UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Gregory B. Jaczko, Chairman Kristine L. Svinicki George Apostolakis William D. Magwood, IV William C. Ostendorff

In the Matter of

LUMINANT GENERATION COMPANY LLC

(Comanche Peak Nuclear Power Plant, Units 3 and 4)

)

Docket Nos. 52-034-COL

52-035-COL

CLI-11-09

MEMORANDUM AND ORDER

Today we resolve Intervenors' petition for review of an Atomic Safety and Licensing Board decision that dismissed certain new contentions.¹ For the reasons set forth below, we deny the petition for review, and affirm the Board's decision.

¹ Intervenors' Petition for Review Pursuant to 10 C.F.R. § 2.341 (Mar. 11, 2011) (Petition for Review) (non-public). Intervenors are the Sustainable Energy and Economic Development Coalition, Public Citizen, True Cost of Nukes, and Texas State Representative Lon Burnam. Where applicable we have indicated whether the documents that we cite are non-publicly available. Some of these documents have been redacted and released pursuant to the Sustainable Energy and Economic Development Coalition's February 2010 Freedom of Information Act request. The redacted documents are available through the Agencywide Documents Access and Management System (ADAMS). See Letter from SEED Coalition to FOIA/Privacy Officer, U.S. NRC (Feb. 26, 2010) (ADAMS accession no. ML100910567); FOIA Request 2010-0145 (ML102160598) (package).

I. BACKGROUND

This proceeding concerns the combined license (COL) application filed by Luminant Generation Company LLC (Luminant), to construct and operate two new nuclear reactors at the Comanche Peak site in Somervell County, Texas. In accordance with the notice of hearing issued for this proceeding,² Intervenors filed a joint hearing request.³ One of Intervenors' proposed initial contentions, Contention 7, claimed that the COL application was incomplete because it did not address newly-promulgated regulations concerning guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities in the event of loss of large areas of the plant due to explosions or fire.⁴ Luminant later submitted its "Mitigative Strategies Report," a supplement to its COL application to address these regulations, and argued that the Board should dismiss Contention 7 as moot.⁵ The first part of the report describes the proposed mitigative strategies in narrative form.⁶ The second part of the report is organized as a two-column table – one column describes the expectation or item that the

² Luminant Generation Company LLC; Application for the Comanche Peak Nuclear Power Plant Units 3 and 4; Notice of Order, Hearing, and Opportunity To Petition for Leave To Intervene, 74 Fed. Reg. 6177 (Feb. 5, 2009).

³ Petition for Intervention and Request for Hearing (Apr. 6, 2009).

⁴ Id. at 22-26.

⁵ See Letter from Rafael Flores, Senior Vice President and Chief Nuclear Officer, Luminant Generation Co., LLC, to U.S. NRC (May 22, 2009) (Mitigative Strategies Report Transmittal Letter), unnumbered attachment 2, Mitigative Strategies Report for Comanche Peak Units 3 & 4 in Accordance with 10 CFR 52.80(d), Rev. 0 (ML091880970) (non-public) (Mitigative Strategies Report); Letter from Steven P. Frantz, counsel for Luminant, to Administrative Judges (May 26, 2009), at 2.

⁶ See Mitigative Strategies Report at 1-8.

mitigative measure is intended to address (the "expectation/safety function" column), and the second column describes Luminant's plans to address it (the "commitment/strategy" column).⁷ Intervenors obtained access to the report, which is not publicly available because it contains sensitive unclassified non-safeguards information (SUNSI), pursuant to a protective order.⁸

The Board granted Intervenors' petition, admitting two of their proposed contentions, but deferred ruling on Contention 7 to permit further consideration of the mootness issue. In addition to arguing that Contention 7 was not moot, Intervenors submitted five new contentions challenging Luminant's Mitigative Strategies Report.

In LBP-10-5, the Board addressed both Contention 7 and the admissibility of the five Mitigative Strategies Report contentions. ¹¹ The Board found that Luminant's filing the Mitigative

⁷ See Mitigative Strategies Report Transmittal Letter, unnumbered attachment 3, Mitigative Strategies Table, at 1-15 (ML091880970) (non-public) (Mitigative Strategies Table).

⁸ See Memorandum and Order (Protective Order Governing the Disclosure of Protected Information) (July 1, 2009), at 1 (unpublished) (governing access to and use of the information in the Mitigative Strategies Report and "any related documents"). The order instructed the parties to file documents containing protected information on the non-public docket. See id. at 3.

⁹ LBP-09-17, 70 NRC 311, 382-83 (2009).

¹⁰ See Petitioners' Brief Regarding Contention Seven's Mootness (July 20, 2009) (non-public); Intervenors' Contentions Regarding Applicant's Submittal Under 10 C.F.R. § 52.80 and 10 C.F.R. § 50.54(hh)(2) and Request for Subpart G Hearing (Aug. 10, 2009) (non-public) (Mitigative Strategies Report Contentions). The pleadings and the full text of the Board decision discussing these contentions also contain SUNSI, and are likewise not publicly available.

¹¹ LBP-10-5 (Mar. 11, 2010) (slip op.) (non-public). Although a redacted version of LBP-10-5 has since been published, *see* LBP-10-5, 71 NRC 329 (2010), we cite the non-public slip opinion for references to the portions of the Board's decision that were redacted in the published version.

Strategies Report rendered Contention 7 moot, and rejected all five new contentions.¹²
Recently, the Board terminated the contested adjudication on Luminant's COL application after granting summary disposition of the sole remaining admitted contention.¹³ With the Board's termination of the proceeding, the Board's interlocutory rulings on contention admissibility, including LBP-10-5, became ripe for appeal.¹⁴ Intervenors thereafter filed the instant petition for review.¹⁵

II. DISCUSSION

We will grant a petition for review at our discretion, giving due weight to the existence of a substantial question with respect to one or more of the following considerations:

(i) a finding of material fact is clearly erroneous or in conflict with a finding as to the same fact in a different proceeding;

¹² *Id.* at 347. As discussed below, however, Judge Young would have admitted a narrowed version of one of the new contentions.

¹³ LBP-11-4, 73 NRC ___ (Feb. 24, 2011) (slip op. at 40).

¹⁴ See 10 C.F.R. § 2.341(b).

Luminant and the NRC Staff oppose the petition for review. See Luminant's Answer in Opposition to Intervenors' Petition for Review of LBP-10-5 (Mar. 21, 2011) (non-public) (Luminant Answer); NRC Staff Answer to Intervenors' Petition for Review (Mar. 21, 2011) (non-public) (Staff Answer). Intervenors replied to Luminant's and the Staff's answers. Intervenors' Reply to Applicant's Answer to Petition for Review (Mar. 28, 2011) (non-public) (Intervenors' Reply to Luminant); Intervenors' Reply to Staff's Answer to Petition for Review (Mar. 29, 2011) (non-public) (Intervenors' Reply to Staff). Intervenors filed the reply to the Staff's answer a day past the deadline. Intervenors request us to permit their late filling, and advise that Luminant and the Staff do not oppose the motion. Intervenors' Unopposed Motion for Leave to File Reply to Staff's Answer to Petition for Review, Out of Time, Instanter (Mar. 29, 2011) (non-public). Given that the other parties do not object, and given that no party was harmed by the brief delay, we grant Intervenors' motion.

- (ii) a necessary legal conclusion is without governing precedent or is a departure from or contrary to established law;
- (iii) a substantial and important question of law, policy, or discretion has been raised:
- (iv) the conduct of the proceeding involved a prejudicial procedural error; or
- (v) any other consideration which we may deem to be in the public interest. 16

Intervenors argue that we should take review "because the regulations at issue have not been the subject of a prior adjudication or Commission decision," and taking review in this case will "provide administrative precedent" for subsequent adjudications.¹⁷ They also assert that their petition raises "crucial policy question[s]" on the effectiveness of the mitigative strategies and the adequacy of the strategies to protect responders in a loss of large area event. We do not find a substantial question warranting review.

At bottom, Intervenors' petition raises basic concepts of contention admissibility, for which there is a wealth of governing precedent. We defer to licensing board rulings on contention admissibility absent error of law or abuse of discretion. As discussed below, the Board did not err or abuse its discretion in rejecting Intervenors' contentions. Before we discuss

¹⁷ Petition for Review at 9 (citing 10 C.F.R. § 2.341(b)(4)(ii)).

¹⁶ 10 C.F.R. § 2.341(b)(4)(i)-(v).

¹⁸ See Progress Energy Florida, Inc. (Combined License Application, Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-2, 71 NRC 27, 29, 46-48 (2010); AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260, 275-77 (2009).

the specific issues raised in the petition for review, however, we provide a brief background on our recently-promulgated mitigative strategies regulations.

After the September 11, 2011 terrorist attacks, the NRC issued a series of orders to existing licensees requiring various interim safeguards and security measures. One of these orders directed the implementation of mitigative strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities in the event of loss of large areas of the plant due to explosions or fire.¹⁹ Subsequently, we amended our regulations to codify generically-applicable security requirements. The rule was informed by the requirements of the security orders, and included new provisions identified as part of lessons learned from the Staff's review of licensee compliance with the security orders, as well as other, related activities.²⁰ The Power Reactor Security Rule was the result of this undertaking, which included two provisions dealing with the implementation of mitigative strategies that are relevant here: 10 C.F.R. §§ 50.54(hh)(2) and 52.80(d).²¹

Section 50.54(hh)(2) sets forth the mitigative strategies requirements for licensees. It provides that:

[e]ach licensee shall develop and implement guidance and strategies intended to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities under the circumstances associated with loss of large areas of the plant due to explosions or fire, to include strategies in the following areas:

¹⁹ See Final Rule, Power Reactor Security Requirements, 74 Fed. Reg. 13,926, 13,926, 13,928 (Mar. 27, 2009) (Power Reactor Security Rule) (discussing the "B.5.b" provisions of the order issued to all operating licensees on February 25, 2002).

²⁰ *Id.* at 13.927.

²¹ *Id.* at 13,969-70.

- (i) [f]ire fighting;
- (ii) [o]perations to mitigate fuel damage; and
- (iii) [a]ctions to minimize radiological release.²²

Section 52.80(d) applies to COL applicants, like Luminant, requiring each COL application to include a "description and plans for implementation of the guidance and strategies" required by section 50.54(hh)(2).²³ Applicants and licensees alike may use the guidance provided in the industry-generated guidance document, NEI 06-12, Revision 2, "as an acceptable means for developing and implementing the mitigative strategies."²⁴

Luminant submitted its COL application prior to the effectiveness of the final Power Reactor Security Rule, but then subsequently submitted its Mitigative Strategies Report to satisfy the requirements of 10 C.F.R. § 52.80(d). Luminant stated that it prepared the report using a May 2009 revision to NEI 06-12, Revision 2.²⁵ Intervenors' contentions are directed at

²² 10 C.F.R. § 50.54(hh)(2)(i)-(iii). The requirements of section 50.54(hh)(2) are conditions in every Part 50 operating license. 10 C.F.R. § 50.54.

²³ 10 C.F.R. § 52.80(d).

²⁴ Power Reactor Security Rule, 74 Fed. Reg. at 13,958. *See generally* NEI 06-12, B.5.b Phase 2 & 3 Submittal Guideline, Rev. 2 (Dec. 2006) (ML070090060) (public). The Nuclear Energy Institute has developed Revision 3 to NEI 06-12, which it submitted to the Staff for consideration and possible endorsement. *See* Letter from Douglas J. Walters, Senior Director, New Plant Deployment, Nuclear Generation Division, NEI, to U.S. NRC (July 17, 2009), at 1 (ML092120157) (non-public). The Staff has endorsed Revision 3. *See* DC/COL-ISG-016, [Final] Interim Staff Guidance, Compliance with 10 CFR 50.54(hh)(2) and 10 CFR 52.80(d) Loss of Large Areas of the Plant due to Explosions or Fires from a Beyond-Design Basis Event (June 9, 2010), at 6 (ML101940484) (public).

²⁵ See Mitigative Strategies Report Transmittal Letter at 1. See generally Letter from Douglas J. Walters, Senior Director, New Plant Deployment, Nuclear Generation Division, NEI, to Thomas (continued. . .)

Luminant's Mitigative Strategies Report, and are labeled "MS" to distinguish the new contentions from the contentions in their initial petition.²⁶ Intervenors challenge "two aspects" of the Board's decision, but, in essence, they challenge the dismissal of Contentions MS-1 and MS-3.²⁷ We discuss each contention in turn.

A. Contention MS-1

Contention MS-1 states that:

[the Mitigative Strategies Report] is deficient because it omits any reference to the numbers and magnitudes of the fires and explosions that would be expected, for example, from the impact of a large commercial airliner(s). Without such reference there is an inadequate basis to determine whether the proposed mitigative strategies are adequate to comply with 10 C.F.R. § 50.54(hh)(2). Compliance with 10 C.F.R. § 50.54(hh)(2) cannot be determined without a determination of the full spectrum of damage states. At a minimum, [Luminant] should be required to describe damage footprints both quantitatively and qualitatively, including composite damage footprints, that are reasonably expected with an airstrike(s) and include descriptions of anticipated physical damage, shock damage, fire spread, radiation exposures to emergency responders and the public and other effects such as failure of structural steel.²⁸

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A. Bergman, Director, Division of Engineering, Office of New Reactors, U.S. NRC (May 1, 2009) (ML091310577) (non-public) (transmitting a revised version of Revision 2 that pre-dated the submittal of Revision 3).

²⁶ See Intervenors' Consolidated Response to the Answers of Applicant and NRC Staff to the Intervenors' Contentions Regarding Applicant's Submittal Under 10 C.F.R. § 52.80 and 10 C.F.R. § 50.54(hh)(2) (Sept. 11, 2009), at 3 n.3 (non-public).

²⁷ See Petition for Review at 1, 3 n.4, 5. While Intervenors do not directly address Contention MS-1, their references all point to Contention MS-1 even though the issues raised in this contention underlie all five Mitigative Strategies contentions. See Mitigative Strategies Report Contentions at 13, 15, 17-18.

²⁸ Mitigative Strategies Report Contentions at 5 (citing 10 C.F.R. § 50.150; NEI 07-13, Methodology for Performing Aircraft Impact Assessments for New Plant Designs, Rev. 7, Public Version (May 2009), at 32-36 (ML091490723) (NEI 07-13, Revision 7)).

Intervenors assert that Luminant has not met its burden of showing that the Mitigative Strategies Report is effective because it does not specify the underlying assumptions regarding the initiating events and the nature and extent of the expected damage that the mitigative strategies are intended to address.²⁹ "Without baseline assumptions about the number and magnitude of fires and explosions," Intervenors argue, "there is no reasonable assurance that the mitigative strategies will be adequate."³⁰

Although they acknowledge that sections 52.80(d) and 50.54(hh)(2) do not specify the number and magnitude of fires and explosions that a COL applicant must consider, Intervenors argue that the regulatory history contemplates that applicants will use aircraft attacks as a baseline for the expected damage. Intervenors argue that the results of an aircraft impact are quantifiable and "known sufficiently to tailor [an appropriate] response strategy." Intervenors suggest that the Aircraft Impact Rule and its corresponding guidance should inform Luminant's choice of mitigative strategies because the rule and the guidance provide descriptions of the effects of aircraft impacts.³³

²⁹ See *id*. at 11.

³⁰ *Id.* at 11-12.

³¹ *Id.* at 6-7.

³² *Id.* at 9.

³³ *Id.* at 5, 10-11 (citing 10 C.F.R. § 50.150; NEI-07-13, Revision 7). The Aircraft Impact Rule was promulgated separately from the Power Reactor Security Rule. *See* Final Rule, Consideration of Aircraft Impacts for New Nuclear Power Reactors, 74 Fed. Reg. 28,112 (June (continued. . .)

Intervenors also question Luminant's use of the mitigative strategies guidance in NEI 06-12 because it permits the use of a "flexible response," without requiring a discussion of the number and magnitude of fires and explosions.³⁴ According to Intervenors, the guidance is contradictory because on the one hand it explains that there are no means to predict the nature and extent of damage to the plant, while on the other it implies that there is a known "spectrum of potential damage states."³⁵ Intervenors assert that if there is a known spectrum of potential damage states, then Luminant must define the damage states and demonstrate that its strategies will effectively mitigate them.³⁶

The Board dismissed Contention MS-1 because it did not find in the rules or the Atomic Energy Act any express or implied requirement that an applicant discuss damage states or the number and magnitude of fires and explosions to demonstrate the

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12, 2009) (Aircraft Impact Rule). The rule requires designers of new nuclear plants to conduct an assessment of the effects of a large commercial aircraft impact on a nuclear power plant, and based on that assessment, discuss design features that will mitigate the effects of an aircraft impact. See id. at 28,112-13. See also Power Reactor Security Rule, 74 Fed. Reg. at 13,957. The Power Reactor Security Rule differs from the Aircraft Impact Rule because it focuses on operational activities rather than design features, and because it focuses on fires and explosions from any cause, rather than aircraft impacts alone. See Power Reactor Security Rule, 74 Fed. Reg. at 13,957-58.

³⁴ Mitigative Strategies Report Contentions at 8.

³⁵ *Id.* at 9 (pointing out that the guidance acknowledges that the mitigative strategies might not "ensure success under the full spectrum of potential damage states").

³⁶ See *id.* at 9.

effectiveness of the proposed mitigative strategies.³⁷ First noting that the rules did not require expressly a discussion of damage states, the Board then analyzed whether such a requirement could be implied.³⁸ In doing so, the Board reviewed Commission precedent, the regulatory history of the Power Reactor Security Rule, and general principles of statutory construction, focusing on our intent in adopting sections 52.80(d) and 50.54(hh)(2).³⁹ Rather than finding anything in the Statements of Consideration for these sections to support Intervenors' arguments, the Board found indications of intent to the contrary.⁴⁰ The Board pointed to a response to a comment rejecting as not "necessary, or even practical," a suggestion that the rule "specify types of fires and explosions and areas most susceptible to damage.³⁴¹ The Board also noted that we considered including fourteen specific strategies in section 50.54(hh)(2), but rejected this approach for a more flexible, general performance-based approach.⁴² Both of these examples, the Board reasoned, while not precisely on point, suggest a lack of intent to

³⁷ See LBP-10-5 (slip op. at 30-31).

³⁸ *Id.* (slip op. at 30).

³⁹ See *id.* (slip op. at 31-35).

⁴⁰ *Id.* (slip op. at 32).

⁴¹ *Id.* (slip op. at 32). *See also* Power Reactor Security Requirements; Supplemental Proposed Rule, 73 Fed. Reg. 19,443, 19,445 (Apr. 10, 2008) (Supplemental Proposed Power Reactor Security Rule).

⁴² LBP-10-5 (slip op. at 32-33). See also Power Reactor Security Rule, 74 Fed. Reg. at 13,957.

require applicants to define damage states or specify a particular number and magnitude of fires and explosions.⁴³

The Board also was not persuaded by Intervenors' argument that it will be "impossible" to evaluate the effectiveness of Luminant's proposals in the Mitigative Strategies Report without knowing the "full spectrum of damage states." The Board observed that the NRC has the ability to evaluate the proposed mitigative strategies based on experience from the assessments that the agency undertook at existing plants in response to the September 11, 2011 terrorist attacks. In addition, the Board pointed out that Intervenors could have "postulated *some* examples of damage states and made any arguments they might have that the measures described in [Luminant's] Report would not be able to mitigate them." Applying principles of statutory interpretation, the Board declined to insert into the regulations a requirement to specify damage states or the number and magnitude of fires and explosions with Commission intent to the contrary and without a showing that such a requirement is "unavoidable' or 'imperatively required." Ultimately, the Board reasoned that Intervenors were attempting to impose an additional requirement that is not present in the Power Reactor Security Rule,

⁴³ LBP-10-5 (slip op. at 32-33).

⁴⁴ *Id.* (slip op. at 33).

⁴⁵ *Id.* (slip op. at 33 & n.151)

⁴⁶ *Id.* (slip op. at 33) (emphasis in original).

⁴⁷ *Id.* (slip op. at 34) (quoting 2A Norman J. Singer, Statutes and Statutory Construction § 47:38 at 393-95 (6th ed. 2000)).

contrary to 10 C.F.R. § 2.335.⁴⁸ Thus, the Board found that Intervenors failed to show that a specification of damage states or fires and explosions is required, and dismissed the contention.⁴⁹

In their petition for review, Intervenors maintain that the regulatory history supports their view of the section 50.54(hh)(2) requirements.⁵⁰ Intervenors reference a statement in the final rule that the purpose of section 50.54(hh)(2) is to ensure that licensees "will be able to implement effective mitigation measures."⁵¹ Intervenors rely on the use of the word "effective" to support their claim that Luminant must specify the damage states and the scale of fires and explosions, reiterating that without this information, we and the Staff will be unable to determine the effectiveness of the mitigative strategies.⁵² According to Intervenors, the "fundamental flaw" in the Board's decision is the Board's failure to require Luminant to demonstrate the "effectiveness" of the mitigative strategies. Intervenors take this to mean that the Board implicitly approved Luminant's mitigative strategies.⁵³

⁴⁸ *Id.* (slip op. at 35).

⁴⁹ *Id.* ("Intervenors have not shown that the information they argue should be contained in the Mitigative Strategies Report is 'required by law.'" (quoting 10 C.F.R. § 2.309(f)(1)(vi))).

⁵⁰ Petition for Review at 3.

⁵¹ *Id.* at 4 (quoting Power Reactor Security Rule, 74 Fed. Reg. at 13,597) (emphasis omitted).

⁵² See *id.* at 3-5.

⁵³ Petition for Review at 4-5.

The Board's analysis of the rule is sound, and we decline to disturb it.

Intervenors' arguments on this point amount to an impermissible challenge to sections 50.54(hh)(2) and 52.80(d). In essence, Intervenors would have us substitute their interpretation of "effective" mitigation strategies for ours.

As the Board stated, our intent is apparent from the regulatory history of sections 52.80(d) and 50.54(hh)(2). Contrary to Intervenors' assertions, we contemplated a flexible approach for maintaining or restoring core cooling, containment, and spent fuel pool cooling capabilities in the event of loss of large areas of the plant.⁵⁴ We explained that, consistent with the security orders imposed on licensees after September 11, 2001, the rule "called for development of mitigation measures *to generally deal with* the situation in which large areas of the plant were lost due to fires and explosions, whatever the beyond-design basis initiator." Although we considered comments suggesting that the rule be narrowed to certain types of events, or that the rule "specify [the] types of fires or explosions... or what areas of the plant are considered particularly susceptible to damage or destruction by fire or explosion," we "decided that the more general

⁵⁴ See Power Reactor Security Rule, 74 Fed. Reg. at 13,928.

⁵⁵ Supplemental Proposed Power Reactor Security Rule, 73 Fed. Reg. at 19,445 (emphasis added).

⁵⁶ See Power Reactor Security Rule, 74 Fed. Reg. at 13,933 (rejecting a comment that we limit section 50.54(hh) to beyond design basis security events).

⁵⁷ Supplemental Proposed Power Reactor Security Rule, 73 Fed. Reg. at 19,445 (finding it not "necessary, or even practical" to incorporate the additional requirements into section 50.54(hh)). The final rule explains that section 50.54(hh)(2) requires "the use of readily available resources and identification of potential practicable areas for the use of beyond-readily-available (continued. . .)

performance-based language . . . [that we adopted] was a better approach."⁵⁸ Moreover, we rejected a comment suggesting that the rule require demonstration of the ability to handle an aircraft impact.⁵⁹ And as the Board noted, we contemplated including fourteen specific strategies in section 50.54(hh)(2) that were part of the original security orders, but opted for more flexible language.⁶⁰ Therefore, the regulatory history directly contradicts Intervenors' assertions that Luminant must specify damage states or the number and magnitude of fires and explosions, or that Luminant must use aircraft impacts as a baseline to plan mitigative strategies. At bottom, Intervenors would have us impose upon Luminant requirements expressly not called for our in our regulations. This proposition constitutes an improper collateral attack upon our regulations; the Board therefore correctly rejected Intervenors' challenge.⁶¹

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resources" – indicating our preference for practicability. Power Reactor Security Rule, 74 Fed. Reg. at 13,928.

⁵⁸ *Id.* at 13,957. *See also* Supplemental Proposed Power Reactor Security Rule, 73 Fed. Reg. at 19,445 (noting the success of the general performance criteria approach when implementing the security order requirements).

⁵⁹ See Supplemental Proposed Power Reactor Security Rule, 73 Fed. Reg. at 19,445. See also Power Reactor Security Rule, 74 Fed. Reg. at 13,933.

⁶⁰ Power Reactor Security Rule, 74 Fed. Reg. at 13,957 (recognizing that "future reactor facility designs . . . may contain features that preclude the need for some of these strategies").

⁶¹ See generally 10 C.F.R. § 2.335.

At the contention admissibility stage, the burden is on Intervenors to demonstrate a deficiency in the application. ⁶² In this case, however, Intervenors attempt to shift the burden to Luminant. For example, Intervenors state that the Mitigative Strategies Report "may be adequate for its stated purpose but there is no way to [make that determination] without a defined description of the event(s) to which the . . . mitigative strategies apply." ⁶³ Intervenors agreed that it would have been possible to hypothesize at least some event descriptions or damage states. ⁶⁴ Yet Intervenors made no attempt to identify circumstances where the strategies identified in Luminant's report might be inadequate. ⁶⁵

Finally, as discussed above, Intervenors argue that in dismissing their contention, the Board implied that Luminant's Mitigative Strategies Report meets the requirements of 10 C.F.R. § 52.80(d) and 50.54(hh)(2).⁶⁶ Had the Board done so, this would have

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⁶² See 10 C.F.R. § 2.309(f)(1)(vi). See also Oyster Creek, CLI-09-7, 69 NRC at 276; Arizona Public Service Co. (Palo Verde Nuclear Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 156 (1991).

⁶³ Mitigative Strategies Report Contentions at 9.

⁶⁴ See Tr. at 556 (non-public); LBP-10-5 (slip op. at 33).

⁶⁵ See generally 10 C.F.R. § 2.309(f)(1)(vi) (to show a genuine dispute with the applicant on a material issue of law or fact, a contention must include references to specific portions of the application that the petitioner disputes and the supporting reasons for each dispute).

⁶⁶ See Petition for Review at 5.

been an improper finding on the merits.⁶⁷ We find, however, that the Board made no such merits determination. Rather, the Board appropriately focused on the contention admissibility requirements, and found that Intervenors had not met their burden of showing that the information they claimed to be missing is "required by law." We find no error in the Board's ruling on Contention MS-1.

B. Contention MS-3

Intervenors also challenge the Board's decision to exclude Contention MS-3, in which Intervenors assert that:

the . . . Mitigative Strategies Table is deficient because it fails to substantiate its assertion that the existing dose projection models currently referenced by [Luminant] in its existing . . . emergency plan are adequate to project doses to onsite responders under the conditions envisioned for this event, as specified by [Mitigative Strategies Table] Item 1.3.3. Without an appropriately detailed and accurate model, [Luminant] cannot demonstrate that its plan for mitigating [loss of large areas] can be effectively executed without subjecting on-site responders to excessive radiation exposure. [Luminant] has not conducted a dose assessment necessary to establish that the mitigative strategies could be implemented without reliance on extraordinary or heroic actions. Further, [Luminant] has not established that the dose assessment models are adequate

⁶⁷ See Final Rule, Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2190 (Jan. 14, 2004) ("The contention standard does not contemplate a determination of the merits of a proffered contention.").

⁶⁸ LBP-10-5 (slip op. at 35) (citing 10 C.F.R. § 2.309(f)(1)(vi)). Further illustrating the Board's focus on contention admissibility and not the merits, the Board provided the parties with the opportunity to submit legal briefs on the issue whether the Board should infer a "damage states" requirement in the mitigative strategies regulations. *See* Tr. at 717 (public). *See generally* Letter from Robert V. Eye, counsel for Intervenors, to Administrative Judges (Nov. 20, 2009) (public); Letter from Jonathan M. Rund, counsel for Luminant, to Administrative Judges (Nov. 27, 2009) (public); Letter from Susan H. Vrahoretis, counsel for the Staff, to Administrative Judges (Nov. 30, 2009) (public).

to do the assessment in any event, taking into account the full spectrum of damage states. ⁶⁹

Intervenors argue that conditions that would necessitate the mitigative strategies likely will be "extreme and complex," and "may well exceed those that emergency responders would be expected to encounter under the existing . . . emergency plan." Because the conditions will differ, Intervenors argue, the burden is on Luminant to demonstrate that the dose assessment model in the existing emergency plan "is capable of real-time, accurate dose assessment for the responders executing the complex mitigative actions."

The contention references the table in Luminant's Mitigative Strategies Report, in which Luminant states that existing emergency plan procedures address dose projections for event

⁶⁹ Mitigative Strategies Report Contentions at 15. For this contention, the Intervenors attach a declaration from their expert, Dr. Edwin Lyman, who generally asserts that he is "responsible for the factual content and expert opinions expressed in [Contention MS-3]." *Declaration of Dr. Edwin S. Lyman in Support of Petitioners' Contentions* (Aug. 10, 2009), ¶ 4. Dr. Lyman also

provided support for Contention MS-4, which is not specifically at issue here.

⁷⁰ Mitigative Strategies Report Contentions at 15.

⁷¹ *Id.* Intervenors offer as an example the potential for refilling spent fuel pools manually or using portable pumps, which could lead to "prolonged deployment" in high radiation areas. *Id.* In addition, Intervenors assert that the Mitigative Strategies Report must address how the volunteer and professional emergency responders identified in the existing emergency plan will be identified, trained, and mobilized. *Id.* at 16. With regard to the identification, training, and mobilization of emergency responders, Luminant pointed out that other items in the Mitigative Strategies Table provide this information. *See Luminant's Answer Opposing Late-Filed Contentions Regarding the Mitigative Strategies Report* (Sept. 4, 2009), at 21 n.70 (non-public). The Board majority did not expressly address this argument in rejecting the contention. *See* LBP-10-5 (slip op. at 48-53). To the extent that Intervenors continue to challenge this element of the Mitigative Strategies Report, that challenge is not litigable, as its assertions do not take issue with the particulars of the report.

responders, and also will include proposed Units 3 and 4.⁷² Intervenors assert that Luminant's statement is ambiguous because it "neither commits to assessing the adequacy of its current dose projection approach for use in [loss of large area] mitigation scenarios, nor uses the current models to 'discuss the impact from dose.'"⁷³

A majority of the Board, with Judge Young dissenting in part, rejected Contention MS-3. The majority found that to the extent the contention incorporated arguments from Contention MS-1 regarding the consideration of the "full spectrum of damage states," it is inadmissible for the same reasons as Contention MS-1.⁷⁴ In finding the remainder of the contention inadmissible, the majority noted that section 52.80(d) requires only a "description and plans," where more detailed procedures and inspections will be required after a COL is issued but before plant operation.⁷⁵ Although the majority agreed that the wording of Luminant's statement in the Mitigative Strategies Table is "somewhat cryptic, at best," the majority reasoned that, although they were "troubled" by the accuracy of the statement, this did not give

⁷² Mitigative Strategies Table at 11.

Mitigative Strategies Report Contentions at 16-17. Intervenors allude to Luminant's incorporation of the dose assessment "expectation" from a draft of NEI 06-12, Revision 3, see Mitigative Strategies Report Contentions at 15; Tr. at 662 (non-public), which guides applicants to "[e]valuate existing dose projection models for their adequacy in projecting doses to event responders onsite." NEI 06-12, B.5.b Phase 2 & 3 Submittal Guideline, Rev. 3 (Sept. 2009), at 20 (ML092890400) (non-public). At the prehearing conference, counsel for Luminant explained that the expectation does not appear in NEI 06-12, Revision 2, but in a later revision to that document. See Tr. at 661. It is unclear from the record which version of NEI 06-12 the parties were referring to, but the September 2009 version of NEI 06-12, Revision 3 cited above contains the referenced "expectation" language.

⁷⁴ LBP-10-5 (slip op. at 48).

⁷⁵ *Id.* (slip op. at 52) (citing Power Reactor Security Rule, 74 Fed. Reg. at 13,933).

rise to a legal requirement.⁷⁶ Thus, the majority rejected the contention for failing to satisfy 10 C.F.R. § 2.309(f)(1)(vi) because Intervenors did not demonstrate that a dose evaluation or dose assessment model is required now, nor did Intervenors challenge the dose assessment model in the existing emergency plan.⁷⁷

Judge Young would have admitted a narrowed version of Contention MS-3. She agreed that sections 52.80(d) and 50.54(hh)(2) do not require an evaluation of existing dose projection models or a dose assessment, and agreed that Intervenors did not affirmatively challenge Luminant's dose assessment model.⁷⁸ But Judge Young would have admitted the contention to the extent that it questioned the accuracy of Luminant's statement in the Mitigative Strategies Table, on the basis that Intervenors' arguments "go to the accuracy of whether, in fact, there exists any actual such evaluation, or assessment, of existing dose projection models, or any commitment to undertake such a task."⁷⁹

Intervenors fault the majority for "diminish[ing] the significance of dose projection modeling" for the purposes of planning mitigative strategies by "relegat[ing]" it to "an activity that falls outside the adjudicative process and that can be completed as an operational matter."

⁷⁶ *Id.* (slip op. at 51). The Board majority noted a lack of reference to an evaluation, past or future.

⁷⁷ *Id.* (slip op. at 53).

⁷⁸ *Id.* (slip op. at 75) (Young, J., Additional Statement).

⁷⁹ *Id.* (slip op. at 80). See also id. (slip op. at 77 n.317) (observing that "[o]n its face the statement in question is a conclusory one, which does not indicate that any 'evaluation' has taken place, or will take place").

⁸⁰ Petition for Review at 8.

Intervenors assert that the purpose of the dose projection models is to "determine whether the mitigative strategies can be accomplished without resort to extraordinary or heroic acts."⁸¹ Intervenors reason that the effectiveness of the mitigative strategies depends on the ability of responders to perform them without receiving high radiation doses.⁸² According to Intervenors, the majority "erroneously approves [the] omission of any substantiation that radiation dose projection models in [the] emergency plan are sufficient to estimate doses to personnel who respond to [loss of large area events]."⁸³

We find no error in the Board majority's ruling on Contention MS-3. Intervenors again attempt, improperly, to shift the burden to Luminant, when the burden rests with Intervenors at the contention admissibility stage. Intervenors claim that Luminant has not shown that the emergency plan dose projection approach is adequate for assessing dose during loss of large area events.⁸⁴ Our rules require intervenors to assert a sufficiently specific challenge that demonstrates that further inquiry is warranted.⁸⁵ Here, Intervenors have not challenged the

⁸¹ *Id*.

⁸² See id. at 7-8.

⁸³ *Id.* at 5.

⁸⁴ See *id.* at 7 (shifting the burden to Luminant "to show that the strategy for dose projection contained in the existing . . . emergency plan is capable of real-time, accurate dose assessment for the responders executing the complex mitigative actions").

⁸⁵ See 10 C.F.R. § 2.309(f)(1)(i)-(vi); Oyster Creek, CLI-09-7, 69 NRC at 276; Palo Verde, CLI-91-12, 34 NRC at 156.

adequacy of the dose projection models provided in Luminant's application. As Intervenors acknowledge, the Mitigative Strategies Report, which is part of the COL application, "effectively adopts the . . . dose projection models in the existing emergency plan for Comanche Peak Units 1 [and] 2." At most, Intervenors assert that events necessitating the mitigative strategies required by section 50.54(hh)(2) differ from those contemplated in the existing emergency plan, and by extension, what is contemplated in the emergency plan is inadequate for events necessitating 50.54(hh)(2) mitigative strategies. But this is insufficient to support the admission of a contention. The Board majority appropriately found Intervenors' support lacking when it rejected Contention MS-3. Moreover, we disagree with Intervenors' assertion that by rejecting the contention, the majority "diminished the significance" of dose projection models.

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Intervenors also reference the proposed emergency plan for Units 3 and 4 in their discussion of Contention MS-3. See Mitigative Strategies Report Contentions at 16. As the Board noted, Intervenors do not question the dose information in the proposed emergency plan. LBP-10-5 (slip op. at 48 n.214). See generally Comanche Peak Nuclear Power Plant Units 3 and 4, Combined License Application, Part 5 - Emergency Plan, Rev. 0, Appendix 2, at A2-2 to A2-4 (Sept. 19, 2008) (ML082680315) (public) (describing the dose assessment models for Units 3 and 4). Luminant has since revised its emergency plan, but appears to use the same dose assessment approach. See Comanche Peak Nuclear Power Plant Units 3 and 4, Combined License Application, Part 5 - Emergency Plan, Rev. 1, Appendix 2, at A2-2 to A2-4 (Nov. 20, 2009) (ML100081186) (public).

⁸⁷ Petition for Review at 6.

⁸⁸ See Petition for Review at 7-8; Mitigative Strategies Report Contentions at 15.

⁸⁹ See LBP-10-5 (slip op. at 49) (observing that none of Intervenors' factual assertions provide support for a requirement that Luminant: (1) substantiate its assertions in the table, or (2) provide a dose assessment, nor do they "challenge the adequacy of the dose assessment model").

To the contrary, the majority correctly focused on the contention admissibility standards, and made no comment about the dose projection models as a general matter.

Nor do we agree with Judge Young's view that Intervenors have impliedly challenged the "accuracy of Luminant's representation" that it has evaluated or will evaluate its existing dose projection models. Judge Young transforms Intervenors' challenge from one concerning the accuracy of the dose projection models to one concerning the "accuracy of Luminant's representation" – two distinctly different challenges. Intervenors focus on the ability of the dose projection models to assess dose in the event of a loss of large area of the plant. We see no assertion that Luminant has misrepresented that it has evaluated or will evaluate the models.⁹⁰

Moreover, before us, Intervenors continue to challenge the accuracy of the dose projection models. Intervenors repeat Judge Young's view without commenting on or adopting it, and they argue that the majority "questioned the accuracy of the dose projections" when it acknowledged the ambiguity in Luminant's representation. On this point, Intervenors misunderstand the majority opinion. The majority observed that Luminant's statement was ambiguous as to whether it has evaluated or will evaluate the models, not that the dose projection models are inaccurate. But Intervenors' characterization of the statement shows that they remain focused on the accuracy of the dose projection models, not the accuracy of Luminant's statements. In any event, even if Intervenors could be said to have challenged the accuracy of Luminant's representations, we would require far more than mere suggestion.

⁹⁰ See generally Mitigative Strategies Contentions at 15-17.

⁹¹ Petition for Review at 6-7.

Intervenors would be required to assert, with particularity and support, that there are misrepresentations or other inaccuracies in the application. They have not done so here.

Accordingly, we decline to disturb the majority's ruling on Contention MS-3.93

One other matter merits mention. Intervenors ask us to take "official notice" of the occurrence of the recent nuclear events in Japan. On March 11, 2011, the Great East Japan Earthquake struck off the coast of Honshu Island, precipitating a large tsunami. These events caused widespread devastation across northeastern Japan, and severely damaged the Fukushima Daiichi Nuclear Power Plant. At the current time, the agency continues to gather and examine all available information regarding the events at the Fukushima Daiichi Nuclear

⁹² Cf. GPU Nuclear, Inc. (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 207 (2000) ("[A]bsent [documentary] support, this agency has declined to assume that licensees will contravene our regulations."); Georgia Power Co. (Vogtle Electric Generating Plant, Units 1 and 2), CLI-93-16, 38 NRC 25, 31-32 (1993) (explaining that challenges to an applicant's or licensee's character require sufficient support).

⁹³ Luminant states before us that after the Board rendered its decision, it amended the Mitigative Strategies Table for this item, clarifying that "during a [loss of large area event], the dose for onsite responders would be 'sampled, monitored and estimated in real time, on location and using actual dose readings to project exposure," and stating that "[t]his provides the most accurate assessment of dose to control and ensure federal exposure requirements are followed and limits are not exceeded by either onsite or offsite responders." Luminant Answer at 22 n.81 (quoting Luminant Generation Company LLC, Comanche Peak Nuclear Power Plant Units 3 & 4, Loss of Large Areas of the Plant Due to Explosions or Fire, Mitigative Strategies Description and Plans Required by 10 CFR 50.80(d), Rev. 1 (Oct. 2010), at 23 (ML103060048) (non-public)).

⁹⁴ See Intervenors' Reply to Luminant at 1 n.2; Intervenors' Reply to Staff at 1 n.2.

⁹⁵ See "Recommendations for Enhancing Reactor Safety in the 21st Century, The Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident" (July 12, 2011), at 7-9 (transmitted to the Commission via SECY-11-0093, "Near-Term Report and Recommendations for Agency Actions Following the Events in Japan" (July 12, 2011) (ML11186A950) (package)).

Power Plant. Intervenors do not, as part of their petition for review, seek particular relief with respect to the Japan events. For the purposes of ruling on the petition, we must look to the adjudicatory record before us. As discussed above, Intervenors have not shown that the Board erred in dismissing their Mitigative Strategies contentions.

We note, however, that Intervenors joined in a petition requesting, among other things, that we suspend "all decisions" regarding the issuance of COLs, pending completion of several actions associated with the recent nuclear events in Japan. Intervenors did not serve the petition on this docket, but our ruling is nonetheless instructive here. Our decision includes a brief summary of the Japan events as we currently understand them, as well as a recitation of the agency's regulatory response to date. Among other things, we ruled that, to the extent that the Fukushima events provide the basis for matters appropriate for litigation in individual proceedings, our procedural rules contain ample provisions through which litigants may seek to raise them.

⁹⁶ See generally Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 14, 2011, corrected Apr. 18, 2011) (ML111080855); Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend all Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident (Apr. 20, 2011) (ML111101075).

⁹⁷ See CLI-11-5, 74 NRC __ (Sept. 9, 2011) (slip op. at 35); 10 C.F.R. §§ 2.309(c), 2.309(f), 2.326. Indeed, Intervenors have filed a motion to reopen the proceeding, together with a new contention relating to the Fukushima events. See Motion to Reopen the Record and Admit Contention Regarding the Safety and Environmental Implications of the Nuclear Regulatory Commission Task Force Report on the Fukushima Dai-ichi Accident (Aug. 11, 2011). The Secretary has referred the motion to the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel. See Order (Aug. 30, 2011) (unpublished).

III. CONCLUSION

For the reasons set forth above, we *deny* the petition for review and *affirm* the Board's ruling in LBP-10-5. Because this order includes information extracted from Luminant's Mitigative Strategies Report, it is being served on the parties through the non-public docket for this proceeding. We *direct* Luminant to review the non-public version of this decision, and, within seven days, advise whether the decision, in whole or in part, may be released to the public. If Luminant is of the view that the decision is releasable only in redacted form, we *direct* Luminant to indicate where redaction is necessary. 99

IT IS SO ORDERED.¹⁰⁰

For the Commission

[NRC SEAL]

/RA/

Annette L. Vietti-Cook Secretary of the Commission

Dated at Rockville, Maryland, this 4th day of October 2011

⁹⁸ See supra note 8 and accompanying text.

⁹⁹ On October 4, 2011, Luminant advised that it did not object to public release of this decision in its entirety. *Notification Regarding Release of CLI-11-09* (Oct. 4, 2011), at 1.

¹⁰⁰ Commissioner Magwood did not participate in this matter.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

In the Matter of)
LUMINANT GENERATION COMPANY, LLC) Docket Nos. 52-034-COL) and 52-035-COL
(Comanche Peak Nuclear Power Plant, Units 3 and 4))))

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing COMMISSION MEMORANDUM AND ORDER (CLI-11-09) have been re-served after finding of no objection by applicant to full public release upon the following persons by Electronic Information Exchange.

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Docket Nos. 52-034-COL and 52-035-COL COMMISSION MEMORANDUM AND ORDER (CLI-11-09)

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Dated at Rockville, Maryland this 4th day of October 2011