MEMORANDUM AND ORDER

The State of Vermont has appealed LBP-15-4, an Atomic Safety and Licensing Board decision that denied the state's request for hearing and petition to intervene in this license amendment proceeding. We affirm the Board's decision for the reasons we provide below.


I. BACKGROUND

A. The NRC’s Emergency Response Data System

Because both Vermont’s proffered contention and the Board’s decision center on an NRC communications system called the Emergency Response Data System (ERDS), we begin with an overview of the ERDS and associated NRC regulations. ERDS is a “direct electronic data link between computer data systems used by licensees of operating reactors and the NRC Operations Center.”3 The system is a method of “assembling and transmitting to the NRC near real time data from a licensee during an alert or higher emergency classification.”4 ERDS automatically collects and transmits a “selected set of parametric reactor data”5 and supplements other communications methods (e.g., voice communication) between licensees and the NRC.6

Following the Three Mile Island accident in March 1979, the NRC sought to “improve the reliability and timeliness of data transmission and ensure that any reactor unit in distress can be suitably monitored.”7 ERDS began as a voluntary program among nuclear power reactor licensees—with about half of the then-operating reactor units participating—but in 1991 the NRC issued section VI to Appendix E, requiring participation in the program.8 The ERDS rule sought to assure that “a reliable and effective communication system” is “in place at operating

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4 See id. at 40,180.
5 See id. at 40,182.
6 See id. at 40,178-79, 40,182-83.
power reactors” to “allow the NRC to monitor critical parameters during an emergency.”9 The NRC did not require licensees to monitor more parameters than were already being monitored at each facility, however.10 Nor has ERDS ever been intended to “portray every detail of a nuclear power reactor in an emergency situation.”11 Licensees are required to activate ERDS “as soon as possible but not later than one hour after declaring an Emergency Class of alert, site area emergency, or general emergency.”12

In issuing the ERDS rule, the NRC required the participation of “all operating nuclear power facilities except Big Rock Point,” whose facility configuration did not “make available as transmittable data a sufficient number of parameters for effective participation.”13 Further, the ERDS rule itself and its Statements of Consideration make clear that the rule is inapplicable to those “nuclear power reactor facilities . . . that are permanently or indefinitely shut down.”14

The NRC allowed state governments to request an ERDS link from the NRC. Although it neither required nor solicited state participation in the ERDS, the NRC permitted states to establish an “ERDS interface” with the NRC through a Memorandum of Understanding.15

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10 See id. at 40,184; see also 10 C.F.R. pt. 50, app. E, § VI.1 (“When selected plant data are not available on the licensee’s onsite computer system, retrofitting of data points is not required.”).
14 See id.; see also 10 C.F.R. pt. 50, app. E, § VI.2 (“Except 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.”). The ERDS rule applies to reactor units shut down only temporarily for maintenance and those authorized only for fuel loading or low power operations. See ERDS Final Rule, 56 Fed. Reg. at 40,178; ERDS Proposed Rule, 55 Fed. Reg. at 41,095-96.
relevant here, in 1997 Vermont and the NRC entered into a Memorandum of Understanding in which the NRC agreed to provide Vermont with access to ERDS “data related to plant conditions during emergencies at commercial nuclear power plants in Vermont.”

B. Procedural Background

1. Entergy’s License Amendment Request

This adjudicatory proceeding stems from Entergy’s request for an amendment to its license for the Vermont Yankee Nuclear Power Station. By letter dated March 24, 2014, Entergy proposed changes to the Site Emergency Plan to reduce the on-shift and Emergency Response Organization staffing. Entergy requested the amendment as part of its “transition from an operating facility to a permanently defueled facility.” Entergy explained that upon the docketing of certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel, the Vermont Yankee license “will no longer authorize operation of the reactor or emplacement or retention of fuel into the reactor vessel.” Entergy described its proposed staffing reductions as “commensurate with the reduced spectrum of credible accidents in [a] permanently defueled condition.”

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17 Wamser, Christopher J., Site Vice President, Entergy, letter to U.S. NRC Document Control Desk (Mar. 24, 2014) (ADAMS accession no. ML14085A257) (License Amendment Request).

18 Id. at 1.

19 See id.; see also 10 C.F.R. § 50.82(a)(2). The certifications have since been filed. See Wamser, Christopher J., Site Vice President, Entergy, letter to U.S. NRC Document Control Desk, “Certifications of Permanent Cessation of Power Operations and Permanent Removal of Fuel from the Reactor Vessel” (Jan. 12, 2015) (ML15013A426).

20 License Amendment Request at 1.
As part of its license amendment request, Entergy submitted an analysis evaluating whether the “proposed post-shutdown minimum on-shift staff” could “implement all emergency tasks.”\textsuperscript{21} The analysis assessed the adequacy of the proposed staffing to perform necessary emergency tasks in light of the reduced number of “postulated accidents that will be applicable in the permanently defueled condition.”\textsuperscript{22} For each of the various accident scenarios studied in the staffing analysis (e.g., fuel handling accident, general emergency with radioactive release beyond the site boundary, design basis threat ground assault), Entergy identified the tasks to be performed and the on-shift positions responsible for each task.\textsuperscript{23} Where “multiple tasks were assigned to an individual in their role,” the analysis included Time Motion Studies evaluating “the timing of the tasks . . . to ensure that they could be performed by the individual in series within any specified time requirements.”\textsuperscript{24}

In evaluating whether the proposed on-shift staff adequately could perform the emergency tasks for each of the evaluated accident scenarios, Entergy identified those positions and tasks it considered no longer applicable to a facility with a permanently shutdown and defueled reactor.\textsuperscript{25} Among these various identified tasks, Entergy explained that in a permanently shutdown and defueled condition the Vermont Yankee facility would not need to have an operational ERDS communications link to the NRC, and therefore the task of activating

\textsuperscript{21} See id., Attach. 4, Analysis of Proposed Shutdown On-Shift Staffing at 4.

\textsuperscript{22} See id.

\textsuperscript{23} See id., Attach. 4 at 17-45.

\textsuperscript{24} See id., Attach. 4 at 10, 46-62.

\textsuperscript{25} See id., Attach. 4 at 7-8, 12-14.
the ERDS link was not included in the staffing analysis as one of the on-shift crew tasks to be performed in an emergency.\textsuperscript{26}

The NRC Staff published a notice of Entergy’s license amendment request in the Federal Register, providing an opportunity to submit comments and to request a hearing.\textsuperscript{27} Vermont filed comments on the proposed license amendment.\textsuperscript{28} Subsequently, Vermont filed its request for hearing and petition to intervene.\textsuperscript{29}

2. Vermont’s Contention

Vermont proffered one contention for hearing. The contention did not address Entergy’s proposed changes in the on-shift or Emergency Response Organization staffing. Instead, Vermont focused on the assumption that “the ERDS link to the NRC will not be operational in the permanently shut down and defueled condition.”\textsuperscript{30} Vermont’s contention sought continuation of the ERDS data link with the NRC or an alternate means of obtaining similar data. The contention in full reads as follows:

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

\textsuperscript{26} See id., Attach. 4 at 8.


\textsuperscript{28} The Vermont Public Service Department filed two comments, both dated August 21, 2014 (Vermont Comment 1, ML14239A029; Vermont Comment 2, ML14239A030).

\textsuperscript{29} Vermont Department of Public Service Notice of Intention to Participate, Petition to Intervene, and Hearing Request (Sept. 22, 2014; filed through the NRC’s E-Filing system Sept. 24, 2014) (Petition for Hearing); see also LBP-15-4, 81 NRC at 162-64 (declining to dismiss petition as untimely).

\textsuperscript{30} See Petition for Hearing at 4.
§ 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.31

Vermont claimed that while many of the parameters ERDS transmits would not be “needed once Vermont is in a permanently shut down and defueled condition, other ERDS parameters are still needed.”32 Vermont argued that “[w]ithout timely access to the spent fuel pool, radiological, and meteorological data” made available through ERDS to the state’s radiological response organizations, “the State would need significantly more time to obtain accurate data needed for State protective action recommendations.”33 Vermont requested a hearing to “put forward testimonial evidence on the potential consequences of that delay.”34

As set forth in its petition, Vermont seeks either that (1) “the ERDS link to the NRC be retained during Vermont Yankee’s permanently shut down and defueled period” or (2) “an alternate means similar to ERDS be made available to provide [an] equivalent Radiation Monitoring System, Meteorological information, and Containment parameters relevant to the spent fuel pool conditions for as long as fuel remains within the spent fuel pool.”35

Both the Staff and Entergy opposed admission of Vermont’s contention on several grounds. Both claimed that the contention falls beyond the scope of the proposed license amendment.36 Both also argued that the contention constitutes an impermissible challenge to

31 See id. at 3-4.
32 See id. at 4.
33 See id. at 5.
34 Id.
35 Id.
36 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), at 9-12, 14-15 (Staff Answer Before Board); Entergy’s Answer Opposing the State of Vermont’s Notice of Intention to
the ERDS requirements in Appendix E to Part 50, which exempt permanently shutdown nuclear power facilities.  

Entergy additionally claimed that the contention fails to raise a genuine material dispute with the application and lacks the necessary factual or expert support.  

The Staff further argued that the contention is not material to the findings that the NRC must make on the license amendment.

3. The Board’s Conclusions in LBP-15-4

Although the Board found that Vermont had submitted a timely petition and had standing to intervene, a Board majority found Vermont’s contention inadmissible as a collateral challenge to an NRC regulation—specifically, the ERDS rule. The Board found the relief Vermont sought to be “inconsistent” with the regulations regarding ERDS, which exempt “all nuclear power facilities that are shut down permanently” from the need to provide an ERDS interface with the NRC. In the Board’s view, Vermont effectively seeks to impose on Entergy requirements “more stringent” than the ERDS regulations because Vermont seeks to require Entergy—even now that the Vermont Yankee reactor is permanently shut down and defueled—to maintain an ERDS link with the NRC or to “create another ERDS-like system.” In reaching its conclusions, the Board examined the language, regulatory history, and regulatory framework


38 See Entergy Answer Before Board at 15-18.

39 See Staff Answer Before Board at 15-16.

40 See 10 C.F.R. § 2.335(a) (“no rule or regulation of the Commission . . . is subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding of this part”).


42 See id.
of the ERDS regulations. The Board rejected Vermont’s alternate interpretations of the ERDS rule exemption.

Judge Wardwell dissented. In his view, the “exemption clause” for shutdown power facilities in Appendix E, Section VI.2 applied only to those “plants . . . already shut down at the time of the rulemaking and not to plants at which an ERDS was later installed” and that now are terminating operations. He reasoned that the text in Appendix E only concerns “the initial installation, startup, operation, and maintenance of the ERDS,” not whether or when an installed system can be disconnected. Judge Wardwell described the exemption as intended merely to exclude the then-shutdown plants, “whose spent fuel had been cooling . . . for a period of time,” from having to comply with the rule’s mandate “to install, implement, and maintain an ERDS.”

Judge Wardwell therefore concluded that the exemption for plants “that are shutdown permanently or indefinitely” does not apply to Vermont Yankee or other plants with “previously installed” ERDS connections that now have terminated reactor operations permanently. In turn, he concluded that Vermont’s contention does not challenge the ERDS rule. Judge Wardwell went on to find Vermont’s contention otherwise admissible for hearing.

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43 See id. at 167-73.
44 See id. at 167-72.
45 See id. at 177 (Wardwell, J., dissenting) (concluding that, at a minimum, two interpretations of the exemption provision are possible).
46 See id. at 182.
47 See id. at 181.
48 See id. at 188.
49 See id.
50 See id. at 190-91.
Both the majority and dissenting opinions address a recent NRC Staff-generated memorandum (referred to as the “Lewis Memorandum” or “Lewis Memo”) whose express intent was to clarify the ERDS requirements for those plants that have permanently ceased operations.51 Issued to the NRC regions, the Lewis Memorandum states that the Appendix E, Section VI requirements involving ERDS do not apply to power reactor licensees that have submitted a certificate of permanent cessation of operation.52 The memorandum goes on to specify that a licensee of a permanently shutdown facility may “retire ERDS without prior NRC approval” if its emergency plan “does not describe ERDS or its use during an emergency.”53 For those licensees whose emergency plan describes ERDS or its use during an emergency, the memorandum outlines a process for retiring ERDS. The memorandum states that such licensees “would need to process a change” to their emergency plans pursuant to 10 C.F.R. § 50.54(q)(3).54

Section 50.54(q)(3) allows a licensee to make changes to an emergency plan without prior NRC approval if the licensee completes and retains an analysis demonstrating that the revised emergency plan satisfies a two-part test: (1) the plan as changed must continue to meet the requirements in Part 50, Appendix E and the standards in section 50.47(b); and (2) the changes must not reduce the effectiveness of the plan.55 The Lewis Memorandum states that a

51 See Memorandum from Lewis, Robert J., Division of Preparedness and Response, Office of Nuclear Security and Incident Response, “Emergency Response Data System at Plants that Have Permanently Ceased Operations” (June 2, 2014) (ML14099A520) (Lewis Memorandum).

52 See id. at 1.

53 Id.

54 Id.

55 “Reduction in effectiveness” means a reduction in the “licensee’s capability to perform an emergency planning function in the event of a radiological emergency.” See 10 C.F.R. § 50.54(q)(1)(iv); see also id. § 50.54(q)(1)(iii).
licensee accordingly may, without NRC prior approval, revise its emergency plan to remove the reference to the ERDS data link to the NRC if the licensee performs the section 50.54(q)(3) screening analysis and concludes that the two-part test is satisfied. If a licensee concludes in its section 50.54(q)(3) analysis that a particular change would reduce the effectiveness of an emergency plan, then the licensee cannot implement the change without prior NRC approval and must seek a license amendment to change the emergency plan.

In February 2015, while this case was pending, the NRC granted the license amendment (License Amendment 261), approving Entergy’s proposed changes to the Vermont Yankee site emergency plan to reduce the on-shift and Emergency Response Organization staffing.\(^\text{56}\) The Staff found that the proposed staffing changes met the emergency plan standards in 10 C.F.R. § 50.47(b) and the requirements in Appendix E to 10 C.F.R. Part 50 and also provide reasonable assurance that adequate protective measures “can and will be taken in the event of a radiological emergency, commensurate with the reduced spectrum of credible accidents in the permanently shutdown and defueled condition.”\(^\text{57}\)

On February 23, 2015, Entergy submitted to the NRC a revised Vermont Yankee emergency plan (Revision 55).\(^\text{58}\) Revisions included the on-shift and Emergency Response Organization staffing reductions authorized by License Amendment 261, as well as several emergency plan changes for which Entergy had performed a section 50.54(q)(3) screening

\(^{56}\) See Kim, James, NRC, letter to Entergy, “Vermont Yankee Nuclear Power Station – Issuance of Amendment to Renewed Facility Operating License Re: Changes to the Emergency Plan” (Feb. 4, 2015) (ML14346A065) (License Amendment).

\(^{57}\) See id. at 22.

analysis and concluded that they would not require prior NRC approval.\textsuperscript{59} Retiring ERDS and removing ERDS from the emergency plan were among the emergency plan changes Entergy made pursuant to section 50.54(q)(3).\textsuperscript{60}

\section*{II. ANALYSIS}

\subsection*{A. Timeliness}

As an initial matter, Entergy opposes Vermont’s appeal as untimely.\textsuperscript{61} The appeal was due on February 23, 2015.\textsuperscript{62} Vermont attempted to file its appeal approximately 30 minutes prior to the midnight deadline on February 23, 2015, but encountered technical difficulties submitting its brief through the NRC’s Electronic Information Exchange (EIE).\textsuperscript{63} Vermont nonetheless sent a copy of its brief to the other participants by e-mail prior to the filing deadline. The next day Vermont obtained technical assistance from the NRC EIE Help Desk and was able to file its brief via the EIE.\textsuperscript{64} Based on the affidavit of Vermont’s counsel, we find that Vermont had good cause to believe its EIE connection to the NRC was in working order on the day its appeal was due and that Vermont otherwise acted in good faith and with reasonable diligence. The other litigants also were not prejudiced by the hours of delay in the EIE filing. We accept the appeal.

\begin{itemize}
\item \textsuperscript{59} \textit{Id.}
\item \textsuperscript{60} See \textit{id.}, Attach. 9.2, 10 CFR 50.54(q) Evaluation, Vermont Yankee ERDS (revised analysis dated Jan. 26, 2015), at pp. 5-6 of 7.
\item \textsuperscript{61} See Entergy’s Answer Opposing the State of Vermont’s 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 (Mar. 20, 2015), at 8-10 (Entergy Brief).
\item \textsuperscript{62} See LBP-15-4, 81 NRC at 176 (majority opinion); 10 C.F.R. § 2.311(b).
\item \textsuperscript{63} See Affidavit of Aaron Kisicki Regarding the Late Electronic Filing of the State of Vermont’s February 23, 2015 Notice of Appeal and Supporting Brief (Feb. 24, 2015), at 1 (ML15055A276).
\item \textsuperscript{64} \textit{Id.} at 1-2.
\end{itemize}
B. Contention Admissibility Requirements

A request for hearing must “set forth with particularity” the contentions a petitioner seeks to litigate.\(^{65}\) The NRC’s contention admissibility rules are found in 10 C.F.R. § 2.309(f)(1). They are intentionally strict. For each contention, the petitioner must state the issue of law or fact to be raised or controverted and a brief explanation of the basis for the contention.\(^{66}\) Contentions cannot be based on speculation but must have “some reasonably specific factual or legal basis.”\(^{67}\) Our rules thus require a petitioner to state the alleged facts or expert opinions that support the petitioner’s position and on which the petitioner intends to rely in litigating the contention at hearing.\(^{68}\)

The petition also must demonstrate that the issue raised in the contention falls within the scope of the proceeding and is material to the findings that the NRC must make.\(^{69}\) A contention, therefore, must provide sufficient information to show a genuine dispute with the applicant on a material issue of law or fact.\(^{70}\) A petitioner must refer to the specific portions of the application that the petitioner disputes, along with the supporting reasons for each dispute; or, if the petitioner believes that an application fails altogether to contain information required by law, the petitioner must identify each failure and provide supporting reasons for the petitioner’s

\(^{65}\) See 10 C.F.R. § 2.309(f)(1).

\(^{66}\) Id. § 2.309(f)(1)(i)-(ii).

\(^{67}\) See Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 213 (2003) (citation omitted).


\(^{69}\) Id. § 2.309(f)(1)(iii)-(iv).

\(^{70}\) Id. § 2.309(f)(1)(vi).
belief.71 We generally defer to Board decisions on contention admissibility unless we find an error of law or abuse of discretion.72

C. Admissibility of Vermont’s Contention

On appeal, Vermont challenges the Board’s interpretation of the ERDS regulations.73 In particular, Vermont argues that the rule’s exemption for permanently shutdown nuclear power facilities “applied only to shut down plants as of 1991,” to exempt those plants from the requirement to install and implement ERDS.74 Vermont argues that the ERDS regulations neither allow nor “even contemplate[] termination of the ERDS feed under any circumstances.”75 Vermont therefore argues that the majority erred when it found Vermont’s contention a collateral attack on the ERDS regulations.76 Vermont also argues that the Staff prematurely issued the license amendment without first reviewing Entergy’s section 50.54(q)(3) analysis on whether removing ERDS would reduce the effectiveness of Entergy’s emergency plan.77 Entergy and the NRC Staff oppose the appeal.78

71 Id.

72 See FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), CLI-12-8, 75 NRC 393, 397 (2012).

73 See Vermont Appeal Brief at 5-11.

74 See id. at 9-10.

75 Id. at 11.

76 Id. at 5, 16.

77 See id. at 5, 17, 19.

78 See Entergy Brief; NRC Staff’s Brief in Opposition to the State of Vermont’s Appeal of LBP-15-4 (Mar. 20, 2015) (Staff Brief).
1. **Scope of the License Amendment Proceeding**

Before turning to Vermont’s arguments on appeal, we first address a key issue that the Board majority did not reach—the limited scope of this proceeding. Both the Staff and Entergy’s primary argument in opposing Vermont’s contention before the Board was that the contention raises issues beyond the scope of this proceeding. We agree.

In challenging Entergy’s license amendment application, Vermont seeks to have Vermont Yankee retain its “ERDS link to the NRC.” Alternatively, Vermont seeks another “means similar to ERDS” that will provide data “equivalent” to the radiological, meteorological, and spent-fuel-pool-related data that Vermont states it was able to obtain through ERDS. Yet Entergy’s license amendment application did not include a request to terminate the Vermont Yankee ERDS link to the NRC. As Vermont itself acknowledges, the license amendment request “made no apparent change” to the section of the emergency plan that addressed the ERDS link and that specified the plant’s “continuous ERDS connection with the NRC Operations Center.” Nor did the NRC Staff’s issuance of the license amendment serve to allow Entergy to delete ERDS from its emergency plan or to remove the system. In granting the license amendment, the Staff made clear both that the license amendment request had not included a request to disconnect the ERDS link and that the Staff was not “providing prior approval for the removal of ERDS” at Vermont Yankee.

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79 See, e.g., Staff Answer Before Board at 1, 9-12; Entergy Answer Before Board at 14-15.

80 See Petition for Hearing at 5.

81 Id. at 5.

82 See Vermont Appeal at 11 (citing § 7.10 of the Vermont Yankee emergency plan).

83 See License Amendment, Attach., Safety Evaluation Related to Amendment No. 261 at 27 (responding to Vermont’s comments on proposed amendment).
To be sure, Entergy deleted the reference to ERDS in the emergency plan and retired the Vermont Yankee ERDS—effective February 5, 2015—but only after completing an analysis under section 50.54(q)(3).84 In its analysis, Entergy concluded that (1) the applicable emergency plan regulations under 10 C.F.R. § 50.47(b) and Appendix E to Part 50 would continue to be met even without ERDS and (2) removing ERDS would not reduce the effectiveness of the Vermont Yankee emergency plan.85 In short, the challenged license amendment did not affect the status of the ERDS link at Vermont Yankee.

The license amendment request does refer to ERDS, but solely in regard to the assumption that after the permanent shutdown of the reactor it would no longer be necessary for the on-shift staff to activate ERDS. Entergy sought the license amendment because it intended to cease reactor operations and defuel the reactor and accordingly all of Entergy’s proposed staff reductions relate to Vermont Yankee in a “permanently defueled condition.”86 As such, the staffing analyses submitted with the request contained assumptions regarding the spectrum of credible accidents or events and the emergency tasks that would still be applicable—or no longer applicable—at a facility with a permanently shutdown and defueled reactor.87 In this vein, Entergy assumed that maintaining the ERDS link would not be required at a permanently defueled facility and in turn that the specific on-shift staff “task of ERDS activation” would no longer be relevant.88

84 Entergy Brief at 6.
85 See Revision 55 to EP, at Attachment 9.2, Section 50.54(q) Evaluation (Jan. 26, 2015), at pp. 5-6 of 7.
86 See License Amendment Request, Cover Letter at 1.
87 See, e.g., id., Attach. 4 at 4-15.
88 See id., Attach. 4 at 8; see also, e.g., id. at 21, 27, 33, 39.
While Vermont took issue with Entergy’s assumption that it could disconnect ERDS after ceasing operations and defueling, Vermont’s contention did not challenge the proposed staffing reductions. Vermont’s petition neither claimed that more on-shift positions would be necessary to allow for timely ERDS activation nor conversely, that without the automatic ERDS mode of data transmission more on-shift staff would be necessary to perform emergency tasks. In short, Vermont’s contention did not seek to litigate the sufficiency of the proposed staffing reductions.

Vermont’s subsequent efforts in its reply brief to tie its interest in the ERDS data to the proposed staffing in the license amendment were both late and unsupported. Vermont neither explained nor otherwise supported claims that the proposed “on-shift staff reductions . . . can only be justified by the elimination of ERDS” or that the “staffing reductions proposed by Entergy will result in . . . the effective elimination of ERDS.” Additionally, Vermont provided no basis for its argument that the license amendment would “permit Entergy to discharge several employees whose training and experience are essential to ERDS operation.”

Notably, by its very nature ERDS does not require a dedicated “operator” for the duration of emergencies because the system automatically collects and transmits plant data; the “acquisition and transmission of data [does] not require human intervention after the system is activated.” Moreover, Vermont Yankee’s ERDS connection to the NRC was a continuous 24-
hour connection and therefore the task of activating ERDS in an emergency would not have been necessary unless the system had become disconnected and needed to be reconnected. Regardless, Vermont’s contention did not propose that merely to perform the single task of activating ERDS or the task of verifying that the ERDS connection was active would require more on-shift staff than proposed in the license amendment. Several different positions at Vermont Yankee could perform the “verification” of the ERDS connection to the NRC.\(^\text{93}\) In fact, Entergy’s counsel repeatedly stated that none of the labor reductions proposed in the license amendment depended on the elimination of ERDS, and that “Vermont Yankee does not require any staff . . . to operate ERDS” during an emergency.\(^\text{94}\) Vermont provided no facts or expert opinion to suggest otherwise.

Judge Wardwell, nonetheless, found the contention to be within the scope of the proceeding and concluded that the proposed reduced staffing levels “are, in part, directly related” to Entergy’s plans to remove ERDS.\(^\text{95}\) Judge Wardwell based his view on Entergy counsel’s statement that it would cost an estimated $680,000 for Entergy to maintain “all of the IT equipment and support personnel” necessary to continue the ERDS “technology infrastructure” until 2020 (when Entergy plans to transfer all of the fuel out of the spent fuel pool and into an Independent Spent Fuel Storage Installation (ISFSI)).\(^\text{96}\) But equipment and activation must be “performed as soon as possible” but at most within one hour of an emergency declaration. See 10 C.F.R. § 50.72(a)(4).

\(^{93}\) See, e.g., Revision 55 to EP, ERDS Section 10 C.F.R. 50.54(q) Evaluation, Attach. 9.2 at p. 2 of 7.

\(^{94}\) See id. at 35, 45; see also id. at 56 (“the staff that are being reduced[] have nothing to do with the operation of ERDS”).

\(^{95}\) See LBP-15-4, 81 NRC at 190-91 (Wardwell, J., dissenting).

\(^{96}\) See id. at 191 & n.68; Tr. at 38.
personnel costs relating to testing, updating, and otherwise maintaining the ERDS hardware and software on a long-term basis are a different matter than the staffing levels necessary to respond in an emergency. And in any event, as noted above, the license amendment was not the basis for Entergy’s removal of ERDS at Vermont Yankee.

For the reasons outlined above, we agree with Entergy and the Staff that Vermont’s proffered contention does not (1) fall within the scope of this license amendment proceeding or (2) raise a genuine dispute on a material issue regarding the proposed staffing reductions in the application. Indeed, even if the license amendment had been denied, Entergy still could have sought removal of ERDS through the section 50.54(q)(3) analysis process. Entergy could have performed its section 50.54(q)(3) analysis regarding the ERDS at any point after certifying that it had ceased operations and defueled the reactor, regardless of the timing of the license amendment request or its issuance.

2. **The ERDS Rule Exception in Appendix E**

In addition to the conclusions reached above, we also agree in substantial part with the majority’s reading of the ERDS rule exception. That is, to the extent that Vermont argues that the ERDS regulations require Entergy to maintain ERDS “until all spent fuel currently in the spent fuel pool is transferred to dry cask storage” or alternatively requires Entergy to “establish”

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97 See, e.g., Entergy Brief at 21-22, 23-24; Staff Brief at 9.

98 Vermont’s petition also offered little support for its claims regarding the impact of the loss of ERDS data and the State’s need for near real-time data. With no further elaboration, the State indicated only that it would “need significantly more time to obtain accurate data” to make protective action recommendations. See Petition for Hearing at 5. The petition incorporated by reference public comments that the State Nuclear Engineer and Decommissioning Coordinator had submitted on the license amendment request. See Vermont Comment 1. These comments stated that while many ERDS parameters would no longer be relevant with the reactor shut down, many would still be meaningful; Vermont provided no specific examples or other description of potential harm. We therefore agree with the Staff that Vermont’s claims are “vague” and lacking in factual or expert support. See Staff Brief at 27-30; see also Entergy Brief at 22-23.
a “comparable or better communication system with the State,” we agree that Vermont misreads the ERDS requirements given the exception for shutdown facilities.\(^9\) We need not reach all aspects of the majority and dissent’s dispute over the ERDS rule, but focus on the points most relevant to Vermont’s contention.

At issue is the ERDS rule exception in Appendix E for “nuclear power facilities that are shut down permanently or indefinitely.”\(^10\) Neither the rule itself nor its history defines what is meant by “shut down permanently.” The Board rejected Vermont’s interpretation that “permanently shut down” means a facility that has moved all of its spent fuel “from the fuel pool into the ISFSI pad offsite.”\(^11\) The Board also rejected Vermont’s arguments that the ERDS rule exception was intended as a “one-time” exception, applicable only to those facilities with permanently shutdown reactors when the NRC issued the rule in 1991.\(^12\) Rather, the Board read the exemption as applying to facilities that have permanently ceased reactor operations and permanently defueled their reactors.\(^13\)

Vermont claims that “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 status.”\(^14\) We consider the exemption in light of the considerations that led to the rule. ERDS as a supplementary communications system was conceived in the wake of the Three Mile Island accident. The key concern behind ERDS was

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9. See Vermont Appeal at 3; see also id. at 6-11.
11. See Tr. at 22; LBP-15-4, 81 NRC at 168-70 (majority opinion).
13. See id. at 169-70.
the NRC’s ability (as part of its oversight and support role) to monitor a “reactor accident”—a “reactor unit in distress.”\textsuperscript{105} The rule history also stressed the need for accurate “near real-time data” to allow the NRC to have quick access to “key information about what is taking place at the reactor during an accident, particularly during the critical early hours.”\textsuperscript{106} ERDS is intended to help the NRC “provide the right recommendation at the right time . . . . in the event of a reactor accident.”\textsuperscript{107} As the Board describes, the history contains no mention of spent fuel pools.\textsuperscript{108}

Moreover, the NRC has not interpreted the rule as a one-time exception or special “waiver” applicable only to those plants that at the time still had spent fuel in pools but no longer had operating reactors. Subsequent NRC generic communications regarding ERDS have been addressed to all holders of operating licenses for nuclear power reactors, except those license holders that have “ceased operations” and “have certified that fuel has been permanently removed from the reactor vessel.”\textsuperscript{109} And while the rule does not address the removal of ERDS, in practice the NRC has allowed licensees that have permanently defueled their reactors to remove ERDS, as the Staff described.\textsuperscript{110} Further, as the Staff noted in its brief, the plants that

\begin{itemize}
\item \textsuperscript{105} See ERDS Final Rule, 56 Fed. Reg. at 40,179, 40,182; ERDS Proposed Rule, 55 Fed. Reg. at 41,098.
\item \textsuperscript{106} See ERDS Final Rule, 56 Fed. Reg. at 40,183.
\item \textsuperscript{107} See id. at 40,179.
\item \textsuperscript{108} See LBP-15-4, 81 NRC at 168-69 (majority opinion).
\item \textsuperscript{109} See NRC Regulatory Issue Summary 2009-13, “Emergency Response Data System Upgrade from Modem to Virtual Private Network Appliance” (Sept. 28, 2009), at 1 (ML092670124); NRC Information Notice 2008-15, “Emergency Response Data System Test Schedule Revised” (Aug. 12, 2008), at 1 (ML081900401).
\item \textsuperscript{110} See Staff Brief at 4-5.
\end{itemize}
were shut down before the ERDS implementation deadline did not install ERDS though they stored spent fuel in their spent fuel pools for years after the ERDS implementation deadline.\textsuperscript{111}

Compared to a reactor accident, a spent fuel pool accident is a slower-moving event with far fewer parameters for a licensee to monitor, fewer kinds of potential accidents, and more time available to take mitigative and corrective actions. Moreover, without an operating reactor in the picture, the entire focus of the licensee’s staff can be on the spent fuel pool. And once a reactor has shut down, the potential for a release from a spent fuel pool will diminish with time as the decay heat of the fuel drops, given that no fresh spent fuel will be added to the pool. It is reasonable, therefore, to read the rule exemption as applying to facilities that have permanently shut down reactor operations and defueled their reactors, as the Board found.

To the extent, then, that Vermont argues that licensees with permanently shut down and defueled reactors must maintain an ERDS for as long as their facilities still have fuel in a spent fuel pool, we agree with the Board that Vermont’s contention collaterally challenges the ERDS rule by seeking to impose more stringent requirements on non-operating plants than the rule intended.\textsuperscript{112} Both the most plausible reading of the rule exemption and the rule’s history (which focuses on timely information to monitor reactor accidents) do not support such an interpretation.

\textsuperscript{111} \textit{Id.} at 3; \textit{see also} LBP-15-4, 81 NRC at 168 n.68.

\textsuperscript{112} See Vermont Appeal at 9 (questioning “whether plants that already have ERDS in place should be allowed . . . [to] eliminat[e] those systems”); \textit{id.} at 11-12 (“Once the spent fuel is transferred to dry cask storage . . . access to ERDS data is no longer necessary”); \textit{id.} at 17 (the “heart of the State’s contention” involves whether “NRC regulations . . . require[s] continued use of ERDS at a defueled facility”).
3. **The Section 50.54(q)(3) Process**

   On appeal, Vermont asserts that its contention does not collaterally challenge the ERDS rule but instead addresses “when and how a licensee can terminate ERDS operation.”\(^{113}\) Specifically, Vermont states that its contention “draws attention to Entergy’s failure" to meet the threshold test in section 50.54(q)(3) for revising an emergency plan.\(^{114}\) Citing to the Lewis Memorandum and to section 50.54(q)(3), Vermont repeatedly stresses that Entergy cannot remove the ERDS provision in the emergency plan “unless and until” it “demonstrates” that ERDS “removal will not reduce the effectiveness” of the plan.\(^{115}\)

   All of the litigants, the Board majority, and Judge Wardwell agree that Entergy did not have the discretion to remove ERDS without first performing and meeting the two-part screening test in section 50.54(q)(3).\(^{116}\) In other words, all parties agree that Entergy could not terminate the ERDS link without first demonstrating that the removal of ERDS would not reduce the effectiveness of Vermont Yankee’s emergency plan.

   As we earlier described, the Staff as a policy matter determined and recently clarified in the Lewis Memorandum that a section 50.54(q)(3) analysis should be completed to remove ERDS if the facility’s emergency plan includes ERDS, as Vermont Yankee’s plan did. This precaution is intended precisely to prevent a licensee from unilaterally removing ERDS when the licensee’s plan might rely on ERDS to provide “assessment data to the emergency response organization,” which the memorandum specifies is an emergency planning function.\(^{117}\)

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\(^{113}\) See Vermont Appeal at 16.

\(^{114}\) See id.

\(^{115}\) See id. at 15; see also id. at 4-5, 12-16.

\(^{116}\) See, e.g., LBP-15-4, 81 NRC at 173; id. at 177-78, 186 (Wardwell, J., dissenting).

\(^{117}\) See Lewis Memorandum at 2.
Lewis Memorandum outlines that if an emergency plan refers to ERDS at all a licensee seeking to remove ERDS is expected to “perform and retain an analysis that concludes that the removal of ERDS is not a reduction in effectiveness” in the plan.\textsuperscript{118}

In its appeal, Vermont does not dispute that Entergy may discontinue ERDS if it justifies through a section 50.54(q)(3) analysis that without ERDS the emergency planning requirements will still be met and that there will be no reduction in the effectiveness of the emergency plan.\textsuperscript{119} At the time of the Board’s oral argument, Entergy had not yet completed its section 50.54(q)(3) analysis regarding ERDS.\textsuperscript{120} But as we earlier noted, Entergy has since completed its analysis and provided it to both the NRC and to Vermont. Vermont therefore now has had the opportunity to review Entergy’s analysis, and it may challenge the accuracy and sufficiency of that analysis through an NRC section 2.206 petition, as we outline further below.

Although Vermont’s intervention petition did not refer to the section 50.54(q)(3) process, the State’s appeal now largely centers on it. Vermont’s main stated concern is whether Entergy adequately demonstrated that the emergency plan without the ERDS component meets emergency planning requirements and does not reduce the effectiveness of the plan.\textsuperscript{121} Vermont also claims that the Staff prematurely issued the license amendment on February 4, 2015, “despite no indication from Entergy that it had conducted the necessary § 50.54(q)(3)” analysis or “evidence that [the Staff] reviewed the impact of ERDS termination” on the plan’s

\textsuperscript{118} See id.; see also Vermont Appeal at 19.

\textsuperscript{119} See Vermont Appeal at 4-5, 11-16.

\textsuperscript{120} See, e.g., LBP-15-4, 81 NRC at 173 (majority opinion) (citing Tr. at 44).

\textsuperscript{121} See Vermont Appeal at 3-5, 12-17, 19. Vermont first referred to the section 50.54(q)(3) analysis in its reply brief before the Board. See Vermont Reply Before Board at 9-12. Vermont claimed that it was “likely that Entergy’s analysis, if done properly” would not satisfy the analysis’s two-part test. See id. at 12-13.
effectiveness. Vermont’s appeal questions “whether the NRC was correct in granting” the license amendment without first reviewing the section 50.54(q)(3) analysis and “whether Entergy was allowed to apparently terminate” the ERDS “feed to the NRC prior to submission of the [section 50.54(q)] analysis for NRC staff review.”

We address these arguments in turn. First, as discussed above, the section 50.54(q)(3) analysis by its own terms allows a licensee to revise an emergency plan without prior NRC approval if the screening criteria are met. Once Entergy completed the analysis and concluded that the criteria were satisfied, it did not have to wait for NRC authorization to remove ERDS. Entergy was required to submit and did submit to the NRC a summary of its analysis (Entergy actually submitted the entire analysis) within 30 days of removing ERDS.

Second, as we earlier outlined, the license amendment did not authorize or cause the removal of ERDS. The section 50.54(q)(3) analysis therefore did not need to be submitted as part of the amendment request. And in any event, Vermont’s contention did not present a supported and material challenge to the license amendment, which only authorized particular staffing changes.

Third, Vermont may challenge Entergy’s section 50.54(q)(3) analysis. Entergy’s analysis addresses whether the removal of ERDS (1) complies with emergency planning requirements in Appendix E and the planning standards in section 50.47(b); and (2) reduces the effectiveness of

122 See Vermont Appeal at 4.

123 See id. at 5.

124 The Board also found Vermont’s arguments regarding the section 50.54(q)(3) analysis to be impermissibly late. See LBP-15-4, 81 NRC at 173-74. We agree. As the Board noted, petitioners cannot use a reply brief to introduce wholly “new arguments not presented in the initial petition.” See id. at 174 n.103 (citing USEC Inc. (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 476 (2006); LES, CLI-04-25, 60 NRC at 224-25). We note, additionally, that Vermont’s appeal fails to address or otherwise acknowledge the Board’s rejection of the section 50.54(q)(3) claims as untimely.
the Vermont Yankee emergency plan. As part of its analysis, Entergy explains that it will continue to have plant data displayed on Plant Display System screens at various locations. Entergy concludes that “the retirement of ERDS would not reduce the effectiveness of [Vermont Yankee’s] ability to communicate plant data to State response organizations.” If in Vermont’s view Entergy’s analysis is incomplete, inaccurate, or otherwise does not satisfy the section 50.54(q)(3) two-part test, Vermont can challenge the analysis through our 10 C.F.R. § 2.206 petition process. As the Board noted, section 2.206 “provides a process for stakeholders ‘to advance concerns and obtain full or partial relief, or written reasons why the requested relief is not warranted.’”

The Board also outlined other avenues Vermont can take, including contacting the Federal Emergency Management Agency (FEMA). Given that FEMA “takes the lead” in the oversight of offsite emergency planning and response, Vermont may contact FEMA to

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126 Id. at 2, 5-6 (of 7).

127 Id. at 6 (of 7).

128 LBP-15-4, 81 NRC at 175 (quoting St. Lucie, CLI-14-11, 80 NRC at 179). Our decision today should not be interpreted as a review or endorsement of either the Lewis Memorandum or Entergy’s section 50.54(q)(3) analysis. Here, no litigant contests the Lewis Memorandum’s specific instruction that a licensee of a permanently shut-down facility that seeks to remove ERDS—and whose emergency plan includes ERDS—should perform and retain a section 50.54(q)(3) analysis that shows that the removal of ERDS will not reduce the effectiveness of the emergency plan.

“endeavor to show that, without ERDS-like data, the State’s emergency plan is no longer adequate.”

In sum, Vermont’s concerns regarding ERDS do not give rise to an admissible contention appropriate for resolution in this license amendment proceeding. As the Board’s decision outlined and our decision reiterates, Vermont has other avenues outside of this adjudication in which it can raise its concerns and pursue relief.

III. CONCLUSION

For the reasons given in this decision, we affirm the Board’s ruling in LBP-15-4.

IT IS SO ORDERED.

For the Commission

NRC SEAL

/RA/
Annette L. Vietti-Cook
Secretary of the Commission

Dated at Rockville, Maryland,
this 1st day of October, 2015.

130 See LBP-15-4, 81 NRC at 175. FEMA, in fact, already has expressed an interest in the ERDS issue at Vermont Yankee. FEMA observers of a Vermont Yankee Combined Functional Drill held in March 2015 specifically assessed “the impact of ERDS data not being directly forwarded to the State.” See Coons, Albert, FEMA, e-mail to Richard Kinard, U.S. Nuclear Regulatory Commission (Mar. 19, 2015) (ML15097A528) (forwarding e-mail regarding FEMA observation of drill). In their view, the impact “will be minimal and will not affect reasonable assurance.” See id. Although “[d]irect transmission [via] ERDS is more efficient,” FEMA personnel concluded that the “state staff found viable methods to transmit the same data” and that during the drill “the state received access to all required information including full system parameter displays, meteorological data displays, radiation monitor displays” and “data obtained from Licensee dose assessment.” Id. FEMA evaluators concluded that these methods “effectively supplanted the ERDS data stream.” FEMA nonetheless intended to make recommendations to the state in regard to further improving its data transmission methods. See id. We intimate no view on the FEMA evaluators’ conclusions regarding the impact of the removal of ERDS at Vermont Yankee. We note only that FEMA, in its oversight role over offsite emergency planning, specifically has sought to confirm that the removal of ERDS at Vermont Yankee will not affect a finding of reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.
Additional Views of Commissioner Baran

I concur in the Commission’s decision that, as a legal matter, the Board is correct that the State of Vermont’s contention is not admissible. I write separately to note that my agreement with the decision should not be read as an endorsement, as a policy matter, of the current ERDS regulation. I am sympathetic to the State of Vermont’s view that licensees should maintain those aspects of ERDS that transmit spent fuel pool conditions or are relevant to a potential spent fuel pool accident until the spent fuel is removed from the pool or there is no reasonable risk of a zirconium fire. The NRC Staff is currently conducting a decommissioning rulemaking. During this effort, it would be useful for the Staff to seek public comment on whether Section VI.2 of, Appendix E should be revised, the potential costs of maintaining a reduced-scope ERDS after the shutdown of a reactor, and the potential benefits to state and local emergency preparedness programs of maintaining ERDS until all fuel is removed from the spent fuel pool.
UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of

ENTERGY NUCLEAR VERMONT YANKEE, LLC
AND ENTERGY NUCLEAR OPERATIONS, INC.
(Vermont Yankee Nuclear Power Station)

Docket No. 50-271-LA

CERTIFICATE OF SERVICE

I hereby certify that copies of the COMMISSION MEMORANDUM AND ORDER CLI-15-20 have been served upon the following persons by the Electronic Information Exchange.

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COMMISSION MEMORANDUM AND ORDER CLI-15-20

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Dated at Rockville, Maryland  
this 1st day of October, 2015