

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)	
)	Docket No. 50-271-LA
ENTERGY NUCLEAR VERMONT)	
YANKEE, LLC AND ENTERGY)	ASLBP No. 15-934-01-LA-BD01
NUCLEAR OPERATIONS, INC.)	
)	February 23, 2015
(Vermont Yankee Nuclear Power Station))	

**THE STATE OF VERMONT'S BRIEF IN SUPPORT OF NOTICE OF APPEAL OF
ATOMIC SAFETY AND LICENSING BOARD'S
JANUARY 28, 2015 MEMORANDUM AND ORDER DENYING
THE STATE'S REQUEST FOR HEARING AND PETITION TO INTERVENE**

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INTRODUCTION

Pursuant to 10 CFR § 2.311(b), the State of Vermont (“State”), represented by the Vermont Department of Public Service, hereby submits to the U.S. Nuclear Regulatory Commission (“NRC”) the following brief in support of its notice of appeal of the Atomic Safety and Licensing Board’s (“ASLB”) January 28, 2015 Memorandum and Order (“Order”) denying the State’s September 22, 2014 Notice of Intention to Participate, Petition to Intervene, and Hearing Request (“Petition”). A clear split among the ASLB is present with respect to the proper interpretation of NRC regulations controlling the implementation, maintenance, and termination of the Emergency Response Data System (“ERDS”) at a permanently shut down facility, as is the case at the Vermont Yankee Power Station (“VY”).

On March 24, 2014, Entergy Nuclear Vermont Yankee, LLC and Entergy Operations, Inc. (together, “Entergy”) filed a license amendment request (“LAR”) proposing certain changes

to the VY Emergency Plan (“EP”) to reflect the facility’s anticipated defueled condition.¹ The proposed changes contained in the LAR included, among other things, termination of the VY ERDS system.² At the time the LAR was made, VY’s EP called for a continuous ERDS communication link with the NRC Operations Center.³ The State in turn received access to the VY ERDS data from the NRC through a Memorandum of Understanding (“MOU”) executed between it and the NRC in 1996.⁴ The State’s Radiological Emergency Response Plan (“RERP”) is predicated in part on the State emergency planning departments receiving VY ERDS data under the MOU. The LAR was noticed in the Federal Register on July 22, 2014.⁵ The State issued timely comments to the NRC during the public comment period raising a number of concerns it had with the LAR, including the impact of Entergy’s proposed termination of VY ERDS on the State’s ability to plan for and respond to an emergency at VY under the RERP.⁶

On September 22, 2014, the State filed a Notice of Intention to Participate, Petition to Intervene, and Hearing Request in response to the LAR.⁷ The Petition brought forth a single contention, focused on Entergy’s failure to ensure continued communication of radiological and

¹ See Letter from Christopher J. Wamser, on behalf of Entergy Nuclear Operations, Inc., to NRC, Proposed Changes to the Vermont Yankee Emergency Plan (Mar. 24, 2014) (“LAR”) (BVY 14-018) (Agency Documents Access and Management System [ADAMS] Accession No. ML14085A257).

² See LAR, Attachment 4, *Analysis of Proposed Post-Shutdown On-Shift Staffing*, at 8.

³ See VY Emergency Plan (Rev. 54) at 42 (“VY EP”)(ADAMS Accession No. ML14339A646).

⁴ See Final Memorandum of Understanding Between the U.S. Nuclear Regulatory Commission and the State of Vermont, 62 Fed. Reg. 6281-2 (Dec. 10, 1996).

⁵ 79 Fed. Reg. 42,539-40.

⁶ See Comments from the Vermont Public Service Department regarding the following License Amendment Request published in the Federal Register on July 22, 2014 at 3 (Aug. 21, 2014) (ADAMS Accession No. ML14239A029).

⁷ See Vermont Department of Public Service Notice of Intention to Participate, Petition to Intervene, and Hearing Request (Sept. 22, 2014) (ADAMS Accession No. ML14267A524).

other data at VY to the State sufficient to facilitate adequate State emergency response under the RERP, in violation of 10 CFR §§ 50.47, 50.57(a)(3), and 50.92. The State sought limited and reasonable relief: that the VY ERDS feed to the NRC that had been in place and operational for over 20 years be kept in place, or that a comparable or better communication system with the State be established until all spent fuel currently in the spent fuel pool is transferred to dry cask storage. Entergy estimates that all spent fuel will be placed in dry cask storage by the end of 2020. Both Entergy and the NRC Staff opposed the State's petition almost exclusively on procedural grounds.⁸ The State submitted a reply to Entergy and NRC Staff's opposition.⁹ The ALSB held an oral argument on the Petition on December 1, 2014,¹⁰ and issued its Order denying the Petition on January 28, 2015.¹¹

In its Order, the ALSB attempted to resolve the salient question of whether 10 CFR Appendix E to Part 50, § VI.2 allows a licensee that had installed ERDS at a facility pursuant to an NRC safety backfit analysis in the 1990s to terminate its ERDS feed to the NRC without NRC approval once the facility has been permanently defueled. In a 2-1 split decision, the ALSB found that Appendix E, § VI.2 contains no regulatory requirement for continuing the VY ERDS feed now that the facility is permanently shut down. The ALSB, did, however, conclude that Entergy was obligated to conduct an analysis of the impact of VY ERDS termination on the

⁸ See NRC Staff's Answer to Vermont Department of Public Service Notice of Intention to Participate, Petition to Intervene, and Hearing Request (Oct. 20, 2014) (ADAMS Accession No. ML14293A114); Entergy's Answer Opposing the State of Vermont's Notice of Intention to Participate, Petition to Intervene, and Hearing Request (Oct. 20, 2014) (ADAMS Accession No. ML14293A701).

⁹ See State of Vermont's Reply to NRC Staff and Entergy Answers to the State of Vermont's Notice of Intention to Participate, Petition to Intervene, and Hearing Request (Oct. 31, 2014 [later refiled on Nov. 4, 2014]) (ADAMS Accession No. ML14308A570)

¹⁰ See Transcript of Teleconference re: Entergy Nuclear Vermont Yankee, Vermont Yankee Nuclear Power Station (Dec. 1, 2015) ("Tr.") (ADAMS Accession No. ML14337A666).

¹¹ See ALSB Memorandum and Order LBP-15-4 (Ruling on Request for Hearing and Petition to Intervene) (Jan. 28, 2015) ("ASLB Order") (ADAMS Accession No. ML15028A521).

effectiveness of the VY EP, pursuant to 10 CFR § 50.54(q)(3), prior to issuance of the requested license amendment.

On February 4, 2014, the NRC Staff issued the license amendment, despite no indication from Entergy that it had conducted the necessary § 50.54(q)(3) VY ERDS safety analysis, or evidence that it reviewed the impact of ERDS termination on VY EP effectiveness. Entergy has since informed the State that it intended to terminate the VY ERDS feed to the NRC (and the State) within a day or two of the issuance of the license amendment. It is the State's understanding that the VY ERDS feed to the NRC is no longer operational.

STANDARD OF REVIEW

The State files this appeal as a matter of right pursuant to 10 C.F.R. § 2.311(c). *In re All Operating Boiling Water Reactor Licensees with Mark I and Mark II Containments: Order Modifying Licenses with Regard to Reliable Hardened Containment Vents*, 77 N.R.C. 39, 44 (2013). Where, as here, a Petition to Intervene was denied and the principal error upon which the appeal is based is a legal error, the Commission does not defer to the decision of the ASLB:

Our rules of practice provide for an automatic right to appeal a licensing board decision deciding standing and contention admissibility, on the question whether a petition to intervene and request for hearing should have been granted, or denied in its entirety. Here, FirstEnergy argues that the Board should have denied Petitioners' hearing request because Petitioners submitted no admissible contentions. In examining contention admissibility, we generally defer to the Board unless we find either an error of law or abuse of discretion.¹²

¹² *In re FirstEnergy Nuclear Operating Co.*, 75 N.R.C. 393, 396-397 (2012)(footnotes omitted).

DISCUSSION

The State now brings three contested issues presented in the ASLB Order before the NRC. First, whether the ALSB was correct in determining that 10 CFR Part 50, Appendix E, § VI.2 justifies denial of the State's contention contained in the Petition. Second, whether the NRC was correct in granting the LAR without review of the § 50.54(q)(3) VY ERDS safety analysis required by the ASLB Order, and/or whether Entergy was allowed to apparently terminate the VY ERDS feed to the NRC prior to submission of the safety analysis for NRC Staff review. Lastly, the State challenges whether the Petition was an impermissible collateral attack on an existing NRC regulation.

I. Appendix E to Part 50 Does Not Allow For a Licensee's Unilateral Termination of an Existing ERDS System Without Conducting a Safety Analysis Upon Reaching Permanently Defueled or Shut Down Status

The ASLB rested its denial of the Petition in large part on a broad conclusion regarding the purported meaning and intent of 10 CFR Part 50, Appendix E, § VI.2: that § VI.2's requirement that ERDS be established and maintained at all nuclear facilities applies only to those with operating reactors. The ASLB's conclusion is incorrect. The prospective nature of the § VI.2 points to a broader reading that does not necessarily allow for licensee termination of ERDS at facility shutdown without NRC review, especially when viewed in the context of the NRC's backfit safety analysis it employed when it mandated the implementation of ERDS at most facilities. Likewise, VY's EP creates additional circumstances that support a broader reading of the regulation.

A. ERDS provides a clear and substantial safety benefit historically recognized by the NRC in a wide variety of accident scenarios

Appendix E to 10 CFR Part 50 addresses emergency planning and preparedness requirements for licensees, including the use of ERDS at facilities. Appendix E, § VI.2 provides that “[e]xcept for Big Rock Point and all nuclear power facilities that are shut down permanently or indefinitely, onsite hardware shall be provided at each unit by the licensee to interface with the NRC receiving system. Software, which will be made available by the NRC, will assemble the data to be transmitted and transmit data from each unit via an output port on the appropriate data system.” In determining the scope of the § VI.2 exception for facilities, the State turns to the NRC’s statement of consideration (“SOC”) and backfit analysis of the rule, as did the ASLB in its Order. The SOC sets out the NRC’s obligation to protect public health and safety in strong terms, and explains how ERDS significantly improves the NRC’s ability to coordinate emergency response in the event of an accident:

The NRC, in its mandated role to protect public health and safety, has a responsibility in the event of a reactor accident to monitor the actions of the licensee, who has the primary continuing responsibility for limiting the consequences of the accident. The NRC also has an important role in assuring the flow of accurate information to affected offsite officials and the public regarding the status of the emergency and, as requested or needed, giving advisory support or assistance in diagnosing the situation, isolating critical problems and determining what remedial actions are appropriate. The NRC must be capable of providing to State and local authorities, and to other Federal agencies, an independent assessment of protective actions recommended by the licensee.

Given the regulatory and statutory basis, and given the importance of emergency planning and response in the defense-in-depth context, when an accident has occurred, the NRC believes that a significant increase in its ability to perform its role would constitute a substantial increase to the overall protection of the public health and safety.

Since the principal effect of ERDS will be a marked improvement in the availability, timeliness, and reliability of key information about what is taking place at the reactor during an accident, particularly during the critical early hours before the NRC Site Team arrives, it is the judgment of the NRC that the implementation of ERDS will provide a significant improvement in the NRC's ability to accurately and promptly assess the situation at the site.

In emergency drills conducted by the NRC and power reactor licensees, the information on the status of the reactor is typically 15-30 minutes old by the time it is received at the NRC Operations Center when transmitted via the existing Emergency Notification System (ENS). Moreover, inaccuracies and errors have been found in that information which in some cases has led to confusion and misunderstanding of the situation.

In drills which have employed a prototype of the ERDS, there has been profound improvement in the availability, timeliness, and reliability of the information transmitted. The actual experience of the NRC using the existing ENS alone contrasted with drills where both ENS and a prototype ERDS were used is the basis for its conclusion, that ERDS will provide significant improvements in the NRC's ability to understand what is taking place during an emergency, and thereby more effectively perform its role of monitoring and advising the licensee. More importantly, the improvement in assessment performance significantly improved the NRC's ability to provide appropriate recommendations and advice to the State and local officials who are required to make the decisions regarding the offsite protective actions which are necessary to protect the public.

Because the decision made by the State and local authorities with regard to offsite protective actions could significantly affect the public health consequences of a reactor accident, it is the judgment of the NRC that a significant improvement in the NRC's ability to provide the right recommendation at the right time provides a substantial improvement in the overall protection to the public. An effective emergency response capability in the event of a reactor accident is an essential element of the defense-in-depth approach to protection of the public health and safety. The NRC's role during an emergency is part of that capability. Because the ERDS will provide a significant improvement in the NRC's ability to perform that role in an emergency, the proposed ERDS improvements are therefore justified, and the costs of implementing those improvements are modest.¹³

The SOC/backfit analysis makes clear that implementation of ERDS at all operational plants at the time would provide substantially better information over the then-existing Emergency Notification System in any emergency situation at a facility, and that coordination with State and local response using ERDS data during an emergency was intended. The SOC's reference to reactor accidents is not dispositive with respect to the scope of ERDS' utility. A reactor emergency is only one of many accident scenarios where ERDS could provide critical

¹³ Emergency Response Data System, 56 Fed. Reg. 40178, Aug. 13, 1991.

and timely information to both the NRC and the State, and the kind that may have come most easily to mind at the time the SOC was drafted.

There is no limiting language in the SOC that indicates that the NRC intended there to be any limitations on the use of ERDS. Placing a limitation on the types of accident scenarios where ERDS should be employed would be patently contrary to the NRC's stated charge of protecting public health and safety. In fact, the LAR analyzes a number of plausible accident scenarios that could occur at a defueled facility where spent fuel is present in the cooling pool. These scenarios include Hostile Action/Force design basis threat, fuel handling accident, aircraft potential threat, control room fire requiring evacuation and maintain spent fuel pool cooling, and general emergency with radioactive release and protective action recommendation.¹⁴ Entergy notes the activation of ERDS as part of its response to each of these analyzed emergency scenarios in the LAR, in further recognition of ERDS value in non-reactor accidents, yet characterizes ERDS use simply as "not applicable" without any supporting analysis.

Since the promulgation of the ERDS rules, the NRC has recognized that spent fuel pool accidents can occur even at shutdown reactor sites.¹⁵ While the NRC views the probability of these accidents as low, it recognizes that if they occur, the consequences are severe, with the most serious scenarios resulting in the deaths of thousands of people, permanent contamination of thousands of square miles of land, and billions of dollars of economic loss.¹⁶ The most recent analysis placed heavy reliance on the effectiveness of emergency planning to mitigate the

¹⁴ See LAR, Attachment 4 at 10-45; Tr. 25-26.

¹⁵ See Consequence Study of a Beyond-Design-Basis Earthquake Affecting the Spent Fuel Pool for a U.S. Mark I Boiling Water Reactor (October, 2013) (ADAMS Accession No. ML13256A342) at 160 *et. seq.*; A Safety and Regulatory Assessment of Generic BWR and PWR Permanently Shutdown Nuclear Power Plants (NUREG/CR 6451 (1997))(ADAMS Accession No. ML082260098) at Table 4.2.

¹⁶ *Id.*

potential consequences of spent fuel pool accidents.¹⁷ This more recent analysis underscores the need for the State to be able to properly devise and execute emergency response plans using all tools outlined in the RERP, given the recognized risk of a serious fuel pool accident. The RERP relies on access to ERDS in large part because of the NRC's recognition of ERDS's significant benefits and the need for effective coordination of emergency response with the State.

B. The Vermont Yankee staff reductions proposed in the LAR are predicated on the elimination of ERDS and are material to the findings the NRC must make on the LAR

Part 50, Appendix E, § IV.2 was promulgated in 1991 and the exemption it provides should be interpreted as applying only to plants that were already shut down at that time. The regulation is framed prospectively, outlining the obligations that operational plants will need to meet going forward. It makes sense, particularly in light of the NRC's backfit requirements, that the NRC would not make shutdown plants go through the expensive and complicated process of setting up an ERDS system from scratch. The incremental safety *increase* from such a requirement at shutdown plants might not substantially outweigh the enormous costs of setting up such a system. It is an entirely different question, however, whether plants that already have ERDS in place should be allowed to *decrease* safety at their plants by eliminating those systems to save a relatively small amount of ongoing operating expenses.

As Judge Wardwell made clear in his ASLB Order dissent, § VI.2 speaks only to the initial installation, startup, operation, and maintenance of the newly-created ERDS system.¹⁸ There is no indication in the regulation that it was intended to allow licensees that had already set up an ERDS system to terminate its feed to the NRC upon achieving permanently defueled

¹⁷ Consequence Study at Appendix A.

¹⁸ See ASLB Order, Wardwell Dissent at 8.

status, let alone in instances where an ERDS system exists that the State emergency preparedness program has become dependent upon and continues to rely on. Given the clear intent articulated in the rule's SOC/backfit analysis, it is reasonable to interpret the rule the other way: that licensee ERDS feeds to the NRC should stay in place under any circumstances where termination could be detrimental to coordination of State and local emergency response and thus imperil public health and safety. VY continues to pose credible accident threats in its defueled state (with spent fuel in the fuel pool) and nothing in either the rule itself or the SOC/backfit analysis suggests that a lesser response capability to those risks to public health should be entertained merely because the reactor is no longer operational.

Even if the regulation could be read as exempting plants that are shut down after 1991, the permanent shut down exception contained in 10 C.F.R. Part 50, Appendix E is neither prescriptive nor proscriptive. It is merely silent and grants no affirmative right for a licensee to discontinue its ERDS feed upon permanent shutdown. It does not prohibit the NRC from imposing an obligation on Entergy to continue the operation of the VY ERDS data feed to the NRC in order to provide adequate protection for the public health and safety. At the very least, sufficient ambiguity is present in the rule justifying the NRC to militate toward the increased public health and safety protection afforded by a continued ERDS feed to the NRC (and the State), and to admit the State's contention.¹⁹

Lastly, 10 CFR Part 50, Appendix E, § VI.4.d supports the State's reading of § VI.2 that the exemption applied only to shut down plants as of 1991. Section VI.4.d requires that "[e]ach licensee shall complete implementation of the ERDS by February 13, 1993, or before escalation to full power, whichever comes later." Upon February 14, 1993, all licensees, including facilities built in the future, were required to implement ERDS before escalation to full power.

¹⁹ See *Id.* at 2.

The NRC Staff conceded that ERDS was a requirement for all plants going forward as a result of the NRC's ERDS backfit analysis. The exemption of § VI.2 was rendered unnecessary as a result of § VI.4.d after February 13, 1993. The § IV regulatory scheme was then left with a mandate for all plants to install and maintain ERDS before full power production, with no provision expressly allowing or even contemplating termination of the ERDS feed under any circumstances.

C. Unique circumstances with respect to emergency response at Vermont Yankee justify a continued ERDS feed from the facility to the NRC

The requirements of VY's own EP, as well as the State's RERP justify continued VY ERDS feed to the NRC (and the State). First, Section 7.10 of the VY EP (Revision 54) explicitly calls for a continuous ERDS feed to the NRC.²⁰ The LAR made no apparent change to § 7.10 of the EP. More importantly, the State's RERP is reliant on information gleaned from the VY ERDS feed in evaluating and executing emergency response activities. Both the licensee and State emergency response plans expressly contemplate ERDS connection with the NRC, yet Entergy has neither provided any analysis of the impact of termination of that feed, nor has it presented an alternative communications mechanism to the NRC or the State in ERDS absence.

Second, as described above, Entergy's LAR expressly analyzed credible threats that could occur at the plant in its current permanently defueled state. Again, Entergy has not outlined any alternative form of communication to the NRC or the State as a replacement for ERDS in the event of an emergency under any of these scenarios. Lastly, the State is seeking a finite extension of ERDS use. It seeks access to the VY ERDS feed only while spent fuel is present in the fuel pool – in this case until approximately 2020. Once the spent fuel is transferred to dry cask storage and the credible risk of an emergency involving the potential

²⁰ See VY EP at 42.

release of radiation, such as those analyzed in the LAR, has passed, the State agrees that access to ERDS data is no longer necessary.

II. The State’s Contention Seeks to Enforce NRC Regulations and Does Not Collaterally Attack Any NRC Regulation

By a divided vote, the ASLB denied the State’s Petition because it ruled the following contention collaterally challenges another NRC regulation²¹:

Entergy has failed to ensure a Radiological Monitoring System that will provide the information that the State needs to assess Vermont Yankee conditions as part of the State’s protective action decision-making process, and Entergy has thus failed to demonstrate that its license amendment request (1) will not significantly reduce the margin of safety or significantly increase the consequences of an accident previously evaluated as required by 10 CFR § 50.92; (2) will provide adequate protection for the public health and safety as required by 10 CFR § 50.57(a)(3); and (3) will comply with the requirements of 10 CFR § 50.47 to provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.²²

The ASLB decision, as cogently argued in the Judge Wardwell’s dissent, is contrary to sound NRC law and deprives the State of a hearing on an issue of vital interest to it and its emergency planning programs. The alleged conflicting regulations are 10 C.F.R. §§ 50.47 and 50.54(q)(3). Stated broadly, the Board reasoned that because 10 C.F.R. Part 50 Appendix E, Section VI.2 does not require *hardware* for an ERDS system for any permanently shutdown reactor facility, the State’s contention regarding Entergy’s proposal to terminate the *operating* ERDS feed already in place – which relies on Entergy’s obligation to prove compliance with 10 C.F.R. §§ 50.47 and 50.54(q)(3) – constitutes a collateral attack on Appendix E.

First, the State is not seeking to impose the requirements of § 50.54(q)(3) on Entergy.

All parties, including Entergy, and the ASLB agreed that Entergy must submit a safety analysis,

²¹ See ASLB Order, Majority at 1. “In this Memorandum and Order, we determine that Vermont submitted a timely petition and has standing to intervene, but we nevertheless deny the petition because Vermont’s contention collaterally challenges an NRC regulation and therefore is not admissible.”

²² Petition at 3-4.

pursuant to 10 CFR § 50.54(q)(3), showing ERDS disconnection would result in no reduction in the effectiveness of the overall VY EP, prior to Entergy disconnecting its ERDS feed to the NRC (and the State).²³ This acknowledgement is supported by NRC Staff's own internal guidance documents. Thus, the ASLB's determination that the State's insistence on Entergy compliance with §§ 50.47(b) and 50.54(q)(3) collaterally attacks the ERDS provision in Part 50, Appendix E, §VI is incorrect.

Second, the sole reason §§ 50.47(b) and 50.54(q)(3) are applicable here is due to Entergy's (and the predecessor VY owner's) voluntary and wise decision to rely on the operation of the ERDS feed to the NRC as a key component of the VY EP. Once Entergy made that decision, it imposed upon itself the NRC regulatory obligation to amend its emergency plan prior to elimination of the ERDS feed, and to implement the requested license amendment,

only if the licensee performs and retains an analysis demonstrating that the changes do not reduce the effectiveness of the plan and the plan, as changed, continues to meet the requirements in appendix E to this part and, for nuclear power reactor licensees, the planning standards of § 50.47(b).²⁴

Third, because the ASLB declined to grant the State and itself a role in determining whether Entergy had conducted the required analysis justifying termination of the ERDS feed, the Staff unilaterally issued the LAR without first receiving, much less evaluating, Entergy's § 50.54(q)(3) safety analysis. The NRC Staff's February 4, 2015 issuance of Amendment No. 261 to the VY operating license was plainly made without review of a ERDS safety analysis.²⁵ The Amendment Issuance notes that the initial LAR was supplemented only two times: on May 21

²³ Tr. 43-44, *see also* Tr. 50; ASLB Order, Majority at 20-21, 23; ALSB Order, Wardwell Dissent at 17.

²⁴ 10 CFR § 50.54.(q)(3).

²⁵ *See* Letter from James Kim, Project Manager, Plant Licensing IV-2 and Decommissioning Transition Branch, Vermont Yankee Nuclear Power Station – Issuance of Amendment to Renewed Facility Operating License re: Changes to the Emergency Plan (TAC No. MF3668) (“Amendment Issuance”) (February 4, 2015) (ADAMS Accession No. ML14346A065) at 1; Amendment No. 261 at 1-2; Safety Evaluation at 1-2, 4-7, 22.

and August 21, 2014. Entergy's representations regarding an ERDS safety analysis at oral argument on December 1, 2014 post-date either of those supplemental filings by over three months. Even more striking, it is the State's understanding that Entergy disconnected its VY ERDS data feed to the NRC within a day of NRC Staff issuance of the LAR, without filing with NRC the § 50.54(q)(3) ERDS safety analysis Entergy acknowledged it was obligated to perform prior ERDS disconnection.

Entergy's failure to conduct the ERDS safety analysis and its disconnection of the VY ERDS feed prior to submitting the analysis it agreed to perform for review, coupled with the NRC Staff's issuance of the LAR without review of the analysis the ASLB had made clear was required, alone – beyond any determination of the meaning of Appendix E, § VI.2 – justifies overturning the ALSB Order and admitting the State's contention. Absent ASLB oversight, Entergy and NRC Staff are apparently ignoring NRC safety requirements as interpreted by the ASLB.

Fourth, 10 CFR § 50.47(b), requires that licensee emergency plans show, among other things, that “[p]rocedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all organizations; the content of initial and followup messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established” and that “[p]rovisions exist for prompt communications among principal response organizations to emergency personnel and to the public.”²⁶ The State's contention included this regulatory requirement as part of its contention not to challenge Appendix E, but rather because NRC regulations, through operation of § 50.54(q)(3), and confirmed by the NRC Staff guidance

²⁶ 10 CFR §§ 50.47(b)(5) and (6).

contained in the so-called Lewis Memorandum on which both Entergy and NRC Staff relied in opposing intervention, impose on Entergy the obligation to demonstrate that termination of the VY ERDS feed does not compromise public health and safety.²⁷ Entergy seeks to remove from its Emergency Plan a program that it once claimed, and NRC Staff agreed, was essential to effective emergency planning and response. As discussed elsewhere in this pleading, the State's dependence upon a fully operational ERDS to ensure that its emergency resources will be used most effectively to protect the public health and safety in the event of an accident is supported by ample evidence.

Fifth, inasmuch as Section VI.2 of Appendix E addresses only when a licensee is required to install ERDS hardware and §§ 50.47(b) and 50.54(q)(3) address the whether operation of the ERDS system is required for an adequate emergency plan and the circumstances under which termination of the ERDS feed is allowed, there is neither a logical nor legal connection between Appendix E and the emergency planning obligations on which the State's contention relies. Once Entergy incorporated ERDS into its emergency plan, ERDS became subject to the requirements governing emergency plans including §§ 50.47(b) and 50.54(q)(3). Like any other license provision, any provision of the VY EP that was used to demonstrate the adequacy of the plan cannot be removed from the plan by license amendment unless and until an applicant is able to demonstrate its removal will not reduce the effectiveness of the EP or otherwise compromise the public health and safety

²⁷ See Memorandum of Robert Lewis, NRC Director of Division of Preparedness and Response, Office of Nuclear Security and Incident Response, Emergency Response Data Systems at Plants That Have Permanently Ceased Operations (June 2, 2014) (ADAMS Accession No. ML14099A520). The Lewis Memorandum notes that "if the licensee's emergency plan relies upon ERDS for the provision of assessment data to the emergency response organization, which is an emergency planning function, the licensee will need to evaluate whether removing ERDS results in a reduction in effectiveness for its special circumstances. In either case, the licensee of a permanently shut-down facility seeking to remove ERDS is required by Paragraph 50.54(q)(3) to perform and retain an analysis that concludes that the removal of ERDS is not a reduction in effectiveness. A simple cross-reference to this memo does not satisfy that requirement." *Id.* at 2.

In sum, the ASLB's reasoning that the State's contention which draws attention to Energy's failure to meet NRC mandated emergency planning obligations pursuant to 10 C.F.R. §§ 50.47 and 50.54(q)(3), addressing when and how a licensee can terminate ERDS operation constitutes a collateral attack on Part 50, Appendix E, outlining licensee obligations to create an ERDS program is incorrect. The State's Petition should be granted and its contention should be admitted.

III. The State's Contention Raises Significant Questions Regarding the Protection of Public Health and Safety.

Regrettably, NRC Staff's issuance of the proposed license amendment, without awaiting or evaluating Entergy's submission of its safety evaluation, evidences a fundamental misunderstanding of Entergy's request in the LAR regarding ERDS use at the VY facility. NRC Staff held a public meeting to address public concerns with the proposed amendment and then, without the benefit of a full adjudicatory hearing and the decision of an independent hearing board, proceeded to reject the State's legitimate concerns. The NRC Staff provided its responses to issues raised by the State during the public comment period in the State Consultation section of the Amendment Issuance.²⁸ The State had filed public comments raising concerns about the potential impact of ERDS disconnection on the public health and safety of Vermont's citizens. The NRC Staff made a number of statements that are either incorrect in part, or altogether erroneous in its response that "the comment is not applicable to the license amendment request."²⁹ First, the NRC Staff posited that the LAR did not request the removal of ERDS, but rather a staffing reduction.³⁰ On the face of the LAR it is clear that Entergy sought removal of

²⁸ See Amendment Issuance, Safety Evaluation at 24-28

²⁹ *Id.* at 28.

³⁰ *Id.* at 27.

ERDS as a component of the overall requested staffing reductions. In addition, NRC Staff agrees without analysis with Entergy's claim that NRC regulations – specifically Part 50, Appendix E, § VI.2 – does not require continued use of ERDS at a defueled facility. The validity of that claim is at the heart of the State's contention and is a question that is far from settled, as evidenced by the ASLB split decision and the State's appeal before the Commission. There is simply no firm basis, particularly during the pendency of the ASLB Order appeal period, for the NRC to accept Entergy's claims as fact.

Second, the NRC Staff stated – again without any supporting analysis – that “[t]he licensee's statement that ERDS is not required after the permanent defueling of VY is correct.”³¹ As discussed above, a final determination regarding the correct interpretation of 10 CFR Part 50, Appendix E, § VI.2 has not been made. At best, the NRC Staff response was premature; at worst, incorrect. Even if the NRC's interpretation is proven correct at a later date, the response makes no acknowledgment of the § 50.54(q)(3) ERDS safety analysis required by the Lewis Memorandum and the ASLB Order.

Lastly, the NRC Staff stated that “Section 7.10 to the current Entergy VY SEP (Revision 54) provides that VY will maintain a continuous ERDS communication with the NRC Operations Center; it makes no commitment that ERDS will be provided by the licensee to the States.”³² The NRC Staff's understanding of Entergy's proposed obligations regarding ERDS connectivity under the license amendment is critically wrong. Section 7.10 of the VY SEP, Revision 54 states only that, “Vermont Yankee maintains a continuous ERDS connection with

³¹ *Id.* at 28.

³² *Id.*

the NRC Operations Center.”³³ At the time Revision 54 became effective on December 19, 2013, that statement was true. It is not, as the NRC Staff appears to suggest, indicative of any ERDS communication scheme after issuance of the license amendment. Indeed, Entergy’s LAR makes clear that the ERDS communications link referenced in Revision 54 of the VY SEP, and relied upon by the NRC Staff in its response to the State’s concerns, will be severed. Section II.C.9 of Entergy’s VY Analysis of Proposed Post-Shutdown On-Shift Staffing plainly states “[t]he VY Emergency Response Data System (ERDS) link to the NRC will not be operational in a permanently shut down and defueled condition. The task of ERDS activation is therefore not included as an on-shift task requiring evaluation as part of this staffing analysis.”³⁴ Furthermore, the termination of the VY-NRC ERDS link is highly problematic for the State, irrespective of Entergy’s claims that it has no commitment to provide ERDS data to the State.

By endorsing an LAR that seeks to terminate communications links critical to the State RERP, the NRC appeared to suggest that a licensee has no obligation to ensure any base level of state emergency planning capabilities. The NRC regulations point in the other direction. 10 CFR § 50.47(b)(6) requires licensee emergency plans to provide for “prompt communications among principal response organizations to emergency personnel and the public.” ERDS provided the primary means for the provision of this required communications link under Revision 54 of the VY EP. The state also recognized the importance of the data provided by ERDS and explicitly predicates many of the emergency response activities on information received from the VY ERDS link to the NRC under a memorandum of understanding executed between the State and the NRC. Entergy has not made provisions for alternative communications with the State in the absence of ERDS that are equal to or exceed the quality

³³ VY EP at 42.

³⁴ LAR, Attachment 4 at 8.

and/or quantity of data ERDS provides. In fact, the State's Nuclear Engineer and Decommissioning Coordinator has identified no less than 37 ERDS data points that are still necessary or useful even in VY's defueled state to the execution of the Vermont RERP in the event of an emergency at the facility.³⁵ Entergy must show compliance with all requirements of § 50.47(b) as part of the § 50.54(q)(3) ERDS safety analysis that has yet to be completed, filed with the NRC, and reviewed by NRC Staff as directed by the ASLB Order. The NRC Staff response is therefore misplaced given the requirements of § 50.47(b), the NRC Staff's own Lewis Memorandum, and the ASLB Order. More generally, the NRC Staff's response to the State's comments in the Amendment Issuance illustrates an incomplete and erroneous safety analysis of the impact of VY ERDS termination. Issuance of the license amendment was premature, and failed to consider a safety analysis required by NRC regulation, the ASLB Order, and the NRC Staff's own guidance documents.

The State's emergency planning and response capabilities have been severely diminished since the premature and defective issuance of the license amendment. It is the State's understanding that Entergy terminated its VY ERDS feed to the NRC within a day of the amendment issuance. Entergy has not completed or provided its promised ERDS safety analysis, contrary clear guidance from the Lewis Memorandum, a directive from the ASLB, and its own representations to the ASLB and the State. As a result, the State's RERP has been compromised without Entergy making any showing that it is able to meet the §§ 50.47(b) and 50.54(q)(3) requirements with alternative communications methods in the absence of ERDS, and the health and safety of Vermont citizens has been unnecessarily placed at risk. However, at this stage of the proceeding, the State need not prove its case on the merits.

³⁵ Tr. at 30, 89.

Determining whether a contention is adequately supported by a concise allegation of the facts or expert opinion, however, “does not call upon the intervenor to make its case at [the contention admissibility] stage of the proceeding, but rather to indicate what facts or expert opinions, be it one fact or opinion or many, of which it is aware at that point in time which provide the basis for its contention.” 54 Fed. Reg. at 33,170. A petitioner does not have to provide an exhaustive list of its experts or evidence or prove the merits of its contention at the admissibility stage. As with a summary disposition motion, the support for a contention may be viewed in a light that is favorable to the petitioner and inferences that can be drawn from evidence may be construed in favor of the petitioner. *See Palo Verde*, CLI 91-12, 34 NRC at 155; 10 C.F.R. § 2.710(c).³⁶

Reversal of ASLB Order and admission of the State’s contention is warranted given the failures of Entergy and the NRC Staff in evaluating the impact of VY ERDS termination on public health and safety. An in-depth inquiry before the ASLB and/or the NRC to examine the safety issues not presented by Entergy and not reviewed by the NRC Staff in issuing the license amendment is necessary to correct these failures and allow the tribunal to make ultimate determinations as to the safety value of ERDS at defueled facilities, particularly in light of the State’s request for limited and finite relief: that the VY ERDS feed to the NRC continue only until all spent fuel is transferred from wet storage to dry cask storage. In this instance, Entergy has represented in its PSDAR that all spent fuel will be in dry cask storage by approximately 2020. Alternative venues for relief, such as an enforcement action under 10 CFR § 2.206, as suggested by the NRC Staff, are not appropriate for review of Entergy’s failure to provide necessary safety analysis.³⁷ The harm to the State is occurring now, is ongoing, and is real. The ASLB panel assigned to this proceeding is familiar with these issues, and administrative

³⁶ *In re Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station)* LPB-06-20, 64 N.R.C. 131 at 150(footnotes omitted).

³⁷ *See* Majority at 23; Tr. at 81. A § 2.206 petition would be reviewed by the NRC Staff which has already made certain determinations regarding the adequacy of Entergy’s safety analysis in support of the LAR. The State seeks an independent evaluation of safety from the ASLB and/or the NRC.

efficiency suggests that accepting the State's contention and continuing the current proceeding is preferable to initiating a new proceeding from scratch.

CONCLUSION

Based on the foregoing, the State of Vermont respectfully requests the U.S. Nuclear Regulatory Commission to grant its Notice of Intention to Participate, Petition to Intervene, and Hearing Request, reversing the Atomic Safety and Licensing Board's denial of the same. The State also respectfully requests that the NRC accept the contention contained in its Petition, and order the ASLB to convene a hearing for the purpose of conducting an in-depth investigation and establishing an evidentiary record related to the State's concerns about the protection of the health and safety of its citizens.

Respectfully submitted,

/Signed (electronically) by/

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