



**Vermont Emergency Management**  
**Department of Public Safety**  
103 South Main Street  
Waterbury, Vermont 05671-2101  
[www.dps.state.vt.us/vem](http://www.dps.state.vt.us/vem)

[toll-free] 800-347-0488  
[phone] 802-244-8721  
[TTY] 888-545-7598  
[fax] 802-241-5556

January 27, 2011

Mr. Steven Colman, Radiological Assistance Committee Chairperson  
U.S. Department of Homeland Security  
Federal Emergency Management Agency Region I  
99 High Street, 5<sup>th</sup> Floor  
Boston, MA 02110-2320

Dear Mr. Colman:

Please be advised that in accordance with 44 CFR 350; NUREG-0654/FEMA REP-1, elements G, H, N, O, P; FEMA REP-10, FEMA GMs PR-1, AN-1, MS-1 and Vermont Statutes Annotated Title 20, Part 1, Chapter 1, Section 3a. (1); the State of Vermont hereby submits the Annual Letter of Certification with attachments, for the calendar year 2010 for the Entergy Nuclear Northeast Vermont Yankee Power Station. This Letter of Certification has been prepared by the staff of the Radiological Emergency Response Program and the Emergency Management Division.

The effect and purpose of our letter to you is to simply set forth Vermont Emergency Management's efforts and plans, in a format designed by the federal government. The certification letter is not in fact a certification of the efficacy of certain plans or preparedness.

If you have any questions please feel free to contact Vermont Emergency Management Director, Michael O'Neil.

Sincerely,

  
Keith Flynn, Commissioner  
Vermont Department of Public Safety

**VERMONT DEPARTMENT OF PUBLIC SAFETY  
EMERGENCY MANAGEMENT DIVISION**



**RADIOLOGICAL EMERGENCY RESPONSE PLAN  
(RERP)**

**ANNUAL LETTER OF CERTIFICATION  
CALENDAR YEAR 2010**

**JANUARY 31, 2011**

**VERMONT DEPARTMENT OF PUBLIC SAFETY  
ANNUAL LETTER OF CERTIFICATION (ALC)**

**CALENDAR 2010**

**SUMMARY FOR 2010**

In conformance with the Annual Letter of Certification Guidance contained in the REP Program Manual dated March 2010, this Annual Letter of Certification (report) provides the information requested in the same sequence provided in the REP Program Manual. Where the manual guidance was redundant, this report is redundant to assist the FEMA reviewers. This report is designed to provide not only that information required of the states but also to answer questions listed under the FEMA Region Review Guide. The Annual Letter of Certification (report) has been streamlined to make FEMA review more effective. Supporting documents are provided as Annexes.

The following information is provided in accordance with REP Manual Review Guide as further defined by NUREG-0654, elements G, H, N, O, P; FEMA REP-10 and FEMA GMs PR-1, AN-1, and MS-1.

## **ANNUAL LETTER OF CERTIFICATION SECTIONS**

### **Section**

1. Public Education and Information
2. Emergency Facilities and Equipment
3. 24-Hour Staffing
4. Drills
5. Radiological Emergency Response Training
6. Update of Plans/Procedures and Letters of Agreement
7. Alert and Notification

## **LIST OF TABLES**

### **Table No.**

1. RERP 2010 Meetings
2. RERP EPZ Training Program Description
3. RERP 2010 EPZ Training
4. RERP Staff Training, Drills and Exercises
5. RERP Plans and Procedures

## **LIST OF ATTACHMENTS**

### **Attachment No.**

1. Brattleboro-Bellows Falls Telephone Book Emergency Planning Information
2. Mailrite Certificate of Distribution for Calendar and Poster Mailing
3. 2010 and 2011 Vermont Yankee Entergy Nuclear Northeast Vermont Emergency Public Information Calendar
4. 2010 Vermont Yankee Entergy Nuclear Northeast "For Your Information" Poster
5. 2010 Vermont Emergency Public Information Brochure
6. "Radiological Emergency Information for Vermont's Farmers, Food Processors and Distributors" Booklet
7. "Entergy Nuclear" - For Energy Security and a Cleaner Environment (Northeast Vermont Yankee Press Kit)
8. RERP Emergency Worker Personal Equipment Allocation
9. Vermont Department of Health Radiological Health Office Instruments, and Radiation Laboratory Instruments
10. Equipment Inspection, Inventory, Operations Check for Local Equipment and State Radio and Equipment
11. Vermont Department of Health 2009 Potassium Iodide Distribution and 2010 Potassium Iodide Available for Distribution
12. 2010 Quarterly Drill Schedules for EPZ Weekly, Monthly, and VEM Staff and HazMat Team
13. VEM RERP Program Briefing Book (July 1, 2009 – June 30, 2010)
14. Entergy – Vermont Yankee Public Notification System Status 2010 Annual Report (Siren Certification)

# **1. PUBLIC EDUCATION AND INFORMATION**

## **A. Annual Dissemination of Information**

- (1) Means of Dissemination of Emergency Public Information (EPI):
  - (a) Vermont Yankee Calendars are distributed annually to all homes and businesses within the EPZ. The calendars contain sixteen pages of emergency public information relating to notification of an emergency and expected actions to take during an emergency. The 2010 calendars were mailed to all homes and businesses in December 2009 and the 2011 calendars were distributed in December 2010.
  - (b) The final page of the January 2010-2011 Fairpoint Communications telephone book for the Brattleboro - Bellows Falls area had a one page summary of key emergency planning information. This was provided as a public service by Vermont Emergency Management (Attachment 1).
  - (c) Vermont Yankee produces a tri-fold brochure and a poster containing key emergency planning information, including directions to the reception centers. These brochures and posters were distributed in the beginning of 2010 to motels, hotels, bed & breakfasts, businesses, campgrounds, and outdoor recreational areas within the EPZ. Laminated posters were hung at all Vermont boat launches in the spring of 2010.
- (2) Identification of Recipients:
  - (a) Mailrite, Inc., of Putney, VT., purchased the city delivery and post office box addresses for those towns where U.S. Postal Service regulations required specific addresses. In addition the current numbers for all residential postal delivery to Rural Routes and Highway Contract Routes were obtained from the Post Office in each town. Mailrite, Inc. mailed a total of 11,699 calendars with sixteen pages of emergency information to all households in the Vermont EPZ (see Attachment 2). In addition, calendars were hand delivered to each Town Clerk's office in each of the EPZ communities.
  - (b) The 2010 posters were distributed to businesses and organizations in the EPZ via U.S. Mail by Mailrite, Inc. in the early part of 2010.
- (3) Copies of all publications/brochures described in this document may be found in the attachments section of this document
  - (a) 2010 and 2011 Vermont Yankee Vermont Calendar (see Attachment 3).

- (b) 2010 Vermont Yankee "For Your Information" poster (17" x 22" tri-color) (see Attachment 4).
  - (c) 2010 "Vermont Emergency Public Information" brochure, (9" x 15.75" four-color) (see Attachment 5).
- (4) Dates Updated and Distributed
- (a) The 2010 calendars were mailed to all permanent population households beginning in December 2009 and the 2011 calendars were mailed to the permanent population households in December 2010.
  - (b) The 2010 posters were distributed to businesses and organizations in the EPZ via U.S. Mail by Mailrite, Inc., in the early part of 2010.
- (5) Yes, all hotels, motels, parks, boat launches, and other recreational areas were included in dissemination of annual public information
- (6) Copies of the "Radiological Emergency Information for Vermont's Farmers, Food Processors and Distributors" booklet have been distributed to farmers and food processors in the 10-mile Emergency Planning Zone. Additionally copies of this brochure are at County Extension Service offices available for distribution in the 50-mile Emergency Planning Zone should there be an emergency at Vermont Yankee Nuclear Power Station requiring it (see Attachment 6)

## **B. Yearly Maintenance of Emergency Public Information**

- (1) The 2010 posters were distributed to businesses, campgrounds and recreational areas
- (a) Camps and Parks:
    - i. Brattleboro KOA Camp Ground Dummerston
    - ii. Fort Dummer State Park Brattleboro
    - iii. Camp Waubanong Brattleboro
    - iv. Green Mountain Camp for Girls Dummerston
    - v. Hidden Acres Camp Ground Dummerston
  - (b) Boat launches in Vermont on or near the Connecticut River

- i. Old Ferry Road in Brattleboro
  - ii. Retreat Meadows on Route 30 in Brattleboro
  - iii. South of the Putney Town line in Dummerston
  - iv. Just north of the Dummerston town line in Putney
  - v. Sunset Lake on the Marlboro/Dummerston town line
  - vi. Water Access near Cersosimo's Lumber in Vernon
- (2) The recreational areas that receive posters and brochures were not expanded nor were there any new transient areas added to the plume EPZ.
  - (3) The 2010 posters were distributed by Vermont Yankee and Vermont Emergency Management staff. The posters are reviewed annually for accuracy and revised if necessary, reprinted, and redistributed each year by Vermont Yankee

### **C. Dissemination of Emergency Information to Transient Population**

- (1) Information is disseminated to the transient population in the EPZ through the programs described above in Section 1.A.(1). The posters and brochures are designed with tourists and transients in mind and the widely disseminated calendars have information that pertains to both residents and transients alike. The 2010 poster was distributed by Vermont Yankee.
- (2) Dissemination:
  - (a) The 2010 poster was mailed out in early 2010. The poster is provided to businesses within the EPZ and on display in area hotels, stores, and restaurants. Additionally, VEM staff made the poster available to state and local emergency response facilities for display.
  - (b) A plasticized version of the 2010 poster (17" x 22") was revised in 2009 and was placed in the following locations in the spring of 2010 by Vermont Emergency Management staff. These locations are utilized on a seasonal basis only.
- (3) The 2010 poster and brochure were sent to all known hotels and motels and other locations frequented by tourists and transients within the Vermont portion of the EPZ. Additionally, VEM staff ensured that the posters and brochures were available in state and local emergency response facilities.

- (4) As noted in 1.A.(3) above, a sample of public information materials are included in this package (see Attachments 3, 4, and 5).

#### **D. Annual Media Program**

- (1) The annual media program for 2010 was conducted by the Vermont Yankee Public Relations Office with the local media listed below and completed December 31, 2009. They were provided with Vermont Yankee Joint News Center information which included a Vermont Yankee press brochure (see Attachment 7), containing Information on general plant operations, radiation, and emergency planning.
- (2) Press kits were distributed to the following news media outlets in December 2009:
- (a) Associated Press, Montpelier, VT
  - (b) Brattleboro Reformer, Brattleboro, VT
  - (c) Burlington Free Press, Burlington, VT
  - (d) Eagle Times, Claremont, NH
  - (e) Greenfield Recorder, Greenfield, MA
  - (f) Keene Sentinel, Keene NH
  - (g) Rutland Herald, Rutland, VT
  - (h) The Commons, Brattleboro, VT
  - (i) The Monadnock Radio Group, Keene, NH
  - (j) Union News, Greenfield, MA
  - (k) Vermont Public Radio, Colchester, VT
  - (l) WCAX, Channel 3, Burlington, VT
  - (m) WCEW/WAMC, Plattsburgh, NY Bureau
  - (n) WFCR, Amherst, MA
  - (o) WHAI, Greenfield, MA
  - (p) WHYN, Springfield, MA
  - (q) WKVT, Brattleboro, VT
  - (r) WNNE, Channel 31, White River Junction, VT
  - (s) WPTZ, Channel 5 Burlington, VT
  - (t) WTSA, Brattleboro, VT
- (3) The annual media program was conducted and sponsored by the Vermont Yankee Public Relations Office
- (4) The annual media program was conducted to acquaint news media with the emergency plans, information concerning radiation, and points of contact for the release of public information in an emergency.
- (5) The press kit included:

- (a) Vermont Yankee Joint Information Center Annual Media Training Power Point
- (b) "Vermont Yankee Safe. Clean. Reliable. Brochure"
- (c) "Vermont Yankee Joint Information Center Media Information"
- (d) "Understanding Radiation, Its Effect and Benefits"
- (e) "Fact Sheet: Emergency Preparedness Near Nuclear Power Plants"
- (f) "Nuclear Power Plant Emergency Preparedness: Protecting Our Neighbors in the Event of an Emergency"
- (g) "Lighting the Future with Clean Nuclear Energy"
- (h) A Vermont Yankee Calendar

## **2. EMERGENCY FACILITIES AND EQUIPMENT**

### **A. Substantial Changes to Facilities**

- (1) New facilities, communications or congregate care.

In 2010, there were no new facilities, communications, or congregate care centers established by Vermont Emergency Management

- (2) Substantial Changes in facilities, communications or congregate care

In 2010, the Incident Field Office name was changed in all plans and procedures to the name of Staging Area. This change also led to a change in the primary staging area location from the Dummerston School at 52 Schoolhouse Rd Dummerston, VT., to the Agency of Transportation garage at 890 U.S. Route 5 in Dummerston, VT.

The State Emergency Operations Center (SEOC), was moved from the Department of Public Safety Headquarters to the Weeks Building in the Waterbury State Office Complex. This change is temporary as the former State Emergency Operations Center is under renovation. Renovations are expected to be finished in calendar year 2011 and the SEOC will return to their former location. As a result of said change, the radio communications and all other communications capabilities were moved to this interim facility.

### **B. Inspection, Inventory and Operational Checks of Survey Instruments**

Quarterly and pre-use inspections, inventories, and operational checks were completed for radiological and environmental monitoring equipment.

- (1) Type of Equipment

- (a) Berkeley Nucleonic Model SAM 935
- (b) Canberra AN/UDR -13
- (c) CDV 700 Radiological Survey Meter with pancake probe
- (d) CDV 700 Radiological Survey Meter with hot dog probe
- (e) CDV 715 Radiological Survey Meter
- (f) CDV 718 Radiological Survey Meter
- (g) F & J Specialty Products, Inc Model HV1-BC Air Sampler
- (h) Ludlum Model 3 Survey Meter
- (i) Ludlum Model 14C Survey Meters with M44-9 Pancake Probes
- (j) Ludlum Micro-R Meter Model 19
- (k) Ludlum Model 300 Alarm Meter
- (l) Ludlum 2220 or 2221 Single Channel Analyzer
- (m) Ludlum Model 2401-P Survey Meter

(n) Thermo Scientific Radiation Portal Monitor Model TPM-903

(2) Quantity of Equipment

For a listing of radiological survey instrument location see Attachment 8, "RERP Emergency Worker Personal Equipment Allocation", and Attachment 9, "Vermont Department of Health 2010 Radiation Laboratory Instruments".

(3) Location of Equipment

See Attachment 8, "RERP Emergency Worker Personal Equipment Allocation", and Attachment 9, "Vermont Department of Health 2010 Radiation Laboratory Instruments" for a listing of radiological survey instrument locations.

(4) Dates of Inspection / Inventory / Operational Check

The dates of Inspection, Inventory, and Operational Check records for dosimetry and survey equipment may be found in Attachment 10. All the 2010 records are maintained at the Vermont Emergency Management Brattleboro office and may be viewed there upon request.

The Vermont Department of Health maintains and calibrates the radiation instruments used in its laboratory according to National Environmental Laboratory Accreditation Conference (NELAC) standards. Records of maintenance and calibration are available at the laboratory in Burlington, VT.

### C. Calibration of Survey Instruments

(1) Type of Equipment

- (a) Berkeley Nucleonic Model SAM 940
- (b) Canberra AN/UDR -13
- (c) CDV 700 Radiological Survey Meter with pancake probe
- (d) CDV 700 Radiological Survey Meter with hot dog probe
- (e) CDV 715 Radiological Survey Meter
- (f) CDV 718 Radiological Survey Meter
- (g) F & J Specialty Products, Inc Model HV1-BC Air Sampler
- (h) Ludlum Model 3 Survey Meter
- (i) Ludlum Model 14C Survey Meters with M44-9 Pancake Probes
- (j) Ludlum Micro-R Meter Model 19
- (k) Ludlum Model 300 Alarm Meter
- (l) Ludlum 2220 or 2221 Single Channel Analyzer
- (m) Ludlum Model 2401-P Survey Meter
- (n) Thermo Scientific Radiation Portal Monitor Model TPM-903

(2) Quantity of Equipment

Attachment 8, "RERP Emergency Worker Personal Equipment Allocation", and Attachment 9 "Vermont Department of Health Radiation Laboratory Instruments" list the quantity of radiological survey instruments.

(3) Location of Equipment

Attachment 8, "RERP Emergency Worker Personal Equipment Allocation", and Attachment 9, "Vermont Department of Health 2010 Radiation Laboratory Instruments" for a listing of radiological survey instrument locations.

(4) Frequency of Calibration

All survey instruments used for radiological and environmental monitoring were calibrated at intervals recommended by the supplier of the equipment.

(5) Dates of Calibration

The calibration records for all dosimetry and survey equipment may be found in Attachment 10. All the 2010 records are maintained at the Vermont Emergency Management Brattleboro office and may be viewed there upon request.

The Vermont Department of Health maintains and calibrates the radiation instruments used in its laboratory according to National Environmental Laboratory Accreditation Conference (NELAC) standards. Records of maintenance and calibration are available at the laboratory in Burlington, VT.

**D. Direct-Reading Dosimetry Testing**

(1) Type of Direct Reading Dosimetry

- (a) Canberra AN/UDR -13
- (b) Canberra Model 213 Electronic Self-Reading Dosimeter
- (c) CDV 715 Direct Reading Dosimeters 0 – 1000 mR
- (d) CDV 720 Direct Reading Dosimeters 0 – 2000 mR
- (e) CDV 725 Direct Reading Dosimeters 0 – 5 R
- (f) CDV 730 Direct Reading Dosimeters 0 – 20 R
- (g) CDV 750 Dosimeter Charger
- (h) CDV 750 Model 6 Dosimeter Charger
- (i) DRD 0 – 1 R with charger
- (j) DRD 0 – 20 R with charger

(2) Quantity of Direct Reading Dosimetry

Attachment 8, "RERP Emergency Worker Personal Equipment Allocation", lists the quantity of direct reading dosimetry.

(3) Location of Direct Reading Dosimetry

Attachment 8, "RERP Emergency Worker Personal Equipment Allocation", lists the location of direct reading dosimetry.

(4) Frequency of Calibration of Direct Reading Dosimetry

Direct Reading Dosimeters used for radiological and environmental monitoring are electrically leak-checked and calibrated by Arrow-Tech in Rolla, ND at intervals recommended by the supplier of the equipment.

(5) Dates of Calibration of Direct Reading Dosimetry

The calibration records for all dosimetry and survey equipment may be found in Attachment 10. All the 2010 records are maintained at the Vermont Emergency Management Brattleboro office and may be viewed there upon request.

**E. Potassium Iodide (KI) Availability**

(1) Approximate Amounts of KI Available (see Attachment 11).

- (a) 130mg = 55,000
- (b) 65mg = 19,000
- (c) Liquid = 170 Bottles (30 doses/bottle)

(2) KI is Stored in the Vermont Department of Health Brattleboro and Springfield district offices (inventory split between district offices because the Brattleboro district office is located in the EPZ).

(3) KI Expiration Dates (see Attachment 11).

- (a) 130mg = February 2014
- (b) 65mg = April 2012
- (c) Liquid = March 2011 and May 2012

### **3. 24-HOUR STAFFING**

The State Emergency Operations Center (SEOC) is located in Waterbury, Vermont, and serves as the command and control center for off-site response efforts and is activated at an Alert or higher classification. However at the discretion of the SEOC Manager, essential DPS support staff may be requested to report to the EOC at an Unusual Event to standby and monitor the situation. In addition the SEOC may be staffed on a 24-hour basis with qualified representatives from participating state agencies who have been involved and trained at the reoccurring Vermont Yankee quarterly drills, other specific training sessions and table top exercises.

The State EOC is capable of continuous (24-hour) uninterrupted operations for a protracted period. Multiple shifts may be necessary to maintain uninterrupted coverage, the nature and extent of which will be incident dependent. The State EOC contains the communications equipment, maps, status boards, plans and procedures, all relevant documentation (procedure, log forms, message forms), and other resources necessary to support the response effort including a web-based disaster management system with those capabilities. In addition to EOC staff positions, sufficient support staff will be provided by the Department of Public Safety and other involved State agencies to ensure sufficient operation of the EOC. Operation procedures are prepared and maintained by each assigned State agency. The Director of each organization with an identified emergency response role must maintain an adequate emergency response capability by ensuring that the organization can be notified and mobilized on a 24-hour basis. Each organization is also capable of 24-hour staffing for the duration of the emergency.

The SEOC Manager, through the EOC support staff, will ensure the continuity of the necessary technical, administrative, and material resources during response operations. Prior to a shift change, outgoing staff provides incoming staff with a briefing on the current emergency classification and the status of emergency response efforts. This capability was demonstrated during an "All Hazards" Catastrophic Exercise conducted over a 36 hour period in September 2010.

- A. In the initial phase of an accident, the on-shift organization will be responsible for event assessment, classification, protective action decision making, notification, and completion of primary emergency actions. Subsequently, additional resources will be activated with the capability of continuous (24-hour per day) operations for a protracted period.
- B. The State Warning Point (SWP), Vermont State Police Dispatch Center, Rockingham, serves as the initial notification point to off-site authorities from the Vermont Yankee Control Room with the alternate SWP located at the Vermont State Police Station in Derby as back-up. Both the SWP and ASWP are staffed on a 24-hour basis and are prepared to send uniformed officers to any town that can not be contacted by pager or telephone.

- C. SEOC Manager - The Director of Vermont Emergency Management, or designee, assumes the duties of SEOC Manager unless otherwise specified by the Governor and is responsible for:
- (1) Activating the emergency response organization and facilities.
  - (2) Coordinating the local, state, and federal response at an operational level.
  - (3) Ensuring the continuity of emergency operations and resources on a 24-hour basis throughout the incident period.
- D. EOC Staff or Incident Coordination Team (ICT) - the SEOC Manager is supported by an EOC Staff based on the Incident Command System (ICS) National Training Curriculum. This staff consists of full-time Department of Public Safety employees and personnel from various state agencies and organizations who are trained to respond to any type of hazard.
- (1) Overseeing all administrative functions including assignment and 24-hour staffing of VEM personnel.
  - (2) Coordinating with other state agencies regarding 24-hour staffing of the State EOC.
- E. The State organization interfaces with the utility, local, federal, and private organizations. A number of primary and backup communication systems are available for reliable communications among principal organizations for coordinated emergency response. The Public Notification System for the Vermont Yankee Plume Exposure Pathway Emergency Planning Zone consists of weather alert radios, automated phone alerting systems, sirens and the Emergency Alert System (EAS). The State has a 24-hour per day capability to activate the Public Notification System.
- F. WTSA AM/FM will broadcast public notification and guidance information authorized by the State EOC or during a fast breaking emergency, by the State Warning Point. Both the State EOC and the State Warning Point have the ENDEC encoder. WTSA AM/FM operates on a 24-hour, 7 days a week, basis. Despite the fact that the station is not always attended, the State EOC can activate an EAS message on a 24-hour, 7 days a week, basis.
- G. The Staging Area is staffed at the Alert level with personnel from various state and local agencies which may include representation from the Department of Health, Vermont State Police, Agency of Transportation, Agency of Human Services, and the Windham County Sheriff's Department. The Staging Area is capable of 24-hour operations.
- H. In the event of an emergency, the licensee is required to establish an off-site facility referred to as the Emergency Operations Facility (EOF). The EOF is

located at Vermont Yankee Corporate Headquarters, Old Ferry Road, Brattleboro, Vermont, and serves as the near-site technical support center established to coordinate the activities of VY emergency response personnel, evaluate off-site accident conditions, and maintain coordination and communications with off-site response authorities. The EOF facility is staffed at an Alert or higher classification and state personnel are capable of sustaining 24-hour operations. Although the radiological health capability for the state is robust with several trained tracking and sampling teams and a dose assessment team, it is likely that Vermont would request assistance to supplement our existing capability in a protracted incident in accordance with existing procedures.

## **4. DRILLS**

### **A. Communications Drills**

- (1) Monthly between State and ORO within the Plume EPZ

Monthly communications tests were conducted between the State Emergency Operations Center (EOC), EPZ town EOCs, the Staging Area (formerly the Incident Field Office [IFO]), the Emergency Operations Facility (EOF), and the BFUHS Reception Center. Telephones, radios and fax machines were tested.

- (2) Quarterly between the State and Federal emergency response organizations and States within the ingestion Pathway EPZ

The National Alerting and Warning System (NAWAS) link between FEMA Headquarters and the Vermont State Warning Point was tested and answered by the SWP daily. The regional NAWAS link was tested and answered by the SWP once a week. The State NAWAS link was tested and answered by VEM staff once a week on Wednesday.

- (3) Annually between nuclear facility, State, and local emergency operations centers, and radiological field monitoring teams

Weekly tests of the Nuclear Alert System were conducted between Vermont Yankee and the State Warning Point (SWP) in Rockingham and the Alternate SWP in Derby staffs throughout 2010 (see Attachment 12 for the Quarterly Drill Schedules). Additionally, Vermont Yankee tests the system with all three states on a periodic basis.

- (4) Dates of communications drills and participating organizations

- (a) Weekly Pager Tests

The SWP and ASWP staff conducted weekly EPZ pager tests. Approximately thirty (30) state and local personnel in the Emergency Planning Zone (EPZ) were paged each week to confirm the viability of notification from the State Warning Point and the Alternate State Warning Point. Weekly EPZ tests are not conducted the week of a monthly notification drill (see Attachment 12 for the 2010 Quarterly Drill Schedules).

- (b) Monthly Notification Drills

- i. All pager carriers are notified monthly in the Monthly notification drills. The file of these notification drills is available at Vermont Emergency Management in Waterbury (see Attachment 12).
  - ii. Once a month, a simulated message is sent to the State Warning Points. Procedures are followed to the point of a sufficient number of State and EPZ responders (approximately 16 persons) being paged to simulate activating sirens and an EAS message and to actually activate the Tone Alert Radios in the EPZ within 15 minutes of the message being confirmed.
  - iii. Once a month, a simulated message is sent to the State Warning Points and procedures are followed to the point of both State and EPZ responders (approximately 78 persons) being paged and listening to the recording of the simulated message from Vermont Yankee.
  - iv. In those months when there is a Vermont Yankee quarterly drill with notification to Vermont, that drill is counted as the monthly drill.
- (c) All appropriate organizations been included in the communications drills (see Attachment 12, REMARKS: VEM Staff, State Agencies, VT National Guard, and EPZ Responders).

## **B. Radiological Monitoring Drill**

- (1) Vermont met and exceeded its requirement of conducting one (1) annual radiological monitoring drill in 2009. Typically the Sampling Teams conduct two field exercises, either one of which qualify as the required radiological monitoring drill. The 2010 field exercises occurred in late Spring and late Summer (see B.(5) below). In 2009 the teams took advantage of the major federal two-day exercise, "Empire 09". This was a major federal exercise with all of the federal participants that will be participating in the FEMA evaluated 2011 ingestion pathway exercise. Although the scenario centered on a "dirty bomb" in Albany, the Vermont sampling teams took samples just as they would in a nuclear power plant incident working for a FRMAC. The teams spent two days, (June 2 and 3, 2009) working with federal and other state assets in Vermont. They staged out of the Police Academy in Pittsford, VT. This also involved the Vermont Dose Assessment Team. The entire exercise was considered the annual radiological monitoring drill. Vermont HSEEP evaluators provided the state control and evaluation of the participants.
- (2) The Radiological Sampling Teams are staffed by personnel from:
  - (a) The Vermont Department of Health

- (b) The Vermont Agency of Natural Resources
  - (c) The Vermont Agency of Agriculture, Food and Markets
  - (d) The Vermont Department of Labor
- (3) The structure of the radiological monitoring drills in Vermont has evolved into a much more realistic event than the typical demonstration at an ingestion pathway exercise. This structure was also followed in the team's participation in "Empire 09". Having all personnel operate as if they were on an actual sampling mission in different parts of the state challenges the teams in many areas including mission planning, communications, navigation, different types of samples, chain of custody to name only a few..
- (4) In the radiological monitoring drill the following integration and coordination with other organizations that are involved in the process occurred:
- (a) Collection of samples was performed by sampling teams.
  - (b) Samples were actually transported to the Vermont Department of Health Radiation Laboratory in Burlington Vermont.
  - (c) Vermont HSEEP personnel participated in the drill as controllers and evaluators.
  - (d) The analysis of many samples was actually performed by personnel from the Vermont Department of Health Radiation Laboratory in Burlington.
  - (e) The Vermont National Guard Civil Support Team (CST) has been involved in both sampling team training sessions and field exercises.
- (5) Sampling Teams training and participation in Drills were as follows:
- (a) February 3, 2010
  - (b) June 11, 2010
  - (c) September 2, 2010
  - (d) December 03, 2010
- (6) The Vermont Sampling Teams conducted a recruitment drive in 2009 and recruited ten new members. This brings the number of active members to 28 plus the six members of the Sampling Team "Working Group." Their training was already under way with their attendance at the October 20, 2009,

training in Waterbury. Two of the members are cross-trained to work on the Dose Assessment Team.

- (7) A key component of the success of the Vermont Sampling Teams is the effective planning and coordination of the Sampling Teams Working Group. The Working Group consists of members from the following agencies and meets several times a year in addition to the training events:
  - (a) VDH Radiological Program
  - (b) VDH Dose Assessment Team
  - (c) VDH Radiation Lab
  - (d) VT Emergency Management
  - (e) Vermont Labor Department
  - (f) Agency of Natural Resources
  - (g) Agency of Agriculture, Food and Markets
  - (h) Vermont National Guard Civil Support Team

### **C. Health Physics Drills**

- (1) Two (2) health physics drills (plume tracking and dose assessment sessions) were conducted in 2010. The health physics drills were conducted on:
  - (a) March 20 and 21, 2010
  - (b) November 20 and 21, 2010
- (2) Participating Organizations
  - (a) The Vermont Department of Health
  - (b) The Vermont Hazardous Materials Response Team
  - (c) Vermont Emergency Management
  - (d) Vermont Yankee Nuclear Power Station
- (3) Support Resources and Personnel for Field Team Coordination
  - (a) The Vermont Hazardous Materials Response Team

(b) The Vermont Department of Health

(4) Dose Assessment Involvement in Drills

Dose Assessment personnel did not participate in the Health Physics drills this year as they participated in other quarterly functional drills instead.

(5) Appropriate Organizations included in Drills.

All appropriate organizations have been included in drills. Rosters for all drills and exercises are on file in the VEM office in Waterbury, VT.

**D. Medical Emergency Drills**

(1) Vermont Yankee Conducted a Medical Emergency Drill with the Brattleboro Memorial Hospital on September 29, 2010.

(2) The organizations that participated were:

(a) Rescue Inc

(b) Entergy Vermont Yankee

(c) Brattleboro Memorial Hospital

(d) Vermont Emergency Management

## **5. RADIOLOGICAL EMERGENCY RESPONSE TRAINING**

### **A. Initial and Annual Retraining**

- (1) Scope & Purpose
  - (a) The EPZ Training Program is a collaborative effort that involves the RERP Training Coordinator, local emergency management directors (EMDs) and local emergency operations center (EOC) staff, and other stake holders to facilitate training in the Emergency Planning Zone (EPZ) communities.
  - (b) The RERP EPZ Training Coordinator has conducted a detailed needs analysis which resulted in the revision of the existing multi-media training program that consists of both primary and annual re-certification training delivered in modular format for responders in local communities and state agencies (see Table 2).
  - (c) Training for special teams and facilities is tailored to the particular functions being performed. For example, a working group plans and conducts training for the Plume Tracking Team and the Post-Plume Sampling Team.
- (2) Relevant information such as titles, date held, nnumber of participants, and agencies/organizations represented are shown in Table 3.
- (3) Relevant information such as titles, date held, nnumber of participants, and agencies/organizations represented are shown in Table 3.
- (4) Relevant information such as titles, date held, nnumber of participants, and agencies/organizations represented are shown in Table 3.
- (5) All training is conducted at the request of the hosting organizations, therefore, all agencies and organization that were invited to training attended.
- (6) Generally Vermont Emergency Management with the collaboration of other state agencies such as the Vermont Department of Health sponsored the training sessions with some assistance by Vermont Yankee.
- (7) All required organizations were offered training through Vermont Emergency Management pursuant to their plans and procedures.

### **B. Training for the RERP Staff**

RERP staff maintained and increased their knowledge by attending conferences, meetings, and other events. These courses are listed in Table 4.

## 6. UPDATE OF PLANS AND LETTERS OF AGREEMENT

### A. Plans and Procedures

All plans, procedures, letters of agreement, and memorandum of understandings were reviewed and checked for accuracy and completeness by the town Emergency Management Directors, agency heads, and facility managers. All documents are on file and available in the RERP Brattleboro office. The town plans were revised as needed prior to June 30, 2010, and published on July 1, 2010. The select boards of the towns of Guilford, Halifax, and Vernon have reviewed and signed off on the plans. For a listing of the RERP Plans and Procedures see Table 5.

A document, "Vermont Emergency Management Radiological Emergency Response Program **Briefing Book**, July 1, 2010 – June 30, 2011", has been developed by the staff to provide participants in the RERP program with guidance for plan review, training, equipment, and drills and exercises. This document applies to all organizations that participate in the RERP program including state, municipal and private organizations (see Attachment 13).

## **7. ALERT AND NOTIFICATION**

### **A. Routine Siren Testing Program**

- (1) Sirens in Brattleboro and Vernon were tested once a month during 2010 on the following schedule.
  - (a) Brattleboro conducted "growl tests" on the first Saturday of each month at 12:00 noon.
  - (b) Vernon conducted its fifteen-second automated tests at 7:00 PM on the third Thursday of each month.
  - (c) The siren test for the Town of Brattleboro was cancelled in June of 2010 because of a conflict with the public celebration known as "The Strolling of the Heifers." However the Vermont Yankee Nuclear Power Station vendor, Burlington Communications, did conduct a siren test in June 2010 as part of their normal monthly inspection and all Brattleboro sirens passed.
- (2) Twelve (12) monthly siren tests in Brattleboro and Vernon were conducted by Burlington Communications Service Center, Inc.
- (3) Annual full-cycle siren tests were conducted by Vermont Yankee Nuclear Power Station in Brattleboro and Vernon during the month of May 2010.
- (4) Attachment 12, "2010 Siren Certification", shows the results of the siren tests.

### **B. Operable Siren Analysis**

- (1) Computation of siren operability is shown in the Efficiency Summary Table. See Attachment 12, "2010 Siren Certification".
- (2) The monthly, quarterly, and annual calculation of the siren operability percentage is shown in the Efficiency Summary Table. See Attachment 15 "2010 Siren Certification".

### **C. Residential Tone-Alert Radio Maintenance**

- (1) Maintenance of residential National Oceanic and Atmospheric Administration (NOAA) tone-alert radios is an ongoing program and was conducted throughout 2010.

- (2) Vermont Yankee Nuclear Power Station maintains a record of holders of NOAA tone-alert radios which has been sent to the Department of Homeland Security Region 1 office.
- (3) Assistance is offered to holders of tone-alert radios through the information printed in the emergency public information calendar. See Attachment 3, "Vermont Yankee Entergy Nuclear Northeast Vermont Emergency Public Information 2010 Calendar".
- (4) NOAA tone-alert radios were tested weekly by the National Weather Service office in Albany, New York using the transmitter located on Ames Hill in Marlboro, Vermont which covers the ten-mile Emergency Planning Zone. These tests are conducted every Wednesday in the late morning when there is no severe weather. The test is postponed until the next less active day in the event of severe weather. The test is monitored by Brattleboro Central Dispatch. The results are sent to Vermont Emergency Management in Waterbury. This transmitter is used to warn the public of incidents and to direct them to listen to Emergency Alert System radio stations for more detailed instructions.
- (5) Written guidance on NOAA tone-alert radios is provided to users as follows. See Attachment 3, "Vermont Yankee Entergy Nuclear Northeast Vermont Emergency Public Information 2010 Calendar", for documentation.
  - (a) Information on general use of the radios is provided on page 4 of the Vermont Yankee Entergy Nuclear Northeast Vermont Emergency Public Information 2010 Calendar as well as the Owner's Manual.
  - (b) Information on weekly tests is provided on page 4 of the Vermont Yankee Entergy Nuclear Northeast Vermont Emergency Public Information 2010 Calendar. Self-testing guidance is found in the Owner's Manual.
  - (c) Information on suggested placement to facilitate efficient use is provided inside the Owner's Manual.
  - (d) Tone-alert radios and batteries are provided to local emergency management offices by Vermont Yankee Nuclear Power Station. They are distributed to residents by the local emergency management office, fire station, or town clerk's office. The Vermont Yankee Entergy Nuclear Northeast Vermont Emergency Public Information 2010 Calendar advises residents to contact their local emergency management office if they need a radio, batteries, or additional information.
  - (e) Local contact numbers for replacement of radios and a toll-free number for the Vermont Emergency Management Division public inquiry line are listed on page 9 of the Vermont Yankee Entergy Nuclear Northeast Vermont Emergency Public Information 2010 Calendar.

#### **D. Testing of Special Alerting Systems**

- (1) Special alerting systems were tested through formal drills and day-to-day use. Mobile route alerting and notification is not a primary method of informing residents in the Vermont Yankee Nuclear Power Station Emergency Planning Zone. Local fire and police personnel use the same vehicles and equipment for special alerting that are used in normal patrols and response. The New Hampshire Department of Environmental Management and the Division of Fisheries, Wildlife, and Environmental Law Enforcement use the same vehicles, boats, and equipment in day-to-day patrols of the Connecticut River and state forests that would be used in an emergency. The Vermont Department of Fish and Wildlife also uses the same vehicles, boats, and equipment in day-to-day patrols of rivers, lakes, and state forests in Vermont that would be used in an emergency. Because there are few shoreline roads on the Vermont side of the Connecticut River the Vermont Department of Fish and Wildlife would launch one or more boats to alert persons on the shore in Vermont who could not be easily reached by land.
- (2) Except for wilderness and marine areas noted above, vehicle route-alerting is an alternate means of alerting the public in each Emergency Planning Zone town.
- (3) Aircraft route-alerting and notification is not a method of alert and notification in the Vermont Yankee Nuclear Power Station Emergency Planning Zone.
- (4) Institutional alerting mechanisms in schools, hospitals, etc., are the same communications systems that are used in day-to-day operations, and include portable radios, word of mouth, public address systems, and interoffice telephones.
- (5) Automatic dialers/switching equipment Rapid Emergency Notification Telephone System (RENTS) is used for alert and notification in the Vermont Yankee Nuclear Power Station Emergency Planning Zone. TTYs are available for any person who is profoundly deaf and requires special notification via this method. However, there are currently no residents in the Emergency Planning Zone who have requested this assistance. TTYs for special alert and notification are mentioned on pages 3 and 9 of the Vermont Yankee Entergy Nuclear Northeast Vermont Emergency Public Information 2010 Calendar to inform new residents or any person who develops this need. Special tone-alert radios for the deaf or hard-of-hearing are also available for distribution.
- (6) Modulated power lines are not used for alert and notification in the Vermont Yankee Nuclear Power Station Emergency Planning Zone.

## **E. Special Alerting Systems Maintenance**

- (1) The special alerting systems are NOAA tone-alert radios. Information on this is included in Section 7.C. above.
- (2) The items in Review Guide Revision 10, Section 7.E. (1) through (4) are currently not applicable.

## **F. Aircraft and/or Mobile Route-Alerting and Notification**

Aircraft and mobile route-alerting and notification are not used in the Vermont Yankee Nuclear Power Station Emergency Planning Zone.

## **G. Siren Sound Pressure Level**

There was no significant population increase in Emergency Planning Zone areas where the siren sound pressure level is less than 70 dBc that would increase population density above 2,000 individuals per square mile. Nonetheless, five (5) new sirens were installed in the towns of Dummerston and Guilford in 2009 which will broaden siren coverage. These sirens were tested and operational by the end of October 2009, but have not been placed into dedicated service.

## **H. Areas not Covered by Sirens**

There has been no significant population increase in Emergency Planning Zone areas located beyond siren coverage. Residents and businesses in areas beyond siren coverage have been issued NOAA tone-alert radios.

## **I. State Warning Point (SWP) Responder Notification**

The system is functional and was used routinely in 2010 for tests, drills, special situations, and actual events. The system automates the notification of responders and contacts each individual by many different means in a pre-programmed manner. Both the State Warning Point in Rockingham and the Alternate State Warning point in Derby used the system in 2010.

## **J. Additional Notification Systems**

A Rapid Emergency Notification Telephone System (RENTS) is capable of automatically making over 500 calls per minute to persons living in the Emergency Planning Zone to supplement other forms of public notification. Cellular telephone numbers were added to the database by the Emergency Planning Zone towns based upon RENTS Registration Cards received from distribution of the Vermont Yankee Entergy Nuclear Northeast Emergency Public Information 2010 Calendar.