Mr. Jay K. Thayer Site Vice President - Vermont Yankee Entergy Nuclear Vermont Yankee, LLC P.O. Box 0500 185 Old Ferry Road Brattleboro, VT 05302-0500

SUBJECT: VERMONT YANKEE - NRC EVALUATED EMERGENCY PREPAREDNESS

EXERCISE INSPECTION REPORT 50-271/03-003

Dear Mr. Thayer:

The enclosed report documents an inspection at the Vermont Yankee Nuclear Power Station, which evaluated the performance of your emergency response organization during the April 4, 2003, full-participation exercise and the post-exercise critique as specified in the reactor oversight program. The inspectors discussed the findings of this inspection with you and other members of your staff on April 6, 2003.

This inspection was an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of a selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of this inspection, the inspectors identified one issue of very low safety significance (green). This issue did not present an immediate safety concern and was determined to involve a violation of NRC requirements. However, because of the very low safety significance and because it was entered into your corrective action program, the NRC is treating this issue as a Non-Cited violation, in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you contest this non-cited violation, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Region I, the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, D.C. 20555-0001; and the NRC Resident Inspector at the Vermont Yankee facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/ADAMS.html (the Public Electronic Reading Room).

Should you have any questions regarding this report, please contact Mr. Richard J. Conte at (610) 337-5183.

Sincerely,

/RA/

Richard J. Conte, Chief Operational Safety Branch Division of Reactor Safety

Docket No. 50-271 License No. DPR-28

Enclosures: Inspection Report No. 50-271/03-003

Attachment 1: Supplemental Information

cc w/encl:

M. R. Kansler, Chief Operating Officer, Entergy Nuclear Vermont Yankee, LLC

M. Hamer, Operating Experience Coordinator - Entergy Nuclear Vermont Yankee, LLC

- J. Kelly, Director, Licensing, Entergy Nuclear Operations, Inc.
- G. Sen, Manager, Licensing, Entergy Nuclear Vermont Yankee, LLC
- D. Tefft, Administrator, Bureau of Radiological Health, State of New Hampshire

Chief, Safety Unit, Office of the Attorney General, Commonwealth of Massachusetts

- D. Lewis, Esquire
- G. Bisbee, Esquire
- J. Block, Esquire
- D. Katz, Citizens Awareness Network (CAN)
- M. Daley, New England Coalition on Nuclear Pollution, Inc. (NECNP)
- R. Shadis, New England Coalition Staff

State of New Hampshire, SLO Designee

State of Vermont, SLO Designee

- S. McGrail, Commonwealth of Massachusetts, SLO Designee
- G. Sachs, President/Staff Person, c/o Stopthesale
- D A. Craig, Regional Director FEMA Region I
- L. Canton, Regional Director FEMA Region II
- P. Arcuri, Acting Regional Director FEMA Region III

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DATE	05/20/03	05/19/03	05/20/03	05/20/03	

U. S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No: 50-271

License No: DPR-28

Report No: 50-271/03-003

Licensee: Entergy Nuclear Vermont Yankee, LLC

Facilities: Vermont Yankee Nuclear Power Station

Location: Vernon, Vermont

Dates: April 3-6, 2003

Inspectors: N. McNamara, Sr. Emergency Preparedness Inspector (Lead)

B. Sienel, Resident Inspector, DRP

R. Fuhrmeister, Senior Reactor Engineer, DRS

J. Laughlin, Operator Examiner, DRS D.Schroeder, Reactor Engineer, DRS

Approved by: Richard J. Conte, Chief

Operational Safety Branch Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000271/03-003; on 04/3-6/2003; Vermont Yankee Nuclear Power Station. Emergency Preparedness Exercise Report.

This team inspection was conducted by region based inspectors and a resident inspector. This inspection identified one Green finding, that was a non-cited violation. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter 0609 "Significant Determination Process" (SDP). The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversite Process," Revision 3, dated July 2000.

A. Inspector Identified Findings

Cornerstone: Emergency Preparedness

Green. The inspectors identified a finding of very low safety significance (Green) that is also a non-cited violation of 10 CFR 50.47(b)(14) and Appendix E.IV.F.2.g., which states in part, formal critiques shall identify weak or deficient areas that need correction and any deficiencies identified as a result of exercises or drills are (will be) corrected. Entergy failed to take adequate corrective actions for eight problems that were found to be repetitive from previous Emergency Preparedness exercises/drills conducted since 2001 and was again identified during the 2003 biennial exercise.

This finding was determined to be of very low safety significance (Green) by using Manual Chapter 0609, Appendix B, Emergency Preparedness (EP) SDP, EP Risk Determination Flow Chart, Sheet 1, because the finding was identified as a failure to comply with a non-risk significant planning standard (10 CFR 50.47(b)(14) and was not a planning standard function failure. This finding is more than minor because it is associated with the EP cornerstone attribute and effects the ERO performance cornerstone objective (Planning Standard 10 CFR 50.47(b)14). A failure to correct past problems could impede ERO performance during an actual event.

B. Licensee Identified Findings

None

ii Enclosure

Report Details

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness (EP)

1EP1 Exercise Evaluation

A. <u>Inspection Scope</u>

An in-office review was conducted of Entergy Nuclear Vermont Yankee exercise objectives submitted to the NRC on January 9, 2003 and the exercise scenario submitted on February 5, 2003 to determine if the Vermont Yankee exercise would test major elements of Entergy's Emergency Plan as required by 10 CFR 50.47(b)(14).

The onsite inspection consisted of the following review and assessment:

- The adequacy of Entergy's performance on the biennial full-participation exercise performance by primarily focusing on the implementation of the risk-significant planning standards (RSPS) in 10 CFR 50.47 (b) (4), (5), (9) & (10) which are emergency classification, offsite notification, radiological assessment, and protective action recommendations, respectively.
- The overall adequacy of Entergy's emergency response facilities and its implementation of NUREG-0696, "Functional Criteria for Emergency Response Facilities" and Emergency Plan commitments. The facilities assessed were the simulator, Technical Support Center (TSC), Operations Support Center (OSC), and Emergency Operations Facility (EOF).
- Other performance areas besides the RSPS, such as, the emergency response organization's (ERO) recognition of abnormal plant conditions, command and control, intra- and inter-facility communications, prioritization of mitigation activities, utilization of repair and field monitoring teams, interface with offsite agencies, and the overall implementation of the Emergency Plan and its implementing procedures.
- Past performance issues from NRC inspection reports and Entergy drill reports to determine effectiveness of corrective actions as demonstrated during this exercise to ensure compliance with 10CFR50.47(b)(14).
- The post-exercise critique to evaluate the Entergy's self-assessment of its ERO performance during the exercise and to ensure compliance with 10CFR50 Appendix E.IV.F.2.g.

The inspectors reviewed various documentation which are listed in Attachment 1 to this report.

b. Findings

No findings of significance were identified.

1EP4 Emergency Action Level and Emergency Plan Changes

a. Inspection Scope

An in-office inspection was conducted by a regional inspector on April 16, 2003, that reviewed recent changes to emergency plan implementing procedures (see attachment) to determine if the changes decreased the effectiveness of the plan. A thorough review was conducted of documents related to the risk significant planning standards (RSPS), such as classifications, notifications and protective action recommendations. A cursory review was conducted for non-RSPS documents. These changes were reviewed against 10 CFR 50.54(q) to ensure that the changes do not decrease the effectiveness of the plan, and that the changes as made continue to meet the standards of 10 CFR 50.47(b), the requirements of Appendix E, and the intent of NUREG-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants. These changes are subject to future NRC inspections to ensure that the results of the changes continue to meet NRC regulations.

b. <u>Findings</u>

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA2 Identification and Resolution of Problems

a. <u>Inspection Scope</u>

The inspectors reviewed Entergy's critique findings documented in 2001, 2002 and 2003 drill and exercise reports to determine if significant performance trends exist and to determine the effectiveness of licensee corrective actions based upon ERO performance during the exercise. The inspectors verified that issues identified during this exercise were entered into Entergy's corrective action program and reviewed event reports related to significant findings from past drill/exercise reports to assess the adequacy of the corrective actions.

b. <u>Findings</u>

Introduction

The inspectors identified a finding of very low safety significance (Green) that is also a non-cited violation of 10 CFR 50.47(b)(14) and Appendix E.IV.F.2.g., which states in part that formal critiques shall identify weak or deficient areas that need correction and any deficiencies identified as a result of exercises or drills are (will be) corrected. The performance deficiency was that Entergy failed to take adequate corrective actions for eight problems that were repetitive in emergency preparedness exercises/drills conducted since 2001 and reoccurred during the 2003 biennial exercise.

<u>Description</u>

The inspectors reviewed the exercise/drill reports from 2001, 2002 and 2003 and the associated event reports and found eight exercise/drill problems that were repetitive in drills conducted in the past three years and again identified by Entergy during the 2003 biennial exercise. The eight problems observed during the exercise were:

- 1. Ring-down phones between the emergency facilities were not operating which made it cumbersome for the facility leads because they had to communicate via a wall phone with no speaker and at times impeded the flow of information between the facilities.
- 2. Air Radiation Monitors (ARM) located in the TSC were inoperable which caused the Health Physicists to monitor the area with hand held instrumentation.
- 3. Inadequate process for routing and communicating dose assessment information to the states from the dose assessment area resulted in the state representatives having to leave their areas and seek out available dose assessment information or miss information altogether.
- 4. Challenging questions were not posed at the News Media Center which resulted in the News Center having to re-demonstrate this objective after the termination of the exercise in order for the Federal Emergency Management Agency to adequately meet their evaluation objectives.
- 5. An OSC team was sent out to a wrong location and some OSC field teams didn't get out quickly which delayed repairs but did not impede Entergy from achieving safe shutdown and restoring plant operations.
- 6. Public Announcement (PA) speakers in the emergency facilities were inaudible and there was a lack of attention to plant announcements impeding players from hearing information concerning PARs, site evacuations, plant status, etc.
- 7. Headsets were not working along with other facility equipment problems (faxes, xeroxing).
- 8. Information on the status boards in the TSC and EOF were at times incomplete or untimely.

Entergy found alternative methods for working around these problems during the exercise and they didn't impede the licensee from meeting the exercise objectives and from protecting the public health and safety. However, these problems continued to be identified during drills/exercises over a three year period without resolution to prevent recurrence.

Analysis

The inspector used the guidance of Manual Chapter (MC) 0612, Power Reactor Inspection Reports, Appendix B for screening and dispositioning this issue. Traditional enforcement does not apply because this issue did not have any actual safety consequences or potential for impacting the NRC's regulatory function and was not the result of any willful violation of NRC requirements or Entergy's procedures. This finding is more than minor because it is associated with the EP cornerstone attribute and effects the ERO performance cornerstone objective (planning standard 10 CFR 50.47(b)(14). A failure to correct past problems could impede ERO performance during an actual event. Specifically, Entergy failed to take adequate corrective actions for eight problems that were identified during drills conducted in the past three years and reoccurred during the 2003 biennial exercise. This issue was considered of very low safety significance using the Manual Chapter 0609, Appendix B, EP SDP because the performance deficiency was a planning standard implementation problem in distinction to a planning standard function failure and was not a risk significant planning standard problem. This was considered a failure to comply with a non-risk significant planning standard (10 CFR 50.47(b)(14) and Appendix E, Section IV.F.2.g) and accordingly, MC 0609, Appendix B, EP Risk Determination Flow Chart, Sheet 1, the significant determination process was entered.

Enforcement

10 CFR 50.47(b)(14) and 10 CFR Part 50, Appendix E, Section IV.F.2.g, states, in part, that exercise deficiencies identified as a result of exercises or drills shall be corrected and deficiencies identified as a result of exercises are corrected. Contrary to the above, during an exercise used for training and evaluating emergency response capabilities, eight problems identified during the 2003 exercise were repetitive from drills conducted in the past three years. Therefore, Entergy's corrective actions were inadequate and did not prevent recurrence. This issue is being treated as a Non-Cited Violation (NCV), consistent with Section VI.A. of the NRC Enforcement Policy. This issue was documented in Event Report No. ER-2003-0777. (NCV 50-271/03-03-01)

40A6 Meetings, including Exit

The inspectors presented the inspection results to Mr. Jay Thayer and other members of the Entergy's staff at the conclusion of the inspection on April 6, 2003.

ATTACHMENT 1

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Vermont Yankee Nuclear Power Station

Lori Tkaczyk, Manager, Emergency Planning Mike Balduzzi, Vice President, Operations Kevin Bronson, General Manager Mike Empey, E-Plan Drill/Exercise Coordinator Audra Williams, E-Plan On-site Coordinator Chrissy Canty, E-Plan Assistant

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened/Closed

NCV 50-271/03-03-01 Inadequate corrective action of past exercise

problems since 2001

Discussed

None

LIST OF ACRONYMS

EOF	Emergency Operations Facility
EP	Emergency Preparedness
ERO	Emergency Response Organization
OSC	Operations Support Center
RSPS	Risk Significant Planning Standard
SDP	Significant Determination Process
TSC	Technical Support Center

LIST OF DOCUMENTS REVIEWED

Vermont Yankee Nuclear Emergency Plan, Rev. 37

AP 3125, Emergency Plan Classification and Action Level Scheme, Rev. 19

OP 3505, Emergency Preparedness Exercises and Drills, Rev. 24

OP 3511, Off-site Protective Action Recommendations, Rev. 12

OP 3513, Evaluations of Off-site Radiological Conditions, Rev. 21

OP 3540, Control Room Actions During an Emergency, Rev. 3

OP 3541/42, Activation and Operation of the TSC, Rev. 2

OP 3545/46, Activation and Operation of the EOF, Rev. 2

EP-AD-022, Nuclear Emergency Planning Performance Indicators, Revision 2

Drill Items for Further Actions, June 2002 and August 2002

Management Drill Critique Practice Drill, 2002

Management Critique Exercise, 2001

ER No. 200111770, Site Area Emergency EAL declared during E-Plan drill

E-Drill-2001-EOF-01, Respond to 2001 Drill Observation EOP-2

E-Drill-2001-EOF-05-01, Respond to 2001 Drill, Improvement needed for status boards

E-Drill-2001-GEN-6-03, Revise OP 0305-Figure 4

EPEX-2001-EOF-9-01, Provide more resource for training on earthquakes and seismic activity

EPEX-2001-EOF-10-01, State PAR Status Board

EPEX-2001-EOF-12-01, Dissemination of rad data to each State

EPEX-2001-EOF-19-01, Training for the EOF engineers - need access to key plant parameters

EPEX-2001-EOF-21-01, Protocol for work assignments for the EOF Engineering Group

EPEX-2001-EOF-22-01, Consider adding long term cool down recommendations to appropriate procedures

EPEX-2001-GEN-10-01, Integration with the NRC Response Team

EPEX-2001-GEN-13-01, Plume extending beyond the 10-mile EPZ

EPEX-2001-SCR-01, Investigate and resolve the problem with the gaitronics interface

EPZ-2001-NMC-15-01, New Media Center Questions

TCR 2001-0320, Problems with the ring-down phone lines and gaitronics

ER No. 20030465, Emergency Action Levels for Emergency Classifications

ER No. 20021405, ERDS appeared to have periodically stopped working during drill

ER No. 20021409, Missed EAL Determination in Simulator during Drill

ER No. 20021410, Inadequate drill performance in the notification and communication function EPEX-2001-EOF-5-01, Timing of PARS

Facility critique, TSC, August 21, 2002, TSC ARMS still broken

Facility critique, simulator, August 21, 2002, Use of ring-down phone due to operational errors

OP 3504, Emergency Communications, Rev 36

OP 3506, Emergency Equipment Readiness Check, Rev 42

OP 3507, Emergency Radiation Exposure Control, Rev 30

OP 3524, Emergency Actions to Ensure Initial Accountability and Security Response, Rev 20

OP 3531, Emergency Call-In Method, Rev 16

AP 3532, Emergency Preparedness Organization, Rev 11

OP 3533, Post Accident Sampling of Reactor Coolant, Rev 6, LPC 1

OP 3540, Control Room Actions During an Emergency, Rev 3

OP 3541, Activation of the Technical Support Center (TSC), Rev 2

OP 3542, Operation of the Technical Support Center (TSC), Rev 2

OP 3543, Activation of the Operations Support Center (OSC), Rev 0

OP 3544, Operation of the Operations Support Center (OSC), Rev 3

OP 3545, Activation of the Emergency Operations Facility / Recovery Center (EOF/RC), Rev 2

OP 3546, Operation of the Emergency Operations Facility / Recovery Center (EOF/RC), Rev 3