



Radiological Emergency Response Plan (RERP)

Emergency Planning Overview- Now and in the Future

Vermont Division of Emergency Management
and Homeland Security (DEMHS)

24 September 2015
Nuclear Decommissioning Citizens Advisory Panel (NDCAP)



Agenda

- Current RERP Program Overview
- Future Requirements and Impacts
- RERP Program Desired Outcomes

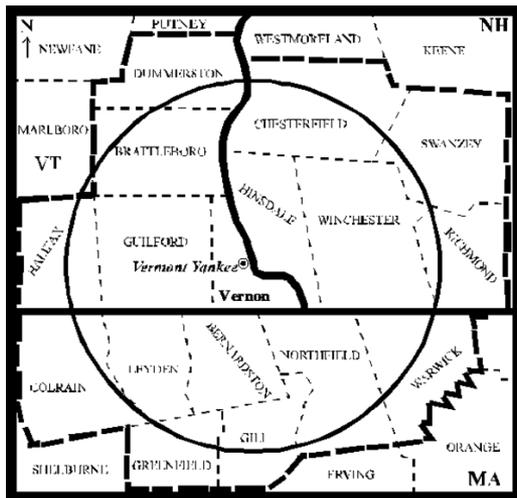


Radiological Emergency Plans

- Federally mandated by 44 CFR 350
- NUREG-0654 sets requirements for planning, training, and preparedness at the local, state, federal, and utility level
- Plans for each state, town, special facility, and more
- DEMHS is the primary agency responsible for local and state plan development and revision, equipment maintenance, training, and exercise

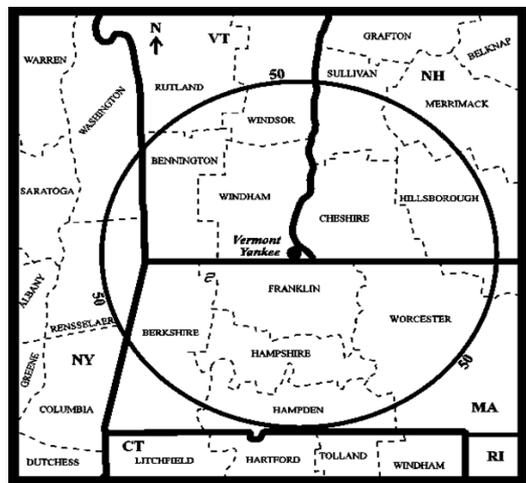
Emergency Planning Zones

- Plume Exposure Pathway Zone
 - Approximately 10 miles from a nuclear reactor
 - Established at the licensing of a reactor
 - Planning provides a substantial base for expansion if needed
- Ingestion Pathway Zone (50 mile radius)



0 5 10 15 Miles

Both PEPZ and IPZ are Emergency Planning Zones, but usually when people talk about "the EPZ" they mean the Plume Exposure Pathway Zone.



0 10 20 30 40 50 Miles

Vermont EPZ Towns

- Brattleboro
- Dummerston
- Guilford
- Halifax
- Marlboro
- Vernon

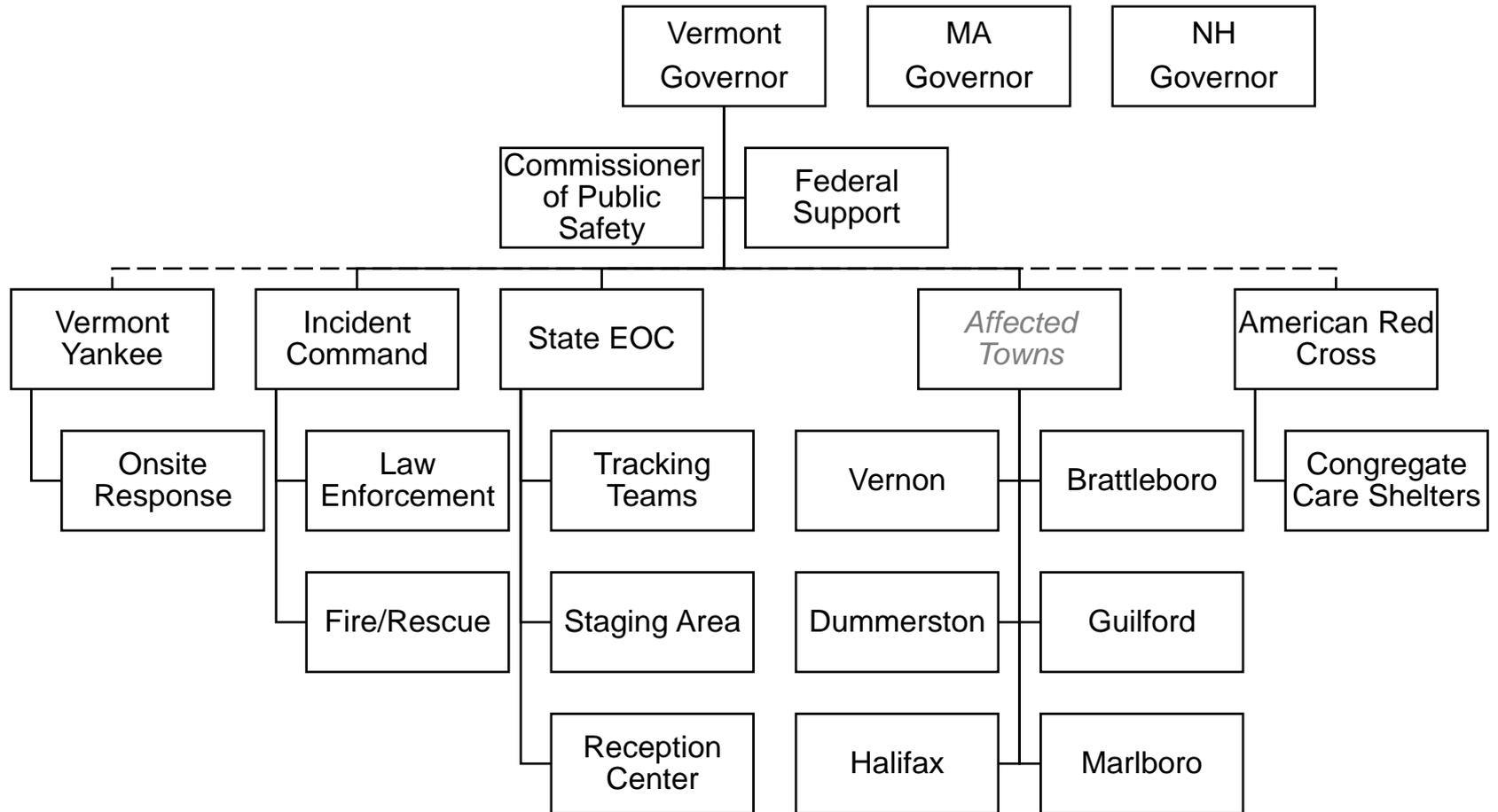


Plan Evaluation

- Operating Reactor
 - Every TWO years
 - Major elements of radiological plans are tested through FEMA evaluated exercises
 - Over an EIGHT year cycle
 - All elements of plans are tested - Reception Centers, Decontamination, Post-Plume Sampling, Ingestion Pathway, Hostile-Actions
 - Out of sequence evaluations check plans for all schools, child care centers, health care facilities, etc.
- Independent Spent Fuel Storage Installation (ISFSI)
 - Every TWO years
 - Onsite exercise
 - Offsite Response Organizations (OROs) invited



Response Structure





Precautionary and Protective Action Summary

Classification	Facility Activation	Protective/Precautionary Action	Public Notification
Unusual Event	State EOC (Partial) Vernon EOC Incident Command Post	None	None
Alert	State EOC (Full) Town EOCs Joint Info Center Reception Center (Core) Staging Area	Early assembly of buses State of Emergency	Press Release
Site Area Emergency	Reception Center (Full)	State of emergency Precautionary transfer Shelter livestock Clear parks and waterways Advise transients to leave	EAS Sirens RENTS Route Alerting
General Emergency		State of emergency Evacuate / Shelter-in-place Implement traffic and access control KI for emergency workers and public	EAS Sirens RENTS Route Alerting

EAS = Emergency Alert System

EOC = Emergency Operations Center

RENTS = Rapid Emergency Notification Telephone System (VT-Alert)



Town Requirements and Resources

- Personnel
 - Emergency Management Director (EMD)
 - Radiological Officer
 - Secondary Pager Carrier
 - 5-10 staff for Emergency Operations Center (EOC)
- Training and Exercises
 - Personnel training
 - Monthly radio checks
 - Quarterly equipment checks
 - Quarterly EOC exercises
 - Biannual FEMA exercise
- Town Plans
- Equipment
 - Radios
 - Computers
 - Backup generators
 - Personal Dosimetry
 - Survey Meters

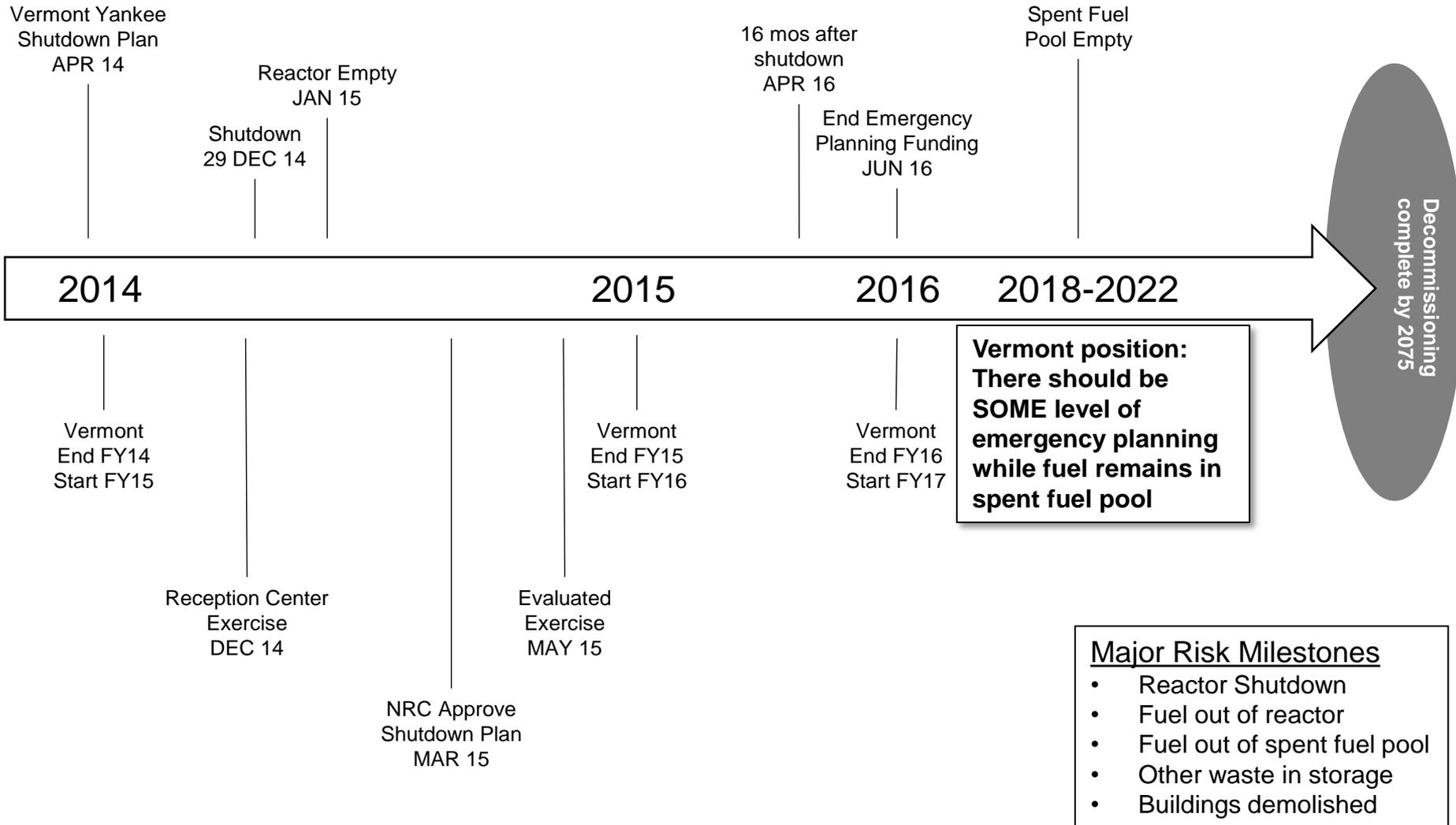


RERP Personnel and Funding

- Total Budget State FY 16 = 1,639,143.00
- DEMHS Employees- 3 + 1 Temp
- Brattleboro Office
- Equipment and Maintenance
- Sub-recipients
 - EPZ Towns = \$32,000/ yr
 - State Agencies =
 - Department of Health
 - Agency of Natural Resources
 - Agency of Agriculture
 - Agency of Transportation
 - Department of Labor
 - American Red Cross
 - Regional Planning Commissions
 - WTSA



Vermont Yankee Shutdown Schedule





Historical Precedence

Previous exemptions reduced EP requirements similar to Independent Spent Fuel Installation (ISFSI)

10 CFR 72.32, EP requirements for stand-alone ISFSI

- Formal offsite emergency plans **NOT** required
- Typically, highest classification is an “Alert”
- Prompt notification of offsite authorities and NRC
- Onsite exercises (required) with opportunity for offsite participation (not required)
- Arrangements and training for offsite response organizations (police, fire and medical services) that may respond to onsite emergencies



Historical Precedence

Operating Reactor(s)

Multi-faceted, to address a variety of emergencies, including hostile action events (HAB), affecting public health and safety

- Formal offsite REP plans
 - Emergency Planning Zone (EPZ)
 - Alert and Notification System(ANS)
 - Evacuation Time Estimate Studies (ETE)
 - Emergency Classification (NOUE-->GE)
- Predetermined offsite Protective Actions
- Immediate (15 min) offsite notification
- Extensive site/offsite emergency response organizations (EROs)
- Dedicated on- and off-site facilities
- Joint, biennial exercises
- Comprehensive site/offsite training

Decommissioning Site

Focused on addressing low consequence, limited impact emergencies

- No formal offsite REP plans: no EPZ / ANS / ETE; removes SAE & GE classification levels → no offsite PAR
 - HAB event not considered
- “Prompt” offsite agency notification
- Streamlined site ERO, to include: assessment; ERO activation; notification/communication; training; facilities and equipment; and recovery
- No dedicated offsite facilities; common onsite facility
- Offsite response organizations invited to participate onsite biennial exercise



RERP Program- Desired Outcomes

- “Step- down” approach to emergency preparedness
- FY 17- FY 20 (Or fuel out of the pool)
 - EPZ towns remain- planning, training, and exercise requirements change
 - Exercises- Biennial planning workshop, Biennial operations-bases exercise, Annual rad survey drill with Vermont Yankee
 - Plans- RERP Plan integrated as an annex to the town Local Emergency Operations Plan
 - Training- Initial and annual refresher for EPZ towns and off-site response organizations with Vermont Yankee
 - Equipment- Keep existing equipment, calibration still completed by DEMHS
 - Staff 1.5 Full Time Equivalent Employees to support program until Dry-Casking



RERP Program- Desired Outcomes

- FY 20 and beyond
 - No EPZ towns
 - Exercises- Invited to participate in on-site exercises
 - Training- Available if needed
 - Equipment- Maintained by town



Questions – Discussion

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