

**COMMENTS AND DECLARATIONS OF THE VERMONT DIVISION OF
EMERGENCY MANAGEMENT AND HOMELAND SECURITY ON
BVY 14-033 VERMONT YANKEE PERMANENTLY DEFUELED EMERGENCY PLAN
AND EMERGENCY ACTION LEVEL SCHEME**

February 9, 2015

INTRODUCTION

The Vermont Division of Emergency Management and Homeland Security, by and through Erica Bornemann, Chief of Staff, (curriculum vitae attached) submits the following comments and declarations with respect to the license amendment request filed by Entergy Nuclear Operations, Inc. (Entergy) regarding the Vermont Yankee Permanently Defueled Emergency Plan and Emergency Action Level Scheme on June 12, 2014. *See Letter from Chris Wamser, Entergy Site Vice President, to NRC Document Control Desk, June 12, 2014 (BVY 14-033) (NRC Agencywide Document Access Management System [ADAMS] Accession No. ML14168A302).*

The Vermont Yankee Permanently Defueled Emergency Plan (VY PDEP) and Emergency Action Level Scheme (EAL) proposed in Entergy's license amendment request presents a number of concerns for the State of Vermont (the State) regarding the status of off-site emergency preparedness if the Vermont Yankee Nuclear Power Station (VY) receives exemption from portions of 10 CFR § 50.47(b), 10 CFR § 50.47(c)(2) and 10 CFR § 50, Appendix E. Through the requested exemptions, VY seeks to alter the emergency planning requirements imposed by its license and subsequently revise the current VY Emergency Plan after the plant enters an anticipated permanently defueled condition. If those license exemptions are granted, Entergy intends to essentially cease its off-site emergency preparedness and response functions beyond the statutorily mandated all-hazards approach required of each Vermont town today. If

the requested exemptions are granted, the license would no longer require the licensee to support activities such as planning, exercises, and training even though the proposed plan continues to rely upon supplemental emergency response organizations and agencies for incidents on-site.

Under the proposed exemptions, Entergy also intends to significantly reduce the number of personnel in the Emergency Response Organization which has historically been tasked with managing a declared incident on-site. Entergy intends to make these reductions even while nuclear fuel remains in the Spent Fuel Pool (SFP) before being moved to Dry Cask Storage. The licensee has proposed to be given a series of exemptions to a relatively robust set of safety measures for which there is not a comparable substitute commensurate with the hazards presented until the fuel is housed in dry casks.

The State continues to bear a large responsibility for response to a Vermont Yankee incident (industrial or radiological). Although the spectrum of possible incidents is reduced, there are still significant risks posed by the plant that require planning and preparedness. Off-site response organizations (ORO) and government entities cannot just dismiss hazards such as those posed by Vermont Yankee in its permanently defueled status.

Vermont law identifies the Division of Emergency Management and Homeland Security (DEMHS) as the delegated lead entity to coordinate all emergency management functions within the State. As such, DEMHS is responsible for maintaining a robust set of preparedness standards for local jurisdictions, public and private sector partners, and governmental partners to uphold. DEMHS is also the steward of the State Emergency Operations Center (SEOC) which coordinates all state level response to incidents such as those which could potentially occur at Vermont Yankee at any time. The Radiological Emergency Response Program (RERP) is housed in DEMHS and includes the state- and local-level plans to respond to an incident at VY.

Licensee funding for the RERP program supports Emergency Management Directors (EMD) and their staff in the six Emergency Planning Zone (EPZ) towns to train and exercise on a regular basis in order to sustain their level of readiness. It supports agencies such as the Department of Health (VDH) and the Division of Fire Safety (DFS) to train Radiological Plume Tracking and Radiological Sampling Teams. The funding also supports the equipment and training needs of fire, rescue, and law enforcement organizations in the EPZ specific to the hazards presented at Vermont Yankee. Regular training and exercises, as well as the periodic planning meetings, ensures that local and state personnel have solid relationships ahead of catastrophic events that stress systems beyond their capabilities. The State has historically followed the robust set of standards in the Federal Emergency Management Agency (FEMA) Radiological Emergency Preparedness (REP) Program Manual to ensure the public safety of the citizens who live outside of plant boundaries through the evaluation of exercises and the maintenance of plans, facilities and equipment.

THE VY PDEP PROPOSES INSUFFICIENT STANDARDS FOR THE FACILITY WHILE SPENT FUEL REMAINS IN THE FUEL POOL

Title 10 of the Code of Federal Regulations (CFR) outlines the regulations nuclear power plants are required to follow to ensure “there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.” 10 CFR. §§ 50.47(a)(1)(i) in 10 CFR § 50.47 and 10 CFR § 50 Appendix E. If a licensee is exempted from the applicable portions of these regulations, its license no longer imposes needed standards until the license is amended once more and the site is classified as an Independent Spent Fuel Installation (ISFSI) and required to adhere to 10 CFR § 72.32. The set of regulations in 10 CFR § 72.32 specifically pertain to ISFSIs or Monitored Retrieval Storage (MRS) and as such are not

written to support the inherently different hazards presented while fuel is stored in a spent fuel pool and not in dry cask storage. While the spent fuel remains in pool storage, the facility poses a higher risk than an ISFSI. The standards applied at VY should reflect and respond to the circumstances at the site.

VY VDEP SUBMISSION IS INCOMPLETE

10 CFR § 72.32 requires licensee emergency plans to “promptly notify offsite response organizations and request offsite assistance, including medical assistance for the treatment of contaminated injured onsite workers when appropriate.” 10 C.F.R. § 72.32(a)(8). The proposed VY PDEP refers to the need for supplemental assistance in several places including the following:

Arrangements have been made for the extension of the ERO's capability to address emergencies. The following arrangements are in place through letters of agreement for ambulance services, treatment of contaminated and injured patients, fire support services, and law enforcement response as requested by the station:

1. Transportation of injured personnel using an ambulance service;
2. Treatment of radioactively contaminated and injured personnel at a local support hospital (Brattleboro Memorial) as specified in the local support hospital plans; and
3. Fire support services by the Vernon and Brattleboro Fire Departments and the Tri-State and Southwestern Fire Mutual Aid Networks.
4. Law enforcement support services provided by local, county, state, and federal law enforcement authorities as appropriate and response capabilities are documented in the letters of agreement maintained by Security.

Evidence of agreements with participating local services is addressed in Appendix E; the Vermont Yankee Fire Protection Program; and the Annual Law Enforcement Letters of Agreement (Safeguards Information) maintained by Security.

LAR, Attachment 2, *Vermont Yankee Nuclear Power Station Permanently Defueled Emergency Plan*, Rev. 0, at 21

The agreements referred to in this section of the plan were not included in the submission. Rather the reader is directed to the Vermont Yankee Emergency Preparedness Department where the documents are said to be on file. LAR, Attachment 2 at 50. Among those agreements said to be on file is one with the State of Vermont. The current agreement Vermont Yankee maintains with the State pertains to Emergency Plan activation under the current regulatory guidelines and outlines response based on the current Emergency Response Organization structure. Before the State could adequately prepare for the implementation of the proposed VY PDEP, the agreement would need to be updated and reflect the conditions as they will exist if the VY PDEP is applicable. Without this piece of documentation in place, the VY PDEP does not comply with 10 CFR § 72.32.

Appendix E of the VY PDEP submission references an Index of Emergency Plan Implementing Procedures and Support Plans, yet none of these pieces of documentation is available for review. Implementing Procedures are meant to provide depth and detail not contained in the main plan. Without the Implementing Procedures and Support Plans, the proposed VY PDEP does not adequately describe how the Emergency Response Organization will respond to an emergency. Without this level of depth it is impossible for those agencies and governmental entities identified to provide supplemental support to the licensee to understand how and when that support will be needed. In these circumstances, the NRC should not approve the exemptions since it cannot find that no significant hazards consideration is needed.

THE VY PDEP FAILS TO ADEQUATELY EVALUATE AND SUPPORT OFF-SITE RESPONSE RESOURCES

Exercises are a cornerstone of the Federal Emergency Management Agency's (FEMA) evaluation that OROs can provide reasonable assurance they can respond to an incident at a nuclear power plant. "FEMA bases its reasonable assurance determination that OROs can protect the health and safety of the public in the event of an incident at an NPP on both adequate plans/procedures and the demonstrated ability to implement them. OROs use exercises, drills, seminars, training, SAVs, and actual events to practice and fine-tune plan implementation." Federal Emergency Management Agency, *Program Manual Radiological Emergency Preparedness*, June 2013 at III-1. The VY PDEP describes the exercise activities the licensee will maintain:

Biennial exercises shall be conducted to test the timing and content of implementing procedures and methods; to test emergency equipment and communication networks; and to ensure that emergency personnel are familiar with their duties. VY offers the following organizations the opportunity to participate to the extent assistance would be expected during an emergency declaration; however, participation is not required:

1. State of Vermont
2. Brattleboro Memorial Hospital
3. Brattleboro Fire Department
4. Law Enforcement
5. Rescue, Inc. Ambulance Service

At least one drill involving a combination of some of the principal functional areas of emergency response shall be conducted in the interval between biennial exercises.

Vermont Yankee will continue to be evaluated by the NRC to assess their on-site response capabilities yet several areas of the plan reference the assistance provided by OROs to supplement their own capabilities. Without the requirement to evaluate OROs, the assessment of the licensee's ability to address significant issues is inherently incomplete. The NRC should, at a minimum, require the evaluation of OROs by FEMA to respond as outlined in the PDEP and subsequent Letters of Agreement. Instituting this requirement would lead to a more holistic approach to evaluation instead of the compartmentalized framework that currently exists in regulation. Without this requirement, the NRC and the licensee have no basis in which to enforce improvement actions for those areas that rely on ORO assistance. Furthermore, without a specific requirement to train and evaluate OROs in exercise there is potential risk agencies will not have the knowledge needed to ensure proficiency in responding to a very specialized type of response such as a nuclear power plant incident. The institution of regimented planning, training and exercise requirements for OROs consequently requires the licensee to support them through financial means in order to facilitate the compliance with said measures. The licensee should be required, rather than encouraged, to continue coordination efforts in order to ensure planning standards continue to be upheld.

THE NRC STAFF HAS FAILED TO CONSIDER THE ABILITY OF OFF-SITE RESOURCES TO PROVIDE NECESSARY ASSISTANCE TO VERMONT YANKEE

On November 14, 2014, the NRC Executive Director for Operations issued a memorandum to NRC Commissioners outlining NRC Staff analysis and recommendations related to Entergy's pending request for exemption from certain emergency planning requirements. In that memorandum, the Staff analysis and recommendations speak, in part, directly to the substance of the LAR. The State therefore includes comments on the

memorandum on the basis and to the extent that the memorandum encompasses issues that are intimately tied to the LAR under review.

The NRC Staff's recommendations included in the November 14 memorandum assert that the analysis conducted by ENO "provides reasonable assurance that in granting the requested exemptions to ENO: (1) an offsite radiological release will not exceed the EPA PAGs at the site boundary for a DBA; and (2) in the unlikely event of a beyond DBA resulting in a loss of all SFP cooling, there is sufficient time to initiate appropriate mitigating actions and, if a release is projected to occur, there is sufficient time for offsite agencies to take protective actions using a CEMP to protect the health and safety of the public." Memorandum from Mark Satorius, NRC Executive Director of Operations to NRC Commissioners, November 14, 2014 (SECY-14-0125) (ADAMS Accession No. ML14227A711). These assertions assume that Comprehensive Emergency Management Plans (Emergency Operations Plans or EOPs) at the State and local level specifically account for an incident involving a radiological release from a fixed facility such as Vermont Yankee. While the all hazards emergency management concept is widely adopted and implemented in Vermont as outlined in the National Response Framework, incidents such as a radiological release are extremely specialized in nature. Even if a release did not exceed Environmental Protection Agency (EPA) Protective Action Guidelines (PAGs) off-site, the burden remains with local and State government to validate what has or has not occurred. The health and economic viability of the areas surrounding Vermont Yankee depend on the assurances provided by governmental entities that impacted areas are safe as is the case in any other disaster. Those assurances can only be provided by training, exercising and equipping personnel to assess the impacts to health and the environment outside of site boundaries. Without the ongoing license requirement to maintain accident assessment capabilities off-site and the

subsequent provision of support, as is now the case, the State might have to rely on resources of surrounding states and the federal government. Unfortunately that reliance could delay response times as resources are mobilized and assigned. This is time that cannot be wasted once a release has occurred even if it below EPA PAGs.

The NRC Staff appears to have come to a number of conclusions regarding the status of off-site EOPs without conducting any sort of formal review of those documents to assure their readiness to address the changing circumstances at the plant. Coupled with the fact that significant portions of the proposed VY PDEP are not available for review by State and local entities, it is impossible for the EOPs of OROs to be revised to reflect the specific response and recovery actions at the plant. Again, the State contends that the NRC Staff should not make a no significant hazards consideration determination as long as plans on-site call for the supplemental assistance of OROs without reviewing the associated plans for such instances and providing the opportunity for revision as applicable.