> be activated, PAGERS <u>will be</u> activated for this drill.</p>
<p>2. Demonstrate the ability to use outside resources to provide technical assistance and logistical support.</p>	<p>E.2 The White Plains ENNE Engineering Group <u>will not</u> be activated for this drill. Activities may be simulated through a control cell, based on scenario conditions.</p>

<p>3. Demonstrate the ability to coordinate available resources to meet current and protracted ERO operations. This includes establishing a relief schedule for ERO positions and addressing logistical considerations for extended operations.</p>	<p>E.3 Available resources will be evaluated and assigned to support extended operations. Discussions regarding logistical considerations for maintaining the ERO operational will be conducted, relative to ERO staffing and plant operations.</p>
---	---

<p>F. Radiological Exposure Control</p>	<p>Extent of Play</p>
<p>1. Demonstrate the ability to provide adequate radiation protection controls for on-site emergency response personnel including exposure limits, dosimetry, equipment, and protective clothing.</p>	<p>F.1 Scenario events will allow OSC On-Site Assistance Teams to be F.2 dispatched to investigate problems with associated plant equipment. Investigation and repair activities in the plant will require implementation of radiation controls which include authorizing, monitoring and tracking of radiation exposure of OSC On-site Assistance Teams. (Refer to Procedure OP 3507, " Emergency Radiation Exposure Control.") In addition, the exposure of the Off-Site Monitoring Teams will be monitored and tracked in the EOF.</p>
<p>2. Demonstrate the ability to monitor and track radiation exposure of on-site emergency response personnel.</p>	
<p>G. In-Plant Corrective and Repair Actions</p>	<p>Extent of Play</p>
<p>1. Demonstrate the ability to dispatch and deploy on-site assistance teams in a timely fashion, consistent with plant conditions and assigned function.</p>	<p>G.1 OSC On-site Assistance Teams should be dispatched to investigate G.2 problems associated with plant equipment. Briefings should be conducted with emergency teams to ensure job requirements are clear and understood. OSC Team Work Status Forms (VYOPF 3544.02) should be used to keep track of team assignments and work tasks.</p>
<p>2. Demonstrate the ability to provide adequate briefings to on-site assistance teams on job assignments and tasks.</p>	
<p>3. Demonstrate the capability of on-site assistance teams to perform corrective actions on plant equipment during emergency conditions.</p>	<p>G.3 OSC On-site Assistance Teams will be given the opportunity to G.4 perform corrective actions associated with plant equipment. Demonstrations of in-plant corrective actions will be controlled in accordance with defined mini-scenarios and as specified in the ground rules (including extent of simulation, etc.) The mini-scenarios will allow players to implement the appropriate emergency work controls per established procedures.</p>
<p>4. Demonstrate the ability to provide adequate administrative controls and documentation for necessary repairs of plant equipment and systems during an emergency.</p>	

H. Radiological Assessment	Extent of Play
1. Demonstrate that adequate dose assessment activities can be performed to determine off-site radiological consequences.	H.1 The scenario will provide information on plant conditions and in-plant
2. Demonstrate that radiological assessment personnel in the EOF can obtain radiological and meteorological data in a timely manner.	H.2 radiological conditions to players that will allow them to evaluate off-site potential radiological consequences. H.3 The scenario will provide off-site radiological data that will allow players H.4 to evaluate off-site conditions. H.5 Players will implement appropriate sections of Procedures OP 3513, "Evaluation of Off-Site Radiological Conditions" and OP 3511, "Off-Site Protective Action Recommendations," as may be required by scenario events. "What-if" dose assessments will be calculated in accordance with OP-3513, Appendix K, "Guidelines for "What If" Projection of Potential Radioactive Material Releases".
3. Demonstrate the ability to perform timely assessment of off-site radiological conditions to support the formulation of protective action recommendations (PAR) for the plume exposure pathway.	
4. Demonstrate the ability to assess potential off-site radiological consequences based on plant conditions.	
5. Demonstrate the ability to project plume trajectory and potentially affected downwind sectors using the METPAC computer dose assessment model, including development of "what-if" dose projections, based on conservative assumptions.	
6. Demonstrate adequate staffing, equipment readiness check, and deployment of off-site monitoring teams.	H.6 Off-site monitoring teams will be assigned at the OSC. Players will H.7 implement appropriate sections of Procedure OP 3510, "Off-Site and Site Boundary Monitoring," as may be required by scenario events.
7. Demonstrate the use of appropriate equipment and procedures to perform off-site radiological monitoring	

I. Protective Action Decision Making	Extent of Play
1. Demonstrate the ability to implement appropriate on-site protective measures for emergency response personnel.	I.1 On-site protective action measures will include radiation exposure control, site accountability and use of protective equipment and supplies. Appropriate on-site protective measures will be implemented as required by scenario events.
2. Demonstrate the adequacy of the protective action decision making process to make appropriate recommendations concerning off-site radiological consequences. (CORNERSTONE PERFORMANCE INDICATOR)	I.2 Protective action decision making will be demonstrated in accordance with Procedure OP 3511, "Off-Site Protective Actions Recommendations." If a Protective Action Recommendation (PAR) is warranted, the PAR shall be communicated to the states within 15 minutes of its determination or declaration of a General Emergency.

J. Public Information	Extent of Play
1. Demonstrate the ability to develop and periodically disseminate timely and accurate press releases to the news media.	J.1 The Joint News Center (JNC) will be activated and staffed.
2. Demonstrate the ability to provide briefings and to interface with the news media.	J.2 Information relative to drill events will be gathered, verified and incorporated into news releases. After approval, information will be
3. Demonstrate the ability to communicate and coordinate news releases between the EOF and the JNC.	J.3 disseminated and briefings on the information will be conducted at the JNC.
4. Demonstrate the ability to provide rumor control.	J.4 A communication line will be established to provide for rumor control concerning the simulated accident.
5. Demonstrate the ability to coordinate news release with the state's public information representatives.	J.5 State public information representatives will be present at the JNC. Information concerning news releases will be coordinated with the states' public information representatives.

K. Parallel and Other Actions	Extent of Play
<p>1. Demonstrate the adequacy of methods to establish and maintain access control and personnel accountability within the protected area.</p>	<p>K.1 Security activities will be implemented in accordance with established procedures to control access to the protected area. Assembly of emergency response personnel and evacuation of contractors/visitors will be implemented to test personnel accountability process within the protected area (Refer to Procedure OP 3524, "Emergency Actions to Ensure Initial Accountability and Security Response"). However, after the plant evacuation and initial accountability checks have been completed, contractors/visitors may be allowed to return to work and will be exempt from the remainder of drill related activities.</p>
<p>2. Demonstrate the ability to transition from the emergency phase to the recovery phase in accordance with established procedures.</p>	<p>K.2 The Site Recovery Manager will determine when it is appropriate to transition from the emergency phase to the recovery phase. This decision will require input from the various technical support groups and concurrence from the states of Vermont and New Hampshire and the Commonwealth of Massachusetts (Refer to OP 3546, "Operation of the EOF/RC", Appendix A "Site Recovery Manager").</p>
<p>3. Demonstrate the licensee's capability for self-critique and ability to identify areas needing improvement.</p>	<p>K.3 A drill critique will be conducted with controllers and players. Critique items will be compiled and documented in accordance with Procedure OP 3505, "Emergency Preparedness Exercises and Drills."</p>

Note: This exercise satisfies the requirements for conducting an annual Radiological monitoring drill and one of two semi-annual Health Physics drills.