

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
ENTERGY NUCLEAR VERMONT) Docket No. 50-271-LA-2
YANKEE, LLC AND ENTERGY)
NUCLEAR OPERATIONS, INC.) February 9, 2015
)
(Vermont Yankee Nuclear Power Station))

**STATE OF VERMONT'S
PETITION FOR LEAVE TO INTERVENE, AND HEARING REQUEST**

I. INTRODUCTION

Pursuant to 10 CFR § 2.309, the State of Vermont (“State”), through the Vermont Department of Public Service, submits the following Petition for Leave to Intervene, and Hearing Request in response to Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc.’s (together, “Entergy”) license amendment request (“LAR”) related to the Vermont Yankee Nuclear Power Station (“VY”) Permanently Defueled Emergency Plan and Emergency Action Level Scheme. The State opposes Nuclear Regulatory Commission (“NRC”) issuance of the LAR. The State seeks to participate as a party in this proceeding, and it requests that the NRC and/or the Atomic Safety and Licensing Board (“ASLB”) hold an evidentiary hearing in order to develop a full evidentiary record for the NRC and/or ASLB to consider when reviewing the LAR.

On June 12, 2014, Entergy filed its LAR seeking to revise the VY site emergency plan (“SEP”) and Emergency Action Level (“EAL”) scheme to reflect a permanently defueled

condition.¹ The LAR is based on exemptions from certain portions of 10 CFR §§ 50.47(b), 50.47(c)(2), and Part 50, Appendix E, Section IV requested by Entergy, but not yet granted by the NRC.² The State filed comments in response to the LAR, outlining its concerns and objections to the proposed license amendments on February 9, 2015.³

II. PETITION FOR LEAVE TO INTERVENE

The State meets all standing requirements outlined in 10 CFR § 2.309(d). The State, as represented by the Vermont Department of Public Service, 112 State Street, Montpelier, VT 05620, has a significant interest in the proposed license amendments contained in the LAR presently at issue. The VY station is located within the state of Vermont. As explained in the State's February 9, 2015 Comments and Declarations, and in the contentions below, the LAR, if granted, would significantly hinder the State's ability to coordinate and execute an effective response to an emergency situation at the station. This hindrance poses a safety risk to Vermont

¹ See Letter from Christopher 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).

² See Letter from Christopher Wamser, Entergy Site Vice President, to NRC Document Control Desk, March 14, 2014 (BVY 14-009)(NRC ADAMS Accession No. ML14080A141); *Biweekly Notice; Applications and Amendments to Facility Operating Licenses and Combined Licenses Involving No Significant Hazards Considerations*, (79 FR 73109)(December 9, 2014). The December 9, 2014 Federal Register notice notes that "[t]he Commission may issue the license amendment before expiration of the 60-day period provided that its final determination is that the amendment involves no significant hazards consideration." Such issuance of the amendment prior to the expiration of the 60-day period to file a hearing request does not, however, preclude commission review of this request for hearing. The Federal Register makes clear that any hearing will take place after issuance of an amendment should the NRC make a No Significant Hazards Consideration Determination prior to review of this request.

³ The LAR was noticed in the December 9, 2014 edition of the *Federal Register* (79 FR 73109). The notice requested the submission of public comments on or before January 8, 2015. On January 8, 2015, the NRC issued a 30 day extension of the public comment period to February 9, 2015. See Notice from James Kim, Plant Licensing IV-2 and Decommissioning Transition Branch, January 8, 2015 (ADAMS Accession No. ML15008A098).

residents. The State therefore petitions the NRC for leave to intervene as a full party in this proceeding.⁴

III. REQUEST FOR HEARING

The State requests that a hearing be held to develop a full evidentiary record related to the contentions stated below and any later amendments to the contentions pursuant to 10 CFR § 2.309. It also requests that the State be granted the opportunity to engage in limited discovery to aid in the development of the evidentiary record, either as a matter of right in the event that the ASLB and/or NRC grants a hearing pursuant to 10 CFR Part 2, Subpart G, or, alternatively, at the discretion of the ASLB and/or NRC under Subpart L.

CONTENTION ONE

Entergy's license amendment request is not ready for review, as the amendment request is predicated upon and assumes approval of an exemption request that has not been ruled upon by the Nuclear Regulatory Commission and/or Atomic Safety and Licensing Board.

BASES

Entergy's instant LAR is not ready for review by the NRC and/or the ASLB. Entergy readily concedes in the LAR that “[t]he proposed PDEP and Permanently Defueled EAL scheme are predicated on approval of requests for exemption from portions of 10 CFR 50.47(b), 10 CFR 50.47(c)(2) and 10 CFR Part 50, Appendix E, Section IV, previously submitted.”⁵ The requested exemptions would remove the planning, notice and protective action requirements in the event of

⁴ See *In the Matter of Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* Docket No. 50-271-LA, Memorandum and Order (Ruling on Request for Hearing and Petition to Intervene)(January 28, 2015) at 7 (“Vermont has standing because Vermont Yankee is “located within the boundaries of the State” and, accordingly, ‘no further demonstration of standing is required.’”).

⁵ BVY14-033 at 2.

an emergency,⁶ reduce the emergency planning zone to the footprint of the plant,⁷ eliminate hostile action scenario planning,⁸ and eliminate State participation in emergency response exercises.⁹ The LAR seeks approval of a Permanently Defueled Emergency Plan and Permanently Defueled Emergency Action Level scheme that would reduce the scope of emergency planning at the VY site, and increase notification time of an emergency declaration to the State from 15 minutes to 60.¹⁰

The LAR, as presented, assumes actions by the NRC that have not yet occurred, and, more importantly, may never occur in the future. Approval of the LAR without NRC review of the predicate exemptions request – which would allow the State to comment on that request and request a hearing – is inappropriate, both as a matter of law and public policy. The exemptions request and the LAR effectively constitute a complete request by Entergy for changes to its approach to emergency planning and response. The two filings cannot be reviewed separately as they are dependent on one another. However, the State has not been afforded an opportunity to respond in a meaningful way to the exemptions request.

In addition, the NRC has options at its disposal beyond simple approval or denial the requested exemptions. It could, for example, impose conditions for approval. Neither the State nor the NRC is able to evaluate the full extent to which the proposed license amendment will or will not meet NRC safety and environmental requirements until the final decision on the

⁶ BVEY 14-009, Attach. 1 at 4-7, addressing changes to 10 CFR § 50.47(b); 11, addressing changes to Part 50, App. E.IV; 16, addressing changes to Part 50 App. E.IV.A; 19-22, addressing changes to E.IV.D; 25-28, addressing changes to Part 50, App. E.IV.E.

⁷ *Id.* at 8, addressing changes to 10 CFR § 50.47(c)(2).

⁸ *Id.* at 10, addressing changes to 10 CFR 50, App. E IV.1; 15, addressing changes to Part 50, App. E.IV.A; 17, addressing changes to Part 50 App. E.IV.B; 26, addressing changes to Part 50, App. E. IV.E.

⁹ *Id.* at 33-36, addressing changes to Part 50, App. E.IV.F.

¹⁰ BVEY 14-033 at 2; App. 1 at 4; App 2 at 35.

exemption requests is made. The State is materially and unfairly disadvantaged when it is forced, as it is here, to challenge the LAR when the exact terms of the request are not known.

This issue is within the scope of the proceeding. NRC approval of exemptions request serves as the foundation on which the LAR is built. In this instance, Entergy seeks approval of the LAR prior to the necessary foundation being laid. Unless and until the State is given an opportunity to at least comment on the exemptions request and the NRC makes a ruling on the same, the issue of whether the NRC and/or ASLB is in an appropriate position to even review the LAR is within the scope of this proceeding. Likewise, this issue is material to core findings that the NRC must make – namely that the predicate exemptions are approved – to support the changes Entergy seeks in the LAR. The ASLB and/or NRC should, at a minimum, hold this proceeding and the deadline for filing contentions and a hearing request in abeyance until at least 30 days after NRC has taken final action on Entergy’s exemptions request. The NRC should likewise provide a meaningful opportunity for the State to provide comments and request a hearing with respect to the exemptions request.

SUPPORTING EVIDENCE

This issue poses a genuine dispute between Entergy and the State with respect to the appropriateness of LAR review now. A significant portion of the State’s February 9, 2015 LAR Comments and Declarations speak to significant concerns it has with the LAR that flow from the underlying exemptions request, and are incorporated into this Petition by reference.¹¹ The Comments and Declarations detail the deficiencies and problems of the requested exemptions,

¹¹ See Vermont Department of Public Service LAR Comments and Declarations (February 9, 2015), attached as Attachment A; Vermont Division of Emergency Management LAR Comments and Declarations (February 9, 2015), attached as Attachment B; and Vermont Department of Health LAR Comments and Declarations (February 9, 2015), attached as Attachment C.

and illustrate the interaction between the LAR and the exemptions request. This interaction, as detailed by the Declarations, cuts to the core of the findings the ASLB and/or NRC must make in reviewing the LAR here. As discussed below, the State disputes Entergy's claim that the proposed PDEP and Permanently Defueled EAL scheme continues to "preserve the . . . effectiveness of the emergency plan," particularly when evaluated in conjunction with the requested exemptions.¹²

CONTENTION TWO

Entergy's license amendment request, if approved along with the predicate requested exemptions, fails to account for all credible emergency scenarios, undermines the effectiveness of the site emergency plan and off-site emergency planning, and poses an increased risk to the health and safety of Vermont citizens in violation of NRC regulatory requirements 10 CFR § 50.54(q)(4) and Appendix E to Part 50.

BASES

The LAR, if approved in conjunction with Entergy's requested exemptions, would increase the threat to public health and safety in the event of a credible accident scenario at the VY plant. First, the requested exemptions outlined above would eliminate Entergy's obligations to keep the State emergency response organizations and the general public informed in the event of an emergency.¹³ The exemptions would further reduce the State's ability to adequately and effectively respond to an emergency by discontinuing the federal requirement for support to State planning and monitoring activities, placing the health and safety of Vermont citizens in jeopardy in the event of a plant emergency. The exemptions would hamper the State's ability to

¹² BVY-033 at 2.

¹³ BVY 14-009, Attach. 1 at 19-22, addressing changes to Part 50, App. E.IV.D.

implement the Vermont Radiological Emergency Response Program, and any additional off-site response to an emergency.¹⁴

The exemptions request effectively treats the VY plant, with radioactive material stored in a spent fuel pool, as if it were a dry cask independent spent fuel storage installation (“ISFSI”) and/or monitored retrievable storage (“MRS”) facility, which is clearly not the case now or for the next several years. Entergy’s exemptions request does not even contain implementing procedures, preventing the State from understanding what changes it would need to make to its emergency response protocols if the exemptions and LAR are approved. The State would be unable to effectively execute its own Radiological Emergency Response Plan in harmony with the VY Emergency Plan without such implementing procedures in the event of an emergency at the plant. In sum, the requested exemptions would eliminate substantial emergency plan requirements contained in 10 CFR Part 50, Appendix E, which in turn would necessarily reduce the effectiveness of any VY emergency plan going forward, including the PDEP and EAL schemes proposed in the instant LAR. The requested exemptions would significantly reduce, if not eliminate, notification procedures currently required by 10 CFR Part 50, Appendix E. For instance, the exemptions request proposes that the procedures requiring notification and interaction with State and local agencies be eliminated almost in their entirety, based on the erroneous assumption that the VY station (in its present state with spent fuel in the cooling pool) be viewed as an ISFSI and/or MRS facility. This would result in no effective means for Entergy to communicate critical information to the State in the event of an emergency, as required by Part 50, Appendix E.¹⁵

¹⁴ See DEMHS LAR Comments and Declarations at 1-3, 5-9; and VDH LAR Comments and Declarations at 5-7.

¹⁵ See BVEY 14-009, Attach. 1 at 19-22, addressing changes to Part 50, App. E.IV.D.

Second, the LAR fails to adequately analyze a number of credible scenarios whereby public health and safety may be put at risk. The LAR does not provide analysis of multiple credible Beyond Design Basis scenarios that continue to pose a health risk while fuel rods remain in the VY spent fuel cooling pool. The exemptions request, if granted, would eliminate the federal requirement that Entergy take responsibility for planning a response to a spent fuel pool emergency that may last more than 10 hours.¹⁶ This problem would be compounded by the lack of clear notification procedures to the State otherwise required by Part 50, Appendix E. Likewise, Entergy has relied upon stale NRC guidance issued prior to the September 11, 2001 attacks in developing the PDEP / EAL scheme that does not consider post-9/11 security concerns. The PDEP /EAL scheme should address all safety concerns present in today's threat environment. The LAR fails to do so. The LAR also fails to address heightened safety concerns at Vermont Yankee due to the existence of high-burnup fuel at the site, even though the NRC has recognized that the use of high-burnup fuel causes special problems, including a greater chance of accidents and an increased chance of structural failure of the fuel rods such that transfer to dry casks is more difficult, more dangerous, and more expensive.¹⁷

When viewed together, the exemptions request and LAR create a circular logic that results in a clear reduction in emergency plan effectiveness that cannot meet the requirements of 10 CFR § 50.54(q)(4) and companion Part 50, Appendix E emergency plan requirements. Entergy has filed the LAR pursuant to § 50.54(q)(4), which requires a request to change an emergency plan that would reduce the effectiveness of the plan to include “the basis for concluding that the licensee’s emergency plan, as revised, will continue to meet the requirements

¹⁶ See, for instance, DPS LAR Comments and Declarations at 1-2, addressing the possibility of fuel pool accident scenarios involving accelerants.

¹⁷ See DPS LAR Comments and Declarations at 3.

in appendix E to this part.” The exemptions request seeks to strike significant portions of 50 App. E.IV.B and D related to actions outside the plant boundary and emergency notification to state and local response organizations. The LAR meets the requirements of § 50.54(q)(4) only in the event Entergy is exempted from material requirements of Part 50, Appendix E. Section 50.54(q)(4), however, mandates that all Appendix E requirements are met. The LAR therefore fails to satisfy § 50.54(q)(4).

The contention is within the scope of this proceeding. The LAR must show that it conforms to the requirements of Part 50, Appendix E given that Entergy readily admits its request would reduce the effectiveness of the VY emergency plan. On its face, the LAR does not meet all the Appendix E requirements as mandated by § 50.54(q)(4). Furthermore, the contention is material to the finding the NRC must make that the LAR satisfies all requirements of § 50.54(q)(4) and Appendix E of Part 50. The State has submitted comments from experts in its Division of Emergency Management and Homeland Security, the Department of Health, and the Department of Public Service, all of which raise concerns about the LAR and companion exemptions request’s adverse impact on the State’s ability to execute monitoring and emergency response programs in the event of an emergency. The exemptions and LAR fail to adequately analyze credible Beyond Design Basis scenarios while spent fuel is present in the VY cooling pool, eliminate critical State notification, monitoring and planning activities, and fail to adopt dose radiation monitoring standards that would best protect public health and safety, as spelled out in the State’s Comments and Declarations.¹⁸

¹⁸ See DPS LAR Comments and Declarations at 1-2; DEMHS Comments and Declarations at 1-2, 5, 7-9; VDH Comments and Declarations at 3-9/

SUPPORTING EVIDENCE

A genuine dispute exists between the State and Entergy with respect to whether the LAR meets all Part 50, Appendix E requirements aimed at ensuring protection of the public health and safety of Vermont citizens. The State has submitted extensive evidence in the form of Declarations sponsored by experts in their respective fields. The details spelled out in the Declarations strongly support the bases by which this contention is set forth, and are incorporated into this Petition by reference. The LAR provides insufficient analysis of credible Beyond Design Basis emergency scenarios and is based on inadequate NRC guidance. The requested exemptions fail to meet the requirements of 10 CFR § 50.54(q)(4) and companion Appendix E to Part 50 by eliminating the federal requirement for notification protocols, and planning and monitoring resources to the State required to ensure public health and safety.

IV. CONCLUSION

Based on the foregoing the State of Vermont, through the Vermont Department of Public Service, respectfully requests the U.S. Nuclear Regulatory Commission and/or Atomic Safety and Licensing Board to grant its request for intervention, admit the State's two contentions offered above, and hold a hearing on Entergy's LAR related to the VY Permanently Defueled Emergency Plan and Emergency Action Level Scheme with the opportunity for the State to engage in discovery to develop a full evidentiary record for review when considering the LAR and associated exemptions request.

Dated at Montpelier, Vermont this 9th of February, 2015

Respectfully submitted,

/s/ Christopher Recchia
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