NUCLEAR REGULATORY COMMISSION ISSUANCES

OPINIONS AND DECISIONS OF THE NUCLEAR REGULATORY COMMISSION WITH SELECTED ORDERS

July 1, 2011 – September 30, 2011

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PREFACE

This is Book I of the seventy-fourth volume of issuances (1–425) of the Nuclear Regulatory Commission and its Atomic Safety and Licensing Boards, Administrative Law Judges, and Office Directors. It covers the period from July 1, 2011, to September 30, 2011. Book II covers the period from October 1, 2011 to December 31, 2011.

Atomic Safety and Licensing Boards are authorized by Section 191 of the Atomic Energy Act of 1954. These Boards, comprised of three members, conduct adjudicatory hearings on applications to construct and operate nuclear power plants and related facilities and issue initial decisions which, subject to internal review and appellate procedures, become the final Commission action with respect to those applications. Boards are drawn from the Atomic Safety and Licensing Board Panel, comprised of lawyers, nuclear physicists and engineers, environmentalists, chemists, and economists. The Atomic Energy Commission (AEC) first established Licensing Boards in 1962 and the Panel in 1967.

Between 1969 and 1990, the AEC authorized Atomic Safety and Licensing Appeal Boards to exercise the authority and perform the review functions which would otherwise have been exercised and performed by the Commission in facility licensing proceedings. In 1972, that Commission created an Appeal Panel, from which were drawn the Appeal Boards assigned to each licensing proceeding. The functions performed by both Appeal Boards and Licensing Boards were transferred from the AEC to the Nuclear Regulatory Commission by the Energy Reorganization Act of 1974. Appeal Boards represented the final level in the administrative adjudicatory process to which parties could appeal. Parties, however, were permitted to seek discretionary Commission review of certain board rulings. The Commission also could decide to review, on its own motion, various decisions or actions of Appeal Boards.

On June 29, 1990, however, the Commission voted to abolish the Atomic Safety and Licensing Appeal Panel, and the Panel ceased to exist as of June 30, 1991. Since then, the Commission itself reviews Licensing Board and other adjudicatory decisions, as a matter of discretion. *See* 56 FR 29403 (1991).

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Issuances are referred to as follows: Commission (CLI), Atomic Safety and Licensing Boards (LBP), Administrative Law Judges (ALJ), Directors' Decisions (DD), and Decisions on Petitions for Rulemaking (DPRM).

The summaries and headnotes preceding the opinions reported herein are not to be deemed a part of those opinions or to have any independent legal significance.

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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 Docket No. 70-7015

AREVA ENRICHMENT SERVICES, LLC (Eagle Rock Enrichment Facility)

July 12, 2011

NRC GUIDANCE DOCUMENTS

Although NRC guidance documents are not legally binding, and compliance with them is not required, they describe an approach to compliance with our rules that is acceptable to the NRC.

MEMORANDUM AND ORDER

This uncontested proceeding concerns the application of AREVA Enrichment Services, LLC (AES) for a license under 10 C.F.R. Parts 30, 40, and 70 to possess and use byproduct, source, and special nuclear material, and to enrich natural uranium by the gas centrifuge process. In conducting the safety-related portion¹ of the mandatory hearing associated with this application, the Atomic Safety and Licensing Board explored in some detail the provisions governing decommissioning funding assurance. Among other things, the Board focused

¹The Board adopted a bifurcated schedule for the mandatory hearing, with separate sessions for safety-related and environmental issues. *See* Initial Scheduling Order (May 19, 2010) at 4 (unpublished).

on whether the NRC has sufficient provisions in place to assure the health of a financial institution issuing a surety that decommissioning costs will be paid. To facilitate its consideration of this issue, the Board has certified a question for our consideration:

Is the commitment by applicant AES to provide decommissioning funding financial assurance for the [Eagle Rock Enrichment Facility] by employing [a letter of credit] that is issued by a financial institution whose operations are regulated and examined by a federal or state agency in accordance with the applicable NRC staff guidance in NUREG-1757, without reference to capitalization/net worth, credit rating, or other measures that might be employed as benchmarks of [a letter of credit] issuer's fiscal reliability, sufficient to comply with the requirements of 10 C.F.R. §§ 30.35(f)(2), 40.36(e)(2), 70.25(f)(2) governing the use of surety methods to guarantee the payment of decommissioning costs?²

The Board raises a significant and novel issue whose early resolution will materially advance the orderly disposition of this proceeding. Therefore, we grant review of the Board's certified question.³ Under the circumstances presented here, we find AES's commitment to provide a letter of credit issued by a financial institution whose operations are regulated and examined by a federal or state agency sufficient to satisfy the decommissioning funding assurance requirements in 10 C.F.R. §§ 30.35(f)(2), 40.36(e)(2), and 70.25(f)(2). However, as discussed below, we have identified a related issue that the Board should explore in conducting the remaining portion of the mandatory hearing.

I. BACKGROUND

AES plans to provide forward-looking, incremental funding for decommis-

²Memorandum (Certifying Question to the Commission Regarding Decommissioning Financial Assurance) (Feb. 18, 2011) at 10-11 (unpublished) (Board Memorandum Certifying Question). See also 10 C.F.R. §§ 2.319(l), 2.323(f)(1); Notice of Receipt of Application for License; Notice of Consideration of Issuance of License; Notice of Hearing and Commission Order and Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information and Safeguard Information for Contention Preparation; In the Matter of AREVA Enrichment Services, LLC (Eagle Rock Enrichment Facility), CLI-09-15, 70 NRC 1, 11 (2009), 74 Fed. Reg. 38,052, 38,055 (July 30, 2009) (directing the Board to certify promptly to the Commission "all novel legal or policy issues that would benefit from early Commission consideration").

³ See 10 C.F.R. § 2.341(f)(1). See also Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-12, 53 NRC 459, 461 (2001). The Board has issued a partial initial decision on the safety-related portion of the proceeding, but left open the issue of decommissioning financial assurance due to the pendency of its certified question. See LBP-11-11, 73 NRC 455, 468-69, 526 (2011).

sioning.⁴ AES must provide financial assurance for decommissioning by selecting one or more of three methods in 10 C.F.R. §§ 30.35(f), 40.36(e), and 70.25(f) — (1) prepayment, (2) a surety, insurance, or other guarantee method, or (3) an external sinking fund.⁵ AES proposes to rely on a surety method — in particular, a letter of credit.⁶ Because it has chosen a surety method, AES also must ensure that the letter of credit is payable to a trust established for decommissioning costs.⁷

AES submitted, and the Staff reviewed, a draft letter of credit and draft standby trust agreement. The Staff determined that the language of both drafts is consistent with applicable agency guidance, but does not satisfy the regulations because, among other things, the draft letter of credit does not name a financial institution, and the draft standby trust agreement does not name a trustee. Accordingly, the Staff has imposed a license condition that requires AES to submit final copies of the proposed financial instruments for Staff review 6 months prior to receipt of licensed material for testing at the Centrifuge Assembly Building. The Staff states that it will review the instruments for compliance with the relevant regulatory requirements once they are finalized.

As part of its consideration of decommissioning funding as a general matter, the Board posed questions to the parties regarding the applicable standards for

⁴To this end, AES has sought an exemption from 10 C.F.R. §§ 40.36(d) and 70.25(e), which require that the licensee certify that financial assurance has been provided in the amount of the cost estimate for decommissioning. Rather than fund a 30-year decommissioning obligation (based on a 30-year operating life for the facility), AES requested an exemption that would enable it to provide decommissioning funding on a forward-looking, incremental basis, at a rate proportional to the then-current decontamination and decommissioning liability. The Staff has granted the exemption. See Exh. NRC000032, NUREG-1951, "Safety Evaluation Report for the Eagle Rock Enrichment Facility in Bonneville County, Idaho" (Sept. 2010), §§ 1.2.4.2.1, 10.3.3.1.1, at 1-13 to 1-14, 10-7 to 10-12 (SER). For convenience, we follow the exhibit numbering format used by the Board. See Board Memorandum Certifying Question at 3 n.1.

⁵ Sections 30.35(f), 40.36(e), and 70.25(f) contain identical provisions.

⁶ See Exh. AES000037, Eagle Rock Enrichment Facility Safety Analysis Report, Rev. 2, § 10.2.1, at 10.2-1 (SAR); Exh. NRC000032, SER § 10.3.3, at 10-6. See also Exh. AES000037, SAR Appendices 10A to 10B (draft letter of credit and draft standby trust agreement).

⁷ 10 C.F.R. §§ 30.35(f)(2)(ii), 40.36(e)(2)(ii), 70.25(f)(2)(ii).

⁸ See Exh. NRC000032, SER § 10.3.3.3, at 10-14 to 10-16.

⁹ See id. § 10.3.3.3, at 10-15.

¹⁰ See id. § 10.3.3.1.1, at 10-9. The license condition sets forth the schedule for submission by AES to the NRC of updated decommissioning funding plans, cost estimates, and financial instruments at various points thereafter, as operation of the facility is "ramped up," and once the plant reaches full capacity. See id. § 10.3.3.1.1, at 10-9 to 10-12. In addition, the Staff intends to impose a standard "tie-down" license condition that will impose on AES an obligation to conduct activities in accordance with the statements, representations, and conditions in the SAR and other licensing documents submitted as part of the license application. LBP-11-11, 73 NRC at 502; Tr. at 229-30.

¹¹ See id. § 10.3.3.3, at 10-15.

assuring that the issuer of the proposed letter of credit is financially reliable.¹² At bottom, the Board's questions reflect concern that neither our rules nor applicable guidance require that the letter of credit issuer demonstrate minimum capitalization requirements, credit rating requirements, or other substantive measures that would demonstrate the issuer's financial soundness.¹³ Following review of the responses to its questions from AES and the NRC Staff, the Board certified to us the instant question.¹⁴

II. DISCUSSION

The certified question focuses on the provision of our rules that governs the proposed letter of credit and standby trust agreement. As the Board observes, the rule on its face imposes no requirements with respect to the financial health of the letter of credit issuer. By implication, assessment of compliance with NRC regulations concerning the use of a letter of credit in this context does not require reference to NRC-established or NRC-endorsed benchmarks concerning capitalization, net worth, credit rating, or similar measurement of fiscal reliability. The relevant regulatory guidance provides that the issuer of a letter of credit "should be a financial institution whose operations are regulated and examined by

¹² See Memorandum and Order (Providing Presentation Topics and Administrative Directives Associated with Mandatory Hearing on Safety Matters) (Dec. 17, 2010), at 5-6 (unpublished); Memorandum and Order (Additional Publicly-Available Question Regarding Safety Matters and Identification of "Available" AES Witnesses) (Jan. 21, 2011) at 2-3 (unpublished).

¹³ See Board Memorandum Certifying Question at 7-11. The total estimated cost to decommission the Eagle Rock Enrichment Facility is considerable — the estimated cost for site and facility decommissioning, and depleted uranium disposition, including a 25% contingency factor, is \$3,523,436,000. See Exh. NRC000032, SER § 10.3.3.2, at 10-14.

¹⁴ See Exh. NRC000027, NRC Staff Responses to Licensing Board's Additional Questions on Financial Assurance (NRC Staff Responses to Additional Questions); Exh. NRC000125, NRC Staff Responses to Licensing Board's Second Set of Supplemental Questions Regarding Financial Assurance (NRC Staff Responses to Second Supplemental Questions); Exh. AES000063, AES Responses to Third Supplemental Public Safety Question (AES Responses).

¹⁵ Board Memorandum Certifying Question at 8. The rules do provide, however, that the trustee and standby trust be "acceptable" to the Commission. "An acceptable trustee includes an appropriate State or Federal government agency or an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency." 10 C.F.R. §§ 30.35(f)(2)(ii), 40.36(e)(2)(ii), and 70.25(f)(2)(ii).

a Federal or State agency." ¹⁶ AES has committed to using a letter of credit issuer that is federally or state regulated. ¹⁷

In response to questions from the Board, the Staff described its process for reviewing letters of credit in accordance with the guidance. The Staff explained that it ensures that the issuer of a letter of credit is either federally or state regulated.¹⁸ The Staff is also expected to ensure that the final letter of credit includes provisions regarding the issuer's obligation to disclose developments pertaining to the issuer's financial health. 19 In response to Board questions, the Staff provided an explanation for its seemingly limited review on this issue. Fundamentally, the Staff relies on the expertise of federal or state agencies that oversee and assess the strength of financial institutions serving as letter of credit issuers. The Staff provided examples of three federal financial regulatory agencies — the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC), and the Federal Reserve — which "prescribe minimum capital requirements and lending limits" for federal and state banks within their jurisdiction.²⁰ The Staff represents that these agencies also regularly examine banks within their jurisdiction, generally at 12- or 18-month intervals.²¹ The Staff stated that it "defer[s] to the expertise of the appropriate federal or state financial regulatory bodies [like the OCC, the FDIC, and the Federal Reserve,] to set and monitor the qualifications that the issuer must meet."22

In our view, this approach reflects a reasonable, and appropriate, use of NRC resources. The NRC's enabling legislation gives us the important responsibility to protect the health and safety of the public. That responsibility occasionally requires us to consider matters related to finance, such as the decommissioning funding questions raised in this proceeding. But the NRC is not a financial regulator. Thus, it is sensible for the NRC to rely on sister government agencies that regulate in the financial arena to assure the financial solvency of institutions providing letters of credit to our licensees.

¹⁶Exh. NRC000096, NUREG-1757, Vol. 3, Consolidated NMSS Decommissioning Guidance, "Financial Assurance, Recordkeeping, and Timeliness" (Sept. 2003), Appendix A, § A.10.1, at A-97 (NUREG-1757, Vol. 3, Appendix A). Although not part of the evidentiary record, NUREG-1797, Volume 3, Chapter 4, provides additional guidance on the Staff's review of a letter of credit issuer. See NUREG-1757, Vol. 3, § 4.3.2.7, at 4-24 to 4-25.

¹⁷Exh. AES000037, SAR § 10.2.1, at 10.2-1.

¹⁸Exh. NRC000027, NRC Staff Responses to Additional Questions at 1.

¹⁹ See infra pp. 7-8.

 $^{^{20}}$ Exh. NRC000125, NRC Staff Responses to Second Supplemental Questions at 1.

²¹ *Id.* at 2-4 (citing 12 C.F.R. §§ 3.14, 4.6, and 12 C.F.R. Subpart E; Exh. NRC000132, FDIC: Risk Management Manual of Examination Policies § 1.1; Exh. NRC000133, Federal Reserve Division of Banking Supervision and Regulation, Commercial Bank Examination Manual, Section 1000.1 (Mar. 1994)).

²² Exh. NRC000027, NRC Staff Responses to Additional Questions at 1.

The NRC's reliance on the expertise of federal or state financial regulatory bodies, as reflected in agency guidance, is analogous to other contexts where the NRC defers to other agencies with greater expertise on an issue. The "design basis threat" rule in 10 C.F.R. Part 73 is a prime example. The rule requires licensees to establish and maintain systems to "protect against acts of radiological sabotage and to prevent the theft or diversion of special nuclear material."23 A series of threats are enumerated in the purpose and scope of the rule, which licensees must use to develop their physical protection systems.²⁴ But we did not include the threat of air attacks within licensees' responsibilities, however, because we determined that a private security force cannot reasonably be expected to defend against such attacks.²⁵ We reasoned that adequate protection against the threat of air attacks is assured through the actions of other federal agencies with defense capabilities and air-safety expertise.²⁶ We find equally reasonable the Staff's deference to the expertise of agencies like the OCC, the FDIC, and the Federal Reserve to set and monitor the financial soundness of institutions issuing letters of credit.27

In the discussion of its certified question, the Board provides two examples where capitalization and credit rating benchmarks have been employed, either in the commercial sector, or elsewhere in the decommissioning funding assurance rule. First, the Board points to a draft sale and leaseback agreement that was submitted as part of a license amendment request for the Beaver Valley Unit 2 operating license.²⁸ The circumstances of that transaction, however, are distinguishable from those presented here. The *Beaver Valley* example involved a capital refinancing transaction entered into by the licensed owners of the plant for their own financial benefit. Specifically, the licensees of the plant requested NRC approval to sell and lease back all (or parts) of their ownership interests in the Beaver Valley facility. The financial documents associated with the transaction,

²³ 10 C.F.R. § 73.1.

²⁴ *Id*.

²⁵ See Final Rule: "Design Basis Threat," 72 Fed. Reg. 12,705, 12,710 (Mar. 19, 2007).

²⁶ See id. (discussing the responsibilities of the Defense, Homeland Security, Transportation, and Justice Departments). On judicial review, a majority of the three-judge Ninth Circuit panel found the rationale for excluding the air threat to be reasonable. See Public Citizen v. NRC, 573 F.3d 916, 926 (9th Cir. 2009).

²⁷ Cf. U.S. Postal Service v. Gregory, 534 U.S. 1, 10 (2001) (noting that "a presumption of regularity attaches to the actions of Government agencies" (citing *United States v. Chemical Foundation, Inc.*, 272 U.S. 1, 14-15 (1926))).

²⁸ Board Memorandum Certifying Question at 9 (citing Letter from Peter S. Tam, Project Manager, Division of Reactor Projects I/II, U.S. NRC, to J. J. Carey, Senior Vice President, Nuclear Group, Duquesne Light Co. (Sept. 23, 1987), unnumbered attachment 2, Safety Evaluation by the Office of Nuclear Reactor Regulation Supporting Amendment No. 1 to Facility Operating License No. NPF-73 (ADAMS Accession No. ML003772796) (Beaver Valley Safety Evaluation)).

which were submitted to the NRC as part of the request, provided that the issuers of any letter of credit associated with the transaction would demonstrate a minimum credit rating.²⁹

The focus of the Staff's review of the transaction was to ensure that the transaction had no effect on the license, and that the licensed operator (as opposed to others who might acquire an interest in the plant as a result of the transaction) remained responsible to the NRC for the safe operation and maintenance of the plant. The Staff did not review the adequacy of the financial instruments as a basis for approving the transaction. Rather, the letter of credit provision in the draft transaction documents was incidental to the Staff's review. The Staff ultimately found that the transaction would have no effect on the source of funds for operating and maintenance expenses, which were to be derived from utility revenues.³⁰ Here, in contrast, the letter of credit is an integral part of the Staff's review of AES's compliance with the decommissioning funding assurance regulations.

Second, the Board notes the use of capitalization/net worth and credit ratings for parent company guarantee or self-guarantee decommissioning funding assurance methods. This example similarly does not inform our review in this proceeding. Without the additional financial tests required for parent company guarantees and self-guarantees, there otherwise would not be objective and disinterested indicators³¹ for assuring the financial strength of the parent company or the licensee, which normally would be an unregulated private entity. The situation is different when, as here, we are dealing with financial institutions issuing letters of credit. They are regulated and monitored by a federal or state agency — which provides the necessary indicator of their financial strength equivalent to the financial tests we require of parent company or self-guarantees.

Safeguards in the draft instruments themselves provide an additional basis for finding AES's commitment adequate. AES has provided a draft letter of credit that, consistent with the guidance in NUREG-1757, requires the issuer to immediately notify AES and the NRC of circumstances affecting its financial

²⁹ *Id.*; Letter from David R. Lewis, counsel for Duquesne Light Co., to U.S. NRC (Sept. 17, 1987), unnumbered attachment 1, Draft Participation Agreement, at 54-56 (NUDOCS Accession No. 8709210496); *id.*, unnumbered attachment 2, Draft Facility Lease, Appendix A, at 21-23, 34.

 ³⁰ Beaver Valley Safety Evaluation at 2-3 (reasoning that the source of funds for operating and maintenance expenses — "utility revenues derived from the regulated rates charged to utility customers" — would be unaffected by the transaction). See generally 10 C.F.R. § 50.33(f).

³¹ For example, the financial tests for both parent company guarantees and self-guarantees require that an independent certified public accountant review the data used in the financial test, and require that the licensee "inform [the] NRC within 90 days of any matters coming to the auditor's attention which cause the auditor to believe that the data specified in the financial test should be adjusted and that the company no longer passes the test." 10 C.F.R. Part 30, Appendix A, II.B. *Accord* 10 C.F.R. Part 30, Appendix C, § II.B(2).

health. In particular, the issuer must disclose "any notice received or action filed alleging (1) the insolvency or bankruptcy of the financial institution or (2) any violation of regulatory requirements that could result in suspension or revocation of the bank's charter or license to do business." Based on the information received from the issuer, the NRC then may decide whether to draw on the letter of credit and place the funds in the standby trust. The draft letter of credit also requires the issuer to "give immediate notice if the bank, for any reason, becomes unable to fulfill its obligation under the letter of credit." In that event, AES will be required to secure alternative financial assurance.

Before the Board, AES reiterated that it intends to fulfill its obligation to provide decommissioning funding assurance by submitting a letter of credit that is "structured and adopted consistent with applicable NRC regulatory requirements and in accordance with NRC regulatory guidance contained in NUREG-1757."³⁵ Given that, once submitted, the Staff will ensure that the finalized letter of credit contains the safeguards provided in the draft letter of credit, and given that the Staff will ensure that the letter of credit issuer's operations are regulated by a federal or state agency, we see no reason for the Board to explore additional benchmarks such as capitalization/net worth or credit ratings for letter of credit issuers in this uncontested proceeding.³⁶

That said, however, in reviewing the record for this proceeding we have identified a related issue that the Board should explore with AES and the Staff involving the timing of the submittal of completed financial instruments.³⁷ In the SER, the Staff cites 10 C.F.R. § 70.25(b)(2) as authority for AES to defer execution of the final letter of credit and standby trust agreement until after the

³² Exh. AES000037, SAR Appendix 10A. This is identical to the language in the model letter of credit in NUREG-1757, Volume 3. *See* Exh. NRC000096, NUREG-1757, Vol. 3, Appendix A, at A-100.

³³ Exh. NRC000125, NRC Staff Responses to Second Supplemental Questions at 5.

³⁴Exh. AES000037, SAR Appendix 10A. This also mirrors the language in the model letter of credit in NUREG-1757, Volume 3. *See* Exh. NRC000096, NUREG-1757, Vol. 3, Appendix A, at A-100.

³⁵Exh. AES000063, AES Responses at 2. Although NRC guidance documents are not legally binding, and compliance with them is not required, they describe an approach to compliance with our rules that is acceptable to the NRC. *See* NUREG-1757, Vol. 3, at x.

³⁶ Board Memorandum Certifying Question at 10. Nothing in the regulations, guidance, or this decision would preclude the Staff from further inquiry should it become aware of information or receive notice raising questions about the financial health of a letter-of-credit issuer or the viability of the surety for decommissioning funding.

³⁷ See Memorandum and Order (Updated General Schedule) (Mar. 30, 2011), at 2 (unpublished) (scheduling the second mandatory hearing session during the week of July 11, 2011 "[t]o maximize the possibility of including in this . . . session any further proceedings that might be necessary relative to the question recently certified to the Commission by the Board regarding decommissioning financial assurance").

license is issued but before the receipt of licensed material. However, it appears that subsection 70.25(b)(2) does not apply to the AES application.

The financial assurance requirements in section 70.25 are structured according to the quantity of material that will be authorized for possession and use.³⁹ Depending on the quantity of material, Part 70 license applicants must submit either a "decommissioning funding plan" or a "certification of financial assurance." 40 Certifications of financial assurance, which are used by applicants seeking to possess smaller quantities of material, are governed by subsection 70.25(b)(2).⁴¹ That rule expressly provides that an applicant submitting a *certification* may defer execution of its financial instruments until after the license has issued. In contrast, an applicant seeking a specific license for a uranium enrichment facility is required to submit a decommissioning funding plan that is consistent with 10 C.F.R. § 70.25(e). Subsection 70.25(e) specifies that each decommissioning funding plan must include a signed original of the instrument obtained to provide financial assurance for decommissioning. In contrast to the certification rule set out in subsection 70.25(b)(2), however, subsection 70.25(e) does not provide for deferral of execution of the financial instruments until after the license has issued. As an applicant seeking a specific license associated with a uranium enrichment facility, AES has submitted a decommissioning funding plan.⁴² Thus, AES's decommissioning funding plan must comply with subsection 70.25(e), which, as discussed above, requires "a signed original" of the financial instruments at the time the plan is submitted.⁴³

As discussed above, AES sought and received an exemption from 10 C.F.R. §§ 40.36(d) and 70.25(e) to provide forward-looking, incremental funding for decommissioning.⁴⁴ It appears that the exemption request could extend to the

³⁸ Exh. NRC000032, SER § 10.3.3.3, at 10-15.

 $^{^{39}}$ See 10 C.F.R. § 70.25(a)-(b). Sections 30.35 and 40.36 are similarly structured. See 10 C.F.R. §§ 30.35(a)-(b), 40.36(a)-(b).

⁴⁰ 10 C.F.R. § 70.25(a), (b)(1)-(2).

⁴¹The possession limits associated with a certification are set forth in 10 C.F.R. § 70.25(d). An applicant whose possession limits exceed those identified in the table must base its financial assurance on a decommissioning funding plan.

 $^{^{42} \}textit{See} \; \text{Exh. AES000037, Chapter 10; Exh. NRC000032, SER at 10-1; 10 C.F.R. \$ 70.25(a)(1).}$

⁴³ Compare 10 C.F.R. § 70.25(e) ("The decommissioning funding plan must... contain a certification by the licensee that financial assurance for decommissioning has been provided in the amount of the cost estimate for decommissioning and a signed original of the financial instrument obtained to satisfy the requirements of paragraph (f) of this section."), with 10 C.F.R. § 70.25(b)(2) (A certification of financial assurance "may state that the appropriate assurance will be obtained after the application has been approved and the license issued but before the receipt of licensed material."). Accord 10 C.F.R. § 40.36(b)(2), (d).

⁴⁴ See Exh. NRC000032, SER §§ 1.2.4.2.1, 10.3.3.1.1, at 1-13 to 1-14, 10-7 to 10-12; supra note 4 and accompanying text.

requirement to provide a signed original of the financial instruments prior to issuance of the license.⁴⁵ The Board should explore with AES and the Staff whether the exemption from sections 40.36(d) and 70.25(e) also permits AES to defer execution of its initial financial instruments after the license is issued but before the receipt of licensed material.

III. CONCLUSION

As discussed above, we take review of the certified question. We find AES's commitment to provide a letter of credit that is issued by a financial institution whose operations are regulated and examined by a federal or state agency sufficient to satisfy the decommissioning funding assurance requirements in 10 C.F.R. §§ 30.35(f)(2), 40.36(e)(2), and 70.25(f)(2). We further direct the Board to further consider the appropriate scope of AES's exemption request, consistent with this decision.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 12th day of July 2011.

 $^{^{45}\,} See$ Exh. NRC000032, SER \S 1.2.4.2.1, at 1-13 to 1-14.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Lawrence G. McDade, Chairman Dr. Kaye D. Lathrop Dr. Richard E. Wardwell

In the Matter of

Docket Nos. 50-247-LR 50-286-LR (ASLBP No. 07-858-03-LR-BD01)

ENTERGY NUCLEAR
OPERATIONS, INC.
(Indian Point, Units 2 and 3)

July 14, 2011

SUBPART L PROCEEDINGS

SUMMARY DISPOSITION

Summary disposition of a contention is appropriate when there no longer exists any genuine dispute over a material fact and the moving party is entitled to judgment as a matter of law. Section 2.1205(c) of 10 C.F.R. (directing that, in a proceeding governed by Subpart L, the Board is to apply the standards of Subpart G when ruling on motions for summary disposition); *id.* § 2.710(d)(2) (permitting a motion for summary disposition to be granted in a proceeding governed by Subpart G "if the filings in the proceeding, depositions, answers to interrogatories, and admissions on file, together with the statements of the parties and the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law.").

ATOMIC ENERGY ACT: NRC RESPONSIBILITIES

LICENSE RENEWAL PROCEEDINGS

NEPA: NRC RESPONSIBILITIES; ALTERNATIVES

To evaluate a license renewal application for a nuclear power reactor, the NRC reviews (1) the management of aging effects and time-limited aging analysis of particular safety-related functions of the plant's systems, structures, and components pursuant to 10 C.F.R. Part 54, in which the NRC addresses its obligations under the Atomic Energy Act, and (2) the environmental impacts and alternatives to the proposed action in accordance with 10 C.F.R. Part 51, in which the NRC addresses its obligations under NEPA. 10 C.F.R. §§ 51.10(a) (declaring that the regulations in 10 C.F.R. Part 51 implement NEPA), 54.29(a)-(b) (outlining the scope of reactor operating license renewal reviews); *see also* LBP-08-13, 68 NRC 43, 66 (2008) (citations omitted).

LICENSE RENEWAL PROCEEDINGS: SCOPE OF ENVIRONMENTAL REVIEW

The "aging-based safety review" set out in Part 54 is analytically separate from Part 51's environmental inquiry and "does not in any sense 'restrict NEPA." *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 13 (2001) (citations omitted). Accordingly, the NEPA review in license renewal proceedings, which is conducted pursuant to Part 51, is not limited to aging management related issues. *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-10-15, 72 NRC 257, 288 (2010).

LICENSE RENEWAL PROCEEDINGS

NEPA: GENERIC ENVIRONMENTAL IMPACT STATEMENT FOR LICENSE RENEWAL

The Commission's Part 51 regulations, which implement NEPA in NRC proceedings, classify the environmental impacts of license renewal as either Category 1 impacts, which are generically addressed by the NRC's Generic Environmental Impact Statement for License Renewal, or Category 2 impacts, which are analyzed on a site-specific basis.

LICENSE RENEWAL PROCEEDINGS

NEPA: ENVIRONMENTAL IMPACT STATEMENT; ENVIRONMENTAL REPORT; MITIGATION

SEVERE ACCIDENT MITIGATION ALTERNATIVES

Where the Staff has not already considered site-specific severe accident mitigation alternatives (SAMAs) for a facility, alternatives to mitigate severe accidents must be considered as part of an applicant's Environmental Report (ER) and, ultimately, as part of the NRC Staff's supplemental EIS in a power reactor license renewal proceeding. 10 C.F.R. § 51.53(c)(3)(ii)(L); *id.* Part 51, Subpart A, App. B, tbl. B-1. SAMA review identifies and assesses possible plant changes — such as improvements in hardware, training, or procedures — that could cost-effectively mitigate the environmental impacts that would otherwise flow from a potential severe accident. *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 5 (2002).

LICENSE RENEWAL PROCEEDINGS

NEPA: HARD LOOK; NRC RESPONSIBILITIES

SEVERE ACCIDENT MITIGATION ALTERNATIVES

The sufficiency of the NRC's hard look at the benefits of SAMAs in comparison to their costs is subject to litigation in a license renewal proceeding. LBP-10-13, 71 NRC at 679 n.17 (2010) (citing *Duke Energy Corp*. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 431 (2003) (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 352 (1989))).

ADMINISTRATIVE PROCEDURE ACT

LICENSE RENEWAL PROCEEDINGS

NEPA: NRC STAFF REVIEW

SEVERE ACCIDENT MITIGATION ALTERNATIVES

While a license renewal applicant is compelled to implement those safety SAMAs that deal with aging management, LBP-10-13, 71 NRC 673, 679 & n.18 (2010) (citing *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 293-94 n.26 (2010)), the Staff's obligations under Part 51 and NEPA are not limited to only those SAMAs that address aging management.

ENVIRONMENTAL REVIEW

NEPA: HARD LOOK; NRC STAFF RESPONSIBILITIES

The NRC Staff is bound to take a hard look, consistent with NEPA and the APA, at all SAMAs (both aging-related and non-aging-related) before deciding whether to grant a license renewal application. *Cf. Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976) ("The only role for a court is to insure that the agency has taken a 'hard look' at environmental consequences."); *Nuclear Fuel Services, Inc.* (Erwin, Tennessee), LBP-05-8, 61 NRC 202, 207 (2005) (citations omitted) ("NEPA . . . imposes a procedural requirement on an agency's decision-making process by mandating that an agency consider the environmental impacts of a proposed action and inform the public that it has taken those impacts into account in making its decision. In other words, an agency must take a 'hard look' at the environmental consequences of a proposed action before taking that action.").

BACKFIT REVIEW

CURRENT LICENSING BASIS

LICENSE RENEWAL PROCEEDINGS

SEVERE ACCIDENT MITIGATION ALTERNATIVES

The NRC Staff has the authority to require implementation of non-aging management SAMAs through its current licensing basis (CLB) backfit review under Part 50 or through setting conditions of the license renewal. LBP-10-13, 71 NRC at 679 & n.19 (2010) (citing *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 388 n.77 (2002); 10 C.F.R. § 50.109(a)(3) ("[T]he Commission shall require the backfitting of a facility only when it determines, based on the analysis described in paragraph (c) of this section, that there is a substantial increase in the overall protection of the public health and safety or the common defense and security to be derived from the backfit and that the direct and indirect costs of implementation for that facility are justified in view of this increased protection.")).

ADMINISTRATIVE PROCEDURE ACT: ARBITRARY AND CAPRICIOUS STANDARD

NRC STAFF REVIEW

A federal agency, such as the NRC, would be acting arbitrarily and capriciously if it did not look at relevant data and sufficiently explain a rational nexus between the facts found in its review and the choice it makes as a result of that review.

Shieldalloy Metallurgical Corp. v. NRC, 624 F.3d 489, 492-93 (D.C. Cir. 2010) (citations omitted).

MEMORANDUM AND ORDER

(Ruling on Motion and Cross-Motions for Summary Disposition of NYS-35/36)

Before this Licensing Board are a motion from the State of New York (New York) and cross-motions from Entergy Nuclear Operations, Inc. (Entergy or Applicant) and the NRC Staff for summary disposition of Consolidated Contention New York 35/36 (NYS-35/36). This contention arises from alleged deficiencies in the severe accident mitigation alternatives (SAMA) analysis for Entergy's License Renewal Application (LRA) for the nuclear power reactors Indian Point Units 2 and 3 (IP2 and IP3).

Specifically, NYS-35/36 challenges the NRC Staff's failure, in its December 2010 Final Supplemental Environmental Impact Statement (FSEIS), (1) to require completion of cost analyses for the SAMAs that appear to be cost-beneficial and (2) to require Entergy either to implement mitigation alternatives when the benefits of those alternatives substantially outweigh costs or, in the alternative, to explain with a rational basis why the NRC Staff would allow Entergy's licenses to be renewed without the implementation of the cost-beneficial SAMAs.²

As explained below, by this Memorandum and Order we *grant* New York's Motion and *deny* the Cross-Motions of Entergy and the NRC Staff.

I. PROCEDURAL BACKGROUND

On December 11, 2009, Entergy submitted a revised SAMA analysis to the NRC Staff.³ In LBP-10-13, we admitted contentions filed by New York challenging the revised SAMA analysis, and we consolidated two of those

¹ State of New York's Motion for Summary Disposition of Consolidated Contention NYS-35/36 (Jan. 14, 2011) [hereinafter New York Motion]; Applicant's Consolidated Memorandum in Opposition to New York State's Motion for Summary Disposition of Contention NYS-35/36 and in Support of Its Cross-Motion for Summary Disposition (Feb. 3, 2011) [hereinafter Entergy Cross-Motion]; NRC Staff's (1) Cross-Motion for Summary Disposition, and (2) Response to New York State's Motion for Summary Disposition, of Contention NYS-35/36 (Severe Accident Mitigation Alternatives) (Feb. 7, 2011) [hereinafter NRC Staff Cross-Motion].

² See LBP-10-13, 71 NRC 673, 688-702 (2010).

³ See Letter from Fred Dacimo, Vice President, License Renewal, Entergy Nuclear Northeast, to U.S. Nuclear Regulatory Commission, NL-09-165 (Dec. 11, 2009) (ADAMS Accession No. ML093580089).

contentions as NYS-35/36.⁴ Specifically, as relevant here, we admitted NYS-35 as a contention of omission to the extent it claimed that Entergy's incomplete SAMA cost-benefit analysis necessarily precluded the NRC Staff from making an informed decision on the environmental impacts of Entergy's LRA.⁵ Using similar reasoning, we admitted NYS-36 to the extent it demanded that the NRC Staff either require the implementation of cost-beneficial SAMAs prior to approving Entergy's LRA or offer a rational explanation for why it was not requiring implementation of those SAMAs found cost-beneficial.⁶

On November 30, 2010, the Commission denied Entergy's and the NRC Staff's appeal from our decision to admit NYS-35/36.⁷ On December 3, 2010, the NRC Staff issued its FSEIS.⁸ The Board permitted the parties, *inter alia*, to move for summary disposition on matters arising from "significantly new data or conclusions in the FSEIS" no later than February 3, 2011.⁹

On January 14, 2011, New York moved for summary disposition, asking that Entergy's LRA be denied due to the inadequate analysis of its SAMAs in the FSEIS. In the alternative, New York requested that there be no final decision on Entergy's LRA until the FSEIS is supplemented in order to add the information and directives called for in NYS-35/36. On February 3, 2011, Entergy opposed New York's Motion and simultaneously cross-moved to dismiss NYS-35/36 as a matter of law. Also on that date, the Attorney General of the State of Connecticut (Connecticut) filed a Response in support of New York's Motion. On February 7, 2011, the NRC Staff filed its Response to New York's Motion and cross-moved to dispose of the contention as a matter of law. On February 23, 2011, New York filed its Combined Reply to Entergy's and the NRC Staff's Cross-Motions.

⁴LBP-10-13, 71 NRC at 702.

⁵ *Id.* at 695-98.

⁶ *Id.* at 701-02.

⁷CLI-10-30, 72 NRC 564, 569 (2010).

⁸ NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Supplement 38: Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3, Final Report, Main Report, and Comment Responses (Dec. 3, 2010) [hereinafter FSEIS].

⁹Licensing Board Order (Granting Intervenor's Joint Motion for an Extension of Time) (Dec. 27, 2010) at 2 (unpublished).

¹⁰ New York Motion at 2-3.

¹¹Entergy Cross-Motion at 2; Response of Attorney General of Connecticut in Support of New York's Motion for Summa[r]y Disposition of Consolidated Contention NYS-35/36 (Feb. 3, 2011) [hereinafter Connecticut Response].

¹²NRC Staff Cross-Motion at 1.

¹³ State of New York's Combined Reply to Entergy and Staff Cross-Motions for Summary Disposition on NYS Combined Contentions 35 and 36 Concerning the December 2009 Severe Accident Mitigation Alternative Reanalysis (Feb. 23, 2011) [hereinafter New York Combined Reply].

II. POSITIONS OF THE PARTIES

A. New York Motion

New York represents that there are no material facts in dispute regarding NYS-35/36. According to New York, all parties agree that Entergy has not completed a SAMA analysis for all potentially cost-beneficial SAMAs and that there is no dispute as to what the cost-to-benefit margins would be if the SAMAs found to be cost-beneficial were implemented. The NRC Staff's stated rationale for not requiring further analysis or the implementation of cost-beneficial SAMAs prior to relicensing is that none of the cost-beneficial SAMAs, or potentially cost-beneficial SAMAs, relate to adequately managing the effects of aging during the period of extended operation.¹⁴ The NRC Staff also based its conclusion on its belief that current licensing basis doctrine prohibits implementation of cost-beneficial SAMAs as part of the license renewal process¹⁵ and that the environmental impacts of a severe accident at the Indian Point facility are small as a generic matter and thus are not relevant.¹⁶

Given that the NRC Staff, in its FSEIS, acknowledges that more SAMA analysis may well be forthcoming after the renewal of Entergy's licenses, New York argues that Entergy's SAMA analysis is incomplete and, as a result of the NRC Staff's permissive posture toward that incomplete analysis, the NRC Staff lacks sufficient information to make an informed decision on Entergy's LRA.¹⁷ New York reasons that the treatment by the NRC Staff of these cost-beneficial and these incomplete, potentially cost-beneficial SAMAs does not satisfy the NRC's legal duties to conduct a hard look pursuant to statutory, precedential, and regulatory authority.¹⁸ Stating that the "backfit rule"¹⁹ does not explicitly preclude and, in fact, Part 54 permits the implementation of SAMAs found to be cost-beneficial, New York argues that the NRC Staff lacks a rational basis for its failure to consider requiring implementation of those SAMAs determined to be cost-beneficial.²⁰

Therefore, New York asks the Board to conclude that the FSEIS is deficient as a matter of law and, as a result, to deny Entergy's LRA. In the alternative, New York asks the Board to suspend a final decision on Entergy's Application

¹⁴ New York Motion at 7.

¹⁵ Id.

¹⁶ Id. at 8.

¹⁷ Id. at 11-17.

¹⁸ Id.

¹⁹Backfitting includes the modification of or addition to systems, structures, components, or designs of a facility in accordance with the provisions of 10 C.F.R. § 50.109.

²⁰New York Motion at 18-23.

until Entergy completes its SAMA cost-benefit analyses and the NRC Staff either conditions license renewal on implementation of all cost-beneficial SAMAs or provides a rational basis for why it is not requiring such implementation.²¹

B. Entergy Cross-Motion

Entergy concurs that summary disposition of NYS-35/36 is appropriate. However, Entergy argues that it, rather than New York, is entitled to judgment as a matter of law on NYS-35/36.²² If the Board does not find in its favor, Entergy alternatively requests that the Board deny New York's Motion and conduct a full hearing on the merits of this consolidated contention.²³

Entergy represents that, contrary to New York's assertions, its SAMA review is complete as a matter of fact and law. ²⁴ While Entergy construes NRC regulations as not prescribing a specific methodology for conducting SAMA analyses, it purports to have followed the dictates of NEI 05-01, a guidance document endorsed by the NRC Staff.²⁵ Entergy states that, in order to confirm the cost-beneficial nature of certain SAMAs, it was necessary to conduct its SAMA analyses in multiple stages to gauge adequately these SAMAs' particular costs and benefits. Because the NRC Staff concluded that Entergy's SAMA cost estimates were reasonable after seeking additional information regarding the Applicant's SAMA reviews, Entergy insists that it has provided sufficient information for the NRC Staff's review in the FSEIS.²⁶ In addition, Entergy defends as reasonable and legally correct the NRC Staff's rationale for not requiring the implementation of cost-beneficial SAMAs. More specifically, Entergy argues that the NRC Staff is correct that Part 54 does not compel changes to a plant's current licensing basis in the license renewal process and that the National Environmental Policy Act (NEPA) does not require implementation of mitigation measures such as SAMAs.²⁷

C. NRC Staff Cross-Motion

Parallel to Entergy's Cross-Motion, the NRC Staff asserts that summary disposition of NYS-35/36 is proper and that the consolidated contention should

²¹ *Id.* at 23.

²² Entergy Cross-Motion at 1-2.

²³ *Id.* at 2.

²⁴ See id. at 26-28 & nn.123, 129.

²⁵ See id. at 8-9, 20, 26 (citing NEI 05-01 [Rev. A], Severe Accident Mitigation Alternatives (SAMA) Analysis, Guidance Document (Nov. 2005) at I (ADAMS Accession No. ML060530203)).

²⁶ Entergy Cross-Motion at 20-22.

²⁷ *Id.* at 22-25, 28-37.

be resolved as a matter of law with dismissal of these contentions.²⁸ After summarizing its review of SAMAs in the FSEIS, the NRC Staff professes to have taken a hard look at SAMAs and justifies its decision not to require implementation of them as consistent with the Board's interpretation in LBP-10-13 of the Administrative Procedure Act (APA) and NEPA.²⁹ Similarly, contrary to New York's position, the NRC Staff posits that license renewal need not hinge on completion of engineering project cost-benefit analyses for SAMAs previously identified as cost-beneficial.³⁰ Because it views itself as having satisfied the concerns at the heart of NYS-35/36, the NRC Staff considers the FSEIS as rendering NYS-35/36 moot.³¹

Regarding the specific claims in New York's Motion, the NRC Staff first posits that additional engineering cost-benefit analysis is unnecessary because it would identify no additional SAMAs as potentially cost-beneficial, would only pertain to issues with Indian Point's current licensing basis, and would therefore be irrelevant and unnecessary to fulfilling the regulatory requirements of license renewal.³² According to the NRC Staff, no agency or industry guidance documents support New York's position that additional engineering project cost-benefit analysis is required "or that cost-effective SAMAs must be required as a condition for license renewal."³³ Finally, the NRC Staff states that New York's request for a backfit is inappropriate because the types of changes to a facility necessitating a backfit are supposed to be handled outside of the agency's license renewal process, rather than as prerequisites to license renewal.³⁴

D. Connecticut Response

Connecticut supports New York's Motion, echoing New York's position that the FSEIS fails to take the mandatory hard look at SAMAs and does not contain enough information to fully analyze the environmental impacts from renewing Entergy's licenses for IP2 and IP3.³⁵

E. New York Combined Reply to Cross-Motions

New York reasons that NRC case law and regulations permit implementation of

²⁸ NRC Staff Answer at 1.

²⁹ *Id.* at 12-19, 24-28.

³⁰ *Id.* at 19-24.

³¹ *Id.* at 29-30.

³² *Id.* at 31-35.

³³ *Id.* at 36-38.

³⁴ *Id.* at 38-39.

³⁵ Connecticut Response at 1-4.

SAMAs that are found to be cost-beneficial as part of the agency's environmental review, even where the Commission has determined generically that the impacts of severe accidents are small because, according to New York, the Commission has explicitly required complete analysis of these SAMAs as a prerequisite to license renewal. Similarly, New York posits that a plant's current licensing basis may be altered as the result of the environmental review conducted during the license renewal process through implementation of SAMAs found cost-effective and further claims that the NRC's Part 54 safety review may not constrict its Part 51 environmental review. According to New York, a plant's SAMA review must be complete before a renewed license is granted in order for the NRC Staff to make an informed decision with a rational basis. New York maintains the NRC Staff failed in this respect because the Staff's FSEIS would permit Entergy to forgo completion of that SAMA analysis.

III. LEGAL STANDARDS GOVERNING MOTIONS FOR SUMMARY DISPOSITION

On two prior occasions, we explained the standards governing motions for summary disposition.³⁹ We do not reiterate that discussion here in full, yet we emphasize that summary disposition of a contention is appropriate when there no longer exists any genuine dispute over a material fact and the moving party is entitled to judgment as a matter of law.⁴⁰

IV. LEGAL STANDARDS GOVERNING SAMAS

To evaluate a license renewal application for a nuclear power reactor, the NRC reviews (1) the management of aging effects and time-limited aging analysis of particular safety-related functions of the plant's systems, structures, and components pursuant to 10 C.F.R. Part 54, in which the NRC addresses its obligations

³⁶ New York Combined Reply at 4-9.

³⁷ *Id.* at 9-13, 21-22.

³⁸ *Id.* at 13-20.

³⁹Licensing Board Memorandum and Order (Denying Entergy's Motion for the Summary Disposition of NYS Contention 17/17A) (Apr. 22, 2010) at 1-2 (unpublished); Licensing Board Memorandum and Order (Ruling on Motions for Summary Disposition) (Nov. 3, 2009) at 1-2 (unpublished).

⁴⁰ 10 C.F.R. § 2.1205(c) (directing that, in a proceeding governed by Subpart L, the Board is to apply the standards of Subpart G when ruling on motions for summary disposition); *id.* § 2.710(d)(2) (permitting a motion for summary disposition to be granted in a proceeding governed by Subpart G "if the filings in the proceeding, depositions, answers to interrogatories, and admissions on file, together with the statements of the parties and the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law.").

under the Atomic Energy Act, and (2) the environmental impacts and alternatives to the proposed action in accordance with 10 C.F.R. Part 51, in which the NRC addresses its obligations under NEPA.⁴¹ The "aging-based safety review" set out in Part 54 is analytically separate from Part 51's environmental inquiry and "does not in any sense 'restrict NEPA.'"⁴² Accordingly, the NEPA review in license renewal proceedings, which is conducted pursuant to Part 51, is not limited to aging management-related issues.⁴³

The Commission's Part 51 regulations, which implement NEPA in NRC proceedings, classify the environmental impacts of license renewal as either Category 1 impacts, which are generically addressed by the NRC's Generic Environmental Impact Statement for License Renewal, or Category 2 impacts, which are analyzed on a site-specific basis.⁴⁴ SAMAs fall within Category 2 and are site-specific.

Where the Staff has not already considered site-specific SAMAs for a facility, alternatives to mitigate severe accidents must be considered as part of an applicant's Environmental Report (ER) and, ultimately, as part of the NRC Staff's supplemental EIS in a power reactor license renewal proceeding. ⁴⁵ SAMA review identifies and assesses possible plant changes — such as improvements in hardware, training, or procedures — that could cost-effectively mitigate the environmental impacts that would otherwise flow from a potential severe accident. ⁴⁶ The sufficiency of the NRC's hard look at the benefits of SAMAs in comparison to their costs is subject to litigation in a license renewal proceeding. ⁴⁷

The current licensing basis (CLB)⁴⁸ of an operating license shall continue during the license renewal period, but

⁴¹ 10 C.F.R. §§ 51.10(a) (declaring that the regulations in 10 C.F.R. Part 51 implement NEPA), 54.29(a)-(b) (outlining the scope of reactor operating license renewal reviews); *see also* LBP-08-13, 68 NRC 43, 66 (2008) (citations omitted).

⁴² Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 13 (2001) (citations omitted).

⁴³ Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-10-15, 72 NRC 257, 288 (2010).

⁴⁴ 10 C.F.R. §§ 51.53(c)(3)(i)-(ii), 51.95(c)(4); *see also id.* Part 51, Subpart A, App. B, tbl. B-1; LBP-08-13, 68 NRC at 67.

⁴⁵ 10 C.F.R. § 51.53(c)(3)(ii)(L); *id.* Part 51, Subpart A, App. B, tbl. B-1.

⁴⁶ Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 5 (2002).

⁴⁷LBP-10-13, 71 NRC at 679 n.17 (citing *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 431 (2003) (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 352 (1989))).

⁴⁸ See LBP-10-13, 71 NRC at 678 & n.12) (citing 10 C.F.R. § 54.3(a); Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 453-54 (2010) ("The current licensing basis (CLB) is the set of NRC requirements (including regulations, orders, technical specifications, (Continued)

[t]hese conditions may be supplemented or amended as necessary to protect the environment during the term of the renewed license and will be derived from information contained in the supplement to the environmental report submitted pursuant to 10 C.F.R. part 51, as analyzed and evaluated in the NRC record of decision.⁴⁹

While a license renewal applicant is compelled to implement those safety SAMAs that deal with aging management,⁵⁰ the Staff's obligations under Part 51 and NEPA are not limited to only those SAMAs that address aging management. Once the NRC completes its environmental review, its record of decision must:

[s]tate whether the Commission has taken all practicable measures within its jurisdiction to avoid or minimize environmental harm from the alternative selected, and if not, to explain why those measures were not adopted. Summarize any license conditions and monitoring programs adopted in connection with mitigation measures.⁵¹

Therefore, the NRC Staff is bound to take a hard look, consistent with NEPA and the APA, at all SAMAs (both aging-related and non-aging-related) before deciding whether to grant a license renewal application.⁵² The NRC Staff has the authority to require implementation of non-aging management SAMAs through its CLB backfit review under Part 50 or through setting conditions of the license renewal.⁵³ Conversely, a federal agency, such as the NRC, would be acting

and license conditions) applicable to a specific plant, and includes the licensee's written, docketed commitments for ensuring compliance with applicable NRC requirements and the plant specific design basis.")).

⁴⁹ 10 C.F.R. § 54.33(c).

⁵⁰LBP-10-13, 71 NRC at 679 & n.18 (citing Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 293-94 n.26 (2010)).

⁵¹ 10 C.F.R. § 51.103(a)(4).

⁵² Cf. Kleppe v. Sierra Club, 427 U.S. 390, 410 n.21 (1976) ("The only role for a court is to insure that the agency has taken a 'hard look' at environmental consequences."); Nuclear Fuel Services, Inc. (Erwin, Tennessee), LBP-05-8, 61 NRC 202, 207 (2005) (citations omitted) ("NEPA... imposes a procedural requirement on an agency's decision-making process by mandating that an agency consider the environmental impacts of a proposed action and inform the public that it has taken those impacts into account in making its decision. In other words, an agency must take a 'hard look' at the environmental consequences of a proposed action before taking that action.").

⁵³ LBP-10-13, 71 NRC at 679 & n.19) (citing *Duke Energy Corp*. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 388 n.77 (2002); 10 C.F.R. § 50.109(a)(3) ("[T]he Commission shall require the backfitting of a facility only when it determines, based on the analysis described in paragraph (c) of this section, that there is a substantial increase in the overall protection of the public health and safety or the common defense and security to be derived from the backfit and that the direct and indirect costs of implementation for that facility are justified in view of this increased protection.")).

arbitrarily and capriciously if it did not look at relevant data and sufficiently explain a rational nexus between the facts found in its review and the choice it makes as a result of that review.⁵⁴

V. BOARD DECISION

In ruling on the instant Motion and Cross-Motions for Summary Disposition, we must first determine whether there exists a genuine dispute over any material fact arising from NYS-35/36. If we find that no factual dispute exists, we must then decide which party is entitled to judgment as a matter of law.

A. No Genuine Dispute of Material Fact

Based on its review of Entergy's LRA, the FSEIS identified the following SAMAs as potentially cost-beneficial: for IP2, SAMAs 9, 21, 22, 28, 44, 53, 54, 56, 60, 61, 62, and 65; and for IP3, SAMAs 7, 18, 19, 52, 53, 55, 61, and 62. 55 Based on the NRC Staff's review of Entergy's ER and Entergy's December 2009 SAMA reanalysis, the estimated costs and benefits for each of these SAMAs are as follows: 56

	Estimated	Estimated Benefit	
SAMA	Benefit	with Uncertainty	Estimated Cost
IP2			
9	\$6,300,000.00	\$13,000,000.00	\$4,100,000.00
21	\$2,100,000.00	\$4,400,000.00	\$ 3,200,000.00
22	\$1,100,000.00	\$2,300,000.00	\$2,200,000.00
28	\$1,400,000.00	\$2,900,000.00	\$938,000.00
44	\$2,400,000.00	\$4,900,000.00	\$1,700,000.00
53	\$660,000.00	\$1,400,000.00	\$800,000.00
54	\$5,600,000.00	\$12,000,000.00	\$200,000.00
56	\$49,000.00	\$100,000.00	\$82,000.00
60	\$1,300,000.00	\$2,700,000.00	\$216,000.00
61	\$2,800,000.00	\$5,800,000.00	\$192,000.00
62	\$850,000.00	\$1,800,000.00	\$1,500,000.00

⁵⁴ Shieldalloy Metallurgical Corp. v. NRC, 624 F.3d 489, 492-93 (D.C. Cir. 2010) (citations omitted).

⁵⁵ FSEIS at 5-9 to 5-10.

⁵⁶ *Id.* at G-36 to G-38. According to the Staff, one of the SAMAs originally identified as potentially cost-beneficial by Entergy, SAMA IP3 30, "was no longer cost beneficial based on correction of an error in the ER." *Id.* at 5-10.

	Estimated	Estimated Benefit	
SAMA	Benefit	with Uncertainty	Estimated Cost
IP2 (Cont.)			
65	\$5,600,000.00	\$12,000,000.00	\$560,000.00
IP3			
7	\$5,000,000.00	\$7,300,000.00	\$4,100,000.00
18	\$4,800,000.00	\$15,000,000.00	\$12,000,000.00
19	\$2,100,000.00	\$3,100,000.00	\$2,800,000.00
52	\$250,000.00	\$360,000.00	\$50,000.00
53	\$500,000.00	\$720,000.00	\$228,000.00
55	\$4,100,000.00	\$5,900,000.00	\$1,300,000.00
61	\$4,400,000.00	\$6,300,000.00	\$560,000.00
62	\$4,400,000.00	\$6,300,000.00	\$197,000.00

After considering Entergy's methodology for calculating these cost and benefit estimates set forth in Entergy's ER and Entergy's December 2009 SAMA reanalysis,⁵⁷ the NRC Staff concluded these potentially cost-beneficial SAMAs "are included within the set of SAMAs that Entergy will consider further for implementation"⁵⁸ and that "the methods used and the implementation of those methods were sound."⁵⁹ As a result, the NRC Staff stated that it:

concurs with Entergy's identification of areas in which risk can be further reduced in a cost-beneficial manner through the implementation of the identified, potentially cost beneficial SAMAs. Given the potential for cost-beneficial risk reduction, the NRC staff agrees that further evaluation of these SAMAs by Entergy is warranted. ⁶⁰

While recognizing these SAMAs as potentially cost-beneficial, the NRC Staff posits that:

these SAMAs do not relate to adequately managing the effects of aging during the period of extended operation. Therefore, they need not be implemented as part of license renewal pursuant to Title 10 of the *Code of Federal Regulations*, Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants" (10 CFR Part 54).⁶¹

Because the parties do not dispute either the text of the FSEIS or the NRC

⁵⁷ Id. at G-39 to G-48.

⁵⁸ *Id.* at G-48.

⁵⁹ *Id.* at G-49.

 $^{^{60}}$ Id.

 $^{^{61}}$ *Id*.

Staff's conclusions regarding Entergy's discussion (beyond the legal implications of the NRC Staff's actions and conclusions in the FSEIS and the completeness of Entergy's own SAMA review as a matter of law),⁶² we agree with all parties that there remains no genuine dispute over any material fact.

B. Entitlement to Judgment as a Matter of Law

In *McGuire/Catawba*, the Commission held that a SAMA need not be implemented during a particular plant's license renewal review where the Commission is concurrently resolving the safety improvement achieved by that SAMA through a generic process attached to the agency's review of all plants' current licensing bases.⁶³ The Commission also admonished in *Pilgrim* that SAMAs unrelated to aging management need not be implemented pursuant to the NRC's license renewal *safety* review under Part 54.⁶⁴

Regardless, both are inapposite here. Specifically, the SAMAs identified in the FSEIS as potentially cost-beneficial have not been analyzed under the NRC's Part 54 license renewal safety review, having instead been analyzed under its Part 51 environmental review. Furthermore, the Staff has not indicated that issues raised by any of the subject SAMAs currently are being resolved generically across all plants through an agency review of their current licensing bases.

Part 51 requires analysis of the potential mitigation of, and alternatives to, severe accidents on a site-specific basis.⁶⁵ Accordingly, we find that the NRC Staff's decision to allow Entergy to complete its SAMA review outside of the license renewal process, by deferring the evaluation of SAMAs found to be potentially cost-beneficial until after relicensing, does not provide an adequate record for the agency to make its decision on the impacts of relicensing IP2 and IP3.

Entergy might represent that its review is "complete" for the purposes of license

⁶² See New York Combined Reply, Attach.: Counterstatement [to Entergy's Statement] of Undisputed Material Facts ¶ 7, 12-19 (Feb. 23, 2011); *id.*, Attach.: Counterstatement [to NRC Staff's Statement] of Undisputed Material Facts ¶ 3-7 (Feb. 23, 2011); NRC Staff Cross-Motion, Attach. 3: NRC Staff's Statement of Material Facts in Support of Its Cross-Motion for Summary Disposition of Contention NYS 35/36 ¶ 4-8 (Feb. 7, 2011); *id.*, Attach. 4: NRC Staff's Response to the State of New York's Statement of Material Facts Not in Dispute ¶ 1-3 (Feb. 7, 2011); Entergy Cross-Motion, Attach. 1: Statement of Material Facts in Support of Applicant's Cross-Motion for Summary Disposition of Contention NYS-35/36 ¶ 12-19 (Feb. 3, 2010); *id.*, Attach. 2: Applicant's Response to New York State's Statement of Material Facts Not in Dispute ¶ B.1-B.3, B.6, B.8, B.10 to B.16 (Feb. 3, 2011); New York Motion at 6-8.

⁶³ McGuire/Catawba, CLI-02-28, 56 NRC at 388 n.77.

⁶⁴ Pilgrim, CLI-10-11, 71 NRC at 294 n.26.

^{65 10} C.F.R. § 51.53(c)(3)(ii)(L).

renewal,⁶⁶ but it also has stated (with the apparent blessing of the NRC Staff) that it will conclude its SAMA review after license renewal is complete.⁶⁷ Although further review might well result in fewer identified cost-beneficial SAMAs, we cannot accept the NRC Staff's notion that fewer identified cost-beneficial SAMAs equals no gain in information.⁶⁸

On the contrary, given that Entergy's SAMA review conducted to date has resulted in the elimination of certain SAMAs and the identification of other SAMAs with favorable cost-to-benefit ratios,⁶⁹ it is equally plausible that further SAMA review would provide the agency and the public with a more accurate sense of the costs and benefits of relicensing IP2 and IP3.⁷⁰ Accordingly, we find that the NRC Staff has prematurely concluded its review before receiving all the requisite information from Entergy, and that until the NRC Staff receives and analyzes that information, it necessarily cannot take the requisite hard look at Entergy's LRA that is required under NEPA.

Moreover, the Staff has the option and the duty, as we discussed, to pursue modifications to Entergy's CLB at all periods during normal and extended operations through the backfit procedure if "there is a substantial increase in the overall protection of the public health and safety or the common defense and security to be derived from the backfit and that the direct and indirect costs of implementation for that facility are justified in view of this increased protection." Consequently, we disagree with the Staff as a matter of law that its citation to the aging management limitations of Part 54 constitutes the requisite rational basis for refusing to require implementation of SAMAs whose benefits, at this juncture and on this record, clearly outweigh their costs. Other than the Staff's misplaced citation to Part 54's limitations, we are left with no explanation at all for why it has decided not to require implementation of these cost-beneficial SAMAs by setting conditions for the license renewal, by directing a backfit, or through some other procedure.

⁶⁶ See Entergy Cross-Motion at 25-28.

⁶⁷ See FSEIS at G-48.

⁶⁸ See NRC Staff Cross-Motion at 20-24 (arguing that further review is not necessary and would not produce any more meaningful information for the Staff's review).

⁶⁹ See FSEIS at 5-10 ("In response to an NRC staff inquiry regarding estimated benefits for certain SAMAs and lower cost alternatives, Entergy identified one additional potentially cost-beneficial SAMA... and Entergy determined that one SAMA that was previously identified as potentially cost beneficial was no longer cost beneficial based on correction of an error in the ER.").

⁷⁰ See Hydro Resources, Inc. (P.O. Box 777, Crownpoint, NM 87313), LBP-06-19, 64 NRC 53, 62 (2006) (explaining the twin aims of NEPA as requiring the agency both to consider all environmental impacts of a proposed action and to inform the public that it has conducted that review).

⁷¹ 10 C.F.R. § 50.109(a)(3).

⁷² See id. § 54.33(c).

⁷³ See id. § 50.109.

Accordingly, we find that the FSEIS does not articulate a rational basis for not requiring Entergy to complete its SAMA review and for not requiring the implementation of cost-beneficial SAMAs prior to the relicensing of Indian Point Units 2 and 3. We further conclude, as a matter of law, that the FSEIS violates NRC regulations, NEPA, and the APA. Therefore, we *grant* New York's Motion and dispose of NYS-35/36 as a matter of law.

VI. CONCLUSION

For the foregoing reasons, we *grant* New York's Motion and, in so doing, hold that, under NRC Regulations, the APA, and NEPA, Entergy's licenses cannot be renewed unless and until the NRC Staff reviews Entergy's completed SAMA analyses and either incorporates the result of these reviews into the FSEIS or, in the alternative, modifies its FSEIS to provide a valid reason for recommending the renewal of the licenses before the analysis of potentially cost-effective SAMAs is complete and for not requiring the implementation of cost-beneficial SAMAs.

The goal of NEPA is to help federal agencies make decisions that are based on an accurate understanding of the environmental consequences of their actions. Accordingly, NEPA prohibits uninformed agency action. To accept the NRC Staff's position on this issue would be to accept the proposition that the regulations (*i.e.*, 10 C.F.R. § 51.53(c)(3)(ii)(L)) require the Applicant to conduct SAMA analysis as part of the license renewal process that the adequacy of those analyses and the conclusions to be drawn from those analyses by the NRC Staff are irrelevant to and need not be considered as part of the license extension decision. To accept this argument would be to put the Board's *imprimatur* on an uninformed agency decision. We are unwilling to accept that argument.

By granting New York's Motion, we are not directing the implementation of any SAMA.⁷⁷ Rather, we hold that the FSEIS must demonstrate that the NRC Staff has received sufficient information to take a hard look at SAMAs as required by 10 C.F.R. § 51.53(c)(3)(ii)(L), has in fact taken that hard look, and has adequately explained its conclusions that may, but need not, include requiring the implementation of cost-effective SAMAs.

⁷⁴ See 40 C.F.R. § 1500.1(c).

⁷⁵ Methow Valley, 490 U.S. at 351.

⁷⁶ If the NRC Staff has not previously considered SAMAs for an applicant's plant in an EIS or Environmental Assessment it must do so in the context of its review of a license renewal application, 10 C.F.R. § 51.53(c)(3)(ii)(L), and a license renewal cannot be granted unless and until all the applicable requirements of 10 C.F.R. Part 51 have been satisfied. 10 C.F.R. § 54.29(b).

⁷⁷ NEPA does not mandate the particular decisions that an agency must reach, only the process the agency must follow while reaching decisions. *McGuire/Catawba*, CLI-02-28, 56 NRC at 388 n.77 (citing *Methow Valley*, 490 U.S. at 350).

It is so ORDERED.

THE ATOMIC SAFETY AND LICENSING BOARD⁷⁸

Lawrence G. McDade, Chairman ADMINISTRATIVE JUDGE

Dr. Kaye D. Lathrop ADMINISTRATIVE JUDGE

Dr. Richard E. Wardwell ADMINISTRATIVE JUDGE

Rockville, Maryland July 14, 2011

⁷⁸ Copies of this Memorandum and Order were sent this date by Internet e-mail to: (1) Counsel for the NRC Staff; (2) Counsel for Entergy; (3) Counsel for the State of New York; (4) Counsel for Riverkeeper, Inc.; (5) Manna Jo Green, the Representative for Clearwater; (6) Counsel for the State of Connecticut; (7) Counsel for Westchester County; (8) Counsel for the Town of Cortlandt; (9) Mayor Sean Murray, the Representative for the Village of Buchanan; and (10) Michael J. Delaney, counsel for the City of New York.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Ann Marshall Young, Chair Dr. Paul B. Abramson Dr. Richard F. Cole

In the Matter of

Docket No. 50-293-LR (ASLBP No. 06-848-02-LR)

ENTERGY NUCLEAR GENERATION COMPANY and ENTERGY NUCLEAR OPERATIONS, INC. (Pilgrim Nuclear Power Station)

July 19, 2011

This proceeding concerns the application of Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc. for renewal of the operating license for its Pilgrim Nuclear Power Station, located in Plymouth, Massachusetts. On remand, a majority of the Licensing Board concludes that accounting for the meteorological patterns, atmospheric transport modeling, and data issues raised by Intervenor Pilgrim Watch cannot credibly alter which severe accident mitigation alternatives are potentially cost-beneficial to implement.

SEVERE ACCIDENT MITIGATION ANALYSIS

The requirements of the National Environmental Policy Act (NEPA) as applied to severe accident mitigation alternatives (SAMA) analysis do not demand a fully developed plan or detailed examination of specific measures that will be employed to mitigate adverse environmental effects. SAMA analysis is neither a worst-case nor a best-case impacts analysis, and the agency's obligations under NEPA are tempered by a practical rule of reason.

SEVERE ACCIDENT MITIGATION ANALYSIS

Use of mean consequences in severe accident mitigation alternatives analysis is consistent with Commission policy and precedent, whereas the 95th percentile approach requested by Intervenor is akin to a worst-case scenario analysis — which is not required by the Commission.

SEVERE ACCIDENT MITIGATION ANALYSIS

The goal of a severe accident mitigation alternatives analysis is to identify potential changes to a nuclear power plant, or its operations, that might reduce the risk (the likelihood or the impact, or both) of a severe reactor accident for which the benefit of implementing the changes outweighs the cost of the implementation.

MATERIALITY

Based on uncontroverted evidence, the effects of the two meteorological patterns at issue, the "sea breeze" effect and the "hot spot" effect, must cause the expected average offsite damages to increase by at least a factor of two for the next most costly severe accident mitigation alternative to be cost-effective, i.e., to credibly alter the conclusions regarding which severe accident mitigation alternatives are cost-beneficial to implement. Uncontroverted expert testimony establishes that more accurate modeling of the meteorology would not result in differences approaching a factor of two for any particular meteorological condition, and therefore could not cause the computed resultant deposition of radioactive products released during any particular severe accident scenario to be in error by more than a factor of two.

EVIDENCE

The evidence before us indicates that more accurate meteorological modeling of the "hot spot" phenomenon cannot alter the severe accident mitigation alternatives cost-benefit analysis because (1) experts testified that the phenomenon is unsubstantiated and would not affect the severe accident mitigation alternatives cost-benefit conclusions if it did exist, (2) the Intervenor has not provided any scientific or technical support for its generalized assertions about "hot spots," and (3) Intervenor's declarant's unsubstantiated assertion of the phenomenon's importance was made without his being qualified as an expert in meteorology.

PARTIAL INITIAL DECISION

(Rejecting, Upon Remand, Pilgrim Watch's Challenge to Meteorological Modeling in SAMA Analysis in Entergy's License Renewal Application)

I. INTRODUCTION

Applicant Entergy¹ seeks renewal of its operating license for the Pilgrim Nuclear Power Station (Pilgrim) for an additional 20-year period beyond its current operating license expiration date of June 8, 2012.² The Commission has remanded to us³ an issue raised by Pilgrim Watch, the Intervenor in this proceeding, regarding certain aspects of the meteorological modeling and data used in Entergy's severe accident mitigation alternatives (SAMA) analysis which Pilgrim Watch argues to be deficient. Having fully considered all record evidence, we find that accounting for the meteorological patterns, atmospheric transport modeling, and data issues raised by Pilgrim Watch cannot credibly alter the Pilgrim SAMA analysis conclusions regarding which SAMAs are potentially cost-beneficial to implement. Accordingly, we find in favor of the Applicant, Entergy, with respect to the remanded matters.⁴

II. BACKGROUND

A. The Procedural History of Entergy's License Renewal Application

On January 25, 2006, Entergy submitted an application to renew its operating license for Pilgrim for a 20-year period pursuant to 10 C.F.R. Part 54.⁵ Pilgrim Watch filed an intervention petition⁶ in response to the NRC's publication of a notice of opportunity for hearing in the *Federal Register*.⁷

This Board, in LBP-06-23, granted Pilgrim Watch's hearing request, admitting two contentions: Contention 1, concerning the aging management program for buried pipes and tanks containing radioactively contaminated water, and

¹The Applicant Entergy encompasses two entities, Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc.

² See 71 Fed. Reg. 15,222, 15,222 (Mar. 27, 2006).

³CLI-10-11, 71 NRC 287, 290 (2010).

⁴ We further find that reliance by the NRC Staff upon Entergy's SAMA analysis would be reasonable in satisfaction of its obligations under the National Environmental Policy Act (NEPA).

⁵71 Fed. Reg. at 15,222.

⁶ Request for Hearing and Petition to Intervene by Pilgrim Watch (May 25, 2006). In its intervention petition, Pilgrim Watch proffered five contentions. *Id.* at 3.

⁷71 Fed. Reg. at 15,222.

Contention 3, challenging Entergy's SAMA analysis.⁸ In admitting Contention 3, the Board limited it to the following challenge:

Applicant's SAMA analysis for the Pilgrim plant is deficient in that the input data concerning (1) evacuation times, (2) economic consequences, and (3) meteorological patterns are incorrect, resulting in incorrect conclusions about the cost versus benefits of possible mitigation alternatives, such that further analysis is called for.⁹

The Board also granted the requests from the Towns of Plymouth and Duxbury, Massachusetts, to participate in this proceeding pursuant to 10 C.F.R. § 2.315(c), ¹⁰ and rejected an intervention petition filed by the Massachusetts Attorney General. ¹¹

On May 18, 2007, Entergy moved for summary disposition of Contention 3.¹² The NRC Staff supported the motion and Pilgrim Watch opposed the motion.¹³ In LBP-07-13, the majority of this Board granted Entergy's motion and dismissed Contention 3.¹⁴

On April 10, 2008, the Board held an evidentiary hearing on the merits of Contention 1¹⁵ and closed the evidentiary record shortly thereafter. ¹⁶ In LBP-08-22, we resolved Contention 1 in favor of Entergy and terminated the proceeding. ¹⁷

⁸ See LBP-06-23, 64 NRC 257, 348-49 (2006).

⁹ *Id.* at 341.

¹⁰ See Board Order and Notice (Regarding Oral Argument and Limited Appearance Statement Sessions) (June 21, 2006) at 1 (unpublished).

¹¹LBP-06-23, 64 NRC at 349, aff'd, CLI-07-3, 65 NRC 13, 16 (2007).

¹² See Entergy's Motion for Summary Disposition of Pilgrim Watch Contention 3 (May 18, 2007).

¹³ See NRC Staff Response to Entergy's Motion for Summary Disposition of Pilgrim Watch Contention 3 (July 2, 2007) at 1; Pilgrim Watch's Answer Opposing Entergy's Motion for Summary Disposition of Pilgrim Watch Contention 3 (July 2, 2007) at 1.

¹⁴ See LBP-07-13, 66 NRC 131, 137 (2007). Pilgrim Watch sought interlocutory Commission review of LBP-07-13, Pilgrim Watch Brief on Appeal of LBP-07-13 Memorandum and Order (Ruling on Motion to Discuss [sic] Petitioner's Contention 3 Regarding Severe Accident Mitigation Alternatives) (Nov. 13, 2007) at 1, which the Commission denied, holding that Pilgrim Watch's appeal must await the Board's final decision. CLI-08-2, 67 NRC 31, 32 (2008).

¹⁵ Tr. at 557-874.

¹⁶ Board Memorandum and Order (Ruling on Pilgrim Watch Motions Regarding Testimony and Proposed Additional Evidence Relating to Pilgrim Watch Contention 1) (June 4, 2008) at 3-4 (unpublished).

¹⁷LBP-08-22, 68 NRC 590, 610 (2008). Judge Young concurred with LBP-08-22. *Id.* at 612 (Young, J., concurring). The Commission denied Pilgrim Watch's petition for review of Contention 1. *See* CLI-10-14, 71 NRC 449, 471 (2010).

Pilgrim Watch petitioned for review of that initial decision and several other Board decisions, including our order dismissing Contention 3 on summary disposition.¹⁸

On March 26, 2010, the Commission reversed in part the Board majority's decision granting summary disposition of Contention 3 and remanded the matter "as limited by [the Commission's] ruling, to the Board for hearing." Specifically, the Commission remanded certain meteorological issues imbedded in Contention 3 that challenged the adequacy of the straight-line Gaussian plume model used in the MACCS2 code for performing the SAMA analysis, insofar as they considered the "sea breeze" and the potential for plumes headed out to sea to change direction, remain concentrated, and cause "hot spots" of radioactivity. ²⁰

Additionally, if the Board were to conclude that there is a deficiency in the challenged meteorological modeling and data that is material enough that it could cause additional SAMAs to become cost-effective, the Commission's remand required consideration of certain economic costs and evacuation timing issues.²¹ The Commission explained this qualified remand:

if the Board on remand were to conclude that there is a material deficiency in the meteorological patterns modeling, the economic cost calculations also could warrant reexamination. We therefore remand the economic cost and evacuation time portions of Contention 3 to the Board, but only to the extent that the Board's merits conclusion on meteorological patterns may materially call into question the relevant economic cost and evacuation timing conclusions in the Pilgrim SAMA analysis.²²

On August 27, 2010, the Commission provided further guidance regarding the scope of Contention 3, explaining that "the issue on remand focuses on the adequacy of the atmospheric dispersion modeling in the Pilgrim SAMA analysis, not the methodology or underlying assumptions used for *translating* the atmospheric dispersion modeling results into economic costs."²³

¹⁸ See Pilgrim Watch's Petition for Review of LBP-06-848 [sic], LBP-07-13, LBP-06-23 and the Interlocutory Decisions in the Pilgrim Nuclear Power Station Proceeding (Nov. 12, 2008) at 1.

¹⁹ CLI-10-11, 71 NRC at 290.

²⁰ Id. at 298-300, 305, 307.

²¹ Id. at 307-08.

²² *Id.* at 308. Pilgrim Watch requested that the Commission reconsider its decision in CLI-10-11, arguing that the Commission improperly limited the scope of Contention 3 to exclude the economic consequences portion of the contention. *See* Pilgrim Watch Motion for Reconsideration of CLI-10-11 (Apr. 5, 2010) at 2. The Commission denied the motion, reiterating that the effects of spent fuel accidents, decontamination cleanup costs, and health costs are not within the scope of the remanded contention. CLI-10-15, 71 NRC 479, 480-84 (2010).

²³ CLI-10-22, 72 NRC 202, 207 (2010). Further, the Commission noted that the Board should "consider whether the NRC's practice [of using the mean consequence values] is reasonable for a SAMA analysis, and whether Pilgrim Watch's concerns are timely raised." *Id.* at 207 n.34. In (Continued)

On September 15, 2010, the Board held a prehearing conference with the parties to discuss the scope of Contention 3.²⁴ After receiving briefs on the matter,²⁵ on September 23, 2010, the Board framed the scope of remanded Contention 3 as follows:

the primary and threshold issue [is] whether the meteorological modeling in the Pilgrim SAMA analysis is adequate and reasonable to satisfy NEPA, and whether accounting for the meteorological patterns/issues of concern to Pilgrim Watch could, on its own, credibly alter the Pilgrim SAMA analysis conclusions on which SAMAs are cost-beneficial to implement.²⁶

The Board stated that if it found meteorological modeling deficiencies in the SAMA analysis significant enough to cause additional SAMAs to become cost-effective, then the Board would consider whether the evacuation and economic

response, the Board called for briefs, and the Board majority requested expert affidavits from the parties regarding the timeliness of the "mean consequence values issues." See Board Order (Confirming Matters Addressed at September 15, 2010, Telephone Conference) (Sept. 23, 2010) at 2 (unpublished) [hereinafter Sept. 23, 2010 Order]; Board Order (Questions from Board Majority Regarding the Mechanics of Computing "Mean Consequences" in SAMA Analyses) (Oct. 26, 2010) at 3-5 (unpublished). After considering the briefs and affidavits submitted by the parties, a majority of the Board held that the mean consequence values issue was not timely raised and thus the Board would not entertain the issue. See Board Order (Ruling on Timeliness of Mean Consequence Issue) (Nov. 23, 2010) at 1-2 (unpublished); accord Board Memorandum and Order (Ruling on Timeliness of Mean Consequence Values Issue) (Mar. 3, 2011) at 1. Judge Young dissented, concluding that Pilgrim Watch raised the issue in responding to Entergy's motion for summary disposition of Contention 3. See Separate Statement of Administrative Judge Ann Marshall Young (Mar. 3, 2011) at 1, 4 (unpublished).

²⁴ See Board Order (Scheduling Telephone Conference) (Sept. 2, 2010) (unpublished) [hereinafter Conference Scheduling Order]. Pilgrim Watch filed a motion for clarification of the September 2, 2010 order. See Pilgrim Watch Motion for Clarification ASLB Order (Sept. 2, 2010) (Sept. 9, 2010) (ADAMS Accession No. ML201580318). The Board did not rule on that motion, instead advising that Pilgrim Watch may seek further clarification with the Commission. See Sept. 23, 2010 Order at 2-3. In response, Pilgrim Watch requested such clarification from the Commission. See Pilgrim Watch Motion Regarding ASLB Refusal to Respond to Pilgrim Watch's Motion for Clarification ASLB Order (Sept. 2, 2010) (Sept. 22, 2010). The Commission denied Pilgrim Watch's request, concluding that Pilgrim Watch's questions were answered by the Board or were premature. CLI-10-28, 72 NRC 553, 554 (2010).

²⁵NRC Staff's Initial Response to the Board's Order (Regarding Deadlines for Submission of Parties) (May 12, 2010); Entergy's Submission on Scope and Schedule for Remanded Hearing (May 13, 2010); Pilgrim Watch Response to ASLB's May 5, 2010 Order (May 13, 2010); NRC Staff Reply to Pilgrim Watch Response Board's [sic] May 5, 2010 Order (May 17, 2010); Pilgrim Watch's Reply to Entergy's Submission on Scope and Schedule for Remanded Hearing (May 17, 2010); Pilgrim Watch's Reply to NRC Staffs [sic] Initial Brief to the Board's Order (Regarding Deadlines for Submission of Parties) (May 17, 2010); Entergy's Reply to Pilgrim Watch's Response to ASLB's May 5, 2010 Order (May 18, 2010).

²⁶ Sept. 23, 2010 Order at 1.

issues identified in CLI-10-11 might be open for adjudication.²⁷ On the other hand, if the Board determined there are no meteorological modeling deficiencies calling into question the SAMA analysis conclusions, then the Board's action on remand would be complete.²⁸ The Board also directed the parties to address a series of questions regarding the meteorological phenomena at issue, specifically the impact of "sea breeze" and "hot spots" on Pilgrim's SAMA analysis.²⁹

On January 3, 2011, the parties filed initial written presentations on Contention 3, prefiled expert testimony, and prefiled exhibits.³⁰ Thereafter, on January 13, 2011, pursuant to 10 C.F.R. § 2.323, Entergy filed a motion *in limine* contending that Pilgrim Watch's prefiled testimony and portions of its exhibits were outside the scope of remanded Contention 3 or unsupported by a qualified witness, and thus should be excluded from the evidentiary record.³¹ The NRC Staff supported Entergy's motion,³² and Pilgrim Watch opposed the motion, but conceded that its prefiled testimony was a statement of position rather than prefiled testimony.³³

On February 1, 2011, the parties filed rebuttal testimony.³⁴

²⁷ *Id.* at 3.

²⁸ See Conference Scheduling Order at 2.

²⁹ Sept. 23, 2010 Order, App. A.

³⁰ Entergy submitted the following prefiled testimony: Exh. ENT000001, Testimony of Dr. Kevin R. O'Kula and Dr. Steven R. Hanna on Meteorological Matters Pertaining to Pilgrim Watch Contention 3 (Jan. 3, 2011) [hereinafter O'Kula/Hanna Testimony]; Exh. ENT000012, Testimony of Dr. Kevin R. O'Kula on Source Term Used in the Pilgrim Nuclear Power Station Severe Accident Mitigation Alternatives (SAMA) Analysis (Jan. 3, 2011); and ten prefiled exhibits. See Entergy Hearing Exhibit List (Jan. 3, 2011). The NRC Staff submitted the following prefiled testimony: Exh. NRC000014, NRC Staff Testimony of Nathan E. Bixler and S. Tina Ghosh Concerning the Impact of Alternative Meteorological Models on the Severe Accident Mitigation Alternatives Analysis (Feb. 2, 2011) [hereinafter Bixler/Ghosh Testimony]; Exh. NRC000015, NRC Staff Testimony of James V. Ramsdell, Jr., Concerning the Impact of Specific Meteorological Conditions on the Severe Accident Mitigation Analysis (Feb. 2, 2011) [hereinafter Ramsdell Testimony]; and thirteen exhibits. NRC Staff Exhibit List (Feb. 2, 2011). Additionally, the NRC Staff and Entergy jointly filed one exhibit. Exh. JN000001, C. R. Molenkamp et al., Comparison of Average Transport and Dispersion Among a Gaussian, a Two-Dimensional, and a Three-Dimensional Model (Oct. 2004) [hereinafter Molenkamp Report]. Although entitled "pre-filed testimony," Pilgrim Watch's submission contained no expert testimony. See Pilgrim Watch SAMA Remand Pre-Filed Testimony (Jan. 3, 2011) [hereinafter Pilgrim Watch Statement of Position]. Pilgrim Watch filed twenty-one exhibits. Pilgrim Watch List of Exhibits (Jan. 3, 2011).

³¹ Entergy's Motion in Limine to Exclude from Evidence Pilgrim Watch's SAMA Remand Pre-Filed Testimony and Exhibits (Jan. 13, 2011) at 1-2.

³²NRC Staff's Response in Support of Entergy's Motion in Limine (Jan. 24, 2011) at 1.

³³ Pilgrim Watch Reply to Entergy's Motion in Limine to Exclude from Evidence Pilgrim Watch's SAMA Remand Pre-Filed Testimony and Exhibits (Jan. 23, 2011) at 1-2.

³⁴Entergy filed the following rebuttal testimony: Exh. ENT000013, Rebuttal Testimony of Dr. Kevin R. O'Kula and Dr. Steven R. Hanna on Meteorological Matters Pertaining to Pilgrim Watch (Continued)

On February 16, 2011, the parties filed a joint motion requesting that the Board resolve the threshold issue of Contention 3 based on the parties' prefiled written evidentiary submissions without holding an oral evidentiary hearing.³⁵ The parties also requested that the Board:

accept into the record the prefiled testimony of the parties on the meteorological modeling issues, including the January 30 declaration of Dr. Bruce Egan submitted by Pilgrim Watch, and the pre-filed exhibits of the parties subject to ruling on Entergy's Motion In Limine.³⁶

On February 18, 2011, the Board convened a teleconference with the parties to discuss *inter alia* the joint motion.³⁷ The Board granted, pursuant to the provisions of 10 C.F.R. § 2.1206, the joint motion for good cause shown and directed the parties to submit proposed findings of fact and conclusions of law.³⁸ The Board also granted Entergy's motion *in limine* in part, excluding as evidence the January 3, 2011 prefiled testimony of Pilgrim Watch, explaining that the document would not be considered evidence but rather a statement of position.³⁹ Additionally, the Board admitted all of the exhibits of the parties (including the declaration of Dr. Egan), but stated that it would accord each exhibit weight to the extent it is "relevant, material, and reliable" pursuant to 10 C.F.R. § 2.337(a).⁴⁰

On March 9, 2011, in Plymouth, Massachusetts, the Board heard argument on the threshold issue of Contention 3, examined the parties' counsel regarding proposed findings of fact and conclusions of law, and heard short closing arguments.⁴¹

Contention 3 (Feb. 1, 2011) [hereinafter O'Kula/Hanna Rebuttal Testimony]; and Exh. ENT000014, Rebuttal Testimony of Dr. Kevin R. O'Kula on Source Term Used in the Pilgrim Nuclear Power Station SAMA Analysis (Feb. 1, 2011). The NRC Staff filed the following rebuttal testimony: Exh. NRC000016, NRC Staff Rebuttal Testimony of S. Tina Ghosh Concerning Pilgrim Watch's Application of NUREG-1150 and NUREG-1465 (Feb. 2, 2011). Pilgrim Watch submitted the Statement by Bruce A. Egan, ScD., CCM (Jan. 30, 2011).

³⁵ Joint Motion Requesting Resolution of Contention 3 Meteorological Issues on Written Submissions (Feb. 16, 2011) at 1.

³⁶ *Id.* at 2.

³⁷ Tr. at 754-83; *accord* Board Order (Addressing Joint Motion, Motion in Limine, Proposed Findings of Fact and Conclusions of Law/Concluding Statements of Position, and Argument to be held March 9, 2011) (Feb. 22, 2011) at 1-2 (unpublished) [hereinafter Feb. 22, 2011 Order].

³⁸ Feb. 22, 2011 Order at 2.

³⁹ *Id*.

⁴⁰ *Id.* at 2, 5.

⁴¹ Tr. at 784-1018.

III. LEGAL STANDARDS

Pilgrim Watch's Contention 3 challenges the adequacy of the SAMA analysis contained in Entergy's environmental report. The NRC's license renewal regulations require that, for a license renewal to be issued, the Commission must determine that the applicable requirements of 10 C.F.R. Part 51, Subpart A have been satisfied.⁴² In an operating license renewal proceeding and as relevant to Contention 3, 10 C.F.R. § 51.53(c)(3)(ii)(L) requires an applicant's environmental report to contain, "[i]f staff has not previously considered severe accident mitigation alternatives for the applicant's plant in an environmental impact statement or related supplement or in an environmental assessment, a consideration of alternatives to mitigate severe accidents."⁴³ Because the Commission has established this requirement to provide information to be used by the Agency staff in fulfillment of its obligation under the National Environmental Policy Act (NEPA),⁴⁴ the suitability of the Entergy SAMA analysis must be judged by the requirements of NEPA.

SAMA analysis is a site-specific mitigation analysis, for which "NEPA demands no fully developed plan or detailed examination of specific measures which will be employed to mitigate adverse environmental effects."⁴⁵ The Commission has explained that the SAMA analysis is neither a worst-case⁴⁶ nor a best-case

⁴² 10 C.F.R. § 54.29(b).

⁴³ *Id.* § 51.53(c)(3)(ii)(L) (emphasis added).

⁴⁴ See id. § 51.1 (stating that the regulations in Part 51 implement section 102(2) of NEPA, codified at 42 U.S.C. § 4332(2)).

⁴⁵ CLI-10-11, 71 NRC at 316 (quoting *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 431 (2003)) (internal quotations omitted).

⁴⁶ In this regard, we note that our colleague once again mentions that she would have admitted evidence on the question of whether the NRC should have used a 95th percentile consequence rather than the mean consequence. *See* Separate Statement of Administrative Judge Ann Marshall Young attached hereto at 2-3. But it is plain that the "mean" is consistent with Commission policy and precedent, whereas the 95th percentile is akin to a worst-case scenario analysis — which is not an approach required by the Commission. In fact, the Commission has stated in this proceeding that "[a]s a policy matter, license renewal applicants are not required to base their SAMA analysis upon consequence values at the 95th percentile consequence level (the level used for the GEIS severe accident environmental impacts analysis)." CLI-10-11, 71 NRC at 316-17. The Commission has expressed a similar view in another license renewal proceeding. *Cf. AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 263 (2009) (holding that the "reasonable assurance" standard for aging management programs does not require a 95% confidence level of compliance).

impacts analysis.⁴⁷ And the agency's NEPA requirements are "tempered by a practical rule of reason."⁴⁸

Regarding the adjudication of Contention 3, the Commission explained that the relevant issue is "not whether there are 'plainly better' atmospheric dispersion models or whether the SAMA analysis can be refined further," but whether "it looks genuinely plausible that inclusion of an additional factor or use of other assumptions or models may change the cost-benefit conclusions for the SAMA candidates evaluated." The Commission also concluded that

[u]ltimately, NEPA requires the NRC to provide a "reasonable" mitigation alternatives analysis, containing "reasonable" estimates, including, where appropriate, full disclosures of any known shortcomings in available methodology, disclosure of incomplete or unavailable information and significant uncertainties, and a reasoned evaluation of whether and to what extent these or other considerations credibly could or would alter the Pilgrim SAMA analysis conclusions on which SAMAs are cost-beneficial to implement.⁵¹

That said, we note that the question of whether or not Staff has satisfied its obligations under NEPA is not at issue before us; the present challenge (and, therefore, the portion of our previous decision remanded for our further examination) is, as we discussed above, to the SAMA analysis performed by Entergy and submitted in fulfillment of its obligations to the Staff under 10 C.F.R. § 51.53(c)(3)(ii)(L). Thus, we evaluate below the sufficiency of the remanded aspects of the Entergy SAMA analysis by applying, in relevant part, the standards appropriate for a NEPA analysis.

IV. THE PARTIES' WITNESSES

As to the meteorological matters of Contention 3, Entergy presented, and the Board accepted into evidence as exhibits, the prefiled written testimony of two witnesses: (1) Dr. Kevin R. O'Kula, Advisory Engineer with URS Safety Management Solutions, LLC, and (2) Dr. Steven R. Hanna, President of Hanna Consultants and an Adjunct Associate Professor at the Harvard School of Public

⁴⁷ CLI-10-11, 71 NRC at 316; see also Robertson v. Methow Valley Citizens Counsel, 490 U.S. 332, 354-56 (1989).

⁴⁸ CLI-10-22, 72 NRC at 208 (quoting *Communities, Inc. v. Busey*, 956 F.2d 619, 626 (6th Cir.

⁴⁹ CLI-10-11, 71 NRC at 315.

⁵⁰ *Id.* at 317.

⁵¹ CLI-10-22, 72 NRC at 208-09 (internal citations omitted).

Health.⁵² The professional qualifications of the witnesses are detailed in their prefiled testimony.⁵³

Regarding the meteorological matters pertaining to Contention 3, the NRC Staff presented, and the Board accepted into evidence as exhibits, the prefiled written testimony of three witnesses: (1) Dr. Nathan Bixler, Principal Member of the Technical Staff at Sandia National Laboratories, (2) Dr. S. Tina Ghosh, Senior Program Manager for the NRC,⁵⁴ and (3) Mr. James Ramsdell, Jr., Senior Technical Researcher for Pacific Northwest Laboratories.⁵⁵ The professional qualifications of the witnesses were appended to their prefiled testimony.⁵⁶

Pilgrim Watch presented, and the Board accepted a document entitled "Prefiled Testimony" which, by agreement of the parties, we accepted as a statement of position. In addition, the declarations of: Dr. Bruce A. Egan, President of Egan Environmental, Inc., were accepted into evidence.⁵⁷ The professional qualifications of Dr. Egan were discussed in the prefiled declaration.⁵⁸

V. FINDINGS OF FACT

A. Statement of the Issue

The threshold issue before the Board is "whether the meteorological modeling in the Pilgrim SAMA analysis is adequate and reasonable to [enable the Staff to] satisfy [its obligations under] NEPA, and whether accounting for the meteorological patterns/issues of concern to Pilgrim Watch could credibly alter the Pilgrim SAMA analysis conclusions on which SAMAs are cost-beneficial to implement." The resolution of this issue implicates two particular weather patterns—the "sea breeze" effect (and the effects of coastal topography thereupon) and

⁵²O'Kula/Hanna Testimony at Q1 to A7.

⁵³ Id. at 1-5 (discussing the professional qualifications of each witness).

⁵⁴ Bixler/Ghosh Testimony at 1.

⁵⁵ Ramsdell Testimony at 1.

⁵⁶Exh. NRC000011, Dr. Bixler's Statement of Qualifications (Jan. 3, 2011); Exh. NRC000012, Dr. Ghosh's Statement of Qualifications (Jan. 3, 2011); Exh. NRC000013, Mr. Ramsdell's Statement of Qualifications (Jan. 3, 2011).

⁵⁷ Exh. PWA000001-00-BD01, Declaration of Bruce A. Egan, Sc.D., CCM, in Support of Pilgrim Watch's Response Opposing Entergy's Motion for Summary Disposition of Pilgrim Watch Contention 3 (June 20, 2007) [hereinafter Egan Decl.]; Exh. PWA000022-00-BD01, Declaration of Bruce A. Egan, Sc.D., CCM, in Support of Pilgrim Watch's Response Opposing Entergy's Initial Statement of Position on Pilgrim Watch Contention 3 (Jan. 30, 2011); Exh. PWA000023-00-BD01, Statement by Bruce A. Egan, Sc.D., CCM (Jan. 30, 2011) [hereinafter Egan Statement].

⁵⁸ Egan Decl. at 2.

⁵⁹ Conference Scheduling Order at 1.

the "hot spot" effect — which Pilgrim Watch claims, if properly accounted for, could cause the SAMA cost-benefit-analyses conclusions to be altered.

B. SAMA Analyses in General

The goal of a SAMA analysis is to identify potential changes to a nuclear power plant, or its operations, that might reduce the risk (the likelihood or the impact, or both) of a severe reactor accident for which the benefit of implementing the change outweighs the cost of implementation. To that end, a SAMA analysis evaluates the extent to which "probability-weighted consequences of the analyzed severe-accident sequences would decrease if a specific SAMA were implemented at a particular facility," and whether the decrease in consequences would sufficiently reduce risk for the SAMA to be cost-beneficial to implement. A SAMA analysis is a probabilistic analysis focused on long-term and spatially averaged impacts from severe accident events for the purpose of making cost-benefit evaluations. The effects are averaged both over the area within 50 miles of the site and over the expected variations in meteorological patterns.

C. Additional Cost-Effective SAMA at Pilgrim

Uncontroverted evidence establishes that the lowest-cost not-implemented SAMA for the Pilgrim plant has a cost approximately twice the benefit derived from its implementation.⁶³ Thus, for the asserted flaws in the meteorological modeling to cause that next SAMA to be cost-effective to implement, the benefit or cost averted must increase by approximately a factor of two by correction of those errors asserted by Pilgrim Watch and remanded here. And this advises that the sum of the offsite economic cost risk (OECR) and population dose risk (PDR), which together comprise approximately 86% of the averted-cost benefit, would need to increase by somewhat more than a factor of two before another

⁶⁰ Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 5 (2002) ("The purpose of the SAMA review is to ensure than any plant changes — in hardware, procedures, or training — that have a potential for significantly improving severe accident safety performance are identified and assessed. If the cost of implementing a particular SAMA is greater than its associated benefit, the SAMA would not be considered cost-beneficial."); accord O'Kula/Hanna Testimony at A15 (O'Kula); Bixler/Ghosh Testimony at A7 (Ghost and Bixler).

⁶¹ CLI-10-11, 71 NRC at 291.

⁶²O'Kula/Hanna Testimony at A16 (O'Kula).

⁶³ The results of the SAMA analysis for the Pilgrim plant indicate that for the next potentially cost-beneficial SAMA, SAMA 8, the approximate cost of implementing the SAMA (>\$5,000,000) is more than twice the benefit (\$2,410,000) derived from the cost averted by implementing the SAMA. Id. at A47 (O'Kula).

SAMA would be considered potentially cost beneficial.⁶⁴ Indeed, the Staff's expert witness, Mr. Ramsdell, testified that this averted-cost benefit would need to increase "by a factor of about 2.5 [in order] to make the next lowest cost SAMA appear cost[]beneficial."⁶⁵ Thus we find that the effects of the two meteorological patterns at issue must cause the expected average offsite damages to increase by at least a factor of two for the next most costly SAMA to be cost-effective, i.e., to credibly alter the Pilgrim SAMA analysis conclusions on which SAMAs are cost-beneficial to implement.

D. As to the Sea Breeze

Pilgrim Watch contends that the Pilgrim SAMA analysis significantly underestimates offsite consequences of a severe accident because (1) the MACCS2 computer code used by Entergy in its SAMA analysis ignores sea breeze circulations and (2) the single meteorological data collection site used to provide the data for the computations cannot adequately capture the complex wind trajectories caused by the sea breeze effect. 66 Pilgrim Watch argues that "the topography of a coastal environment plays an important role in the sea breeze circulation[] and can alter the typical flow pattern expected from a typical sea breeze along a flat coastline." Pilgrim Watch also argues that "Pilgrim's coastal location increases doses on communities inland to an approximate distance of 15 km (9.3 miles)."

1. Pilgrim's Wind Data Included the Appropriate Portion and Information for the Sea Breeze

Contrary to Pilgrim Watch's claim, the computations with MACCS2 do not ignore sea breezes. Entergy's SAMA analysis covers an entire year and thus includes data reflecting both types of coastal breeze, land and sea breezes.⁶⁹ Pilgrim's onsite meteorological tower captured both seaward and inland coastal breezes during 2001, and Entergy used this meteorological data in the MACCS2 calculation of the SAMA analysis.⁷⁰ Both the primary and backup data collection

⁶⁴ Id. (O'Kula).

⁶⁵ Ramsdell Testimony at A36.

⁶⁶ Pilgrim Watch Statement of Position at 4-5.

⁶⁷ *Id.* at 6-7 (citing Exh. PWA000011-00-BD01, J. D. Spengler & G. J. Keeler, Final Project Report, Feasibility of Exposure Assessment for the Pilgrim Nuclear Power Plant at 40 (May 12, 1988)) [hereinafter Spengler Report].

⁶⁸ *Id.* at 6 (citing Spengler Report).

⁶⁹O'Kula/Hanna Testimony at A74 (Hanna); Ramsdell Testimony at A10.

⁷⁰O'Kula/Hanna Testimony at A77 (O'Kula).

towers are located less than ¹/₄ mile from the coastline.⁷¹ If there is a coastal breeze onsite, it is recorded by the onsite meteorological towers and has been included as part of the MACCS2 calculation. As concluded by Entergy's experts, "the 2001 Pilgrim hourly meteorological data used in the SAMA analysis captures the coastal breeze effect, including any sea breeze blowing inland during the day and any land breeze blowing offshore during the night."⁷²

Pilgrim Watch's and Dr. Egan's claims that one meteorological data collection site cannot adequately capture the complex wind trajectories caused by the sea breeze effect were shown to be incorrect by Dr. O'Kula and Dr. Hanna. By comparing annual wind roses (which show the frequency that the wind is blowing in each of sixteen directional sectors)73 for other coastal sites in the SAMA domain, Dr. O'Kula and Dr. Hanna concluded that the Pilgrim site's observed wind directions for 2001 are representative of the other coastal sites.⁷⁴ Dr. O'Kula and Dr. Hanna also testified that they compared the Pilgrim 2001 annual wind rose to wind roses from inland sites within the SAMA domain beyond typical sea breeze range, such as Taunton, and found "little net change" between them. 75 Dr. O'Kula and Dr. Hanna concluded that the 2001 annual wind roses "show no dramatic differences that would affect the long term and broad area impacts produced by a SAMA analysis."76 They explained that local temporal and spatial dependencies of individual sea breezes do not affect the SAMA analysis because they average out over the year.⁷⁷ Dr. O'Kula and Dr. Hanna confirmed this result by CALMET Trajectory Analysis, 78 which was used to calculate the annual distribution of trajectories from the Pilgrim Station.

Entergy also presented uncontroverted evidence demonstrating that the single year's worth of meteorological data collected at the site during 2001 is both temporally and spatially representative of other years' data. Dr. Hanna explained that comparing the annual wind rose at Pilgrim for 2001 to the annual wind roses at Pilgrim for 1996-2000 shows that the 2001 wind rose is reasonably representative of other years.⁷⁹ Indeed, quantitatively comparing the percentages of each year

⁷¹ Id. at A73 (O'Kula and Hanna).

⁷² Id. (O'Kula and Hanna) (emphasis added).

⁷³ Id. at A14 (O'Kula and Hanna).

⁷⁴ Id. at A79 (O'Kula and Hanna).

⁷⁵ Id. (O'Kula and Hanna) (citing Exh. ENT000004-00-BD01, Steven Hanna & Elizabeth Hendrick, Analysis of Annual Wind Roses and Precipitation Within about 50 Miles of the Pilgrim Nuclear Power Station, and Use of CALMET to Calculate the Annual Distribution of Trajectories from the Pilgrim Station at B-11 (Dec. 2010) [hereinafter Hanna Report]).

⁷⁶ *Id.* (O'Kula and Hanna).

⁷⁷ Id. (O'Kula and Hanna).

⁷⁸ Id. (O'Kula and Hanna).

⁷⁹ *Id.* at Q65-A65 (Hanna).

that the wind is blowing in each of the sixteen directional sectors establishes that the maximum variation from year to year was an increase in the NNE direction by 3.1% (i.e., from 14% to 17.1%), while more than half of the yearly variations in any directional sector are less than 1%.80 This comparison led Dr. Hanna to conclude that, as to wind direction used in the SAMA analysis, "the annual wind rose from 2001 at the Pilgrim Station is representative of other years."81 Entergy also presented an evaluation demonstrating that the Plymouth Municipal Airport 2001 precipitation data used in the Pilgrim SAMA analysis is representative of the 2001 precipitation levels at eight other sites in the SAMA domain⁸² and representative of the precipitation levels for the years 1995 to 2009.83

Dr. Egan suggests that the Molenkamp model comparison study (Molenkamp Report) does not validate use of the Gaussian Plume for Pilgrim's SAMA analysis because "a comparison of model predictions made in the relatively flat area of the 'Southern Great Plains (SGP) site in Oklahoma and Kansas' cannot be used to state how model comparisons would fare at a coastal area like Plymouth, MA."84 Entergy's experts agree that "topography and other surface property variability . . . could affect local wind speed and direction,"85 but note that the Molenkamp Report concluded that the selected site had "sufficient variability for the purpose of this study,"86 which was to evaluate whether it was necessary to use more sophisticated models than MACCS2 for performing SAMA analyses.

Dr. Hanna provided specific uncontroverted evidence indicating adequate similarity between the Southern Great Plains and the Pilgrim coastal domain, in terms of wind variations and topography.⁸⁷ He testified that the wind roses the Molenkamp Report provided for six sites showed approximately the same variability as the wind roses for weather sites in the Pilgrim analysis.⁸⁸

Thus we conclude, based on our review of the evidence, that the Pilgrim SAMA analysis incorporates the proper fraction (percentage) of contribution from times when the sea breeze is blowing and that the data used by Entergy to represent the sea breeze and other meteorological phenomena as well as topographical effects are sufficiently representative of the conditions at Pilgrim for SAMA analyses use. Further, we find the Entergy Pilgrim data and analysis includes an appropriate contribution from the sea breeze effect.

⁸⁰ Hanna Report at 26 tbl. 3; see also O'Kula/Hanna Testimony at A65 (Hanna).

⁸¹ Hanna Report at 24-25.

⁸² *Id.* at 34.

⁸³ O'Kula/Hanna Testimony at A72 (Hanna).

⁸⁴Egan Statement at 7.

⁸⁵ O'Kula/Hanna Rebuttal Testimony at A6 (O'Kula and Hanna).

⁸⁶ Id. (O'Kula and Hanna) (quoting Molenkamp Report at 3).

⁸⁷ *Id.* at A7, A8 (Hanna).

⁸⁸ Id. at A7 (Hanna).

2. Sea Breezes Are Localized Phenomena; They Do Not Materially Impact the Large Inland Areas That Make Up the Dominant Portions of the SAMA Impacts

Entergy's expert testimony indicates that sea breeze conditions are (1) most often localized within 10 miles of the coast⁸⁹ and (2) generally beneficial in dispersing the plume and decreasing doses.⁹⁰ The sea breeze is generally a highly beneficial phenomenon that disperses and dilutes the plume concentration and thereby lowers projected doses downwind from the release point.⁹¹ Furthermore, Entergy's expert testimony concludes that a sea breeze influence at Pilgrim would generally penetrate only 5 to 10 miles inland⁹² and will not be a factor toward the more heavily populated inland areas that are present in the 50-mile radius over which the SAMA analysis is conducted.

The Staff presented evidence that sea breezes occur in Boston, Massachusetts, only 31 days per year (8.5%) and that sea breeze circulation near Pilgrim is weaker and has less inland penetration than near Boston. Staff's expert testimony on this point is:

A recent Master's degree thesis analyzed sea breeze events at General Edward Lawrence Logan International Airport ("Logan") in Boston, Massachusetts over a recent ten (10) year period using criteria developed by Miller and Keim. Thorp determined from the Logan data that meteorological conditions conducive to sea breeze events occurred an average of about 88 days per year (24%), but actual sea breeze events only occurred an average of about 31 days per year (8.5%). The average time of onset of the sea breeze was about 10:00 am and the average duration was about 8 hours. About 25% of the sea breeze events were marginal events that lasted less than 2 hours, were interrupted by periods of calm, or light and variable winds, or had no clear start or stop. Typical inland penetration of the sea breeze varied from about 10 to 25 miles depending on the underlying synoptic situation. Sea breeze flow patterns presented by Thorp suggest that the sea breeze circulation in the vicinity of Pilgrim is weaker than in the vicinity of Logan and has more limited inland penetration. ⁹³

⁸⁹ Id. at A77 (O'Kula).

⁹⁰ Id. at A76 (Hanna).

⁹¹ Exh. NRC000006-00-BD01, Washington Safety Management Solutions LLC, Washington Group International, Radiological Dispersion and Consequence Analysis Supporting Pilgrim Nuclear Power Station Severe Accident Mitigation Alternative Analysis at 20-21 (May 2007).

⁹²O'Kula/Hanna Testimony at A74 (Hanna).

⁹³ Ramsdell Testimony at A8 (emphasis added) (citing Exh. NRC000010, Jennifer E. Thorp, The Eastern Massachusetts Sea Breeze Study (May 2009) (unpublished)). According to Dr. Hanna, a "synoptic wind" is caused by prevailing pressure gradients that are often too strong to be overcome by the local pressure difference causing coastal breezes. O'Kula/Hanna Testimony at A74 (Hanna).

3. Entergy's SAMA Analysis Conservatively Accounts for Sea Breezes

Entergy's experts explained that the SAMA analysis conservatively accounts for "the deposition that would occur from an individual sea breeze occurrence." 94 They explained that "any deposition impacts from a typical single sea breeze would generally be limited to 10 miles inland" because "sea breezes are localized phenomena that generally occur within 10 miles of the coast."95 However, the present Pilgrim SAMA analysis "model[s] any plume initiated during a sea breeze event as continuing to travel in the same direction out to 50 miles, and thus would model these plumes as reaching the more heavily populated inland areas."96 Pilgrim Watch does not controvert Entergy's testimony that approximately 95% of the PDR occurs (outside the reach of the sea breeze effects) in the 10- to 50-mile range, 97 and 83% of the SAMA offsite population dose consequences occur in the 20- to 50-mile range from the Pilgrim plant. 98 Dr. O'Kula explained that, as a result, "the Pilgrim SAMA analysis conservatively accounts for the sea breezes by assuming that they had impacts throughout the 50-mile range, and not just the 10-mile range near the coast where such breezes might be localized."99 Thus we conclude, based upon our review of the evidence, that using data from only the Pilgrim site (which is in substantial agreement with wind data from nearby measuring stations) and coupling that with the Gaussian Plume model of MACCS2, which computes consequences outside the reach of the actual

Pilgrim Watch hypothesizes specific short-term scenarios for which the ability to track an individual plume and determine concentrations and depositions at specific locations are important, as would be the case for emergency response or for EPA air permit applications. However, the Pilgrim SAMA analysis is focused on expected annual consequences integrated over an area with radius 50 miles, based on use of one year of hourly meteorological data. While over the course of a year it is possible that a hypothetically simulated plume during one or two hours could be redirected onshore by an individual sea breeze, thereby increasing impacts, it is also true that a hypothetically simulated plume during another hour could be redirected offshore by an individual land breeze yielding no impacts. Because the SAMA analysis simulates postulated plume travel based on weather scenarios experienced over the course of a year, which includes both sea breezes and land breezes, there is little net change on an expected annual basis over a broad area.

O'Kula/Hanna Testimony at A78 (Hanna).

⁹⁴ Id. at A80 (O'Kula and Hanna).

⁹⁵ Id. (O'Kula and Hanna).

⁹⁶ *Id.* at A77 (O'Kula).

⁹⁷ Id. at A43 (O'Kula).

⁹⁸ Id. at A77 (O'Kula).

⁹⁹ *Id.* (O'Kula); *accord* Ramsdell Testimony at A14. Entergy's testimony also addresses the suggestion that sea breezes may increase concentrations for coastal locations by drawing contaminants inland that would otherwise be directed offshore or be carried aloft, thereby subjecting inhabitants of coastal communities to larger doses. In this regard, Dr Hanna testified that:

meteorological patterns associated with sea breezes, causes the Pilgrim SAMA analysis to conservatively compute the effects of the sea breeze phenomenon.

4. Sea Breezes Generally Decrease Doses in the Region That Contributes Most to Overall Consequences

Dr. O'Kula testified that "population dose and economic cost results are relatively insensitive to individual plume transport behavior." He explained that "hourly variations in plume behavior and individual plume travel trajectories are of secondary importance to . . . long-term, longer-distance (out to 50 miles) land contamination impacts" because "the land contamination result is the principal contributor to the long-term population dose and economic costs." ¹⁰¹

Dr. Hanna testified that, for SAMA purposes, "the sea breeze phenomenon generally has the beneficial effect of decreasing doses at specific locations where maximum concentrations would occur and for specific time periods rather than increasing them." The reason sea breezes are more likely to decrease, rather than increase, consequences stems from the fact that "coastal breezes are dispersive over a several-hour period." Dr. Hanna explained

Coastal land and sea breezes are a type of mesoscale or medium range phenomena that lead to relatively slow (over an hour or two) fluctuations in wind speeds and directions over 90° to 180°. Therefore, they would be likely to increase lateral dispersion and reduce concentrations and dosages at specific locations near the centerline of the plume over a given time period ranging from one to several hours. Accordingly, for a period of time up to about a day, because of the broad (as much as 180°) variations in wind direction during a coastal breeze episode, sea and land breezes are not a concentrating phenomenon (increasing the maximum plume centerline concentration). Rather they are a dispersive one (lowering the maximum plume centerline concentration and thereby lowering projected dose at that location and for that time period). ¹⁰⁴

Entergy's experts testified that "on an annual basis, sea breezes during the day are generally offset by land breezes at night." Similarly, Staff's expert testified that the effects of overestimating and underestimating the impacts more or less cancel each other:

¹⁰⁰ Id. at A44 (O'Kula).

¹⁰¹ *Id.* (O'Kula).

¹⁰² Id. at A76 (Hanna).

¹⁰³ Id. at A81 (O'Kula and Hanna).

 $^{^{104} \}emph{Id}.$ at A76 (Hanna).

¹⁰⁵ Id. at A81 (O'Kula and Hanna).

Recalling that sea breeze events occur about 8.5% of the days, we can then estimate that the MACCS2 wind model would underestimate offsite consequences about 3.5% of the time . . . during the year because it didn't represent the sea breeze circulation explicitly. We can also estimate that MACCS2 would overestimate offsite consequences about 2.8% of the time ¹⁰⁶

Thus we find that the present Pilgrim SAMA analysis does not underestimate the consequences of scenarios that occur during the presence of the sea breeze, and therefore does not underestimate, as a result of inaccuracies in modeling the sea breeze meteorology, the benefit of implementation of any SAMA.

5. More Accurate Modeling of the Meteorology Would Not Result in the Identification of Additional Cost-Effective SAMAs

Uncontroverted expert testimony establishes that more accurate modeling of the meteorology would not result in differences of more than a factor of two for any particular meteorologic condition, and therefore could not cause the computed resultant deposition of radioactive products released during any particular severe accident scenario to be in error by more than a factor of two. We note that the only dispute before us regards the predicted deposition during the occurrence of the "sea breeze" effect and the "hot spot" effect; i.e., the possibility that the entire meteorologic computation might be in error is not at issue, just whether or not more accurate modeling of the meteorology during occurrence of the "sea breeze" and the "hot spot" conditions can credibly alter the Pilgrim SAMA analysis conclusions on which SAMAs are cost-beneficial to implement:

Based upon our review of the evidence (discussed below), we conclude that results of computations with MACCS2's meteorological models agree, within a factor of two, with those of more sophisticated models (such as full three-dimensional time-dependent modeling). The Gaussian plume model used in the MACCS2 code was compared to models like those suggested by Pilgrim Watch (AERMOD and CALPUFF)¹⁰⁷ in a 2004 NRC Office of Nuclear Regulatory Research funded atmospheric transport model comparison study involving three classes of atmospheric models, the Molenkamp Report.¹⁰⁸ The computations by MACCS2's atmospheric model were compared to those of the NRC's RAS-CAL code (a two-dimensional Lagrangian puff dispersion model) and Lawrence Livermore National Laboratory's ADPIC/LODI models (fully three-dimensional time-dependent models).¹⁰⁹ The Staff's expert explained that

¹⁰⁶ Ramsdell Testimony at A14 (internal cross reference omitted).

 $^{^{107}}$ Egan Decl. \P 7.

 $^{^{108}\,\}mbox{Ramsdell}$ Testimony at A29 (citing Molenkamp Report).

¹⁰⁹ Id.

The models predicted the mean air concentrations for both non-depositing and depositing material and surface concentration for depositing material to distances beyond 50 mi for 610 randomly selected release times. The mean concentration and deposition estimates which are directly related to SAMA analysis input were generally within a factor of 2 for the three models. The estimates of the MACCS2 dispersion model were generally within the bounds of the other two models. 110

Entergy and the Staff presented uncontroverted evidence that the model-to-model comparison between MACCS2 and more complex atmospheric transport and dispersion models showed that results calculated by the various models are generally within a factor of two and that MACCS2 is within plus or minus 10% of a state-of-the-art three-dimensional model when averaged over a series of radial arcs out to 50 miles.¹¹¹ The Staff's experts concurred that the estimates of the MACCS2 dispersion model were generally within the bounds of the other models¹¹² and that MACCS2 performed as well as either of the more advanced Lagrangian puff model codes (similar to CALPUFF in capability) evaluated in the study.¹¹³

Therefore, based upon our review of the evidence, we conclude that, even if the sea breeze effect were erroneously computed by the present SAMA analysis, the errors could not have caused the portion of the meteorological computations involving the sea breeze effect to be in error by more than a factor of two. And, because the sea breeze effect is localized, the effects upon the computed consequences of a release from the plant during the occurrence of the sea breeze effect cannot be in error by a factor of two; rather any such error must be considerably less.

6. The Sea Breeze Occurs Only During a Small Fraction of the Year, and Its Effects Are Countercompensating, Rather Than Unidirectional

There are a limited number of days per year when noticeable coastal breezes that are not offset by synoptic winds might occur. The parties' expert testimony is consistent that, in the Pilgrim coastal area, there are

about 45 days per year during the summer months where the thermal gradient is sufficient and the synoptic winds are weak enough for a noticeable sea breeze. The durations of sea breezes are typically a few hours

¹¹⁰ Id. at A30.

¹¹¹O'Kula/Hanna Testimony at A58 (O'Kula and Hanna); Bixler/Ghosh Testimony at A38-A41 (Bixler); Molenkamp Report.

¹¹² Ramsdell Testimony at A30.

¹¹³ Bixler/Ghosh Testimony at A38 (Bixler).

Usually days with a noticeable sea breeze (blowing inland) are days with light synoptic winds, and therefore there is also an opposing land breeze (blowing offshore) at night, which is often stronger.¹¹⁴

Dr. Hanna testified that

[t]he standard sea and land breeze cycle occurs in the late spring and summer along the New England coast, when daytime land temperatures are usually warmer than the ocean temperatures. But, for the other half of the year, from late fall to winter, when daytime land temperatures are usually cooler than ocean temperatures, there is more likely a land (offshore) breeze generated.¹¹⁵

Further, Dr. Hanna explained that "for every day when there is a sea breeze blowing on shore, during the same day there is typically a nighttime land breeze blowing offshore," such that the two effects cancel out when performing an annual consequence evaluation over a broad area, as done in a SAMA analysis. The Staff's expert, Mr. Ramsdell, fully concurs with Dr. Hanna that onshore winds during the day are effectively offset, for purposes of a SAMA analysis, by offshore winds during the night or early morning hours. 117

None of the parties dispute that the sea breeze phenomenon occurs only 30 to 50 days per year, has a typical inland penetration of 10 miles, and has a duration of a only a few hours.¹¹⁸

Thus, from our examination of the evidence, we conclude that the sea breeze effect does not occur more than 50 days per year and such occurrences last *no more than* half a day.¹¹⁹ Thus we conclude that, at a maximum, the sea breeze effect occurs less than 25/365 of the year — or less than approximately 7% of the time. We therefore further conclude that the sea breeze effect cannot be weighted, from a probability of occurrence viewpoint, by more than 7%.

Because (a) the next most costly SAMA is twice as expensive as the consequences estimated by the present Pilgrim SAMA analysis to be associated with the scenario it would address, and (b) the sea breeze effect occurs less than 7% of the year, and (c) the maximum error which could have been found to be present by inaccurate modeling of the meteorology is a factor of two, we find, from

¹¹⁴O'Kula/Hanna Testimony at A75 (Hanna).

¹¹⁵ *Id.* at A74 (Hanna).

¹¹⁶ Id. at A80 (Hanna).

¹¹⁷ Ramsdell Testimony at A7.

¹¹⁸ O'Kula/Hanna Testimony at A80 (O'Kula and Hanna); Ramsdell Testimiony at A8; Pilgrim Watch Statement of Position at 6, 24 (citing Spengler Report at 1).

¹¹⁹ We conservatively use "half a day" here to make the point, but expert testimony indicates plainly that the duration is generally 8 hours or less. O'Kula/Hanna Testimony at A80 (Hanna); Ramsdell Testimony at A8; Pilgrim Watch Statement of Position at 24 (citing Spengler Report at 1).

examination of the evidence, that any errors in computation of the meteorology associated with the sea breeze effect cannot be greater than 14% and therefore cannot have been large enough (i.e., cannot approach the 100% necessary) to bring the next most costly SAMA into economic play. In other words, asserted inadequacies in the modeling of meteorology and the use of meteorological data in the Pilgrim SAMA analysis at issue upon remand cannot be so large as to credibly alter the Pilgrim SAMA analysis conclusions regarding which SAMAs are cost-beneficial to implement.

Viewed in its totality, the evidence presented by Entergy and the NRC Staff demonstrates that the Pilgrim SAMA analysis adequately accounts for sea breezes. Pilgrim Watch's evidence does not dispute any of that evidence. Therefore, we reject Pilgrim Watch's unsupported claims and conclude that: (a) Entergy's Pilgrim SAMA analysis adequately takes coastal (sea) breezes into account; and (b) further refinement of the modeling or data accounting for sea breezes will not materially or significantly alter the overall impacts estimated by MACCS2 and the conclusions by Entergy regarding those SAMAs that are potentially cost beneficial.

7. An Additional View of the Evidence

The evidence also demonstrates, in another manner, that it is not possible for modeling improvements regarding the sea breeze to alter the outcome of the Pilgrim SAMA cost-benefit analysis. The sea breeze occurs between 40 and 50 days a year 120 for a period of about 6 hours. 121 This would be (at 50 days) [50 × 0.25]/365 of the yearly time; i.e., less than 4% of the time. 122

This would mean that for the contribution to consequences during the existence of the sea breeze to double the cost (which is the level required to make the next most costly SAMA cost-effective to implement), the consequences during that period would have to contribute as much as the consequences during the entire balance of the year (i.e., the other 96%) — or that the consequences during the

¹²⁰ See supra Section V.D.6.

¹²¹ See, e.g., O'Kula/Hanna Testimony at A80 (Hanna); supra note 119 and accompanying text. We conservatively used a "half a day" in our discussion above simply to demonstrate the principle, but expert testimony indicates plainly that the duration is generally 6 hours or less.

¹²²We expressed *supra* that 7% would be a conservative estimate of the fraction of time a sea breeze might be present, but a realistic estimate should be based upon no more than 6 hr/day and 50 days/year.

sea breeze occurrence would have *to be* approximately 26 times those during the mean meteorological conditions. ¹²³

Therefore, for the SAMA cost-benefit analysis to have been sufficiently in error from not accurately modeling the sea breeze to cause the next SAMA candidate to be cost effective to implement, the consequences from the sea breeze would have to be in the range of somewhat more than 25 times the mean consequences computed by the SAMA analysis.

But, as is discussed and found above, the damages from a release during a sea breeze are likely to be less than those for median meteorologic patterns simply because the sea breeze not only tends to be a dispersive phenomenon, but does not carry the radioactive products into the large inland regions where the dominant portion of the SAMA damages are computed to occur.¹²⁴ And, as is discussed and found above, the effects of a sea breeze tend to be counter-canceling, and will, at most, cause only minor additive effects in the interior 10-mile range which they affect.

- Further, as we discussed and found above, the maximum differential in computed resultant consequences that could be caused by more sophisticated modeling is a factor of two, and the evidence leads us to conclude that the differences may be considerably smaller, so that it is not possible for improved modeling to cause the computed damages during the occurrence of the sea breeze to be larger than those of the median by more than a factor of two.¹²⁵
- Therefore, the evidence also demonstrates that it is simply not possible that errors in the modeling of meteorology during the occurrence of a sea breeze could alter the cost-benefit analysis by any amount approaching the factor of approximately twenty-six which would be necessary to alter the

Where:

A is the mean of the consequences computed to occur when the sea breeze is active

B is the mean of the consequences computed to occur during all other meteorological conditions Solving this equation for *A*, we find that $.04 \times A = 1.04 \times B$, or A = 26B

For the purposes of this simple approximate linear analysis, we assume that the current mean of the consequences is not materially affected by the contribution from the sea breeze contributions. This linear approximation is borne out by the expert testimony described above.

¹²³ For the effect of the sea breeze to cause the next SAMA to be cost effective, it would need to contribute an amount determined by the following approximate formula:

 $^{.04 \}times A + 0.96 \times B = 2.0 \times B$

 $^{^{124}}$ The evidence demonstrates that the sea breeze will not carry the radioactive products more than 10 miles inland, whereas 95% of the damages occur between 10 and 50 miles away from the plant.

¹²⁵ We discussed this view with the parties who generally agreed, Tr. at 892-98, although Pilgrim Watch's representative noted that there are other "meteorological variables" that should be considered, Tr. at 895.

Pilgrim SAMA analysis conclusions on which SAMAs are cost-beneficial to implement.

E. "Hot Spot" Effect

Pilgrim Watch asserted it "showed that a plume over water, rather than being rapidly dispersed, will remain tightly concentrated due to the lack of turbulence, and will remain concentrated until winds blow it onto land."¹²⁶ Quoting an article concerning pollutant transport, Pilgrim Watch suggests that the following "basic principles" apply to the radionuclide transport:

major pollution episodes along the northern New England coast are caused by efficient transport of pollutants from distant sources. The transport is efficient because the stable marine boundary layer allows the polluted air masses or plumes to travel long distances with little dilution or chemical modification. The sea-breeze or diurnal modulation of the wind, and thermally driven convergence along the coast, modify the transport trajectories.¹²⁷

Pilgrim Watch goes on to assert that "[t]his effect can lead to hot spots of radioactivity in places along the coast, certainly to Boston" and to "Cape Cod, directly across the Bay from Pilgrim and heavily populated in summer." Pilgrim Watch designates this effect as the "behavior of plumes over water (the so-called hot spot effect)." ¹³⁰

This "Hot Spot" effect, which the Commission has directed us to consider, ¹³¹ is referred to by Pilgrim Watch only through a discussion in a report prepared by Dr. Jan Beyea briefly mentioning the potential specter of "Hot Spots" without any explanation or technical support. ¹³²

Dr. Beyea provides no scientific rationale or discussion of his concern, nor

¹²⁶ Pilgrim Watch Statement of Position at 30 (citing Exh. PWA000006-00-BD01, Wayne M. Angevine et al., Modeling of the Coastal Boundary Layer and Pollutant Transport in New England, J. Appl. Meteorol. & Clim. (Jan. 2006) [hereinafter Angevine]). Pilgrim Watch also cites a second document by its author's last name, "Zager et al.," but does not seem to have submitted any such document for the record as an exhibit. The Board will not acknowledge citations to technical articles that have not been submitted as exhibits.

¹²⁷ *Id.* (quoting Angevine at 153).

¹²⁸ *Id.* (citing Exh. PWA000002-00-BD01, Jan Beyea, excerpt from Report to the Massachusetts Attorney General on the Potential Consequences of a Spent-Fuel-Pool Fire at the Pilgrim or Vermont Yankee Nuclear Plant (May 25, 2006) at 11 [hereinafter Excerpt from Beyea Report]).

¹²⁹ Id.

¹³⁰ Id. at 31.

¹³¹ See CLI-10-11, 71 NRC at 305-07.

¹³²Excerpt from Beyea Report at 11.

does Pilgrim Watch provide that itself or through any other evidence. Dr. Beyea is not a meteorologist, ¹³³ and therefore his bare concern is not entitled to be given expert evidentiary status. Thus we have before us no evidence based on technical data explaining or supporting the hypothesis offered by Pilgrim Watch that this phenomenon could affect the SAMA cost-benefit balance determination.

On the other side of the evidentiary balance, uncontroverted expert testimony plainly establishes that the effects of any phenomenon causing concentration of the nature that concerns Pilgrim Watch will be minimized because the concentration of a release that is transported out to sea is then, if it returns to land, extremely diluted. More succinctly, Dr. Hanna testified

"hot spots," as claimed by Pilgrim Watch, simply do not exist. Therefore, one cannot estimate their occurrence or spatial and time-dependent pattern.

Pilgrim Watch's speculative claim of hot spots requires the confluence of impossible circumstances. First, the postulated release must remain "tightly concentrated" as it travels out to sea. As explained, even under very stable conditions plumes disperse significantly as they travel (e.g., concentrations decrease by at least a factor of 30 in the near field and a factor of ten or more at larger distances for each factor of ten increase in downwind distance). Next, the postulated release must travel out to sea and back, being carried by a variable wind field which does not cause the "tightly concentrated" release to disperse. Again, even under very stable conditions plumes disperse significantly as they travel.

Therefore, the facts show that by the time such a postulated release reached land after first traveling out to sea, the plume would be significantly dispersed and maximum plume centerline concentrations greatly reduced having generally traveled a much further distance than if the plume had traveled directly over land.

When we talk about concentrations, we are also implicitly talking about deposition and therefore the above statements about concentration also apply to deposition. Dry deposition is always proportional to concentration, with the dry deposition velocity providing the proportionality constant. Wet deposition is proportional to concentration, too, but with a need to know rain rate and wet removal rate."¹³⁴

Dr. Hanna further testifies that the CALMET analysis discussed in his testimony shows

there is no consistent, frequently occurring pattern of wind blowing out to sea and

¹³³ See Pilgrim Watch's Answer Opposing Entergy's Motion for Summary Disposition of Pilgrim Watch Contention 3 (June 29, 2007) at 97; *id.*, Attachment, Report to the Massachusetts Attorney General on the Potential Consequences of a Spent-Fuel-Pool Fire at the Pilgrim or Vermont Yankee Nuclear Plant (May 25, 2006) at 2.

¹³⁴O'Kula/Hanna Testimony at A89 (Hanna) (emphasis added).

then reversing direction and heading for the coast that might conceivably affect the time and space integrated results of the SAMA analysis. The comparison of the CALMET and Pilgrim roses shows slightly more CALMET trajectories towards the north-northwest, but this difference and other differences between the CALMET and Pilgrim roses are minor and have negligible impact on the SAMA analysis

In short, "hot spots," as hypothesized by Pilgrim Watch, do not exist and therefore do not impact deposition or cost differentials, and ultimately have no impact on Pilgrim's SAMA analysis. ¹³⁵ On the other hand, Staff's expert, James V. Ramsdell, Jr., took a quite different view of the meaning of a "hot spot" — interpreting it in terms of localized deposition, although, in the end, he reached a conclusion regarding a localized concentration resulting from a plume that is transported out to sea and back onto land. He testified:

The term "hot spot" is not particularly well defined. In the MACCS2 lexicon, the term refers to an area in which the dose rate from surface contamination exceeds a user specified value. When I hear or see the term, I generally think of an area in which the surface contamination is greater than the contamination in surrounding areas. I don't know of any criterion for how much greater the contamination has to be for an area to be considered a "hot spot[.]" 136

Mr. Ramsdell went on to testify:

In my opinion, the most likely meteorological conditions that might lead to a "hot spot" in the vicinity of Pilgrim would be related to precipitation starting after the release was underway. Similarly, most of the large release pathways for severe accidents are ground-level releases, so "hot spot" mechanisms associated with elevated releases would come into play.¹³⁷

Mr. Ramsdell also expressed the opinion that "the modeling of 'hot spots' is not essential to the evaluation of SAMAs and is unlikely to affect the identification of potentially cost[-]beneficial SAMAs."¹³⁸ He concluded his testimony with the observation that

[i]n many respects, the rationale for concluding that the MACCS2 treatment of hot spots is reasonable is similar to the rationale for concluding that explicit treatment of sea breeze events is not essential for SAMA analyses. A "hot spot" is a relatively small area compared to the model domain and the magnitude of "hot

¹³⁵ Id. (Hanna) (emphasis added).

¹³⁶ Ramsdell Testimony at A38.

¹³⁷ *Id.* at A41.

 $^{^{138}}$ Id. at A47.

spots" would be small. Consequently the [e]ffect of the hot spot on the two spatially and temporally integrated parameters (population dose and economic cost) used in the SAMA analysis is small when a hot spot exists. Further, considering the frequency of conditions that might lead to a hot spot, the [e]ffect of hot spots on the climatological mean parameter values is even smaller. Finally, in the case of Pilgrim, the population dose and economic cost parameter values would have to increase by more than a factor of 2 before the next least costly SAMA would be identified in the screening process as being potentially cost beneficial. Therefore I can conclude that even if MACCS2 included effects from hot spots related to onshore arrival of plumes it would not lead to identification of another cost[-]beneficial SAMA at Pilgrim.¹³⁹

By an overwhelming preponderance of the evidence, we find that more accurate meteorological modeling of the so-called "hot spot" phenomenon cannot alter the SAMA cost-benefit analysis because (1) Pilgrim Watch has not provided any scientific or technical support for its generalized assertions about "hot spots," (2) Dr. Beyea's unsubstantiated assertion of the phenomenon's importance was made without his being qualified as an expert in meteorology, and (3) experts testified that the phenomenon is unsubstantiated and would not affect the SAMA cost-benefit conclusions if it did exist.

Finally, based upon our review of the record and in consideration of the foregoing, we find that the modeling of the hot spot and sea breeze phenomena and the data used in the SAMA computations by Entergy is reasonable and adequate for the Staff's use in developing a reasonable analysis of their effects in satisfaction of its obligations under NEPA.

VI. CONCLUSIONS

For the foregoing reasons and based upon a review of the entire hearing record of this proceeding and the proposed findings of facts and conclusions of law submitted by the parties, we resolve all matters in controversy regarding Contention 3, as limited and remanded by the Commission's March 26, 2010 order, in favor of the Applicant and, to the extent relevant here regarding the Staff's obligations under NEPA, the NRC Staff is justified in relying upon those Entergy data, modeling, and SAMA analyses.

In particular, with respect to the challenge to meteorological modeling and data by Pilgrim Watch as it has been remanded to us, we find that the overwhelming preponderance of the evidence demonstrates:

(a) the Pilgrim SAMA analysis cost-benefit conclusions cannot credibly be

¹³⁹ Id. at A48.

altered by the use of more sophisticated modeling or use of additional or different sources of meteorological data respecting the sea breeze or the hot spot effect. We conclude that: (1) the Pilgrim SAMA analysis incorporated data adequately representing the "sea breeze" effect and the "hot spot" effect asserted by Pilgrim Watch to have been inadequately modeled; and (2) representation of those meteorological patterns underlying the challenges to the SAMA cost-benefit conclusions was conservative and the resultant computations cannot be altered sufficiently to credibly challenge the cost-benefit analysis results (either independently or cumulatively) by: (i) the use of alternative more sophisticated atmospheric transport models, such as AERMOD and CALPUFF; (ii) further refinement in its consideration of the "sea breeze" effect; and (iii) refined treatment of "hot spots" as defined by Pilgrim Watch.

(b) Regarding the NRC Staff's obligations under NEPA, we conclude that: (1) the meteorological modeling and the transport dispersion modeling performed by Entergy, and the data it employed in the Pilgrim SAMA analysis, were reasonable and adequate to determine the offsite risk for use in the SAMA cost-benefit analysis; (2) the Entergy Pilgrim SAMA analysis adequately accounts for uncertainties in the two meteorological patterns at issue to enable the development, for NEPA purposes, of reasonable estimates supporting the Pilgrim SAMA analysis conclusions on which SAMAs are cost-beneficial to implement.

We therefore find that the Pilgrim SAMA analysis meteorological data and straight-line Gaussian plume dispersion model are sufficient, and that further refinements to those inputs would not change the cost-benefit conclusions for the SAMA candidates evaluated. Therefore, no consideration need be given to "the economic cost and evacuation time portions of Contention 3." Accordingly, we conclude that the modeling and data used in the Pilgrim SAMA analysis by Entergy are reasonable and adequate for use by the NRC in satisfaction of its obligations under NEPA. 141

VII. ORDER

Based on the foregoing discussion, and the entirety of the record, it is, this 19th

¹⁴⁰ See CLI-10-11, 71 NRC at 308.

¹⁴¹ The Board hereby adopts and incorporates by reference in this Order all of the findings of fact proposed by Entergy and the NRC Staff not otherwise addressed herein. All other issues, motions, arguments, or proposed findings presented by the parties concerning Contention 3 and not addressed herein have been found without merit or otherwise unnecessary for the decision.

day of July 2011, ORDERED that Pilgrim Watch's Contention 3, as remanded, is resolved in favor of the Applicant, and against the Intervenor. Pursuant to 10 C.F.R. § 2.1210(a), this Partial Initial Decision shall constitute the final decision of the Commission forty (40) days from the date of its issuance, unless, within fifteen (15) days of its service, a petition for review is filed in accordance with 10 C.F.R. § 2.341(b), or the Commission, in its discretion, takes review on its own motion. Unless otherwise authorized by law, a party who wishes to seek judicial review of this Initial Decision must first seek Commission review.

It is so ORDERED.

FOR THE ATOMIC SAFETY AND LICENSING BOARD¹⁴⁴

Dr. Paul B. Abramson ADMINISTRATIVE JUDGE

Dr. Richard F. Cole ADMINISTRATIVE JUDGE

Rockville, Maryland July 19, 2011

¹⁴² 10 C.F.R. § 2.1210(a)(3).

 $^{^{143}\,10}$ C.F.R. § 2.1212.

 $^{^{144}}$ Judge Young does not fully subscribe to the above opinion. Her views are set forth on the following pages.

Separate Statement of Administrative Judge Ann Marshall Young

I agree with the majority decision to the extent that I find that the preponderance of the evidence presented on that part of Contention 3 currently at issue is to the effect that accounting for Pilgrim Watch's meteorological concerns would not on its own affect the severe accident mitigation alternatives (SAMA) analysis for the Pilgrim plant sufficiently to alter the conclusions on which SAMAs would be cost-beneficial to implement. Pilgrim Watch conceded this in its Pre-Filed Testimony, considered herein as its Initial Statement of Position, in which it stated that "[i]t is not possible for either Pilgrim Watch, or anyone else, to show that meteorology, *in and of itself,* would result in a significantly different SAMA analysis." Although Pilgrim Watch's expert, Dr. Bruce Egan, raised significant questions regarding meteorological modeling for purposes of emergency planning² — a not insignificant issue — this is not part of what is at issue in Contention 3 at this time.³

With respect to what *is* at issue in Contention 3 at this time, as the majority notes, the Commission directed in CLI-10-11 that "[t]he question is not whether there are 'plainly better' atmospheric dispersion models or whether the SAMA analysis can be refined further";⁴ this is not required by NEPA,⁵ and to the contrary:

Unless it looks genuinely plausible that inclusion of an additional factor or use of other assumptions or models may change the cost-benefit conclusions for the SAMA candidates evaluated, no purpose would be served to further refine the SAMA analysis, whose goal is only to determine what safety enhancements are cost-effective to implement.⁶

Thus, as my colleagues point out and we have earlier stated, the (two-part) issue that is actually before us is the following:

Whether the meteorological modeling in the Pilgrim SAMA analysis is adequate and reasonable to satisfy NEPA, and whether accounting for the meteorological

¹ Pilgrim Watch SAMA Remand Pre-Filed Testimony (Jan. 3, 2011) at 2 (emphasis in original); *see also id.* at 3, 4.

² See, e.g., Pilgrim Watch Exhibit 23, Statement by Bruce A. Egan, Sc.D., CCM (Jan. 30, 2011) [hereinafter PW Exh. 23].

³For one example of an explanation of the different analyses involved in emergency response planning and a SAMA analysis, *see* the testimony quoted in the Majority Decision at 45 n.99.

⁴CLI-10-11, 71 NRC 287, 315 (2010).

⁵ *Id*.

⁶ Id. at 317; see also NRC Staff's Proposed Findings of Fact and Conclusions of Law, and Order in the Form of an Initial Decision (Mar. 4, 2011) at 11.

patterns and issues of concern to Pilgrim Watch could, on its own, credibly alter the Pilgrim SAMA analysis conclusions on which SAMAs are cost-beneficial to implement.⁷

Dr. Egan does not dispute the statements of Entergy's experts to the effect that accounting for Pilgrim Watch's concerns regarding the meteorological analysis would not change the ultimate conclusions on which SAMAs, or safety enhancements, would be cost-beneficial.⁸ Although one can appreciate Pilgrim Watch's arguments that Entergy should use the most up-to-date and accurate meteorological modeling available and more than one year's weather data,⁹ this does not appear to be required for purposes of the SAMA analysis. Nor does it or other Pilgrim Watch evidence overcome the preponderance of the evidence presented by the NRC Staff and Entergy on the meteorological issue now before

I would, however, for reasons I have previously stated,¹⁰ have allowed the issue, whether substituting the 95th percentile for the mean in the consequence values analysis would make a significant difference in and should be used in the

⁷ See, e.g., Majority Decision at 34, 39; Notice and Order (Regarding Hearing and Oral Argument) (Feb. 9, 2011).

⁸ See PW Exh. 23 at 3, 8.

⁹ See, e.g., Pilgrim Watch's Reply to Entergy's and NRC Staff's Initial Statement of Position on Pilgrim Watch Contention (Feb. 1, 2011), and material cited therein.

¹⁰ See Order (Questions from Board Majority Regarding the Mechanics of Computing "Mean Consequences" in SAMA Analyses), Separate Statement of Administrative Judge Ann Marshall Young (Oct. 26, 2010) (unpublished); Memorandum and Order (Ruling on Timeliness of Mean Consequence Values Issue), Separate Statement of Administrative Judge Ann Marshall Young (Mar. 3, 2011) (unpublished).

SAMA analysis, to have been litigated in conjunction with Contention 3¹¹ (which might indeed have led to a different result on the contention¹²).

Additionally, there have been matters raised, relating to how new information arising out of the Fukushima accident in Japan (which occurred only days after the March oral argument in this proceeding) should affect the environmental analysis (including the SAMA analysis) on the application under NEPA, as well as matters relating to the sought license renewal in certain other particulars. And it has been argued in various post-Fukushima filings that any final licensing decision on the renewal application should be postponed until significant further analysis is done concerning the ability of the Pilgrim plant to perform safely in the renewal period, taking into account information arising out of the Fukushima situation and the fact that the Pilgrim plant is of the same type as the Fukushima reactors. Preliminarily, I would tend to find that some of these arguments do warrant greater scrutiny of the plant and application in light of Fukushima-related information prior to any decision whether to renew the license for another 20 years. However, because the Board Majority's Initial Decision does not terminate this proceeding or constitute a final licensing decision, I will address the preceding matters in greater detail, as appropriate, in the context of later Board rulings on several pending new contentions and other filings submitted by Pilgrim Watch and the Commonwealth of Massachusetts.

¹¹ As my colleagues note, see Majority Decision at 37 n.46, and as stated in CLI-10-11, "[a]s a policy matter, license renewal applicants are not required to base their SAMA analysis upon consequence values at the 95th percentile consequence level (the level used for the GEIS severe accident environmental impacts analysis)." CLI-10-11, 71 NRC at 316-17. There is, however, no binding rule or other authority excluding use of the 95th percentile consequence level or rendering the use of mean consequence values beyond question, and indeed the Commission in CLI-10-22, 72 NRC 202 (2010), specifically referenced the NRC "practice for SAMA analysis to utilize mean consequence values, which results in an averaging of potential consequences," and stated that, because Pilgrim Watch apparently questioned this practice, "it would be appropriate for the Board on remand to consider whether the NRC's practice is reasonable for a SAMA analysis, and whether Pilgrim Watch's concerns are timely raised." Id. at 207 n.34 (emphasis added). Because I found Pilgrim Watch timely addressed the matter, see supra note 10, I would have permitted litigation of the reasonableness of the NRC's policy/practice regarding mean consequence values as opposed to 95th percentile values. In this regard, although I note that Pilgrim Watch makes certain arguments that touch on this reasonableness issue, see, e.g., Pilgrim Watch Findings of Fact Conclusions of Law SAMA Remand (Mar. 4, 2011); Pilgrim Watch Exhibit PWA00012, Dr. Edwin S. Lyman, "A Critique of the Radiological Consequence Assessment Conducted in Support of the Indian Point Severe Accident Mitigation Alternatives Analysis" (Nov. 2007), the issue has clearly not been fully litigated, and, in the absence of full litigation of this issue with specific regard to the Pilgrim plant, I do not draw any ultimate conclusions on it at this time, or on any other substantive issues outside the specific, relatively narrow issue now before us.

¹² See, e.g., Tr. at 974-77; cf. Entergy's Proposed Findings of Fact and Conclusions of Law on Meteorological Matters Raised in Pilgrim Watch Contention 3 (Mar. 4, 2011) at 40 ¶ 22.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Paul S. Ryerson, Chairman E. Roy Hawkens Paul B. Abramson

In the Matter of

Docket No. 40-3392-MLA (ASLBP No. 11-910-01-MLA-BD01)

HONEYWELL INTERNATIONAL, INC. (Metropolis Works Uranium Conversion Facility)

July 27, 2011

HEARING REQUESTS

If the 20-day deadline for requesting a hearing in 10 C.F.R. § 2.103(b) applies, the Staff's failure to comply with its own responsibilities under that provision bars the Staff from invoking it. Having failed to notify Applicant of the regulatory deadline for requesting a hearing — as 10 C.F.R. § 2.103(b) requires — the Staff will not be heard to enforce it.

HEARING REQUESTS

Where Applicant has raised sufficient question as to the appropriate deadline, the Board may conclude that it would be unfair to penalize Applicant on account of what might be ambiguity in the NRC's own regulations.

MEMORANDUM AND ORDER

(Granting Request for Hearing)

Before the Board is a request by Honeywell International, Inc. (Honeywell) for a hearing on the Nuclear Regulatory Commission (NRC) Staff's decision not to exempt it from certain provisions of 10 C.F.R. § 40.36(e) and 10 C.F.R. Part 30, Appendix C.¹ Specifically, the Staff denied Honeywell permission to use an alternate method for demonstrating decommissioning funding assurance for its Metropolis Works Uranium Conversion Facility in Metropolis, Illinois.²

The NRC Staff opposes a hearing, solely on the ground that Honeywell should be denied a hearing because allegedly its request was late.³

The Board disagrees. The NRC Staff denied Honeywell's exemption request on April 25, 2011,⁴ and Honeywell requested a hearing on June 22.⁵ The parties differ on the applicable regulatory deadline, and hence on whether Honeywell met it.⁶ Regardless, however, to deny Honeywell a hearing in the circumstances presented would be neither fair nor sensible, for three independent reasons.

First, if the NRC Staff is correct that the 20-day deadline in 10 C.F.R. § 2.103(b) applies, then the Staff's failure to comply with its own responsibilities under that provision bars the Staff from invoking it. As the Staff admits,⁷ its April 25, 2011 letter denying Honeywell's exemption request failed to inform the

¹ Request for Hearing on Denial of Decommissioning License Amendment Request (June 22, 2011) [hereinafter Hearing Request].

 $^{^{2}}$ *Id.* at 1.

³ NRC Staff's Opposition to Hearing Request (July 15, 2011) at 5-10 [hereinafter NRC Staff Opposition]. On July 20, 2011, Honeywell filed a timely reply to the NRC Staff's response. Honeywell Reply to NRC Staff Response to Hearing Request (July 20, 2011) at 1 [hereinafter Honeywell Reply].

⁴Hearing Request at 10. The Staff's decision was on remand from the United States Court of Appeals for the District of Columbia Circuit, which ruled that the Staff had not adequately explained its reasons for previously denying Honeywell's exemption request. *See Honeywell v. NRC*, 628 F.3d 568 (D.C. Cir. 2010).

⁵ Hearing Request at 1.

⁶ See id. at 11; NRC Staff Opposition at 2, 5-10; Honeywell Reply at 1-6. The Atomic Energy Act imposes no statutory deadline for requesting a hearing.

⁷ NRC Staff Opposition at 9 ("The Staff acknowledges that, in the denial letter, it did not state that the applicant could seek a hearing within 20 days. This was inconsistent with § 2.103(b)(2), which requires such notice.").

applicant of the 20-day deadline, as section 2.103(b) expressly requires.⁸ Having failed to notify Honeywell of the regulatory deadline for requesting a hearing — in violation of that very same regulation — the Staff will not be heard to enforce it.⁹ We find unpersuasive the Staff's attempts to carve out an exception to this well-established equitable rule.¹⁰

Second, if, on the other hand, Honeywell is correct that the 60-day deadline in 10 C.F.R. § 2.309(b)(4) applies, then its hearing request was timely. Alternatively, Honeywell has at least raised sufficient question as to the appropriate deadline¹¹ to permit the Board to conclude that it would likewise be unfair to penalize Honeywell on account of what might be ambiguity in the NRC's own regulations. ¹²

Third, it would be wasteful and inefficient to deny Honeywell's hearing request. As Honeywell points out, ¹³ if the Board were to deny its hearing request

(b) If the Director, Office of Nuclear Reactor Regulation, Director, Office of New Reactors, Director, Office of Federal and State Material and Environmental Management Programs, or Director, Office of Nuclear Material Safety and Safeguards, as appropriate, finds that an application does not comply with the requirements of the Act and this chapter he may issue a notice of proposed denial or a notice of denial of the application and inform the applicant in writing of:

Id

⁹ See Dr. James E. Bauer (Order Prohibiting Involvement in NRC-Licensed Activities), LBP-95-7, 41 NRC 323, 328 (1995) (noting NRC Staff acknowledgment that the time for applicant to request a hearing should be tolled until 10 C.F.R. § 2.103(b) notice was issued, given that NRC Staff had failed to provide the notice and hearing opportunity mandated by section 2.103(b)); Burke v. Kodak Retirement Income Plan, 336 F.3d 103, 107-08 (2d Cir. 2003) (holding that a notice failing to contain a specific time limit for administrative review, as required by federal regulations, "does not trigger a time bar").

¹⁰ NRC Staff Opposition at 7-10. The Staff argues that Honeywell should have reviewed section 2.103(b) because the provision was previously cited by the Staff in the D.C. Circuit. *Id*.

¹¹ Honeywell Reply at 3-5. Honeywell argues that section 2.103(b) is ambiguous as it applies to this proceeding because section 2.103(b) repeatedly refers to license applications, not exemptions or license amendments, while Honeywell's hearing request concerns an application for an exemption and a corresponding license amendment. *Id.* at 3. In addition, Honeywell asserts its hearing request is timely under 10 C.F.R. § 2.309(b)(4), and that this is the applicable timing provision because 10 C.F.R. § 2.103(b) addresses actions to be taken by the Staff, whereas 10 C.F.R. § 2.309 concerns actions that an interested person, such as Honeywell, must take to request a hearing. *Id.* at 4-5.

¹² See, e.g., Huang v. Immigration and Naturalization Service, 47 F.3d 615, 617-18 (3d Cir. 1995) (holding that notice of appeal of immigration judge's deportation order was timely filed because regulations governing timing of appeals were ambiguous); Investment Co. Institute v. Board of Governors of the Federal Reserve System, 551 F.2d 1270, 1282-83 (D.C. Cir. 1977) (excusing applicant from filing in the wrong court because the rules were unclear).

⁸ 10 C.F.R. § 2.103(b). That section specifically states that:

⁽¹⁾ The nature of any deficiencies or the reason for the proposed denial or the denial, and

⁽²⁾ The right of the applicant to demand a hearing within twenty (20) days from the date of the notice or such longer period as may be specified in the notice.

¹³ Honeywell Reply at 5-6.

as untimely, Honeywell could (and presumably would) simply apply again for the exemption it seeks and appeal from the Staff's denial of its new application. There is no reason to force the parties to go through such a meaningless exercise. Honeywell's request for a hearing is therefore *GRANTED*.

In accordance with the provisions of 10 C.F.R. § 2.311, any appeal to the Commission from this Memorandum and Order must be taken within ten (10) days after it is served.

It is so ORDERED.

THE ATOMIC SAFETY AND LICENSING BOARD

Paul S. Ryerson, Chairman ADMINISTRATIVE JUDGE

E. Roy Hawkens ADMINISTRATIVE JUDGE

Paul B. Abramson ADMINISTRATIVE JUDGE

Rockville, Maryland July 27, 2011

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Ann Marshall Young, Chair Dr. Paul B. Abramson Dr. Richard F. Cole

In the Matter of

Docket No. 50-293-LR (ASLBP No. 06-848-02-LR)

ENTERGY NUCLEAR
GENERATION COMPANY
and ENTERGY NUCLEAR
OPERATIONS, INC.
(Pilgrim Nuclear Power Station)

August 11, 2011

This proceeding concerns the application of Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc. for renewal of the operating license for its Pilgrim Nuclear Power Station, located in Plymouth, Massachusetts. Between the time when the Commission remanded a limited issue to the Board and when the Board disposed of that issue, Intervenor Pilgrim Watch filed requests for hearing on five proposed new contentions. The first concerns agency responsibility for and regulation of accident cleanup, and the second and third challenge the aging management plan for non-environmentally qualified inaccessible cables. Addressing only the first three proposed new contentions in this order, a majority of the Licensing Board denies the requests for hearing because Intervenor did not address or meet the standards for reopening a closed evidentiary record.

REOPENING A RECORD

Intervenor's failure to address the reopening standards set out in 10 C.F.R.

§ 2.326 creates a yawning deficiency in its submissions because the evidentiary record in this Board hearing has been closed and the Board's jurisdiction in this remanded proceeding does not extend to, nor does the remand reopen, except for its narrow scope, any other aspect of this hearing or any other issue regarding the requested license renewal.

MOTIONS TO REOPEN

The board cannot reconstruct the intervenor's pleadings to find that they might be interpreted to satisfy the requirements for reopening a closed evidentiary record where the intervenor itself has explicitly argued it need not, and explicitly elected not to attempt to do so, and the intervenor's arguments fail to supply the necessary substance.

SEVERE ACCIDENT MITIGATION ANALYSIS

Arguments along the lines of the need to perform more conservative severe accident mitigation alternatives analysis, to use 95th percentile computations, and not to use a discount factor to evaluate the time effects of cleanup costs regard policy matters that are solely within the jurisdiction of the Commission and represent inadmissible challenges to binding Commission rulings regarding what is required in a severe accident mitigation alternatives analysis.

RELEVANCE

Possible new information, from studies of the events at the Fukushima reactors, as to potential consequences of a severe accident at Applicant's nuclear power plant is simply irrelevant to any uncertainty that might exist regarding which agency has authority over cleanup after a severe accident in the United States. To the extent that such information might become a future basis for modifications of SAMA analysis standards, such speculation is outside the scope of this proceeding.

MOTION TO REOPEN

The contention is inadmissible for its failure to satisfy the explicit and intentionally stringent requirements for reopening a record. When a motion to reopen is required, 10 C.F.R. § 2.326(b) requires an expert's affidavit to supply the factual and legal foundation for assertions that the reopening criteria are satisfied.

CONTENTIONS, LATE-FILED

For this contention to be admissible the "new" information must, in and of itself, be sufficient to support its admissibility because the proposed new contention's subject — inaccessible cables — was addressed in the Applicant's original license renewal application. The particular information notice upon which Intervenor relies as a foundation for its assertion that there is new information merely summarized information that was previously available which does not, therefore, present new information upon which a new contention can be based. Therefore, Intervenor's proposed new contention fails to satisfy 10 C.F.R. § 2.326(a)(1) and therefore is inadmissible.

CONTENTIONS, LATE-FILED

The subject of inaccessible cable inspection and maintenance was covered by aging management plans in Applicant's original license renewal application and any shortcomings of those plans were appropriate for contention at the time. Although Applicant later elected to enhance its existing aging management plan for non-environmentally qualified inaccessible medium-voltage cables, an enhancement to a program does not constitute new information sufficient to support a new contention.

MEMORANDUM AND ORDER

(Denying Pilgrim Watch's Requests for Hearing on Certain New Contentions)

On March 26, 2010, the Commission remanded to this Board a narrow portion of Contention 3 for reconsideration in accordance with specific instructions. Subsequently, the parties agreed that the remanded portion of Contention 3 could be resolved on the evidentiary record — as supplemented by their written evidentiary submissions — without an oral evidentiary hearing. The Board heard oral argument on Contention 3, and the Board denied the remanded portion for failure to raise a material issue. During the interval between the remand and the ruling on Contention 3, Intervenor Pilgrim Watch filed requests for hearing on

¹ See CLI-10-11, 71 NRC 287, 290 (2010).

 $^{^2}$ Joint Motion Requesting Resolution of Contention 3 Meteorological Issues on Written Submissions (Feb. 16, 2011) at 1.

³ Tr. at 784-1018.

⁴LBP-11-18, 74 NRC 29, 55-56 (2011).

five new contentions, the first two in November and December 2010,⁵ a followup to the December contention filed in January 2011,⁶ a fourth in May 2011,⁷ and a fifth in June 2011.⁸

This ruling of a majority of the Board pertains only to Pilgrim Watch's first three proposed new contentions. The first concerns which agency regulates costs of, and which bears responsibility for, the cleanup of any accident at the Pilgrim Nuclear Power Station (Pilgrim). The second and third challenge the aging management plan (AMP) for non-environmentally qualified (EQ) inaccessible cables of Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc. (collectively Entergy) for Pilgrim.

The Board will address Pilgrim Watch's fourth and fifth contentions, which both concern information derived from the events at the Fukushima reactors, in a separate ruling. Pilgrim Watch's fourth contention asserts that Entergy's severe accident mitigation alternatives (SAMA) analysis fails to incorporate lessons learned from Fukushima,¹¹ and the fifth asserts that Entergy's SAMA analysis fails to properly consider the probability of both containment failure and subsequent larger offsite consequences due to failed operation of the direct torus vent.¹²

In addition, that separate ruling will address filings by the Commonwealth of Massachusetts that also concern information from the Fukushima events. The Commonwealth filed a motion before us on May 2, 2011, that amounts to a request for a stay of this proceeding, ¹³ and submitted on June 2 both (a) a hearing request for a new contention challenging the Entergy SAMA analysis because of asserted new information regarding both spent fuel pool (SFP) accidents and

⁵ Pilgrim Watch Request for Hearing on a New Contention (Nov. 29, 2010) at 1 [hereinafter Cleanup Contention]; Pilgrim Watch Request for Hearing on a New Contention: Inadequacy of Entergy's Aging Management of Non-Environmentally Qualified (EQ) Inaccessible Cables (Splices) at Pilgrim Station (Dec. 13, 2010) at 1 [hereinafter Cables Contention 1].

⁶ See Pilgrim Watch Request for Hearing on a New Contention: Inadequacy of Entergy's Aging Management of Non-Environmentally Qualified (EQ) Inaccessible Cables (Splices) at Pilgrim Station (Jan. 20, 2011) [hereinafter Cables Contention 2].

⁷ Pilgrim Watch Request for Hearing on Post[-]Fukushima Contention (May 12, 2011) [hereinafter Post-Fukushima Contention 1].

⁸ Pilgrim Watch Request for Hearing on a New Contention Regarding Inadequacy of Environmental Report, Post Fukushima (June 1, 2011) [hereinafter Post-Fukushima Contention 2].

⁹Cleanup Contention at 2.

¹⁰ Cables Contention 1 at 1; Cables Contention 2 at 1.

¹¹ Post-Fukushima Contention 1 at 1.

¹² Post-Fukushima Contention 2 at 1.

¹³ See Commonwealth of Massachusetts Motion to Hold Licensing Decision in Abeyance Pending Commission Decision Whether to Suspend the Pilgrim Proceeding to Review the Lessons of the Fukushima Accident (May 2, 2011) at 1.

severe accident probabilities based upon the events at Fukushima¹⁴ and (b) a request to waive our regulation that SFP issues are outside the scope of a license renewal proceeding such as this.¹⁵

Given the status of this case, for any of the three contentions we consider today to be admitted, the Commission's demanding regulatory requirements for reopening the record regarding such contention must be satisfied. For the reasons set out below, we DENY Pilgrim Watch's requests.

I. BACKGROUND

In late January 2006, Entergy submitted its license renewal application (LRA) for Pilgrim, requesting a 20-year extension of its current operating license. Pilgrim Watch petitioned to intervene, challenging the application, and this Board admitted two contentions — Contention 1, challenging Entergy's aging management program for buried piping and Contention 3, challenging Entergy's SAMA analysis. On October 30, 2007, the majority of this Board granted summary disposition of Contention 3 in Entergy's favor. On April 10, 2008, the Board held an evidentiary hearing on Contention 121 and closed the evidentiary record shortly thereafter.

On October 30, 2008, this Board issued an initial decision resolving Contention 1 in Entergy's favor and terminated the proceeding.²³ Pilgrim Watch petitioned for review of that initial decision and numerous other Board decisions, including our order dismissing Contention 3 on summary disposition.²⁴ On March 26, 2010, the Commission, in CLI-10-11, reversed the summary disposition of Contention

¹⁴Commonwealth of Massachusetts' Contention Regarding New and Significant Information Revealed by the Fukushima Radiological Accident (June 2, 2011) at 5-8; see also Commonwealth of Massachusetts' Motion to Admit Contention and, if Necessary, to Re-open Record Regarding New and Significant Information Revealed by Fukushima Accident (June 2, 2011) at 1.

¹⁵ Commonwealth of Massachusetts' Petition for Waiver of 10 C.F.R. Part 51 Subpart A, Appendix B or, in the Alternative, Petition for Rulemaking to Rescind Regulations Excluding Consideration of Spent Fuel Storage Impacts from License Renewal Environmental Review (June 2, 2011) at 1-2.

¹⁶ See 10 C.F.R. § 2.326.

¹⁷ See 71 Fed. Reg. 15,222, 15,222 (Mar. 27, 2006).

¹⁸ Request for Hearing and Petition to Intervene by Pilgrim Watch (May 25, 2006) at 1.

¹⁹LBP-06-23, 64 NRC 257, 348-49 (2006).

²⁰LBP-07-13, 66 NRC 131, 137 (2007).

²¹ Tr. at 557-874.

²² Board Memorandum and Order (Ruling on Pilgrim Watch Motions Regarding Testimony and Proposed Additional Evidence Relating to Pilgrim Watch Contention 1) (June 4, 2008) at 3-4 (unpublished) [hereinafter Order Regarding Testimony and Evidence].

²³ LBP-08-22, 68 NRC 590, 610 (2008).

²⁴ See Pilgrim Watch's Petition for Review of LBP-06-848 [sic], LBP-07-13, LBP-06-23 and the Interlocutory Decision in the Pilgrim Nuclear Power Station Proceeding (Nov. 12, 2008) at 1.

3 and remanded it to the Board "as limited by [the Commission's remand] ruling" for further proceedings.²⁵ More particularly, the Commission explicitly limited the remanded proceeding to the narrow topic of whether asserted shortcomings in the meteorological modeling are so large as to alter the results of the SAMA cost-benefit analysis.²⁶

On November 29, 2010, Pilgrim Watch filed the first new contention (the Cleanup Contention), asserting:

Until and unless some third party assumes responsibility for cleanup after a severe nuclear reactor accident to pre-accident conditions, sets a cleanup standard, and identifies a funding source, Entergy should be required to take all of the mitigation steps that would be required by a SAMA analysis (i) based on a conservative source term using release fractions no lower than those specified in NUREG-1465 or used by the NRC in studies such as NUREG 1450, cleanup to a dose rate of not more than 15 millirem a year, and at least the 95th percentile of the total consequences determined by the EARLY and CHRONC modules of the MACCS2 Code, and (ii) does not reduce any costs by use of a discount factor or probabilistic analysis.²⁷

Pilgrim Watch filed the second new contention on December 13, 2010 (Cables Contention 1)²⁸ and the third on January 20, 2011 (Cables Contention 2).²⁹ In Cables Contention 1 Pilgrim Watch asserts:

Entergy's Aging Management Plan for non-environmentally qualified (EQ) inaccessible cables and cable splices at Pilgrim Station is insufficient to provide reasonable assurance that these cables will be in compliance with NRC Regulations and public health and safety shall be protected during license renewal.³⁰

²⁵ CLI-10-11, 71 NRC at 290.

²⁶ Id. at 307-08. The Board framed the remanded question to be "whether the meteorological modeling in the Pilgrim SAMA analysis is adequate and reasonable to satisfy NEPA, and whether accounting for the meteorological patterns/issues of concern to Pilgrim Watch could, on its own, credibly alter the Pilgrim SAMA analysis conclusions on which SAMAs are cost-beneficial to implement." Board Order (Confirming Matters Addressed at September 15, 2010, Telephone Conference) (Sept. 23, 2010) (unpublished) (emphasis omitted). The Commission also directed that if the Board determines that the asserted deficiency in the meteorological pattern modeling could cause additional SAMAs to become cost-effective, the Board also reexamine offsite economic costs and evacuation time inputs linked to the adequacy of the meteorological modeling. CLI-10-11, 71 NRC at 308.

Faced with Pilgrim Watch's argument that it should be allowed to present evidence on matters not subject to the remand, the Commission explicitly held that Pilgrim Watch "cannot now insist that it is free to 'present evidence' on remand... to the extent that such evidence is not within the scope of the remanded meteorological patterns issue, as explained in CLI-10-11." CLI-10-15, 71 NRC 479, 485 (2010).

²⁷ Cleanup Contention at 1.

²⁸ Cables Contention 1 at 1.

²⁹ Cables Contention 2 at 1.

³⁰Cables Contention 1 at 1.

Cables Contention 2 is identical to Cables Contention 1 except that Pilgrim Watch has modified the noun "Plan" by inserting after it the parenthetical "(as amended by Entergy on January 7, 2011)."³¹ The two cables contentions are based upon assertedly new information. Pilgrim Watch asserts that Cables Contention 1 is based upon new information contained in the NRC's Information Notice 2010-26 (Submerged Electrical Cables), issued on December 2, 2010.³² Pilgrim Watch asserts that Cables Contention 2 is based upon new information contained in the NRC's December 2010 revision of the Generic Aging Lessons Learned (GALL) Report³³ and Entergy's January 7, 2011 LRA supplement³⁴ which, among other things, amended the AMP for non-EQ inaccessible cables.³⁵ Pilgrim Watch filed its requests for a hearing on contentions challenging Entergy's AMP even though Pilgrim Watch's intervention petition did not challenge the original LRA's program for managing inaccessible cables.³⁶

Pilgrim Watch contends that these three proposed new contentions: (1) need not satisfy the standards for reopening the record in 10 C.F.R. § 2.326;³⁷ (2) satisfy

³¹ Cables Contention 2 at 1 (emphasis omitted). Cables Contention 2 reads in full:

Entergy's Aging Management Plan (as amended by Entergy on January 7, 2011) for non-environmentally qualified (EQ) inaccessible cables and cable splices at Pilgrim Station is insufficient to provide reasonable assurance that these cables will be in compliance with NRC Regulations and public health and safety shall be protected during license renewal.

Id.

³² Cables Contention 1 at 2 (citing *id.*, Attach. A).

³³ Office of Nuclear Reactor Regulation, Generic Aging Lessons Learned (GALL) Report, NUREG-1801, Rev. 2 (Dec. 2010) (ADAMS Accession No. ML103490041) [hereinafter GALL Rev. 2].

³⁴Cables Contention 2 at 24-25. Entergy thoroughly discusses the GALL revision and LRA supplement in section II.B of its answer to Cables Contention 1, Entergy Answer Opposing Pilgrim Watch Request for Hearing on a New Contention (Jan. 7, 2011) at 5-10 [hereinafter Entergy Answer to Cables Contention 1], and discusses them with similar thoroughness in its answer to Cables Contention 2. *E.g.*, Entergy Answer Opposing Pilgrim Watch Request for Hearing on a New Contention (Feb. 14, 2011) at 10-11, 17 [hereinafter Entergy Answer to Cables Contention 2].

³⁵Letter from Stephen J. Bethay, Entergy Nuclear Operations, Inc. to U.S. Nuclear Regulatory Commission, Attach. 1, License Renewal Application — Supplemental Information at 8 (Jan. 7, 2011) (ADAMS Accession No. ML110200058) [hereinafter LRA Supplement].

³⁶ Pilgrim Nuclear Power Station License Renewal Application (Jan. 2006) (ADAMS Accession No. ML060300028) [hereinafter License Renewal Application].

³⁷ Pilgrim Watch Reply to Entergy's and NRC Staff's Answers Opposing Pilgrim Watch Request for Hearing on a New Contention (Jan. 7, 2011) at 5-6 [hereinafter Reply for Cleanup Contention]; Pilgrim Watch Reply to Entergy's and NRC Staff's Answers Opposing Pilgrim Watch Request for Hearing on New Contention (Jan. 14, 2011) at 8-9 [hereinafter Reply for Cables Contention 1]; Cables Contention 2 at 58-59.

the contention admissibility standards in 10 C.F.R. § 2.309(f)(1);³⁸ and (3) satisfy the standards for nontimely new contentions in 10 C.F.R. § 2.309(c).³⁹

In late December of 2010, Entergy and the NRC Staff filed their respective answers to Pilgrim Watch's Cleanup Contention.⁴⁰ Entergy and the NRC Staff filed their answers to Cables Contention 1 on January 7, 2011.⁴¹ On February 14, 2011, Entergy and the Staff filed answers opposing Cables Contention 2.⁴²

Entergy and the NRC Staff assert that the requests for admission of the three subject contentions should be denied because the evidentiary record has been closed since the Board's decision terminating the proceeding in LBP-08-22, and therefore 10 C.F.R. § 2.326's requirements for reopening a closed record apply, but Pilgrim Watch neither filed a motion to reopen nor addressed or met the 10 C.F.R. § 2.326 criteria. ⁴³ Entergy argues also that the three subject requests for admission are untimely under 10 C.F.R. § 2.309(f)(2)⁴⁴ and do not meet the 10 C.F.R. § 2.309(c) standards for nontimely contentions. ⁴⁵ The NRC Staff also argues the Cleanup Contention and Cables Contention 2 are untimely ⁴⁶ and fail to meet the standards for nontimely contentions.

In addition, Entergy and the NRC Staff oppose the subject contentions' admission under 10 C.F.R. § 2.309(f)(1). Entergy argues Cables Contention 1 and Cables Contention 2 are inadmissible because they are too vaguely stated to

³⁸ Cables Contention 2 at 1; *see*, *e.g.*, Cleanup Contention at 4 (asserting the 10 C.F.R. § 2.309(f)(iv) materiality standard is met); Cables Contention 1 at 4 (asserting the 10 C.F.R. § 2.309(f)(iv) materiality standard is met).

³⁹ Cleanup Contention at 9-15; Cables Contention 1 at 34-39; Cables Contention 2 at 53-58.

⁴⁰ Entergy Answer Opposing Pilgrim Watch Request for Hearing on a New Contention (Dec. 27, 2010) [hereinafter Entergy Answer to Cleanup Contention]; NRC Staff's Answer in Opposition to Pilgrim Watch's Request for Hearing on New Contention (Dec. 23, 2010) [hereinafter Staff Answer to Cleanup Contention].

⁴¹ Entergy Answer to Cables Contention 1; NRC Staff's Answer in Opposition to Pilgrim Watch Request for Hearing on New Contention (Jan. 7, 2011) [hereinafter Staff Answer to Cables Contention 1].

⁴² Entergy Answer to Cables Contention 2; NRC Staff's Answer in Opposition to Pilgrim Watch's January 20, 2011 Amended Contention (Feb. 14, 2011) [hereinafter Staff Answer to Cables Contention 2].

⁴³ See, e.g., Entergy Answer to Cleanup Contention at 3-5; Staff Answer to Cleanup Contention at 1; Entergy Answer to Cables Contention 1 at 3, 10-14; Staff Answer to Cables Contention 1 at 4; Entergy Answer to Cables Contention 2 at 4, 12, 15-16; Staff Answer to Cables Contention 2 at 7.

⁴⁴Entergy Answer to Cleanup Contention at 1, 5-12; Entergy Answer to Cables Contention 1 at 1, 14-20; Entergy Answer to Cables Contention 2 at 17-20.

⁴⁵ Entergy Answer to Cleanup Contention at 1, 12-15; Entergy Answer to Cables Contention 1 at 20-23; Entergy Answer to Cables Contention 2 at 26-30.

⁴⁶ Staff Answer to Cleanup Contention at 11-12; Staff Answer to Cables Contention 2 at 11-13.

⁴⁷ Staff Answer to Cleanup Contention at 7-11; Staff Answer to Cables Contention 2 at 10.

satisfy 10 C.F.R. § 2.309(f)(1)(i),⁴⁸ raise issues that are immaterial to and outside the scope of the proceeding in contravention of 10 C.F.R. § 2.309(f)(1)(iii) and (iv),⁴⁹ and fail to demonstrate a genuine dispute with the application pursuant to 10 C.F.R. § 2.309(f)(1)(vi).⁵⁰ Entergy argues in addition that Cables Contention 1 lacks the support of alleged facts or expert opinion required by 10 C.F.R. § 2.309(f)(1)(v)⁵¹ and that Cables Contention 2 lacks a brief explanation of its basis in violation of 10 C.F.R. § 2.309(f)(1)(ii).⁵² The NRC Staff also argues that Cables Contention 2 raises issues outside the scope of this proceeding.⁵³ Finally, both Entergy and the NRC Staff argue that the Cleanup Contention fails to provide a brief explanation of its basis,⁵⁴ raises issues beyond the scope of this proceeding and not material to this proceeding,⁵⁵ lacks the support of facts or expert opinion,⁵⁶ and fails to raise a genuine dispute with the application on a material issue of law or fact.⁵⁷

On January 7, 2011, Pilgrim Watch replied to Entergy and the NRC Staff's answers concerning admission of the Cleanup Contention. Se Pilgrim Watch replied to Entergy and the NRC Staff's answers concerning Cables Contention 1 on January 14, 2011. and Cables Contention 2 on February 24, 2011.

On March 9, 2011, in conjunction with hearing oral argument on the remanded issue, the Board heard argument on admissibility of these three proposed new contentions.⁶¹

⁴⁸ Entergy Answer to Cables Contention 1 at 24-25; Entergy Answer to Cables Contention 2 at 35.

⁴⁹Entergy Answer to Cables Contention 1 at 35-37; Entergy Answer to Cables Contention 2 at 32-35.

⁵⁰Entergy Answer to Cables Contention 1 at 26-35; Entergy Answer to Cables Contention 2 at 36-49.

⁵¹ Entergy Answer to Cables Contention 1 at 25.

⁵²Entergy Answer to Cables Contention 2 at 35.

⁵³ Staff Answer to Cables Contention 2 at 13-15.

⁵⁴ Entergy Answer to Cleanup Contention at 16-18; Staff Answer to Cleanup Contention at 16-17.

⁵⁵Entergy Answer to Cleanup Contention at 18-19; see Staff Answer to Cleanup Contention at 15-16, 18-19.

⁵⁶ Entergy Answer to Cleanup Contention at 20, see Staff Answer to Cleanup Contention at 17-18.

⁵⁷ Entergy Answer to Cleanup Contention at 20-23, Staff Answer to Cleanup Contention at 15-16.

⁵⁸ Reply for Cleanup Contention.

⁵⁹ Reply for Cables Contention 1.

⁶⁰ Pilgrim Watch Reply to Entergy's and the NRC Staff's Oppositions to Pilgrim Watch's Request for Hearing on a New Contention (Feb. 24, 2011) at 1 [hereinafter Reply for Cables Contention 2].

⁶¹ Tr. at 784-1018. After the oral argument, Pilgrim Watch filed five memoranda relating to the three proposed new contentions addressed in today's ruling. On March 12 and 28, 2011, Pilgrim Watch submitted two filings related to the recent events at the Fukushima Nuclear Power Plant in Japan, in which it argues that we should consider concerns related to these events in connection with the matters (Continued)

II. ANALYSIS

A. General Legal Standard Governing Motion to Reopen the Record

Under 10 C.F.R. § 2.326(a), a motion to reopen a closed record must (1)

currently pending before us. Pilgrim Watch Memorandum Regarding Fukushima (Mar. 12, 2011) at 1 [hereinafter PW Fukushima Memo 1]; Pilgrim Watch Post-Hearing Memorandum (Mar. 28, 2011) at 1 [hereinafter PW Fukushima Memo 2]. In the second of these Pilgrim Watch argues that the events in question constitute relevant new information of which we should take judicial notice, PW Fukushima Memo 2 at 1, and that we should, on the same basis, accept the proposed new contentions, require further analysis of the Pilgrim SAMA analysis, and delay any decision on the LRA "until NRC has evaluated the lessons learned from Fukushima to be assured that the Aging Management Programs for Pilgrim are appropriate." *Id.* at 3. Attached to this latter filing was an editorial from the *Boston Globe* newspaper, urging among other things that "a badly needed reappraisal of nuclear energy safety in the United States" should "start with [the] Pilgrim nuclear station in Plymouth," including revisiting "concerns about the aging cables at Pilgrim and the plant's security." *Id.*, Attach. 1, *At Pilgrim, NRC must address fuel rods, cables, safety plan, Boston Globe, Mar. 27, 2011 (emphasis omitted).*

Pilgrim Watch's next two posthearing memoranda concern alleged statements by Entergy about the availability of commercially proven tests to detect cable insulation degradation. Pilgrim Watch Memorandum — Entergy's Incorrect and Misleading Information Regarding Proven Tests to Detect Cable Insulation Degradation (Apr. 11, 2011) at 1; Pilgrim Watch Memorandum — Entergy's Incorrect and Misleading Information Regarding Proven Tests to Detect Cable Insulation Degradation — Video Supplement (Apr. 12, 2011) at 1.

Pilgrim Watch's fifth posthearing memorandum presents excerpts from an NRC task force report on Fukushima. Pilgrim Watch Request for Leave to Supplement Pilgrim Watch Request for Hearing on the Inadequacy of Entergy's Aging Management Program of Non-Environmentally Qualified (EQ) Inaccessible Cables (Splices) at Pilgrim Station, filed on December 10, 2010 and January 20, 2011 (Aug. 8, 2011) at 1 (citing Dr. Charles Miller et al., 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)).

NRC Staff and Entergy have not filed answers to Pilgrim Watch's fifth posthearing memorandum yet, but they oppose the requests made by Pilgrim Watch in the first four. Entergy's Reply to Pilgrim Watch Post-Hearing Memorandum (Apr. 7, 2011) at 1; NRC Staff's Response to Pilgrim Watch Post-Hearing Memorandum (Apr. 7, 2011) at 1; Entergy's Objection to Pilgrim Watch's Post-Hearing Memoranda and Other Unauthorized Filings (Apr. 22, 2011) at 1 [hereinafter Entergy's Objection to Unauthorized Filings]. Entergy argues the first four postargument memoranda are unauthorized and contain inaccurate allegations. Entergy's Objection to Unauthorized Filings at 1-2.

Despite not having the opportunity to consider answers and a reply regarding Pilgrim Watch's fifth posthearing memorandum, we conclude that the excerpts of the task force report, as with the other four posthearing memoranda, have no bearing on today's ruling. Therefore, we do not rule herein on those filings. Accordingly we need not address Entergy's and Staff's objections and Pilgrim's response to those objections. Pilgrim Watch Answer to Entergy's and NRC Staff's Reply to Pilgrim Watch Post-Hearing Memorandum Filed April 7, 2011 (Apr. 11, 2011); Pilgrim Watch Response to Entergy's April 22, 2011 Filing Regarding Proven Tests to Detect Cable Insulation Degradation (Apr. 24, 2011).

be timely,⁶² (2) address a significant safety or environmental issue; and (3) demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially.⁶³ In addition, the motion must be accompanied by affidavits that set forth the factual and/or technical bases for the claim that the above criteria have been met.⁶⁴ In such affidavits, "[e]ach of the criteria must be separately addressed, with a specific explanation of why it has been met."⁶⁵

B. Application of Motion to Reopen Standards to Pilgrim Watch's Three New Contentions

Pilgrim Watch explicitly elected not to file a motion to reopen with regard to any of these three proposed new contentions, asserting, instead, that there was no need to reopen. 66 Pilgrim Watch, having taken this approach without making any attempt to argue in the alternative, nowhere in its arguments attempts to make the case that a materially different result would be likely if any of its proposed new contentions were considered, as required by 10 C.F.R. § 2.326(a)(3). Moreover, it fails to present affidavits required by section 2.326(b) setting forth the factual and technical bases for the claim that the criteria of section 2.326(a) have been met, thus depriving the Board of any foundation for finding, for example, that a materially different result could be likely. Although Pilgrim Watch did deliver

Pilgrim Watch [(PW)] does not seek to "reopen" anything. It does not ask to reopen Contention 1; neither does it seek to add anything to still pending Contention 3. Rather, PW's new contention is directed to an issue — submerged unqualified inaccessible cables — that was not part of, and that was not and could not have been litigated in connection with, either Contention 1 or Contention 3. . . .

In short, this is not "a motion to reopen a closed record." Neither is it an attempt to show that "a materially different result would be or would have been likely had the newly proffered evidence been considered initially." . . . The "results" in Contention 1 and Contention 2 would not be affected for the simply [sic] reason that nothing in PW's new contention relates to either of those contentions, and PW does not ask that the record in either be reopened.

What Pilgrim Watch does seek is a hearing on a new contention that raises an issue that was not been litigated, [sic] and could not have been litigated, as part of either Contention 1 or Contention 3.

Reply for Cables Contention 2 at 3 (internal citation omitted).

⁶² Section 2.326(a)(1) gives the presiding officer discretion to consider "an exceptionally grave issue . . . even if untimely presented." *Id.*

^{63 10} C.F.R. § 2.326(a).

⁶⁴ *Id.* § 2.326(b).

⁶⁵ Id

⁶⁶ As it regards Cables Contentions 2, Pilgrim Watch made their position unequivocally clear, stating:

affidavits in support of its two new cable contentions,⁶⁷ neither addresses, as is required by our regulations, the reopening standards of section 2.326. The Commission has emphasized, in this docket, the need for affidavits to support any motion to reopen and has held that intervenors' speculation that further review of certain issues "might" change some conclusions in the final safety evaluation report does not justify restarting the hearing process.⁶⁸

This failure of Pilgrim Watch to address the reopening standards in accord with section 2.326 creates a yawning deficiency in its submissions since the evidentiary record in this Board hearing has been closed⁶⁹ and the Board's jurisdiction in this remanded proceeding does not extend to, nor does the remand reopen, any other aspect of this hearing or other issues regarding the requested license renewal.⁷⁰ The scope of the remand does not even encompass all of Contention 3; it is limited to the narrow issue respecting whether addressing the asserted shortcomings in the meteorological modeling could cause other SAMAs to become cost-effective.⁷¹

Each of Pilgrim Watch's proposed new contentions raises new matters not heretofore raised in this proceeding, and, notwithstanding Pilgrim Watch's assertions to the contrary, section 2.326(d) of agency regulations explicitly sets out criteria for reopening a closed record when the motion "relates to a contention not previously in controversy." Thus Pilgrim Watch's view that no motion to

⁶⁷Cables Contention 1, Attach. B, Declaration of Paul M. Blanch [hereinafter Blanch Declaration]; Affidavit of Paul M. Blanch ¶ 18 (Jan. 19, 2011) [hereinafter Blanch Affidavit].

 ⁶⁸ AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461,
 486 (2008). The CLI-08-23 order involved four NRC proceedings, including the Pilgrim proceeding.
 ⁶⁹ Order Regarding Testimony and Evidence at 3-4.

⁷⁰ See Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-10-17, 72 NRC 1, 10 n.37 (2010) [hereinafter Vermont Yankee I] (noting that during pendency of remand intervenors "are free to submit a motion to reopen the record pursuant to 10 C.F.R. § 2.326, should they seek to address any genuinely new issues related to the license renewal application that previously could not have been raised" (emphasis omitted)). The record of the hearing before the Board consists of all evidence presented to the Board, all correspondence between the Board and the parties (including teleconferences), and all Board rulings and other orders. That record was finalized when the Board closed the record. The remand of the Commission directed that the Board consider a very narrow topic and that all evidence and correspondence and Board issuances that occur during the course of carrying out the Commission's remand directive will be added to the Board's previously closed record. However, the remand did nothing more vis-à-vis the record, and had the Commission intended that the record of the Board be reopened, it is quite capable of so directing. In the absence of any such directive, we cannot, and, in fact, must not, find the record otherwise reopened or ordered to be expanded beyond that narrow scope.

⁷¹ Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant, Units 1-4), ALAB-526, 9 NRC 122, 123-24, 124 n.3 (1979) (holding that, after board authorized issuance of applicant's permits and Commission remanded specific question to board, board's jurisdiction was limited to what was remanded to it, and board lacked jurisdiction over newly filed intervention petition).

⁷² 10 C.F.R. § 2.326(d).

reopen is required in this circumstance⁷³ is in error.⁷⁴ And, if there were any doubt whatsoever regarding the intent of section 2.326, Commission precedent makes clear that Pilgrim Watch's request for hearing regarding a newly proffered contention cannot be admitted unless it satisfies the stringent standards for reopening the record.⁷⁵

The rationale for the Commission's policy of "generally disfavor[ing] the filing of new contentions at the eleventh hour of an adjudication" is based on the doctrine of finality, "which states that at some point, an adjudicatory proceeding must come to an end." Where, as here, the record has been closed, the Commission is equally plain that its rules impose a "deliberately heavy"

 $^{^{73}}$ Reply for Cleanup Contention at 5-6; Reply for Cables Contention 1 at 8-9; Cables Contention 2 at 58-59.

⁷⁴ Indeed, the only circumstance which would enable Pilgrim Watch to avoid satisfaction of the reopening requirements would be if the record here were not closed, or if the remand had the effect of keeping it open regarding the new contention material. But, as we discussed above, not only does the subject matter of Pilgrim Watch's new contentions fall well outside the scope of the remanded matter, but the remand had no effect which can reasonably be said to reopen the record — rather it creates a circumstance wherein the record will be supplemented in the narrow remanded subject area.

⁷⁵ See Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-11-2, 73 NRC 333, 338 (2011) [hereinafter Vermont Yankee II] (citing 10 C.F.R. § 2.326(a) and § 2.309(c) as the burden to be met when an intervenor "seeks both to reopen the record and to submit a late contention" after the record "has been closed, even with respect to an existing contention"); Vermont Yankee I, CLI-10-17, 72 NRC at 10 n.37; AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC 658, 668 (2008) [hereinafter Oyster Creek I] ("Commission practice holds that the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention." (quoting *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-05-12, 61 NRC 345, 350 (2005))); Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), LBP-83-30, 17 NRC 1132, 1135, 1138 (1983) (holding standards for reopening the record "clearly do" apply to proposed new contention after all issues, excepting matters unrelated to the proposed new contention, have been litigated and the record has been closed); cf. Criteria for Reopening Records in Formal Licensing Proceedings, 51 Fed. Reg. 19,535, 19,538-39 (May 30, 1986) [hereinafter Criteria for Reopening] ("A motion to reopen must be filed whenever a proponent seeks to add new information to a closed record, whether the information concerns a new contention or one which has already been heard.").

⁷⁶ Vermont Yankee II, CLI-11-2, 73 NRC at 337.

⁷⁷ *Id.* (citing *Private Fuel Storage*, CLI-05-12, 61 NRC at 350 n.18); *see also* Criteria for Reopening, 51 Fed. Reg. at 19,539 ("Administrative consideration of evidence always creates a gap between the time the record is closed and the time the administrative decision is promulgated. This is especially true if the issues are difficult, the evidence intricate, and the consideration of the case deliberate and careful. If upon the coming down of the order litigant might demand rehearings as a matter of law because some new circumstance has arisen, some new trend has been observed; or some new fact discovered, there would be little hope that the administrative process could ever be consummated in an order that would not be subject to reopening. It has been almost a rule of necessity that rehearings were not matters of right, but were pleas to discretion." (quoting *Interstate Commerce Commission v. Jersey City*, 322 U.S. 503, 514-15 (1944))).

burden on an intervenor seeking to reopen the record to consider additional evidence, including evidence on a new contention.⁷⁸

Moreover, a Board may not provide analysis that an intervenor has failed to provide. Rather, the Commission has held that "[w]hile a board may view a petitioner's supporting information in a light favorable to the petitioner, it cannot do so by ignoring *our contention admissibility rules*, which *require the petitioner* (not the board) to supply all of the required elements for a valid intervention petition."⁷⁹ Although we agree with our colleague's general approach that we should not endorse form over substance, we may not, as our colleague would, ⁸⁰ reconstruct Pilgrim Watch's pleadings to find that Pilgrim Watch's pleadings might be interpreted to satisfy these requirements where Pilgrim Watch itself has explicitly argued it need not, and explicitly elected not to attempt to do so, and its arguments fail to supply the necessary substance.⁸¹

Additionally, where a motion to reopen relates to a contention not previously in controversy, section 2.326(d) requires that the motion demonstrate that the balance of the nontimely filing factors in 10 C.F.R. § 2.309(c) favors granting the motion to reopen. Finally, the new contention must also meet the standards for contention admissibility under 10 C.F.R. § 2.309(f)(1).

With these precepts in mind, we turn to an analysis of the admissibility of each of Pilgrim Watch's three new contentions under consideration here.

C. Rulings on Admissibility of Proposed New Contentions

1. Cleanup Contention (Filed November 29, 2010)

In its proposed new Cleanup Contention Pilgrim Watch asserts:

Until and unless some third party assumes responsibility for cleanup after a severe nuclear reactor accident to pre-accident conditions, sets a cleanup standard, and identifies a funding source, Entergy should be required to take all of the mitigation steps that would be required by a SAMA analysis (i) based on a conservative source term using release fractions no lower than those specified in NUREG-1465 or used by the NRC in studies such as NUREG 1450, cleanup to a dose rate of not more than 15 millirem a year, and at least the 95th percentile of the total consequences

⁷⁸ Ovster Creek I, CLI-08-28, 68 NRC at 674.

⁷⁹ AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260 (2009) [hereinafter Oyster Creek II] (emphasis added).

⁸⁰ See Administrative Judge Ann Marshall Young, Concurring in Part and Dissenting in Part (Aug. 11, 2011) at 7 [hereinafter Concurrence and Dissent].

 $^{^{81}}$ In this aspect, we disagree with our colleague's interpretation of the substance of Pilgrim Watch's pleadings.

determined by the EARLY and CHRONC modules of the MACCS2 Code, and (ii) does not reduce any costs by use of a discount factor or probabilistic analysis.⁸²

As we indicated above, Pilgrim Watch has filed no affidavit to establish that this contention meets the requirements of 10 C.F.R. § 2.326(a)(1)-(3).

While arguing it need not satisfy the requirements for reopening the record, Pilgrim Watch nonetheless presents arguments regarding timeliness,⁸³ which is a requirement under 10 C.F.R. § 2.326(a)(1). Pilgrim Watch asserts the Cleanup Contention is timely because of information it found in an article published on November 10, 2010, in Inside EPA.⁸⁴ According to this article,

EPA, the Nuclear Regulatory Commission (NRC) and the Federal Emergency Management Agency (FEMA) are struggling to determine which agency — and with what money and legal authority — would oversee cleanup in the event of a large-scale accident at a nuclear power plant that disperses radiation off the reactor site and into the surrounding area.

The effort, which the agencies have not acknowledged publicly, was sparked when NRC recently informed the other agencies that it does not plan to take the lead in overseeing such a cleanup and that money in an industry-funded insurance account for nuclear accidents would likely not be available, according to documents obtained by Inside EPA . . . under the Freedom of Information Act (FOIA).⁸⁵

At oral argument, Pilgrim Watch argued that it should be excused from the affidavit requirement of section 2.326(b) because the issue in the contention "is a non[-]technical issue and . . . very straightforward on its face" and because the contention is supported by a large number of e-mails of government employees. 86

⁸² Cleanup Contention at 1.

⁸³ *Id.* at 9-10.

⁸⁴ Id. at 5, 10.

⁸⁵ Id., Attach. 1, Douglas P. Guarino, Agencies Struggle to Craft Offsite Cleanup Plan for Nuclear Power Accidents, Inside EPA, Nov. 22, 2010 (emphasis omitted), quoted in part in Cleanup Contention at 5-6. The documents to which the article refers — a series of e-mails among employees of various federal agencies discussing issues relating to the subject of the article — are attached to the Cleanup Contention. The article also notes that

[[]a] spokesman for the Nuclear Energy Institute (NEI), which represents the nuclear power industry, says officials believe such cleanups would be handled by the insurance fund despite assertions in the documents to the contrary. The NEI spokesman also downplays the likelihood of such a cleanup being necessary, saying accidents are "highly unlikely to occur."

Guarino, supra this note.

⁸⁶ Tr. at 795-96; Pilgrim Watch further indicates in the Cleanup Contention that at a hearing it "intends principally to rely upon government documents and testimony from David I. Chanin and Dr. Edwin Lyman." Cleanup Contention at 15. Pilgrim Watch argues that "[i]t would be unreasonable . . . to expect a totally unfunded group to provide testimony from these experts" when filing a contention.

The NRC Staff opposes admission because, among other things, issues relating to NRC policy and its interactions with other agencies "are not issues that are susceptible to resolution in this proceeding." Entergy and the NRC Staff further assert that the referenced article does not support the technical modeling changes that Pilgrim Watch seeks. 88

To begin with, and paramount to our decision regarding admissibility of this proposed new contention, we note that the Cleanup Contention has a singular subject matter: Pilgrim Watch's purported "new" information regarding cleanup after a severe accident, particularly implying a lack of certainty regarding which agency has responsibility for cleanup after a severe accident, the standard for cleanup and the source of funding for such cleanup. In fact, in its reply, Pilgrim Watch asserts that this contention is "based on new information indicating that no third party has assumed responsibility for cleanup after a severe nuclear reactor accident, no cleanup standard had been set, and no source is identified to pay for the cleanup." Based upon that information, Pilgrim Watch argues that:

. . . Entergy should be required to take all of the mitigation steps that would be required by a SAMA analysis (i) based on a conservative source term using release fractions no lower than those specified in NUREG-1465 or used by the NRC in studies such as NUREG 1450, cleanup to a dose rate of not more than 15 millirem a year, and at least the 95th percentile of the total consequences determined by the EARLY and CHRONC modules of the MACCS2 Code, and (ii) does not reduce any costs by use of a discount factor or probabilistic analysis. 90

But these challenges regard policy matters that are solely within the jurisdiction of the Commission. They also represent challenges to binding Commission rulings regarding what is required in a SAMA analysis; arguments along the lines of the need to perform more conservative analysis, to use 95th percentile computations, as well as the challenge of using a discount factor to evaluate the time effects of cleanup costs, were all previously advanced by Pilgrim Watch in this proceeding and explicitly rejected by the Commission.⁹¹

Id. According to Pilgrim Watch, such a requirement would render "most members of the public, non-profit public interest groups, and local governments . . . unable to file due to lack of resources." *Id.* Pilgrim Watch advises that "[r]esources for these groups necessarily must be preserved for expert witnesses required at the summary disposition and hearing stage of these proceedings." *Id.*

⁸⁷ Staff Answer to Cleanup Contention at 19.

⁸⁸ Entergy Answer to Cleanup Contention at 7; Staff Answer to Cleanup Contention at 6, 17-18.

⁸⁹ Reply for Cleanup Contention at 1.

⁹⁰Cleanup Contention at 1.

⁹¹ CLI-10-11, 71 NRC at 316-17; *see, also,* this Board's discussions of these matters in LBP-11-18, 74 NRC at 40.

As to Pilgrim Watch's implication that there may be forthcoming, from studies of the events at the Fukushima reactors, new information as to potential consequences of a severe accident at Pilgrim,⁹² the consequences of those events are simply irrelevant to any uncertainty that might exist regarding which agency has authority over cleanup after a severe accident in the United States. And, of course, to the extent that such information might become a future basis for modifications of SAMA analysis standards in the United States, speculation regarding any such unknown modifications is outside the scope of this proceeding.

Thus, this proposed contention must be rejected as being outside the scope of this proceeding and requesting remedies previously rejected in this proceeding by the Commission itself.

Further, although the contention is inadmissible for the aforesaid reasons, it is also inadmissible for its failure to satisfy the explicit and intentionally stringent requirements for reopening a record. Although we recognize that participating in an NRC adjudication proceeding obviously involves some cost, and that intervenors are not always situated to have the resources, including experts, needed to support contentions, when a motion to reopen is required, as we have concluded it is here, section 2.326(b) specifically requires an affidavit because that affidavit supplies the factual and legal foundation for assertions that the reopening criteria are satisfied. As Entergy has pointed out, the Commission is plain that the "burden of satisfying the reopening requirements is a heavy one," and that "proponents of a reopening motion bear the burden of meeting all of [these] requirements."⁹³

Pilgrim Watch has failed, both in the pleadings associated with the Cleanup Contention itself and its subsequent pleadings, to meet the requirement of section 2.326, including those of section 2.326(b) for an affidavit. The absence of expert-supported information causes Pilgrim Watch to fail to satisfy the requirements of section 2.326(a)(3); the absence of such information directly causes a failure to *demonstrate* (as is required) (and therefore deprives us of the ability — even the opportunity — to substantively consider whether) a materially different result would be obtained (as is required by our reopening standards).⁹⁴ Therefore, even if

⁹² PW Fukushima Memo 2 at 3.

⁹³ Oyster Creek II, CLI-09-7, 69 NRC at 287 (quoting Louisiana Power & Light Co. (Waterford Steam Electric Station, Unit 3), CLI-86-1, 23 NRC 1, 5 (1986) and Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), CLI-90-10, 32 NRC 218, 221 (1990)) quoted in Entergy Answer to Cleanup Contention at 5.

Further, Entergy and Staff also point out that Pilgrim Watch's technical concerns could have been raised earlier. *See, e.g.,* Entergy Answer to Cleanup Contention at 7-11; Staff Answer to Cleanup Contention at 11.

⁹⁴This standard is measured using the Commission's test of whether it has been shown that a motion for summary disposition could be defeated. See Vermont Yankee II, CLI-11-2, 73 NRC at 346.

we had not found (as we did) that the contention was inadmissible for the reasons set out above, it is inadmissible for failure to satisfy the reopening standards of 10 C.F.R. § 2.326.

2. Cables Contention 1 (Filed December 13, 2010)

In the second of its proposed new contentions, filed December 13, 2010, Pilgrim Watch alleges

Entergy's Aging Management Plan for non-environmentally qualified (EQ) inaccessible cables and cable splices at Pilgrim Station is insufficient to provide reasonable assurance that these cables will be in compliance with NRC Regulations and public health and safety shall be protected during license renewal.⁹⁵

But Pilgrim Watch plainly concedes that the subject matter of inaccessible cables was addressed in Entergy's original LRA (submitted on January 17, 2006), 96 and thus for this contention to be admissible the "new" information must, in and of itself, be sufficient to support its admissibility. 97 Pilgrim Watch identifies NRC Information Notice 2010-26, which concerned submerged electrical cables and was issued on December 2, 2010, as the new information upon which this proposed new contention is based. 98

This same issuance was presented as new information to support admissibility by an intervenor in the Vermont Yankee proceeding. 99 Similar to Cables Contention 1, the proposed new contention in Vermont Yankee alleged that an aging management program for "buried, below grade, underground, or hard-to-access" cables did not "comply with NRC regulation" and did not assure "protection of public health and safety." 100 The Commission determined that NRC Information Notice 2010-26 merely summarized information that was previously available, and explicitly held that such a summary is not new information upon which a new

⁹⁵ Cables Contention 1 at 1.

 $^{^{96}}$ See, e.g., Cables Contention 1 ¶31. Both the NRC Staff and Entergy thoroughly discuss the depth to which inaccessible cables were addressed in the original LRA. Entergy Answer to Cables Contention 1 at 7; Staff Answer to Cables Contention 1 at 13.

^{97 10} C.F.R. § 2.309(f)(2).

⁹⁸ Cables Contention 1 at 2.

⁹⁹ Vermont Yankee II, CLI-11-2, 73 NRC at 344.

¹⁰⁰ *Id.* at 336. Another reason we find *Vermont Yankee II* instructive is that the proposed new contention there was supported by the affidavit of the same expert who provided the affidavit in support of Cables Contention 1. *Compare* New England Coalition's Motion to Reopen the Hearing and for the Admission of New Contentions (Aug. 23, 2010), Attach. Declaration and Affidavit of Paul Blanch (ADAMS Accession No. ML102420042) *with* Blanch Declaration.

contention can be based.¹⁰¹ In addition, the Commission held that the Vermont Yankee intervenor did not "come close to demonstrating a likelihood that it would have prevailed on the merits of [the new contention] and that its success would have materially altered the outcome of [that] proceeding."¹⁰² Thus the notice relied upon by Pilgrim Watch is not new information sufficient to provide the basis for reopening the presently closed record in this proceeding; i.e., it causes the contention to fail to satisfy the requirements of section 2.326(a)(1) and therefore to be inadmissible.

Moreover, Pilgrim Watch failed to make any motion to reopen the record, which is, in and of itself, fatal to admissibility of this contention. 103 Further, Pilgrim Watch has, here again in connection with its refusal to address the reopening requirements, failed to deliver the required expert affidavit and caused, by absence of such information, the contention to fail to satisfy the requirements of section 2.326(a)(3). Thus, Cables Contention 1 cannot be admitted because it fails to satisfy the requirements for reopening the record.

Finally, Pilgrim Watch asserts that this Board should consider concerns arising out of the problems at the Fukushima nuclear power plants in the wake of the earthquake and tsunami there, because "[t]he inability to provide electric power to critical safety components appears to be a major contributing factor." But Pilgrim Watch fails to provide any connection or logic explaining how those factors (if they exist) are related to this proposed contention, or to explain how those factors could affect the fact that the information upon which this contention is based is not new within the requirements of the NRC. Nor do the assertions regarding the problems at the Fukushima reactors in any way affect the other failures of Pilgrim Watch regarding this contention. These concerns simply provide no basis upon which we might rule otherwise than in accordance with the NRC rules at 10 C.F.R. § 2.326.

3. Cables Contention 2 (Filed January 20, 2011)

In Cables Contention 2, the second of Pilgrim Watch's proposed new contentions challenging Entergy's aging management plan for inaccessible cables, Pilgrim Watch alleges:

Entergy's Aging Management Plan (as amended by Entergy on January 7, 2011) for non-environmentally qualified (EQ) inaccessible cables and cable splices at Pilgrim

¹⁰¹ Vermont Yankee II, CLI-11-2, 73 NRC at 344.

¹⁰² Id. at 348.

¹⁰³ In this regard, we find thorough and persuasive, and hereby adopt, the arguments advanced by the Staff in pages 7 through 19 of its answer. Staff Answer to Cables Contention 1 at 7-19.

¹⁰⁴ PW Fukushima Memo 1 at 1.

Station is insufficient to provide reasonable assurance that these cables will be in compliance with NRC Regulations and public health and safety shall be protected during license renewal. 105

As with its November and December 2010 contentions, Pilgrim Watch elected not to file a motion to reopen the record with its January 2011 new contention. ¹⁰⁶ Rather Pilgrim Watch repeatedly claimed it need not satisfy the reopening standard in order for the contention to be admissible. ¹⁰⁷ Thus, nowhere in its pleading does Pilgrim Watch argue or otherwise demonstrate that its request satisfies the requirements of 10 C.F.R. § 2.326(a)(3) or (b). By so refusing, not only has Pilgrim Watch simply not addressed the relevant criteria, but it has failed to submit the required information which might enable us to make a favorable determination on its request, failing to deliver any affidavit setting forth the factual bases for a claim that it satisfies each of the criteria in 10 C.F.R. § 2.326(a), and thereby failing to submit the requisite information to demonstrate that a materially different result would be likely if we were to admit this proposed new contention. This failure requires that we reject the request for hearing on the new cable contention. ¹⁰⁸

¹⁰⁵ Cables Contention 2 at 1 (emphasis omitted).

¹⁰⁶ We cannot, as Pilgrim Watch would have it, wholly disregard the Commission's reopening standards. Indeed, the burden (and here, the deliberately heavy burden) falls upon an intervenor, not a licensing board, to assure that the Commission's substantive standards have been met. *See supra* note 79 and accompanying text.

¹⁰⁷ As we stated, this position is patently incorrect. *See supra* note 75 and accompanying text. This Board's jurisdiction on remand is limited to the narrow meteorological SAMA issue of remanded Contention 3. And for Pilgrim Watch's new contention to be admitted, it must satisfy the Commission's stringent standards for reopening the record.

¹⁰⁸ See Vermont Yankee II, CLI-11-2, 73 NRC at 348 (affirming denial of motion to reopen because intervenor did not show likelihood that it would have prevailed on the merits of proposed new contention and that its success would have materially altered the proceeding's outcome); Oyster Creek II, CLI-09-7, 69 NRC at 287 (stating that "proponents of a reopening motion bear the burden of meeting all of [these] requirements" (quoting Seabrook Station, CLI-90-10, 32 NRC at 221)); Private Fuel Storage, CLI-05-12, 61 NRC at 350 ("[A] party seeking to reopen a closed record to raise a new matter faces an elevated burden to lay a proper foundation for its claim."); see also Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-775, 19 NRC 1361, 1365-66 (1984) (stating reopening motion must show that a different result would have been reached initially if the material had been considered (quoting ALAB-756, 18 NRC 1340, 1344 (1983))).

And, we disagree with our colleague that looking at the "reality" of what is shown by Pilgrim Watch's pleadings (which she apparently does based upon her review of Pilgrim Watch's statement repeated in her Concurrence and Dissent that "its request for hearing on its January 2011 new contention 'is not a motion to reopen, and even if it were Pilgrim Watch's request meets the standards for reopening — it is timely and addresses a significant safety issue," Concurrence and Dissent at text accompanying note 2 (quoting Reply for Cables Contention 2 at 2) (emphasis omitted)) can reasonably lead to the conclusion that the stringent and explicit requirements that each of the reopening criteria (Continued)

Furthermore, even if Pilgrim Watch had addressed the other requirements for reopening the record, Pilgrim Watch fails to demonstrate that Cable Contention 2 is timely under 10 C.F.R. § 2.326(a)(1) which is fatal under both our regulations and under plain and unequivocal Commission precedent on this topic. ¹⁰⁹ To be timely, Pilgrim Watch must demonstrate that the issues sought to be raised by the new cable contention could not have been raised earlier. ¹¹⁰

Cable Contention 2 alleges that Entergy's AMP for non-environmentally qualified (EQ) inaccessible cables and cable splices at Pilgrim *remains* insufficient to satisfy 10 C.F.R. §§ 54.21(a) and 54.9.¹¹¹ Pilgrim Watch asserts that Entergy's January 7, 2011 commitment in its AMP to include monitoring of low-voltage cables (400V to 2kV) and to increase the frequency of cable testing and manhole inspections "remains" inadequate because, *inter alia*, the AMP: (1) does not commit to replacing non-EQ cables exposed to submergence; (2) fails to monitor cables carrying less than 400V; (3) does not commit to adequate frequency of inspections; (4) does not assume the correct probability of corrosion (and thus the risk management in the AMP is misguided); (5) does not perform a baseline inspection of groundwater flow as it relates to inaccessible cables; and (6) does not provide sampling methodology.¹¹²

be explicitly addressed in an expert affidavit as well as set out clearly in the contention pleading are satisfied. *Id.* at 96. Pilgrim Watch's pleadings and expert affidavit simply do not address the criteria to the requisite degree, and the results we express in this Order regarding our examination of these requirements cannot reasonably be construed to elevate form over substance.

There simply would be no end to NRC licensing proceedings if petitioners could ignore our timeliness requirements and add new contentions at their convenience based on information that could have formed the basis for a timely contention at the outset of the proceeding. Our expanding adjudicatory docket makes it critically important that parties comply with our pleading requirements and that the Board enforce those requirements.

Vermont Yankee II, CLI-11-2, 73 NRC at 338-39 (quoting Oyster Creek II, CLI-09-7, 69 NRC at 271-72).

¹¹⁰ See Criteria for Reopening Records, 51 Fed. Reg. at 19,536 (explaining that "timely" has been defined in NRC case law as "whether the issues sought to be presented could have been raised at an earlier time"); see, e.g., Diablo Canyon, ALAB-775, 19 NRC at 1366 ("[F]or a reopening motion to be timely presented, the movant must show that the issue sought to be raised could not have been raised earlier." (citing Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), ALAB-138, 6 AEC 520, 523 (1973))); 10 C.F.R. § 2.309(f)(2).

111 See Cables Contention 2 at 2 (alleging the AMP is "like" the original AMP in failing to satisfy 10 C.F.R. §§ 54.21(a) and 54.29). It cannot go unnoticed that Pilgrim Watch's assertion is not that the improvements to the AMPs made through Entergy's January 2011 supplement to its LRA themselves present an insufficiency in the subject programs, but that Pilgrim Watch asserts that those programs "remain" insufficient — i.e., that Pilgrim Watch now seeks to raise a matter it believed was problematic ab initio.

¹⁰⁹ As the Commission has repeatedly stated:

¹¹² Id. at 28-35.

Pilgrim Watch asserts that the contention is timely because it is based on the NRC Staff's recent revisions to the GALL report and Entergy's license renewal supplement filed in response thereto.¹¹³

Entergy and the NRC Staff argue, *inter alia*, that Cables Contention 2 is not based on new information because the GALL report revision and Entergy's LRA supplement merely enhance the AMP identified in the original LRA.¹¹⁴ For the reasons set out below, we agree with Entergy and the NRC Staff that the contention is not timely under 10 C.F.R. § 2.326(a)(1).¹¹⁵

As noted, *on January 17*, 2006, Entergy submitted its LRA which identified the AMP that it planned to use for inaccessible cables at Pilgrim. ¹¹⁶ On its face, Entergy's original AMP committed to implement a program for "Non-EQ Inaccessible Medium-Voltage Cable" consistent with section XI.E3 of Revision 1 of NUREG-1801, Generic Aging Lessons Learned (GALL) Report (GALL Report Rev. 1). ¹¹⁷ In turn, the GALL Report Rev. 1 provided, at the time Entergy submitted its original LRA, for a program for managing "Inaccessible Medium-Voltage Cables Not Subject to 10 CFR 50.49 Environmental Qualification Requirements," which requires periodic testing of cable insulation and inspection of manholes for water accumulation. ¹¹⁸ Thus, Entergy's original LRA identified an AMP that provided a program for periodic inspection and testing of non-EQ inaccessible cables. Although such a program was included in the original LRA (and therefore could have been challenged), Pilgrim Watch did not proffer a contention that challenged that AMP in its original intervention petition when the issue could have been first raised.

Since the original LRA was submitted, more than 5 years ago, no material portion of Entergy's AMP regarding the subject cables has been changed. In response to the recommendations of revision 2 to the GALL Report, Entergy elected to *enhance* its existing AMP for non-EQ inaccessible medium-voltage cables to include monitoring of low-voltage cable (400V to 2kV), and to increase the minimum frequency of non-EQ inaccessible cable testing and inspections, thus continuing its efforts to be in compliance with the requirements of 10 C.F.R.

¹¹³ Id. at 53-54.

¹¹⁴Entergy Answer to Cables Contention 2 at 17; Staff Answer to Cables Contention 2 at 8.

¹¹⁵ In addition, we find that Cables Contention 2 is not timely under 10 C.F.R. § 2.309(f)(2).

¹¹⁶ See License Renewal Application, App. B § B.1.19, App. A § A.2.1.21 (ADAMS Accession No. ML060300029) [hereinafter LRA Appendices]; see also Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Safety Evaluation Report: Related to the License Renewal of Pilgrim Nuclear Power Station (July 2007) at 3-18 to 3-21.

¹¹⁷LRA Appendices, App. B § B.1.19.

¹¹⁸ Office of Nuclear Reactor Regulation, Generic Aging Lessons Learned (GALL) Report, NUREG-1801, Rev. 1, § XI.E3 (Sept. 2005) (ADAMS Accession No. ML052780376) [hereinafter GALL Rev. 1].

§§ 54.21(a) and 54.9.¹¹⁹ Entergy's enhancements to its AMP for these cables include commitments to test cables for degradation once every 6 years, to inspect the manholes yearly, and to increase the frequency of testing and inspection based on its evaluation of test results.¹²⁰

For Pilgrim Watch's position to be correct, the modifications must, in and of themselves, and despite the fact that the general topic of inspection and maintenance of the subject cables was addressed, and a related AMP provided, in the original LRA and not challenged by Pilgrim Watch, constitute new information sufficient to permit admissibility of an entirely new contention. But the Commission is plain in its view that an enhancement to a program does not constitute new information sufficient to support a new contention. 121 The Commission could not have been more clear on this point when it explicitly endorsed as reasonable the view of the licensing board in Oyster Creek that "as a matter of law and logic if — as [Intervenors] allege — [Applicant's] enhanced monitoring program is inadequate, then [Applicant's] unenhanced monitoring program . . . was a fortiori inadequate, and [Intervenor] had a regulatory obligation to challenge it in their original Petition to Intervene."122 Thus, if Entergy's enhanced AMP for the Pilgrim plant is inadequate as alleged by Pilgrim Watch, then its original AMP for the plant was also inadequate and Pilgrim Watch was obligated to challenge it in its intervention petition. 123 Moreover, close scrutiny of the Affidavit of Paul M. Blanch submitted in support of Pilgrim Watch's challenge raised by this contention makes clear that every single objection raised by Mr. Blanch, even where he made specific reference to the amendment to the LRA, regarded subject

¹¹⁹LRA Supplement at 8; Compare GALL Rev. 2 at XI E3-2 with GALL Rev. 1 at XI E-7 to E-8.

¹²⁰LRA Supplement at 8.

¹²¹ Oyster Creek II, CLI-09-7, 69 NRC at 273-74.

¹²² *Id.* at 274 (quoting LBP-06-22, 64 NRC 229, 246 (2006)). The Commission also stated that the Oyster Creek Board's reasoning was "equally sound when the Board later applied it to reject a proposed new contention concerning a new program for monitoring [the imbedded liner portion at issue there]." *Id.*

We note our colleague disagrees with this view, and her approach is not without merit. However, her analysis fails to recognize that the circumstances that would need to be present for her interpretation of precedent to be appropriately applicable to the present situation are simply not present here. *See*, *e.g.*, our discussion *supra* at text accompanying note 121 and *infra* text accompanying note 124.

¹²³ Indeed, by its own statements, Pilgrim Watch makes clear that it could have filed the new contention earlier. For example, Pilgrim Watch asserts that

[[]t]he license renewal application for Pilgrim Station was amended by Entergy January 7, 2011. Like its original Aging Management Program (AMP), in its 2006 License Renewal Application, it fails to comply with the requirements of 10 C.F.R. §§ 54.21(a) and 54.29 because the applicant has not proposed an adequate or sufficiently specific plan for aging management of non-environmentally qualified inaccessible electrical cables

Cables Contention 2 at 2. Likewise, Pilgrim Watch contends that "Entergy's AMP for Non-EQ inaccessible cables at Pilgrim, as amended, *remains* woefully insufficient." *Id.* at 28 (emphasis added).

matter that could (and therefore should) have been raised at the outset of this proceeding as an objection to the AMPs set out in the original LRA.¹²⁴ In short,

We do not disagree with our colleague's interpretation of governing cases to the effect that there are circumstances wherein an amendment to an AMP will present new information that is indeed new when compared to the then-existing AMP and which is, therefore, suitable fuel for a contention, even one requiring reopening a then-closed record. However, this is not such a situation as Pilgrim Watch's challenge raises matters that were the subject of the original AMP and that have merely been expanded or supplemented by Entergy's amendment. Put simply, the subject of inaccessible cable inspection and maintenance was covered by AMPs in Entergy's original LRA and any shortcomings of those plans were appropriate for contention at the time. While Entergy's amendment indeed enhances and supplements the original AMP for inaccessible cables, all of the shortcomings addressed in the amendment were obviously present in the original LRA AMP, and therefore those shortcomings are not new today. Thus the issues Pilgrim Watch raised through its expert, Mr. Blanch, are nothing more than issues that were present in the original AMP submitted with the original LRA. For example, Mr. Blanch raised the following issues: (a) assertions of the absence from the AMP of a "requirement to perform a thorough subsurface hydrological-geological survey over the entire site to determine groundwater flow today as it relates to inaccessible Non-EQ cables within scope," Blanch Affidavit \P 18; (b) assertions that there are "very high corrosive salt concentrations in the groundwater which will likely accelerate the degradation of cables in contrast to those nuclear plants located away from coastal areas" and that "[t]he risk of common mode failure of submerged cables at Pilgrim is significantly greater than [at] most US nuclear plants," id. ¶23; (c) concerns about the effectiveness of GALL, Revision 2, id. ¶¶ 25, 26; (d) assertions that by its amendment, Entergy

has arbitrarily redefined the scope of its cables monitoring programs thereby eliminating the majority of vital cables within the scope of 10 CFR 54.4 and 10 CFR 54.21. There are miles of cables operating at voltages of less than 400 volts that meet the requirements defined in 10 CFR 54, yet Entergy and the NRC has [sic] failed to address any requirements for aging management for these cables and wires. Entergy and the NRC have now defined low voltages cables to eliminate all cables designed to operate at less than 400 volts.

Id. ¶28; (e) an assertion that in the amendment "Entergy infers they have a 'proven method' for detecting cable deterioration," and the assertion that "[t]here is no 'proven, commercially available test' that will assure cables that have experienced submergence for any voltage rating from 0 to 345 KV," id. ¶29; (f) an assertion that "Entergy claims it has a program (EN-DC-346, Cable Monitoring Program, which it issued on December 31, 2009) with the inference it will provide reasonable assurance that will detect degraded cable failures," id. ¶34; (g) an assertion that section B.1.19 of the LRA Supplement (which he recites in part in paragraph 36)

fails to meet the requirements of 10 CFR 54 as there is no technical justification for periodicity (Continued)

 $^{^{124}}$ In this regard, we disagree with our colleague's view that the mere statement by Mr. Blanch that he "fully support[s] all technical and regulatory aspects of this contention" might fulfill the requirements of section 2.326(b), Concurrence and Dissent at notes 21-22 and accompanying text (quoting Blanch Declaration and citing 10 C.F.R. § 2.326), that the expert affidavit "set forth the factual and/or technical bases for the movant's claim that the criteria of paragraph (a) . . . have been satisfied . . . [and that] [e]ach of the criteria must be separately addressed, with a specific explanation of why it has been met." 10 C.F.R. § 2.326(b). In fact, as we discussed, this affidavit plainly fails these requirements.

the issue raised in Cables Contention 2 is not new and the contention thus not timely under 10 C.F.R. § 2.326(a)(1).¹²⁵

III. ORDER

For the foregoing reasons, we DENY admission of each of Pilgrim Watch's first three proposed new contentions.

of inspections and it is not possible to inspect the condition of cable splices that may exist within submerged conduits. Cables that have been exposed to any submergence must be replaced with cables designed and qualified for underwater operation.

Id. ¶37; and (h) after assertions that "Entergy has failed to provide any commitment to establishing any baseline inspections for safety related inaccessible cables," id. ¶42, and that "[t]he NRC does not have the expertise to totally understand cable manufacturing, installation and operation," id. ¶43, concludes with the assertion that, in his professional opinion

this is a grave safety issue that may result in common mode failures increasing the probability and possibly challenging:

The integrity of the reactor coolant pressure boundary;

The capability to shut down the reactor and maintain it in a safe shutdown condition; or The capability to prevent or mitigate the consequences of accidents.

Id. ¶ 50. Every single one of these challenges regards elements of the AMPs for inaccessible electrical cables, and, because the subject matter was treated in the original LRA, these could have been raised as objections to the initial AMP, which were surely suffering from these same shortcomings now addressed in part by Entergy's amendment. We disagree with our colleague's basis for finding that this contention presents an admissible challenge.

¹²⁵ Regarding the issue of timeliness, we note that the provisions of 10 C.F.R § 2.326(a)(1) would permit a finding of timeliness if the issue raised is "exceptionally grave." We do not find persuasive or compliant with our regulations Mr. Blanch's bare speculative statement, that he believes this is a grave safety issue, Blanch Affidavit § 50; his statements are simply conclusory remarks provided with no explanation as to how the asserted shortcomings he finds in Entergy's AMP for inaccessible cables logically lead to the sort of safety issues he asserts are present. Those statements are also speculative ("may result" in common mode failures leading to the several outcomes he suggests are possible), and speculation by an expert cannot form the basis for admission of a contention on the basis of the matter being exceptionally grave. See Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 125 (2009) (affirming finding of untimeliness where expert did not explain how the issue presented an exceptionally grave safety or environmental issue). Thus we do not find any basis for Pilgrim Watch's (or Mr. Blanch's) assertion that an exceptionally grave issue is presented by the matters subject of this proposed contention. Moreover, we see nothing to suggest, and nothing has been presented by Pilgrim Watch that could enable us to conclude, that Entergy's January 2011 improvements to its AMP submitted might present some exceptionally grave issue — and certainly if there were such a serious matter, it would plainly have been presented by the provisions of Entergy's original LRA regarding the subject cables.

It is so ORDERED.

FOR THE ATOMIC SAFETY AND LICENSING BOARD 126

Dr. Paul B. Abramson ADMINISTRATIVE JUDGE

Dr. Richard F. Cole ADMINISTRATIVE JUDGE

Rockville, Maryland August 11, 2011

 $^{^{\}rm 126}\,\rm Judge$ Young's concurring and dissenting views are set forth on the following pages.

Administrative Judge Ann Marshall Young, Concurring in Part and Dissenting in Part

I agree that Pilgrim Watch's new contentions are required to meet the standards of 10 C.F.R. § 2.326, and that its November 2010 new contention does not meet these requirements. For the reasons stated herein, however, although Intervenor's January 2011 new contention presents a close case, I find it meets the rule's standards.¹

Reopening Standards of 10 C.F.R. § 2.326

Intervenor argues that the reopening requirements of section 2.326 do not apply to its new contentions, stating among other things, for example, that its request for hearing on its January 2011 new contention "is *not* a motion to reopen, and even if it were Pilgrim Watch's request meets the standards for reopening — it is timely and addresses a significant safety issue." Pilgrim Watch urges that the reopening requirements apply only to "new evidence about an issue that has already been heard," and "may not be properly applied to the new material contentions that deal with u[n]litigated issues."

It is true that 10 C.F.R. § 2.326 begins, in subsection (a), by referring to a "motion to reopen a closed record *to consider additional evidence*," stating that such a motion "will not be granted" unless certain criteria are satisfied.⁴ But subsection (d) of the rule refers to "[a] motion to reopen *which relates to a contention not previously in controversy among the parties*," indicating that the rule is not intended to be limited to motions seeking only to submit additional evidence relating to a previously admitted contention.

¹ As indicated *infra*, I find no need to rule on Intervenor's December 2010 new contention.

² Pilgrim Watch Reply to Entergy's and the NRC Staff's Oppositions to Pilgrim Watch's Request for Hearing on a New Contention (Feb. 24, 2011) at 2 (emphasis in original) [hereinafter Pilgrim Watch 2/24/11 Reply].

³ Id. at 4. Intervenor cites various cases in support of its arguments, including Union of Concerned Scientists v. NRC, 735 F.2d 1437, 1443-44 & n.11 (D.C. Cir. 1984); Commonwealth of Mass. v. NRC, 924 F.2d 311, 334 (D.C. Cir. 1991); Union of Concerned Scientists v. NRC, 920 F.2d 50 (D.C. Cir. 1990); San Luis Obispo Mothers for Peace v. NRC, 751 F.2d 1287, 1316-17 (D.C. Cir. 1984), vacated in part, 760 F.2d 1320 (D.C. Cir. 1985) (en banc), and aff'd, 789 F.2d 26 (D.C. Cir. 1985) (en banc), cert. denied, 479 U.S. 923 (1986). These cases, however, all involve situations in which parties were not permitted to raise issues initially and/or there was no opportunity for hearing on a particular issue, see Union of Concerned Scientists, 735 F.2d at 1444-45; Mass. v. NRC, 924 F.2d at 333-36; Mothers for Peace, 751 F.2d at 1316-17, which is not the situation herein. Intervenor has at all times in this proceeding been permitted at least to raise issues, as argued by Entergy and the NRC Staff. See Tr. at 808-09, 812.

⁴ 10 C.F.R. § 2.326(a) (emphasis added).

⁵ *Id.* § 2.326(d) (emphasis added).

The reopening criteria that must be satisfied under section 2.326 are, first, under subsection (a), that any such motion (1) must be timely (except that "an exceptionally grave issue may be considered in the discretion of the presiding officer even if untimely presented"); (2) must "address a significant safety or environmental issue"; and (3) must "demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially." In addition, the rule in subsection (b) requires that:

The motion must be accompanied by affidavits that set forth the factual and/or technical bases for the movant's claim that the criteria of paragraph (a) of this section have been satisfied. Affidavits must be given by competent individuals with knowledge of the facts alleged, or by experts in the disciplines appropriate to the issues raised. Evidence contained in affidavits must meet the admissibility standards of this subpart. Each of the criteria must be separately addressed, with a specific explanation of why it has been met. When multiple allegations are involved, the movant must identify with particularity each issue it seeks to litigate and specify the factual and/or technical bases which it believes support the claim that this issue meets the criteria in paragraph (a) of this section.⁷

Finally, subsection (d) requires that a motion relating to a new contention also "satisfy the requirements for nontimely contentions in § 2.309(c)." All of these criteria must be met in order to satisfy the requirements of section 2.326. And, of course, any contention must meet the requirements of 10 C.F.R. § 2.309(f)(1)(i)-(vi).

The Commission has endorsed the principle that "a motion to file new or amended contentions must address the motion to reopen standards" after an intervention petition has been denied. And in the *Vermont Yankee* proceeding, in which the Commission on appeal of board initial decisions remanded the case for a limited purpose, to observed that, although the *proceeding* would remain open, Intervenors therein had to submit a motion to reopen to address "any *genuinely new* issues related to the license renewal application that previously could not have been raised." Although the Commission has not made such a statement

⁶ Id. § 2.326(a)(1)-(3).

⁷ Id. § 2.326(b). Subsection (c) of the rule concerns motions predicated on allegations of confidential informants and is not relevant to the matters at issue.

⁸ *Id.* § 2.326(d)

⁹ Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 120 (2009).

¹⁰ Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-10-17, 72 NRC 1, 4 (2010) [hereinafter Vermont Yankee I].

¹¹ Id. at 10 n.37 (emphasis in original). See also New Jersey Environmental Federation v. NRC, No. 09-2567, 2011 WL 1878642, at *9-10 (3rd Cir. May 18, 2011).

in this proceeding,¹² the same logic would seem to apply. I therefore agree that under NRC rule and case law, Pilgrim Watch must meet the reopening criteria of section 2.326 with respect to any new contentions filed after the Commission's remand, in CLI-10-11, for the limited purposes set forth therein.

November 2010 "Cleanup Contention"

In its November 2010 contention Pilgrim Watch asserts:

Until and unless some third party assumes responsibility for cleanup after a severe nuclear reactor accident to pre-accident conditions, sets a cleanup standard, and identifies a funding source, Entergy should be required to take all of the mitigation steps that would be required by a SAMA analysis (i) based on a conservative source term using release fractions no lower than those specified in NUREG-1465 or used by the NRC in studies such as NUREG 1450, cleanup to a dose rate of not more than 15 millirem a year, and at least the 95th percentile of the total consequences determined by the EARLY and CHRONC modules of the MACCS2 Code, and (ii) does not reduce any costs by use of a discount factor or probabilistic analysis. ¹³

Although there are certain arguments that might be said to support the timeliness and significance aspects of this contention, ¹⁴ Pilgrim Watch has not met the

¹²I do note that, in an Order issued August 5, 2010, the Commission through its Secretary denied Pilgrim Watch's request for further consideration and remand of certain matters, stating that Intervenor "neither addresses nor meets the Commission's standards for seeking reconsideration, *or for reopening a closed record*, and therefore merits no further adjudicatory action by the Commission." Commission Order (Aug. 5, 2010) (unpublished) (emphasis added). This indicates some level of presumption that the reopening requirements would apply to any new filings in the proceeding, at least from and after August 5, 2010.

¹³ Pilgrim Watch Request for Hearing on New Contention (Nov. 29, 2010) at 1 [hereinafter Nov. 2010 Cleanup Contention].

¹⁴Pilgrim Watch bases this contention largely on a November 10, 2010, article in the online publication Inside EPA, entitled *Agencies Struggle to Craft Offsite Cleanup Plan for Nuclear Power Accidents*, in which it is stated that there exist disagreements and confusion among the NRC, the Environmental Protection Agency (EPA), and the Federal Emergency Management Agency (FEMA) over "which agency — and with what money and legal authority — would oversee cleanup in the event of a large-scale accident at a nuclear power plant that disperses radiation off the reactor site and into the surrounding area." *Id.*, Attach. 1, Douglas P. Guarino, *Agencies Struggle to Craft Offsite Cleanup Plan for Nuclear Power Accidents*, Inside EPA, Nov. 22, 2010. Although Entergy and the NRC Staff dispute the preceding assertions, assuming *arguendo* them to be true (and avoiding going into the merits of the contention at this stage of the proceeding, as is proper) they would seem on their face to be both timely and serious so as to support some of the suggestions made in the contention itself, even if they do not meet the affidavit and "materially different result" requirements of section 2.326.

requirement of 10 C.F.R. § 2.326(b) for an affidavit,¹⁵ which also brings into question whether it has met the "materially different result" requirement of section 2.326(a)(3), using the Commission's test of whether it has been shown that a motion for summary disposition could be defeated.¹⁶ Therefore, while not agreeing with all of my colleagues' analysis on this contention, I must agree that it is inadmissible, because it does not meet all of the reopening standards of 10 C.F.R. § 2.326. Whatever their ultimate merits, however, I do not discount the subjects about which Pilgrim Watch is concerned,¹⁷ particularly in view of the recent events at the Fukushima Plant in Japan, and would therefore recommend to the Commission that it consider having the NRC Staff address the subjects of this contention and the matters on which it is based, in light of ongoing Fukushima-related efforts,¹⁸ prior to considering the issuance of the sought license renewal.

December 2010 Cables Contention

In December 2010 Pilgrim Watch filed a contention relating to inaccessible cables.¹⁹ Attached to it is a December 13, 2010, Declaration signed by Paul M. Blanch, stating his experience, among other things as a Navy nuclear reactor operator and electric plant operator on *Polaris* submarines; a California registered professional engineer with a B.S. in electrical engineering; an active participant in "industry standards writing activities" with the American Nuclear Society, the Instrumentation Society of America, and the Institute of Electrical and Electronics Engineers, for use by the nuclear industry; a contractor for the Electric Power Research Institute and the Nuclear Energy Institute; and more than 40 years of "engineering, design, operations, maintenance, engineering management, and project coordination"; as well as noting that he was named 1993 "Engineer of

¹⁵ I note Pilgrim Watch's statement that it "intends principally to rely upon government documents and testimony from David I. Chanin and Dr. Edwin Lyman. It would be unreasonable at this date to expect a totally unfunded group to provide testimony from these experts" Nov. 2010 Cleanup Contention at 15. However, section 2.326(b) and relevant case law appear not to permit such circumstances to be taken into account. *See, e.g., AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC 658, 672-73 (2008).

¹⁶ See Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-11-2, 73 NRC 333, 346 (2011) [hereinafter Vermont Yankee II]; 10 C.F.R. § 2.1205.

¹⁷ See supra note 14; see also Tr. at 814-59.

¹⁸ For example, an NRC task force recently issued a report that is currently under consideration by the Commission. *See* Dr. Charles Miller et al., 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) (ADAMS Accession No. ML111861807) [hereinafter Near-Term Task Force Report].

¹⁹ Pilgrim Watch Request for Hearing on a New Contention: Inadequacy of Entergy's Aging Management of Non-Environmentally Qualified (EQ) Inaccessible Cables (Splices) at Pilgrim Station (Dec. 13, 2010) [hereinafter Dec. 2010 Cables Contention].

the Year" by Westinghouse Electric and Control magazine for his "efforts in identifying the subtle failures of active electrical devices such as pressure, level, and flow transmitters and indicators [including] generic design deficiencies of piping and mechanical systems in reactor level monitoring systems." Mr. Blanch states in his Declaration that he has "read and reviewed the enclosed proposed contention from Pilgrim Watch and fully support[s] all technical and regulatory aspects of this contention on Inaccessible cables." Based on the last preceding statement, one might consider that Mr. Blanch has effectively incorporated by reference the entire December 2010 Cables Contention and its accompanying basis, and address the reopening standards of 10 C.F.R. § 2.326, among others, based on such a reading. Because, however, the allegations in the December 2010 Cables Contention have in effect been superseded by those in Pilgrim Watch's January 2011 contention, which challenges Entergy's aging management plan for the cables as amended in January 2011, I consider that the latter has effectively replaced the former, and address only the latter, in the following section.

January 2011 Cables Contention

Pilgrim Watch in the contention asserts:

Entergy's Aging Management Plan (as amended by Entergy on January 7, 2011) for non-environmentally qualified (EQ) inaccessible cables and cable splices at Pilgrim Station is insufficient to provide reasonable assurance that these cables will be in compliance with NRC Regulations and public health and safety shall be protected during license renewal.²³

Although Pilgrim Watch has argued that this contention "is timely and addresses a significant safety issue,"²⁴ it did not in the contention seek to reopen the record, and does not explicitly address the reopening standards of 10 C.F.R. § 2.326.²⁵ If, however, the contention *does in fact* meet all the substantive criteria

²⁰ Dec. 2010 Cables Contention, Attach. B, Declaration of Paul M. Blanch (Dec. 13, 2010), Dec. 2010 Cables Contention at 48-49.

²¹ *Id.* at 50.

²² The contention is in any event likely inadmissible based on the Commission's ruling in *Vermont Yankee II*, CLI-11-2, 73 NRC 333, discussed *infra* in my consideration of Pilgrim Watch's January 2011 Cables Contention.

²³ Pilgrim Watch Request for Hearing on a New Contention: Inadequacy of Entergy's Aging Management of Non-Environmentally Qualified (EQ) Inaccessible Cables (Splices) at Pilgrim Station (Jan. 20, 2011) at 1 (emphasis in original) [hereinafter January 2011 Cables Contention or Cables Contention 2].

²⁴ Pilgrim Watch 2/24/11 Reply; see also supra note 2 and accompanying text.

²⁵ See Cables Contention 2 at 58-59.

of 10 C.F.R. § 2.326, I would find denying it solely on the basis that Intervenor did not file a formal motion to reopen to be elevating form over substance. In my view, looking instead at the *reality* of what is actually shown in the filings is the appropriate course to take, particularly given Pilgrim Watch's *pro se* status. ²⁶ To do this does not violate any regulatory provisions or reasonable standards of fair play, nor does it constitute supplying for the intervenor any required elements, as suggested by the board majority. It involves looking to whether Intervenor itself has supplied the necessary elements, even if not designating them as such. I look, therefore, to whether Cables Contention 2 and its support, as filed, does in fact meet the requirements of 10 C.F.R. § 2.326.

Timeliness Under 10 C.F.R. §§ 2.326(a)(1), (d), and 2.309(c)

On the requirements of timeliness found in sections 2.326(a)(1) and (d) and 2.309(d), I would take the following circumstances into account:

First, the Commission in its recent decision in the *Vermont Yankee* proceeding upheld that Licensing Board's denial of a motion to reopen regarding a contention similar to both Pilgrim Watch's December 2010 new contention as well as this one in some respects, supported by the affidavit of the same expert.²⁷ The Commission in CLI-11-2 noted that "the first and most significant difficulty" with the cables contention in *Vermont Yankee* was that it was "based on the premise that the cable AMP in Entergy's Application is incomplete — an assertion that, if true today, was equally true when Entergy filed its Application in 2006."²⁸ The contention, the Commission said, "raises the question of whether the AMP in the Application adequately addresses the issue of submerged electric cables during the 20-year period of extended operation — an issue of which [Intervenor New

²⁶ In NRC proceedings, *pro se* litigants are generally not held to the same high standards of pleading and practice as parties with counsel. *See, e.g., Vermont Yankee I,* CLI-10-17, 72 NRC at 45 n.246); *U.S. Enrichment Corp.* (Paducah, Kentucky Gaseous Diffusion Plant), CLI-01-23, 54 NRC 267, 272 (2001); *Consolidated Edison Co. of New York* (Indian Point, Unit 2), LBP-83-5, 17 NRC 134, 136 (1983).

²⁷ Vermont Yankee II, CLI-11-2, 73 NRC 333. The contention at issue in that case stated as follows: Applicant has not demonstrated adequate aging management review and/or time-limited aging analysis nor does the applicant have in place an adequate aging management program to address the effects of moist or wet environments on buried, below grade, underground, or hard-to-access safety-related electrical cables[. T]hus the applicant does not comply with NRC regulation (10 CFR § 54.21(a)[)] and guidance and/or provide adequate assurance of protection of public health and safety (54.21(a)[)].

Id. at 336. See New England Coalition's Motion to Reopen the Hearing and for the Admission of New Contentions (Aug. 23, 2010), Attached Declaration and Affidavit of Paul Blanch (ADAMS Accession No. ML1024200420).

²⁸ Vermont Yankee II, CLI-11-2, 73 NRC at 341.

England Coalition (NEC)] should have been aware since the filing of the 2006 Application."²⁹

The Commission then, after finding that the information on which NEC based its contention was not truly new,³⁰ went on to address NEC's complaint that the *Vermont Yankee* Board should not in ruling on its contention have considered a supplement to its application that Entergy had filed, addressing certain cable-related criteria and arguing that it rendered NEC's contention moot.³¹ The Commission noted NEC's argument that the Board should not have "accepted" the document, but found that Entergy appropriately filed the supplement, stating in addition:

NEC has not shown that it has been harmed or prejudiced by the agency's consideration of the Supplement. NEC has had ample time to review, and adequate means by which to address, the Supplement. Specifically, NEC could either have filed a second motion to reopen the proceeding on the basis of the Supplement, or requested leave to amend its August 20 Motion to Reopen, and (either way) to file a revised Contention 7. NEC has taken none of these steps.³²

The Commission follows this statement immediately with its conclusion that "[i]n sum, the [*Vermont Yankee*] Board did not err in determining that NEC offered no 'new' information supporting Contention 7 and that the information therefore did not support NEC's Motion to Reopen."³³

In contrast to the intervenor in *Vermont Yankee*, Pilgrim Watch in this proceeding did file a revised contention — its January 20, 2011, contention quoted above — citing as "new information" Entergy's January 7, 2011, amendment of its aging management plan, or "AMP."³⁴ Thus Cables Contention 2 is distinguishable from the contention addressed in CLI-11-02 (which Pilgrim Watch's December 2010 Cables Contention may be said to more closely resemble). The new AMP amendment is comparable to the "supplement" in *Vermont Yankee* that

²⁹ *Id.* at 342.

³⁰ Id. at 342-44.

³¹ *Id.* at 345.

³² *Id.* (citing 10 C.F.R. §§ 2.326, 2.309(f)(2)). I also note that the Commission's ruling in CLI-11-2 was limited to finding that the provisions of 10 C.F.R. § 2.326(a)(1) and (3) were not met. An affidavit had been provided, and the Commission did not rule on the significance issue of subsection (a)(2) because the Licensing Board had not ruled on it and therefore, the Commission found, it was not properly before it on appeal. *Id.* at 337 n.13.

³³ *Id.* at 345.

³⁴Cables Contention 2 at 24-25. Pilgrim Watch also cited the NRC Staff's December 23, 2010, Revision 2 of the GALL Report, *id.*, which the Commission in CLI-11-2 found did not constitute new information, given that it merely summarized previously available information, *Vermont Yankee II*, CLI-11-2, 73 NRC at 344.

the Commission discusses in the above-quoted language. Based on this, I would find that the January 2011 Cables Contention 2 may be timely and admissible to the extent it is based on the AMP amendment, assuming all other relevant criteria are met.

Regarding my colleagues' conclusion that the contention fails because based on a mere enhancement of what existed before, the same could have been said with respect to the supplement in Vermont Yankee, 35 and yet the Commission in CLI-11-2 does not suggest this, notwithstanding its earlier comment about the "incompleteness" of the original cables AMP. 36 I note the authority that my colleagues and Entergy cite for the contrary proposition — namely, the Commission's earlier Oyster Creek ruling upholding that Licensing Board's finding that a contention challenging an "enhanced monitoring program" adopted by that Applicant was inadmissible because that intervenor had not challenged the original "unenhanced monitoring program." However, while the Commission in Vermont Yankee cited its earlier Oyster Creek ruling for various other propositions,³⁸ it does not make any reference to the concept of holding inadmissible challenges to "enhanced" programs when an original "unenhanced" program has not been challenged, nowhere even using the word "enhance," "enhanced," or "unenhanced." If it intended to adopt this reasoning, it surely would have done so explicitly.

Furthermore, what the Commission actually did in *Oyster Creek* with respect to the "enhancement" ruling of that Board was to find it to be reasonable and to state that it saw "no error in [its] reasoning." The Commission in *Oyster Creek* did not say that this was the only possible result in circumstances in which an intervenor files a new contention based on a supplement to an application, such as, for example, Entergy's *new* amendment to its AMP herein. Nor does the Third Circuit Court of Appeals in its ruling on an appeal of the Commission's *Oyster Creek* decision say anything to the contrary, instead (similarly to the Commission) merely finding the ruling to have been reasonable and not an abuse of discretion. 40

³⁵ See id. at 345 n.55.

³⁶ It might also be observed that Intervenor herein challenges more the correctness than the completeness of the AMP amendment in question. In addition, the exact definition of what constitutes an "enhancement" may not be so clear as the majority sees it.

³⁷ See Entergy Answer Opposing [Cables Contention 2] at 2 & n.6 (citing AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 274 (2009)) [hereinafter Entergy Answer to Cables Contention 2]; accord Majority Ruling at notes 121-123 and accompanying text

³⁸ See Vermont Yankee II, CLI-11-2, 73 NRC at 337 n.14, 338 n.17, 339 n.22, 346 nn.63-64, 347 n.69)

³⁹ Oyster Creek, CLI-09-7, 69 NRC at 274.

⁴⁰N.J. Envtl Fed'n, 2011 WL 1878642 at 7.

Moreover, the Commission's statement in Vermont Yankee that NEC had not moved to reopen based on the supplement or filed a "revised [c]ontention"⁴¹ must be presumed to have meaning, to be more than mere dictum, and to have played into its timeliness ruling — particularly in the absence of any reference to its observation in Oyster Creek on a contention challenging an "enhancement" to an existing program. Again, notwithstanding the Commission's earlier reference in CLI-11-2 to the asserted "incompleteness" of that cables AMP, to construe that reference to mean that any contention that might have been based on the Vermont Yankee supplement (or, as in this case, the amendment to the AMP⁴²) would actually and necessarily be inadmissible, because the original "unenhanced" AMP was not challenged, would effectively be to accuse the Commission of a sort of sleight of hand in the above-quoted statement, offering but an empty theory. For just as in this case, NEC in Vermont Yankee had not challenged the original AMP,⁴³ and under the "enhancement" theory could never have successfully challenged the AMP supplement through a motion to reopen or a revised contention, which would render the Commission's above-quoted language from CLI-11-2⁴⁴ meaningless. I will presume, to the contrary, that the Commission's analysis was meaningful and genuine.

In sum, Pilgrim Watch in its January 20, 2011, contention did, unlike the Intervenor in *Vermont Yankee*, challenge Entergy's January 7, 2011, amendment to its AMP, and on this basis I would find it to be timely under 10 C.F.R. § 2.326(a)(1) as well as under sections 2.326(d) and 2.309(c). (Insofar as Pilgrim Watch's January 20, 2011, filing is based on Entergy's January 7, 2011, amendment of its AMP, it might indeed also be considered timely under section 2.309(f)(2).)

Under section 2.309(c), I would consider that Entergy's January AMP amendment constituted good cause for failure to file on time under section 2.309(c)(1)(i), and find in Pilgrim Watch's favor on the remaining subparts of section 2.309(c)(1), with the exception of subpart (vii) and possibly subpart (viii). It has already been determined that Pilgrim Watch has an interest and right as a party to this proceeding, 45 which carries with it the reality that whatever order is ultimately issued in this proceeding will affect such interest, and there appears to be no other party raising the concerns stated in Cables Contention 2. Obviously, admitting

⁴¹ See supra note 32 and accompanying text.

⁴²I note that the supplement at issue in *Vermont Yankee* appears to be very similar to the AMP amendment in this proceeding. *See Entergy Nuclear Vermont Yankee*, *LLC* (Vermont Yankee Nuclear Power Station), LBP-10-19, 72 NRC 529, 543, 548 (2010) (the supplement extended the AMP for medium-voltage cables to also cover low-voltage cables).

⁴³ See id. at 539, 547.

⁴⁴ See supra text accompanying note 32.

⁴⁵LBP-06-23, 64 NRC 257, 271, 348 (2006).

the contention would delay the proceeding somewhat,⁴⁶ but I would not find this consideration to outweigh the good cause provision of subpart (i), the factor given the greatest weight in a section 2.309(c) analysis.⁴⁷ And on subpart (viii), it is clear that Pilgrim Watch is limited in its resources, but I would also note that it has an expert who can address the issues in its January 2011 Cables Contention.

Significance Under 10 C.F.R. § 2.326(a)(2)

With respect to the requirement under 10 C.F.R. § 2.326(a)(2) for a "significant safety or environmental issue," I note Affiant Paul Blanch's January 19, 2011, Affidavit, including, among others, statements therein that Entergy's AMP amendment for inaccessible cables inappropriately limits the scope of its monitoring program, omitting "miles of cables operating at voltages of less than 400 volts that meet the requirements defined in 10 CFR 54",⁴⁸ that Entergy's commitment to use a "proven, commercially available test" is incorrect because there is no such test;⁴⁹ that the cables should be replaced "with cables designed and qualified for underwater operation" because of the salt water environment;⁵⁰ that NUREG/CR-7000 supports his opinion;⁵¹ and that it is his expert opinion that the aging cables at issue in the contention and the lack of any "recognized testing that can provide reasonable assurance that [they] can perform 'their intended functions'" present a:

grave safety issue that may result in common mode failures increasing the probability and possibly challenging:

The integrity of the reactor coolant pressure boundary;

The capability to shut down the reactor and maintain it in a safe shutdown condition; or

The capability to prevent or mitigate the consequences of accidents.⁵²

As to Mr. Blanch's expertise, in addition to the experience noted *supra* in my discussion of Pilgrim Watch's December 2010 Cables Contention, he has "more than 45 years of engineering, design, operations, maintenance, engineering man-

⁴⁶Of course, the fact that the Applicant may continue to operate pending a final decision on its license renewal application, *see* 10 C.F.R. § 2.109, minimizes the negative impact of any delay.

⁴⁷ See, e.g., Vermont Yankee I, CLI-10-17, 72 NRC at 53 n.304.

⁴⁸ Affidavit of Paul M. Blanch (Jan. 19, 2011) at 9 [hereinafter Blanch Affidavit].

⁴⁹ *Id.* at 9-10.

⁵⁰ *Id.* at 11-12.

⁵¹ *Id.* at 13-14.

⁵² *Id.* at 18.

agement, and project coordination experience for the construction[,] maintenance and operation of nuclear power plants," among other things.⁵³ I find his overall experience establishes his competence, knowledge, and expertise for purposes of subsections 2.326(b) and (a)(2).

I further find Expert Blanch's statements support a finding of both safety and environmental significance. I note that Applicant and the NRC Staff disagree with Mr. Blanch's statements, which I discuss in greater detail below in the context of the section 2.326(a)(3) and (b) requirements for a "materially different" demonstration. However, such disagreements go to the merits of the issues, and while Intervenor might not (were the contention admitted) ultimately prevail on all issues, Applicant's and Staff's arguments do not negate the serious issues themselves that Mr. Blanch raises and addresses in his Affidavit.

I note also, on the issue of significance, Pilgrim Watch's March filing of two documents asking the Board to consider certain concerns arising out of, and take judicial notice of, the accident at the Fukushima nuclear power plant in the wake of the earthquake and tsunami there as well as, among other things, loss of power being a contributing factor in the accident, and the fact that both the Fukushima reactors and the Pilgrim reactor are General Electric Mark I models. Although both Entergy and the NRC Staff object to these filings, and much of the information in them goes into a level of alleged detail inappropriate for judicial notice, the three facts of the accident (1) occurring, (2) being related to loss of power, and (3) involving reactors of the same model as at the Pilgrim plant, appear to be pretty clearly undisputed and beyond reasonable controversy or dispute. Would therefore consider these bare facts in making the significance determination required by section 2.326(a)(2) — if only to provide some reasonable context and emphasis on the matter.

⁵³ Id. at 3; see also supra text accompanying note 20.

⁵⁴ Pilgrim Watch Memorandum Regarding Fukushima (Mar. 12, 2011); Pilgrim Watch Post-Hearing Memorandum (Mar. 28, 2011).

⁵⁵ Entergy's Reply to Pilgrim Watch Post-Hearing Memorandum (April 7, 2011) [hereinafter Entergy 4/7/11 Reply]; NRC Staff's Response to Pilgrim Watch Post-Hearing Memorandum (April 7, 2011).

⁵⁶ As Entergy has pointed out, *see* Entergy 4/7/11 Reply at 2, 10 C.F.R. § 2.337(f)(1) permits a board to take official notice "[1] of any fact of which a court of the United States may take judicial notice or [2] of any technical or scientific fact within the knowledge of the Commission as an expert body." Rule 201 of the Federal Rules of Evidence permits judicial notice of any fact "not subject to reasonable dispute in that it is either (1) generally known within the territorial jurisdiction of the trial court or (2) capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned." Fed. R. Evid. 201. Even assuming the three facts I list in the text were not generally known, the NRC's Near-Term Task Force is one example of a body that has clearly recognized these facts, in a manner indicating they are beyond reasonable dispute. *See* Near-Term Task Force Report at 8-9. *See also* Pilgrim Nuclear Power Station License Renewal Application (Jan. 2006) at 2.4-1 (ADAMS Accession No. ML060300028).

Although the extent to which the exact cables at issue in Cables Contention 2 are connected to or otherwise related to critical safety components is not altogether clear, I find it reasonable to presume that they have some safety and environmental significance. If they did not, there would presumably have been no need for either the amended AMP or the revised evaluation that prompted it.⁵⁷ Also, although it is possible that any similar such cables would not be related to the occurrences in Japan, the accident at the Fukushima Dai-ichi plant has at a minimum highlighted the seriousness of power-related issues, with regard to which electrical cables would seem clearly to be relevant. Not to take the situation into account as, at least, context would seem to be the equivalent of wearing blinders to a matter that is obviously of serious concern and significance to the world, the country, and the NRC.⁵⁸

Affidavit and "Materially Different Result" Requirements of 10 C.F.R. § 2.326(a)(3), (b)

As indicated above, Pilgrim Watch filed in support of its Cables Contention 2 the Affidavit of Paul M. Blanch.⁵⁹ This Affidavit consists of nineteen pages of information challenging various aspects of Entergy's amended cables AMP for the Pilgrim plant.⁶⁰ Entergy, however, in addition to arguing that Pilgrim Watch has not met the standards for reopening,⁶¹ shown the existence of a significant safety issue (providing instead "bare assertions and speculation"⁶²), or met the late-filing or contention admissibility standards of 10 C.F.R. § 2.309,⁶³ contends that Intervenor has also failed to show that a materially different result would be likely.⁶⁴ NRC Staff agrees with Entergy on all points,⁶⁵ does not provide any affidavit in support of its opposition to the January 2011 new contention, but

⁵⁷ See infra text accompanying notes 73-75.

⁵⁸ See, e.g., Near-Term Task Force Report.

⁵⁹ See Blanch Affidavit. I note that in some respects this Affidavit bears some similarities to the one provided in support of a somewhat similar contention in another license renewal proceeding, in which that contention was found to be admissible. See NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), LBP-11-2, 73 NRC 28, 53-56 (2011).

⁶⁰ See supra text accompanying notes 48-52. See also supra text accompanying notes 20, 53, on Mr. Blanch's experience, competence, knowledge, and expertise.

⁶¹ Entergy Answer to Cables Contention 2 at 1, 15-20.

⁶² *Id.* at 20-21.

⁶³ Id. at 26-49.

⁶⁴ *Id.* at 21-26.

⁶⁵NRC Staff's Answer in Opposition to Pilgrim Watch's January 20, 2011 Amended Contention (Feb. 14, 2011) at 1-2, 7-15 [hereinafter Staff 2/14/2011 Answer].

does cite certain of its earlier filings related to Cables Contention 1, including its response to Pilgrim Watch's December 2010 cables contention.⁶⁶

In support of its arguments, Entergy provides the eighteen-page Declaration of Vincent Fallacara and Roger B. Rucker, who are, respectively, the Director of Engineering at the Pilgrim plant, and an electrical engineering consultant on license renewal for Entergy who is responsible for "developing and implementing aging management programs for electrical components, responding to NRC requests for additional information and other license renewal related reviews, and assisting with audits and inspections." Like Mr. Blanch, Mr. Rucker holds a professional engineering license; he is also a licensed master electrician. Entergy argues that their Declaration "demonstrates that there is no genuine issue of material fact in dispute," and provides a summary of the points made in the Declaration.

Given that the standard for determining whether a party has met the "materially different result" requirements of 10 C.F.R. § 2.326(a)(3) and (b) is whether the party can defeat a motion for summary disposition,⁷¹ I examine Pilgrim Watch's January 2011 Cables Contention in this light. More specifically, I look to whether Mr. Blanch's Affidavit demonstrates a genuine dispute on a material issue of fact.⁷² Of course, the situation herein is reversed from that in a normal summary

if the filings in the proceeding, depositions, answers to interrogatories, and admissions on file, together with the statements of the parties and the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law.

If it is found that a moving party has provided a sufficient showing of the right to summary disposition, the next inquiry is whether the opposing party has overcome the movant's case by showing a genuine dispute on a material issue of fact. The Commission has stated in this regard the following:

When a motion for summary disposition is made and supported as described in our regulations, "a party opposing the motion may not rest upon [] mere allegations or denials," but must state "specific facts showing that there is a genuine issue of fact" for hearing. It is not sufficient, however, for there merely to be the existence of "some alleged factual dispute between the parties,["] for "the requirement is that there be no genuine issue of material fact." "Only

(Continued)

⁶⁶ Staff 2/14/2011 Answer at 4.

⁶⁷ Entergy Answer to Cables Contention 2, Attached Declaration of Vincent Fallacara and Roger B. Rucker in Support of [Entergy Cables 2 Answer] (Feb. 14, 2011) at 1 [hereinafter Entergy Declaration].

⁶⁹Entergy Answer to Cables Contention 2 at 22.

⁷⁰ *Id.* at 22-26.

⁷¹ See supra note 16 and accompanying text.

 $^{^{72}}$ In this 10 C.F.R. Part 2, Subpart L proceeding, NRC regulations require, in 10 C.F.R. § 2.1205(c), that in ruling on a motion for summary disposition the standards of Subpart G apply. Subpart G in section 2.710(d)(2) provides that summary disposition should be granted:

disposition context, in that Entergy is actually responding to Pilgrim Watch's presentation in Mr. Blanch's Affidavit, rather than the other way around. I will, however, proceed with considering Entergy's submission first, along with excerpts from an earlier Staff filing, and then look to whether Pilgrim Watch has shown a genuine dispute on any material issue(s) of fact with respect to Entergy's and NRC Staff's position, so as to be able to defeat a summary disposition motion on the matters the parties address. To simplify the inquiry, I will use Entergy's summary of its witnesses' Declaration, refer to the Staff's earlier affidavit of an NRC expert, and then consider whether Pilgrim Watch through Mr. Blanch's Affidavit has demonstrated any genuine dispute on a material issue of fact.

In its summary of the Declaration of its experts, Entergy states at the outset that, while its original Application "committed to an AMP for Non-EQ Inaccessible Medium-Voltage Cable that is consistent with Rev. 1 of the GALL Report," in response to GALL Rev. 2⁷⁴ it "enhanced this AMP so that it now includes low-voltage (400 V to 2 kV) power cable, and has increased the minimum frequency of manhole inspections and cable insulation testing." It continues its summary as follows:

disputes over facts that might affect the outcome" of a proceeding would preclude summary disposition. "Factual disputes that are . . . unnecessary will not be counted."

The correct inquiry is whether there are material factual issues that "properly can be resolved only by a finder of fact because they may reasonably be resolved in favor of either party." At issue is not whether evidence "unmistakably favors one side or the other," but whether "there is sufficient evidence favoring the non-moving party" for a reasonable trier of fact to find in favor of that party. If the evidence in favor of the nonmoving party is "merely colorable" or "not significantly probative," summary disposition may be granted.

In ruling on a motion for summary disposition a licensing board (or presiding officer) should not, however, conduct a "trial on affidavits." At this stage, "the judge's function is not himself to weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for [hearing]." "The evidence of the non-movant is to be believed, and all justifiable inferences are to be drawn in his favor." If "reasonable minds could differ as to the import of the evidence," summary disposition is not appropriate.

CLI-10-11, 71 NRC 287, 297-98 (quoting 10 C.F.R. § 2.710(b); *Anderson v. Liberty Lobby*, 477 U.S. 242, 247-52, 255 (1986) (emphasis in original)).

⁷³Entergy Answer to Cables Contention 2 at 22 (citing Entergy Declaration ¶ 6-7). The GALL Report is an NRC "technical basis" document relating to license renewal. NUREG-1801, "Generic Aging Lessons Learned (GALL) Report," Rev. 1, Abstract (Sept. 2005) (ADAMS Accession No. ML052780376). Of course, as the Commission observed in the *Vermont Yankee* case, "a commitment to implement an AMP that the NRC finds is consistent with the GALL Report constitutes one acceptable method for compliance with 10 C.F.R. § 54.21(c)(1)(iii)," *Vermont Yankee I*, CLI-10-17, 72 NRC at 36, but this does not insulate such an approach from challenge by an intervenor, and is not binding on a licensing board in an adjudication, as, for example, a regulation would be. *Id.* at 38.

⁷⁴ Office of Nuclear Reactor Regulation, Generic Aging Lessons Learned (GALL) Report, NUREG-1801, Rev. 2 (Dec. 2010) (ADAMS Accession No. ML103490041).

⁷⁵ Entergy Answer to Cables Contention 2 at 22 (citing Entergy Declaration ¶ 10).

The purpose of this AMP for non-EQ inaccessible cable is to minimize cable exposure to significant moisture that might cause failure of low- and medium-voltage cable not subject to the environmental qualification requirements of 10 C.F.R. § 50.49 (which Entergy refers to as "non-EQ" cable), and to test the cable insulation for cables potentially exposed to significant moisture.⁷⁶

Entergy indicates that it does not include cables with voltages below 400 V, "because the operating experience across all operating units has not indicated any significant frequency of water-induced failure," which is said to reflect "the fact that degradation of cable insulation is generally a function of both the voltage and the presence of water (i.e., the voltage level contributes to the degradation)."

Nor are high-voltage cables and connections included, because of unique characteristics that require they be "evaluated on an application specific basis."

In addition, Entergy states that "[t]here are no inaccessible cable splices at Pilgrim," and the splices that exist are managed according to a different AMP in the Application.

Entergy summarizes the Declaration on monitoring and testing of cables under the amended cables AMP as follows:

- The AMP for non-EQ inaccessible cable requires periodic actions to minimize exposure of cable [to] significant moisture, such as inspecting for water collection in cable manholes containing in-scope cables, and draining water as needed. These inspections will occur at least once every year, with more frequent inspections performed if necessary based on trending and evaluation of inspection results. For example, with respect to the only two manholes that are near the water table, Entergy conducts these inspections bi-weekly.
- The AMP for non-EQ inaccessible cable requires testing at least every six years
 to provide an indication of the condition of the cable insulation, and the results
 will be evaluated to determine the need for increasing the test frequency.
- Multiple proven tests exist for determining the degradation of cable insulation from different aging mechanisms. The types of tests specified in Section XI.E3 of the GALL Report and in the revised Pilgrim AMP for non-EQ inaccessible cable are all identified in NUREG/CR-7000 as tests that have the ability to indicate the condition of cable insulation.
- The tests identified in the AMP for detecting cable insulation degradation include: dielectric loss (dissipation factor/power factor); insulation resistance

 $^{^{76}}$ Id. at 23 (citing Entergy Declaration \P 5).

⁷⁷ *Id.* (citing Entergy Declaration ¶ 26).

⁷⁸ *Id.* (citing Entergy Declaration ¶ 27).

⁷⁹ *Id.*; Entergy Declaration ¶ 13.

and polarization index; AC voltage withstand; partial discharge; step voltage; time domain reflectometry; and line resonance analysis.

 The manhole inspections and cable insulation tests required under Pilgrim's AMP are consistent with recommendations for such inspections and tests developed by the Electric Power Research Institute ("EPRI").⁸⁰

Entergy asserts that "there is no regulatory requirement for baseline inspections," but that "initial testing of the non-EQ medium- and low-voltage inaccessible cable will provide baseline results," that "[a]ll in-scope medium-voltage cable will be tested before the period of extended operation, and [that] all in-scope, inaccessible low-voltage cable will be tested within the first six years of extended operation." It states that "[c]orrosion is not an aging effect applicable to cable insulation because cable insulation is non-metallic and therefore not subject to corrosion."

According to Entergy's experts, there is also "no regulatory requirement to perform a hydrological survey of the Pilgrim site for license renewal purposes," but it has nevertheless "performed such a survey in 2007 as part of the industry's groundwater protection initiative," which "confirm[ed] that Pilgrim cables are installed above the groundwater table." **83 Entergy states that the "Pilgrim site grade elevation is 23 feet above mean sea level and above the 100 year flood level," and that there has been no flooding at Pilgrim, because "[g]roundwater flows into Cape Cod Bay; sea water does not flow in the reverse direction," and because "[g]roundwater at Pilgrim does not have high corrosive salt concentrations," nor does rainwater. **According to Entergy's experts, the "average pH results from tests on water collected from storm drains and manholes is essentially neutral and does not indicate the presence of any contaminants that might adversely impact cable insulation."**

According to Entergy and its experts, "Pilgrim's inaccessible cables are located in a 'mild environment' as defined in the NRC rules and, therefore, the environmental qualification requirements of 10 C.F.R. § 50.49 do not apply to them." Thus, "compliance with the provisions of [General Design Criterion] 4 are generally achieved and demonstrated by proper incorporation of all relevant environmental conditions into the design process, including the equipment specifi-

 $^{^{80}}$ Entergy Answer to Cables Contention 2 at 23-24 (citing Entergy Declaration \P 10-11, 13, 15, 17, 23, 27).

⁸¹ Id. at 24 (citing Entergy Declaration ¶¶ 28-29).

⁸² *Id.* at 25 (citing Entergy Declaration ¶ 31).

⁸³ Id. (citing Entergy Declaration ¶¶ 35-36).

⁸⁴ *Id.* (citing Entergy Declaration ¶ 50).

⁸⁵ Id.

⁸⁶ Id.; Entergy Declaration ¶ 39.

cation."⁸⁷ Moreover, Pilgrim's inaccessible cables "were procured for installation in wet locations," and "[t]est results of samples taken from underground, 4 kV Pilgrim medium-voltage cable over 30 years old showed no evidence of premature aging or degradation."⁸⁸

Entergy states that Pilgrim does not use "inside wiring not intended to get wet"; there is "no NM-B cable in use" underground; and the commercial industry standards of the National Electrical Manufacturers Association (NEMA), National Electric Code (NEC), "do not apply to underground power cables installed at Pilgrim." Finally, any cable failures at Pilgrim "will not result in common mode failures because the likelihood of simultaneous cable insulation failure is extremely low in light of the long time period required to make a cable susceptible to voltage surges that can lead to cable failure, and the fact that voltage surges are random." Entergy asserts that any allegations not addressed in the previous summary are "immaterial or otherwise beyond the scope of this proceeding."

Because the NRC Staff has referred to its response to Pilgrim Watch's December 2010 cables contention, ⁹² I note as well its attachment to that response of the Affidavit of NRC employee Roy K. Mathew, addressing the cables issue. In his Affidavit, he states among other things that, while "allowing medium voltage cables to remain submerged for extended periods of time [at the Pilgrim plant in 2010] was a performance deficiency [because t]hese cables are not designed for submergence," this finding was "determined to be of very low safety significance . . . because the condition did not contribute to both the likelihood of a reactor trip and the unavailability of mitigating systems equipment." I also note Mr. Mathew's discussion of the NRC's "ongoing and continuous oversight of nuclear reactor operations"; his statement that "cables do not fail immediately, even when they are subjected to a wet or submerged environment," and should be "monitored for degradation"; as well as his statement that NUREG/CR-7000 does not contain any provisions with which licensees are required to comply.⁹⁴

Mr. Blanch disputes Entergy's reliance on the GALL Report, stating that it offers only "vague guidance" and "provides no assurance that the proposed

⁸⁷ Entergy Answer to Cables Contention 2 at 25 (citing Entergy Declaration ¶ 42).

⁸⁸ *Id.* (citing Entergy Declaration ¶¶ 43, 29).

⁸⁹ *Id.* at 26 (citing Entergy Declaration ¶¶ 44-49).

⁹⁰ Id. (citing Entergy Declaration ¶¶ 44-49, 59-60).

⁹¹ Id

⁹² See supra text accompanying note 66.

⁹³ NRC Staff's Answer in Opposition to Pilgrim Watch Request for Hearing on New Contention (Jan. 7, 2011), Attached Affidavit of Roy K. Mathew at 3.

⁹⁴ *Id.* at 5-6. *See infra* note 98 for a complete cite for NUREG/CR-7000. Mr. Mathew is of course correct that NUREG/CR-7000, like the GALL report, does not carry the binding authority of a properly promulgated regulation. *See supra* note 73.

program is in compliance with NRC regulations and industry standards." He also disputes Entergy's position that the cables in question are in a "mild environment" as provided at 10 C.F.R. § 50.49.95 He challenges Entergy's limiting of "the scope of its cables monitoring programs" that "eliminate[e] the majority of vital cables within the scope of 10 CFR 54.4 and 10 CFR 54.21." According to Mr. Blanch, there are "miles of cables operating at voltages of less than 400 volts that meet the requirements defined in 10 CFR 54, yet Entergy . . . has failed to address any requirements for aging management for these cables and wires," which Blanch contends must meet the requirements of section 50.49.96

Mr. Blanch disputes Entergy's monitoring and testing system, contending that "[t]here is no 'proven, commercially available test' that will assure cables that have experienced submergence for any voltage rating from 0 to 345 KV," stating that "neither the NRC, EPRI, Sandia nor Brookhaven have concluded there is any 'proven' technology to detect degradation." Mr. Blanch quotes the following from NUREG/CR-7000 in support of this statement:

In-service testing of safety-related systems and components can demonstrate the integrity and function of associated electric cables under test conditions. However, in-service tests do not provide assurance that cables will continue to perform successfully when they are called upon to operate fully loaded for extended periods as they would under normal service operating conditions or under design basis conditions. In-service testing of systems and components does not provide specific information on the status of cable aging degradation processes and the physical integrity and dielectric strength of its insulation and jacket materials. 98

According to Mr. Blanch, the preceding statement is consistent with his own experience.⁹⁹

Mr. Blanch disputes Entergy's statements on the need for a survey, stating that there should be a "thorough subsurface hydrological-geological survey over the entire site to determine groundwater flow today as it relates to inaccessible Non-EQ cables within scope," in order to "compare those results to the original Dames and Moore 1967 hydro study to see if locally adverse conditions are more severe than were anticipated when the plant was originally designed." In addition, he contends, this should be followed up "with regular subsequent scheduled

⁹⁵ Blanch Affidavit ¶ 26.

⁹⁶ *Id*. ¶ 28.

⁹⁷ Id. ¶ 29.

 $^{^{98}}$ Id. ¶ 30, 32 (citing NUREG/CR-7000, BNL-NUREG-90318-200 — Essential Elements of an Electric Cable Condition Monitoring Program (Jan. 2010)) (emphasis provided by Affiant Blanch). The quotation provided by Mr. Blanch is found in the Conclusions and Recommendations part of NUREG/CR-7000, at 5-1.

⁹⁹ *Id*. ¶ 31.

subsurface surveys to track changes in groundwater flow and tides expected from, for example, onsite construction or impacts from global warming changes" in the license renewal period. 100

Also disputed by Mr. Blanch are Entergy's statements regarding the absence of saltwater and cable insulation. According to Mr. Blanch, the National Electrical Manufacturers Association (NEMA) does have relevant information relating to the cables in question. He states that "it would be logical to have Nuclear Power plants" comply with certain minimum standards of NEMA relating to residential, industrial and commercial facilities, and advocates replacement of certain wires and cables. Noting that the Pilgrim plant "is located adjacent to Cape Cod Bay," he states that "therefore the groundwater has very high corrosive salt concentrations . . . which will likely accelerate the degradation of cables in contrast to those nuclear plants located away from coastal areas," and the cables are "not located in a mild environment." He cites various NEMA requirements regarding water-damaged cables, as well as descriptions of the dangers of using cables that have been water-damaged, "whether through floodwaters or other means," including risks of future equipment failure. 102

Mr. Blanch challenges Entergy's inspection program for inaccessible mediumvoltage cables that is to be "based on and consistent with the program described in NUREG-1801, Revision 2, Section XI.E3, 'Inaccessible Medium-Voltage Cables Not Subject to 10 CFR 50.49 Environmental Qualification Requirements," and that will include at least annual inspections for water accumulation in manholes, trending to determine possible need for a different inspection frequency, and "[a]dditional operational inspections . . . to verify drainage systems are functional prior to predicted heavy rains or flooding events such as hurricanes."103 Mr. Blanch disputes the efficacy of these measures, stating that it is his "professional opinion that this proposed program fails to meet the requirements of 10 CFR 54 as there is no technical justification for periodicity of inspections." It is his professional opinion that relevant cables are within the scope of 10 C.F.R. § 50.49, and that the baseline inspections addressed in NUREG/CR-7000 (which he quotes in some detail) are required as well, but that Entergy has not complied with these.¹⁰⁴ He points out that, "[w]hile a single event of a submerged cable failure may be of low safety significance this is a problem that may result in common mode failures of multiple redundant safety systems," citing Information Notice 2010-26 and cable failures discussed therein, and the relationship of aging to cable failures. 105

¹⁰⁰ *Id*. ¶ 18.

 $^{^{101}}$ Id. ¶¶ 20-21.

¹⁰² Id. ¶¶ 22-24.

¹⁰³ *Id.* ¶ 36 (quoting from Entergy's amended Cables AMP).

¹⁰⁴ Id. ¶¶ 37-43.

¹⁰⁵ *Id.* ¶ 45 (emphasis in original).

Finally, in his January Affidavit Mr. Blanch states that he has reviewed Pilgrim Watch's January 2011 contention and fully supports all "technical and regulatory aspects" of it. He also challenges the NRC in various ways, which are not material to this proceeding, the scope of which is limited to Entergy's license renewal Application for the Pilgrim plant.

I note in addition that Intervenor, in its reply to Entergy and Staff responses to the January 2011 contention, quotes from an August 2010 presentation by NRC Staff Affiant Mathew and others, in which one of the slides states (1) that "[e]lectric cables are one of the most important components in a nuclear plant to provide the various plant systems function to mitigate the effects of an accident and preserve the safety of the plant during the normal, abnormal, and anticipated operational occurrences," (2) that, "[i]f cable degradation from aging or other mechanisms remain undetected, it can lead to deterioration of cable performance or result in cable failure when it is relied on to mitigate design bases accidents and transients," and (3) that in response to a 2007 letter licensees had "provided data showing that the number of cable failures is increasing with plant age, and that cable failures are occurring within the plants' 40-year licensing periods," which "failures have resulted in plant transients and shutdowns, loss of safety redundancy, entry into limiting conditions for operation, and undue challenges to plant operations." 106

From the preceding, I would conclude that Intervenor Pilgrim Watch has demonstrated a genuine dispute on material issues of combined fact and law. It is clear that, while some of Mr. Blanch's statements come close to being "mere allegations," Pilgrim Watch through his Affidavit has raised significant, genuine, and material issues, regarding whether the Pilgrim cables addressed in Entergy's AMP amendment in question are within the scope of and meet the requirements of 10 C.F.R. §§ 50.49, 54.4, and 54.21; whether the amendment includes all the cables that it should include under these rules; and whether the surveying, monitoring, and inspection programs for inaccessible cables at Pilgrim are sufficient to meet the requirements of the rules and to protect public health and safety.

Section 54.4 addresses the scope of license renewal. Subsection (a) of the rule concerns "[p]lant systems, structures, and components" including "(1) [s]afety-related systems, structures, and components which are those relied upon to remain functional during and following design-basis events (as defined in 10 CFR 50.49(b)(1)) to ensure the following functions:"

¹⁰⁶ Pilgrim Watch 2/24/11 Reply at 15 (quoting from NRC Public Meeting "Inaccessible or Underground Cable Performance Issues at Nuclear Power Plants," Aug. 10, 2010, chaired by Mr. Roy Mathew, NRC/NRR, Slide 10 (ADAMS Accession No. ML092460425)). The slides are actually dated August 19, 2009.

- (i) The integrity of the reactor coolant pressure boundary;
- (ii) The capability to shut down the reactor and maintain it in a safe shutdown condition; or
- (iii) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in § 50.34(a)(1), § 50.67(b)(2), or § 100.11 of this chapter, as applicable. 107

Section 54.21 concerns the contents of a license renewal application.

Section 50.49 concerns "[e]nvironmental qualification of electric equipment important to safety for nuclear power plants." It requires licensees to "establish a program for qualifying [certain defined] electric equipment," and, at subsection (b), states (similarly to § 54.4(a)(1)):

Electric equipment important to safety covered by this section is:

- (1) Safety-related electric equipment.
- (i) This equipment is that relied upon to remain functional during and following design basis events to ensure
 - (A) The integrity of the reactor coolant pressure boundary;
- (B) The capability to shut down the reactor and maintain it in a safe shutdown condition; or
- (C) The capability to prevent or mitigate the consequences of accidents that could result in potential offsite exposures comparable to the guidelines in § 50.34(a)(1), § 50.67(b)(2), or § 100.11 of this chapter, as applicable.
- (ii) Design basis events are defined as conditions of normal operation, including anticipated operational occurrences, design basis accidents, external events, and natural phenomena for which the plant must be designed to ensure functions (b)(1)(i) (A) through (C) of this section.

 $^{^{107}}$ The remainder of section 54.4(a) places the following additional systems, structures, and components within the scope of license renewal:

⁽²⁾ All nonsafety-related systems, structures, and components whose failure could prevent satisfactory accomplishment of any of the functions identified in paragraphs (a)(1)(i), (ii), or (iii) of this section.

⁽³⁾ All systems, structures, and components relied on in safety analyses or plant evaluations to perform a function that demonstrates compliance with the Commission's regulations for fire protection (10 CFR 50.48), environmental qualification (10 CFR 50.49), pressurized thermal shock (10 CFR 50.61), anticipated transients without scram (10 CFR 50.62), and station blackout (10 CFR 50.63).

In addition, under section 54.4(b):

The intended functions that these systems, structures, and components must be shown to fulfill in § 54.21 are those functions that are the bases for including them within the scope of license renewal as specified in paragraphs (a)(1)-(3) of this section.

¹⁰⁸ 10 C.F.R. § 50.49(a).

Section 50.49 also states, at subsection (c), the following:

Requirements for (1) dynamic and seismic qualification of electric equipment important to safety, (2) protection of electric equipment important to safety against other natural phenomena and external events, and (3) environmental qualification of electric equipment important to safety located in a mild environment are not included within the scope of this section. A mild environment is an environment that would at no time be significantly more severe than the environment that would occur during normal plant operation, including anticipated operational occurrences. (Emphasis added.)

As indicated above, Entergy maintains that "Pilgrim's inaccessible cables are located in a 'mild environment'" and therefore section 50.49 does not apply to them. Pilgrim Watch disputes this, through Mr. Blanch's Affidavit.

I note at this point that, while the question of the rule's definition of a "mild environment" is not as precise as it might be, 109 it seems, according to its plain language, to be tied to whether the environment in question could ever for any reason be subject to variation (apart from "anticipated operational occurrences") that could include significantly more severe conditions than those existing during "normal plant operation." Entergy in effect claims that there are no inaccessible cables of the sort described in its amended cables AMP in any location that could ever be subject to a saltwater environment with "high corrosive salt concentrations," because the elevation of the plant is so high above sea level, and because the cables are above the groundwater level. Pilgrim Watch submits that being next to Cape Cod Bay implicitly means that the cables will be subject to a saltwater environment that will "accelerate the degradation of cables in contrast to those nuclear plants located away from coastal areas." There would seem to be an issue both of how high salt concentrations might reach in the environment of the cables, and of whether these could ever at any time rise significantly above normal levels.

This is a close case in several respects. However, while there are obviously differing opinions between Mr. Blanch, on the one hand, and Entergy and Staff and their experts, on the other, it is not appropriate to weigh the evidence presented in competing expert affidavits in a summary disposition context. Intervenor must in such a context demonstrate a genuine dispute on a material issue of fact, and I would find that Pilgrim Watch has done this, and therefore shown that it could defeat a motion for summary disposition, if not with respect to every

¹⁰⁹ I understand that there may be a common understanding of the meaning of the definition in the nuclear industry, but regulations must first be interpreted according to their plain language, which in this instance is not clear.

¹¹⁰ See supra note 72.

individual issue addressed by the parties' experts, at least with respect to those issues I describe above.

Based on the preceding, I would find that Pilgrim Watch has met the requirements of 10 C.F.R. § 2.326(a)(3) and (b).

Admissibility Under 10 C.F.R. § 309(f)(1)(i)-(vi)

Very briefly, Pilgrim Watch has clearly provided a specific statement of the issue it raises in its January 2011 Cables Contention, as required under 10 C.F.R. § 309(f)(1)(i), as well as a brief explanation of the basis for the contention as required by section 309(f)(1)(ii). The contention raises questions about the safety of equipment it argues must comply with 10 C.F.R. §§ 50.49, 54.4, and 54.21, which bring it within the scope of this proceeding, and thereby satisfies the requirement to this effect in 10 C.F.R. § 309(f)(1)(iii), and also meets the materiality requirement of section 309(f)(1)(iv). And Mr. Blanch's Affidavit satisfies the requirement of section 309(f)(1)(v) for a "concise statement of the alleged facts or expert opinions" supporting the contention, and that of section 309(f)(1)(vi) for "sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact," as discussed above.

Conclusion

I would, based on the preceding analysis, reopen the proceeding and admit Pilgrim Watch's January 20, 2011 (Cables 2) Contention.

Finally, although this licensing board will be addressing certain post-Fukushima contentions filed in May and June of this year in a later issuance, I would add a comment noting again Pilgrim Watch's request that we take judicial notice of the accident at the Fukushima nuclear power plant in the wake of the earthquake and tsunami there, as well as, among other things, loss of power being a contributing factor in the accident, and the fact that both the Fukushima reactors and the Pilgrim reactor are General Electric Mark I models.¹¹¹ Particularly given these circumstances, I find the lack of clarity about which electrical cables might be subject to any saltwater environment, however high or low the concentration, and about the effects of and efforts to address this, to be of a level of concern

¹¹¹ See supra notes 54, 56. I note also Pilgrim Watch's most recent filing of August 8, 2011, in which it in effect requests that the Board consider certain findings of the Near Term Task Force Report on flooding and mitigation measures related to loss of power. Pilgrim Watch Request for Leave to Supplement Pilgrim Watch Request for Hearing on the Inadequacy of Entergy's Aging Management Program of Non-Environmentally Qualified (EQ) Inacessible Cables (Splices) at Pilgrim Station, Filed on December 10, 2010 and January 20, 2011 (Aug. 8, 2011).

sufficient to "tip the balance" in this close case, and to warrant further inquiry and exploration¹¹² in this proceeding prior to issuing a renewed license.

¹¹² See Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 249 (1996) (citing Rules of Practice for Domestic Licensing Proceedings — Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989); Costle v. Pacific Legal Foundation, 445 U.S. 198, 204 (1980)); Vermont Yankee Nuclear Power Corp. v. NRC, 435 U.S. 519, 554 (1978)); see also Gulf States Utilities Co. (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 51 (1994); Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-942, 32 NRC 395, 428 (1990).

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Ronald M. Spritzer, Chairman Nicholas G. Trikouros Larry R. Foulke

In the Matter of

Docket Nos. 50-498-LR 50-499-LR (ASLBP No. 11-909-02-LR-BD01)

SOUTH TEXAS PROJECT NUCLEAR OPERATING COMPANY (South Texas Project, Units 1 and 2)

August 26, 2011

In this 10 C.F.R. Part 54 proceeding regarding the application of South Texas Project Nuclear Operating Company (STPNOC) for renewal of licenses authorizing operation of its two nuclear power reactors, STP Units 1 and 2, located near Wadsworth, Texas, ruling on a petition for leave to intervene and request for a hearing by the Sustainable Energy and Economic Development (SEED) Coalition, the Licensing Board denies the petition, finding the four proffered contentions inadmissible.

LICENSE RENEWAL: APPLICABLE REGULATIONS

License renewal applicants must file pursuant to the NRC's license renewal regulations, 10 C.F.R. Part 54. The general requirements regarding the contents of a license renewal application are set forth in 10 C.F.R. §§ 54.19-54.23. The environmental requirements regarding the contents of a license renewal application are set forth in 10 C.F.R. § 51.53(c). Additionally, in accordance with 10 C.F.R.

§ 51.95(c), the NRC Staff will prepare a Supplemental Environmental Impact Statement (SEIS) to the Commission's Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants, NUREG-1437. The standard for issuing the renewed license is set forth in 10 C.F.R. § 54.29.

RULES OF PRACTICE: STANDING TO INTERVENE; STANDING (PRESUMPTION BASED ON GEOGRAPHIC PROXIMITY)

Under NRC regulations, a petitioner must demonstrate standing to intervene in a licensing process. 10 C.F.R. § 2.309(a). In general, a proper showing includes (1) the name, address, and telephone number of the petitioner; (2) the nature of the petitioner's right under a relevant statute to be made a party to the proceeding; (3) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (4) the possible effect of any decision or order that might be issued in the proceeding on the petitioner's interest. *Id.* § 2.309(d)(1)(i)-(iv). In reactor license renewal proceedings, the Commission recognizes a proximity presumption, whereby a petitioner is presumed to have standing to intervene without the need to specifically plead injury, causation, and redressability if the petitioner lives within 50 miles of the nuclear power facility. *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915-16 & n.15 (2009); *see also Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989).

RULES OF PRACTICE: STANDING (REPRESENTATIONAL)

If the petitioner is an organization seeking to intervene in an NRC proceeding in its own right, it must allege that the challenged action will cause a cognizable injury to its interests or to the interests of its members. *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-94-3, 39 NRC 95, 102 n.10 (1994). Alternatively, when seeking to intervene in a representational capacity, as is the case here, an organization must identify at least one member who is affected by the licensing action and who qualifies for standing in his or her own right, and show that the member has authorized the organization to intervene on his or her behalf. *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 163 (2000).

RULES OF PRACTICE: STANDING (DEMONSTRATION IN SUPPORT OF)

A petitioner bears the burden of providing facts sufficient to establish its

standing. *See PPL Bell Bend, LLC* (Bell Bend Nuclear Power Plant), CLI-10-7, 71 NRC 133, 139 (2010).

RULES OF PRACTICE: CONTENTION ADMISSIBILITY

The purpose of the contention rule is to "focus litigation on concrete issues and result in a clearer and more focused record for decision." Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004). The Commission has stated that it "should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing." *Id.* The Commission has emphasized that the rules on contention admissibility are "strict by design." *See, e.g., Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 213 (2003). Further, absent a waiver, contentions challenging applicable statutory requirements or Commission regulations are not admissible in agency adjudications. *See* 10 C.F.R. § 2.335(a). Failure to comply with any of these requirements precludes admission of a contention. *See Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 636 (2004).

LICENSE RENEWAL: SCOPE OF PROCEEDING (SAFETY MATTERS)

The license renewal process is not an open invitation for new, broad-scoped inquiries into compliance that are separate from and parallel to the Commission's day-to-day operational oversight duties. 56 Fed. Reg. at 64,952. The Commission has rejected many such broad-based conceptual inquiries as beyond the bounds of a license renewal proceeding: safety culture, operational history, quality assurance, quality control, management competence, human factors, and emergency planning. *Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC at 481, 491 (2010) (citing 56 Fed. Reg. at 64,959, 64,967-68); *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 10 (2001). To require a full reassessment of these issues during license renewal would be both unnecessary and wasteful. *Turkey Point*, CLI-01-17, 54 NRC at 7. Accordingly, the NRC's license renewal review focuses upon those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs.

COMMISSION REGULATIONS: SECTION 50.54(hh)(2)

Section 50.54(hh)(2), which arose as a post-9/11 security regulation, requires licensees to develop guidance and strategies for addressing the loss of large

areas of the plant due to explosions or fires from a beyond-design basis event. Power Reactor Security Requirements, 74 Fed. Reg. 13,926, 13,926, 13,957 (Mar. 27, 2009). Section 50.54(hh)(2) applies to both current reactor licensees under Part 50 and new applicants for licenses under Part 52. *Id.* at 13,957. Thus, section 50.54(hh)(2) focuses on preplanning for beyond-design basis events and applies to all nuclear facilities regardless of age; consequently, challenges to that provision are neither germane to age-related degradation nor unique to the license renewal period. *Cf. Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 561 (2005) (emergency planning contention).

LICENSE RENEWAL: SCOPE OF PROCEEDING (ENVIRONMENTAL MATTERS)

As with safety contentions, the NRC's regulations put limits on NEPA contentions in a license renewal proceeding. 10 C.F.R. § 2.309(f)(1)(iii). The ER for the operating license renewal stage need not contain environmental analysis of the "Category 1" issues identified in Appendix B to Subpart A of 10 C.F.R. Part 51. Id. § 51.53(c)(3)(i). Category 1 issues are not subject to challenge in a relicensing proceeding, absent a waiver under 10 C.F.R. § 2.335, because they "involve environmental effects that are essentially similar for all plants [and] need not be assessed repeatedly on a site-specific basis." Turkey Point, CLI-01-17, 54 NRC at 11. But the ER must contain analyses of the environmental impacts of the proposed action for those matters identified as "Category 2" license renewal issues in Appendix B. 10 C.F.R. § 51.53(c)(3)(ii). The ER must also "contain a consideration of alternatives for reducing adverse impacts, as required by [10] C.F.R. § 51.45(c)], for all Category 2 license renewal issues in [Appendix B]." Id. § 51.53(c)(3)(iii). Finally, "[i]f the staff has not previously considered severe accident mitigation alternatives for the applicant's plant in an environmental impact statement or related supplement or in an environmental assessment, a consideration of alternatives to mitigate severe accidents must be provided" in the ER. Id. § 51.53(c)(3)(ii)(L). Category 2 issues must be reviewed on a site-specific basis because they have not been determined to be "essentially similar" for all plants. 10 C.F.R. Part 51, Subpart A, App. B, n.2. Therefore, challenges relating to these issues are properly part of a license renewal proceeding.

COMMISSION REGULATIONS: SECTIONS 51.53(c)(2) AND 51.45(b)(3)

The agency's regulations require that an ER provide sufficient information about alternatives to enable the NRC Staff to prepare an Environmental Impact

Statement in compliance with NEPA. See 10 C.F.R. § 51.45(b)(3). An ER that provides an incomplete or misleading picture of an alternative would fail in that essential purpose. See Animal Defense Council v. Hodel, 840 F.2d 1432, 1439 (9th Cir. 1988) (an EIS that contains an incomplete or misleading comparison of alternatives is deficient).

MEMORANDUM AND ORDER

(Ruling on Petition for Leave to Intervene and Request for Hearing)

This case arises from an application by South Texas Project Nuclear Operating Company (STPNOC) to the Nuclear Regulatory Commission (NRC) for renewal of licenses authorizing operation of its two nuclear power reactors, STP Units 1 and 2, located near Wadsworth, Texas. The proposed renewal would authorize STPNOC to operate STP Units 1 and 2 for an additional 20 years after the current licenses expire in 2027 and 2028, respectively. The Sustainable Energy and Economic Development (SEED) Coalition, an organization that has members living within 50 miles of STP Units 1 and 2, has challenged the application by filing a petition to intervene and request for a hearing.

Because we conclude that Petitioner, SEED Coalition, has failed to proffer an admissible contention as required under 10 C.F.R. § 2.309(a), we deny its Petition.

I. BACKGROUND

On October 25, 2010, STPNOC applied to the NRC for a renewal of its licenses (NPF-76 and NPF-80) to operate its two nuclear power reactors, STP Units 1 and 2.4 The current licenses expire on August 20, 2027, and December 15, 2028, respectively. The renewed licenses would authorize operation of the reactors for an additional 20 years beyond those dates.

¹ Notice of Acceptance for Docketing of the Application and Notice of Opportunity for Hearing Regarding Renewal of Facility Operating License Numbers NPF-76 and NPF-80 for an Additional 20-Year Period, STP Nuclear Operating Company, South Texas Project, Units 1 and 2, 76 Fed. Reg. 2426, 2426 (Jan. 13, 2011).

 $^{^{2}}$ Id.

³ Petition for Leave to Intervene and Request for Hearing of SEED Coalition and Susan Dancer (Mar. 14, 2011) (Petition).

⁴76 Fed. Reg. at 2426.

⁵ *Id*.

⁶ *Id*.

STPNOC submitted its application pursuant to NRC's license renewal regulations, 10 C.F.R. Part 54.⁷ The general requirements regarding the contents of a license renewal application are set forth in 10 C.F.R. §§ 54.19-54.23. The environmental requirements regarding the contents of a license renewal application are set forth in 10 C.F.R. § 51.53(c). Additionally, in accordance with 10 C.F.R. § 51.95(c), the NRC Staff will prepare a Supplemental Environmental Impact Statement (SEIS) to the Commission's Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants, NUREG-1437. The standard for issuing the renewed license is set forth in 10 C.F.R. § 54.29.

On January 13, 2011, the NRC published a notice of opportunity for hearing in the STP license renewal proceeding in the *Federal Register*.⁸ On March 14, 2011, SEED Coalition filed a petition challenging the license renewal.⁹ The Petition proffers four proposed contentions. Proposed Contentions 1, 2, and 3 relate to the requirements of 10 C.F.R. § 50.54(hh)(2) for mitigative strategies for loss of large areas (LOLA) of the plant due to fires or explosions. Proposed Contention 4 relates to reduced demand for electricity due to adoption of an energy-efficient building code in Texas.¹⁰ The Petition and accompanying documents indicate that SEED Coalition seeks to intervene as a *pro se* litigant, represented by its Executive Director, Karen Hadden.¹¹ On March 23, 2011, the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel appointed this Board to preside over the adjudicatory proceeding concerning STPNOC's license renewal application for STP Units 1 and 2.¹²

Thereafter on April 7, 2011, STPNOC and the NRC Staff filed answers to the Petition, opposing the admission of all four proposed contentions.¹³ SEED Coalition did not file a reply.¹⁴ However, on May 11, 2011, nearly 2 months after

⁷ *Id*.

⁸ *Id*.

⁹ Petition at 1. Petitioner did not number the pages of their filings. So, the page numbers identified in this and subsequent citations are the product of Board review.

¹⁰ Id. at 4-6

¹¹ *Id.* at 1, 7; *id.*, Exh., Declaration of Karen Hadden at 1 (Mar. 14, 2011) (Hadden Declaration). Only after the filing of its Petition and Amended Petition, SEED Coalition obtained legal counsel.

¹² South Texas Project Nuclear Operating Company, South Texas Project, Units 1 and 2, Establishment of Atomic Safety and Licensing Board (Mar. 23, 2011) (unpublished); 76 Fed. Reg. 17,460 (Mar. 29, 2011).

¹³ [STPNOC's] Answer Opposing Request for Hearing and Petition for Leave to Intervene (Apr. 7, 2011) (STPNOC Answer); NRC Staff's Answer to Petition for Leave to Intervene and Request for Hearing of SEED Coalition and Susan Dancer (Apr. 7, 2011) (Staff Answer).

¹⁴Commission rules permit SEED Coalition to file a reply 7 days after the filing of STPNOC and Staff answers. 10 C.F.R. § 2.309(h)(2).

filing its Petition, SEED Coalition did file an amended Petition¹⁵ and a request for oral argument.¹⁶ STPNOC and the NRC Staff filed answers to the Amended Petition on June 2, 2011.¹⁷ On June 27, 2011, the Board heard oral argument on the Petition and Amended Petition by teleconference.¹⁸

In order for a request for hearing and petition to intervene to be granted, a petitioner must (1) establish that it has standing and (2) propose at least one "admissible" contention. ¹⁹ We address each of these two requirements in turn.

II. STANDING

A. Standards Governing Standing

Under NRC regulations, a petitioner must demonstrate standing to intervene in a licensing process.²⁰ A proper showing includes (1) the name, address, and telephone number of the petitioner; (2) the nature of the petitioner's right under a relevant statute to be made a party to the proceeding; (3) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (4) the possible effect of any decision or order that might be issued in the proceeding on the petitioner's interest.²¹ Yet, while judicial concepts of standing are generally followed in NRC proceedings,²² in reactor license renewal proceedings the Commission recognizes a proximity presumption, whereby a petitioner is presumed to have standing to intervene without the need to specifically plead injury, causation,

¹⁵ Petitioners' Proposed Amended Petition for Leave to Intervene and Request for Hearing of SEED Coalition and Susan Dancer (May 8, 2011) (Amended Petition). SEED Coalition did not perfect this filing until 3 days later, when it certified service on May 11, 2011. *See* 10 C.F.R. § 2.302(c), (e) (stating service of a filing is not complete until accompanied by a certificate of service).

¹⁶ Intervenors Request for Oral Argument on Contentions Raised on Relicensing (May 8, 2011). As with its Amended Petition, SEED Coalition did not perfect this filing until three days later, when it certified service on May 11, 2011. *See* 10 C.F.R. § 2.302(c), (e).

¹⁷ NRC Staff Answer to Proposed Amended Petition for Leave to Intervene and Request for Hearing of SEED Coalition and Susan Dancer (June 2, 2011); [STPNOC's] Answer Opposing Amended Petition to Intervene (June 2, 2011).

¹⁸ Tr. at 1-22.

^{19 10} C.F.R. § 2.309(a).

²⁰ Id.

²¹ Id. § 2.309(d)(1)(i)-(iv).

²² Nuclear Management Co., LLC (Monticello Nuclear Generating Plant), CLI-06-6, 63 NRC 161, 163 (2006). Judicial concepts of standing require that a petitioner establish that "(1) it has suffered a distinct and palpable harm that constitutes injury-in-fact within the zone of interests arguably protected by the governing statute; (2) that the injury can fairly be traced to the challenged action; and (3) that the injury is likely to be redressed by a favorable decision." Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 6 (1996).

and redressability if the petitioner lives within 50 miles of the nuclear power facility.²³

In the context of a license renewal application, the Atomic Energy Act of 1954 (42 U.S.C. §§ 2011-2213 (1954)) (AEA) and the National Environmental Policy Act of 1969 (42 U.S.C. §§ 4321-4335 (1969)) (NEPA) are the primary statutes establishing the appropriate zone of interests that the petitioners may assert. Once parties demonstrate that they have standing, the parties will then be free to assert any contention, which, if proven, will afford them the relief they seek.²⁴ Thus, for example, if a petitioner is challenging license renewal, then once it has standing, it can pursue any other issue that, if resolved in its favor, would prevent or otherwise affect license renewal.

If the petitioner is an organization seeking to intervene in an NRC proceeding in its own right, it must allege that the challenged action will cause a cognizable injury to its interests or to the interests of its members.²⁵ Alternatively, when seeking to intervene in a representational capacity, as is the case here, an organization must identify at least one member who is affected by the licensing action and who qualifies for standing in his or her own right, and show that the member has authorized the organization to intervene on his or her behalf.²⁶

B. Ruling on Standing

SEED Coalition bears the burden of providing facts sufficient to establish its standing.²⁷ In its petition, SEED Coalition identifies one member, Susan Dancer, who allegedly lives within 50 miles of STP Units 1 and 2.²⁸ By virtue of Ms. Dancer's alleged proximity to the facility, she would have standing to participate in this proceeding in her own right. SEED Coalition seeks representational standing on Ms. Dancer's behalf.²⁹

STPNOC does not challenge SEED Coalition's standing.³⁰ The Staff challenges the standing of Susan Dancer and thereby the standing of SEED Coalition to

²³ Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915-16 & n.15 (2009); see also Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989).

²⁴ Yankee Nuclear, CLI-96-1, 43 NRC at 6.

²⁵ Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-94-3, 39 NRC 95, 102 n.10 (1994)

²⁶ Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 163 (2000).

²⁷ See PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), CLI-10-7, 71 NRC 133, 139 (2010).

²⁸ Petition at 1; Hadden Declaration at 1; Petition, Exh., Declaration of Susan Dancer at 1 (Mar. 14, 2011) (Dancer Declaration).

²⁹ Petition at 1, 3.

³⁰ STPNOC Answer at 1.

intervene in this proceeding.³¹ The Staff claims that Susan Dancer fails to provide sufficient facts in her declaration to establish standing.³² In her declaration, among other things, Ms. Dancer states that she "live[s] in Blessing, Texas[,]...[residing] approximately eight miles from South Texas Project Units 1 & 2."³³ The Staff argues this statement fails to provide Ms. Dancer's address, which according to the Staff (1) is required by the Commission's rules of procedure and (2) precludes the Staff from verifying the accuracy of her declaration with regard to her proximity to STP Units 1 and 2.³⁴

The Staff's argument overlooks a significant inconsistency. Although the Commission's regulations mandate that a petition contain the name, address, and telephone number of the petitioner,³⁵ the Commission's hearing notice advises prospective petitioners "not to include personal privacy information, such as . . . home addresses or home phone numbers in their filings."³⁶ A petitioner must therefore choose between obeying the warning in the hearing notice and thereby violating the Commission's regulations, or exceeding what is asked by the hearing notice and thereby ignoring the Commission's warning. Here, Ms. Dancer apparently chose the former course of action.

Given the obvious inequity of denying standing to SEED Coalition because Ms. Dancer heeded the Commission's warning, we will not question SEED Coalition's standing. Ms. Dancer affirms under oath that she lives in Blessing, Texas, and Blessing is within approximately 7 miles of STP Units 1 and 2.³⁷ If we found one of SEED Coalition's proposed contentions admissible, we could require that it provide Ms. Dancer's address in a manner consistent with maintaining the confidentiality of that information.³⁸ Because we do not find any of the four proposed contentions admissible, however, we see no point in requiring SEED Coalition to provide further information.

³¹ Staff Answer at 6. Since SEED Coalition's standing is derivative to Ms. Dancer's, the Staff also puts SEED Coalition's standing at issue.

³² Staff Answer at 6.

³³ Dancer Declaration at 1.

³⁴ Staff Answer at 6 (citing 10 C.F.R. § 2.309(d)(1)(i)).

^{35 10} C.F.R. § 2.309(d)(1)(i).

³⁶ 76 Fed. Reg. at 2428.

³⁷ Dancer Declaration at 1.

³⁸A petitioner may correct or supplement its showing on standing. *See Bell Bend*, CLI-10-7, 71 NRC at 139-40; *see also South Carolina Electric & Gas Co.* (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 7 (2010).

III. CONTENTION ADMISSIBILITY

A. Standards Governing Contention Admissibility

Under 10 C.F.R. § 2.309(f)(1) a hearing request or petition to intervene "must set forth with particularity the contentions sought to be raised." To satisfy this requirement, section 2.309(f)(1) specifies six criteria that each contention must meet:

- Specificity: "Provide a specific statement of the issue of law or fact to be raised or controverted;"
- (ii) *Brief Explanation*: "Provide a brief explanation of the basis for the contention;"
- (iii) Within Scope: "Demonstrate that the issue raised in the contention is within the scope of the proceeding;"
- (iv) Materiality: "Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;"
- (v) Concise Statement of Alleged Facts or Expert Opinion: "Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and"
- (vi) Genuine Dispute: "[P]rovide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief."³⁹

The purpose of the contention rule is to "focus litigation on concrete issues and result in a clearer and more focused record for decision." The Commission has stated that it "should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, reso-

³⁹ See 10 C.F.R. § 2.309(f)(1).

⁴⁰Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

lution in an NRC hearing."⁴¹ The Commission has emphasized that the rules on contention admissibility are "strict by design."⁴² Further, absent a waiver, contentions challenging applicable statutory requirements or Commission regulations are not admissible in agency adjudications.⁴³ Failure to comply with any of these requirements precludes admission of a contention.⁴⁴

Yet, while mere notice pleading is insufficient,⁴⁵ a petitioner does not have to prove its contentions at the admissibility stage.⁴⁶ Boards do not adjudicate disputed facts at this juncture.⁴⁷

B. Proposed Contentions 1, 2, and 348

Petition states in Contention 1:

The Applicant's License Renewal Application and Environmental Report fail to adequately address the Applicant's capacity to deal with fires and explosions that cause a loss of large areas (LOLA) of the plant.⁴⁹

Petition states in Contention 2:

The Applicant's License Renewal Application is deficient because it does not

⁴¹ *Id*.

⁴² Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 213 (2003); Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358-59 (2001); Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334-35 (1999).

⁴³ See 10 C.F.R. § 2.335(a).

⁴⁴ See Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 636 (2004); Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999) (citing Arizona Public Service Co. (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991)).

⁴⁵ Fansteel, Inc. (Muskogee, Oklahoma, Site), CLI-03-13, 58 NRC 195, 203 (2003).

⁴⁶ Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 139 (2004); see also Nuclear Innovation North America LLC (South Texas Project, Units 3 and 4), LBP-11-7, 73 NRC 254, 292-93 (2011) ("[A]t the contention admissibility stage of a proceeding, [petitioners] need not marshal their evidence as though preparing for an evidentiary hearing."); U.S. Department of Energy (High-Level Waste Repository), LBP-09-6, 69 NRC 367, 416 (2009) (noting that requiring petitioners to proffer additional and conclusive support for the effect of their proposed contention "would improperly require . . . Boards to adjudicate the merits of contentions before admitting them"), aff'd in pertinent part, CLI-09-14, 69 NRC 580 (2009).

⁴⁷ See AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), LBP-06-22, 64 NRC 229, 244 (2006) (citing Mississippi Power & Light Co. (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-130, 6 AEC 423, 426 (1973)).

⁴⁸ Given the substantial overlap among these "LOLA contentions," we analyze them together.

⁴⁹ Petition at 4.

describe the means that it will use to determine radiation exposures to LOLA responders.⁵⁰

Petition states in Contention 3:

The Applicant's License Renewal Application is deficient because it does not describe the means that it will use to protect LOLA responders from excessive radiation exposures.⁵¹

1. Parties' Positions

In proposed Contentions 1, 2, and 3, SEED Coalition challenges the adequacy of STPNOC's mitigation measures for addressing LOLA events. For each of these LOLA contentions, SEED Coalition claims that STPNOC fails to meet its obligations under 10 C.F.R. § 52.80 and 10 C.F.R. § 50.54(hh)(2).⁵² In support, SEED Coalition cites several sections of the Applicant's Final Safety Analysis Report (FSAR) or Environmental Report (ER) that deal with topics allegedly "within the scope of this proceeding." For example, SEED Coalition argues that since STPNOC addresses fire protection in its FSAR, fire protection mitigation measures for LOLA events are mandated by 10 C.F.R. § 52.80 and 10 C.F.R. § 50.54(hh)(2).

Both STPNOC and the Staff argue that the proposed LOLA contentions are outside the scope of this proceeding. According to STPNOC, the Commission has specifically limited its license renewal safety review to the matters specified in 10 C.F.R. Part 54, which focus on the management of aging for certain systems, structures, and components, and the review of time-limited aging analyses.⁵⁴ To meet those regulations, applicants must "demonstrate how their programs will be effective in managing the effects of aging during the proposed period of extended

⁵⁰ *Id.* at 4-5.

⁵¹ Id. at 5-6.

⁵² *Id.* at 4-6.

⁵³ For Contention 1, SEED Coalition claims that the contention is within the scope of the proceeding because STPNOC addresses fire protection in its FSAR in Appendix A, § 1.12. *Id.* at 4. For Contentions 2 and 3, SEED Coalition claims the contentions are within the scope of the proceeding because STPNOC addresses the cumulative impacts of postulated accidents and the cumulative impacts on radiological health (occupational and public dose) in its ER in sections 4.21.9, 4.21.10, and 4.21.10.1, respectively. *Id.* at 5.

⁵⁴ STPNOC Answer at 6 (citing *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 7-8 (2001) and *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358, 363 (2002)).

operation," at a "detailed . . . 'component and structure level,' rather than at a more generalized 'system level.'"55

STPNOC asserts that as part of their daily responsibilities, current licensees — including those applying for a renewed license — must comply with the NRC's ongoing regulatory process. STPNOC states that this process ensures the current licensing basis (CLB) of an operating plant remains acceptably safe. ⁵⁶ According to STPNOC, entertaining contentions in a license renewal proceeding that challenge the CLB would be "both unnecessary and wasteful" given ongoing agency oversight, review, and enforcement. ⁵⁷

Thus, according to STPNOC and the Staff, the Commission distinguishes between aging management issues, reviewed at the time of license renewal, and operational issues, reviewed at all times as part of the CLB. Contentions on aging management issues are appropriate for a license renewal proceeding, whereas contentions on operational issues⁵⁸ are outside the scope of such a proceeding.⁵⁹

STPNOC and the Staff contend that the LOLA mitigation measures SEED Coalition raises under section 50.54(hh)(2) are part of the CLB, properly challenged with a petition to initiate an enforcement action, rather than petition for a hearing in a license renewal proceeding. STPNOC argues that the Commission's regulations define section 50.54(hh)(2) as part of the CLB and conceptually LOLA mitigation measures are "unrelated" to aging management. In the same vein, the Staff argues that LOLA mitigation measures implemented under section 50.54(hh)(2) are "conceptual issues . . . outside the bounds of the passive, safety-related *physical* systems, structures and components that form the scope of [the Commission's] license renewal review." Moreover, the Staff emphasizes that even SEED Coalition's purported basis for its LOLA contentions, section 52.80(d), is outside the scope of the proceeding because that section only applies to combined license applicants, not license renewal applicants.

Both STPNOC and the Staff argue that the proposed LOLA contentions do not present a genuine dispute on a material issue of fact or law. According to

⁵⁵ Id. at 6 (quoting Turkey Point, CLI-01-17, 54 NRC at 8).

⁵⁶ Id. at 6-7 (citing Nuclear Power Plant License Renewal, 56 Fed. Reg. 64,943, 64,946 (Dec. 13, 1991) and 10 C.F.R. § 54.3).

⁵⁷ Id. at 7 (citing Turkey Point, CLI-01-17, 54 NRC at 9).

⁵⁸ STPNOC provides examples of several operational issues it claims as unfit for a license renewal proceeding, including emergency planning, quality assurance, physical protection, and radiation protection. *Id.* at 7-8.

⁵⁹ *Id.* at 7-8; Staff Answer at 16.

⁶⁰ See STPNOC Answer at 8; Staff Answer at 16.

⁶¹ STPNOC Answer at 8.

⁶² Staff Answer at 16, 21-22 (emphasis in original).

⁶³ *Id.* at 15.

STPNOC, SEED Coalition bases its LOLA contentions on 10 C.F.R. § 52.80(d), but that regulation only applies to combined operating license (COL) applications, not license renewal applications.⁶⁴ STPNOC argues that, because they are based upon an irrelevant regulation, the contentions do not present a genuine dispute with the application as required by 10 C.F.R. § 2.309(f)(1)(vi).⁶⁵

The Staff argues that the LOLA contentions do not present a genuine dispute for different reasons: the contentions do not provide the information required by 10 C.F.R. § 2.309(f)(1)(vi).⁶⁶ According to the Staff, SEED Coalition neither explains how the application is inadequate nor identifies which sections of the application are inadequate.⁶⁷ The Commission's regulations and case law, however, require greater specificity.⁶⁸

Finally, both STPNOC and the Staff argue that SEED Coalition does not support its LOLA contentions with alleged facts or expert opinion as required by 10 C.F.R. § 2.309(f)(1)(v). STPNOC and the Staff liken SEED Coalition's petition to a "notice pleading." According to STPNOC, the Petition does not address any inadequacies with the application or point to any study or expert statements describing how the application improperly treats LOLA event mitigation. Even though SEED Coalition claims that information and belief support the Petition, SEED Coalition does not reveal the information or explain the belief. According to STPNOC, SEED Coalition cannot rest its contentions on "bare assertions and speculation." The Staff echoes this sentiment, noting that such bare assertions run afoul of the Commission's intention to focus the hearing process and provide notice to the other parties.

To these assertions, SEED Coalition did not file a reply.

⁶⁴ STPNOC Answer at 11.

⁶⁵ Id. at 11. Similarly, STPNOC also argues that because 10 C.F.R. § 54.29, the Commission's standards for issuing a renewal license, does not implicate LOLA mitigation measures, such issues are not material to the present license renewal proceeding. See id. at 9-10 (citing 10 C.F.R. § 2.309(f)(1)(iv)).

⁶⁶ Staff Answer at 17-18, 24.

⁶⁷ Id. at 17, 24.

⁶⁸ Id. at 17 (citing Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-05-15, 61 NRC 365, 381 (2005)).

⁶⁹ STPNOC Answer at 10-11; Staff Answer at 18-19, 23.

⁷⁰ STPNOC Answer at 10.

⁷¹ *Id.* at 11.

⁷² *Id.* at 11 (citing *Fansteel*, CLI-03-13, 58 NRC at 203).

⁷³ See Staff Answer at 19, 23 (citing PPL Susquehanna, LLC (Susquehanna Steam Electric Station, Units 1 and 2), LBP-07-4, 65 NRC 281, 303-04 (2007)).

2. Board Ruling

a. Safety Issues

For the reasons set forth below, the Board concludes that Contentions 1, 2, and 3, which challenge STPNOC's compliance with the LOLA requirements of 10 C.F.R. § 50.54(hh)(2), are not admissible because they are not within the scope of this license renewal proceeding as required by 10 C.F.R. § 2.309(f)(1)(iii). The NRC's license renewal process concerns a particularized and limited inquiry into the potential impacts of an additional 20 years of nuclear power plant operation, not day-to-day operational issues as SEED Coalition suggests. ⁷⁴ The relevant issues for an additional 20 years of reactor plant operation differ from those when a reactor plant is first built and licensed. ⁷⁵ For example, many safety questions that relate to plant aging become important during the extended renewal term since the design of some components may have been based upon a service lifetime of only 40 years. ⁷⁶

As a plant ages, degradation mechanisms such as corrosion, fatigue, and embrittlement may adversely affect physical parts of the plant. If these degradation mechanisms go unconsidered or unmitigated they might reduce safety margins or affect plant operability. Accordingly, renewal applicants must demonstrate how they will adequately manage the effects of aging during the proposed renewal term. This requires renewal applicants to make a detailed assessment, conducted on passive, safety-related physical systems, structures, and components (SSC) of the plant, as well as those other SSCs identified in 10 C.F.R. § 54.4(a). Additionally, renewal applicants must reassess time-limited aging analyses — those analyses made during the original license term and based upon the length of the original license term, for example, 40 years.

The license renewal process is not an open invitation for new, broad-scoped inquiries into compliance that are separate from and parallel to the Commission's day-to-day operational oversight duties.⁸⁰ The Commission has rejected many such broad-based conceptual inquiries as beyond the bounds of a license renewal proceeding: safety culture, operational history, quality assurance, quality control,

⁷⁴ See Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481, 492 (2010) (citing *Millstone*, CLI-04-36, 60 NRC at 637-38).

⁷⁵ Turkey Point, CLI-01-17, 54 NRC at 7.

⁷⁶*Id.*, CLI-01-17, 54 NRC at 7 (citing 56 Fed. Reg. at 64,946 and Nuclear Power Plant License Renewal; Revisions, 60 Fed. Reg. 22,461, 22,479 (May 8, 1995)).

⁷⁷ See 10 C.F.R. § 54.21(a)(3).

⁷⁸ Prairie Island, CLI-10-27, 72 NRC at 491; see also 60 Fed. Reg. at 22,462.

⁷⁹ See 10 C.F.R. §§ 54.3, 54.21(c).

⁸⁰ 56 Fed. Reg. at 64,952.

management competence, human factors, and emergency planning.⁸¹ To require a full reassessment of these issues during license renewal would be both unnecessary and wasteful.⁸² Accordingly, the NRC's license renewal review focuses upon those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs.

While the license renewal process seeks to mitigate the detrimental effects of aging from operation beyond the initial license term, everyday public health and safety are assured by the comprehensive and continuous process of operational oversight. Operational oversight allows the NRC to "continuously analyze[] conditions, acts, and practices that could affect safe operation of plants" through "research, inspections, audits, investigations, evaluations of operating experience, and regulatory actions to resolve identified issues." The NRC undertakes this mission by ensuring that a licensed facility remains in compliance with the plethora of binding requirements constituting the facility's Current Licensing Basis (CLB). The CLB "represents the evolving set of requirements and commitments for a specific plant that are modified as necessary over the life of a plant to ensure continuation of an adequate level of safety."

SEED Coalition's LOLA contentions fall outside the scope of this proceeding as they do not relate to aging management review and fall squarely within the STP Unit 1 and 2 CLB. SEED Coalition anchors its LOLA contentions on the requirements of section 50.54(hh)(2). Section 50.54(hh)(2), which arose as a post-9/11 security regulation, requires licensees to develop guidance and strategies for addressing the loss of large areas of the plant due to explosions or fires from a

⁸¹ Prairie Island, CLI-10-27, 72 NRC at 491 (citing 56 Fed. Reg. at 64,959, 64,967-68); Turkey Point, CLI-01-17, 54 NRC at 10.

⁸² Turkey Point, CLI-01-17, 54 NRC at 7.

⁸³ Id., CLI-01-17, 54 NRC at 9-10.

^{84 60} Fed. Reg. at 22,485.

^{85 56} Fed. Reg. at 64,947; see also 60 Fed. Reg. at 22,485.

⁸⁶The CLB represents the set of NRC requirements applicable to a specific plant and a licensee's written commitments for ensuring compliance with and operation within applicable NRC requirements and the plant-specific design basis (including all modifications and additions to such commitments over the life of the license) that are docketed and in effect. The CLB includes the NRC regulations contained in 10 C.F.R. Parts 2, 19, 20, 21, 26, 30, 40, 50, 51, 52, 54, 55, 70, 72, 73, 100 and appendices thereto; orders; license conditions; exemptions; and technical specifications. It also includes the plant-specific design-basis information defined in 10 C.F.R. § 50.2 as documented in the most recent final safety analysis report (FSAR) as required by 10 C.F.R. § 50.71 and the licensee's commitments remaining in effect that were made in docketed licensing correspondence such as licensee responses to NRC bulletins, generic letters, and enforcement actions, as well as licensee commitments documented in NRC safety evaluations or licensee event reports. 10 C.F.R. § 54.3; see also Turkey Point, CLI-01-17, 54 NRC at 9.

⁸⁷ 60 Fed. Reg. at 22,473.

beyond-design basis event. 88 Section 50.54(hh)(2) applies to both current reactor licensees under Part 50 and new applicants for licenses under Part 52.89 Thus, section 50.54(hh)(2) focuses on preplanning for beyond-design basis events and applies to all nuclear facilities regardless of age; consequently, challenges to that provision are neither germane to age-related degradation nor unique to the license renewal period.90

Moreover, compliance with the requirements of 10 C.F.R. § 50.54(hh)(2) falls within the STP Units 1 and 2 CLB. A facility's CLB contains, *inter alia*, any license conditions. And in both the regulations and the statement of considerations accompanying the promulgation of section 50.54(hh)(2), the Commission states that current reactor licensees comply with the requirements of section 50.54(hh)(2) through conditions on their operating licenses. Therefore, SEED Coalition's challenge to STPNOC's compliance with section 50.54(hh)(2) falls outside the scope of a license renewal proceeding. As a result, proposed Contentions 1, 2, and 3 are inadmissible.

Furthermore, SEED Coalition's Petition undermines the admissibility of proposed Contentions 1, 2, and 3 because the purported basis for each of these LOLA contentions is irrelevant to this license renewal proceeding. As the basis for each of its LOLA contentions, SEED Coalition cites the requirements of 10 C.F.R. § 52.80(d). 95 However, section 52.80(d) and its requirements do not apply to this proceeding. Part 52 of the Commission's regulations "governs the issuance of early site permits, standard design certifications, combined licenses, standard design approvals, and manufacturing licenses for nuclear power facilities. . . . "96 Yet, this proceeding concerns the renewal of STPNOC's existing operating licenses for STP Units 1 and 2, not a combined license application for new reactor units. 97 As such, STPNOC's application to renew its operating licenses will not be evaluated against the requirements of section 52.80(d). Therefore, section 52.80(d)

⁸⁸ Power Reactor Security Requirements, 74 Fed. Reg. 13,926, 13,926, 13,957 (Mar. 27, 2009).

⁸⁹ Id. at 13,957.

 $^{^{90}}$ Cf. Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 561 (2005) (emergency planning contention).

^{91 10} C.F.R. § 54.3.

⁹² *Id.* § 50.54; 74 Fed. Reg. at 13,957.

^{93 10} C.F.R. § 54.30(b).

⁹⁴ Id. § 2.309(f)(1)(iii).

⁹⁵Petition at 4, 5. Section 52.80(d) in turn mandates compliance with the agency's LOLA requirements in 10 C.F.R. § 50.54(hh)(2).

 $^{^{96}\,10}$ C.F.R. § 52.0 (scope). In contrast, Part 54 "governs the issuance of renewed operating license. . . ." 10 C.F.R. § 54.1 (purpose).

⁹⁷ 76 Fed. Reg. at 2426; *see also* License Renewal Application, South Texas Project Units 1 and 2, Facility Operating License Nos. NPF-76 and NPF-80, at 1.1-1.

cannot act as a basis for a contention within the scope of this proceeding. 98 SEED Coalition offers no other basis for its LOLA contention.

b. NEPA Issues

We also conclude that proposed Contentions 1, 2, and 3 do not present admissible contentions under Part 51 of the Commission's regulations — the NEPA regulations. SEED Coalition refers to STPNOC's ER in Contentions 1, 2, and 3. Even though SEED Coalition does not address any of the specific requirements of Part 51, we construe these references to invoke the requirements of Part 51 and therefore as attempts to proffer NEPA contentions.

As with safety contentions, the NRC's regulations put limits on NEPA contentions in a license renewal proceeding. The ER for the operating license renewal stage need not contain environmental analysis of the "Category 1" issues identified in Appendix B to Subpart A of 10 C.F.R. Part 51.99 Category 1 issues are not subject to challenge in a relicensing proceeding, absent a waiver under 10 C.F.R. § 2.335, because they "involve environmental effects that are essentially similar for all plants [and] need not be assessed repeatedly on a site-specific basis." 100 But the ER must contain analyses of the environmental impacts of the proposed action for those matters identified as "Category 2" license renewal issues in Appendix B.101 The ER must also "contain a consideration of alternatives for reducing adverse impacts, as required by [10 C.F.R. § 51.45(c)], for all Category 2 license renewal issues in [Appendix B]."102 Finally, "[i]f the staff has not previously considered severe accident mitigation alternatives for the applicant's plant in an environmental impact statement or related supplement or in an environmental assessment, a consideration of alternatives to mitigate severe accidents must be provided" in the ER.¹⁰³ Category 2 issues must be reviewed on a site-specific basis because they have not been determined to be "essentially similar" for all plants.¹⁰⁴ Therefore, challenges relating to these issues are properly part of a license renewal proceeding.

In its ER, STPNOC addresses severe accident mitigation alternatives (SAMAs) and concludes that no SAMAs would be beneficial to implement given their

^{98 10} C.F.R. § 2.309(f)(1)(iii).

⁹⁹ *Id.* § 51.53(c)(3)(i).

¹⁰⁰ Turkey Point, CLI-01-17, 54 NRC at 11.

¹⁰¹ 10 C.F.R. § 51.53(c)(3)(ii).

¹⁰² Id. § 51.53(c)(3)(iii).

¹⁰³ Id. § 51.53(c)(3)(ii)(L).

¹⁰⁴ 10 C.F.R. Part 51, Subpart A, App. B, n.2.

costs. 105 The Commission defines LOLA events as severe accidents. 106 Thus, because Contentions 1, 2, and 3 allege that the ER "fail[s] to adequately address the Applicant's capacity to deal with fires and explosions that cause a loss of large areas (LOLA) of the plant," and "does not describe the means . . . to determine radiation exposures," and "does not describe the means that it will use to protect LOLA responders from excessive radiation exposures," SEED Coalition presents a *de facto* challenge to the ER's SAMA analysis and conclusions. 107 Nevertheless, SEED Coalition's challenge falls short of presenting an admissible contention.

Contentions 1, 2, and 3 fail because the Commission's rules of procedure do not permit the filing of notice pleadings — general, vague, or unsupported claims intended to act as placeholders for later elaboration. Instead, at the pleading stage of an NRC adjudication parties must come forward with sufficiently detailed grievances to allow a board to conclude that genuine disputes exist justifying a commitment of adjudicatory resources. SEED Coalition premises its contentions on its own "information and belief," but SEED Coalition provides no indication as to what the information is or why it holds its beliefs. Such "bare assertions and speculation" do not meet the Commission's standard of "a concise statement of the alleged facts or expert opinions . . . together with references to the specific sources and documents" upon which the petitioner relies. Accordingly, Contentions 1, 2, and 3 fail to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(v).

Second, Contentions 1, 2, and 3 do not raise a genuine dispute of fact or law with the ER. Although we have construed the Contentions as a *de facto* challenge to the ER's SAMA analysis and conclusions, the contentions fail to identify any specific deficiency, inadequacy, or omission in STPNOC's analysis or conclusions. For example, SEED Coalition fails to identify any specific SAMA that should have been considered but was not, nor does it identify any error in STPNOC's calculations of costs and benefits. Thus, the contentions fail to satisfy the requirement of 10 C.F.R. § 2.309(f)(1)(vi).

¹⁰⁵ South Texas Project, Applicant's Environmental Report — Operating License Stage South Texas Project, Units 1 & 2 (2010), § 4.20 (ER).

¹⁰⁶ 74 Fed. Reg. at 13,957.

¹⁰⁷ See Petition at 4-6.

¹⁰⁸ See, e.g., Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 120, 122-23 (2009). Yet this is exactly what SEED Coalition has attempted to do by submitting its Amended Pleading. Nearly 2 months after filing its Petition, SEED Coalition amended its pleading and for the first time offered legal and factual support for its contentions. See Amended Petition at 4 n.1, 5 n.2, 6 n.3.

¹⁰⁹ See, e.g., North Atlantic Energy Service Corp. (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 219 (1999)

¹¹⁰ 10 C.F.R. § 2.309(f)(1)(v); Fansteel, CLI-03-13, 58 NRC at 203 (citing GPU Nuclear, Inc. (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 208 (2000)).

Finally, SEED Coalition's attempt to clarify its position in its Amended Petition only muddies the water further. On May 11, 2011, nearly 2 months after filing its Petition, SEED Coalition filed an Amended Petition. Although SEED Coalition did not file a corresponding motion for leave to file the amendment, explain what changes were made, or justify the late filing, 111 it appears that several footnotes were added as legal support. 112 For proposed Contentions 1, 2, and 3, SEED Coalition added references to several nonpublic documents in the Comanche Peak COL proceeding, as well as the dissent to LBP-10-5. 113 But, aside from indicating its reliance, SEED Coalition offers no explanation as to which arguments it relies upon or how those arguments relate to this proceeding. Thus, the Amended Petition adds nothing helpful to SEED Coalition's original Petition, 114 even if we could consider the Amended Petition despite its untimeliness.

We therefore will not admit Contentions 1, 2, and 3.115

C. Proposed Contention 4

Contention 4 states:

The Applicant's License Renewal Application is deficient because it does not determine the projected decline in demand for electricity attributable to adoption of [an] energy efficient building code in Texas.¹¹⁶

¹¹¹Based on their respective dates, SEED Coalition could have included each of the amended references in its original Petition. Instead, SEED Coalition waited nearly 2 months to proffer the references as support for its contentions. As a result, the amendment is late and SEED Coalition did not seek to justify the late filing even though it bears the burden of doing so. *See, e.g., Millstone,* CLI-09-5, 69 NRC at 126 ("The Board correctly found that failure to address the requirements [of 10 C.F.R. § 2.309(c) and (f)(2)] was reason enough to reject the proposed new contentions.").

¹¹² See Amended Petition at 4, 5.

¹¹³ See id. at 4-5, n.1, 2. The documents which SEED Coalition references are nonpublic documents, held as Sensitive Unclassified Non-Safeguards Information under 10 C.F.R. § 2.390 and a July 1, 2009 protective order in the Comanche Peak COL proceeding.

¹¹⁴ 10 C.F.R. § 2.309(f)(1)(iv).

¹¹⁵ As several of SEED Coalition's proposed contentions fall within the facility's CLB, it may seek action on its concerns by either filing a petition for rulemaking under 10 C.F.R. § 2.802 or submitting an enforcement petition under 10 C.F.R. § 2.206. See, e.g., Florida Power & Light Co. v. Lorion, 470 U.S. 729, 731 (1985); Riverkeeper, Inc. v. Collins, 359 F.3d 156, 158 (2d Cir. 2004); Union of Concerned Scientists v. NRC, 920 F.2d 50, 55 n.4 (D.C. Cir. 1990); Massachusetts v. NRC, 878 F.2d 1516, 1520 (1st Cir. 1989); see also Carolina Power & Light Co. (Shearon Harris Nuclear Power Station, Units 1; H.B. Robinson Plant, Unit 2), DD-06-1, 63 NRC 133, 140 (2006) (granting a 10 C.F.R. § 2.206 petition on fire protection).

¹¹⁶ Petition at 6.

1. Parties' Positions

Contention 4 alleges that provisions of the Texas building code mandating energy efficiency will produce enough reduction in power demand to render renewal of the licenses for STP Units 1 and 2 unnecessary. SEED Coalition states that this issue is material "because the Applicant is required to consider alternatives under the requirements of [NEPA], 42 U.S.C. § 4332(c)(iii)."¹¹⁷ Petitioner acknowledges that the Applicant's ER, in § 7.2.1.4, discusses demand-side management as an alternative to relicensing, but alleges that the ER fails to specify the estimated diminished demand anticipated from adoption of the energy-efficient building code. SEED Coalition states, again "[o]n information and belief," that the energy-efficient building code "will result in energy savings of approximately 2,362 MW by 2023. Such savings would nearly offset the net electrical output of 2,500 MW from STP Units 1 and 2."¹¹⁸

The Staff argues that Contention 4 challenges the need for power from STP Units 1 and 2 and is, therefore, outside the scope of license renewal. Moreover, according to the Staff, to the extent that Contention 4 could be viewed as an alternatives contention, Contention 4 does not raise a material dispute with the Application because it does not challenge the ER's conclusion that additional, unenacted demand-side management (DSM) measures would be unlikely to produce sufficient energy savings to replace the power from STP Units 1 and 2. Finally, the Staff observes that Petitioner provides no factual support for Contention 4.119

Similarly, STPNOC argues that proposed Contention 4 is outside the scope of the proceeding, is not supported by alleged facts or expert opinions, and fails to raise a genuine dispute of material law or fact with the Application. TPNOC further argues that Petitioner fails to challenge the information in the ER on the very subject of its contention, and therefore fails to demonstrate a genuine dispute.

2. Board Ruling

We will not admit Contention 4 because it fails to provide alleged facts or expert opinion sufficient to demonstrate a genuine dispute of material law or fact on the issue whether DSM is a reasonable alternative to license renewal.¹²¹

If Contention 4 were based solely on the ER's failure to discuss the need for power, we would agree with the argument of the Staff and STPNOC that

 $^{^{117}}$ *Id*.

¹¹⁸ Id.

¹¹⁹ Staff Answer at 25-26.

¹²⁰ STPNOC Answer at 12.

¹²¹ 10 C.F.R. § 2.309(f)(1)(v), (vi).

Contention 4 is outside the scope of the proceeding. The regulations state that a license renewal ER "is not required to include discussion of need for power." ¹²² But, we understand Contention 4 to challenge the adequacy of the analysis of alternatives in the ER, not the lack of analysis of the need for power. Petitioner states that Contention 4 "is within the scope of this proceeding because it relates to the Applicant's abilities to meet its obligations under 10 C.F.R. 51.53(c)(2) because the costs and benefits of the energy efficient building code are essential to determine whether the adoption of an energy efficient building code should be included as an alternative under 10 C.F.R. 51.53(b)(2)." ¹²³ Under section 51.53(c)(2), a discussion of the economic costs and benefits of the proposed action and alternatives is required if "such costs and benefits are . . . essential for a determination regarding the inclusion of an alternative in the range of alternatives considered" Viewed as a challenge to the alternatives analysis in the ER, Contention 4 is within the scope of the proceeding.

We therefore turn to the ER's discussion of DSM as an alternative to license renewal. The ER discusses various DSM strategies, and notes that "[t]he Texas legislature is currently considering several bills that would increase demandreduction mandates in [the Electric Reliability Council of Texas region] (ERCOT) and other regions of Texas."124 The ER concludes, however, that "it is unlikely that implementation of additional DSM measures in the CPS Energy and Austin Energy service areas could offset the electricity generated by STP Units 1 & 2."125 SEED Coalition challenges this claim. Petitioner states that "Applicant's ER at section 7.2.1.4 discusses demand side management as an alternative to relicensing but fails to specify the estimated diminished demand anticipated from adoption of the energy-efficient building code. On information and belief, Petitioner alleges that the energy-efficient building code will result in energy savings of approximately 2362 MW by 2023. Such savings would nearly offset the net electrical output of 2500 MW from STP Units 1 and 2." Thus, according to SEED Coalition, had the ER acknowledged the energy-saving potential of the energy-efficient building code, the ER would have supported their position that

¹²² *Id.* § 51.53(c)(2). Under 10 C.F.R. § 2.335(a), this and other rules and regulations of the Commission are not subject to challenge in any adjudicatory proceeding in the absence of a waiver. Petitioner has neither sought nor received a waiver of section 51.53(c)(2).

 $^{^{123}}$ Petition at 6. We assume Petitioner intended to cite 10 C.F.R. $\S\,51.53(c)(2),$ not 10 C.F.R. $\S\,51.53(b)(2).$

¹²⁴ ER § 7.2.1.4.

¹²⁵ *Id.* CPS Energy and Austin Energy are the only owners of STP Units 1 and 2 that are regulated utilities and therefore have some ability to engage in DSM. STPNOC Answer at 9 (citing ER ch. 7, at 9). The areas served by those utilities are therefore the relevant service areas for analyzing DSM as a reasonable alternative to license renewal.

DSM is a reasonable alternative to license renewal because DSM would offset most or all of the electricity generated by STP Units 1 and 2.

Had SEED Coalition provided factual support for this theory, it might have established a genuine dispute of material fact with the ER's analysis of DSM as an alternative to license renewal. An ER that contains an incomplete or misleading discussion of an alternative to the proposed action would likely not comply with the requirement of section 51.53(c)(2) that the ER discuss the environmental impacts of alternatives. ¹²⁶ Thus, the question whether the ER adequately assesses the energy savings potential of DSM is material to the licensing decision.

Once again, however, the information SEED Coalition relies on is provided entirely "[o]n information and belief." For reasons we have already explained, this is insufficient to satisfy the NRC's pleading requirements.

STPNOC points out, moreover, that the stated purpose of and need for STP Units 1 and 2 is to provide 2560 MW of baseload generating capability. Petitioner has not challenged this statement of purpose and need. And the Commission has held that "reasonable alternatives" are limited to those alternatives that "will bring about the ends" of the proposed action. 129 Thus, only an alternative that will provide a reduction in the need for baseload power in the relevant service areas would satisfy the purpose and need of the proposed action and constitute a reasonable alternative to license renewal. Accordingly, the energy savings of approximately 2362 MW to which SEED Coalition refers is only relevant if it represents a savings in baseload power demand during the license renewal period in the CPS Energy and Austin Energy service areas.

We cannot determine, given the lack of information before us, whether the energy savings SEED Coalition claims will result from an energy-efficient building code represents savings in peak power demand or baseload power demand. We also cannot determine whether the estimated energy savings is projected to occur in the CPS Energy and Austin Energy service areas, in the entire State of Texas, or in some other geographic area. SEED Coalition has therefore failed to establish a genuine dispute with the ER's conclusion that DSM is not a reasonable alternative to license renewal. Because the Petitioner has the burden to provide

¹²⁶ The agency's regulations require that an ER provide sufficient information about alternatives to enable the NRC Staff to prepare an Environmental Impact Statement in compliance with NEPA. *See* 10 C.F.R. § 51.45(b)(3). An ER that provides an incomplete or misleading picture of an alternative would fail in that essential purpose. *See Animal Defense Council v. Hodel*, 840 F.2d 1432, 1439 (9th Cir. 1988) (an EIS that contains an incomplete or misleading comparison of alternatives is deficient).

¹²⁷ Petition at 6

¹²⁸ STPNOC Answer at 16 (citing ER ch. 7, at 10-11).

¹²⁹ Hydro Resources, Inc. (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 55 (2001) (citing Citizens Against Burlington v. Busey, 938 F.2d 190, 195-96 (D.C. Cir. 1991) and City of Grapevine v. Department of Transportation, 17 F.3d 1502, 1506 (D.C. Cir. 1994)).

alleged facts or expert opinion sufficient to establish a genuine dispute of material fact or law with the license application, Contention 4 must fail. 130 We therefore will not admit Contention 4.

V. CONCLUSION

For the reasons stated in this Order, SEED Coalition's Petition is *denied*. SEED Coalition may file an appeal of this Order to the Commission pursuant to 10 C.F.R. § 2.311 within ten (10) days after service of the Order. It is so ORDERED.

THE ATOMIC SAFETY AND LICENSING BOARD

Ronald M. Spritzer, Chairman ADMINISTRATIVE JUDGE

Nicholas G. Trikouros ADMINISTRATIVE JUDGE

Larry R. Foulke ADMINISTRATIVE JUDGE

Rockville, Maryland August 26, 2011

 $^{^{130}\,10\;\}text{C.F.R.}\;\S\,2.309(f)(1)(v),\,(vi).$

Licensing Board Statement Regarding 10 C.F.R. § 50.54(hh)(2)

Although we find that as it relates to 10 C.F.R. § 50.54(hh)(2), Petitioner's proposed Contention 1 falls outside the scope of this license renewal proceeding, we include this separate statement regarding section 50.54(hh)(2) to highlight an apparent gap in the Commission's regulations. This is an issue the Commission might want to consider as it reviews the agency's regulatory program in light of the Fukushima events.

Section 50.54(hh)(2) requires licensees to develop and to implement severe accident mitigation strategies for events associated with a loss of large areas of the plant (LOLAs). Commission regulations and case law dictate that compliance with section 50.54(hh)(2) is part of a facility's Current Licensing Basis (CLB). As part of the CLB, compliance is ensured by the NRC's operational oversight programs so that challenges to compliance are inadmissible in a license renewal proceeding.

Given that compliance with section 50.54(hh)(2) is part of a facility's CLB, section 50.54(hh)(2) only directs licensees to "develop and implement guidance and strategies. . . ." A licensee's duties under section 50.54(hh)(2) then appear to expire once it has finished developing and implementing. Section 50.54(hh)(2) does not compel licensees to ensure such guidance and strategies are effective or remain effective for any length of time. Section 50.54(hh)(2) neither mandates licensees to routinely inspect systems, structures, or components (SSCs) that may be initially implemented because of the regulation, nor does it mandate licensees to ensure operability of SSCs later in life. Section 50.54(hh)(2) indicates that compliance only entails initial development and implementation, not ongoing inspection and maintenance. It would appear then that inspection and maintenance of section 50.54(hh)(2)-related SSCs are not part of a facility's CLB.

At the same time, the passive SSCs a licensee develops or implements to comply with section 50.54(hh)(2) are not included within the scope of license renewal review. Section 54.4 identifies the SSCs subject to license renewal review. To be within the scope of license renewal review, SSCs must either be safety-related under section 54.4(a)(1), support safety-related functions under section 54.4(a)(2), or relate to one of the *sui generis* regulated events identified in section 54.4(a)(3). Section 50.54(hh)(2)-related SSCs do not fall within any of these categories. Therefore, the Commission's license renewal rules do not require an aging management review of section 50.54(hh)(2)-related passive SSCs. But, as a practical matter, passive SSCs developed and implemented to comply with section 50.54(hh)(2) may be subject to the same age-related degradation mechanisms that underpin the NRC's license renewal review generally. Moreover, section 50.54(hh)(2) passive SSCs provide at least as much "additional protection

to the public health and safety" in case of a LOLA event as the other regulated events identified in section 54.4(a)(3).¹³¹

The agency is, therefore, left with a gap in the regulations. 132 Section 50.54(hh)(2) SSCs are neither evaluated as part of NRC operational oversight of the CLB nor evaluated as part of a license renewal aging management review. It is not within the Board's authority to address this regulatory gap. Under 10 C.F.R. § 2.335(a), rules and regulations of the Commission are not subject to challenge in an adjudicatory proceeding in the absence of a waiver. No waiver has been sought on this issue, and even if a waiver had been sought, it seemingly could not have been granted because the regulatory gap pertains to license renewal generally, not just to the subject matter of this license renewal proceeding.¹³³ The issue could, however, be addressed by the Commission in its review of the agency's regulations.

¹³¹ See Nuclear Power Plant License Renewal; Revisions, 60 Fed. Reg. 22,461, 22,465 (May 8,

 $^{^{132}\,} This\, regulatory\, gap\, may\, help\, explain\, the\, inspection\, results\, from\, Temporary\, Instruction\, 2515/183,$ "Followup to the Fukushima Daiichi Fuel Damage Event." Temporary Instruction 2515/183 directed NRC inspection staff to assess licensee readiness to respond to an event similar to the Fukushima Daiichi nuclear plant fuel damage event. Although none of the observations obtained under that temporary instruction constituted a significant safety issue, the Staff acknowledged that the observations indicated a "potential trend of failure to maintain equipment and strategies required to mitigate some design and beyond design basis events." Summary of Observations, Temporary Instruction 2515/183, "Followup to the Fukushima Daiichi Fuel Damage Event," available at http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/follow-up-rpts.html (Summary of TI 2515/183 Observations). For section 50.54(hh)(2) observations in particular, inspectors observed that "[s]ome equipment (mainly pumps) would not operate when tested or lacked test acceptance criteria," "[s]ome equipment was missing or dedicated to other plant operations," "[i]n some cases plant modifications had rendered strategies unworkable," and "[f]uel for pumps [were] not always readily available." Id.

¹³³ See 10 C.F.R. § 2.335(b).

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CLI-11-5

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 Matters of

UNION ELECTRIC COMPANY d/b/a AMEREN MISSOURI (Callaway Plant, Unit 2) Docket No. 52-037-COL

AP1000 DESIGN CERTIFICATION AMENDMENT (10 C.F.R. Part 52)

Docket No. NRC-2010-0131 (RIN 3150-Al81)

CALVERT CLIFFS NUCLEAR PROJECT, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3) Docket No. 52-016-COL

DETROIT EDISON COMPANY (Fermi Nuclear Power Plant, Unit 3) Docket No. 52-033-COL

DUKE ENERGY CAROLINAS, LLC (William States Lee III Nuclear Station, Units 1 and 2) Docket Nos. 52-018-COL 52-019-COL

ENERGY NORTHWEST (Columbia Generating Station)

Docket No. 50-397-LR

ENTERGY NUCLEAR GENERATION COMPANY and ENTERGY NUCLEAR OPERATIONS, INC. (Pilgrim Nuclear Power Station)

Docket No. 50-293-LR

ENTERGY NUCLEAR OPERATIONS, INC.

Docket Nos. 50-247-LR 50-286-LR

(Indian Point, Units 2 and 3)

Docket No. NRC-2010-0135

ESBWR DESIGN CERTIFICATION AMENDMENT 10 C.F.R. Part 52)

(RIN-3150-AI85)

FIRSTENERGY NUCLEAR OPERATING **COMPANY**

Docket No. 50-346-LR

(Davis-Besse Nuclear Power Station, Unit 1)

FLORIDA POWER & LIGHT COMPANY

Docket Nos. 52-040-COL

52-041-COL

(Turkey Point Nuclear Generating Plant, Units 6 and 7)

LUMINANT GENERATION COMPANY, LLC

Docket Nos. 52-034-COL

52-035-COL

50-323-LR

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

NEXTERA ENERGY SEABROOK, LLC

Docket No. 50-443-LR

(Seabrook Station, Unit 1)

PACIFIC GAS AND ELECTRIC COMPANY

Docket Nos. 50-275-LR

(Diablo Canyon Nuclear Power Plant, Units 1 and 2)

Docket No. 52-039-COL

PPL BELL BEND, LLC

(Bell Bend Nuclear Power Plant)

PROGRESS ENERGY CAROLINAS, INC. Docket Nos. 52-022-COL (Shearon Harris Nuclear Power 52-023-COL

Plant, Units 2 and 3)

PROGRESS ENERGY FLORIDA, INC. Docket Nos. 52-029-COL (Levy County Nuclear Power 52-030-COL Plant, Units 1 and 2) **SOUTH CAROLINA ELECTRIC &** Docket Nos. 52-027-COL **GAS COMPANY and SOUTH** 52-028-COL **CAROLINA PUBLIC SERVICE AUTHORITY** (also referred to as SANTEE COOPER) (Virgil C. Summer Nuclear Station, Units 1 and 2) **NUCLEAR INNOVATION NORTH** Docket Nos. 52-012-COL AMERICA LLC 52-013-COL (South Texas Project, Units 3 and 4) **SOUTHERN NUCLEAR OPERATING** Docket Nos. 52-025-COL **COMPANY** 52-026-COL (Vogtle Electric Generating Plant, Units 3 and 4) **TENNESSEE VALLEY AUTHORITY** Docket Nos. 52-014-COL (Bellefonte Nuclear Power Plant, 52-015-COL Units 3 and 4) **TENNESSEE VALLEY AUTHORITY** Docket No. 50-391-OL (Watts Bar Nuclear Plant, Unit 2) **VIRGINIA ELECTRIC AND POWER** Docket No. 52-017-COL COMPANY d/b/a DOMINION **VIRGINIA POWER and OLD DOMINION ELECTRIC COOPERATIVE** (North Anna Power Station,

STAY OF DECISIONS; SUSPENSION OF PROCEEDINGS

Unit 3)

The sole provision of the Commission's procedural rules explicitly authorizing stay applications is available only to parties to adjudicatory proceedings seeking

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stays of decisions or actions of a presiding officer pending the filing and resolution of a petition for review. However, the Commission may consider requests to suspend or hold proceedings in abeyance pursuant to its inherent supervisory authority over agency proceedings.

SUSPENSION OF PROCEEDINGS

The Commission considers "suspension of licensing proceedings a 'drastic' action that is not warranted absent 'immediate threats to public health and safety," or other compelling reason. Where the Commission faces circumstances analogous to those it considered in the post-September 11 *Private Fuel Storage*, *L.L.C.* (Independent Spent Fuel Storage Installation) proceeding (CLI-01-26, 54 NRC 376 (2001)), the criteria articulated then are apt. Thus, the Commission considers, first, whether moving forward will jeopardize the public health and safety. Second, the Commission examines whether continuing the review process will prove an obstacle to fair and efficient decisionmaking. Third, the Commission decides whether going forward will prevent appropriate implementation of any pertinent rule or policy changes that might emerge from our ongoing evaluation.

COMMISSION, AUTHORITY TO DIRECT CHANGES; REGULATORY PROCESSES

The Commission's regulatory processes provide sufficient time and avenues to ensure that design certifications and combined licenses satisfy any Commission-directed changes before any new power plant commences operations. To the extent that the Commission's comprehensive review of the events in Fukushima, Japan, leads to new rules applicable to any pending application, the Commission has sufficient authority and time to apply them to any new license that may be issued. With respect to license renewals, the NRC's ongoing regulatory and oversight processes provide reasonable assurance that each facility complies with its "current licensing basis," which can be adjusted by future Commission order or by modification to the facility's operating license outside the renewal proceeding (perhaps even in parallel with the ongoing license renewal review). The Commission has well-established processes for imposing any new requirements necessary to protect the public health and safety and the common defense and security.

SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

The Commission's regulations specify the circumstances under which the Staff must prepare supplemental environmental review documents. *See* 10 C.F.R. § 51.72(a). To merit this additional review, information must be both "new"

and "significant," and it must bear on the proposed action or its impacts. As the Commission has explained, the new information must present a seriously different picture of the environmental impact of the proposed project from what was previously envisioned.

PROCEDURAL RULES; BURDEN OF PARTICIPATION; REOPENING STANDARDS

The Commission's normal processes for filing new or amended contentions, submitting rulemaking comments, and motions (including motions to reopen) carry with them costs typically associated with participation in litigation and rulemaking. Participants accept these costs when they elect to participate in the Commission's proceedings; the Commission's rules require a level of engagement that far exceeds simple interest in the outcome of a proceeding. For example, the Commission's rules deliberately place a heavy burden on proponents of contentions, who must challenge aspects of license applications with specificity, backed up with substantive technical support; mere conclusions or speculation will not suffice. An even heavier burden applies to motions to reopen.

PROCEDURAL RULES: CONTENTIONS, CERTIFIED QUESTIONS

To the extent that the events at Fukushima, Japan, provide the basis for contentions appropriate for litigation in individual proceedings, the Commission's procedural rules contain ample provisions through which litigants may seek admission of new or amended contentions, seek stays of licensing board decisions, appeal adverse decisions, and file motions to reopen the record, as appropriate. And, should a licensing board decision raise novel legal or policy questions, boards may certify to the Commission, in accordance with 10 C.F.R. §§ 2.319(*l*) and 2.323(f), those questions that would benefit from the Commission's consideration. All of these procedural mechanisms contribute toward guaranteeing the propriety of adjudicatory decisions, and allow proceedings to continue with minimal disruption to all participants. Neither new procedures nor a separate timetable for raising new issues related to the Fukushima events are therefore warranted.

MEMORANDUM AND ORDER

We have received a series of petitions to suspend adjudicatory, licensing, and rulemaking activities, and requesting additional related relief, in the captioned

matters.¹ The petitioners seek relief in light of the recent events at the Fukushima Daiichi Nuclear Power Station, following the March 11, 2011, earthquake and tsunami, to ensure the consideration in these matters of the safety and environmental implications of the Fukushima events. As discussed below, we grant the requests for relief in part and deny them in part. In particular, we decline to suspend the captioned rulemaking proceedings and adjudications, or any final licensing decisions in the captioned matters, but grant the request for a safety analysis to the extent that the NRC is conducting both a short-term and long-term lessons-learned analysis, incorporating stakeholder input.

I. BACKGROUND

A. Events at Fukushima Daiichi Nuclear Power Station

On March 11, 2011, Japan suffered a 9.0 magnitude earthquake, followed by a devastating tsunami. The earthquake and tsunami damaged reactors, power grid and power supply connections, cooling and backup cooling systems, and the spent fuel pools at the six-unit Fukushima Daiichi site, located on Japan's coast. Immediately upon learning of the events in Japan, the NRC staffed its Operations Center and deployed technical staff to assist the U.S. ambassador in Japan. Initial reports indicated that the plants, three of which were operating at the time of the events, survived the earthquake without major damage, only to experience significant damage after the tsunami irrevocably damaged backup diesel generators and diesel fuel supplies. Our understanding of the details of the failure modes at the Fukushima Daiichi site continues to evolve, and we continue to learn more about the extent of the damage at the site.

¹ A complete list of all filings associated with today's decision is provided in an Appendix to the decision. The petitions, amended petitions, and errata, although filed on multiple dockets, are substantively identical. For convenience, page references in today's decision correspond to a single set of pleadings, filed by Mindy Goldstein of the Turner Environmental Law Clinic, on behalf of Dan Kipnis, Mark Oncavage, National Parks Conservation Association, and Southern Alliance for Clean Energy, in *Florida Power & Light Co.* (Turkey Point, Units 6 and 7): 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); Amendment and Errata to Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 18, 2011); 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. 18, 2011) ("Amended Petition" in citations, "Petition," generally, in the text of today's decision).

B. Domestic Regulatory Response to the Japanese Events

Following the earthquake and tsunami, the agency began prompt action to verify the safety of nuclear facilities in the United States. The Staff is working to gather and examine all available information in order to analyze the Japanese events and understand their implications for the United States. This effort has included regular Commission briefings.²

On our direction, the Staff established a Task Force to review our processes and regulations to determine, among other things, whether the agency should make additional improvements to our regulatory system. We instructed the Task Force to submit for our consideration recommendations for technical and policy direction.³ In the near term, we directed the Task Force to take a number of actions, including evaluation of currently available information from the Japanese events to identify "potential or preliminary near-term/immediate operational or regulatory issues" affecting domestic operating reactors of all designs, in several areas.⁴ These areas include protection against earthquake, tsunami and other natural events, station blackout, severe accident mitigation, emergency preparedness, and combustible gas control.⁵

The Task Force completed its near-term effort and issued its report on July 12, 2011, for our consideration. This report includes twelve overarching recommen-

² See, e.g., Transcript, "Briefing on NRC Response to Recent Nuclear Events in Japan" (Mar. 21, 2011) (Mar. 21 Tr.); Transcript, "Briefing on the Status of NRC Response to Events in Japan and Briefing on Station Blackout" (Apr. 28, 2011) (ADAMS Accession No. ML111390571); Transcript, "Briefing on the Task Force Review of NRC Processes and Regulations Following Events in Japan" (July 19, 2011) (July 19 Tr.).

³ See "NRC Actions Following the Events in Japan," Staff Requirements — Tasking Memorandum COMGBJ-11-0002 (Mar. 23, 2011) (ADAMS Accession No. ML110800456) (Tasking Memorandum). See generally "Charter for the Nuclear Regulatory Commission Task Force to Conduct a Near-Term Evaluation of the Need for Agency Actions Following the Events in Japan" (Apr. 1, 2011) (ADAMS Accession No. ML11089A045).

⁴Tasking Memorandum at 1 (unnumbered).

⁵ *Id.* at 1 (unnumbered). Consistent with direction in the Tasking Memorandum, the Task Force provided an initial status report to the Commission at a public meeting on May 12, 2011. *See generally* Transcript, "Briefing on the Progress of the Task Force Review of NRC Processes and Regulations Following the Events in Japan" (May 12, 2011) (ADAMS Accession No. ML111360513) (May 12 Tr.). A second briefing was provided on June 15, 2011. *See generally* Transcript, "Briefing on the Progress of the Task Force Review of NRC Processes and Regulations Following the Events in Japan" (June 15, 2011) (ADAMS Accession No. ML111672048) (June 15 Tr.).

⁶ 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) (Near-Term Report) (transmitted to the Commission via SECY-11-0093, "Near-Term Report and Recommendations for Agency Actions Following the Events in Japan" (July 12, 2011) (ADAMS Accession No. ML11186A950 (package)). Any changes we decide to adopt as a result of these recommendations.

dations for improving the safety of both new and operating nuclear reactors by clarifying our regulatory framework, reevaluating and enhancing protective and mitigative measures, strengthening emergency preparedness, and improving the efficiency of NRC regulatory oversight programs. However, the Task Force also stated that "continued operation and continued licensing activities do not pose an imminent risk to public health and safety." The Task Force formally presented the report to us at a briefing on July 19, 2011.

We directed a number of actions in response to the Near-Term Report, including review and assessment, with stakeholder input, of the Task Force recommendations; provision of a draft charter for assessing the Task Force recommendations and conducting the agency's longer-term review; preparation of a notation vote paper that identifies recommended short-term actions; preparation of a notation vote paper that sets recommended priorities for the Task Force recommendations; and formal review of the Task Force recommendations by the Advisory Committee on Reactor Safeguards.¹⁰

In parallel with, and in support of, the Task Force's efforts, the Staff has taken several actions to communicate with licensees and to obtain information regarding various aspects of their emergency preparations and compliance. Just a few days after the earthquake, the Staff issued an initial Information Notice to the power-reactor community, describing the circumstances at the Fukushima Daiichi site.¹¹ The Staff asked recipients to review the information to assess

dations will be implemented through our normal regulatory processes. *See* "Near-Term Report and Recommendations for Agency Actions Following the Events in Japan," Staff Requirements Memorandum SECY-11-0093 (Aug. 19, 2011) (SRM on Near-Term Report) (ADAMS Accession No. ML112310021), for our directions to the Staff in response to the Near-Term Report.

⁷ See, e.g., Near-Term Report at 69-70.

⁸ Near-Term Report at vii. The Task Force explained: "The current [U.S.] regulatory approach, and more importantly, the resultant plant capabilities allow the Task Force to conclude that a sequence of events like the Fukushima accident is unlikely to occur in the United States and some appropriate mitigation measures have been implemented, reducing the likelihood of core damage and radiological release." *Id.*

⁹ See generally July 19 Tr.

¹⁰ See SRM on Near-Term Report. We also directed a separate consideration of the recommendation that the agency reevaluate its regulatory framework (Task Force Recommendation 1), followed by the preparation of a notation vote options paper regarding that recommendation. *Id.* at 2 (unnumbered).

¹¹ See generally NRC Information Notice 2011-05, "Tohoku-Taiheiyou-Oki Earthquake Effects on Japanese Nuclear Power Plants" (Mar. 18, 2011) (ADAMS Accession No. ML110760432). Shortly thereafter, the Staff issued a second Information Notice to fuel-cycle licensees, updating the status of the Fukushima Daiichi facilities, and highlighting the regulatory requirements applicable to those licensees. See generally NRC Information Notice 2011-08, "Tohoku-Taiheiyou-Oki Earthquake Effects on Japanese Nuclear Power Plants — for Fuel Cycle Facilities" (Mar. 31, 2011) (ADAMS Accession No. ML110830824).

its applicability to their facilities, and to consider taking appropriate actions to prevent similar problems.

To date, the Staff also has issued two temporary inspection instructions to examine the readiness of U.S. facilities to respond to design basis and beyond design basis accidents. The first instruction directed the Staff to inspect operating power reactor facilities to assess their readiness to respond to events similar to those that occurred at the Fukushima Daiichi site.¹² The second instruction directed the Staff to assess each licensee's ability to access and implement the severe accident management guidelines at its facility.¹³

The Staff also issued a bulletin to licensees for currently operating nuclear power reactors, to seek confirmation that they are complying with the requirements of 10 C.F.R. § 50.54(hh)(2)¹⁴ and to obtain information to determine whether additional assessment of mitigating strategy program implementation is required, whether the existing inspection program should be enhanced, or whether additional regulatory action is justified.¹⁵

¹² NRC Inspection Manual, Temporary Instruction 2515/183, "Followup to the Fukushima Daiichi Nuclear Station Fuel Damage Event" (Mar. 23, 2011) (ADAMS Accession No. ML11077A007). The NRC Staff completed these inspections and issued inspection reports to licensees on May 13, 2011. As a general matter, the reports indicate that none of the observations made during the performance of these examinations raised a significant safety issue. *See* "Summary of Observations TI 2515/183" and "Results Overview TI 2515/183," both available at http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/follow-up-rpts.html (released on May 20, 2011). The inspection reports informed the Task Force's near-term efforts; further evaluation of the inspection reports is occurring through the NRC's Reactor Oversight Process.

¹³ NRC Inspection Manual, Temporary Instruction 2515/184, "Availability and Readiness Inspection of Severe Accident Management Guidelines (SAMGs)" (Apr. 29, 2011) (ADAMS Accession No. ML11115A053) (TI 2515/184). SAMGs were put into place on a voluntary basis by licensees in the late 1990s. The purpose of SAMGs is to contain or reduce the impact of accidents that damage a reactor core. *See* May 12 Tr. at 9-10; TI 2515/184 at 1; June 15 Tr. at 15-16. Task Force representatives highlighted these inspections in the May 12 briefing, and stated the expectation that this examination would be of substantial assistance to the Task Force in the formulation of its recommendations. May 12 Tr. at 14. Inspection results were issued in June 2011. The Staff found that SAMGs were available at every location, although there was some inconsistency in how this voluntary program is implemented. The Staff concluded that, individually, none of its observations presented significant safety issues, but is evaluating the information in order to decide if additional agency actions are required. *See* "Summary of Observations TI 2515/184," and "Results Overview TI 2515/184," both available at http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/SAMGs.html (released on June 6, 2011).

¹⁴ Section 50.54(hh)(2) requires licensees to "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. . . ."

¹⁵ See generally NRC Bulletin 2011-01: "Mitigating Strategies" (May 11, 2011) (ADAMS Accession No. ML111250360). All operating power reactor licensees provided the requested information by July 11, 2011. The responses are available at http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/mitigating-strategies.html.

C. Procedural Background

The initial petitions were filed over a period of days, beginning April 14, 2011. These petitions were followed by a series of amended petitions and errata to the original petitions. On April 19, 2011, the Secretary of the Commission issued an order establishing a briefing schedule. The Scheduling Order authorized two sets of additional filings: (1) supplements to the petition and (2) answers to the Petition or briefs *amici*. A declaration prepared by Dr. Arjun Makhijani, supporting the petitions, was filed in the majority of the captioned proceedings. The Commonwealth of Massachusetts asked to be allowed to join the petitions to suspend, and asked for additional *Pilgrim*-specific relief. Answers to the petitions also were filed in the majority of the captioned matters. We subsequently received a series of pleadings, styled as motions to permit replies, replies, and responses opposing the motions to permit replies. We also received filings attaching additional supporting documents.

Petitioners²⁰ invoke our supervisory authority under the Atomic Energy Act

¹⁶ Order (Apr. 19, 2011) (unpublished) (Scheduling Order).

¹⁷ See, e.g., 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), filed by Mindy Goldstein of the Turner Environmental Law Clinic, on behalf of Dan Kipnis, Mark Oncavage, National Parks Conservation Association, and Southern Alliance for Clean Energy, in *Florida Power & Light Co.* (Turkey Point, Units 6 and 7) (Makhijani Declaration). For convenience, page references in today's decision correspond to this filing.

¹⁸ Commonwealth of Massachusetts Response to Commission Order Regarding Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident, Joinder in Petition to Suspend the License Renewal Proceeding for the Pilgrim Nuclear Power Plant, and Request for Additional Relief (May 2, 2011) (Commonwealth Petition).

¹⁹ We have received four sets of substantively identical "supplemental comments" in support of the emergency petition, filed by participants on the North Anna, Summer, and Shearon Harris combined license dockets and by participants in the ESBWR design certification rulemaking. These filings, and corresponding answers, are listed in the Appendix to this decision. The commenters seek consideration of the Near-Term Report in all licensing proceedings and in the ESBWR rulemaking proceeding and raise several general concerns related to the conclusions in the Near-Term Report. The commenters point out that these comments are "substantially similar" to filings that have been made contemporaneously in other pending cases. With respect to the ESBWR-related filing, we refer the comments to the ESBWR design certification rulemaking docket. For the three adjudicatory matters, we have reviewed the comments, and find that none change our conclusion that the captioned licensing reviews and adjudicatory proceedings (as applicable) need not be stayed today. At bottom, the North Anna, Summer, and Shearon Harris commenters appear to seek consideration of their concerns in the corresponding proceedings. However, the appropriate vehicle for doing so is not the submission of comments. The proper mechanism for raising application-specific concerns in these combined license cases is to file a new contention, consistent with the procedural rules applicable to the proceeding. See, e.g., 10 C.F.R. §§ 2.309(c), 2.309(f), 2.326.

²⁰ A list of the petitioners is set out in the Amended Petition at 5-7.

of 1954, as amended (AEA) and argue that, under the AEA and the National Environmental Policy Act (NEPA), the NRC is precluded "from issuing licenses or approving standardized reactor designs until it has completed its investigation of the Fukushima accident and considered the safety and environmental implications of the accident with respect to its regulatory program." In brief summary, petitioners request relief including: suspension of all licensing and rulemaking decisions pending completion by the NRC's Task Force of its near-term and long-term review; suspension of all proceedings on issues identified for investigation by the Task Force; suspension of proceedings in connection with any other issues identified by the Task Force; analysis of whether the events at Fukushima constitute "new and significant information" under NEPA; safety analysis of the regulatory implications of the events at Fukushima; and establishment of a schedule for raising new issues in pending licensing proceedings.

Petitioners included requests to suspend the AP1000 and ESBWR design certification rulemakings. A second, separate petition was filed in the AP1000 rulemaking docket in advance of the initial petitions.²² The second petition requested two remedies: the immediate postponement of the ongoing AP1000 design certification rulemaking and a comprehensive review of the Fukushima events focused on new reactor designs.²³ Westinghouse opposed both the Petition²⁴ and the AP1000 Petition.²⁵ GE Hitachi Nuclear Energy opposed the Petition in connection with the ESWBR rulemaking.²⁶

In mid-August, we received a series of petitions for rulemaking seeking to rescind certain regulations contained in 10 C.F.R. Part 51.²⁷ These petitions, citing

²¹ Amended Petition at 24.

²² Petition to Suspend AP1000 Design Certification Rulemaking Pending Evaluation of Fukushima Accident Implications on Design and Operational Procedures and Request for Expedited Consideration (Apr. 6, 2011) (AP1000 Petition).

²³ *Id.* at 23.

²⁴ Ziesing, R.F., Westinghouse Electric Co., Letter to Annette L. Vietti-Cook, NRC, Subject: "Emergency Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident" (May 2, 2011), endorsing Brief of Nuclear Energy Institute in Opposition to Emergency Petition (May 2, 2011).

²⁵ Ziesing, R.F., Westinghouse Electric Co., Letter to Secretary, NRC, Subject: "Westinghouse Comments in the AP1000[®] Design Certification Amendment Rulemaking in Response to Petitions to Suspend Rulemaking" (May 10, 2011).

²⁶ Head, Jerald G., GE Hitachi Nuclear Energy, Letter to Secretary, NRC, Subject: "Answer to Petition; SECY Order PR 52 (76FR16549), Docketed 04/19/2011 (ADAMS Accession No. ML111101277); Proposed Rule, ESBWR Design Certification, NRC-2010-0135, RIN 3150-AI85, 76 Federal Register 16549 (March 24, 2011)" (May 2, 2011).

²⁷ A complete list of these rulemaking petitions, and associated supporting declarations, is included in the Appendix to the decision. For convenience, page references in today's decision correspond to (Continued)

10 C.F.R. § 2.802(d), also seek suspension of certain of the captioned proceedings pending resolution of these rulemaking petitions. These rulemaking petitions are considered separately, in Section III.²⁸

D. Historical Perspective — Parallels to Prior Regulatory Responses

Our decision today is informed by the actions taken by the Commission following the March 28, 1979, accident at Three Mile Island (TMI), and following the events of September 11, 2001. In both instances the agency assessed the events, including implications for existing licenses and pending licensing actions, over a period of time, and considered the impact of the events on pending licensing actions.

1. The Accident at Three Mile Island

The pleadings we consider today vary in their characterizations of the Commission's actions after the TMI accident.²⁹ We therefore set out a brief chronology of NRC decisions from the post-TMI era, as relevant to today's decision. For several months following the TMI accident, the NRC issued no new operating licenses, construction permits, or limited work authorizations.³⁰ In part, this was because Staff resources were reallocated from licensing reviews to TMI-related assignments.³¹ The so-called "licensing pause" also resulted from the Commission's

the set filed by Gene Stilp, in *PPL Bell Bend*, *LLC* (Bell Bend Nuclear Power Plant): Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 10, 2011) (Rulemaking Petition); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).

²⁸ We also received responses opposing these petitions, a motion for leave to reply to these responses, and an opposition to this motion for leave to reply. A list of these pleadings is included in the Appendix to the decision.

²⁹ Petitioners maintain that the Commission suspended all licensing actions in the aftermath of the TMI accident. Amended Petition at 25. Respondents argue, e.g., that even after the TMI accident, "the Commission chose *not* to suspend ongoing licensing proceedings, but instead, on June 5, 1979, temporarily stopped issuing licenses for a short period pending its initial assessment of the accident." *E.g., Comanche Peak*: Luminant Generation Company LLC's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011) at 11 (emphasis in original).

³⁰ Following a May 31, 1979, meeting, the Commission directed the Staff to develop policy guidance addressing general principles for reaching licensing decisions, and to propose specific guidance to be applied for seven near-term operating license cases. *See* Staff Requirements — Discussion of Options Regarding Deferral of Licenses (May 31, 1979) (ADAMS Accession No. ML041900359).

³¹ See, e.g., SECY-79-344, "Interim NRR Organization to Deal with Impacts of TMI-2 and Other NRR Priority Tasks" (May 19, 1979) (ADAMS Legacy Library No. 7908030425) (detailing short-(Continued)

desire to ensure that lessons learned from the TMI accident were appropriately accounted for not only for operating reactors, but additionally for new reactor applications then under review. The Commission did not suspend adjudications during this time, although it did issue several iterations of adjudicatory guidance.

Beginning in October 1979, the Commission took several actions in fairly quick succession to provide guidance for power reactor adjudications. Initially, the Commission issued an interim policy statement where it determined that no new licenses for nuclear power reactors would be authorized by Atomic Safety and Licensing Boards, or issued by the NRC Staff, except after order of the Commission itself.³² Shortly thereafter, the Commission temporarily suspended the immediate effectiveness rule,³³ and set forth guidance for adjudications.³⁴ This policy required both Atomic Safety and Licensing Appeal Board consideration of effectiveness, and a Commission decision on effectiveness, prior to issuance of any construction permit or operating license.³⁵ The Commission also directed the Boards, in deciding issues before them, to use the existing regulations, with the

term realignment of resources and priorities in the Office of Nuclear Reactor Regulation to support TMI-related activities).

³² See Interim Statement of Policy and Procedure, 44 Fed. Reg. 58,559 (Oct. 10, 1979) (Interim Immediate Effectiveness Policy). At the same time, the Commission made clear that all other adjudicatory proceedings, "including enforcement and license amendment proceedings[,]" could continue, as could issuance of appellate decisions and partial initial decisions not related to issuance of new reactor licenses or permits. *Id.*

³³ See 10 C.F.R. § 2.764. This rule, subsequent to our 2004 10 C.F.R. Part 2 revisions, resides at 10 C.F.R. § 2.340 (see Final Rule: "Changes to Adjudicatory Process," 69 Fed. Reg. 2182 (Jan. 14, 2004)).

³⁴ See Domestic Licensing Proceedings; Modified Adjudicatory Procedures, 44 Fed. Reg. 65,049 (Nov. 9, 1979). The amended procedures were set out as Appendix B to 10 C.F.R. Part 2. Appendix B, as a practical matter, provided for direct Commission review of licensing board decisions. In an *uncontested* operating license proceeding, the Commission would review informally the Staff recommendations, and the license would issue only after Commission action. *Id.* at 65,050.

³⁵ *Id.* at 65,050. The "Appendix B" process nominally resulted in some delay in the issuance of operating licenses. One and a half years later, the Commission amended the immediate effectiveness rule as to operating license applications, by requiring direct, expedited Commission review of licensing board decisions in favor of granting operating licenses. The amendment eliminated the Appeal Board review required by Appendix B. These changes removed Appendix B and incorporated the revised procedures into 10 C.F.R. § 2.764. *See generally* Final Rule: "Commission Review Procedures for Power Reactor Operating Licenses; Immediate Effectiveness Rule," 46 Fed. Reg. 28,627 (May 28, 1981). Shortly thereafter, the Commission again modified the rule, to delete the requirement that the Commission conduct an effectiveness review prior to fuel loading and low-power (up to 5% of rated power) testing. *See generally* Final Rule: "Commission Review Procedures for Power Reactor Operating Licenses; Immediate Effectiveness Rule," 46 Fed. Reg. 47,764 (Sept. 30, 1981). Concurrently, the Commission issued a brief policy statement reiterating its intention that in uncontested cases the Commission still would authorize full-power operation. Statement of Policy on Issuance of Uncontested Fuel Loading and Low Power Testing Operating Licenses, 46 Fed. Reg. 47,906 (Sept. 30, 1981).

understanding that post-TMI analyses were still under way, and that, ultimately, compliance with then-existing rules might not be sufficient for an application to be approved. Then-Chairman Hendrie formally announced a "licensing pause" on November 5, 1979. The "licensing pause" lasted just a few months, ending in February 1980 with the issuance of a 5% power operating license for the Sequoyah facility. 8

After acting on three operating license applications and considering lessons learned, the Commission issued a third statement of policy in June 1980.³⁹ The Commission determined that operating license applications should be measured against our regulations, as augmented by several new requirements.⁴⁰ To facilitate adjudications, the Commission explained how to litigate TMI-related issues in operating license proceedings, and included guidance on certain case management issues.⁴¹ Notably, the Commission considered the question of timeliness, and directed that, where the time for filing contentions had expired in a given case, no new TMI-related contentions would be accepted absent a showing of good cause and a balancing of the late-filing factors.⁴² The Commission also directed boards to adhere strictly to our standards for reopening records, where applicable.⁴³

³⁶ 44 Fed. Reg. at 65,050-51. The Commission advised that it would provide "case-by-case guidance" on changes as part of its own reviews in adjudicatory proceedings, which the Boards should apply in cases before them. *Id.*

³⁷ See Steve Wynkoop, Gossick Resigns; NRC Responds to Kemeny with License 'Pause,' Nucleonics Week, Nov. 8, 1979, at 1.

³⁸ See NUREG/BR-0175, "A Short History of Nuclear Regulation, 1946-2009," Rev. 2 (Oct. 2010), at 59; Dircks, W.J., NRC, Letter to R.J. Sherman, Atomic Industrial Forum, Inc. (Apr. 17, 1980). Six months later, the NRC issued the first full-power operating license following the TMI accident. *Id.*

³⁹ See Further Commission Guidance for Power Reactor Operating Licenses; Statement of Policy, 45 Fed. Reg. 41,738 (June 20, 1980) (June 1980 Policy Statement). Commissioners Gilinsky and Bradford provided separate and dissenting views, respectively.

 $^{^{40}\}mathit{Id}.$ at 41,739 (citing NUREG-0660, "NRC Action Plan Developed as a Result of the TMI-2 Accident" (May 1980) (ADAMS Accession No. ML072470526) (TMI Action Plan)).

⁴¹ *Id.* at 41,740. This guidance essentially expanded the scope of permissible contentions to include issues associated with TMI-related requirements that supplemented existing regulations.

⁴² *Id.* (citing 10 C.F.R. § 2.714(a)(1), now renumbered as 10 C.F.R. § 2.309(c), (f)(2)).

⁴³ "[F]or example, where initial decisions have been issued, the record should not be reopened to take evidence on some TMI-related issue unless the party seeking reopening shows that there is significant new evidence, not included in the record, that materially affects the decision." *Id.* When challenged on this the following year, the Commission reiterated its expectation that parties would adhere to these requirements. *See Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-81-5, 13 NRC 361, 364-65 (1981).

Just a few months later, in November 1980, the Commission approved a revision to its TMI Action Plan,⁴⁴ and shortly thereafter issued a revised policy statement.⁴⁵ Of note, the Commission observed that many matters in the TMI Action Plan appropriately were addressed on a generic basis, rather than in individual adjudications. The Commission therefore recommended that litigants seeking to challenge new requirements provide additional, specific information supporting their challenges.⁴⁶

In 1981, the Commission proposed a rule that would have codified the TMI-related procedural provisions for operating license cases.⁴⁷ But the NRC never implemented a final rule because experience showed that the proposed guidance was rarely needed. The Commission observed that TMI-related issues were litigated in very few operating license proceedings, and concluded that the absence of a rule would not cause unnecessary delays in proceedings where such issues were raised.⁴⁸

Once all regulatory revisions implementing the TMI Action Plan had been completed, special TMI-related guidance no longer was needed. The Commission therefore rescinded the December 1980 Policy Statement in 1989.⁴⁹

⁴⁴ See generally NUREG-0737, "Clarification of TMI Action Plan Requirements" (Nov. 1980). Among other things, NUREG-0737 included revisions to previous requirements, more explicit requirements, and different schedules for implementation of actions.

⁴⁵ See Statement of Policy: Further Commission Guidance for Power Reactor Operating Licenses, CLI-80-42, 12 NRC 654 (1980) (December 1980 Policy Statement); corrected by Statement of Policy; Further Commission Guidance for Power Reactor Operating Licenses, 46 Fed. Reg. 15,242 (Mar. 4, 1981). Chairman Ahearne dissented.

⁴⁶ *Id.* at 660 (recommending that parties state "the nexus of the issue to the TMI-2 accident, . . . the significance of the issue, and . . . any differences between their positions and the rationale underlying the Commission['s] consideration of additional TMI-related requirements."). The December 1980 Policy Statement reiterated the Commission's expectations regarding the applicability of the late-filing and reopening rules. *Id.* at 661.

⁴⁷ See generally Proposed Rule: "Licensing Requirements for Pending Operating License Applications," 46 Fed. Reg. 26,491 (May 13, 1981).

⁴⁸Withdrawal of Proposed Rule: "Licensing Requirements for Pending Operating License Applications," 48 Fed. Reg. 13,987, 13,988 (Apr. 1, 1983).

⁴⁹ See Statement of Policy on Litigation of TMI-Related Issues in Power Reactor Operating License Proceedings; Revocation of Superseded Policy Statement Concerning TMI-Related Procedures, 54 Fed. Reg. 7897 (Feb. 23, 1989). The Commission offered guidance for the litigation of TMI-related issues in operating license proceedings where the guidance might still be pertinent. *Id.* at 7898. As an administrative matter, the Commission also rescinded the October 1979 Interim Immediate Effectiveness Policy. *Id.* Concurrently, the Commission made minor revisions to the immediate effectiveness rule, to remove "TMI-related" portions of the rule that were no longer necessary. *See* Final Rule: "Issuance or Amendment of Power Reactor License or Permit Following Initial Decision," 54 Fed. Reg. 7756, 7757 (Feb. 23, 1989). The "automatic stay" provisions were removed from 10 C.F.R. § 2.340 in 2007. *See* Final Rule: "Licenses, Certifications, and Approvals for Nuclear Power Plants," 72 Fed. Reg. 49,352, 49,415 (Aug. 28, 2007).

As this brief summary of the agency's actions makes clear, the NRC initiated a comprehensive analysis of the TMI accident immediately after it occurred. This analysis included thoughtful consideration of the potential ramifications of lessons learned for licensing decisions and ongoing adjudications. On the procedural front, the Commission provided guidance to facilitate adjudications and considered making formal changes to its Part 2 rules to codify this guidance. But throughout the evolution of this guidance, the Commission adhered to the fundamental premise that its procedural rules — as they related, for example, to new or amended contentions and to motions to reopen — should be applied in accordance with existing adjudicatory precedent and practices.

2. Events of September 11, 2001

The events of September 11, 2001, generated a flurry of litigation, including requests to suspend ongoing adjudications and licensing reviews. The Commission declined to suspend ongoing proceedings and licensing reviews. Instead, the agency pursued a top-to-bottom reassessment of its regulations and policies on terrorism generically, outside the adjudicatory process.

In October 2001, intervenor Georgians Against Nuclear Energy (GANE) and another requester filed a petition to suspend the mixed-oxide fuel fabrication proceeding (*MOX*) in view of the events of September 11.⁵⁰ The Commission denied the petition, finding no health and safety reason justifying suspension of the proceeding, no injury beyond litigation costs, ample time to implement new rules if appropriate, and value in moving forward with the proceeding in a timely and efficient way.⁵¹

As GANE had in *MOX*, the State of Utah, in the *Private Fuel Storage* independent spent fuel storage installation (ISFSI) proceeding, petitioned the Commission to suspend licensing proceedings for the proposed ISFSI in light of the events of September 11.⁵² The Commission made three principal findings, which led it to deny Utah's suspension petition. First, the Commission found that even if the licensing, construction, and shipping processes went forward as planned, no radiological materials would be present onsite for at least 2 years, so there was no immediate threat to public safety.⁵³ Second, the Commission found that the interest in efficient adjudication would best be served if the proceeding went forward to resolve the numerous safety and environmental issues — many

⁵⁰ See Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-01-28, 54 NRC 393, 397-98 (2001), reconsideration denied, CLI-02-2, 55 NRC 5 (2002).

⁵¹ MOX, CLI-01-28, 54 NRC at 398-401.

⁵² See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 377-78 (2001).

⁵³ *Id.* at 380-81.

with no link to terrorism — at issue; moreover, the relief requested by Utah — suspension of the entire proceeding — was not narrowly tailored to the goal of adjudicatory efficiency.⁵⁴ Finally, the Commission found that continuing the proceeding would not thwart regulatory review, and that suspending the proceeding was not necessary to guarantee that the full benefit of the agency's post-September 11 review would be realized at the proposed facility.⁵⁵

In the McGuire/Catawba license renewal proceeding, intervenor Blue Ridge Environmental Defense League (BREDL) moved to dismiss an application to renew the operating licenses of four nuclear power units, as legally invalid.⁵⁶ In the alternative, BREDL asked the Commission to hold the proceeding in abeyance pending the Commission's comprehensive post-September 11 review of its rules and policies.⁵⁷ The Commission denied both the request to dismiss the proceeding and the alternative request to hold it in abeyance.⁵⁸ Noting the early stage of the proceeding — contentions had only just been submitted and the Board had not yet ruled on them — the Commission found that there was no risk of immediate threat to public health and safety, that there were non-terrorism-related contentions to be considered, and that the only "harm" to BREDL would be inevitable litigation costs.⁵⁹ The Commission pointed out that any changes in rules that might bear on license renewal reviews could be addressed via late-filed contentions. 60 Additionally, the Commission reasoned that there would be time to apply any new rules that might result from the generic review of terrorism-related issues.61

While bearing in mind the history of Commission actions following the TMI accident, we look to the more recent post-September 11 "suspension-of-proceedings" cases for the framework under which we consider the current petitions.⁶²

⁵⁴ *Id.* at 381-83.

⁵⁵ *Id*. at 383-84.

⁵⁶ Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-27, 54 NRC 385, 388 (2001).

⁵⁷ LA

⁵⁸ Id. at 388, 392.

⁵⁹ *Id.* at 390-91.

⁶⁰ *Id.* at 391.

⁶¹ *Id*.

⁶² See also Pacific Gas and Electric Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-02-23, 56 NRC 230 (2002).

II. DISCUSSION

A. Legal Framework

The petitions do not fall neatly within our regulations — the sole provision explicitly authorizing stay applications is available only to parties to adjudicatory proceedings seeking stays of decisions or actions of a presiding officer pending the filing and resolution of a petition for review.⁶³ That is not the situation here. We previously considered requests to suspend or hold proceedings in abeyance in a number of proceedings following the September 11 terrorist attacks, as well as more recently, pursuant to our inherent supervisory authority over agency proceedings.⁶⁴ We exercise this supervisory authority again today.⁶⁵

We consider "suspension of licensing proceedings a 'drastic' action that is not warranted absent 'immediate threats to public health and safety," '66 or other compelling reason. The three criteria articulated in the post-September 11 *Private Fuel Storage* proceeding are apt here, where we face analogous circumstances, and we apply them today. Thus, we consider, first, "whether moving forward . . . will jeopardize the public health and safety." Second, we examine whether continuing the review process will "prove an obstacle to fair and efficient decisionmaking." Third, we decide whether going forward will "prevent appropriate implementation

⁶³ See 10 C.F.R. § 2.342.

⁶⁴ See Private Fuel Storage, CLI-01-26, 54 NRC 376; McGuire/Catawba, CLI-01-27, 54 NRC 385; MOX, CLI-01-28, 54 NRC 393; Diablo Canyon, CLI-02-23, 56 NRC 230. See also AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 484-85 (2008) (citing Private Fuel Storage, CLI-01-26, 54 NRC 376; Diablo Canyon, CLI-02-23, 56 NRC 230; MOX, CLI-01-28, 54 NRC 393) (considering petitions to suspend multiple license renewal proceedings in view of an Inspector General's report on the agency's license renewal process).

⁶⁵ Because we consider the petitions, and take action, in our supervisory capacity, we need not address a number of procedural issues that would merit further discussion in a traditional adjudication. As Entergy Nuclear Operations, Inc. (Entergy) points out: "While the NRC rules require that motions be addressed to the Presiding Officer when a proceeding is pending, the Commission has previously indicated that suspension motions such as this are best addressed to it." Pilgrim & Indian Point: Entergy's Answer Opposing Petition to Suspend Licensing Proceedings (May 2, 2011) at 2 (citing *Oyster Creek*, CLI-08-23, 68 NRC at 476; *Diablo Canyon*, CLI-02-23, 56 NRC at 237). We agree that the filings here are appropriately brought before us in this instance. We do not address whether certain of the petitions (for example, filed on the *Callaway* and *Columbia Generating Station* dockets) are appropriate, given that they were filed in the absence of an ongoing adjudication. We also do not address the procedural propriety of a number of filings not contemplated by the Secretary's Scheduling Order, including petitioners' motions for leave to reply, answers to those motions, and various supplements filed after the date specified in the Scheduling Order. The participants should assume our familiarity with all relevant filings.

⁶⁶ Oyster Creek, CLI-08-23, 68 NRC at 484.

⁶⁷ Private Fuel Storage, CLI-01-26, 54 NRC at 380.

⁶⁸ *Id*.

of any pertinent rule or policy changes that might emerge from our . . . ongoing evaluation." 69

B. Analysis

As stated above, petitioners ask for a number of remedies. We consider each in turn.

1. Suspension Requests

The first three remedies sought by petitioners relate to suspension of decisions or proceedings for reasons related to the NRC's review of the implications of the events at Fukushima. Petitioners request:

- Suspension of "all decisions regarding the issuance of construction permits, new reactor licenses, [Combined Licenses (COLs)], [Early Site Permits (ESPs)], license renewals, or standardized design certification pending completion by the NRC's Task Force of its investigation of the near-term and long-term lessons of the Fukushima accident and the issuance of any proposed regulatory decisions and/or environmental analyses of those issues."
- Suspension of all proceedings specifically, all hearings and opportunities for
 public comment on reactor or spent fuel pool issues identified for investigation
 by the Task Force, including external event issues, station blackout, severe
 accident measures, implementation of 10 C.F.R. § 50.54(hh)(2) requirements on
 response to fire or explosions, and emergency preparedness.⁷¹
- Suspension of proceedings in connection with any other issues identified by the Task Force pending completion of the Task Force's investigation of those issues and issuance of any proposed regulatory decisions and/or environmental analyses.⁷²

As discussed below, we deny these requests.

According to petitioners, should the NRC continue to issue licenses and apply any lessons learned retrospectively, its actions would be inconsistent with the AEA and NEPA.⁷³ Petitioners argue that "the NRC may not issue a license for a

⁶⁹ *Id.* There, the evaluation pertained to terrorism-related policies. Here, the evaluation relates to the domestic implications of the Fukushima events.

⁷⁰ Amended Petition at 28. See also id. at 1-2.

⁷¹ *Id.* at 2, 28.

⁷² Id. at 2, 28-29.

 $^{^{73}}$ *Id.* at 27.

reactor if it would pose an 'undue risk' to public health and safety or the common security."⁷⁴ To support their argument, petitioners point to the AEA's prohibition against issuing a license if issuance would be "inimical to the common defense and security or to the health and safety of the public."⁷⁵ Petitioners argue that "[t]he list of issues identified for investigation in the Task Force Charter demonstrates that the Fukushima accident raises significant questions about the adequacy of the NRC's regulatory program," and that it would be "almost impossible" for the NRC to make definitive findings on safety until after the Task Force completes its work.⁷⁶

Respondents reason, as a general matter, that the Petition does not offer a basis for suspending proceedings because the standards we have previously applied, as enumerated in the *Private Fuel Storage* proceeding, have not been satisfied.⁷⁷ Respondents argue that moving forward with ongoing Staff safety and environmental reviews and with hearings on admitted contentions will not threaten public health and safety or impede implementation of any regulatory changes necessitated by the NRC's evaluation of the events in Japan, and that stopping the licensing process would be needlessly inefficient.⁷⁸ Respondents argue that the NRC has wide discretion to proceed with its usual licensing activities while the agency's investigation of the implications of the Fukushima accident for U.S. facilities proceeds. Respondents maintain that the NRC already has "exercised this discretion by allowing pending licensing actions to continue without interruption while the agency evaluates the regulatory significance of the Fukushima events."

 $^{^{74}}$ Id. at 25.

 $^{^{75}}$ AEA \S 103(d), 42 U.S.C. \S 2133. (Petitioners cite 42 U.S.C. \S 2311, Amended Petition at 25; we expect they intended section 2133.)

⁷⁶ Amended Petition at 25.

⁷⁷ Columbia Generating Station: Energy Northwest's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011) at 14-15.

⁷⁸ See, e.g., Calvert Cliffs: Opposition to Emergency Petition to Suspend Licensing Decisions and Proceedings (May 2, 2011) at 5.

⁷⁹ Levy County: Progress Energy Florida, Inc.'s Response Opposing Emergency Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident (May 2, 2011), at 14. In this connection, respondents note the approval of the Vermont Yankee license renewal application on March 28, 2011, and the approval of the renewal of the licenses for the Palo Verde Nuclear Generating Station units on April 29, 2011. *Id.* (citing Entergy Nuclear Operations, Inc.; Vermont Yankee Nuclear Power Station; Notice of Issuance of Renewed Facility Operating License No. DPR-28 for an Additional 20-Year Period; Record of Decision, 76 Fed. Reg. 17,162 (Mar. 28, 2011); Arizona Public Service Company; Palo Verde Nuclear Generating Station, Units 1, 2, and 3, Notice of Issuance of Renewed Facility Operating License Nos. NPF-41, NPF-51, and NPF-74 for an Additional 20-Year Period; Record of Decision, 76 Fed. Reg. 24,064 (Apr. 29, 2011)).

As discussed above, the events at Fukushima have prompted a comprehensive review of our regulations and practices and, as a result of this review, we may determine that regulatory or procedural changes are warranted. However, nothing we have learned to date puts the continued safety of our currently operating regulated facilities, including reactors and spent fuel pools, into question. Similarly, nothing learned to date requires immediate cessation of our review of license applications or proposed reactor designs. Significantly, the Petition fails to identify specific problems with any captioned COL application, license renewal application, or design certification rulemaking. This lack of a specific link between the relief requested and the particulars of the individual applications makes it difficult to conclude that moving forward with any individual licensing decision or proceeding will have a negative impact on public health and safety.

Petitioners have not shown that any of the license applications would pose an immediate threat to the public health and safety, if licensing activities are continued. At bottom, this is a practical consideration — in the case of every captioned new reactor license application, for example, the proposed plants are years away from being placed into operation. We have factored this concept of immediacy into past decisions where suspension of a proceeding has been sought after significant and unusual events. We denied requests to immediately suspend proceedings in the aftermath of the September 11 attacks, finding suspension neither necessary nor appropriate. In the *Private Fuel Storage* case, where shipments of spent fuel to the facility were at least 2 years down the road, we found no immediate threat that the facility might be targeted for terrorists. Similarly, in the post-September 11 *Diablo Canyon* proceeding, we denied a request for suspension, finding that there was "no reason to believe that any danger to public health and safety would result from *mere continuation of this adjudicatory proceeding.*" 81

The same reasoning holds true for the matters for which petitioners request suspension. For example, licensing decisions for pending COL applications are months and, in many cases, years away and fuel loading into completed reactors is still further away; continuation of these reviews poses no immediate threat to public health and safety.⁸²

 $^{^{80}\,}Private$ Fuel Storage, CLI-01-26, 54 NRC at 378.

⁸¹ Diablo Canyon, CLI-02-23, 56 NRC at 239 (emphasis in original). See also Potential Implications of Chernobyl Accident for All NRC-Licensed Facilities, DD-87-21, 26 NRC 520 (1987).

⁸² Callaway — Staff's review was suspended at the applicant's request, proceeding terminated in August 2009 pursuant to settlement agreement (Ameren Missouri Response to Emergency Petition (May 2, 2011) at 2-3); Calvert Cliffs — final safety evaluation report (SER) scheduled for completion in January 2013 (Calvert Cliffs Opposition to Emergency Petition to Suspend Licensing Decisions and Proceedings (May 2, 2011), at 4); Fermi — final SER is scheduled for completion in September (Continued)

Our regulatory processes provide sufficient time and avenues to ensure that design certifications and COLs satisfy any Commission-directed changes before any new power plant commences operations.⁸³ This is demonstrated by the

2012, followed by final environmental impact statement (EIS) in November 2012 (Detroit Edison Opposition to Emergency Petition to Suspend Licensing Decisions and Proceedings (May 2, 2011) at 4); William States Lee III — final decision on the application is not expected until late 2012 or early 2013 (Answer of Duke Energy Carolinas LLC Opposing Petition to Suspend All Pending Reactor License Proceedings (May 2, 2011) at 7); Turkey Point — reactors are "years away" from receiving licenses and are at least 10 years away from operation (Florida Power & Light Response Opposing Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident (May 2, 2011) at 12); Comanche Peak — a petition for review of a board contention admissibility decision is pending before the Commission, and a final decision on the complete application is not expected until late 2013 (Luminant Generation Company LLC's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011) at 3, 10); Bell Bend — final SER expected in August 2012, no date for final EIS (Opposition to Emergency Petition (May 2, 2011) at 3); Shearon Harris — the current projected start date for the first of the two units is, at the earliest, the first quarter of 2026, and the final EIS is not due to be issued until January 2014 (Progress Energy Carolina, Inc.'s Response Opposing Emergency Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident (May 2, 2011) at 12, 20); Levy County — the current projected start date for operation of the first unit is projected for the second quarter of 2021, at the earliest (Progress Energy Florida, Inc.'s Response Opposing Emergency Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident (May 2, 2011) at 10); Virgil C. Summer — the applicant expects a final decision on its COL application in the fall of 2011, but construction would not be completed for at least several years thereafter (South Carolina Electric & Gas Company's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011) at 10); South Texas — the applicant expects a decision on the South Texas COL application sometime in 2012, but even if granted, construction would not be completed for at least several years (Nuclear Innovation North America LLC's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011) at 9); Vogtle — "Vogtle Unit 3 will not go online until 2016, 5 years from now" (Southern Nuclear Operating Company's Answer to 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 (May 2, 2011) at 13); Bellefonte currently deferred, with no decision on whether the units ever will be constructed (Tennessee Valley Authority's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011) at 11); North Anna — the projected date for completing the mandatory hearing is in November 2013 (Dominion's Answer Opposing Petition to Suspend Pending Licensing Proceedings (May 2,

⁸³ With respect to the timing associated with the Watts Bar operating license application, TVA states that it does not expect the proceeding to be completed until 2012, with operations to start sometime later. Tennessee Valley Authority's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011) at 11. Here again, the agency has ample authority and time to make appropriate changes prior to commencement of operation of the plant. Any necessary changes

implementation strategy for new reactor licensing outlined in the Near-Term Report. Whether we adopt the Task Force recommendations or require more, or different, actions associated with certified designs or COL applications, we have the authority to ensure that certified designs and combined licenses include appropriate Commission-directed changes before operation. We therefore find no imminent risk to public health and safety or to the common defense and security that necessitates a stay of new reactor licensing actions or adjudications.

The situation is similar for pending license renewal applications, where the period of extended operation, provided renewed licenses are issued, will not begin for, at a minimum, nearly a year, and, in the majority of cases, for several years. 84 In our view, there is no imminent threat to public health and safety that requires suspension of any of these proceedings or the associated licensing decisions now. 85

We further find that it is in the public interest that adjudicatory proceedings (as applicable) and licensing reviews continue. During the pendency of the agency's review, as respondents point out, safety and environmental contentions raised in our ongoing proceedings, "many with no conceivable connection to the accident in Japan or the issues identified in the Task Force Charter," can, and should, be resolved.⁸⁶ As we stated in *Private Fuel Storage*, we have "a responsibility to go forward with other regulatory and enforcement activities even while" the agency

that may be implemented post-license issuance would be imposed on the facility in the same manner as for operating reactors. Similarly, therefore, we find no imminent risk that would compel a stay of either the ongoing licensing review or the associated adjudication.

⁸⁴ Columbia Generating Station — current operating license expires on December 20, 2023 (Energy Northwest's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011) at 17); Pilgrim — current operating license expires on June 8, 2012 (Entergy's Answer Opposing Petition to Suspend Pending Licensing Proceedings (May 2, 2011) at 4); Indian Point for Unit 2, the current operating license expires on September 9, 2013, and for Unit 3, the current operating license expires on December 12, 2015 (Entergy's Answer Opposing Petition to Suspend Pending Licensing Proceedings (May 2, 2011) at 5); Davis-Besse — current operating license expires on April 22, 2017 (FirstEnergy's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011) at 3); Seabrook — NRC decision on license renewal is not expected until December 2012 (Answer of NextEra Energy Seabrook LLC Opposing Petition to Suspend Pending Licensing Proceedings (May 2, 2011) at 2-3); and Diablo Canyon — the final decision on the license renewal application has been significantly delayed (see Holian, Brian E., NRC, Letter to John Conway, Pacific Gas and Electric Co., "Response to Request for Deferral of Issuance of Renewed Operating Licenses and Revision of Schedule for the Review of the Diablo Canyon Nuclear Power Plant, Units 1 and 2, License Renewal Application" (May 31, 2011) (ADAMS Accession No. ML111520068); Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), Notice of 52-Month Delay and Order Requiring Status Reports (June 7, 2011) (unpublished)).

⁸⁵ See generally McGuire/Catawba, CLI-01-27, 54 NRC at 390-91.

⁸⁶ Columbia Generating Station: Energy Northwest's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011) at 17.

conducts its review.⁸⁷ To the extent that our comprehensive review leads to new rules applicable to any pending application, we have sufficient authority and time to apply them to any new license that may be issued.

License renewal presents an additional circumstance factoring into our decision. As respondents argue, our license renewal review is a limited one, focused on aging management issues.88 It is not clear whether any enhancements or changes considered by the Task Force will bear on our license renewal regulations, which encompass a more limited review. The NRC's ongoing regulatory and oversight processes provide reasonable assurance that each facility complies with its "current licensing basis," which can be adjusted by future Commission order or by modification to the facility's operating license outside the renewal proceeding (perhaps even in parallel with the ongoing license renewal review).89 As one respondent points out, "the Commission is conducting extensive reviews to identify and apply the lessons learned from the Fukushima Daiichi accident, and has made it clear that it will use the information from these activities to impose any requirements it deems necessary, irrespective of whether a plant is applying for or has been granted a renewed operating license."90 We agree. Further, we do not believe that an imminent risk will exist during the time period needed to apply any necessary changes to operating plants, whether a license renewal application is pending or not.91 Therefore, allowing these proceedings to continue will not

⁸⁷ Private Fuel Storage, CLI-01-26, 54 NRC at 381 (citing Statement of Policy on Adjudicatory Proceedings, CLI-98-12, 48 NRC 18 (1998), reaffirming the Commission's commitment to efficient and expeditious processing of adjudications).

⁸⁸ See, e.g., Columbia Generating Station: Energy Northwest's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011) at 20. See generally Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 453-56 (2010).

⁸⁹ See Final Rule: "Nuclear Power Plant License Renewal," 56 Fed. Reg. 64,943, 64,949, 64,953-54 (Dec. 13, 1991) (explaining that the current licensing basis can be modified at any time to resolve emerging concerns, and expressly noting a change in the final rule to the definition of "current licensing basis" to ensure that changes could be made to the existing 10 C.F.R. Part 50 license while the 10 C.F.R. Part 54 license renewal application is under review).

⁹⁰ Pilgrim & Indian Point: Entergy's Answer Opposing Petition to Suspend Pending Licensing Proceedings (May 2, 2011) at 3.

⁹¹ However, to the extent that issues appropriately within the scope of license renewal are identified, our procedural rules provide avenues for the submission of proposed contentions on those issues. See 10 C.F.R. § 2.309(c), (f)(1)-(2). For example, prior to issuance of the Near-Term Report, one intervenor (in the *Pilgrim* proceeding) filed two new contentions associated with the Fukushima events. See Pilgrim Watch Request for Hearing on Post Fukushima SAMA Contention (May 12, 2011); Pilgrim Watch Request for Hearing on a New Contention Regarding Inadequacy of Environmental Report, Post Fukushima (June 1, 2011). (The Board has since ruled on these requests, and rejected them pursuant to 10 C.F.R. §§ 2.326, 2.309(c), and 2.309(f)(1). See Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), LBP-11-23, 74 NRC 287, 324 (2011) (Young, J., concurring (Continued)

prevent the appropriate implementation of any rule or policy changes we may make as a result of our post-Fukushima review.

Moreover, nothing in the Petition or in Dr. Makhijani's Declaration persuades us otherwise. Respondents argue that Dr. Makhijani "provides no information showing that U.S. plants (particularly those on the East Coast) are vulnerable to the type of accident scenarios that occurred at Fukushima Daiichi. In particular, he makes no showing that tsunami or station blackout risk at these plants is higher than previously assumed, or that spent fuel pool risk at U.S. plants is anything other than very low."92 We essentially agree — Dr. Makhijani provides mostly speculation, not facts or evidence, on potential implications for U.S. facilities. He states that he "believe[s]" that "if" new information from the Japanese event is taken into account in the NRC's analyses, then "it is likely" to change those analyses.⁹³ In connection with safety issues, he says that information learned as a result of the Japan event "is likely to result in more rigorous regulation."94 He goes on to predict that "[i]t is likely that more . . . protective features will be needed ... [and i]t is also likely that additional measures involving significant costs will have to be taken,"95 and, consequently, an economic analysis "may well result in a decision that licensing of new reactors and re-licensing of existing reactors is not cost-effective." And "[t]herefore . . . [he] believe[s] it is reasonable and necessary for the NRC to suspend licensing and re-licensing decisions and standardized design certifications until the NRC completes its review of the regulatory implications of the Fukushima accident."97

As discussed further in Section II.B.3, *infra*, to the extent that the petitions seek agency consideration of issues that were within the scope of the near-term Task Force charter or that we subsequently direct the Staff to review, the request is granted. In fact, the Makhijani Declaration points to a number of the same areas that the Task Force examined, and it may be that we take actions that will address concerns similar to Dr. Makhijani's. On balance, however, Dr. Makhijani's broad assertions are insufficient to support an immediate freeze of licensing decisions, and we do not institute one today.

in part and dissenting in part).) Since issuance of the report, new contentions have been filed in a number of ongoing license renewal cases. *See, e.g.,* Motion to Admit New Contention Regarding the Safety and Environmental Implications of the Nuclear Regulatory Commission Task Force Report on the Fukushima Dai-ichi Accident (Aug. 11, 2011) (Diablo Canyon); Friends of the Coast and New England Coalition's Contention Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report (Aug. 11, 2011) (Seabrook).

⁹² *Id.* at 22.

 $^{^{93}\,\}text{Makhijani}$ Declaration at 12, \P 34.

⁹⁴ Id.

⁹⁵ *Id.* at 12, ¶ 36.

⁹⁶ Id.

⁹⁷ *Id.* at 13, ¶ 37.

As discussed above, the Task Force has provided us with its recommendations for short-term and long-term agency action. Our consideration of the Task Force's recommendations, and the efforts we have directed the Staff to undertake based on those recommendations98 may result in actions including the issuance of regulatory and policy direction. Moreover, as the report reflects, the mechanisms and consequences of the events at Fukushima are not yet fully understood. If our consideration of the Near-Term Report or the results of the longer-term review of hazards like those that damaged reactors at the Fukushima site ultimately causes the NRC to revise its requirements, licensees may well become subject to new regulations or agency orders. But safety and environmental regulation is by its very nature a dynamic process. Outside the context of the events at Fukushima, new information and new analyses constantly emerge and may lead to fresh regulatory approaches. That is not a reason to halt ongoing regulatory activity in the meantime. Even for the licenses that the NRC issues before completing its review, any new Fukushima-driven requirements can be imposed later, if necessary to protect the public health and safety.99

In sum, we find no imminent risk to public health and safety if we allow our regulatory processes to continue. Instead of finding obstacles to fair and efficient decisionmaking, we see benefits from allowing our processes to continue so that issues unrelated to the Task Force's review can be resolved. We have well-established processes for imposing any new requirements necessary to protect public health and safety and the common defense and security. Moving forward with our decisions and proceedings will have no effect on the NRC's ability to implement necessary rule or policy changes that might come out of our review of the Fukushima Daiichi events.

2. National Environmental Policy Act

Our licensing reviews include (among other things) assessment of the environmental impacts of severe accidents, as well as severe accident mitigation alternatives. ¹⁰⁰ Petitioners request that the NRC conduct a separate generic NEPA

⁹⁸ See SRM on Near-Term Report.

⁹⁹ See Private Fuel Storage, CLI-01-26, 54 NRC at 383-84.

¹⁰⁰ See, e.g., 10 C.F.R. § 51.53(c)(3)(ii)(L) (requiring a site-specific consideration of severe accident mitigation alternatives at the time of license renewal, unless a previous consideration of such alternatives regarding plant operation has been included in a final environmental impact statement, final environmental assessment, or a related supplement); 10 C.F.R. Part 51, Subpart A, Appendix B, Table B-1, "Summary of Findings on NEPA Issues for License Renewal of Nuclear Power Plants" (reflecting the conclusion for the generic analysis of severe accidents, that the probability-weighted consequences of atmospheric releases, fallout onto open bodies of water, releases to groundwater, and

analysis regarding whether the Fukushima events constitute "new and significant information" under NEPA that must be analyzed as part of the environmental review for new reactor and license renewal decisions. ¹⁰¹ At bottom, according to petitioners, such a review is required now because the NRC has "admitted" that it "has new information that concededly could have a significant effect on its regulatory program and the outcome of its licensing decisions for individual reactors." ¹⁰²

This request is premature. Although the Task Force completed its review and provided its recommendations to us, the agency continues to evaluate the accident and its implications for U.S. facilities and the full picture of what happened at Fukushima is still far from clear. In short, we do not know today the full implications of the Japan events for U.S. facilities. Therefore, any generic NEPA duty — if one were appropriate at all — does not accrue now.

If, however, new and significant information comes to light that requires consideration as part of the ongoing preparation of application-specific NEPA documents, the agency will assess the significance of that information, as appropriate. Our regulations specify the circumstances under which the Staff must prepare supplemental environmental review documents. Section 51.72(a) requires preparation of a supplemental draft EIS when:

- (1) There are substantial changes in the proposed action that are relevant to environmental concerns; or
- (2) There are significant *new circumstances or information* relevant to environmental concerns and *bearing on the proposed action or its impacts.* ¹⁰³

To merit this additional review, information must be both "new" and "significant," and it must bear on the proposed action or its impacts. As we have explained, "[t]he new information must present 'a seriously different picture of the environmental

societal and economic impacts of severe accidents are of small significance for all plants); 10 C.F.R. §§ 51.45 (requiring consideration of alternatives in environmental reports), 51.50(c) (requiring an environmental report for a combined license application); *Limerick Ecology Action v. NRC*, 869 F.2d 719 (3d Cir. 1989) (requiring that the NRC include consideration of certain SAMAs in environmental reviews performed under NEPA § 102(2) in conjunction with operating license applications).

¹⁰¹ Amended Petition at 2, 29.

¹⁰² *Id.* at 26-27.

¹⁰³ 10 C.F.R. § 51.72(a) (emphasis added). Section 51.92(a) sets forth substantively identical requirements for preparation of supplemental final EISs. In addition, the NRC Staff has the option of preparing a supplement to a draft or final EIS "when, in its opinion, preparation of a supplement will further the purposes of NEPA." *See* 10 C.F.R. §§ 51.72(b), 51.92(c).

impact of the proposed project from what was previously envisioned."104 That is not the case here, given the current state of information available to us. For these reasons, we decline petitioners' request to commence a generic NEPA review today.

3. Request for Safety Analysis

Petitioners request that the NRC perform a safety analysis of the regulatory implications of the events at Fukushima. Petitioners request that long-term measures be issued as proposed rules (with opportunity for comment).¹⁰⁵

This request has, in essence, been granted. As explained above, we initiated a comprehensive examination of the implications of the Fukushima accident for U.S. facilities, establishing a Task Force instructed to undertake near-term review and to make recommendations for future actions. Of After we received the Near-Term Report, we directed further Staff action, including longer-term review of the implications of the accident for U.S. facilities. As a result, the NRC may implement changes to its regulations and regulatory processes. These changes may be accomplished in a variety of ways, such as via issuance of Commission orders, or by formal changes to our regulations, all pursuant to our normal processes, which include appropriate opportunities for public and stakeholder input.

4. Scheduling and Procedural Request

Petitioners request that we "establish procedures and a timetable for raising new issues relevant to the Fukushima accident in pending licensing proceedings" to include a 60-day period for raising new issues following the publication of regulatory proposals or environmental decisions. ¹⁰⁷ Petitioners also seek the

¹⁰⁴ See Hydro Resources, Inc. (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-99-22, 50 NRC 3, 14 (1999) (citing Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 373 (1989); Sierra Club v. Froehlke, 816 F.2d 205, 210 (5th Cir. 1987)). As to license renewal in particular, the NRC Staff currently is preparing an update to the 1996 Generic Environmental Impact Statement (GEIS) for license renewal. See generally Proposed Rule: "Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses," 74 Fed. Reg. 38,117 (July 31, 2009).

¹⁰⁵ Amended Petition at 2, 29.

¹⁰⁶ Petitioners request that we publish the results of our analysis for public comment. *Id.* at 2, 29. While the analysis will not be published specifically for public comment, we grant the request to the extent that we directed the Task Force efforts to be "informed by some stakeholder input," and that, during the longer-term review, the agency should "receive input from and interact with all key stakeholders." Tasking Memorandum at 1, 2 (unnumbered).

¹⁰⁷ Amended Petition at 29.

suspension of the requirement to satisfy late-filing standards if the relevance of the new issue to the Fukushima events can be demonstrated.¹⁰⁸

Petitioners maintain that we should modify our procedural rules by creating special timeliness definitions for new contentions and by setting out special processes for judging motions to reopen. Petitioners seek to ensure that boards in the various proceedings apply uniform standards for admitting contentions spawned by the events in Fukushima and to establish an ordered process for applying "lessons learned" from those events. ¹⁰⁹ Petitioners claim that the Commission will be better served if it establishes such an ordered process; without it, "intervenor groups will be placed in the position of rushing to file contentions, rulemaking comments, and motions to reopen closed hearing records, based on whatever evaluations they are able to make of slowly-emerging and ever-evolving information from the accident." ¹¹⁰

Respondents disagree, arguing that "NRC regulations and case law already provide clear and uniform standards to determine the timeliness of motions to add new contentions or to reopen the record" and this situation should not be treated differently.¹¹¹

As a general matter, we agree with the respondents' assessment. Our normal processes for filing new or amended contentions, submitting rulemaking comments, and motions (including motions to reopen) carry with them costs typically associated with participation in litigation and rulemaking. Participants accept these costs when they elect to participate in our proceedings; our rules require a level of engagement that far exceeds simple interest in the outcome of a proceeding. For example, our rules deliberately place a heavy burden on proponents of contentions, who must challenge aspects of license applications with specificity, backed up with substantive technical support; mere conclusions or speculation will not suffice. An even heavier burden applies to motions to reopen. 113

Following the events of September 11, 2001, in ruling on petitions to intervene, the admissibility of new or amended contentions filed after initial petitions, and motions to reopen, the Commission did not deviate from its usual application of the Part 2 procedural rules. In the *Private Fuel Storage* case, intervenor State of Utah petitioned the Board for admission of a late-filed contention related

 $^{^{108}}$ *Id*.

¹⁰⁹ *Id.* at 23.

¹¹⁰ Id. at 23-24.

¹¹¹ Comanche Peak: Luminant Generation Company LLC's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011) at 17.

¹¹² See, e.g., AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 259-61 (2009).

¹¹³ See, e.g., id. at 286-87. See generally 10 C.F.R. § 2.326.

to the risk of a terrorist attack on the ISFSI. The Board applied the late-filed contention standards to Utah's petition, and found the contention timely,¹¹⁴ but nonetheless denied admission of both the safety and environmental aspects of the contention.¹¹⁵ The Board referred its rulings to the Commission for further consideration.¹¹⁶ The Commission accepted review of the Board's ruling on the safety and environmental aspects of the contention, but declined the referral with respect to the Board's application of the late-filing factors.¹¹⁷

In another example, a proceeding in which the adjudicatory record had closed, the intervenors submitted a contention arguing that the September 11 events required additional environmental analysis of the proposed action. The Board applied, and found that the intervenors had satisfied, our rules for reopening the record and for late-filed contentions, but found that the contention was inadmissible. The Board referred its ruling to the Commission, which subsequently affirmed the Board's decision. 119

In these post-September 11 cases, the Boards applied the existing procedural rules for issues raised late in ongoing adjudications. ¹²⁰ We see no reason to proceed differently here. Reactor adjudications should go forward, including those that may involve proposed contentions based on issues implicated by the Fukushima events. To the extent that the Fukushima events provide the basis for contentions appropriate for litigation in individual proceedings, our procedural rules contain ample provisions through which litigants may seek admission of new or amended contentions, seek stays of licensing board decisions, appeal adverse decisions, and file motions to reopen the record, as appropriate. And, should a licensing board decision raise novel legal or policy questions, we encourage the boards to certify to us, in accordance with 10 C.F.R. §§ 2.319(*l*) and 2.323(f), those questions that would benefit from our consideration. All of these procedural mechanisms contribute toward guaranteeing the propriety of adjudicatory decisions, and allow

¹¹⁴ Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-37, 54 NRC 476, 483-84 (2001).

¹¹⁵ Id. at 484-87.

 $^{^{116}}$ Id. at 487-88.

¹¹⁷ Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-3, 55 NRC 155, 156 & 156 n.9 (2002). The Commission ultimately affirmed the Board's decision. *Private Fuel Storage*, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 357 (2002).

¹¹⁸ *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), LBP-02-5, 55 NRC 131, 145 (2002) (involving a license amendment request for reconfiguring a spent fuel pool).

¹¹⁹ Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-02-27, 56 NRC 367, 371-72 (2002).

¹²⁰ And, as discussed above, in the post-TMI time frame, the Commission, although providing for some modified procedures, continued to apply the existing rules for filing new contentions and motions to reopen the record. *See* June 1980 Policy Statement, 45 Fed. Reg. at 41,470; *December 1980 Policy Statement*, CLI-80-42, 12 NRC at 661; *Diablo Canyon*, CLI-81-5, 3 NRC at 364-65.

proceedings to continue with minimal disruption to all participants. Neither new procedures nor a separate timetable for raising new issues related to the Fukushima events are therefore warranted.¹²¹

Although we do not establish a timetable for future adjudicatory pleadings today, we will monitor our ongoing adjudicatory proceedings and will reassess this determination if it becomes apparent that additional guidance would be appropriate. To this end, boards in particular proceedings are welcome to notify us if additional procedures would assist the board in effectively managing the filings arising from the Fukushima events.

5. Separate Requests for Relief Filed by Commonwealth of Massachusetts

The Commonwealth of Massachusetts asked to be allowed to join the petitions to suspend, and asked for additional, *Pilgrim*-specific relief. The Commonwealth requests that we suspend the *Pilgrim* license renewal proceeding pending the Commission's consideration of "new and significant" information related to spent fuel pools, related risks, and regulatory requirements; and "[g]rant the Commonwealth and the public an additional reasonable time following completion of the release of the NRC's own findings on the lessons of Fukushima to comment on them and propose licensing or regulatory changes as appropriate." Consistent with our decisions on the requests for relief contained in the primary Petition, above, we deny the Commonwealth of Massachusetts's similar requests for relief.

¹²¹ Indeed, participants in a number of matters have availed themselves of our rules, and seek to raise issues related to the Fukushima events. *See supra* note 91; Motion to Amend Contentions 1, 2, and 5 of the CASE Revised Petition to Intervene (August 20, 2010) (Apr. 18, 2011); Amended Contentions 1, 2 and 5 (Apr. 18, 2011) (filed in the *Turkey Point* proceeding prior to issuance of the Near-Term Report). The *Turkey Point* Board denied the revised intervention petition; the intervenor is seeking reconsideration of the Board decision, as well as admission of new contentions. *See* LBP-11-15, 73 NRC 629 (2011); Citizens Allied for Safe Energy, Inc., Motion for Reconsideration of Amended Contentions 1, 2, and 5 and New Contentions Following Fukushima Near-Term Task Force Recommendations (Aug. 11, 2011, revised Aug. 16, 2011). Following issuance of the Near-Term Report, a number of new contentions have been filed. *E.g.*, Contention Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report (Aug. 10, 2011) (Bell Bend); Contention Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report (Aug. 11, 2011) (Watts Bar).

¹²²Commonwealth Petition at 13-14. The Commonwealth also requested an additional 30 days, through June 2, 2011, to make additional filings in the *Pilgrim* proceeding. *Id.* at 13. Because it now has made these filings, this request is moot. *See generally* Commonwealth of Massachusetts' Petition for Waiver of 10 C.F.R. Part 51, Subpart A, Appendix B or, in the Alternative, Petition for Rulemaking to Rescind Regulations Excluding Consideration of Spent Fuel Storage Impacts from License Renewal Environmental Review (June 2, 2011); Commonwealth of Massachusetts' Conditional Motion to Suspend Pilgrim Nuclear Power Plant License Renewal Proceeding Pending Resolution of Petition for Rulemaking to Rescind Spent Fuel Pool Exclusion Regulations (June 2, 2011). These new filings will be addressed separately, in the *Pilgrim* proceeding.

The Commonwealth's petition, like the primary Petition, fails to satisfy our three-part *Private Fuel Storage* test and therefore does not support suspending the *Pilgrim* proceeding pending evaluation of information obtained as a result of the events in Japan.

We also reject the Commonwealth's premature request for additional time to comment on the agency's post-Fukushima findings and to propose licensing or regulatory changes of its own. As noted above, we directed the Task Force to consider stakeholder input in the development of its recommendations. There will be further opportunities for stakeholder input as the agency's review proceeds, and public and stakeholder participation will be sought consistent with the established processes for any actions that we direct the NRC Staff to undertake. 124

6. Requests for Relief: Design Certification Rulemaking Proceedings

In addition to the requests for relief contained within the initial Petition directed at both the AP1000 and the ESBWR design certification rulemakings, we received requests for relief directed specifically to the ongoing AP1000 design certification rulemaking. The additional requests were made in a petition filed by a set of public interest groups. 125 These petitioners seek immediate postponement of the ongoing AP1000 design certification rulemaking, 126 and request initiation by the Commission of "a comprehensive review of the Fukushima accident to develop lessons learned for new reactor designs and the subsequent development and implementation of new regulatory safeguards to protect public health and safety." 127 We deny the request for immediate postponement of the AP1000

¹²³ With respect to stakeholder involvement, the Near-Term Report notes that members of the Task Force: (1) met with representatives of the Institute of Nuclear Power Operations to gather information on the industry's post-Fukushima actions; (2) met with representatives of the Federal Emergency Management Agency to discuss offsite emergency preparedness, and to obtain insights on the U.S. National Response Framework; and (3) "appropriately screened and considered information and suggestions received from internal and external stakeholders." Near-Term Report at 2. The Task Force also held a public meeting with stakeholders on July 28, 2011. Transcript, "Public Meeting on the Results of the NRC's Near-Term Task Force Review of NRC Processes and Regulations Following Events in Japan" (July 28, 2011). We have since provided additional direction to the Staff for engaging internal and external stakeholders in our processes. *See* "Engagement of Stakeholders Regarding the Events in Japan," Staff Requirements Memorandum COMWDM-11-0001/COMWCO-11-0001 (Aug. 22, 2011) (ADAMS Accession No. ML112340693).

¹²⁴ The Commonwealth is free at any time to file a petition for rulemaking, pursuant to 10 C.F.R. § 2.802, to issue, amend, or rescind any regulation.

¹²⁵ AP1000 Petition. The AP1000 petitioners are a subset of the petitioners. *See id.* at 1 for a complete listing. This has been placed on the AP1000 rulemaking docket.

¹²⁶ Id. at 23.

¹²⁷ *Id*.

and ESBWR design certification rulemakings for the same reasons we decline to suspend ongoing adjudications and licensing decisions. However, insofar as these and other filings made with respect to the AP1000 rulemaking bear on the propriety of the AP1000 design, or suggest that additional substantive work on the rulemaking is needed, these filings are referred to the NRC Staff for consideration as comments on the AP1000 design certification rulemaking amendment.¹²⁸ We also refer the elements of the Petition that relate to the ESBWR rulemaking to the Staff for consideration as a rulemaking comment.

III. REQUESTS TO SUSPEND ASSOCIATED RULEMAKING PETITIONS

The fifteen petitions for rulemaking that we received in mid-August are substantively similar. 129 The rulemaking petitions seek to rescind regulations in 10 C.F.R. Part 51 — in particular, petitioners cite 10 C.F.R. Part 51, Appendix B, and 10 C.F.R. §§ 51.45, 51.53, and 51.95 — that "draw generic conclusions about the environmental impacts of severe reactor and spent fuel pool accidents and that preclude consideration of those issues in individual licensing proceedings." Related to their petitions, the rulemaking petitioners seek suspension of the associated licensing proceedings, pending disposition of the rulemaking petitions. 131

Section 2.802(d) of our rules provides that a rulemaking petitioner "may request the Commission to suspend all or any part of any licensing proceeding to which the petitioner is a party pending disposition of the petition for rulemaking." Of the

¹²⁸ See, e.g., Additional Comments Supporting the Petition by the AP1000 Oversight Group et al. to Suspend AP1000 Design Certification Rulemaking Pending Evaluation of Fukushima Accident Implications on Design and Operational Procedures and Request for Expedited Consideration (May 24, 2011); E-mails from John Runkle to Docket ID NRC-2010-0131 (dated May 10, 2011, at 6:19 p.m. and 6:21 p.m.); Bell, R.J., Nuclear Energy Institute, Letter to Secretary, NRC, "Comments on AP1000 Design Certification Amendment; Docket ID NRC 2010-0131, Federal Register Notice 76 FR 10269" (May 10, 2011). To the limited extent the recently filed request to terminate the AP1000 design certification raises issues or makes requests analogous to those in the Petition or the AP1000 Petition, we refer those items also to the Staff for consideration as rulemaking comments. (See Runkle, John D., Esq., Letter to Gregory B. Jaczko, Chairman, NRC, Re "Petition to Terminate the Rulemaking on Design Certification of the AP1000 Reactor and Declare It Null and Void (Docket ID NRC-2010-0131)" (June 16, 2011)).

 $^{^{129}}$ See note 27, supra. The NRC has not yet determined whether the petitions are acceptable for docketing under 10 C.F.R. § 2.802.

¹³⁰Rulemaking Petition at 2 (unnumbered).

¹³¹ *Id.* at 3 (unnumbered).

petitioners, most are parties to ongoing adjudicatory proceedings. ¹³² Although the petitioners provide no separate grounds for suspending the proceedings pending disposition of their rulemaking petition, they do reiterate the argument that the NRC must suspend the proceedings while it considers the environmental impacts of the Near-Term Report, including with respect to severe reactor and spent fuel pool accidents. ¹³³

For the reasons discussed above, the rulemaking petitioners' request does not support suspension of the named proceedings at this time. These petitioners have not shown that continuation of licensing proceedings, pending consideration of the rulemaking petition, would "jeopardize the public health and safety, prove an obstacle to fair and efficient decisionmaking, or prevent appropriate implementation of any pertinent rule or policy changes that might emerge" from our continued evaluation of the impacts of the events in Japan. As we stated above, until we have a complete understanding of the Fukushima events, and have provided direction as to potential changes to regulatory requirements, we will not know whether, or the extent to which, an individual NEPA review might be impacted. If the NRC determines that changes to its current environmental assessment rules are warranted, we can revisit whether an individual licensing review or adjudication should be held in abeyance pending the outcome of a relevant rulemaking.

Additionally, the rules cited by the rulemaking petitioners that reach "generic conclusions" regarding severe reactor and spent fuel accidents appear to be those that pertain to license renewal. None of the license renewal applications implicated here is on the verge of being granted, and those proceedings involve a number of issues unrelated to the rulemaking petitions; a request to suspend is therefore premature. As we noted in the *Pilgrim* and *Vermont Yankee* matters,

¹³² This is not true in all cases. For example, Mr. Stilp, proponent of the suspension request in the *Bell Bend* matter, is not a party to an ongoing proceeding. We may nonetheless consider the request of a nonparty as an exercise of our inherent supervisory powers over proceedings. *See Petition for Rulemaking to Amend 10 C.F.R. §54.17(c)*, CLI-11-1, 73 NRC 1, 3 n.5 (2011) (quoting *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 484-85 (2008)).

¹³³ Rulemaking Petition at 3 (unnumbered).

¹³⁴ Private Fuel Storage, CLI-01-26, 54 NRC at 380.

¹³⁵ See 10 C.F.R. § 51.53(c)(3)(i), and Appendix B to Subpart A (excluding from individual analysis in an environmental report associated with a license renewal application certain "Category 1" issues, including severe accidents and onsite storage of spent fuel). It is not immediately clear that all petitioners would be affected even if the rulemaking petition is successful, in whole or in part. A number of the rulemaking petitioners are participants in combined license proceedings, associated with new reactors, where no such generic conclusions have been drawn.

¹³⁶ See Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-07-3, 65 NRC 13, 22 n.37 (2007), aff'd, Massachusetts v. United States, 522 F.3d 115 (1st Cir. 2008).

after considering the rulemaking petitions, the NRC will make a decision whether to deny the petitions, or proceed to make revisions to Part 51. Depending on the timing and outcome of the NRC Staff's resolution of the rulemaking petitions, the Staff itself potentially could seek the Commission's permission to suspend one or more of the generic determinations in the license renewal environmental rules, and include a new analysis in pending, plant-specific environmental impact statements.¹³⁷

Given that the NRC will have the opportunity to further consider the concerns that the rulemaking petitioners have expressed, and as we further consider actions related to the Japan events, we decline to suspend any proceeding pending resolution of the rulemaking petition. No harm will accrue to the petitioners by continuation of ongoing proceedings, as we have discussed above. Nor does the ordinary burden to parties pursuing litigation pending the rulemaking justify disrupting our ongoing reviews.¹³⁸ For all of these reasons, we deny the rulemaking petitioners' request for suspension.

IV. CONCLUSION

For the reasons provided above, we:

- Deny petitioners' request to suspend licensing and standardized design certification decisions pending completion of the NRC Task Force's evaluation of the implications of the Fukushima accident and issuance of any proposed regulatory decisions and/or environmental analyses.
- *Deny* petitioners' request to suspend proceedings with respect to hearings and opportunities for public comment on reactor or spent fuel pool issues identified for investigation by the Task Force.
- Deny petitioners' request to suspend proceedings in connection with any
 other issues identified by the Task Force pending completion of the Task
 Force's investigation and issuance of any proposed regulatory decisions
 and/or environmental analyses.

¹³⁷ See Vermont Yankee, CLI-07-3, 65 NRC at 22 (citing Final Rule: "Environmental Review for Renewal of Nuclear Power Plant Operating Licenses," 61 Fed. Reg. 28,467, 28,472 (June 5, 1996) (providing that, if a commenter in a license renewal matter provides new, generic information that demonstrates the analysis of an impact codified in the rule is incorrect, the Staff will seek Commission approval to either suspend the application of the rule on a generic basis with respect to the analysis, or delay granting the affected license renewal application (and possibly other pending applications) until its analysis is completed, and the rule amended).

¹³⁸ See Petition to Amend 10 C.F.R. § 54.17(c), CLI-11-1, 73 NRC at 5-6.

- *Deny* petitioners' request for a separate generic NEPA analysis of the potential impacts of the Fukushima events.
- Grant petitioners' request for a safety analysis of the regulatory implications of the events at Fukushima, to the extent we directed the Task Force
 to undertake this analysis and to the extent we subsequently directed the
 Staff to further this analysis, incorporating stakeholder input as we have
 directed.
- Refer to the NRC Staff those elements of the Petition that relate specifically
 to design certification, for consideration as rulemaking comments. Refer
 to the NRC Staff for resolution as comments in the AP1000 rulemaking
 proceeding, all additional filings relevant to the AP1000 rulemaking
 proceeding.
- *Deny* petitioners' request to revise our procedural rules.
- Deny the requests for relief made by the Commonwealth of Massachusetts.
- *Deny* the requests to suspend certain of the captioned proceedings pending resolution of petitions for rulemaking arising from the events in Japan.

IT IS SO ORDERED.139

For the Commission*

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 9th day of September 2011.

¹³⁹ Petitioners also request that we suspend all decisions and proceedings regarding all licensing and related rulemaking proceedings, "pending the outcome of any *independent* investigation of the Fukushima accident that may be ordered by Congress or the President or instigated by the Commission" and request that the President establish an independent investigation of the Fukushima accident and its implications, similar to the President's Commission on the Accident at Three Mile Island. Amended Petition at 3 (emphasis in original). The initiation of independent investigations by Congress or the President lies beyond the scope of our authority; to date no such investigations have been initiated. We have confidence in the objectivity of our Task Force and ongoing agency review and have no plans to establish an additional investigatory body at this time.

^{*}Commissioner Apostolakis's approval does not pertain to the *Pilgrim* and *Indian Point* license renewal proceedings, in which he is not participating.

APPENDIX

I. INITIAL AND REVISED PETITIONS

- 1. Union Electric Company, d/b/a Ameren Missouri (Callaway Plant, Unit 2), Missouri Coalition for the Environment, Missourians for Safe Energy: 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. 15, 2011); Amendment and Errata to 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. 18, 2011); 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. 18, 2011).
- 2. AP1000 Design Certification Amendment (10 C.F.R. Part 52), AP1000 Oversight Group, Bellefonte Efficiency and Sustainability Team, Blue Ridge Environmental Defense League, Citizens Allied for Safe Energy, Friends of the Earth, Georgia Women's Action for New Directions, Green Party of Florida, Mothers Against Tennessee River Radiation, North Carolina Waste Awareness and Reduction Network, Nuclear Information and Resource Service, Nuclear Watch South, South Carolina Chapter–Sierra Club, Southern Alliance for Clean Energy: Petition to Suspend AP1000 Design Certification Rulemaking Pending Evaluation of Fukushima Accident Implications on Design and Operational Procedures and Request for Expedited Consideration (Apr. 6, 2011).
- 3. Calvert Cliffs Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), Nuclear Information and Resource Service: 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); Amendment and Errata to 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. 21, 2011); 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. 21, 2011).
- 4. Detroit Edison Co. (Fermi Nuclear Power Plant, Unit 3), Keith Gunter, Michael J. Keegan, Edward McArdle, Leonard Mandeville, Frank Mantei, Marcee Meyers, Henry Newnan, Sierra Club (Michigan Chapter), Don't Waste Michigan, Inc., Citizens Environment Alliance of Southwestern Ontario, Beyond Nuclear, George Steinman, Shirley Steinman, Harold L. Stokes, Citizens for Alternatives to Chemical Contamination, Marilyn R. Timmer: 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); Amendment and Errata to 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. 21, 2011).
- 5. Duke Energy Carolinas, LLC (William States Lee III Nuclear Station, Units 1 and 2), Blue Ridge Environmental Defense League: 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. 18, 2011).
- 6. Energy Northwest (Columbia Generating Station), Northwest Environmental Advocates: 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. 18, 2011).
- 7. Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), Pilgrim Watch: 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); Amendment and Errata to 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. 19, 2011); 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. 19, 2011).
- 8. Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), Commonwealth of Massachusetts: Commonwealth of Massachusetts Response to Commission Order Regarding Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident, Joinder in Petition to Suspend the License Renewal Proceeding for the Pilgrim Nuclear Plant, and Request for Additional Relief (May 2, 2011).
- 9. Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Station, Units 2 and 3), Hudson River Sloop Clearwater, Inc.: 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. 19, 2011).
- 10. FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, Green Party of Ohio: Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pend-

ing Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 14, 2011); Amendment and Errata to 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. 21, 2011).

- 11. Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), Citizens Allied for Safe Energy, Inc.: 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); 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. 18, 2011).
- 12. Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), Village of Pinecrest, Florida: 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. 18, 2011).
- 13. Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), Dan Kipnis, Mark Oncavage, National Parks Conservation Association, Southern Alliance for Clean Energy: 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); Amendment and Errata to 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. 18, 2011); 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. 18, 2011).
- 14. NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Beyond Nuclear: 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. 18, 2011); Amendment and Errata to 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. 19, 2011); 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. 19, 2011).
 - 15. NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Friends

of the Coast, New England Coalition: 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. 15, 2011); Amendment and Errata to 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); 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).

- 16. Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), San Luis Obispo Mothers for Peace: 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); Amendment and Errata to 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. 18, 2011); 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. 18, 2011).
- 17. PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), Gene Stilp: 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); Amendment and Errata to 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. 19, 2011).
- 18. Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), North Carolina Waste Awareness and Reduction Network: 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. 18, 2011).
- 19. Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), Nuclear Information and Resource Service: 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); Amendment and Errata to 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. 18, 2011); 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. 18, 2011).
- 20. South Carolina Electric & Gas Co. and South Carolina Public Service Authority (also referred to as Santee Cooper) (Virgil C. Summer Nuclear Station, Units 1 and 2), Friends of the Earth, South Carolina Chapter of Sierra Club: 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. 19, 2011).
- 21. Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), Blue Ridge Environmental Defense League: 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. 18, 2011).
- 22. Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), Blue Ridge Environmental Defense League, Center for a Sustainable Coast, Georgia Women's Action for New Directions, Savannah Riverkeeper, Southern Alliance for Clean Energy: 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); Amendment and Errata to 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. 18, 2011); 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. 18, 2011).
- 23. Tennessee Valley Authority (Bellefonte Nuclear Power Plant, Units 3 and 4), Blue Ridge Environmental Defense League, Bellefonte Efficiency and Sustainability Team: 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. 18, 2011).
- 24. Tennessee Valley Authority (Watts Bar Nuclear Plant, Unit 2), Southern Alliance for Clean Energy: 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); Amendment and Errata to 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. 18, 2011); 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. 18, 2011).
- 25. Virginia Electric and Power Co. d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative (North Anna Nuclear Plant, Unit 3), Blue Ridge Environmental Defense League, People's Alliance for Clean Energy: 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. 18, 2011).

II. SUPPLEMENTAL FILINGS

- 1. Union Electric Company, d/b/a Ameren Missouri (Callaway Plant, Unit 2), Missouri Coalition for the Environment, Missourians for Safe Energy: 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).
- 2. AP1000 Design Certification Amendment (10 C.F.R. Part 52), AP1000 Oversight Group, Bellefonte Efficiency and Sustainability Team, Blue Ridge Environmental Defense League, Citizens Allied for Safe Energy, Friends of the Earth, Georgia Women's Action for New Directions, Green Party of Florida, Mothers Against Tennessee River Radiation, North Carolina Waste Awareness and Reduction Network, Nuclear Information and Resource Service, Nuclear Watch South, South Carolina Chapter-Sierra Club, Southern Alliance for Clean Energy: Inquiry by the AP1000 Oversight Group et al. on the Status of Their Petition to Suspend AP1000 Design Certification Rulemaking Pending Evaluation of Fukushima Accident Implications on Design and Operational Procedures and Request for Expedited Consideration (Apr. 29, 2011); E-mails from John Runkle to Docket ID NRC-2010-0131 (dated May 10, 2011, at 6:19 p.m. and 6:21 p.m.); Additional Comments Supporting the Petition by the AP1000 Oversight Group et al. to Suspend AP1000 Design Certification Rulemaking Pending Evaluation of Fukushima Accident Implications on Design and Operational Procedures and Request for Expedited Consideration (May 24, 2011).
- 3. Calvert Cliffs Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), Nuclear Information and Resource Service: 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. 21, 2011).
- 4. *Detroit Edison Co.* (Fermi Nuclear Power Plant, Unit 3), Keith Gunter, Michael J. Keegan, Edward McArdle, Leonard Mandeville, Frank Mantei, Marcee

Meyers, Henry Newnan, Sierra Club (Michigan Chapter), Don't Waste Michigan, Inc., Citizens Environment Alliance of Southwestern Ontario, Beyond Nuclear, George Steinman, Shirley Steinman, Harold L. Stokes, Citizens for Alternatives to Chemical Contamination, Marilyn R. Timmer: 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. 21, 2011).

- 5. Energy Northwest (Columbia Generating Station), Northwest Environmental Advocates: 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).
- 6. Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), Pilgrim Watch: 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. 19, 2011).
- 7. Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Station, Units 2 and 3), Hudson River Sloop Clearwater, Inc.: 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. 19, 2011).
- 8. FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, Green Party of Ohio: 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. 21, 2011).
- 9. Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), Village of Pinecrest, Florida: 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).
- 10. Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), Dan Kipnis, Mark Oncavage, National Parks Conservation Association, Southern Alliance for Clean Energy: 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).

- 11. NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Beyond Nuclear: 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).
- 12. NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Friends of the Coast, New England Coalition: 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).
- 13. Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), San Luis Obispo Mothers for Peace: 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. 19, 2011).
- 14. PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), Gene Stilp: 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. 19, 2011).
- 15. Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), North Carolina Waste Awareness and Reduction Network: Supplement to 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. 19, 2011); 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. 19, 2011).
- 16. Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), Nuclear Information and Resource Service: 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. 19, 2011).
- 17. South Carolina Electric & Gas Co. and South Carolina Public Service Authority (also referred to as Santee Cooper) (Virgil C. Summer Nuclear Station, Units 1 and 2), Friends of the Earth, South Carolina Chapter of Sierra Club: 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. 19, 2011).
- 18. Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), Blue Ridge Environmental Defense League: Supplement to 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); 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).
- 19. Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), Blue Ridge Environmental Defense League, Center for a Sustainable Coast, Georgia Women's Action for New Directions, Savannah Riverkeeper, Southern Alliance for Clean Energy: 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).
- 20. Tennessee Valley Authority (Watts Bar Nuclear Plant, Unit 2), Southern Alliance for Clean Energy: 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. 19, 2011).
- 21. Virginia Electric and Power Co. d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative (North Anna Nuclear Plant, Unit 3), Blue Ridge Environmental Defense League, People's Alliance for Clean Energy: Supplement to 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), 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. 19, 2011).

III. RESPONSIVE PLEADINGS

1. Served in all captioned proceedings except design certification rulemaking proceedings: Brief of the Nuclear Energy Institute as Amicus Curiae in Opposition to the Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions (May 2, 2011).

- 2. Served in all captioned proceedings except design certification rulemaking proceedings: NRC Staff Answer to 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 (May 2, 2011).
- 3. *Union Electric Company, d/b/a Ameren Missouri* (Callaway Plant, Unit 2), Missouri Coalition for the Environment, Missourians for Safe Energy: Ameren Missouri Response to Emergency Petition (May 2, 2011).
- 4. AP1000 Design Certification Amendment (10 C.F.R. Part 52), AP1000 Oversight Group, Bellefonte Efficiency and Sustainability Team, Blue Ridge Environmental Defense League, Citizens Allied for Safe Energy, Friends of the Earth, Georgia Women's Action for New Directions, Green Party of Florida, Mothers Against Tennessee River Radiation, North Carolina Waste Awareness and Reduction Network, Nuclear Information and Resource Service, Nuclear Watch South, South Carolina Chapter-Sierra Club, Southern Alliance for Clean Energy: Ziesing, R.F., Westinghouse Electric Co., Letter to Annette L. Vietti-Cook, NRC, "Emergency Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident" (May 2, 2011); Bell, R.J., Nuclear Energy Institute, Letter to Secretary, NRC, "Comments on AP1000 Design Certification Amendment; Docket ID NRC 2010-0131, Federal Register Notice 76 FR 10269" (May 10, 2011); Ziesing, R.F., Westinghouse Electric Co., Letter to Secretary, NRC, Subject: "Westinghouse Comments in the AP1000[®] Design Certification Amendment Rulemaking in Response to Petitions to Suspend Rulemaking" (May 10, 2011).
- 5. Calvert Cliffs Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), Nuclear Information and Resource Service: Opposition to Emergency Petition to Suspend Licensing Decisions and Proceedings (May 2, 2011).
- 6. Detroit Edison Co. (Fermi Nuclear Power Plant, Unit 3), Keith Gunter, Michael J. Keegan, Edward McArdle, Leonard Mandeville, Frank Mantei, Marcee Meyers, Henry Newnan, Sierra Club (Michigan Chapter), Don't Waste Michigan, Inc., Citizens Environment Alliance of Southwestern Ontario, Beyond Nuclear, George Steinman, Shirley Steinman, Harold L. Stokes, Citizens for Alternatives to Chemical Contamination, Marilyn R. Timmer: Opposition to Emergency Petition to Suspend Licensing Decisions and Proceedings (May 2, 2011).
- 7. Duke Energy Carolinas, LLC (William States Lee III Nuclear Station, Units 1 and 2), Blue Ridge Environmental Defense League: Answer of Duke Energy Carolinas LLC Opposing Petition to Suspend All Pending Reactor Licensing Proceedings (May 2, 2011).
- 8. Energy Northwest (Columbia Generating Station), Northwest Environmental Advocates: Energy Northwest's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011).

- 9. Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), Pilgrim Watch: Entergy's Answer Opposing Petition to Suspend Pending Licensing Proceedings (May 2, 2011).
- 10. Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), Commonwealth of Massachusetts: Entergy's Answer Opposing Commonwealth's Joinder in Petition to Suspend the License Renewal Proceedings for the Pilgrim Nuclear Power Plant and Request for Additional Relief (May 12, 2011).
- 11. Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Station, Units 2 and 3), Hudson River Sloop Clearwater, Inc.: Entergy's Answer Opposing Petition to Suspend Pending Licensing Proceedings (May 2, 2011).
- 12. ESBWR Design Certification Amendment (10 C.F.R. Part 52), Head, Jerald G., GE Hitachi Nuclear Energy, Letter to Secretary, NRC, Subject: "Answer to Petition; SECY Order PR 52 (76FR16549), Docketed 04/19/2011 (ADAMS Accession No. ML111101277); Proposed Rule, ESBWR Design Certification, NRC-2010-0135, RIN 3150-AI85, 76 Federal Register 16549 (March 24, 2011)" (May 2, 2011).
- 13. FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, Green Party of Ohio: FirstEnergy's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011).
- 14. Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), Citizens Allied for Safe Energy, Inc.; Village of Pinecrest, Florida; Dan Kipnis, Mark Oncavage, National Parks Conservation Association, Southern Alliance for Clean Energy: Florida Power & Light Response Opposing Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident (May 2, 2011).
- 15. Luminant Generation Co., LLC (Comanche Peak Nuclear Power Plant, Units 3 and 4), Public Citizen, SEED Coalition: Luminant Generation Company LLC's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011).
- 16. NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Beyond Nuclear; Friends of the Coast, New England Coalition: Answer of NextEra Energy Seabrook LLC Opposing Petition to Suspend Pending Licensing Proceedings (May 2, 2011).
- 17. Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), San Luis Obispo Mothers for Peace: Opposition to Emergency Petition to Suspend Licensing Decisions and Proceedings (May 2, 2011).
- 18. *PPL Bell Bend, LLC* (Bell Bend Nuclear Power Plant), Gene Stilp: Opposition to Emergency Petition (May 2, 2011).
 - 19. Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant,

- Units 2 and 3), North Carolina Waste Awareness and Reduction Network: Progress Energy Carolina, Inc.'s Response Opposing Emergency Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident (May 2, 2011).
- 20. Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), Nuclear Information and Resource Service: Progress Energy Florida, Inc.'s Response Opposing Emergency Petition to Suspend All Pending Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from the Fukushima Daiichi Nuclear Power Station Accident (May 2, 2011).
- 21. South Carolina Electric & Gas Co. and South Carolina Public Service Authority (also referred to as Santee Cooper) (Virgil C. Summer Nuclear Station, Units 1 and 2), Friends of the Earth, South Carolina Chapter of Sierra Club: South Carolina Electric & Gas Company's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011).
- 22. Nuclear Innovation North America LLC (South Texas Project, Units 3 and 4), Public Citizen, SEED Coalition: Nuclear Innovation North America LLC's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011).
- 23. Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), Blue Ridge Environmental Defense League (Runkle); Blue Ridge Environmental Defense League, Center for a Sustainable Coast, Georgia Women's Action for New Directions, Savannah Riverkeeper, Southern Alliance for Clean Energy (Goldstein): Southern Nuclear Operating Company's Answer to 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 (May 2, 2011).
- 24. Tennessee Valley Authority (Bellefonte Nuclear Power Plant, Units 3 and 4), Blue Ridge Environmental Defense League, Bellefonte Efficiency and Sustainability Team: Tennessee Valley Authority's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011).
- 25. *Tennessee Valley Authority* (Watts Bar Nuclear Plant, Unit 2), Southern Alliance for Clean Energy: Tennessee Valley Authority's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011).
- 26. Virginia Electric and Power Co. d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative (North Anna Nuclear Plant, Unit 3), Blue Ridge Environmental Defense League, People's Alliance for Clean Energy: Dominion's Answer Opposing Petition to Suspend Licensing Proceedings (May 2, 2011).

IV. REPLY PLEADINGS

- 1. Union Electric Company, d/b/a Ameren Missouri (Callaway Plant, Unit 2), Missouri Coalition for the Environment, Missourians for Safe Energy: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 6, 2011); Petitioners' Reply to Responses to 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 (May 6, 2011); Certificate Regarding Consultation (May 6, 2011).
- 2. AP1000 Design Certification Amendment (10 C.F.R. Part 52), AP1000 Oversight Group, Bellefonte Efficiency and Sustainability Team, Blue Ridge Environmental Defense League, Citizens Allied for Safe Energy, Friends of the Earth, Georgia Women's Action for New Directions, Green Party of Florida, Mothers Against Tennessee River Radiation, North Carolina Waste Awareness and Reduction Network, Nuclear Information and Resource Service, Nuclear Watch South, South Carolina Chapter–Sierra Club, Southern Alliance for Clean Energy: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 10, 2011); Petitioners' Reply to Responses to 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 (May 10, 2011).
- 3. Calvert Cliffs Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), Nuclear Information and Resource Service: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 9, 2011); Petitioners' Reply to Responses to 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 (May 9, 2011); Certificate Regarding Consultation (May 9, 2011).
- 4. Detroit Edison Co. (Fermi Nuclear Power Plant, Unit 3), Keith Gunter, Michael J. Keegan, Edward McArdle, Leonard Mandeville, Frank Mantei, Marcee Meyers, Henry Newnan, Sierra Club (Michigan Chapter), Don't Waste Michigan, Inc., Citizens Environment Alliance of Southwestern Ontario, Beyond Nuclear, George Steinman, Shirley Steinman, Harold L. Stokes, Citizens for Alternatives to Chemical Contamination, Marilyn R. Timmer: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 6, 2011); Petitioners' Reply to Responses to 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 (May 6, 2011); Certificate of Consultation (May 6, 2011).

- 5. Duke Energy Carolinas, LLC (William States Lee III Nuclear Station, Units 1 and 2), Blue Ridge Environmental Defense League: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 12, 2011); Petitioners' Reply to Responses to 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 (May 12, 2011); Certificate Regarding Consultation (May 12, 2011).
- 6. Energy Northwest (Columbia Generating Station), Northwest Environmental Advocates: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 9, 2011); Petitioners' Reply to Responses to 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 (May 9, 2011); Certificate Regarding Consultation (May 9, 2011).
- 7. Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), Pilgrim Watch: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 6, 2011); Petitioners' Reply to Responses to 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 (May 6, 2011); Certificate Regarding Consultation (May 6, 2011).
- 8. Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), Commonwealth of Massachusetts: Commonwealth of Massachusetts Motion to Reply to Entergy's Answer Opposing Commonwealth's Joinder in Petition to Suspend the License Renewal Proceeding for the Pilgrim Nuclear Power Plant and Request for Additional Relief (May 19, 2011); Commonwealth of Massachusetts Reply to Entergy's Answer Opposing Commonwealth's Joinder in Petition to Suspend the License Renewal Proceeding for the Pilgrim Nuclear Power Plant and Request for Additional Relief (May 19, 2011); Commonwealth of Massachusetts Motion to Reply to NRC Staff and Entergy Oppositions to the Commonwealth of Massachusetts Motion to Suspend the License Renewal Proceeding for the Pilgrim Nuclear Power Plant (June 16, 2011) (with integrated Certificate of Counsel); Commonwealth of Massachusetts Reply to Oppositions of NRC Staff and Entergy to Commonwealth Motion to Suspend Pilgrim License Renewal Proceeding (June 16, 2011).
- 9. Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Station, Units 2 and 3), Hudson River Sloop Clearwater, Inc.: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated

Reply (May 6, 2011); Petitioners' Reply to Responses to 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 (May 6, 2011); Certificate Regarding Consultation (May 6, 2011).

- 10. FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, Green Party of Ohio: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 6, 2011); Petitioners' Reply to Responses to 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 (May 6, 2011); Certificate of Consultation (May 6, 2011).
- 11. Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), Citizens Allied for Safe Energy, Inc.: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 9, 2011); Petitioners' Reply to Responses to 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 (May 9, 2011).
- 12. Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), Village of Pinecrest, Florida: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 6, 2011); Petitioners' Reply to Responses to 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 (May 6, 2011); Certificate Regarding Consultation (May 6, 2011).
- 13. Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), Dan Kipnis, Mark Oncavage, National Parks Conservation Association, Southern Alliance for Clean Energy: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 6, 2011); Petitioners' Reply to Responses to 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 (May 6, 2011); Certificate Regarding Consultation (May 6, 2011).
- 14. NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Beyond Nuclear: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 6, 2011); Petitioners' Reply to Responses to 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 (May 6, 2011); Certificate Regarding Consultation (May 6, 2011).

- 15. NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Friends of the Coast, New England Coalition: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 6, 2011); Petitioners' Reply to Responses to 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 (May 6, 2011); Certificate Regarding Consultation (May 6, 2011).
- 16. Pacific Gas and Electric Co. (Diablo Canyon Power Plant, Units 1 and 2), San Luis Obispo Mothers for Peace: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 6, 2011); Petitioners' Reply to Responses to 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 (May 6, 2011); Certificate of Counsel Regarding Consultation (May 6, 2011).
- 17. Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), North Carolina Waste Awareness and Reduction Network: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 9, 2011); Petitioners' Reply to Responses to 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 (May 9, 2011); Certificate Regarding Consultation (May 9, 2011).
- 18. Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), Nuclear Information and Resource Service: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 6, 2011); Petitioners' Reply to Responses to 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 (May 6, 2011); Certificate Regarding Consultation (May 6, 2011).
- 19. South Carolina Electric & Gas Co. and South Carolina Public Service Authority (also referred to as Santee Cooper) (Virgil C. Summer Nuclear Station, Units 1 and 2), Friends of the Earth, South Carolina Chapter of Sierra Club: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 9, 2011); Petitioners' Reply to Responses to 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 (May 9, 2011); Certificate Regarding Consultation (May 9, 2011).
- 20. Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), Blue Ridge Environmental Defense League, Center for a Sustainable

- Coast, Georgia Women's Action for New Directions, Savannah Riverkeeper, Southern Alliance for Clean Energy: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 6, 2011); Petitioners' Reply to Responses to 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 (May 6, 2011); Certificate Regarding Consultation (May 6, 2011).
- 21. Tennessee Valley Authority (Bellefonte Nuclear Power Plant, Units 3 and 4), Blue Ridge Environmental Defense League, Bellefonte Efficiency and Sustainability Team: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 12, 2011); Petitioners' Reply to Responses to 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 (May 12, 2011); Certificate Regarding Consultation (May 12, 2011).
- 22. Tennessee Valley Authority (Watts Bar Nuclear Plant, Unit 2), Southern Alliance for Clean Energy: Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 6, 2011); Petitioners' Reply to Responses to 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 (May 6, 2011); Certificate of Counsel Regarding Consultation (May 6, 2011).
- 23. Virginia Electric and Power Co. d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative (North Anna Power Station, Unit 3), Blue Ridge Environmental Defense League, People's Alliance for Clean Energy: Petitioners' Reply to Responses to 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 (May 9, 2011); Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 9, 2011); Certificate Regarding Consultation (May 9, 2011).

V. RESPONSES TO REPLY PLEADINGS

- 1. Served in all captioned proceedings except design certification rulemaking proceedings: NRC Staff's Answer to Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 16, 2011).
- 2. *Union Electric Company, d/b/a Ameren Missouri* (Callaway Plant, Unit 2), Missouri Coalition for the Environment, Missourians for Safe Energy: Ameren

Missouri's Response Opposing Motion to Permit Filing of Unauthorized Reply (May 16, 2011).

- 3. Calvert Cliffs Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), Nuclear Information and Resource Service: Applicants' Response to Motion for Leave to Reply (May 16, 2011).
- 4. Detroit Edison Co. (Fermi Nuclear Power Plant, Unit 3), Keith Gunter, Michael J. Keegan, Edward McArdle, Leonard Mandeville, Frank Mantei, Marcee Meyers, Henry Newnan, Sierra Club (Michigan Chapter), Don't Waste Michigan, Inc., Citizens Environment Alliance of Southwestern Ontario, Beyond Nuclear, George Steinman, Shirley Steinman, Harold L. Stokes, Citizens for Alternatives to Chemical Contamination, Marilyn R. Timmer: Applicant's Response to Motion for Leave to Reply (May 16, 2011).
- 5. Duke Energy Carolinas, LLC (William States Lee III Nuclear Station, Units 1 and 2), Blue Ridge Environmental Defense League: Duke Energy's Answer Opposing Motion to Allow Unauthorized Reply (May 23, 2011).
- 6. *Energy Northwest* (Columbia Generating Station), Northwest Environmental Advocates: Energy Northwest's Answer in Opposition to Petitioners' Motion to Permit a Consolidated Reply (May 16, 2011).
- 7. Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), Pilgrim Watch; and Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Station, Units 2 and 3), Hudson River Sloop Clearwater, Inc.: Entergy's Answer Opposing Motion to Permit Unauthorized Reply (May 16, 2011).
- 8. Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), Commonwealth of Massachusetts: Entergy's Answer Opposing Commonwealth of Massachusetts Motion to Permit Unauthorized Reply (May 31, 2011); Entergy Answer Opposing Commonwealth of Massachusetts Motion to Permit Unauthorized Reply to Entergy and NRC Staff Answers Opposing Conditional Motion for Suspension (June 24, 2011).
- 9. FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, Green Party of Ohio: FirstEnergy's Answer Opposing Petitioners' Motion to Permit a Consolidated Reply (May 16, 2011).
- 10. Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), Citizens Allied for Safe Energy, Inc.; Village of Pinecrest, Florida; Dan Kipnis, Mark Oncavage, National Parks Conservation Association, Southern Alliance for Clean Energy: Florida Power & Light Company's Response Opposing Motion to Permit Filing of Unauthorized Reply (May 16, 2011).
- 11. Luminant Generation Co., LLC (Comanche Peak Nuclear Power Plant, Units 3 and 4), Public Citizen, SEED Coalition: Luminant Generation Company LLC's Answer in Opposition to Petitioners' Motion to Permit a Consolidated Reply (May 16, 2011).

- 12. NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Beyond Nuclear, Friends of the Coast, New England Coalition: Answer of NextEra Energy Seabrook, LLC Opposing Motion to Permit Unauthorized Reply (May 16, 2011).
- 13. Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), North Carolina Waste Awareness and Reduction Network: Progress Energy Carolinas, Inc.'s Response Opposing Motion to Permit Filing of Unauthorized Reply (May 16, 2011).
- 14. *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), Nuclear Information and Resource Service: Progress Energy Florida, Inc.'s Response Opposing Motion to Permit Filing of Unauthorized Reply (May 16, 2011).
- 15. South Carolina Electric & Gas Co. and South Carolina Public Service Authority (also referred to as Santee Cooper) (Virgil C. Summer Nuclear Station, Units 1 and 2), Friends of the Earth, South Carolina Chapter of Sierra Club: South Carolina Electric & Gas Company's Answer in Opposition to Petitioners' Motion to Permit a Consolidated Reply (May 16, 2011).
- 16. Nuclear Innovation North America LLC (South Texas Project, Units 3 and 4), Public Citizen, SEED Coalition: Nuclear Innovation North America LLC's Answer Opposing Petitioners' Motion to Permit a Consolidated Reply (May 16, 2011).
- 17. Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), Blue Ridge Environmental Defense League (Runkle); Blue Ridge Environmental Defense League, Center for a Sustainable Coast, Georgia Women's Action for New Directions, Savannah Riverkeeper, Southern Alliance for Clean Energy (Goldstein): Southern Nuclear Operating Company's Answer in Opposition to Petitioners' Motion for Modification of the Commission's April 19, 2011, Order to Permit a Consolidated Reply (May 16, 2011).
- 18. Tennessee Valley Authority (Bellefonte Nuclear Power Plant, Units 3 and 4), Blue Ridge Environmental Defense League, Bellefonte Efficiency and Sustainability Team: Tennessee Valley Authority's Answer Opposing Petitioners' Motion to Permit a Consolidated Reply (May 16, 2011); Tennessee Valley Authority's Answer Opposing Petitioners' Motion to Permit a Consolidated Reply (May 16, 2011) (corrected certificate of service).
- 19. Tennessee Valley Authority (Watts Bar Nuclear Plant, Unit 2), Southern Alliance for Clean Energy: Tennessee Valley Authority's Answer Opposing Petitioners' Motion to Permit a Consolidated Reply (May 16, 2011); Tennessee Valley Authority's Answer Opposing Petitioners' Motion to Permit a Consolidated Reply (May 20, 2011) (corrected certificate of service).
- 20. Virginia Electric and Power Co. d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative (North Anna Power Station, Unit 3), Blue Ridge

Environmental Defense League, People's Alliance for Clean Energy: Dominion's Answer Opposing Motion to Permit Unauthorized Reply (May 19, 2011).

VI. SUPPLEMENTAL COMMENTS AND SUPPORTING DECLARATIONS

- 1. AP1000 Design Certification Amendment (10 C.F.R. Part 52), AP1000 Oversight Group, Bellefonte Efficiency and Sustainability Team, Blue Ridge Environmental Defense League, Citizens Allied for Safe Energy, Friends of the Earth, Georgia Women's Action for New Directions, Green Party of Florida, Mothers Against Tennessee River Radiation, North Carolina Waste Awareness and Reduction Network, Nuclear Information and Resource Service, Nuclear Watch South, South Carolina Chapter–Sierra Club, Southern Alliance for Clean Energy: Petition to Terminate the Rulemaking on Design Certification of the AP1000 Reactor and Declare it Null and Void (June 16, 2011) (SECOND PETITION, rather than Supplemental Comments).
- 2. ESBWR Design Certification Amendment (10 C.F.R. Part 52), Beyond Nuclear, Citizens Environment Alliance, Citizens for Alternatives to Chemical Contamination, Don't Waste Michigan, Sierra Club–MI Chapter: Supplemental Comments by the ESBWR Intervenors et al. Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report (Aug. 11, 2011).
- 3. Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), North Carolina Waste Awareness and Reduction Network: Supplemental Comments by NC WARN in Support of Emergency Petition Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).
- 4. South Carolina Electric & Gas Co. and South Carolina Public Service Authority (also referred to as Santee Cooper) (Virgil C. Summer Nuclear Station, Units 1 and 2), Friends of the Earth, South Carolina Chapter of Sierra Club: Supplemental Comments by Friends of the Earth and the South Carolina Chapter of the Sierra Club in Support of Emergency Petition Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report (Aug. 10, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).
- 5. Virginia Electric and Power Co. d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative (North Anna Power Station, Unit 3), Blue Ridge

Environmental Defense League: Supplemental Comments by the Blue Ridge Environmental Defense League in Support of Emergency Petition Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).

VII. ANSWERS TO SUPPLEMENTAL COMMENTS

- 1. AP1000 Design Certification Amendment (10 C.F.R. Part 52), AP1000 Oversight Group, Bellefonte Efficiency and Sustainability Team, Blue Ridge Environmental Defense League, Citizens Allied for Safe Energy, Friends of the Earth, Georgia Women's Action for New Directions, Green Party of Florida, Mothers Against Tennessee River Radiation, North Carolina Waste Awareness and Reduction Network, Nuclear Information and Resource Service, Nuclear Watch South, South Carolina Chapter–Sierra Club, Southern Alliance for Clean Energy: Ziesing, R.F., Westinghouse Electric Co., Letter to Annette L. Vietti-Cook, NRC, "Petition to Terminate the Rulemaking on Design Certification of the AP1000 Reactor and Declare it Null and Void" (Aug. 15, 2011) (RESPONSE TO SECOND PETITION, rather than Answer to Supplemental Comments).
- 2. Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), North Carolina Waste Awareness and Reduction Network: Progress Energy Carolina's Objection to the North Carolina Waste Awareness and Reduction Network's Supplemental Comments Relating to Petition to Suspend Licensing Proceedings (Aug. 22, 2011).
- 3. Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), North Carolina Waste Awareness and Reduction Network: NRC Staff's Answer to Supplemental Comments in Support of Emergency Petition Regarding Fukushima Task Force Report (Aug. 22, 2011).
- 4. South Carolina Electric & Gas Co. and South Carolina Public Service Authority (also referred to as Santee Cooper) (Virgil C. Summer Nuclear Station, Units 1 and 2), Friends of the Earth, South Carolina Chapter of Sierra Club: South Carolina Electric & Gas Company's Answer in Opposition to Supplemental Comments Regarding Fukushima Task Force Report (Aug. 22, 2011).
- 5. South Carolina Electric & Gas Co. and South Carolina Public Service Authority (also referred to as Santee Cooper) (Virgil C. Summer Nuclear Station, Units 1 and 2), Friends of the Earth, South Carolina Chapter of Sierra Club: NRC Staff Answer to Supplemental Comments in Support of Emergency Petition Regarding Fukushima Task Force Report (Aug. 22, 2011).
 - 6. Virginia Electric and Power Co. d/b/a Dominion Virginia Power and

Old Dominion Electric Cooperative (North Anna Power Plant, Unit 3), Blue Ridge Environmental Defense League: Dominion's Objection to the Blue Ridge Environmental League's Supplemental Comments Relating to Petition to Suspend Pending Licensing Proceedings (Aug. 22, 2011).

7. Virginia Electric and Power Co. d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative (North Anna Power Station, Unit 3), Blue Ridge Environmental Defense League: NRC Staff's Answer to Supplemental Comments in Support of Emergency Petition Regarding Fukushima Task Force Report (Aug. 22, 2011).

VIII. RULEMAKING PETITIONS/REQUESTS TO SUSPEND; SUPPORTING DECLARATIONS

- 1. Calvert Cliffs Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), Nuclear Information and Resource Service: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Requests to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).
- 2. Detroit Edison Co. (Fermi Nuclear Power Plant, Unit 3), Keith Gunter, Michael J. Keegan, Edward McArdle, Leonard Mandeville, Frank Mantei, Marcee Meyers, Henry Newnan, Sierra Club, Don't Waste Michigan, Inc., Citizens Environment Alliance of Southwestern Ontario, Beyond Nuclear, George Steinman, Shirley Steinman, Harold L. Stokes, Citizens for Alternatives to Chemical Contamination, Marilyn R. Timmer, Derek Coronado, Sandra Bihn, Richard Coronado: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Requests to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).
- 3. Energy Northwest (Columbia Generating Station), Northwest Environmental Advocates: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 22, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).
- 4. Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Station, Units 2 and 3), Hudson River Sloop Clearwater, Inc., Riverkeeper: River-

keeper, Inc. and Hudson River Sloop Clearwater, Inc. Rulemaking Petition to Rescind Prohibition Against Consideration to Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).

- 5. FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, Green Party of Ohio, Beyond Nuclear: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 12, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).
- 6. Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), Citizens Allied for Safe Energy, Inc.: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 12, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).
- 7. Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), Dan Kipnis, Mark Oncavage, National Parks Conservation Association, Southern Alliance for Clean Energy: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).
- 8. Luminant Generation Co., LLC (Comanche Peak Nuclear Power Plant, Units 3 and 4), Public Citizen, SEED Coalition: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).
- 9. NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Beyond Nuclear, Seacoast Anti-Pollution League, Sierra Club of New Hampshire: Rule-making Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding

Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).

- 10. NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Friends of the Coast, New England Coalition: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).
- 11. Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), San Luis Obispo Mothers for Peace: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).
- 12. PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), Gene Stilp: Rule-making Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 10, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).
- 13. Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), Nuclear Information and Resource Service, The Ecology Party of Florida, Green Party of Florida: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).
- 14. Nuclear Innovation North America LLC (South Texas Project, Units 3 and 4), Public Citizen, SEED Coalition: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).
- 15. Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), Blue Ridge Environmental Defense League, Center for a Sustainable Coast, Georgia Women's Action for New Directions, Savannah Riverkeeper, Southern Alliance for Clean Energy: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent

Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).

16. Tennessee Valley Authority (Watts Bar Nuclear Plant, Unit 2), Southern Alliance for Clean Energy: Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision (Aug. 11, 2011); Declaration of Dr. Arjun Makhijani Regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Aug. 8, 2011).

IX. RESPONSES TO RULEMAKING PETITIONS/REQUESTS TO SUSPEND

- 1. Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), Citizens Allied for Safe Energy, Inc.: Florida Power & Light Company's Response Opposing Request for Stay of Licensing Proceedings Pending Resolution of Rulemaking Petition (Aug. 20, 2011).
- 2. Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), Dan Kipnis, Mark Oncavage, National Parks Conservation Association, Southern Alliance for Clean Energy: Florida Power & Light Company's Response Opposing Request for Stay of Licensing Proceedings Pending Resolution of Rulemaking Petition (Aug. 20, 2011).
- 3. NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Beyond Nuclear, Seacoast Anti-Pollution League, Sierra Club of New Hampshire: NextEra Energy Seabrook, LLC's Response Opposing Request to Suspend Licensing Proceedings Pending Resolution of Rulemaking Petition (Aug. 22, 2011).
- 4. NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), Friends of the Coast, New England Coalition: NextEra Energy Seabrook, LLC's Response Opposing Request to Suspend Licensing Proceedings Pending Resolution of Rulemaking Petition (Aug. 22, 2011).
- 5. Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), Nuclear Information and Resource Service, The Ecology Party of Florida, Green Party of Florida: Progress Energy Florida, Inc.'s Response Opposing Request for Suspension of Licensing Proceedings Pending Resolution of Rulemaking Petition (Aug. 22, 2011).

X. REPLY TO RESPONSES TO RULEMAKING PETITIONS/REQUESTS TO SUSPEND

1. Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), Dan Kipnis, Mark Oncavage, National Parks Conservation Association, Southern Alliance for Clean Energy: Joint Intervenors' Motion for Leave to Reply to Florida Power & Light Company's Response Opposing Request for Stay of Licensing Proceedings Pending Resolution of Rulemaking Petition (Aug. 29, 2011).

XI. OPPOSITION TO REPLY TO RESPONSES TO RULEMAKING PETITIONS/REQUESTS TO SUSPEND

1. Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), Dan Kipnis, Mark Oncavage, National Parks Conservation Association, Southern Alliance for Clean Energy: Florida Power & Light Company's Response Opposing Joint Intervenors' Motion for Leave to Reply (Sept. 8, 2011).

CLI-11-6

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

Docket Nos. 52-012-COL 52-013-COL

NUCLEAR INNOVATION NORTH AMERICA LLC (South Texas Project, Units 3 and 4)

September 9, 2011

SUMMARY DISPOSITION APPEALS, INTERLOCUTORY

The Board's denial of a summary disposition motion did not constitute a "de facto partial initial decision" or a "final decision on the merits" ripe for Commission review. Simply because a Board makes a disputed legal ruling does not necessarily warrant immediate Commission action. See Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), CLI-10-30, 72 NRC 564, 568 (2010) (rejecting interlocutory review where it was observed that "[p]ortions of the Board's decision appear[ed] problematic, and may warrant our review later in the proceeding"). See also Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-08-2, 67 NRC 31, 35 (2008); Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-1, 53 NRC 1, 5 (2001).

APPEALS, INTERLOCUTORY

The Commission rejects the Staff's argument that allowing an environmental

challenge to continue after the environmental impact statement (EIS) has issued constitutes a "merits" ruling that the Staff's review document is inadequate. Boards frequently hold hearings on contentions challenging the Staff's final environmental review documents, in which case the EIS and the adjudicatory record become part of the environmental record of the decision.

MEMORANDUM AND ORDER

The NRC Staff has filed a petition for review of LBP-11-7, which denied the Staff's motion to dismiss one of two pending contentions in the captioned combined license proceeding. As explained below, the Atomic Safety and Licensing Board's decision is interlocutory; the petition for review is therefore premature, and we deny review.

I. BACKGROUND

Nuclear Innovation North America LLC (the Applicant) has applied for a combined license (COL) for two new reactors to be built adjacent to the two existing reactors at the South Texas Nuclear Project site in Bay City, Texas. The application references the certified design for the Advanced Boiling Water Reactor (ABWR). Three intervenors, the Sustainable Energy and Economic Development Coalition, the South Texas Association for Responsible Energy, and Public Citizen (collectively, Intervenors) offered several contentions claiming, as a general matter, that the application failed to account for the effects of colocating additional reactors at the site of the existing South Texas Project Electric Generating Station, Units 1 and 2.

In its initial order ruling on standing and contention admissibility, the Board admitted Contention 21, which claimed that the Applicant's Environmental Report (ER) did not address impacts that severe accidents at the new reactors might have on operation of Units 1 and 2.² Thereafter, the Applicant (at that time, STP Nuclear Operating Company)³ revised its ER to add a new section 7.5S to cure the omission that had formed the basis for Contention 21, and moved for summary

¹LBP-11-7, 73 NRC 254 (2011).

² See LBP-09-21, 70 NRC 581, 617-20 (2009).

³ See Letter to Administrative Judges from Steven P. Frantz, Counsel for STP Nuclear Operating Company, at 1 (Jan. 21, 2011) (notifying Board that NINA, which has a 92% ownership interest in the proposed facilities, would take over as lead applicant in this proceeding).

disposition.⁴ Intervenors opposed the summary disposition motion, moved to modify Contention 21, and proposed four new, multipart, colocation contentions based on the Applicant's revisions, CL-1 through CL-4.⁵ In response, the Board dismissed Contention 21 (finding that the asserted omissions had been cured), rejected proposed contention CL-1,⁶ and admitted in part and rejected in part the remaining new proposed contentions, combining them into one new colocation contention, CL-2.⁷

Contention CL-2 claims that the ER fails to consider that a severe accident at one reactor would affect operations at the others on the site, thereby increasing the replacement cost of energy estimates contained in the Severe Accident Mitigation Design Alternatives (SAMDA) analysis. Intervenors argue that underestimating the replacement costs of energy in turn improperly skews the cost/benefit balance in the SAMDA analysis.⁸

The Staff moved for summary disposition of this contention last summer. The Staff argued that all issues surrounding SAMDAs have been resolved by regulation, and therefore may not be challenged in this individual adjudication. The Staff pointed out that the design certification rule for the ABWR, codified in 10 C.F.R. Part 52, Appendix A, provides that the Commission considers resolved in a subsequent COL proceeding:

All environmental issues concerning severe accident mitigation design alternatives associated with the information in the NRC's final environmental assessment for the U.S. ABWR design and Revision 1 of the technical support document for the U.S. ABWR, dated December 1994, for plants referencing this appendix whose site parameters are within those specified in the technical support document.¹⁰

The controversy arises from the phrase "whose site parameters are within those specified in the technical support document." The Staff, in its draft Environmental Impact Statement (DEIS), acknowledged that vendor General Electric Nuclear

⁴ See Notification of Filing Related to Contention 21, Letter to the Administrative Judges from Stephen J. Burdick, Counsel for STP Nuclear Operating Company (Nov. 11, 2009); Applicant's Motion to Dismiss Contention 21 as Moot (Nov. 30, 2009).

⁵ See Intervenors' Response to Applicant's Motion to Dismiss Contention 21 as Moot (Dec. 14, 2009); Intervenors' Contentions Regarding Applicant's Proposed Revision to Environmental Report Section 7.5S and Request for Hearing (Dec. 22, 2009) (Intervenors' New Contentions).

⁶Contention CL-1 argued the inadequacy of the Applicant's evaluation of the possible impacts of a severe accident at one unit on the other units. Intervenors' New Contentions at 3-7.

⁷LBP-10-14, 72 NRC 101 (2010).

⁸ See id. at 127 (summarizing Contention CL-2, as admitted).

⁹ NRC Staff Motion for Summary Disposition (July 22, 2010) (attaching the affidavit of Richard L. Emch, Jr., and James V. Ramsdell, Jr.) (Staff Motion).

¹⁰ 10 C.F.R. Part 52, Appendix A, § VI.B.7.

Energy's (GE) technical support document (TSD) for the ABWR¹¹ does not list any explicit "site parameters." In the DEIS, the Staff concluded, in essence, that an appropriate site parameter can be inferred. The Staff reasoned that the probability-weighted population dose risk specified in the TSD is the appropriate "site parameter" to use when determining if environmental issues are resolved by rule. The DEIS concluded that the probability-weighted population dose risk at the South Texas site would fall within this parameter. The DEIS did not discuss the site-specific SAMDA analysis that the Applicant had included in its ER, which contention CL-2 challenges. The DEIS did not discuss the site-specific SAMDA analysis that the Applicant had included in its ER, which contention CL-2 challenges.

The Staff, in its motion for summary disposition, argued that because the South Texas site was within the applicable parameter as determined in the DEIS (i.e., the probability-weighted population dose risk in the TSD), SAMDA issues were precluded from litigation by operation of the design certification rule in Appendix A, § VI.B.7.¹⁶

Earlier this year, the Board rejected the Staff's motion, disagreeing with the Staff's argument that South Texas site characteristics are bounded by the site parameters listed in the ABWR TSD. The Board focused on the fact that there are no site parameters "specified" in the TSD, and that the Staff therefore used

¹¹ See Letter from J.F. Quirk, Project Manager, ABWR Certification, to R.W. Borchardt, Director, Standardization Project Directorate, U.S. Nuclear Regulatory Commission, Attach. 1, Technical Support Document for the U.S. ABWR (Dec. 21, 1994) (Rev. 1) (ADAMS Accession No. ML100210563) (TSD).

¹² See NUREG-1937, "Draft Environmental Impact Statement for Combined Licenses (COLs) for South Texas Project Electric Generating Station Units 3 and 4" (Mar. 2010) at 5-110 (ADAMS Accession Nos. ML100700327 & ML100700333).

¹³ *Id.* "Population dose risk" refers to the offsite radiological consequences to the public of a severe accident. In analyzing the effects of a nuclear facility, the NRC considers a variety of site attributes, one of which is the "changes in radiation exposures to the public due to changes in accident frequencies or accident consequences associated with the proposed action." *See generally* NUREG/BR1084, "Regulatory Analysis Technical Evaluation Handbook" (Jan. 1997) at 5.10 (ADAMS Accession No. ML050190193) (Regulatory Analysis Technical Evaluation Handbook).

¹⁴DEIS at 5-111.

¹⁵ In February 2011, the Final EIS (FEIS) was released. NUREG-1937, "Environmental Impact Statement for Combined Licenses (COLs) for South Texas Project Electric Generating Station Units 3 and 4; Final Report" (Feb. 2011) (FEIS) (ADAMS Accession Nos. ML11059A000 & ML11049A001). That document added a discussion of the Applicant's SAMDA analysis, but stated that the Staff confined its review to the issue whether the South Texas site characteristics were within the population dose risk parameter specified in the ABWR TSD. *Id.* at 5-112.

¹⁶ Staff Motion at 5-6, 11-13, Attachment 2 (Affidavit of Richard L. Emch, Jr. and James V. Ramsdell, Jr. Concerning Finality of SAMDA Conclusions in ABWR Design Certification as Applied to STP Units 3 and 4). The Applicant also moved for summary disposition of this contention, but on a different legal theory.

its own judgment to determine the applicable site parameter.¹⁷ The Board further held that the Staff could not "cure the absence of a list of site parameters in the TSD" by "creating" a list of site parameters for use in this proceeding.¹⁸

The Board also rejected the Staff's argument that the population dose risk is the appropriate site parameter to compare to the South Texas site for purposes of the design certification rule. ¹⁹ The Board determined that this parameter does not take into account "all" the site-specific information that GE used in the TSD to evaluate SAMDAs. The Board pointed out that GE also considered "onsite costs including economic losses, replacement power costs, and direct accident costs" in the SAMDA evaluation. ²⁰

The Board included an Appendix to its decision, in which it set out in greater detail its rationale for why the Staff erred in arguing that the probability-weighted population dose risk parameter includes all of the site-specific information used to evaluate SAMDAs, and why genuine disputed issues remain with respect to Contention CL-2.²¹ The Board cited the NRC's Regulatory Analysis Technical Evaluation Handbook — not available at the time GE performed its SAMDA analysis in support of the design certification — which includes a list of site "attributes" that can be affected by an accident at a facility.²² The Board stated its view that this reference "now provides the current best guidance" of what costs should be considered in a SAMDA analysis.²³

The Board observed that the ABWR SAMDA analysis did not consider offsite economic costs, and calculated replacement power costs assuming that the power to be replaced was that generated by a single ABWR unit.²⁴ The Board concluded that, because of this, the TSD site parameters for its analysis were the offsite exposure (population dose) risk, the presence of a single ABWR reactor, and "negligible" offsite economic costs.²⁵ In the Board's view, the Staff should have judged the applicability of the ABWR SAMDA evaluation based on whether the site met all three of these "parameters."²⁶

¹⁷LBP-11-7, 73 NRC at 275. The Board also rejected a Staff argument that Contention CL-2 was mooted by the DEIS, which did not contain any analysis of the issue. *Id.* at 276.

¹⁸ *Id*.

¹⁹ Id.

²⁰ Id. (citing TSD at 32).

²¹ See generally id. at 319, Appendix Concerning NRC Staff Motion for Summary Disposition of Contention CL-2 (Appendix). The Staff challenges the propriety of this evaluation. See NRC Staff Petition for Review of the Licensing Board's Decision in LBP-11-07 Denying the NRC Staff Motion for Summary Disposition (Mar. 15, 2011) at 19-20 (Staff Petition).

²² Appendix, 73 NRC at 319.

 $^{^{23}}$ Id.

²⁴ Id. at 320-21.

²⁵ See id. at 321-22.

²⁶ See id.

In the same order, the Board also rejected the Applicant's motion for summary disposition of Contention CL-2.²⁷ The Staff then filed its petition for review. Intervenors oppose the petition.²⁸ The Applicant filed a brief in support of Staff's petition, but did not seek review in its own right.²⁹

II. DISCUSSION

We decline to consider the Staff's interlocutory appeal because the challenged Board ruling is not ripe for review. LBP-11-7 is not a partial or final initial decision — there remain outstanding questions of fact relating to the contention in question.

The Staff argues that the issue is a "de facto partial initial decision" and ripe for our review because "the Board made a decision on the merits rejecting the position taken in the [South Texas Environmental Impact Statement], concluding as a matter of law that SAMDA issues in this proceeding cannot be resolved by rule and ruling on the merits that the Staff's identification of site parameters is incorrect." But simply because a Board makes a disputed legal ruling does not necessarily warrant immediate Commission action. 31

As an initial matter, we reject the Staff's suggestion that allowing an environmental challenge to continue after the FEIS has issued constitutes a "merits" ruling that the Staff's review document is inadequate.³² Boards frequently hold

²⁷ The Applicant argued that its site-specific SAMDA analysis was sufficiently conservative as to render all of the Intervenors' challenges immaterial; that is, none of the Intervenors' claims could alter the conclusion that there are no additional cost-effective SAMDAs. STP Nuclear Operating Company's Motion for Summary Disposition of Contention CL-2 (Sept. 14, 2010). The Board also denied the Applicant's motion, concluding that genuine issues of material fact remain in dispute regarding whether Intervenors' challenges to replacement power costs are bounded by the Applicant's analysis. See LBP-11-7, 73 NRC at 273. Judge Arnold dissented from the portion of the Board's order denying summary disposition to the Applicant on the SAMDA issue. *See id.* (Dissenting Opinion of Judge Gary S. Arnold). Judge Arnold did not speak to the Staff's arguments. LBP-11-7 also admitted one and rejected five of Intervenors' six proposed new contentions on the DEIS, all unrelated to the SAMDA issue. *See id.* at 281-313. Those rulings are not before us today.

²⁸ Intervenors' Answer in Opposition to NRC Staff's Petition for Review of the Licensing Board's Decision in LBP-11-07 Denying NRC Staff Motion for Summary Disposition (Mar. 25, 2011).

 $^{^{29}\,}See$ Nuclear Innovation North America LLC's Answer to NRC Staff Appeal of LBP-11-07 (Mar. 24, 2011).

³⁰ Staff Petition at 6.

³¹ See Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), CLI-10-30, 72 NRC 564, 568 (2010) (rejecting interlocutory review where it was observed that "[p]ortions of the Board's decision appear[ed] problematic, and may warrant our review later in the proceeding"). See also Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-08-2, 67 NRC 31, 35 (2008); Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-1, 53 NRC 1, 5 (2001).

³² See Staff Petition at 7.

hearings on contentions challenging the Staff's final environmental review documents. In such cases, "[t]he adjudicatory record and Board decision (and . . . any Commission appellate decisions) become, in effect, part of the FEIS."³³ Put another way, under our longstanding practice, the Staff's review (the FEIS itself) and the adjudicatory record will become part of the environmental record of the decision.³⁴

More to the point here, we recently rejected an argument that the denial of a motion for summary disposition constituted a "merits" decision and was the equivalent of a partial initial decision. In the *Pilgrim* license renewal case, we held that a partial initial decision is one "rendered following an evidentiary hearing on one or more contentions, but that does not dispose of the entire matter." The Board held an evidentiary hearing in August 2011, but has not yet issued a decision. Further, the Staff, in fact, acknowledges that there may be some outstanding issues relating to the Applicant's SAMDA analysis. We therefore conclude that the Board's ruling here is interlocutory in nature, warranting immediate review only under the circumstances specified in our rules.

Our regulations provide for Commission review of interlocutory Board rulings when the petitioner demonstrates either that the ruling threatens the petitioner with immediate and irreparable harm, or where the ruling has a "pervasive and unusual effect" on the structure of the proceeding.³⁸ The Staff did not address these factors, and we do not find them present here.

Last summer, Intervenors in this proceeding petitioned for interlocutory review of the Board's decision rejecting several proposed contentions relating to the Applicant's mitigative strategies for dealing with fires and explosions resulting in

³³ Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 89 (1998) (citing *Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681, 705-07 (1985)).

³⁴ See Pacific Gas and Electric Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-26, 68 NRC 509, 526 (2008), petition for review denied on other grounds, San Luis Obispo Mothers for Peace v. NRC, 635 F.3d 1109 (9th Cir. 2011).

³⁵ Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-08-2, 67 NRC 31, 34 (2008).

 $^{^{36}}$ See Memorandum and Order (Establishing Schedule for Evidentiary Hearing) (March 11, 2011) (unpublished).

³⁷ Staff Petition at 7.

³⁸ 10 C.F.R. § 2.341(f)(2). *See, e.g., Indian Point,* CLI-10-30, 72 NRC at 568 (the admission of a contention that might require further explanation of SAMA cost-benefit analysis did not have a "pervasive and unusual effect on the litigation"). *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-08-2, 67 NRC 31, 34 (2008) (the grant of summary disposition on a particular contention is an interlocutory ruling appealable at the end of the case).

the loss of large areas of the plant.³⁹ We declined Intervenors' interlocutory appeal, pointing to our traditional "disfavor of piecemeal appeals during ongoing licensing board proceedings."⁴⁰ As outlined briefly above, the disputed Board ruling deals with only one aspect of four proposed contentions concerning SAMAs and the effects of colocating four units on a single site that Intervenors have sought to litigate in this adjudication. To the extent that the Board's admissibility decisions regarding Contention CL-1 and the balance of Contentions CL-2 through CL-4 are appealable at the end of the case, it makes sense for us to consider all related arguments at the same time.⁴¹

The Staff, as well as the Intervenors, must wait until the conclusion of the adjudication (or issuance of a partial initial decision) to bring appeals of interlocutory Board rulings. We therefore deny the Staff's request for interlocutory review, without prejudice to the Staff's ability to file a fresh petition for review after issuance of the Board's partial initial or final decision in this matter. Our decision to decline review at this time should not be interpreted as a determination on the merits of the Staff's appeal of the Board's ruling in LBP-11-7.

One other matter merits mention. While the Staff's appeal was pending, we received a series of substantively identical petitions, filed in multiple dockets, which requested, 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. 42 Although the parties to this case were not served with that petition, this proceeding was included in the caption and the Applicant filed an answer to it. 43

We granted the requests for relief in part, and denied them in part. In particular, we declined to suspend this or any other adjudication, or any final licensing decisions, finding no imminent risk to public health and safety, or to common

³⁹ Notice of Appeal (Feb. 9, 2010); Brief in Support of Intervenors' Appeal of Atomic Safety and Licensing Board's Order of January 29, 2010 (Feb. 9, 2010) (nonpublic).

⁴⁰ South Texas Project Nuclear Operating Co. (South Texas Project, Units 3 and 4), CLI-10-16, 71 NRC 486, 489-90 (2010) (citing Crow Butte Resources, Inc. (In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 365 & n.178 (2009); Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), CLI-09-6, 69 NRC 128, 137 (2009)).

⁴¹ See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-00-24, 52 NRC 351, 353 (2000).

⁴² 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); 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. 19, 2011).

⁴³ See Nuclear Innovation North America LLC's Answer in Opposition to Emergency Petition to Suspend Licensing Proceedings (May 2, 2011).

defense and security.⁴⁴ The agency continues to evaluate the implications of the events in Japan for U.S. facilities, as well as to consider actions that may be taken as a result of lessons learned in light of those events. Particularly with respect to new reactor licenses, we observed that "we have the authority to ensure that certified designs and combined licenses include appropriate Commission-directed changes before operation."⁴⁵

III. CONCLUSION

For the foregoing reasons, we *deny* the Staff's petition for review of the Board's decision in LBP-11-7, without prejudice.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 9th day of September 2011.

⁴⁴ See generally Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141 (2011).

⁴⁵ *Id.* at 163.

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

Docket No. 63-001-HLW

U.S. DEPARTMENT OF ENERGY (High-Level Waste Repository)

September 9, 2011

MEMORANDUM AND ORDER

On June 30, 2010, the participants were invited to submit briefs as to whether the Commission should review, and reverse or uphold, the Board's decision denying the Department of Energy's motion to withdraw its construction authorization application with prejudice. Upon consideration of all filings in this matter, the Commission finds itself evenly divided on whether to take the affirmative action of overturning or upholding the Board's decision.

Consistent with budgetary limitations, the Board has taken action to preserve information associated with this adjudication.² In furtherance of this, we hereby exercise our inherent supervisory authority to direct the Board to, by the close of the current fiscal year, complete all necessary and appropriate case management activities, including disposal of all matters currently pending before it and comprehensively documenting the full history of the adjudicatory proceeding.

¹ See LBP-10-11, 71 NRC 609 (2010); Order (June 30, 2010) (unpublished).

² See generally Memorandum of Daniel J. Graser, Licensing Support Network Administrator (LSNA), to the Administrative Judges, "Shutdown of the Licensing Support Network" (July 26, 2011); Order (Concerning LSNA July 26, 2011 Memorandum) (July 28, 2011) (unpublished).

IT IS SO ORDERED.3

For the Commission

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 9th day of September 2011.

 $^{^3}$ Commissioner Apostolakis has recused himself from this adjudication and, therefore, did not participate in this matter. *See* Notice of Recusal (July 15, 2010).

CLI-11-8

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

Docket Nos. 52-025-COL 52-026-COL

SOUTHERN NUCLEAR
OPERATING COMPANY
(Vogtle Electric Generating Plant,
Units 3 and 4)

September 27, 2011

PROCEDURAL RULES: REPLY BRIEFS

The Commission's rules, in 10 C.F.R. § 2.311(b), require briefs on appeal to conform to the requirements stated in 10 C.F.R. § 2.341(c)(2). Section 2.341(c)(2) limits briefs to 30 pages in length, absent Commission order directing otherwise. Briefs on appeal should be comprehensive, concise, and self-contained; the Commission will not augment appellants' brief by incorporating "by reference" other pleadings or arguments contained in such other pleadings.

PROCEDURAL RULES: ORAL ARGUMENT

To justify a request for oral argument on an appeal, appellants must show how oral argument will assist the Commission in reaching a decision, as is required by 10 C.F.R. § 2.343. Where the Commission has a thorough written record containing adequate information on which to base a decision, there is no need for oral argument.

PROCEDURAL RULES: REOPENING STANDARDS

Like issues related to standing and contention admissibility, the question whether a pleading satisfies the requirements of section 2.326 — and therefore justifies reopening a closed proceeding — is a threshold issue. In the absence of clear error or abuse of discretion, the Commission defers to its boards' rulings on such threshold issues. The Commission will not sustain an appeal that fails to show a board committed clear error or abuse of discretion. Appellants' conclusory statement that they "proved" their position is not sufficient to show clear error or abuse of discretion on the part of the Board.

PROCEDURAL RULES: AMENDMENT OF CONTENTION ON APPEAL

Appellants may not amend their contentions on appeal. Therefore, to the extent appellants' explanation alters or amends the proposed contention, the amendment must be rejected.

CONTENTION ADMISSIBILITY

The evaluation of a contention that is performed at the contention admissibility stage should not be confused with the evaluation that is later conducted at the merits stage of a proceeding. At the contention admissibility stage, a Board evaluates whether a petitioner has provided sufficient support to justify admitting the contention for further litigation. The facts and issues raised in a contention are not "in controversy" and subject to a full evidentiary hearing unless the proposed contention is admitted. In making its contention admissibility decision, the Board appropriately applied its technical and legal expertise to evaluate the proposed contention and the support provided for that contention.

PROCEDURAL RULES: REOPENING STANDARDS

The Commission's rules place a heavy burden on petitioners who ask to have a record reopened. Section 2.326(a) makes it clear that a motion to reopen will not be granted unless all three of the criteria listed in that section are satisfied. Additionally, pursuant to section 2.326(b), "[t]he motion must be accompanied by affidavits that set forth the factual and/or technical bases for the movant's claim that the criteria of paragraph (a) of this section have been satisfied. . . . Each of the criteria must be separately addressed, with a specific explanation of why it has been met." It is true that those providing affidavits must be competent witnesses or appropriately qualified experts. But satisfying one part of section 2.326(b) is not enough. The balance of the rule also must be satisfied.

CONTENTION ADMISSIBILITY: REOPENING STANDARDS

As the Commission has stated before, "the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention." "New information is not enough . . . to reopen a closed hearing record at the last minute; the information must be significant and plausible enough to require reasonable minds to inquire further." This is equally true where, as here, not only has the evidentiary record closed, but the entire proceeding has closed. "[T]o justify the granting of a motion to reopen the moving papers must be strong enough, in the light of any opposing filings, to avoid summary disposition."

PROCEDURAL RULES: NONTIMELY FILINGS, REOPENING STANDARDS

In addition to the three criteria listed in section 2.326(a) and the pleading specificity requirements in section 2.326(b), the Commission's reopening rule explicitly calls into play the rule governing nontimely filings. When a petitioner proposes a new contention after the record has closed, the petitioner must "address the reopening standards contemporaneously with a late-filed intervention petition, which must satisfy the standards for both contention admissibility and late filing." Section 2.326(d) provides that "[a] motion to reopen which relates to a contention not previously in controversy among the parties must also satisfy the requirements for nontimely contentions in § 2.309(c)." Section 2.309(c), in turn, requires a balancing of eight factors. These factors must be addressed with specificity. Of the eight factors, the Board accorded the greatest weight to the first factor — good cause — consistent with the Commission's case law.

CONTENTION ADMISSIBILITY

The Commission's contention admissibility standards, *see* 10 C.F.R. § 2.309(f)(1), "are deliberately strict," and the Commission "will reject any contention that does not satisfy" its requirements. Section 2.309(f)(1) requires a request for hearing or petition for leave to intervene to explain proposed contentions with particularity.

CONTENTION ADMISSIBILITY; RULEMAKING PROCEEDINGS

As the Board points out, "a contention that attacks a Commission rule, or [that] seeks to litigate a matter that is, or clearly is about to become, the subject of a rulemaking, is inadmissible." The Commission's rules, in 10 C.F.R. § 2.335, explicitly provide that "no rule or regulation of the Commission, or any provision

thereof, concerning the licensing of production and utilization facilities, source material, special nuclear material, or byproduct material, is subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding."

MANAGEMENT CHARACTER AND INTEGRITY

The Commission finds no evidence that prior experience with field application of protective coatings or prior experience with a particular contractor indicates that future work to be performed at the Vogtle site will be unsatisfactory. To the extent that Appellants appear to assert that there will be future misdeeds, they fail to show a nexus between their generalized complaints, the details of the combined license application, and prospective coating application or contractor behavior — that is, management character or integrity — at the Vogtle site. Without such a link, Appellants have raised no viable issue.

MEMORANDUM AND ORDER

This proceeding concerns the combined license (COL) application of Southern Nuclear Operating Company (Southern), for the proposed Vogtle Electric Generating Plant (Vogtle), Units 3 and 4. Our initial contested proceeding in connection with this application closed in June 2010. A second licensing board was established in August 2010 after three public interest groups, the Blue Ridge Environmental Defense League, Georgia Women's Action for New Directions, and the Center for a Sustainable Coast (collectively, Appellants), sought admission of a new contention. The second board denied Appellants' request to admit this new contention. Appellants now challenge the Board's decision. For the reasons presented below, we affirm the Board.

I. BACKGROUND

In its decision, the Board recounts the procedural history of our contested proceeding on this license application, including the termination of that proceeding,

¹The proceeding closed upon the expiration of the time period for seeking review of the licensing board's grant of summary disposition on the sole remaining contention in that proceeding. *See* LBP-10-8, 71 NRC 433 (2010).

²LBP-10-21, 72 NRC 616 (2010).

³ Notice of Appeal, Request for Oral Argument and Brief Supporting Notice of Appeal by Joint Intervenors (Dec. 9, 2010) (Appeal).

and the designation of a second, new licensing board to consider Appellants' August 12, 2010, pleading.⁴ As the Board explains, Appellants sought admission of a new contention, as follows:

Safety Contention 2 (SAFETY-2):

[Southern's COL application] fails to demonstrate that [Vogtle] Units 3 and 4 can be operated safely because the containment and containment-coating inspection regime proposed in the [Final Safety Analysis Report], *see* [COL application] at pp. 6.1-1 6.1-4, fails to provide assurance against corrosion-caused penetrations of the containment that would lead, in the event of an accident, to leakage to the environment of radioactive materials in excess of regulatory requirements.⁵

To support this contention, Appellants relied on a report prepared by Arnold Gundersen, submitted to the NRC's Advisory Committee on Reactor Safeguards (ACRS) on April 21, 2010, and discussed during an ACRS subcommittee meeting held on June 25, 2010, as well as on an affidavit by Mr. Gundersen discussing the same information. In their August 2010 Pleading, Appellants argued that July 13, the date the transcript of this meeting became available, was the proper starting point for calculating the 30-day window for filing their proposed new contention, and that therefore their request was timely. Regarding our 10 C.F.R. Part 2 threshold requirements, their pleading addressed only the standards in section 2.309(f)(2), governing new or amended contentions.

The Board found that Appellants had standing, but that they did not satisfy the other rules governing the filing: our reopening standards, our standards governing nontimely intervention petitions, our contention admissibility standards, or — to

⁴ Proposed New Contention by Joint Intervenors Regarding the Inadequacy of Applicant's Containment/Coating Inspection Program (Aug. 12, 2010) (Attachments amended Aug. 13, 2010) (August 2010 Pleading).

⁵ August 2010 Pleading at 4.

⁶ Gundersen, Arnold, "Post Accident AP1000 Containment Leakage, An Unreviewed Safety Issue" (Apr. 21, 2010) (Fairewinds Report), attached to August 2010 Pleading as Exh. 3.

⁷ Declaration of Arnold Gundersen Supporting Blue Ridge Environmental Defense League's New Contention Regarding AP1000 Containment Integrity on the Vogtle Nuclear Power Plant Units 3 and 4 (Aug. 13, 2010) (Gundersen Affidavit).

⁸ A 30-day window is in line with our general practice in analogous situations (*see, e.g., Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-07-15, 66 NRC 261, 266 n.11 (2007)). It also is consistent with the first *Vogtle* board's requirement that motions seeking the admission of new or amended contentions be filed within 30 days of the date the information that forms the basis for the contention becomes available. *See* Memorandum and Order (Initial Prehearing Order) (Dec. 2, 2008) at 6 n.6 (unpublished).

the extent arguably applicable — our standards for new or amended contentions.⁹ Appellants' timely appeal followed. Both Southern and the NRC Staff oppose the appeal.¹⁰

II. DISCUSSION

A. Preliminary Matters

Appellants, in their brief on appeal, adopt certain prior pleadings in the proceeding "by reference," arguing that "[a]ny consideration by the Commission must be made in context of the previous filings[,] with due consideration of the legal and factual arguments made in those filings."¹¹ Our rules, in 10 C.F.R. § 2.311(b), require briefs on appeal to conform to the requirements stated in 10 C.F.R. § 2.341(c)(2). Section 2.341(c)(2) limits briefs to 30 pages in length, absent Commission order directing otherwise. ¹² Briefs on appeal should be comprehensive, concise, and self-contained; we will not augment Appellants' brief by incorporating "by reference" other pleadings or arguments contained in such other pleadings. ¹³ While we consider the entire record on appeal — including in this instance the pleadings Appellants ask us to adopt by reference — our decision responds to the arguments made explicitly in Appellants' appellate brief. ¹⁴

Appellants also request — citing 10 C.F.R. § 2.343 but offering no justification to support the request — that we allow oral argument on this appeal. ¹⁵ Appellants have not shown how oral argument will assist us in reaching a decision, as is

⁹ The Board also granted Appellants' motion for leave to file its reply pleading out of time, based on the last-minute unexpected withdrawal of counsel. LBP-10-21, 72 NRC at 637-38. The grant of this motion is not at issue on appeal.

¹⁰ See Southern Nuclear Operating Company's Brief in Opposition to Appeal (Dec. 20, 2010) (Southern Answer); NRC Staff Brief in Opposition to Petitioners' Appeal and Request for Oral Argument (Dec. 20, 2010) (NRC Answer).

¹¹ Appeal at 2 (identifying particular filings).

¹²The page count excludes tables of content and citation, appropriate exhibits, and statutory or regulatory extracts. *See* 10 C.F.R. § 2.341(c)(2).

¹³ "[A]n issue is not properly briefed by incorporating by reference papers filed with the Licensing Board." *Texas Utilities Electric Co.* (Comanche Peak Steam Electric Station, Unit 1), ALAB-868, 25 NRC 912, 924 n.42 (1987) (citations omitted).

¹⁴ See also Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-10-9, 71 NRC 245, 278 n.205 (2010).

¹⁵ Section 2.343 provides, "[i]n its discretion, the Commission may allow oral argument upon the request of a party made in a petition for review, brief on review, or upon its own initiative." Appellants in this case are not "parties," but we need not reach the question whether this fact bars their request.

required.¹⁶ And, in the face of a thorough written record containing adequate information on which to base our decision, we see no need for oral argument here.

B. Analysis

Resolution of this appeal turns on whether the Board erred in concluding that the Appellants' August 2010 Pleading did not satisfy our 10 C.F.R. § 2.326 reopening standards, our section 2.309(c) standards for nontimely filings, and our section 2.309(f)(1) contention admissibility standards. We agree with the Board that Appellants did not satisfy these standards and therefore affirm the Board's decision.

Like issues related to standing and contention admissibility, the question whether a pleading satisfies the requirements of section 2.326 — and therefore justifies reopening a closed proceeding — is a threshold issue. In the absence of clear error or abuse of discretion, we defer to our boards' rulings on such threshold issues. ¹⁷ We will not sustain an appeal that fails to show a board committed clear error or abuse of discretion.

Appellants make no such showing. Instead of "clearly identifying the errors in the decision below and ensuring that [their] brief contains sufficient information and cogent argument to alert the other parties and the Commission to the precise nature of and support for [their] claims," Appellants provide general arguments and conclusory statements asserting the substantive merits of their proposed contention. This is insufficient to support an appeal.

Appellants open their brief with general arguments that reframe the rejected contention in terms of compliance with the Atomic Energy Act (AEA) and the National Environmental Policy Act (NEPA). Appellants argue that the Board's decision to reject their proposed contention SAFETY-2 did not comply with the purposes of the AEA because the license application does not comply with the AEA's safety standards. Appellants assert that they "proved by . . . Affidavit and engineering report [of their expert,] Mr. Gundersen, that the 'structures, systems and components' of the reactors proposed for the Vogtle Plant are not adequate to prevent the accidental release of radioactive materials." Appellants criticize the

¹⁶ Shearon Harris, CLI-10-9, 71 NRC at 251 (citing Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Unit 2), CLI-93-2, 37 NRC 55, 59 n.4 (1993) and Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Units 1 and 2), CLI-92-12, 36 NRC 62, 68-69 (1992)).

¹⁷ AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 121 (2006)

¹⁸ Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 639 n.25 (2004) (quoting Advanced Medical Systems, Inc. (One Factory Row, Geneva, Ohio 44041), CLI-94-6, 39 NRC 285, 297 (1994)).

¹⁹ Appeal at 5.

Board for appearing "to dismiss the new contention based on the experience of the members rather than on reports and studies already conducted, and certainly not on expert testimony in an evidentiary hearing." Appellants maintain that the Board's decision to reject the contention did not comply with NEPA—even though NEPA compliance never was a part of the contention as proposed—because the decision ignores the scenario for release of radioactive material postulated in SAFETY-2.

We make three observations with respect to these arguments. First, Appellants may not amend their contentions on appeal.²¹ Therefore, to the extent Appellants' explanation alters or amends the proposed contention, the amendment must be rejected. Second, Appellants' conclusory statement that they "proved" their position is not sufficient to show clear error or abuse of discretion on the part of the Board. Third, the evaluation of a contention that is performed at the contention admissibility stage should not be confused with the evaluation that is later conducted at the merits stage of a proceeding. At the contention admissibility stage, a Board evaluates whether a petitioner has provided sufficient support to justify admitting the contention for further litigation. The facts and issues raised in a contention are not "in controversy" and subject to a full evidentiary hearing unless the proposed contention is admitted. Here, the Board applied our threshold reopening, nontimely filing, and contention admissibility standards to find that contention SAFETY-2 should not be admitted for hearing. In making this decision, the Board appropriately applied its technical and legal expertise to evaluate the proposed contention and the support provided for that contention. The Board properly took, as the starting point for this evaluation, the analysis of the proposed contention relative to our reopening standards.

1. Reopening Criteria

Our rules place a heavy burden on petitioners who ask to have a record reopened.²² Section 2.326(a) makes it clear that a motion to reopen will not be granted unless all of the following criteria are satisfied:

- (1) The motion must be timely. However, an exceptionally grave issue may be considered in the discretion of the presiding officer even if untimely presented;
 - (2) The motion must address a significant safety or environmental issue; and

²⁰ *Id.* at 14.

²¹ See, e.g., Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 122-23 (2009).

²² E.g., AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC 658, 668-69 (2008).

(3) The motion must demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially.²³

Additionally, pursuant to section 2.326(b), "[t]he motion must be accompanied by affidavits that set forth the factual and/or technical bases for the movant's claim that the criteria of paragraph (a) of this section have been satisfied. . . . Each of the criteria must be separately addressed, with a specific explanation of why it has been met."²⁴ In their pleading proffering SAFETY-2, Appellants did not address this requirement. During oral argument, Appellants suggested the Board could fill in the blanks itself by examining the Gundersen Affidavit and the Fairewinds Report to find something to satisfy each of the section 2.326(a) criteria.²⁵ The Board "decline[d] this offer to hunt for information that the agency's procedural rules require be explicitly identified and fully explained."²⁶ We concur with the Board's decision on this point.

On appeal, Appellants claim that their August 2010 Pleading satisfied the requirements of section 2.326(b) because Mr. Gundersen is an expert in the appropriate disciplines for the contention and for the requirements of section 2.326(a).²⁷ It is true that those providing affidavits pursuant to section 2.326(b) must be competent individuals or appropriately qualified experts, and it also is true that Mr. Gundersen's status as an "expert[] in the disciplines appropriate to the issues raised" has not been challenged here.²⁸ But satisfying one part of section 2.326(b) is not enough. The balance of the rule also must be satisfied. The August 2010 Pleading could have been rejected solely on the basis of the Appellants' failure to comply fully with section 2.326(b).

As we have stated before, "the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention."²⁹ "New information is not enough... to reopen a closed hearing record at the last minute; the information must be significant and plausible enough to require reasonable

²³ 10 C.F.R. § 2.326(a).

²⁴ 10 C.F.R. § 2.326(b).

²⁵ Tr. at 35-36.

²⁶LBP-10-21, 72 NRC at 647 (citing *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 204-05 (2003); *Powertech (USA), Inc.* (Dewey-Burdock In Situ Uranium Recovery Facility), LBP-10-16, 72 NRC 361, 398 (2010)).

²⁷ Appeal at 14.

²⁸ 10 C.F.R. § 2.326(b).

²⁹ Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-05-12, 61 NRC 345, 350 (2005). See also Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-11-2, 73 NRC 333, 338 (2011) (when an intervenor "seeks both to reopen the record and to submit a new contention" the intervenor must satisfy both the "deliberately heavy" burden that applies when an intervenor seeks to reopen a closed record and the "higher standard" that applies when an intervenor seeks to introduce new contentions after the regulatory deadline).

minds to inquire further."³⁰ This is equally true where, as here, not only has the evidentiary record closed, but the entire proceeding has closed.³¹ "[T]o justify the granting of a motion to reopen the moving papers must be strong enough, in the light of any opposing filings, to avoid summary disposition."³² In our view, the Board's decision gives thorough consideration to the explicit requirements for motions to reopen contained in section 2.326(a), addressing each requirement in turn and providing a reasoned basis for concluding that Appellants failed to satisfy each one.

With respect to the first of these — timeliness — the Board considered Appellants' claim that the 30-day clock started on July 13, 2010, as well as countervailing claims that the contention could have been proffered as early as November 2008 (when the original intervention petitions were submitted) or shortly after September 2009 based on availability of the information cited and relied on in the Fairewinds Report.³³ To justify the timing of their pleading, Appellants relied on their interpretation of statements made by Mr. Harold Ray, Chairman of the ACRS subcommittee on the AP1000 design certification, at the subcommittee's July 13, 2010, meeting (during which Mr. Gundersen testified on the topic of the Fairewinds Report). On that occasion, Mr. Ray explained that some of the matters discussed by Mr. Gundersen were part of the ACRS's consideration of the proposed certified design, while some would be considered as part of the ACRS's review of the COL application.³⁴ Mr. Ray stated that the coating applied to the containment was "an important element of [the] whole system" and that Mr. Gundersen's "points . . . about accessibility for inspection are ones [the ACRS subcommittee had] yet to look at," and "that that would be taken up as part of the COL." rather than the design certification.³⁵ Appellants misinterpreted Mr. Ray's statements to mean that the question needed to be

³⁰ Private Fuel Storage, CLI-05-12, 61 NRC at 350.

³¹ Appellants attempt to draw a distinction between this case and *Millstone*, CLI-09-5, 69 NRC 631, attaching significance to the fact that in *Millstone* the petitioners never had a contention admitted whereas here there was at one time an admitted contention. Appeal at 10. We find this distinction irrelevant. Here, as in *Millstone*, where the record has been closed, our strict reopening standards must be satisfied.

³² Private Fuel Storage, CLI-05-12, 61 NRC at 350 (quoting Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), ALAB-138, 6 AEC 520, 523 (1973)).

³³ See Southern Nuclear Operating Company's Answer to Proposed New Contention by Certain Former Joint Intervenors (Aug. 23, 2010) at 11-16; NRC Staff's Answer to Petition (Sept. 2, 2010) at 10-11.

³⁴ Transcript, Advisory Meeting on Reactor Safeguards (ACRS), Subcommittee on the Westinghouse AP1000 [Design Control Document] and Vogtle Units 3 and 4 [Combined License] (June 25, 2010), at 54-55 (ACRS Transcript), attached to August 2010 Pleading as Exh. 5.

³⁵ ACRS Transcript at 58.

raised in a COL *adjudicatory* proceeding if it were ever to be considered,³⁶ and argued that Mr. Ray's statements constituted "new information" supporting a new contention. The Board rejected this argument and concluded that April 21, 2010, when the Fairewinds Report was made available to the ACRS, was the correct starting point.³⁷

On appeal, Appellants reiterate their claim that "no one could have known" the ACRS chairman's opinion on the "proper forum" for considering containment coating and coating inspection issues prior to June 25, 2010.³⁸ Appellants now also characterize Mr. Gundersen's testimony before the ACRS as "generic," and argue that only after the transcript of the June 25 meeting became available did Mr. Gundersen analyze the specific ramifications of the report for the Vogtle COL application.³⁹ In other words, not until the transcript became available did Appellants' expert analyze the implications of the April 2010 Fairewinds Report — that is, his own report — for the Vogtle application. Appellants provide no justification for the delay.

Appellants characterize the process they employed in reaching their decision to file a new contention, as "the cumulative putting together [of] the pieces of the 'puzzle.'"

As they list them, the pieces of this "puzzle" are: the "preliminary analysis by Mr. Gundersen on containment flaws in the AP1000 reactors"; "the discussion of the issue with the members of the ACRS"; and "the subsequent specific analysis of the Vogtle program."

But the discussion with the ACRS

³⁶Consistent with 10 C.F.R. § 52.87, the ACRS conducted a separate review of the Vogtle COL application and the Staff's Advanced SER associated with the application, in parallel with its review of the AP1000 certified design. *See* Southern Answer at 13. *See generally* Report on the Safety Aspects of the Southern Nuclear Operating Company Combined License Application for Vogtle Electric Generating Plant, Units 3 and 4 (Jan. 24, 2011) (ADAMS Accession No. ML110170008).

³⁷ The Board did not reach the question whether the contention could have been raised even earlier (as Southern and the NRC Staff maintained, *see supra* note 33). *See* LBP-10-21, 72 NRC at 645. This question is not before us today.

³⁸ Appeal at 11.

³⁹ *Id.* at 11.

⁴⁰ *Id.* at 12.

⁴¹ *Id.* Appellants also point to NRC Information Notice 2010-12, "Containment Liner Corrosion" (June 18, 2010) (IN 2010-12) for the proposition "that even the NRC Staff had not realized the gravity of the problem and its widespread prevalence throughout the industry until some time after the filing of the new contention." Appeal at 12. Leaving aside the fact that the containment liner corrosion problems documented by the Staff in the information notice date to 2008 and 2009, the discussion in the notice does not appear, on its face, to be relevant to the AP1000 design. All three examples discussed in the information notice relate to containments where a steel liner is enclosed in a concrete shell. IN 2010-12 at 1-3. The information notice points out that "containment liner corrosion is often the result of liner plates being in contact with objects and materials that are lodged between or embedded in the containment concrete." IN 2010-12 at 4. In contrast, in the AP1000 design there is

members did not alter the technical information available to Appellants, and the record reflects no reason why the Vogtle site-specific analysis could not have been accomplished immediately after, or concurrent with, the preparation of the Fairewinds Report. In short, we see no puzzle with missing pieces, but rather a failure on the part of Appellants to analyze diligently information readily available as of April 21, 2010, to determine its relevance to the Vogtle COL application.⁴²

As the Board stated, petitioners "have an ongoing, independent responsibility to identify and interpose issues into [a] proceeding on a timely basis. . . . [Appellants] chose in April 2010 to present their . . . concerns to the ACRS without, as they could have, also seeking to introduce them into this proceeding for consideration as to whether they constituted an appropriate subject for further litigation."⁴³ We agree with the Board that as of April 21, 2010, Appellants had sufficient information to formulate their proposed contention SAFETY-2. As a result, the Board did not err in finding that Appellants' proposed contention, submitted 4 months later, was not timely, and that the first criterion of 10 C.F.R. § 2.326(a) was not satisfied.

We also agree with the Board that the second criterion of section 2.326(a)(1) — presentation of an exceptionally grave issue that should be considered even if untimely — was not satisfied.⁴⁴ On appeal, Appellants never explain how the Board's decision on this point was in error. Instead, they simply reiterate their view that the affidavit and supporting information they provided to the Board "clearly" demonstrated that the scenario raised in their proposed contention was "exceptionally grave in nature."⁴⁵ This conclusory language is not sufficient to support an appeal.⁴⁶

Moreover, our review of the record supports the Board's conclusions. In his affidavit and in the Fairewinds Report, Mr. Gundersen reviewed historical problems

no concrete shell surrounding the steel containment — in fact, the absence of a concrete shell as a "secondary" barrier in the AP1000 is one of Mr. Gundersen's concerns. *See, e.g.*, Gundersen Affidavit at 3, 14; Fairewinds Report at 1-3; ACRS Transcript at 37-39.

⁴² See Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481, 493-94 (2010) (safety evaluation report did not add a "last piece" of information, but merely compiled and organized preexisting information).

⁴³LBP-10-21, 72 NRC at 645.

⁴⁴ As the Board indicates, when a motion to reopen is untimely, the section 2.326(a)(1) "exceptionally grave" test supplants the section 2.326(a)(2) "significant safety or environmental issue" test. LBP-10-21, 72 NRC at 646 n.16 (citing *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-886, 27 NRC 74, 78 (1988)).

⁴⁵ Appeal at 12. See also id. at 15.

⁴⁶ See, e.g., Oyster Creek, CLI-08-28, 68 NRC at 675-76; Pennsylvania Power & Light Co. (Susquehanna Steam Electric Station, Units 1 and 2), ALAB-693, 16 NRC 952, 955-56 (1982) (citing Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2), ALAB-573, 10 NRC 775, 787 (1979)).

with coatings applied to containments at currently operating reactors, critiqued the AP1000 containment design for, in his view, being a single barrier design, and questioned the adequacy of American Society of Mechanical Engineers (ASME) coating inspection programs. Neither Mr. Gundersen nor Appellants explained how historical problems with coating applications necessarily translate to coating or coating inspection problems for the Vogtle AP1000 containment. As the Board found, "the degree to which the information regarding current containment coating and inspection issues utilized in support of the [Fairewinds R]eport has any applicability to the AP1000 containment is far from clear, and certainly not compelling enough for us to consider this a matter that is 'exceptionally grave' within the meaning of section 2.326(a)(1)."⁴⁷

Finally, we agree with the Board that the third reopening criterion — which requires a showing that there would have been a materially different result if the "new" information had been considered initially — also was not satisfied. Again, Appellants do not explain how the Board's decision regarding this criterion was in error. As the Board indicates, the information provided was not of a caliber sufficient to avoid a summary disposition motion.⁴⁸ Nothing in the Gundersen Affidavit or the Fairewinds Report links Appellants' concerns about the AP1000 design to the particulars of the Vogtle units in a way that merits resolution in this adjudicatory proceeding.

2. Criteria for Nontimely Filings

In addition to the three criteria listed in section 2.326(a) and the pleading specificity requirements in section 2.326(b), our reopening rule explicitly calls into play our rule governing nontimely filings. When a petitioner proposes a new contention after the record has closed, the petitioner must "address the reopening standards contemporaneously with a late-filed intervention petition, which must satisfy the standards for both contention admissibility and late filing." Section 2.326(d) provides that "[a] motion to reopen which relates to a contention not previously in controversy among the parties must also satisfy the requirements for nontimely contentions in § 2.309(c)." Section 2.309(c), in turn, requires a balancing of eight factors. 51

⁴⁷LBP-10-21, 72 NRC at 646.

⁴⁸ *Id. See Oyster Creek*, CLI-08-28, 68 NRC at 674 (bare assertions and speculation are insufficient to support the heavy burden placed on the proponent of a motion to reopen to demonstrate that the motion should be granted).

⁴⁹ Millstone, CLI-09-5, 69 NRC at 124.

⁵⁰ 10 C.F.R. § 2.326(d).

⁵¹ 10 C.F.R. § 2.309(c)(1)(i)-(viii).

Five of these factors are at issue here.⁵² The first of these is "good cause, if any, for the failure to file on time."⁵³ Next are the availability of other means of protecting the requestor's/petitioner's interest,⁵⁴ the extent to which other parties will represent the requestor's/petitioner's interests,⁵⁵ and "the extent to which the requestor's/petitioner's participation will broaden the issues or delay the proceeding."⁵⁶ The final factor at issue here is "the extent to which the requestor's/petitioner's participation may reasonably be expected to assist in developing a sound record."⁵⁷

These factors must be addressed with specificity.⁵⁸ Appellants' August 2010 Pleading did not address the requirements of section 2.309(c) and thus failed to satisfy its requirements.⁵⁹ Moreover, on appeal Appellants fail to show that the Board's analysis of section 2.309(c) was in error or constituted an abuse of discretion.

Of the eight factors, the Board accorded the greatest weight to the first factor — good cause — consistent with our case law.⁶⁰ The Board found its "reopening determination regarding . . . untimeliness . . . to be dispositive of the good cause showing here, particularly given that the delay in filing, albeit only 3 months, comes in the latter portion of this proceeding."⁶¹ As a result, the "good cause" factor weighed against allowing the contention to be admitted. The Board found some support for Appellants' pleading in factors (v), (vi), and (vii), in that, assuming they offered an admissible contention, there are no other means to protect Appellants' interests, Mr. Gunderson appears to be able to assist in developing a sound record, and there are no other parties to represent Appellants' interests.⁶² But the Board found that factor (viii) weighed against admission because the proposed contention would "clearly broaden[] the issues

 $^{^{52}}$ In its decision, the Board treated its decision to grant standing to the Appellants as resolving factors (ii), (iii), and (iv) of section 2.309(c)(1) in Appellants' favor because these factors track the standing requirements in section 2.309(d)(1)(ii), (iii), and (iv). LBP-10-21,72 NRC at 648. This determination is not at issue on appeal.

⁵³ 10 C.F.R. § 2.309(c)(1)(i).

⁵⁴ 10 C.F.R. § 2.309(c)(1)(v).

⁵⁵ 10 C.F.R. § 2.309(c)(1)(vi).

⁵⁶ 10 C.F.R. § 2.309(c)(1)(vii).

⁵⁷ 10 C.F.R. § 2.309(c)(1)(viii).

⁵⁸ 10 C.F.R. § 2.309(c)(2).

⁵⁹ As the Board pointed out, Appellants' failure to specifically address the section 2.309(c)(1) factors is a potentially fatal omission. LBP-10-21, 72 NRC at 649 n.18 (citing *Texas Utilities Electric Co*. (Comanche Peak Steam Electric Station, Unit 2), CLI-93-11, 37 NRC 251, 255 (1993)).

⁶⁰ See, e.g., Tennessee Valley Authority (Watts Bar Nuclear Plant, Unit 2), CLI-10-12, 71 NRC 319, 322-23 (2010).

⁶¹ LBP-10-21, 72 NRC at 648.

⁶² *Id.* at 649.

in the contested portion of this proceeding, which heretofore was closed, as well as potentially delay[] the proceeding while that matter is fully litigated."⁶³ Ultimately, the Board concluded that, on balance, application of the section 2.309(c)(1) factors did not support admission of the proposed contention.⁶⁴

Appellants argue that they had good cause for their delay in submitting the proposed contention based upon their belief that their pleading was a timely response to the July 13 availability of the ACRS transcript. As discussed above, we reject Appellants' attempt to use the ACRS meeting, or its transcript, as an artificial bridge to extend the time in which a contention could be filed. We find no good cause justifying the nontimely filing of Appellants' contention. Moreover, the introduction of a new contention, well after the contested proceeding closed, would broaden the issues and delay the proceeding. We find no error in the Board's balancing of the section 2.309(c)(1) factors or in the Board's decision to deny admission of the nontimely contention.⁶⁵

3. Contention Admissibility Standards

In addition to considering the filing as a motion to reopen and as a late petition, the Board also examined whether Appellants proffered an admissible contention under 10 C.F.R. § 2.309(f)(1). Once again, Appellants' August 2010 Pleading did not address these requirements. Our contention admissibility standards "are deliberately strict, and we will reject any contention that does not satisfy [our] requirements." Section 2.309(f)(1) requires a request for hearing or petition for leave to intervene to explain proposed contentions with particularity. 67

As the Board points out, "a contention that attacks a Commission rule, or [that] seeks to litigate a matter that is, or clearly is about to become, the subject

⁶³ *Id*.

⁶⁴ *Id*.

⁶⁵ Appellants' August 2010 Pleading addressed the standards for admitting a new or amended contention, contained in section 2.309(f)(2) of our rules. In its decision, the Board suggests that this section may not apply here. We agree that it does not. At the time of Appellants' August 2010 Pleading, the contested portion of the proceeding was closed. There was, therefore, no proceeding in which to file a new or amended contention. Thus, Appellants' pleading was in reality a new intervention petition subject to 10 C.F.R. §§ 2.326, 2.309(c)(1), and 2.309(f)(1). The Board, "for the sake of completeness," assessed whether Appellants' pleading complied with the requirements of section 2.309(f)(2). The Board concluded that Appellants' failure to proffer their new contention in a timely manner after the Fairewinds Report was completed and provided to the ACRS meant that they did not satisfy section 2.309(f)(2)(iii). LBP-10-21, 72 NRC at 650. We agree.

⁶⁶ USEC Inc. (American Centrifuge Plant), CLI-06-9, 63 NRC 433, 437 (2006).

⁶⁷ See generally 10 C.F.R. § 2.309(f)(1)(i)-(vi).

of a rulemaking, is inadmissible."⁶⁸ Our rules, in 10 C.F.R. § 2.335, explicitly provide that "no rule or regulation of the Commission, or any provision thereof, concerning the licensing of production and utilization facilities, source material, special nuclear material, or byproduct material, is subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding."⁶⁹

With the requirements of section 2.309(f)(1) and the prohibition contained in section 2.335 in mind, the Board analyzed contention SAFETY-2, including the information presented in the Fairewinds Report and the Gundersen Affidavit. The Board concluded that SAFETY-2 was "not admissible in this proceeding because it improperly seeks to raise a challenge to aspects of the AP1000 standard design and NRC regulations regarding ASME inspections." Appellants point to no specific error in the Board's decision. Instead, they complain generally that the Board "ignore[d] the reasoned analysis in the Gundersen Affidavit" and rehash Mr. Gundersen's concerns. These conclusory statements are insufficient to support an appeal. We find no error in the Board's conclusions.

Fundamentally, as the Board found, Appellants raise matters outside the scope of this COL proceeding. Mr. Gundersen's concerns about the AP1000 containment directly implicate its physical design — and the physical design of the containment fits squarely within the AP1000 design certification rule. According to Mr. Gundersen, the AP1000's containment design, which consists of a thick steel vessel, is comparable to a single-hulled oil tanker rather than a double-hulled oil tanker. Mr. Gundersen argued that, if the steel containment vessel were cracked, radioactive gases would vent directly into the atmosphere should the plant experience a loss of coolant accident. As the Board pointed out, the details, including safety-related benefits, of the AP1000's containment vessel and passive containment cooling system are discussed extensively in the AP1000 design control document (DCD), and these design features have been part of the design during the ongoing AP1000 rulemaking since at least DCD revision 15, which the Commission adopted as a certified design. As a result, the Board reasonably concluded that "challenging these features of the AP1000

⁶⁸LBP-10-21, 72 NRC at 651 (citing 10 C.F.R. § 2.335(a); *Potomac Electric Power Co.* (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79, 85, 89 (1974)).

^{69 10} C.F.R. § 2.335.

⁷⁰LBP-10-21, 72 NRC at 658.

⁷¹ Appeal at 13.

⁷²Gundersen Affidavit at 6, ¶ 30. *See generally* AP1000 Rev. 17 DCD, Tier 2 Material, at 3.1-7 (ADAMS Accession No. ML083230298).

⁷³ Gundersen Affidavit at 6, ¶ 30.

⁷⁴LBP-10-21, 72 NRC at 654 (citing Westinghouse Electric Co., LLC, AP1000 Design Control Document, Tier 2 Material, at 1.2-15 (rev. 17, Sept. 22, 2008) (ADAMS Accession No. ML083230208), Tier 1 Material at 2.2.2-2 (ADAMS Accession No. ML083230175)), and 72 NRC at 654 n.23. *See* 10 C.F.R. Part 52, App. D, "Design Certification Rule for the AP1000 Design."

standard design is a matter for a design certification rulemaking, . . . not a [COL application] proceeding."⁷⁵ We find no error in the Board's conclusion.

We also find no error in the Board's assessment of Appellants' liner coating and coating inspection argument. Mr. Gundersen charged that ASME inspection techniques are an inadequate methodology for monitoring containment integrity. He asserted that the common element, historically, in liner and containment failures, has been the failure of ASME inspection techniques to detect problems before a crack or hole has become a through-wall failure. He asserted further that protective coatings on containment systems have a history of failure despite the industry's belief that such coatings are a reliable barrier. The Board found that this aspect of Appellants' contention also was an improper challenge to our regulations.

Our regulations incorporate by reference ASME inspection requirements. As the Board noted, ⁷⁸ 10 C.F.R. § 52.79(a)(11) requires a COL application to include "[a] description of the program(s), and their implementation, necessary to ensure that the systems and components meet the requirements of the ASME Boiler and Pressure Vessel Code and the ASME Code of Operation and Maintenance of Nuclear Power Plants in accordance with [section] 50.55a."⁷⁹ As the Board also noted, ⁸⁰ sections 50.55a(b) and 50.55a(g)(4) (on inservice inspections) incorporate by reference the requirements of section XI of the ASME Boiler and Pressure Vessel Code. Finally, "the AP1000 DCD expressly requires that the containment vessel be subject to inservice inspections in accordance with ASME Code, section XI, subsection IWE."⁸¹

On appeal, Appellants maintain that Mr. Gundersen's affidavit raises issues specific to the Vogtle application: that there are problems with the field application of protective coatings; that "the contractor for the Vogtle Plant has a record of ignoring problems with field application of protective coatings"; that visual inspections at Vogtle will be insufficient; that the COL application "does not state whether Vogtle will seek exemptions from the [ASME] for limited exams in hard

⁷⁵LBP-10-21, 72 NRC at 654 (citing 10 C.F.R. §§ 52.63(a)(1) and 52.63(a)(5), and *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-08-15, 68 NRC 1, 4 (2008)). We recently approved the proposed amendment to 10 C.F.R. Part 52, App. D for publication in the *Federal Register. See* AP1000 Design Certification Amendment, Proposed Rule, 76 Fed. Reg. 10,269 (Feb. 24, 2011).

⁷⁶ Gundersen Affidavit at 5, ¶ 27.

⁷⁷ Id. at 6, ¶ 28.

⁷⁸LBP-10-21, 72 NRC at 656.

⁷⁹ 10 C.F.R. § 52.79(a)(11).

⁸⁰ LBP-10-21, 72 NRC at 656.

⁸¹ Id. (citing AP1000 Rev. 17 Design Control Document, Tier 2 Material, at 3.2-12 (ADAMS Accession No. ML083230299)).

to access areas"; and that the Vogtle application's interpretation of the ASME code requirements is a problem.⁸²

With respect to the first two of these complaints, we find no evidence that prior experience with field application of protective coatings or prior experience with a particular contractor indicates that future work to be performed at the Vogtle site will be unsatisfactory. To the extent that Appellants appear to assert that there will be future misdeeds, they fail to show a nexus between their generalized complaints, the details of the COL application, and prospective coating application or contractor behavior — that is, management character or integrity — at the Vogtle site. Without such a link, Appellants have raised no viable issue.⁸³

The remaining complaints simply reiterate Appellants' dissatisfaction with our rules and with the ASME inspection programs required under our rules. As the Board's explanation makes clear, the ASME inspection requirements are integral to our regulations. A Consequently, we affirm the Board's conclusion that SAFETY-2's challenge to the adequacy of ASME inspection requirements is an impermissible challenge to our regulations.

* * * *

While the Staff's appeal was pending, we received a series of substantively identical petitions, filed in multiple dockets, which requested, 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.

⁸² Appeal at 13.

⁸³ See, e.g., Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 365 (2001) (for management integrity and character to be a viable contention, there must be a direct and obvious relationship between these issues and the challenged licensing action).

⁸⁴LBP-10-21, 72 NRC at 656 (citing 10 C.F.R. §§ 52.79(a)(11), 50.55a, 50.55a(b), and 50.55a(g)(4), and AP1000 Rev. 17 Design Control Document, Tier 2 Material, at 3.2-12 (ADAMS Accession No. ML083230299)).

⁸⁵ Appellants also argue that the Board should have admitted their proposed contention by asserting that: "the [Board] found in essence the proposed contention had merit as it pointed directly to flaws in the [COL application] concerning the Vogtle inspection program and monitoring of maintenance." Appeal at 7. But the Board made no such finding. Rather, the Board simply ruminates on whether it ever would be possible to formulate a contention regarding a COL application's description of an inspection plan, without challenging a certified design or other NRC regulation. The Staff believed it would be possible, although Appellants in this instance did not formulate a viable contention. Southern maintained that inspection plans are not subject to adjudication, but only to operational oversight. The Board expressed disagreement with Southern's opinion, which it considered inconsistent with AEA § 189(a) and with certain regulatory requirements. LBP-10-21, 72 NRC at 657 n.28. However, the Board's discussion nowhere implies that Appellants' proposed contention had substantive merit.

Two of these petitions were served in this proceeding (even though the proceeding had closed). 86

We granted the requests for relief in part, and denied them in part. In particular, we declined to suspend this — or any other — adjudication, or any final licensing decisions, finding no imminent risk to public health and safety, or to common defense and security.⁸⁷ The agency continues to evaluate the implications of the events in Japan on U.S. facilities, as well as to consider actions that may be taken as a result of lessons learned in light of those events. Particularly with respect to new reactor licenses, we observed that "we have the authority to ensure that certified designs and combined licenses include appropriate Commission-directed changes before operation."⁸⁸

III. CONCLUSION

For the reasons detailed above, the Board's decision is *affirmed*. IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 27th day of September 2011.

⁸⁶ One petition was filed jointly by the Blue Ridge Environmental Defense League (BREDL), Center for a Sustainable Coast, Georgia Women's Action for New Directions, Savannah Riverkeeper, Southern Alliance for Clean Energy (joint petitioners); the other was filed by BREDL alone. 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) (amendment and errata, together with a clean petition incorporating those changes, filed Apr. 18, 2011) (joint petitioners); 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. 18, 2011) (BREDL). Both the joint petitioners and BREDL submitted the 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).

⁸⁷ See generally Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141 (2011).

⁸⁸ *Id.* at 163.

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

Docket Nos. 52-034-COL 52-035-COL

LUMINANT GENERATION COMPANY, LLC (Comanche Peak Nuclear Power Plant, Units 3 and 4)

September 27, 2011 (Re-served October 4, 2011)

REVIEW, DISCRETIONARY

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; (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 that we may deem to be in the public interest.

ADMISSIBILITY OF CONTENTIONS: STANDARD OF REVIEW

We defer to licensing board rulings on contention admissibility absent error of law or abuse of discretion.

LICENSE CONDITIONS

Section 50.54(hh)(2) sets forth the mitigative strategies requirements for licensees. It provides that: each 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: (i) fire fighting; (ii) operations to mitigate fuel damage; and (iii) actions to minimize radiological release.

COMBINED LICENSE APPLICATION

Section 52.80(d) applies to combined license (COL) applicants, requiring each COL application to include a "description and plans for implementation of the guidance and strategies" required by section 50.54(hh)(2).

RULES OF PRACTICE: ADMISSIBILITY OF CONTENTIONS

At the contention admissibility stage, the burden is on intervenors to demonstrate a deficiency in the application.

RULES OF PRACTICE: ADMISSIBILITY OF CONTENTIONS

The contention standard does not contemplate a determination of the merits of a proffered contention.

RULES OF PRACTICE: ADMISSIBILITY OF CONTENTIONS

Our rules require intervenors to assert a sufficiently specific challenge that demonstrates that further inquiry is warranted.

REVIEW, DISCRETIONARY: SCOPE OF REVIEW

For the purposes of ruling on the petition, we must look to the adjudicatory record before us.

MEMORANDUM AND ORDER

Today we resolve Intervenors' petition for review of an Atomic Safety and

Licensing Board decision that dismissed certain new contentions. For the reasons set forth below, we deny the petition for review, and affirm the Board's decision.

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 mitigative measure is intended to address (the "expectation/safety function" column), and the second column describes Luminant's plans to address it (the

¹Intervenors' Petition for Review Pursuant to 10 C.F.R. § 2.341 (Mar. 11, 2011) (Petition for Review) (nonpublic). 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 nonpublicly 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 (ADAMS Accession No. ML102160598) (package).

²Luminant 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 (ADAMS Accession No. ML091880970) (nonpublic) (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.

"commitment/strategy" column). Intervenors obtained access to the report, which is not publicly available because it contains sensitive unclassified nonsafeguards 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. 10

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 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

⁷ See Mitigative Strategies Report Transmittal Letter, unnumbered attachment 3, Mitigative Strategies Table, at 1-15 (ADAMS Accession No. NONML091880970) (nonpublic) (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 nonpublic 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) (nonpublic); 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) (nonpublic) (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 (2010) (slip op.) (nonpublic). Although a redacted version of LBP-10-5 has since been published, *see* LBP-10-5, 71 NRC 329 (2010), we cite the nonpublic slip opinion for references to the portions of the Board's decision that were redacted in the published version.

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

¹³LBP-11-4, 73 NRC 91, 128 (2011).

¹⁴ See 10 C.F.R. § 2.341(b).

¹⁵ 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) (nonpublic) (Luminant Answer); NRC Staff Answer to Intervenors' Petition for Review (Mar. 21, 2011) (nonpublic) (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) (nonpublic) (Intervenors' Reply to Luminant); Intervenors' (Continued)

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;
- (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) [t]he conduct of the proceeding involved a prejudicial procedural error; or
 - (v) [a]ny 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 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

Reply to Staff's Answer to Petition for Review (Mar. 29, 2011) (nonpublic) (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 filing, 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) (nonpublic). Given that the other parties do not object, and given that no party was harmed by the brief delay, we grant Intervenors' motion.

¹⁶ 10 C.F.R. § 2.341(b)(4)(i)-(v).

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

¹⁸ See Progress Energy Florida, Inc. (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).

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. 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. 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).

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:

- (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

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.

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) (ADAMS Accession No. 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 (ADAMS (Continued))

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 Luminant's Mitigative Strategies Report, and are labeled "MS" to distinguish the new contentions from the contentions in their initial petition. 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

Accession No. ML092120157) (nonpublic). 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 (ADAMS Accession No. 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 A. Bergman, Director, Division of Engineering, Office of New Reactors, U.S. NRC (May 1, 2009) (ADAMS Accession No. ML091310577) (nonpublic) (transmitting a revised version of Revision 2 that predated 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 (nonpublic).

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.

emergency responders and the public and other effects such as failure of structural steel. 28

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.³¹ Intervenors argue that the results of an aircraft impact are quantifiable and "known sufficiently to tailor [an appropriate] response strategy."³² 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

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

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 (ADAMS Accession No. ML091490723) (NEI 07-13, Revision 7)).

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 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.

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 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."41 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 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

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.

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).

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

⁴³LBP-10-5 (slip op. at 32-33).

⁴⁴ *Id.* (slip op. at 33).

terrorist attacks.⁴⁵ 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."⁴⁶ 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.'"⁴⁷ Ultimately, the Board reasoned that Intervenors were attempting to impose an additional requirement that is not present in the Power Reactor Security Rule, 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

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 contem-

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)).

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.

plated 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."55 Although we considered comments suggesting that the rule be narrowed to certain types of events.⁵⁶ 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,"57 we "decided that the more general 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 in our regulations. This proposition constitutes an improper collateral attack upon our regulations; the Board therefore correctly rejected Intervenors' challenge.61

At the contention admissibility stage, the burden is on Intervenors to demon-

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 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.

⁶⁰Power 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.

strate 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 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]

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 Generating 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 (nonpublic); 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.

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).

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 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 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

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 (nonpublic). 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.

⁷² Mitigative Strategies Table at 11.

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 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

⁷³ 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 (nonpublic), 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 (ADAMS Accession No. ML092890400) (nonpublic). 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.

⁷⁴LBP-10-5 (slip op. at 48).

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

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).

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." 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." Intervenors reason that the effectiveness of the mitigative strategies depends on the ability of responders to perform them without receiving high radiation doses. 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]."

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. A Our rules require intervenors to assert a sufficiently specific challenge that demonstrates that further inquiry is warranted. Here, Intervenors have not challenged the adequacy of the dose projection models provided in Luminant's application.

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.

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.

⁸⁶ 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) (ADAMS Accession No. 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) (ADAMS Accession No. ML100081186) (public).

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."⁸⁷ 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. ⁸⁸ 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. ⁸⁹ Moreover, we disagree with Intervenors' assertion that by rejecting the contention, the majority "diminished the significance" of dose projection models. 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. Intervenors would be required to assert, with

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").

⁹⁰ See generally Mitigative Strategies Contentions at 15-17.

⁹¹ Petition for Review at 6-7.

particularity and support, that there are misrepresentations or other inaccuracies in the application.⁹² 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. 94 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. 95 At the current time, the agency continues to gather and examine all available information regarding the events at the Fukushima Daiichi Nuclear 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. ⁹⁶ Our decision includes a brief summary of the Japan events as we currently understand them, as well as a recitation of the agency's

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 (ADAMS Accession No. ML103060048) (nonpublic)).

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) (ADAMS Accession No. ML11186A950) (package)).

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) (ADAMS Accession No. ML111080855); Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend

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.⁹⁷

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 nonpublic docket for this proceeding. We *direct* Luminant to review the nonpublic version of this decision, and, within 7 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

ANNETTE L. VIETTI-COOK Secretary of the Commission

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

all Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 20, 2011) (ADAMS Accession No. ML111101075).

⁹⁷ See CLI-11-5, 74 NRC 141, 170 (2011); 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).

⁹⁸ See supra note 8 and accompanying text.

⁹⁹On 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.

¹⁰⁰Commissioner Magwood did not participate in this matter.

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

Docket Nos. 52-029-COL 52-030-COL

PROGRESS ENERGY FLORIDA, INC. (Levy County Nuclear Power Plant, Units 1 and 2)

September 27, 2011

SUMMARY DISPOSITION

APPEALS, INTERLOCUTORY

A denial of summary disposition does not constitute a "full or partial initial decision" warranting immediate Commission review. *See Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-08-2, 67 NRC 31, 34 (2008).

APPEALS, INTERLOCUTORY

Appellate review of interlocutory Licensing Board orders is disfavored, and will be undertaken as a discretionary matter only in extraordinary circumstances. *See Entergy Nuclear Operations, Inc.* (Indian Point, Units 2 and 3), CLI-09-6, 69 NRC 128, 133-37 (2009).

MEMORANDUM AND ORDER

The NRC Staff has appealed the Atomic Safety and Licensing Board's order

denying a motion for summary disposition filed by the applicant, Progress Energy Florida, Inc. (Progress), in this combined license (COL) proceeding. As discussed below, we deny review because the order is not ripe for review under our rules of practice.

I. BACKGROUND

The proceeding involves Progress's application to construct and operate a 2000-megawatt facility in Levy County, Florida, consisting of two units of the Westinghouse AP1000 design. Three organizations, the Green Party of Florida, the Nuclear Information and Resource Service (NIRS), and the Ecology Party of Florida (collectively, Joint Intervenors), filed a timely petition to intervene in the proceeding, and were admitted as parties.

There are currently two contentions pending before the Board. The contention at issue here, Contention 8A, concerns the adequacy of Progress's plans for handling and long-term storage of low-level radioactive waste (LLRW). Joint Intervenors' concerns arise from the closure of the Barnwell, South Carolina, LLRW disposal facility to waste generated outside the Atlantic Compact, and the apparent unavailability of LLRW disposal for waste generated at the proposed Florida facility.²

Initially, the Board admitted two contentions on LLRW: Contention 7, which concerned the environmental impacts of LLRW storage, and Contention 8, which challenged the safety aspects of the same processes.³ In response to a Staff Request for Additional Information (RAI), Progress proposed to amend the

¹ See LBP-10-20, 72 NRC 571 (2010); Memorandum and Order (Denying Motion for Reconsideration of LBP-10-20) (Dec. 22, 2010) (Order on Reconsideration) (unpublished).

² See generally NRC Regulatory Issue Summary 2008-32: Interim Low Level Radioactive Waste Storage at Reactor Sites (Dec. 30, 2008) (ADAMS Accession No. ML082190768) (discussing the Barnwell closure, and consolidating relevant information on interim long-term storage of LLRW); NRC Regulatory Issue Summary 2011-09: Available Resources Associated with Extended Storage of Low-Level Radioactive Waste (Aug. 16, 2011) (ADAMS Accession No. ML111520042) (informing addressees, among other things, of a consolidated list of available resources that will assist with the extended storage of LLRW). The other pending contention, concerning environmental impacts to ground and surface water, is not before us today.

³ See LBP-09-10, 70 NRC 51 (2009). Progress appealed this decision. We affirmed the admission of the LLRW contentions, although further narrowed. See CLI-10-2, 71 NRC 27, 47-48 (2010) (excluding challenges to storage of Greater-than-Class-C waste). After the Staff issued its Draft Environmental Impact Statement (DEIS), the Board dismissed Contention 7 as moot, and subsequently rejected a proposed new contention on the DEIS. See Memorandum and Order (Granting Motion for Summary Disposition of Contention 7 as Moot) (Sept. 8, 2010) (unpublished); Memorandum and Order (Denying Contention 7A) (Mar. 16, 2011) (unpublished).

relevant sections of its application, stating that it would add more storage, if necessary, consistent with relevant NRC guidance.⁴

Progress and the Joint Intervenors subsequently sought dismissal of Contention 8, based on a settlement of the contention; the Board approved the settlement, and dismissed Contention 8.5 Joint Intervenors then filed a new contention, Contention 8A, challenging the adequacy of Progress's revised plans for onsite LLRW management and storage.⁶ The Board admitted Contention 8A, ⁷ and Progress filed a motion for summary disposition almost immediately.⁸

A majority of the Board (with Judge Baratta dissenting) denied Progress's motion for summary disposition of Contention 8A. At bottom, the majority agreed with Joint Intervenors that the information provided in Progress's RAI response did not set forth an adequate plan to satisfy the relevant NRC regulations. The Board majority concluded that, as a matter of law, Progress's revised plans to manage and store LLRW onsite did not satisfy 10 C.F.R. § 52.79(a)(3), because Progress did not provide "a level of information sufficient to enable the Commission to reach a final conclusion," prior to issuance of the combined license, to resolve whether the application would comply with applicable provisions of 10 C.F.R. Part 20.9 The Board further opined that Progress "may wish to revise and resubmit" this portion of its COL application. ¹⁰ The same Board majority denied Progress's subsequent motion for reconsideration. ¹¹

⁴Levy Nuclear Plant Units 1 and 2, Response to NRC Request for Additional Information Letter No. 073 Related to SRP Section 11.4 for the Combined License Application, dated November 4, 2009 (Dec. 4, 2009) at 2-5 (amending sections 11.4-1 and 11.4-2 of its Final Safety Analysis Report (FSAR)) (RAI Response) (ADAMS Accession No. ML093440353). See generally NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports," ch. 11.4, Solid Waste Management System (Rev. 3, 2007), and NUREG-1793, "Final Safety Evaluation Report Related to Certification of the AP1000 Standard Design," ch. 11, Radioactive Waste Management (2004). Progress also stated that it would implement a waste minimization plan that would consider various strategies for reducing waste. RAI Response at 2.

⁵ See Joint Motion for Approval of Settlement and Dismissal of Contention 8 (Apr. 14, 2010) (stating that Progress provided information curing the omission in its application, and that Joint Intervenors agreed Contention 8 should be dismissed); Order (Approving Settlement and Dismissal of Contention 8) (Apr. 21, 2010) (unpublished).

⁶ Motion by Joint Intervenors to Amend Contention 8 on So-Called "Low-Level" Radioactive Waste and Safety Issues Associated with Extended On-Site Storage (May 14, 2010) at 3.

⁷ Memorandum and Order (Ruling on Joint Intervenors' Motion to File and Admit New Contention 8A) (Aug. 9, 2010) (unpublished).

⁸ Motion for Summary Disposition of Contention 8A (Aug. 27, 2010).

⁹LBP-10-20, 72 NRC at 606.

¹⁰ *Id*.

¹¹ See Order on Reconsideration. Judge Baratta dissented from the majority's ruling on both the summary disposition motion and the motion for reconsideration. He concluded that Progress had (Continued)

The NRC Staff now seeks review of LBP-10-20, arguing that the Board's decision should be reversed, and that Contention 8A should be resolved in Progress's favor. As discussed below, we deny review of this interlocutory Board decision. In any event, now pending before the Board is a motion for summary disposition that has the potential to resolve the contention.

II. DISCUSSION

The Staff argues that the Board's order denying summary disposition is reviewable immediately, even though it was not styled a "partial initial decision" and is not otherwise a final decision under traditional Commission jurisprudence.¹² Progress joins the Staff in urging us to grant review.¹³

The Staff argues that the decision is ripe for appellate review because it is a *de facto* partial initial decision, in that the Board effectively has resolved the contention in the Joint Intervenors' favor. ¹⁴ The Staff points to the Board majority's finding that no material fact remains in dispute. ¹⁵ Alternatively, the Staff argues that because there are no remaining safety contentions, the Board majority's ruling qualifies for immediate appellate review because it resolves a "major segment of the case." ¹⁶ The Staff cites a longstanding practice initiated by our (now defunct) Appeal Board to allow petitions for review of Board rulings that dispose of a "major segment of the case." ¹⁷

provided a sufficient level of information in its application relative to LLRW storage, and therefore was entitled to summary disposition. LBP-10-20, 72 NRC at 608-15. Judge Baratta considered the regulatory scheme as a whole, and determined that, given the simple statement in section 52.79(a)(3) that a COL applicant provide information necessary to provide "the *means* for controlling and limiting radioactive effluents . . . ," logically requires less detail than is required under section 52.79(a)(4). In contrast, that section specifies more detailed design information that must be included with respect to the certain elements of the proposed facility. Although Judge Baratta agreed with the decision to deny reconsideration, he reiterated his argument that the Board's original ruling was in error, and added that, in his view, the ruling is ripe for our review. Order on Reconsideration at unnumbered page 7 (Additional Comments of Judge Anthony J. Baratta).

¹²NRC Staff Petition for Review of the Licensing Board's Decision in LBP-10-20 Denying the Applicant's Motion for Summary Disposition (Dec. 10, 2010) at 5-6 (Staff Petition).

¹³ Progress Energy Florida, Inc.'s Brief in Support of NRC Staff's Petition for Review of LBP-10-20 (Dec. 20, 2010) (Progress Brief). Joint Intervenors did not file an answer. *See* Joint Intervenors Note to All (Dec. 24, 2010).

¹⁴LBP-10-20, 72 NRC at 586 ("[W]e rule that there is no genuine issue of material fact in dispute and that, as a matter of law, PEF's LLRW plan does *not* satisfy 10 C.F.R. § 52.79.").

¹⁵ Staff Petition at 4 (citing LBP-10-20, 72 NRC at 586-90).

¹⁶ Id. at 6.

¹⁷ See, e.g., Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-731, (Continued)

The Board did indeed indicate that any remaining factual disputes were not "material" to its finding that the COL application does not satisfy 10 C.F.R. § 52.79(a).¹⁸ In denying Progress's reconsideration motion, however, the Board majority expressly stated that it intended its decision to be a denial of summary disposition, not an "initial decision." The majority's stated concern was that "[s]uch a label [could] serve as a device to delay [the] proceeding, hold it in abeyance, or otherwise terminate jurisdiction" over other matters pending in the adjudication.¹⁹

Our rules of practice allow petitions for review after a full or partial initial decision, both of which are considered "final" decisions.²⁰ We held in the *Pilgrim* license renewal case that a partial initial decision is one "rendered following an evidentiary hearing on one or more contentions, but that does not dispose of the entire matter."²¹ On that basis, we declined in *Pilgrim* to review a grant of summary disposition of a safety contention (in a proceeding with other safety contentions pending), finding that the Board's decision in that case did not fall within the exception for partial initial decisions.

Consistent with our ruling in *Pilgrim*, regardless of how it is titled, the Board's decision here does not qualify as a "partial initial decision." A denial of summary disposition generally demonstrates that there remains an unresolved controversy — here, the controversy surrounds the extent, and type, of information required in a COL application regarding the question of long-term, onsite LLRW storage sufficient to permit the agency to make the requisite findings under 10 C.F.R. § 52.97, based on the information provided in the application pursuant to 10 C.F.R. § 52.79(a)(3).

It is also for this reason that the Board's decision does not resolve a "major segment of the case." The Board found in Joint Intervenors' favor as to Contention 8A, but the clear implication of the Board decision is that the matter is not settled. The Board did not terminate the contested proceeding, as might be expected

¹⁷ NRC 1073, 1074-75 (1983) (quoting *Toledo Edison Co.* (Davis-Besse Nuclear Power Station), ALAB-300, 2 NRC 752, 758 (1975)).

¹⁸LBP-10-20, 72 NRC at 589. *See also id.* at 606 (finding that, even if Progress is correct, as a legal matter, that it need not include any more specifics in its long-term plan for LLRW, then the question whether Progress could implement its long-term plan before running out of storage space becomes a material issue, also precluding summary disposition in Progress's favor).

¹⁹ Order on Reconsideration at 5.

²⁰ See generally 10 C.F.R. § 2.341(b)(1). See also Final Rule: "Procedures for Direct Commission Review of Decisions of Presiding Officers," 56 Fed. Reg. 29,403 (July 27, 1991). This rule codified our practice of considering a Board order appealable where it "disposes of . . . a major segment of the case or terminates a party's right to participate." Seabrook, ALAB-731, 17 NRC at 1074-75 (internal quotation omitted)

²¹ Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-08-2, 67 NRC 31, 34 (2008).

if the ruling were dispositive of the case; indeed, as noted above, the Board itself suggested that Progress submit a further revision to its application.²² Such a revision would be subject to challenge in this proceeding, and to further consideration by the Board. We thus conclude that the Board's decision is interlocutory.

The Staff does not argue that interlocutory appellate review is merited under our usual standards for such review; we find, in any event, that the denial of summary disposition in this case does not satisfy our interlocutory review standards. Appellate review of interlocutory Licensing Board orders is disfavored, and will be undertaken as a discretionary matter only in extraordinary circumstances.²³ The denial of summary disposition of Contention 8A neither threatens the Staff with "immediate and serious irreparable impact which . . . could not be alleviated through a petition for review of the presiding officer's final decision," nor affects the basic structure of the proceeding in a "pervasive or unusual manner."²⁴

It is clear that matters associated with Contention 8A are still in flux. In the time since the Staff filed its petition for review, Progress voluntarily supplemented its response to the Staff's RAI related to long-term storage of LLRW,²⁵ and now has filed a fresh motion for summary disposition of Contention 8A.²⁶ The Board's

²²LBP-10-20, 72 NRC at 606.

²³ Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), CLI-09-6, 69 NRC 128, 133-37 (2009).

²⁴ See 10 C.F.R. § 2.341(f)(2)(i)-(ii). Ordinarily, the principal adverse effect suffered by the refusal of a Board to grant summary disposition is that the moving party may incur the labor and expense of pursuing litigation that it sought to curtail. We have long held that this type of burden does not constitute irreparable harm. See Connecticut Yankee Atomic Power Co. (Haddam Neck Plant), CLI-01-25, 54 NRC 368, 373-74 (2001) (admission of contention); Sequoyah Fuels Corp. and General Atomics (Gore, Oklahoma Site), CLI-94-11, 40 NRC 55, 61-62 (1994) (denial of motion for summary disposition or dismissal). Similarly, the expansion of issues for litigation that results from such a Board action does not have a "pervasive and unusual" effect on the litigation. See Haddam Neck, 54 NRC at 374; Sequoyah Fuels, 40 NRC at 62-63.

²⁵ The supplemental response, which is to be incorporated in an amendment to the COL application, provides more detail about how Progress would add storage if no offsite disposal or storage options were available by the time the proposed facility begins operations. *See* Letter from J. Elnitsky, Progress Energy, to NRC Document Control Desk, "Levy Nuclear Plant Units 1 and 2, Voluntary Supplemental Response to Request for Additional Information Letter No. 073 Related to Solid Waste Management System" (Apr. 14, 2011) (ADAMS Accession No. ML11112A087) (Supplemental RAI Response). Progress's voluntary supplemental response was added to the hearing file and made available to the parties. *See* Letter from Kevin C. Roach, counsel for the NRC Staff, to the Administrative Judges (May 19, 2011) (transmitting update 19 to the hearing file); Notice to the Commission of Information Relevant to the NRC Staff Appeal of LBP-10-20 (Aug. 29, 2011) (notifying us of the supplemental response, and of the Staff's review of the changes to Progress's LLRW management plan in Chapter 11 of the Advanced Final Safety Evaluation Report).

²⁶ See Progress Energy Florida, Inc.'s Motion for Summary Disposition of Contention 8A in Light of Revised Extended LLRW Plan (Aug. 27, 2011).

resolution of Progress's recent motion for summary disposition of this contention may resolve Contention $8A.^{27}$

III. CONCLUSION

For the foregoing reasons, we *deny* the Staff's Petition for review.²⁸ IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 27th day of September 2011.

²⁷ See generally Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), LBP-10-8, 71 NRC 433 (2010) (concluding, as a matter of law, that the LLRW plan outlined in the applicant's FSAR complied with 10 C.F.R. § 52.97(a)(3)).

²⁸During the pendency of the Staff's petition for review, NIRS filed in this proceeding 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. This was one of a series of similar petitions filed in multiple dockets. 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); 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. 19, 2011). We granted the requests for relief in part, and denied them in part. In particular, we declined to suspend this — or any other — adjudication, or any final licensing decisions, finding no imminent risk to public health and safety, or to common defense and security. See generally Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141 (2011). The agency continues to evaluate the implications of the events in Japan for U.S. facilities, as well as to consider actions that may be taken as a result of lessons learned in light of those events. Particularly with respect to new reactor licenses, we observed that "we have the authority to ensure that certified designs and combined licenses include appropriate Commission-directed changes before operation." Id. at 163.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Ronald M. Spritzer, Chairman Dr. Richard F. Cole Dr. Alice C. Mignerey

In the Matter of

Docket No. 52-017-COL (ASLBP No. 08-863-01-COL) (Combined License Application)

VIRGINIA ELECTRIC AND POWER COMPANY d/b/a DOMINION VIRGINIA POWER and OLD DOMINION ELECTRIC COOPERATIVE

(North Anna Power Station, Unit 3)

September 1, 2011

RULES OF PRACTICE: TERMINATING A PROCEEDING

Terminating an adjudication has significant implications for the rights of intervenors under AEA § 189a, which instructs the Commission to grant a hearing to and to admit as a party to any licensing proceeding "any person whose interest may be affected by the proceeding."

RULES OF PROCEDURE: CONTENTIONS; DEFERRAL OF HEARINGS

Until the SER and Staff NEPA documents have been issued, a licensing board is generally prohibited from holding the hearing on the license application. *See Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), CLI-07-17, 65 NRC 392, 395 (2007). In the interim, the intervenor may submit

proposed new contentions based on new information. 10 C.F.R. § 2.309(f)(2). The filing of new contentions based on the SER and Staff NEPA documents is expressly contemplated by the Model Milestones in 10 C.F.R. Part 2, App. B.

LICENSING BOARDS, AUTHORITY

The Board's authority is not confined to a specific set of previously admitted contentions; rather, the Board's delegated authority to provide the hearing mandated by AEA § 189a is sufficient to permit it to keep adjudication open to take account of the dynamic nature of the licensing process.

RULES OF PRACTICE: TERMINATION OF PROCEEDING

The proceeding before the Licensing Board will terminate when (1) the deadlines in the Board's scheduling orders for filing new or amended contentions have expired and (2) the Board has resolved all contentions that were admitted or proposed before those deadlines expired.

RULES OF PRACTICE: TERMINATION OF PROCEEDING

Terminating this adjudication for lack of pending contentions would force the Intervenor to meet the stringent requirements for reopening the proceeding in order to propose new contentions based on information not currently available or that has only recently become available, and such action would thus be inconsistent with the agency's obligation under AEA § 189a to provide a hearing at the Intervenor's request on any issue material to the licensing decision.

LICENSING BOARDS, JURISDICTION; NOTICE OF HEARING

A licensing board may exercise only the jurisdiction conferred upon it by the Commission. The Commission's hearing notice defines both the nature of the proceeding and the Board's jurisdiction over the proceeding. *See Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-825, 22 NRC 785, 790 (1985).

LICENSING BOARDS, JURISDICTION; MATERIALITY; NOTICE OF HEARING

Where the hearing notice does not restrict the hearing to any particular set of issues, the hearing should be understood as encompassing all issues raised by a party to the licensing proceeding that may properly be litigated under AEA § 189a. The potential subject matter of the hearing includes all material issues that have

a bearing on the licensing decision, which necessarily includes material issues based on new information in the SER and the required Staff NEPA document.

RULES OF PRACTICE: TERMINATION OF PROCEEDING

The plain language of 10 C.F.R. § 2.318(a) supports the conclusion that a licensing board does not lose its jurisdiction whenever there is no pending contention during some period of the lengthy and dynamic licensing process. Section 2.318(a) delineates three occasions that could trigger termination of the presiding officer's jurisdiction: "when the period within which the Commission may direct that the record be certified to it for final decision expires, when the Commission renders a final decision, or when the presiding officer withdraws from the case upon considering himself or herself disqualified, whichever is earliest." The fact that the regulation sets forth three specific circumstances in which a board's jurisdiction ends implies that jurisdiction does not end in other circumstances not listed.

RULES OF PRACTICE: INTERVENTION PETITIONERS; CONTENTIONS

Nothing in the regulations suggests that an intervenor loses its status as a party to the licensing proceeding or forfeits its right to a hearing whenever its admitted contention has become moot prior to the issuance of the SER and required Staff NEPA documents. Although intervenor status may only be granted to a petitioner if it proffers at least one admissible contention, and the intervenor must have at least one pending contention by the time of the evidentiary hearing, nothing in section 2.309 requires that throughout the course of the adjudicatory proceeding there must always be at least one contention pending before the board.

MEMORANDUM AND ORDER

(Denying Dominion's Motion for Clarification of LBP-11-10)

Before the Board is a Motion for Clarification of LBP-11-10, timely filed on April 18, 2011, by Virginia Electric and Power Company, d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative (Dominion or Applicant). Although labeled a Motion for Clarification, the Motion argues that the Board must immediately terminate this proceeding, and we have accordingly treated it

¹ Dominion's Motion for Clarification of LBP-11-10 (Apr. 18, 2011) [hereinafter Dominion Motion].

as a motion seeking that relief. We deny Dominion's request to terminate the proceeding.

I. BACKGROUND

On November 26, 2007, Dominion filed its Combined License Application (COLA) for North Anna Unit 3 pursuant to Subpart C of 10 C.F.R. Part 52.² The Commission subsequently issued a Notice of Hearing and Opportunity to Petition for Leave to Intervene on February 29, 2008.³ On May 9, 2008, the Blue Ridge Environmental Defense League (BREDL) submitted a Petition to Intervene and Request for Hearing, which included eight contentions.⁴ The Board issued a Memorandum and Order on August 15, 2008, in which it found that BREDL had standing, admitted BREDL's Contention One in part, determined that BREDL's remaining contentions were inadmissible, admitted BREDL as a party, and granted BREDL's request for a hearing.⁵

Our Initial Scheduling Order adopted the schedule proposed by the parties for disclosures, the filing of motions for summary disposition and written direct testimony, and the evidentiary hearing.⁶ That Order further stated that "[f]or any filing not covered by the deadlines listed [in the items described earlier in the Order], including the filing of any late-filed contentions, the Board will, absent compelling circumstances, expect compliance with the applicable model milestones for hearings conducted under 10 C.F.R. Part 2, Subpart L." The Model Milestones permit the filing of "[p]roposed late-filed contentions on SER [Safety Evaluation Report] and necessary NEPA [National Environmental Policy Act] documents" to be filed within 30 days of the issuance of those documents. Thus, by adopting the Model Milestones in our Initial Scheduling Order, we allowed proposed new and/or amended contentions to be filed within 30 days of the NRC Staff's issuance of its SER and NEPA documents.

² See Notice of Receipt and Availability of Application for a Combined License Dominion Virginia Power — North Anna Unit 3, 72 Fed. Reg. 70,619 (Dec. 12, 2007).

³ Dominion Virginia Power; Notice of Hearing and Opportunity to Petition for Leave to Intervene on a Combined License for North Anna Unit 3, 73 Fed. Reg. 12,760 (Mar. 10, 2008).

⁴ See LBP-08-15, 68 NRC 294, 302 (2008).

⁵ Id. at 337-38.

⁶ Licensing Board Order (Establishing Schedule to Govern Further Proceedings) (Sept. 10, 2008) at 1-2 (unpublished) [hereafter Initial Scheduling Order].

⁷ *Id.* at 2.

⁸ 10 C.F.R. Part 2, App. B, § II.

 $^{^9\}mathrm{By}$ filing the proposed new or amended contention within the time specified in the Initial (Continued)

We later dismissed BREDL's Contention One as moot but, given that BREDL's new Contention 10 (an amended version of Contention One) was pending before the Board, we emphasized that our Order "should not be construed as terminating this case. On the contrary, we retain jurisdiction to decide whether to admit proposed Contention 10. *See* 10 C.F.R. § 2.318(a)." We subsequently issued an Order admitting Contention 10 in part. The Board later updated the schedule for the proceeding to reflect the status of the NRC Staff's review of Dominion's COLA and the procedure for resolving Contention 10. We reiterated that "[f]or filings not covered by the deadlines [in the Order], see the reference to the Model Milestones of 10 C.F.R. Part 2, App. B, in the Initial Scheduling Order." We again allowed BREDL to file proposed new and/or amended contentions within 30 days of the NRC Staff's issuance of its SER and necessary NEPA documents, as we had done in the Initial Scheduling Order.

On June 1, 2010, the NRC Staff informed the parties that Dominion intended to revise its COLA to incorporate the U.S. Advanced Pressurized Water Reactor (US-APWR) design instead of the Economic Simplified Boiling Water Reactor (ESBWR) design. ¹⁴ On July 1, 2010, Dominion confirmed the NRC Staff's letter by filing a notice of its revision to its COLA to incorporate the US-APWR design. ¹⁵ Following the submission of Dominion's revised COLA, the Board dismissed Contention 10 as moot because the revised COLA omitted the claim of improved fuel efficiency that was the subject of Contention 10. ¹⁶

In the same Order, the Board declined to admit BREDL's proposed Contention 11, which alleged that, because the revised COLA incorporated a new reactor design, it represented such a substantial change that Dominion was required to file an entirely new license application.¹⁷ BREDL argued, among other things, that the revised COLA compromised its right to a hearing under section 189(a) of the

Scheduling Order, BREDL would satisfy the timeliness requirement of 10 C.F.R. § 2.309(f)(2)(iii). BREDL would still have to satisfy the other requirements of section 2.309(f)(2) or the requirements of section 2.309(c), as well as the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1).

¹⁰Licensing Board Order (Dismissing Contention 1 as Moot) (Aug. 19, 2009) at 1, 4 (unpublished) [hereinafter Aug. 19, 2009 Licensing Board Order].

¹¹LBP-09-27, 70 NRC 992, 1016 (2009).

¹²Licensing Board Order (Updating Schedule Governing Proceeding) (Mar. 22, 2010) at 2 (unpublished) [hereinafter Mar. 22, 2010 Licensing Board Scheduling Order].

¹³ Id. at 3.

 $^{^{14}}$ Letter from Robert M. Weisman, Counsel for the NRC Staff, to Atomic Safety and Licensing Board at 1 (June 1, 2010).

¹⁵Letter from David R. Lewis, Counsel for Dominion, to Atomic Safety and Licensing Board at 1 (July 1, 2010).

¹⁶LBP-10-17, 72 NRC 501, 507-08, 517 (2010).

¹⁷ *Id.* at 517.

Atomic Energy Act (AEA)¹⁸ because the opportunity for public participation had passed by the time the revision was filed.¹⁹ We responded that "NRC regulations ... preserve the right to a hearing when an application is amended by allowing new or amended contentions to be filed in response to material new information."²⁰ We further noted that "licensing boards have the authority to control the schedule for a proceeding to ensure that intervenors have adequate time to prepare new or amended contentions in response to new information."²¹ We concluded that because "licensing boards have the authority to establish reasonable schedules for the filing of new or amended contentions based on changes to a license application, we see no inherent conflict between section 189(a)'s right to a hearing and the filing of a revised license application that incorporates a different reactor design."²²

Although we dismissed Contention 10 as moot and did not admit Contention 11, we did not terminate the case. Instead, we noted that "[u]nder the Board's supplemental scheduling order of August 11, 2010, BREDL has until October 4, 2010, to file new contentions based on the June 29, 2010 COLA revision," and stated that we would "retain jurisdiction to decide whether to admit any new contentions BREDL might file pursuant to that order." BREDL subsequently filed two proposed new contentions based on Dominion's revised COLA (Contentions 12 and 13). In LBP-11-10, we declined to admit those two new contentions. But, as in our earlier rulings, we did not terminate the proceeding. Instead, because the NRC Staff had not yet issued documents that could be the subject of new contentions, the SER and the new Supplemental Environmental Impact Statement (SEIS) required by NEPA, 5 we reiterated the requirement of the Model

¹⁸ 42 U.S.C. § 2239(a)(1)(A).

¹⁹LBP-10-17, 72 NRC at 515.

²⁰ Id. (citing 10 C.F.R. § 2.309(f)(2)).

²¹ *Id.* at 515-16.

²² *Id.* at 516.

²³ Id. at 517.

²⁴LBP-11-10, 73 NRC 424, 427, 453 (2011).

²⁵ *Id.* at 453. The Staff issued an SEIS for North Anna Unit 3 in March of 2010 (NUREG-1917), but the analysis of environmental impacts in that document was based, in part, on the design, construction, and operation of an ESBWR at the North Anna site. Accordingly, after Dominion substituted the US-APWR for the ESBWR as its reactor design, the Staff announced its intent to prepare a new SEIS. *See* Virginia Electric and Power Company d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative, North Anna Combined License Application; Notice of Intent to Prepare a Supplemental Environmental Impact Statement and Conduct Scoping Process, 76 Fed. Reg. 6638 (Feb. 7, 2011). We will refer to this second SEIS as the "new SEIS."

Milestones that any new contention based on either of those documents must be filed within 30 days of the document's availability.²⁶

On or about April 18, 2011, BREDL and other organizations filed an Emergency Petition to the Commission in this and other proceedings.²⁷ The Emergency Petition requests that the Commission suspend all decisions regarding the issuance of combined licenses (COLs), as well as various other types of licenses, "pending completion by the NRC's Task Force . . . of its investigation of the near-term and long-term lessons of the Fukushima accident and the issuance of any proposed regulatory decisions and/or environmental analyses of those issues." The Emergency Petition contains a number of additional requests related to the Fukushima accident, including that the Commission

[e]stablish procedures and a timetable for raising new issues relevant to the Fukushima accident in pending licensing proceedings. The Commission should allow all current intervenors in NRC licensing proceedings, all petitioners who seek to re-open closed licensing or re-licensing proceedings, and all parties who seek to comment on design certification proposed rules, a period of at least 60 days following the publication of proposed regulatory measures or environmental decisions, in which to raise new issues relating to the Fukushima accident.²⁹

The Commission has not yet ruled on the Emergency Petition.

Dominion filed its Motion for Clarification of LBP-11-10 on April 18, 2011, insisting that the Board must immediately terminate this proceeding due to the absence of any contentions currently pending before the Board.³⁰ In our April 22, 2011 Order, we announced we would treat Dominion's Motion as a motion to terminate this proceeding and provided five questions for BREDL and the NRC Staff to respond to in their answers to Dominion's Motion, as well as an opportunity for Dominion to reply to those answers.³¹ We allowed BREDL and

(Continued)

²⁶ LBP-11-10, 73 NRC at 453 (permitting new contentions based on SER or SEIS to be filed within the time period specified in the Board's prior scheduling orders); *see* Mar. 22, 2010 Licensing Board Scheduling Order at 3 (adhering to the Model Milestones); Initial Scheduling Order at 2 (adhering to the Model Milestones).

²⁷ 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 (Corrected version, filed Apr. 19, 2011) [hereinafter Emergency Petition].

²⁸ *Id.* at 1-2.

²⁹ *Id.* at 3.

³⁰ Dominion Motion at 1.

³¹Licensing Board Order (Regarding Dominion's Motion for Clarification of LBP-11-10) (Apr. 22, 2010) at 2-3 (unpublished) [hereinafter Apr. 22, 2011 Licensing Board Order]. The questions were:

^{1. &}quot;Whether applicable NRC regulations require termination of a proceeding in the circumstances present here";

the NRC Staff to respond to these issues and Dominion's Motion by May 2, 2011, and permitted Dominion to reply by May 12, 2011.³² The NRC Staff responded on May 2, 2011, supporting Dominion's Motion.³³ BREDL responded on May 5, 2011, opposing Dominion's Motion.³⁴ Dominion filed its Reply on May 12, 2011.³⁵

BREDL recently submitted "Supplemental Comments" to its Emergency Petition that is currently pending before the Commission. ³⁶ BREDL requests that the Commission provide

Id. at 2.

BREDL interprets LBP-11-10 to mean that we kept this proceeding open because proposed Contention 13 (which we dismissed) may be litigated in the future. *See* BREDL Answer at 2. This is incorrect. In LBP-11-10, we only evaluated the admissibility of the contention, finding that Dominion's exemption request *could* be subject to litigation. We did not admit the contention and were not predicting the future litigation of this issue. *See* LBP-11-10, 73 NRC at 452-53.

^{2. &}quot;[W]hether [the parties] contend [10 C.F.R. § 2.318(a)] or any other relevant regulation or applicable Commission or Appeal Board decision mandates termination of a licensing board proceeding in the circumstances of this case";

^{3. &}quot;If the Board's jurisdiction is not automatically terminated by any regulation or controlling decision . . . [which] factors [the parties] believe the Board should consider in deciding whether termination is appropriate";

^{4. &}quot;[W]hether, if the Board were to terminate the proceeding at this point, the Intervenor would have a right of appeal under 10 C.F.R. §§ 2.311, 2.341, or any other provision"; and

^{5. &}quot;[T]he relevance to the termination issue, if any, of the Emergency Petition recently filed before the Commission in this and other proceedings."

³² *Id.* at 2-3.

³³ NRC Staff Answer to Dominion's Motion for Clarification and Response to Licensing Board Order Dated April 22, 2011 (May 2, 2011) [hereinafter NRC Staff Answer].

³⁴ Intervenor's Reply Regarding Dominion's Motion for Clarification of LBP-11-10 (May 5, 2011) [hereinafter BREDL Answer]. BREDL's Answer was not timely filed within the deadline established by our April 22, 2011 Order, but BREDL claimed that it was unable to timely respond due to a family illness. *Id.* at 1. Ordinarily, this method of response without a motion for an extension of time would be insufficient to excuse such a late filing, but our interpretation of governing regulations and case law was not affected by BREDL's Answer. In the future, we admonish BREDL to follow instructions in our Orders and seek an extension of time.

³⁵Dominion's Reply to Licensing Board's April 22, 2011 Order (May 12, 2011) [hereinafter Dominion Reply].

³⁶ Supplemental Comments by the Blue Ridge Environmental Defense League in Support of Emergency Petition Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report (Aug. 11, 2011) [hereinafter BREDL's Supplemental Comments]. Dominion and the NRC Staff responded to these comments on August 22, 2011. Dominion's Objection to the Blue Ridge Environmental Defense League's Supplemental Comments Relating to Petition to Suspend Pending Licensing Proceedings (Aug. 22, 2011); NRC Staff's Answer to Supplemental Comments in Support of Emergency Petition Regarding Fukushima Task Force Report (Aug. 22, 2011).

a complete review and hearing on the significant — indeed extraordinary — safety and environmental implications for the applications for the [North Anna Unit 3] ESP and COL and their related environmental documents of the conclusions and recommendations of the [NRC's] Near-Term Task Force.³⁷

As yet, however, BREDL has not filed with the Board any new contentions related to the Fukushima accident.

II. ANALYSIS

A. Summary of the Issue

The current status of this adjudicatory proceeding is that, although the Intervenors have established standing and have previously proffered several viable contentions that the Board admitted, those contentions have recently been dismissed and, at the moment, there are no pending admitted contentions. This is because the Board dismissed Contention 10 as moot³⁸ and has declined to admit proposed new Contentions 12 and 13.³⁹ Meanwhile, the Applicant and the NRC Staff are actively continuing to process the COLA. Assuming that the Applicant does not amend its COLA again, the Staff expects to issue the final new SEIS in October 2012 and the Final SER in July 2013.⁴⁰ BREDL seeks to preserve its right to file new contentions, as contemplated by the Board's scheduling orders, if there is new information in the SER or the new SEIS that it finds objectionable or problematic.

Despite our rulings dismissing Contention 10 as moot and declining to admit Contentions 12 and 13, the licensing proceeding remains in existence. 41 Because the Board granted BREDL's request for a hearing and petition to intervene in the licensing proceeding, it remains a party to that proceeding and may propose new contentions for litigation. 42 Indeed, a party such as BREDL that has successfully intervened in a licensing proceeding may propose new contentions for litigation

 $^{^{\}rm 37}\, BREDL's$ Supplemental Comments at 2.

³⁸ See LBP-10-17, 72 NRC at 517.

³⁹ See LBP-11-10, 73 NRC at 453.

⁴⁰ See Application Review Schedule for the Combined License Application for North Anna, Unit 3, http://www.nrc.gov/reactors/new-reactors/col/north-anna/review-schedule.html (last visited Sept. 1, 2011).

⁴¹ See Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Units 1 and 2), CLI-92-1, 35 NRC 1, 6 n.5 (1992).

⁴² See id. at 6.

until the license is issued.⁴³ Thus, BREDL may still propose new contentions based on the Fukushima accident, the SER, the new SEIS, or other sources of new and materially different information, provided that it does so promptly after the new information becomes available and that it successfully fulfills the general contention admissibility requirements.⁴⁴

In light of the ongoing licensing process and BREDL's continuing right to file new contentions, the Board did not terminate this adjudicatory proceeding when it issued LBP-11-10.⁴⁵ Instead, the Board reiterated the deadlines in its scheduling orders concerning the filing of proposed new contentions based on new information in the SER or the new SEIS.⁴⁶

Dominion and the NRC Staff argue that the Board exceeded its jurisdiction. They maintain that, because we dismissed BREDL's Contention 10 as moot and declined to admit proposed Contentions 12 and 13, we are compelled to terminate this adjudicatory proceeding before the SER and new SEIS have been issued, and therefore before BREDL could file any proposed new contentions based on those documents.⁴⁷ Dominion and the Staff also maintain that we should terminate the proceeding now even though the Commission is considering the Emergency Petition,⁴⁸ which includes the request that the Commission "[e]stablish procedures and a timetable for raising new issues relevant to the Fukushima accident in pending licensing proceedings."⁴⁹ If BREDL files new contentions based on the Fukushima accident, the SER, or the new SEIS, they would have to be filed with the Commission, which would decide whether to refer the matter to the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel to appoint a new licensing board, or to conduct the new adjudicatory proceeding itself. Thus,

⁴³ Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-06-3, 63 NRC 19, 24 (2006). In that case, the State of Utah moved to reopen the case to allow it to litigate a new version of a previously rejected contention, even though the licensing board had closed the evidentiary record and the Commission had issued its final decision authorizing the Staff to issue the license for the proposed facility. *Id.* at 21-22. The applicant argued that the Commission lacked jurisdiction over Utah's motion to reopen. *Id.* at 23. The Staff had not yet issued the license, however, and the Commission accordingly rejected the applicant's jurisdictional argument. *Id.* at 24. Here, the licensing proceeding is far less advanced than in *Private Fuel Storage*, so BREDL clearly may still file proposed new contentions.

⁴⁴ See 10 C.F.R. § 2.309(f)(1), (2).

⁴⁵LBP-11-10, 73 NRC at 453.

 $^{^{46}}Id$

⁴⁷ Dominion Reply at 3-8; NRC Staff Answer at 6-8; Dominion Motion at 2-3, 5-6.

⁴⁸ See id. at 9-10.

⁴⁹ Emergency Petition at 3.

there could be multiple adjudicatory proceedings and multiple licensing boards in the same licensing proceeding.⁵⁰

Even more importantly, granting Dominion's request to terminate the adjudication would have significant implications for the rights of intervenors under AEA § 189a, which instructs the Commission to grant a hearing to and to admit as a party to any licensing proceeding "any person whose interest may be affected by the proceeding." Section 189a has been interpreted to require that the hearing "must encompass *all* material factors bearing on the licensing decision raised by the requester." The right granted by section 189a is thus not limited to only those material issues that were raised during the initial stages of the licensing proceeding. But Dominion maintains that, once the adjudication terminates, BREDL would not only have to satisfy the generally applicable timeliness and admissibility requirements for any new contentions it might file based on new information, but would also have to satisfy the additional requirements for reopening the terminated adjudicatory proceeding. Commission practice holds that "the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention." The Commission has further stated

⁵⁰That scenario occurred in the *Vogtle COL* proceeding, where a newly constituted board, *inter alia*, applied the reopening standard to new contentions filed after the prior proceeding was terminated for want of pending or admitted contentions. *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4), LBP-10-21, 72 NRC 616, 631-32, 644-47 (2010). More than 8 months after the second *Vogtle COL* Board declined to reopen that proceeding, new contentions were again filed before the Commission. The NRC Secretary again referred such new contentions (as well as contentions filed regarding another previously terminated COL proceeding) "to the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel for appropriate action consistent with 10 C.F.R. §§ 2.309 and 2.326." *Duke Energy Carolinas, LLC* (William States Lee III Nuclear Station, Units 1 and 2) and *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4) Secretary Order (Aug. 18, 2011) at 1 (unpublished); *see also Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4), *PPL Bell Bend, L.L.C.* (Bell Bend Nuclear Power Plant), and *Luminant Generation Co. LLC* (Comanche Peak Nuclear Power Plant, Units 3 and 4) Secretary Order (Aug. 30, 2011) at 2-3 (unpublished).

⁵¹ 42 U.S.C. § 2239(a)(1)(A).

⁵² Union of Concerned Scientists v. NRC, 735 F.2d 1437, 1443 (D.C. Cir. 1984) (emphasis added).

⁵³ In general, a new contention must satisfy the timeliness requirement of either 10 C.F.R. §§ 2.309(f)(2) or 2.309(c), and the admissibility requirements of section 2.309(f)(1). *See Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-06-14, 63 NRC 568, 571-76 (2006).

⁵⁴ Dominion Motion at 6 n.3. The agency's requirements for reopening a "closed record" are found in 10 C.F.R. § 2.326. As we explain *infra* Part II.B.3, this provision has no logical application to a proceeding such as this, in which the evidentiary record never opened. Unfortunately, the agency's regulations provide no alternative means of reopening a terminated adjudication.

⁵⁵ Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-05-12, 61 NRC 345, 350 (2005); see also Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-10-19, 72 NRC 529, 531, 552 (Attach. A) (2010), aff^{*}d, CLI-11-2, 73 NRC 333 (2011).

that reopening the record is an "'extraordinary' action"⁵⁶ and that "proponents of motions seeking to reopen the record bear a 'heavy burden."⁵⁷ Thus, granting Dominion's motion would create a substantial barrier to BREDL's ability to file proposed contentions based on new information, including new information arising from the Fukushima accident, the SER, or the new SEIS, even though BREDL has established its right to a hearing on "all material factors bearing on the licensing decision."⁵⁸

The Commission applied the requirements for reopening a closed record to the proposed new contention in *Private Fuel Storage*, ⁵⁹ but in that case the licensing board had conducted a lengthy evidentiary hearing, and both the board and the Commission had issued their decisions on the merits. 60 Thus, the evidentiary record had long since closed by the time the new proposed contention was filed. Here, by contrast, not only has there been no decision on the merits of any admitted contention,61 but no evidentiary hearing has even begun. Moreover, BREDL could not have filed any contention based on either the SER or the new SEIS because neither document has been issued yet. When, as in Private Fuel Storage, a case has been fully litigated on the merits and the intervenor seeks to file a new contention on the verge of the NRC's issuance of the license, the agency may reasonably require that the intervenor provide compelling reasons for reopening the closed record. Otherwise, litigation might never end. But there are no sound reasons for imposing such a demanding burden in this case, where not only has there been no evidentiary hearing, but BREDL could not have filed contentions based on the SER or the new SEIS because both documents are still in preparation as a result of Dominion's change in reactor design.⁶²

BREDL supports the more generous interpretation of the Board's authority applied in LBP-11-10, which avoids the problems just discussed.⁶³ Under that interpretation, as a licensing board appointed to conduct the hearing provided for in AEA § 189a, we continue to have jurisdiction over contentions that the

⁵⁶ Shaw AREVA MOX Services, LLC (Mixed Oxide Fuel Fabrication Facility), CLI-09-2, 69 NRC 55, 65-66 n.48 (2009) (quoting 51 Fed. Reg. 19,535, 19,538 (May 30, 1986)).

⁵⁷ *Id.* (quoting *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-756, 18 NRC 1340, 1344 (1983) (*quoting Kansas Gas & Electric Co.* (Wolf Creek Generating Station, Unit 1), ALAB-462, 7 NRC 320, 338 (1978))).

⁵⁸ Union of Concerned Scientists, 735 F.2d at 1443.

⁵⁹ Private Fuel Storage, CLI-06-3, 63 NRC at 25-31; see supra note 43.

⁶⁰ Private Fuel Storage, CLI-06-3, 63 NRC at 21-23; Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-05-19, 62 NRC 403, 406 (2005).

⁶¹The Board dismissed BREDL's contentions 1 and 10 as moot, but a dismissal based on mootness is a jurisdictional ruling, not a decision on the merits of the claim. *See Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-09-15, 70 NRC 198, 210 (2009).

⁶² See supra note 25 and infra note 69 (noting that the Staff plans on issuing a new SEIS).

⁶³ BREDL Answer at 1-2 (citing 10 C.F.R. § 2.318(a)).

Intervenor proposes for hearing within the deadlines in our scheduling orders, even though contentions admitted during the initial stages of the licensing proceeding might have been dismissed. The Board may therefore continue the adjudicatory proceeding until the deadlines for filing proposed new contentions have expired and the Board has resolved all admitted and proposed contentions filed within the deadlines. ⁶⁴ Because the Board decided not to terminate this adjudication before the SER and new SEIS have been issued, BREDL will not be required to satisfy the stringent requirements for reopening a closed proceeding merely to be able to file contentions based on information in those documents that was not previously available. This approach also avoids the inefficiency and delay likely to result from multiple adjudicatory proceedings in the same licensing proceeding.

The issue before us is not unique to this case. It arises from what the Commission has termed "the dynamic licensing process followed in Commission licensing proceedings." The NRC normally publishes its *Federal Register* notice of opportunity to petition for leave to intervene or request a hearing shortly after a license application is docketed. Petitions must be filed within 60 days based on the documents then in existence, which means that the petition must be based on the documents submitted with the application. The Staff's SER and NEPA documents will not be issued until much later, usually several years after the application is filed. In the interim, the applicant will often submit substantial additional information to the NRC Staff, including revisions to the application. As this COL proceeding demonstrates, the applicant's revisions may be substantial. The applicant's new information might render moot the contention(s) admitted by the Board, as has already happened twice in this case.

⁶⁴ See Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-05-15, 62 NRC 53, 54 (2005). The adjudicatory proceeding would also terminate in the specific circumstances identified by the Commission and the Appeal Board, where the intervenor either settles or abandons all of its contentions. See Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-91-13, 34 NRC 185, 188 n.1 (1991) (citing Public Service Co. of Colorado (Fort St. Vrain Independent Spent Fuel Storage Installation), Commission Order (Oct. 29, 1990) (unpublished)); Portland General Electric Co. (Trojan Nuclear Plant), ALAB-796, 21 NRC 4, 5 (1985). Neither of those circumstances is present in this case. BREDL has neither withdrawn from this litigation nor entered into a settlement with Dominion. The potential for future litigation between the parties remains, and a hearing may still be required.

⁶⁵ Curators of the University of Missouri (TRUMP-S Project), CLI-95-8, 41 NRC 386, 395 (1995) (citation omitted); see also Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-04-33, 60 NRC 749, 753 (2004).

⁶⁶ See 10 C.F.R. § 2.309(b)(3)(i)-(ii), (f)(1)(vi).

⁶⁷ Cf. Baltimore Gas & Electric Co. (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 349-50 (1998) (explaining the process of revising an application after its initial submission and docketing).

⁶⁸ Cf. LBP-10-17, 72 NRC at 507-08, 517; Aug. 19, 2009 Licensing Board Order at 4.

board is generally prohibited from holding the hearing on the license application. ⁶⁹ In the interim, the intervenor may submit proposed new contentions based on new information, including new information in the SER and Staff NEPA documents. ⁷⁰ The filing of new contentions based on the SER and Staff NEPA documents is expressly contemplated by the Model Milestones and our scheduling orders in this case. ⁷¹

Thus, because of the dynamic licensing process, other boards are likely to face situations like this, where substantial changes to the application have mooted previously admitted contentions but new information, including information in Staff documents still in preparation, may result in the filing of new contentions prior to the evidentiary hearing. Accordingly, the question now before the Board has significant implications not only for BREDL's rights in this case, but for the rights of intervenors in other licensing proceedings.

B. Board Ruling

The Board concludes that it continues to have jurisdiction and that it is appropriate in the present circumstances not to terminate this adjudication. Under the plain language of the Commission's Notice of Hearing for the North Anna Unit 3 COLA and the regulations governing our jurisdiction, the Board's authority is not confined to a specific set of previously admitted contentions. Rather, the Board's delegated authority to provide the hearing mandated by AEA § 189a is sufficient to permit it to keep adjudication open to take account of the dynamic nature of the licensing process, particularly in a case such as this where the Applicant has made substantial changes to the COLA that are still being evaluated by the NRC Staff. We therefore have the authority to keep the adjudication

⁶⁹The Board may not commence a hearing on environmental issues before the Final Environmental Impact Statement (FEIS) is issued, and may only commence a hearing with respect to safety issues prior to issuance of the Final Safety Evaluation Report if it "will expedite the proceeding without adversely impacting the Staff's ability to complete its evaluations in a timely manner." *Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), CLI-07-17, 65 NRC 392, 395 (2007) (citing *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-20, 54 NRC 211, 214 (2001)); *see also* 10 C.F.R. § 2.332(d). For North Anna Unit 3, although the NRC Staff has already issued an SEIS based, in part, on the design, construction, and operation of an ESBWR at the North Anna site, it subsequently announced its intent to prepare a new SEIS based on the US-APWR design. *See supra* note 25. Although the Commission's *Vogtle ESP* ruling did not directly address the situation where an SEIS is being prepared, it would be inconsistent with the rationale of that decision for the Board to hold a hearing on environmental issues in this proceeding before the new SEIS is issued.

⁷⁰ 10 C.F.R. § 2.309(f)(2).

 $^{^{71}\}mathit{See}$ 10 C.F.R. Part 2, App. B, II; Mar. 22, 2010 Licensing Board Scheduling Order at 3; Initial Scheduling Order at 2.

open to provide a forum in which BREDL may file proposed new contentions based on the SER and the new SEIS, essential Staff documents that are clearly material to the agency's licensing decision but have not yet been issued because of Dominion's change in reactor design.⁷²

We should also await the Commission's ruling on BREDL's Emergency Petition before terminating this proceeding. The Commission might grant the request to "[e]stablish procedures and a timetable for raising new issues relevant to the Fukushima accident in pending licensing proceedings."⁷³ Even if the Commission does not grant that request, it might provide guidance to licensing boards in this and other cases and to parties concerning the filing of contentions related to the Fukushima accident. By continuing this proceeding, we will provide a forum in which BREDL could file any contentions that might be appropriate under a potential ruling from the Commission without the need to reopen the proceeding or to appoint a new licensing board.

We recognize, however, that an adjudication must have a "defined endpoint."⁷⁴ Accordingly, as in *Savannah River*, this proceeding will terminate when (1) the deadlines in our scheduling orders for filing new or amended contentions have expired and (2) the Board has resolved all contentions that were admitted or proposed before those deadlines expired.⁷⁵ At that point, BREDL will have had the opportunity to file new contentions based on the SER and the new SEIS. This procedure will be more fair and efficient than terminating this proceeding now, which potentially would subject any new contentions to the higher burden assigned to the reopening of a "closed record"⁷⁶ — a record that has never been opened in the first instance given that we have not held an evidentiary hearing or admitted any evidence.

Dominion and the NRC Staff argue, however, that we must terminate the adjudication now, regardless of any practical or equitable factors that favor

⁷² BREDL may not challenge the adequacy of the SER. It may, however, file contentions challenging the COLA based on new information in the SER. *See Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481, 493 n.56 (2010); *AmerGen Energy Co.*, *LLC* (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 476 (2008). Contentions may also challenge the adequacy of the review contained in the Staff's NEPA documents. *See Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-10-24, 72 NRC 720, 729-30 (2010).

⁷³ Emergency Petition at 3.

⁷⁴ MOX, CLI-09-2, 69 NRC at 66.

⁷⁵ See Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-05-15, 62 NRC 53, 54 (2005) (Board terminated the proceeding after all admitted contentions had been resolved and the time for late-filed contentions arising out of information in the Staff's Final SER had expired without the filing of any such contentions.).

⁷⁶ See 10 C.F.R. § 2.326 (governing the standards for reopening a closed record).

keeping it open.⁷⁷ We reject this argument. As explained in more detail below, our ruling follows from the plain language of the Commission's Notice of Hearing and applicable NRC regulations. Furthermore, because terminating the adjudication now would force BREDL to meet the stringent requirements for reopening the proceeding in order to propose new contentions based on information not currently available or that has only recently become available, such action would be inconsistent with the agency's obligation under AEA § 189a to provide a hearing at the Intervenor's request on any issue material to the licensing decision. We accordingly conclude that we have the authority to keep the adjudication open and that it is appropriate to do so in the present circumstances.

1. The Commission's Notice of Hearing

To resolve the jurisdictional question, we must determine the extent of the Commission's delegation of authority to the Board. A licensing board may exercise only the jurisdiction conferred upon it by the Commission.⁷⁸ "The various hearing notices are the means by which the Commission identifies the subject matters of the hearings and delegates to the boards the authority to conduct proceedings."⁷⁹ We therefore turn to the Commission's hearing notice for this proceeding to define both the nature of the proceeding and the Board's jurisdiction over the proceeding.

The hearing notice for this proceeding stated that a hearing would be held, at a future date to be determined by the Commission or the Board, to consider Dominion's COLA for North Anna Unit 3.80 The hearing notice further explained that "[t]he hearing will be conducted by a Board that will be designated by the Chairman of the Atomic Safety and Licensing Board Panel or by the Commission," and that "[a]ny person whose interest may be affected by this proceeding and desires to participate as a party to this proceeding must file a written petition

⁷⁷ We asked the parties to identify the factors the Board should consider in deciding whether termination is appropriate, assuming the Board's jurisdiction is not automatically terminated. Apr. 22, 2011 Licensing Board Order at 2. Dominion chose not to identify any such factors, instead relying solely on its argument that controlling precedent requires "automatic termination." Dominion Reply at 8 n.16. The Staff identified only one factor: that BREDL might want to file an immediate appeal of the Board's previous rulings. NRC Staff Answer at 8-9. BREDL has indicated no intent to file an immediate appeal, however, but rather supports the Board's continuation of the adjudicatory proceeding. BREDL Answer at 1-2. We therefore lack any relevant argument that the Board abused its discretion by not terminating the adjudication. Instead, the sole question we must address is whether we have the discretion to keep the adjudication open in the present circumstances.

⁷⁸ Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), ALAB-825, 22 NRC 785, 790 (1985).

⁷⁹ *Id.* (footnotes and citations omitted).

⁸⁰ 73 Fed. Reg. at 12,760.

for leave to intervene in accordance with 10 CFR 2.309."81 "Those permitted to intervene," the Commission further explained, "become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing."82

The hearing notice implemented the mandate of AEA § 189a, which as previously noted instructs the Commission to grant a hearing to and to admit as a party to any licensing proceeding "any person whose interest may be affected by the proceeding." Given that the hearing notice does not restrict the hearing to any particular set of issues, the hearing should be understood as encompassing all issues raised by a party to the licensing proceeding that may properly be litigated under section 189a. Section 189a requires that the hearing "encompass all material factors bearing on the licensing decision raised by the requester." Thus, the potential subject matter of the hearing includes all material issues raised by a party to the licensing proceeding that have a bearing on the licensing decision, which necessarily includes material issues based on new information in the SER and the required Staff NEPA document.

This Board was created subsequent to the hearing notice to conduct the contested hearing on the North Anna Unit 3 COLA mandated by AEA § 189a. 86 We see nothing in the notice of hearing for the North Anna Unit 3 COLA that restricts the presiding officer's authority to a narrower set of issues than those that a party to the licensing proceeding may properly raise under the broad mandate of section 189a. Accordingly, this Board has the delegated authority to consider all issues raised by the Intervenor that are material to the agency's licensing decision, including those arising under the SER and the new SEIS.

To be sure, a contested hearing would not have been required if no petitioner had satisfied the criteria for intervention. But we have already found that BREDL demonstrated standing pursuant to 10 C.F.R. § 2.309(d), and that it proffered one admissible contention as required by 10 C.F.R. § 2.309(f). Therefore, BREDL met the criteria for intervention and, as explained in the Commission's hearing notice, it became a party to the licensing proceeding and entitled to participate fully in the conduct of the hearing. This necessarily entails the right to propose

⁸¹ Id. at 12,761.

⁸² Id.

^{83 42} U.S.C. § 2239(a)(1)(A).

⁸⁴ Union of Concerned Scientists, 735 F.2d at 1443.

⁸⁵ See supra note 72.

⁸⁶ Dominion Virginia Power; Establishment of Atomic Safety and Licensing Board, 73 Fed. Reg. 29,541, 29,541-42 (May 21, 2008).

⁸⁷ See 10 C.F.R. § 2.309(a).

⁸⁸ See LBP-08-15, 68 NRC at 337-38.

contentions that have a bearing on the licensing decision, including those based on the SER and the new SEIS when they are issued, or on the Fukushima accident.

Because the Board was delegated the authority to conduct a hearing on all issues material to the licensing decision, including those arising under the SER and the new SEIS, we decline to terminate this proceeding before those documents have been issued and BREDL has had the time provided in our scheduling orders to propose new contentions based on those documents. Although Contention 10 was mooted by Dominion's decision to change its referenced reactor design and the Board rejected BREDL's proposed Contentions 12 and 13, those rulings tell us little or nothing about whether BREDL might be able to successfully propose new contentions based on the Fukushima accident, the SER, or the new SEIS. If BREDL proposes new contentions and at least one is admitted, the agency would be obligated to hold an evidentiary hearing absent summary disposition, settlement, or withdrawal of the admitted contention. It is therefore entirely possible that a hearing will still be required to fulfill the mandate of the Commission's hearing notice in this proceeding and, ultimately, the requirement of AEA § 189a to provide a hearing to any person whose interest might be affected by the proceeding on all issues that entity may raise that are material to the licensing decision.

We therefore conclude that it is within our authority, as delegated by the Commission, to retain jurisdiction of this proceeding despite the current absence of a pending contention.

2. NRC Regulations

The plain language of the agency's procedural regulations confirms that we continue to have jurisdiction in this adjudicatory proceeding.⁸⁹

The NRC is of course bound by the unambiguous language of its own regulations. The plain text of 10 C.F.R. § 2.318(a) refutes the argument of Dominion and the Staff that the Board's jurisdiction has ended. In that regulation, entitled "[c]ommencement and termination of jurisdiction of presiding officer," the Commission delineated three occasions that could trigger termination of the presiding officer's jurisdiction: "when the period within which the Commission may direct that the record be certified to it for final decision expires, when the Commission renders a final decision, or when the presiding officer withdraws from the case

⁸⁹ Dominion and the NRC Staff acknowledge that no agency regulation mandates termination of this proceeding. Dominion Reply at 3; NRC Staff Answer at 4. We agree on that much, but we think the regulations also fully support our continued jurisdiction.

⁹⁰Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-900, 28 NRC 275, 288 (1988) (citing Abourezk v. Reagan, 785 F.2d 1043, 1053 (D.C. Cir. 1986), aff d, 484 U.S. 1 (1987); GUARD v. NRC, 753 F.2d 1144, 1146 (D.C. Cir. 1985)).

upon considering himself or herself disqualified, whichever is earliest."⁹¹ Here, we are faced with neither the expiration of any period within which the Commission may direct that the record in this proceeding be certified for final decision nor a final decision rendered by the Commission. This is obvious, given that the final license review documents have not yet been issued by the NRC Staff. Further, the presiding officer has not withdrawn from the case upon considering itself disqualified.⁹²

Applying the rule of statutory construction that the mention of one thing implies the exclusion of another, the fact that the regulation sets forth three specific circumstances in which a board's jurisdiction ends implies that jurisdiction does not end in other circumstances not listed.⁹³ Accordingly, the plain language of section 2.318(a) supports our conclusion that a licensing board does not lose its jurisdiction whenever during some period of the lengthy and dynamic licensing process there is no pending contention.⁹⁴

Indeed, as the Staff acknowledges, it is not unusual for a board to continue to operate and to retain jurisdiction even when there are no admitted contentions. Although the Staff argues for a rule that would generally require a board to terminate an adjudication whenever it lacks a pending contention, it acknowledges an exception when a contention of omission is mooted by new information. The Staff notes that in that situation licensing boards have commonly afforded intervenors the opportunity to propose new contentions to challenge the new information, even though no contention is pending. We agree that under those conditions a board retains jurisdiction to consider new contentions. We have, without objection, twice kept this proceeding open for the purpose that the Staff identifies. The Staff's acknowledgment of continuing board jurisdiction under such conditions is consistent with our view that the presence of a pending

^{91 10} C.F.R. § 2.318(a).

⁹² Part 2 of 10 C.F.R. defines the presiding officer in NRC adjudicatory proceedings as "the Commission, an administrative law judge, an administrative judge, an Atomic Safety and Licensing Board, or other person designated in accordance with the provisions of this part, presiding over the conduct of a hearing conducted under the provisions of this part." 10 C.F.R. § 2.4.

⁹³ See Bruesewitz v. Wyeth LLC, 131 S. Ct. 1068, 1076 (2011) (applying doctrine of expressio unius, exclusio alterius).

⁹⁴ Dominion argues that "Section 2.318(a) does not apply to present circumstances where there are no longer any admitted contentions that may result in a hearing, record, and decision." Dominion Reply at 4. This argument, however, rests on the implausible and premature assumption that because there is no contention pending at the moment, no new contentions will be admitted, no evidentiary hearing will be required, and no decision will issue. *See supra* p. 276.

⁹⁵ NRC Staff Answer at 6.

⁹⁶ *Id.* (citing *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 382-84 (2002); LBP-10-17, 72 NRC at 507-08, 517).

⁹⁷ See supra pp. 263-64.

contention is not invariably required for licensing board jurisdiction, and that licensing boards need not necessarily dismiss adjudicatory proceedings whenever the last pending contention is resolved. We fail to see any basis in the agency's regulations, however, for limiting a board's continuing jurisdiction to only the specific situation noted by the Staff. As we have explained, during the licensing process the application is often amended multiple times before the SER and EIS are issued, the initially admitted contentions are commonly mooted and dismissed, and new or amended contentions may be proposed for admission. Given the plain language of section 2.318(a) and the dynamic nature of the licensing process, we think it equally clear that boards have the authority to rule on new or amended contentions arising from the ongoing licensing process even if they do not arise in the specific manner that the Staff identifies.

Also, we find nothing in the regulations to suggest that an intervenor loses its status as a party to the licensing proceeding or forfeits its right to a hearing whenever its admitted contention has become moot prior to the issuance of the SER and required Staff NEPA documents. A foundational aspect of NRC adjudicatory proceedings is that a hearing request and party status as an intervenor may only be granted to a petitioner if it demonstrates standing pursuant to 10 C.F.R. § 2.309(d) and proffers at least one admissible contention pursuant to 10 C.F.R. § 2.309(f).98 But once these criteria have been satisfied and the request for a hearing has been granted, neither section 2.309 nor any other regulation mandates that the intervenor must at all times prior to the hearing have an admitted or proposed contention pending before the Board. Of course, the intervenor must have at least one pending contention by the time of the evidentiary hearing, but nothing in section 2.309 requires that throughout the course of the adjudicatory proceeding there must always be at least one contention pending before the board.⁹⁹ This is significant because section 2.309 contains a detailed list of requirements governing both the timing and admissibility of contentions. The Commission has emphasized that the rules on contention admissibility are "strict by design."100 Had the Commission intended to require that the proceeding be

^{98 10} C.F.R. § 2.309(a).

⁹⁹ Similarly, we find nothing in the definition of "contested proceeding" to require that the proceeding terminate during any period when there is no contention pending before the Board. As relevant here, a "contested proceeding" is defined as "[a] proceeding in which a petition for leave to intervene in opposition to an application for a license or permit has been granted or is pending before the Commission." *Id.* § 2.4. Thus, the Board's ruling granting BREDL's Petition for Intervention and Request for Hearing initiated a contested proceeding. Given that the definition contains no specific termination point for a contested proceeding, it provides no support to Dominion's argument that we must terminate this proceeding before BREDL can file new contentions based on the SER, the new SEIS, or the Fukushima accident.

¹⁰⁰ Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001), pet. for reconsideration denied, CLI-02-1, 55 NRC 1 (2002).

terminated and the intervenor lose its party status and right to a hearing whenever it temporarily lacks a pending contention, the Commission would have included such a mandate in its comprehensive list of strict requirements.

The agency's regulations also show that the Commission expects boards to take into account the dynamic nature of the licensing process in managing adjudicatory proceedings. Shortly after a hearing request has been granted, the board must set a schedule to govern the proceeding. The board must use the applicable Model Milestones in 10 C.F.R. Part 2, Appendix B as a "starting point" for the schedule, although the board "shall make appropriate modifications" based upon the circumstances of each case. The Model Milestones permit the filing of "[p]roposed late-filed contentions on SER and necessary NEPA documents" to be filed within 30 days of the issuance of those documents. Sexplained previously, our scheduling orders incorporated this Model Milestone, among others. Nothing in Appendix B conditions an intervenor's right to file new contentions based on the SER and necessary NEPA documents on whether previously admitted contentions are still pending.

Moreover, in the Model Milestones for Subpart L proceedings, the Commission directs boards to consider when establishing a schedule "the NRC's interest in providing a fair and expeditious resolution of the issues sought to be admitted for adjudication in the proceeding," along with other factors. ¹⁰⁴ The Commission's choice of language is significant because, in the preceding section, which concerns scheduling in an enforcement or other action conducted under 10 C.F.R. Part 2, Subpart G, the Commission referred only to "the NRC's interest in providing a fair and expeditious resolution of the issues to be adjudicated in the proceeding." ¹⁰⁵ In Subpart L proceedings such as this, the Commission, by referring instead to "a fair and expeditious resolution of the issues *sought to be admitted* for adjudication in the proceeding," ¹⁰⁶ made clear that boards should develop schedules that would provide a fair and expeditious procedure for resolving new or amended contentions that might be proposed during the course of the proceeding, not just those already admitted.

The Commission has also provided that "[a] presiding officer has the duty to conduct a fair and impartial hearing according to law, to take appropriate action to control the prehearing and hearing process, to avoid delay and to maintain order," and that "[t]he presiding officer has *all the powers necessary* to those

¹⁰¹ 10 C.F.R. § 2.332(a).

¹⁰² Id. § 2.332(b).

¹⁰³ 10 C.F.R. Part 2, App. B, § II.

¹⁰⁴ Id.

¹⁰⁵ 10 C.F.R. Part 2, App. B, § I.

¹⁰⁶ 10 C.F.R. Part 2, App. B, § II (emphasis added).

ends...."¹⁰⁷ We see nothing terminating this broad grant of authority to manage the prehearing and hearing process solely because, during an intermediate stage of that process, the previously pending contentions have been mooted and they have not yet been replaced by at least one other contention. Given the dynamic nature of the licensing process, it would better serve the Commission's goals of avoiding delay and maintaining order for the Board to continue to preside over the adjudicatory proceeding.

If Dominion and the Staff are correct that the adjudicatory proceeding must end now, however, then the binding effect of our scheduling orders would also terminate, the parties would be left to guess what deadlines would govern the filing and adjudication of any future contentions, and there would no longer be any control of the prehearing and hearing process. This would frustrate the Commission's intent that licensing boards provide a fair and expeditious schedule for regulating "the issues sought to be admitted for adjudication in the proceeding," and would prevent boards from exercising "all the powers necessary" to "control the prehearing and hearing process, to avoid delay and to maintain order." 109

We therefore conclude that, under the relevant NRC regulations, we continue to have jurisdiction in this adjudicatory proceeding for the conduct of a hearing on the North Anna Unit 3 COLA.

3. Premature Termination of This Adjudication Could Unlawfully Restrict BREDL's Right to a Hearing

Dominion's argument presents another significant problem. If the adjudicatory proceeding must be terminated at this point, long before the licensing proceeding is completed, then, to be consistent with AEA § 189a as interpreted in *Union of Concerned Scientists*, ¹¹⁰ the agency must provide an appropriate procedure that would allow an intervenor to reopen the terminated proceeding to propose new contentions based on new and material information generated later in the licensing process. ¹¹¹ But the regulations do not provide such a procedure. The only relevant regulation that in any way concerns reopening a closed proceeding, 10 C.F.R. § 2.326, is of no help because it concerns reopening a closed evidentiary

 $^{^{107}\,10}$ C.F.R. § 2.319 (emphasis added).

¹⁰⁸ 10 C.F.R. Part 2, App. B, § II.

^{109 10} C.F.R. § 2.319.

¹¹⁰ Union of Concerned Scientists, 735 F.2d at 1443.

¹¹¹The general admissibility and timeliness requirements for new contentions based on new information are in 10 C.F.R. § 2.309(c), (f)(1)(i)-(vi), and (f)(2). Those regulations, however, do not include a procedure for reopening a closed adjudicatory proceeding.

record; that is, the record that exists *after* an evidentiary hearing. 112 Section 2.326 expressly refers to "[a] motion to reopen a closed record to consider *additional* evidence" and "*newly* proffered evidence." 113 Evidence can only be "additional" or "newly proffered" if an evidentiary record already exists. Thus, the term "closed record" in section 2.326 must refer to a record developed at an evidentiary hearing. But, in this case, the evidentiary record has not even opened, much less closed. Section 2.326 would also require BREDL to show that a "materially different result would . . . have been likely" if the new contention is admitted. 114 But, if BREDL files a new contention based on new information in future Staff documents, it likely will be arguing issues that differ from those previously resolved by the Board, as is its right under AEA § 189a, rather than for a change in the Board's earlier rulings dismissing previously admitted contentions as moot. Thus, the requirements of section 2.326 have no logical application at this juncture of an adjudicatory proceeding.

The Commission has implicitly recognized that it would be inequitable to apply the reopening requirements when, due to factors beyond a party's control, it presently lacks the information to frame an admissible contention.

[B]ecause Intervenors' inability to satisfy our contention admissibility rules in this instance is due to factors beyond their control, we decline to adopt the Staff's and the Applicant's position that we require Intervenors to meet both our strict late-filing requirements and our even stricter reopening standards if Intervenors identify safety issues during the upcoming years of ongoing construction. Rather, if Intervenors file a new or amended Contention 7, with supporting materials, within 60 days after pertinent information . . . first becomes available, then the contention will be deemed timely filed and Intervenors will be absolved of their obligation to satisfy the late-filing requirements of 10 C.F.R. § 2.309(c). Likewise, under those same circumstances, Intervenors need not satisfy our regulatory requirements for reopening the record. 115

In this case, not only would imposing the reopening requirements be inequitable, it would be unlawful as well if doing so precluded BREDL from litigating an otherwise admissible contention. The AEA does not grant the NRC the discretion "to eliminate from the hearing material issues in its licensing de-

¹¹²In a proceeding such as ours to be conducted under Subpart L, we view the evidentiary record as opened upon the filing of the first initial written statements of position and written testimony with supporting affidavits on the admitted contentions. *See* 10 C.F.R. §§ 2.1207 (outlining the procedure for filings in an oral hearing), 2.1208 (outlining the procedure for filings in a written hearing).

¹¹³ 10 C.F.R. § 2.326(a)(3).

 $^{^{114}}$ *Id*.

¹¹⁵ MOX, CLI-09-2, 69 NRC at 65.

cision."¹¹⁶ The agency may impose reasonable requirements on new contentions when those requirements are related to legitimate agency goals such as avoiding needless duplication and delay. Nevertheless, "[a]lthough the Commission retains broad authority to define standards and thresholds for determining when new information raises a material issue of a plant's conformity with the [Atomic Energy] Act, if such information is presented, it must provide a hearing upon request."¹¹⁸ Requiring BREDL to meet the stringent reopening requirements designed for entirely different cases where there has been an evidentiary hearing would unreasonably and unfairly restrict BREDL's ability to obtain a hearing based on material new information. Arbitrary and unreasonable restrictions on the right to a hearing would violate AEA § 189a. 119 Such restrictions would also violate the Administrative Procedure Act's prohibition on agency action that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law."¹²⁰

The Board "has the duty to conduct a fair and impartial hearing according to law," and has "all the powers necessary" to that end. 121 Given the lack of an appropriate mechanism for an intervenor to reopen a terminated proceeding to propose new contentions based on new and material information generated later in the licensing process, we decline to terminate this proceeding now.

4. NRC Case Law

None of the NRC case law cited by Dominion or the NRC Staff requires termination of this proceeding in the present circumstances.

Dominion cites *Turkey Point*, in which the Commission warned licensing boards not to raise issues *sua sponte* when the sole intervenor has withdrawn from the proceeding.¹²² The Commission relied on an unpublished order in *Fort St. Vrain* for the proposition that once the sole intervenor in a proceeding withdraws, the proceeding has been brought to a close.¹²³ Here, in contrast, we have not received a notice of withdrawal or any other indication that BREDL intends to withdraw from this proceeding, and we have not raised any issues *sua sponte*. This case is therefore readily distinguishable from *Turkey Point*.

¹¹⁶ Union of Concerned Scientists, 735 F.2d at 1447.

¹¹⁷ See Union of Concerned Scientists v. NRC, 920 F.2d 50, 55-56 (D.C. Cir. 1990).

 $^{^{118}}$ Nuclear Information and Resource Service v. NRC, 918 F.2d 189, 195 (1990), aff'd and rev'd on reh'g on other grounds, 969 F.2d 1169 (D.C. Cir. 1992).

¹¹⁹See id.

¹²⁰ 5 U.S.C. § 706(2)(A).

^{121 10} C.F.R. § 2.319.

¹²² Turkey Point, CLI-91-13, 34 NRC at 188; Dominion Motion at 2-3.

¹²³ Turkey Point, CLI-91-13, 34 NRC at 188 n.1 (citing Fort St. Vrain Commission Order).

In the *Summer COL* proceeding, also cited by Dominion,¹²⁴ the licensing board terminated the proceeding on remand from the Commission when it found petitioners proffered no admissible contentions. But that board, unlike this one, neither granted the petition to intervene nor admitted any contentions at the start of the proceeding.¹²⁵ The petitioners in *Summer* appealed, and that appeal was rejected by the Commission, which affirmed the licensing board's dismissal of the petitioners' hearing request and termination of the proceeding.¹²⁶ Here, by contrast, we granted BREDL's petition to intervene and hearing request.¹²⁷ BREDL accordingly became a party to the licensing proceeding and entitled under AEA § 189a to a hearing on issues material to the licensing decision. Therefore, neither the *Summer* board's ruling nor the Commission's decision affirming that ruling dictates that we must terminate this case.¹²⁸

The Staff cites the Appeal Board's decision in *Trojan* for the proposition that licensing boards may only decide the issues contested by the parties, and that the case should be dismissed once those issues are no longer in dispute.¹²⁹ In that spent fuel pool amendment proceeding, "[a]fter a brief hearing on the admitted contentions, the applicant filed proposed findings of fact and conclusions of law that the intervenor . . . and the NRC Staff then adopted."¹³⁰ As the Appeal Board explained, "[a]t that point there was, in effect, a stipulated resolution or a settlement of the contested issues and thus no need for the Board below to do anything more than dismiss the proceeding."¹³¹ Thus, *Trojan* stands for the unremarkable proposition that, if the parties settle their dispute after a hearing, the board should dismiss the adjudication. Here, however, there has been neither a settlement nor a hearing on admitted contentions, and a hearing might be required to resolve contentions based on the SER, the new SEIS, or the Fukushima accident.

The Staff also cites the Appeal Board's ruling in *Indian Point*, ¹³² but that ruling is also inapposite. The decision arose from the application for an operating license for Indian Point Unit 3. The licensing board had conducted the contested hearing,

¹²⁴ Dominion Motion at 3.

¹²⁵ South Carolina Electric & Gas Co. (Virgil C. Summer Nuclear Station, Units 2 and 3), LBP-10-6, 71 NRC 350, 357-58, 385-86 (2010), aff'd, CLI-10-21, 72 NRC 197 (2010).

¹²⁶ Summer, CLI-10-21, 72 NRC at 201.

¹²⁷LBP-08-15, 68 NRC at 337-38.

¹²⁸ The same factors also distinguish this case from *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 120-21 (2009) (affirming a licensing board's use of the reopening standard to evaluate the admissibility of contentions submitted after the board denied petitioners' hearing request).

¹²⁹NRC Staff Answer at 4 (citing *Trojan*, ALAB-796, 21 NRC at 5).

¹³⁰ Trojan, ALAB-796, 21 NRC at 5.

¹³¹ *Id.* at 5.

¹³² NRC Staff Answer at 4, 5 n.4 (citing *Consolidated Edison Co. of New York* (Indian Point, Units 1, 2, and 3), ALAB-319, 3 NRC 188, 189-91 (1976)).

the board had issued its decision, that decision had been reviewed by the Appeal Board, and the Commission had authorized the issuance of a full-term, full-power operating license.¹³³ After all this, an organization that had not intervened in the adjudicatory proceeding filed a petition seeking to raise issues related to the seismic design of the plant.¹³⁴ The Appeal Board held that, because the licensing board's hearing had concluded and the seismic issues raised in that proceeding had been resolved or abandoned, the adequacy of the seismic design of Indian Point Unit 3 was now a matter within the jurisdiction of the NRC Staff.¹³⁵

Nothing in that ruling addresses the situation presented here, where no hearing has been or could have been held, no decision has been issued, no appellate review has occurred, and no license has been authorized. In Indian Point, the agency had fulfilled its statutory obligation under AEA § 189a to provide those who had successfully intervened in the adjudicatory proceeding with a hearing on issues material to the licensing decision. Here, by contrast, the Board has held no evidentiary hearing on any issue. It has merely resolved two admitted contentions related to the no longer relevant ESBWR design by declaring them moot, and ruled that various other contentions are inadmissible. We can hardly determine based on those rulings whether the agency has fulfilled its statutory responsibility under section 189a to provide a hearing on all contested issues material to the licensing decision. Issues related to the new reactor design and its potential environmental consequences have not been, and could not have been, fully resolved because the Staff has issued neither the SER nor the new SEIS that will take into account the new design. In addition, the potential remains that BREDL may file contentions related to the Fukushima accident. Thus, in this case, unlike *Indian Point*, a contested hearing might still be required. It is therefore appropriate that this adjudicatory proceeding, leading potentially to such a hearing, should continue. Nothing in *Indian Point* suggests otherwise.

Other rulings cited by Dominion and the Staff are licensing board orders, not Commission or Appeal Board decisions. Not only are the rulings of other licensing boards not binding upon us, we also see no indication in any of those orders that the boards believed the particular procedure they chose to follow was compelled by agency regulation or precedent. For example, in the *Comanche Peak COL* and *Vogtle COL* proceedings, the licensing boards chose to terminate the adjudications when faced with no pending contentions, but they did not state that they were compelled to do so by Commission precedent or agency

¹³³ Indian Point, ALAB-319, 3 NRC at 191-93.

¹³⁴ Id. at 188, 191.

¹³⁵ Id. at 193.

regulation.¹³⁶ Similarly, in the *North Anna ESP* proceeding, the licensing board chose to terminate the contested portion of that proceeding after granting summary disposition on the only pending contentions, but that board also did not state that its decision was compelled by either precedent or regulation.¹³⁷ The *Oyster Creek* licensing board said that the dismissal of all pending contentions on mootness grounds due to new information "ordinarily would terminate the proceeding," but that board permitted new contentions to be filed on the new information before terminating the proceeding.¹³⁸ On the other hand, the *Savannah River* board terminated the proceeding only after all admitted contentions were resolved and "the time for late-filed contentions on the Staff's FSER ha[d] expired without any such contentions being filed."¹³⁹ That approach is equivalent to the one we follow here.

The boards in those cases did not attempt to prescribe a rule for all other boards to follow, just as our decision does not announce a categorical rule for all future proceedings. We decide only that the procedure we have followed is within the bounds of our delegated authority and appropriate for this case.

III. CONCLUSION

For the foregoing reasons, we decline to terminate this proceeding and therefore deny Dominion's Motion for Clarification. Unless and until there is at least one admitted contention, however, Dominion's and BREDL's disclosure obligations

¹³⁶ Luminant Generation Co., LLC (Comanche Peak Nuclear Power Plant, Units 3 and 4), LBP-11-4, 73 NRC 91, 128 (2011); Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), LBP-10-8, 71 NRC 433, 447 (2010). In Vogtle COL, subsequent to the original board's termination of the proceeding, the intervenors filed a new contention, and the original Vogtle COL board referred that contention to the Commission. Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4) Licensing Board Order (Referring Request to Admit New Contention to the Commission) (Aug. 17, 2010) at 1-3 (unpublished). The Secretary of the Commission, pursuant to her authority under 10 C.F.R. § 2.346(i) to refer requests for hearing to the Atomic Safety and Licensing Board Panel, issued a brief order referring the new contention to the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel for appropriate action. Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4) Secretary Order (Aug. 25, 2010) at 1 (unpublished). The Chief Judge appointed a new board (consisting of the same members as the old board), which held that the new contention did not meet the reopening standard, deemed that contention untimely and inadmissible, and again terminated the adjudicatory proceeding. Vogtle, LBP-10-21, 72 NRC at 630, 631-32, 644-47, 648-58.

¹³⁷ Dominion Nuclear North Anna, LLC (Early Site Permit for North Anna ESP Site), LBP-06-24, 64 NRC 360, 365 (2006).

¹³⁸ AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), LBP-06-16, 63 NRC 737, 744 (2006). Importantly, the *Oyster Creek* board did not say what would "ordinarily" terminate a proceeding in similar circumstances.

¹³⁹ See Savannah River, LBP-05-15, 62 NRC at 54.

pursuant to 10 C.F.R. § 2.336(a) and our prior scheduling orders are suspended. The NRC Staff's obligation to update its Hearing File pursuant to 10 C.F.R. §§ 2.336(b) and 2.1203 is not suspended. We will consider suspending that obligation when and if the Staff requests that we take that action. It is so ORDERED.

THE ATOMIC SAFETY AND LICENSING BOARD

Ronald M. Spritzer, Chairman ADMINISTRATIVE JUDGE

Dr. Richard F. Cole ADMINISTRATIVE JUDGE

Dr. Alice C. Mignerey ADMINISTRATIVE JUDGE

Rockville, Maryland September 1, 2011

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Ann Marshall Young, Chair Dr. Paul B. Abramson Dr. Richard F. Cole

In the Matter of

Docket No. 50-293-LR (ASLBP No. 06-848-02-LR)

ENTERGY NUCLEAR GENERATION COMPANY and ENTERGY NUCLEAR OPERATIONS, INC. (Pilgrim Nuclear Power Station)

September 8, 2011 (Corrected and Reissued December 13, 2011)

This proceeding concerns the application of Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc. for renewal of the operating license for its Pilgrim Nuclear Power Station, located in Plymouth, Massachusetts. Between the time when the Commission remanded a limited issue to the Board and when the Board disposed of the remanded issue, Intervenor Pilgrim Watch filed several requests for hearing on proposed new contentions. In this Order, a majority of the Licensing Board denies two hearing requests that Pilgrim Watch filed after the accident at the Fukushima Daiichi Nuclear Power Plant in Japan.

REOPENING

The standards for reopening apply not only when a party is seeking to introduce new evidence on a previously admitted contention after the evidentiary record is closed, but also when a party is seeking to introduce a new contention after the record is closed.

REOPENING

The contention regards limitations and phenomena that were widely known, and should have been known to intervenor, at the outset of this proceeding, and thus could have been raised long ago, rendering it untimely now.

REOPENING

Unsupported speculation that fresh analysis might lead the NRC to require additional mitigation measures simply does not rise to the level required to raise a significant safety issue or *a fortiori* an exceptionally grave issue.

REOPENING

Because severe accident mitigation alternatives analysis is a cost-benefit analysis (which has no bearing on safety significance) and is not a direct safety analysis, it does not, and by its very nature cannot, raise any exceptionally grave issue.

REOPENING

The standard for when an environmental issue is "significant" in the context of reopening a closed record is the same as the standard for when supplementation of an environmental impact statement is required; i.e., the new and significant information must paint a seriously different picture of the environmental landscape.

MOTIONS TO REOPEN

Because intervenor does not provide an affidavit substantively addressing why a materially different result is likely, the contention fails to satisfy the regulatory requirement to demonstrate that a materially different result would have been likely in this proceeding. Bare unsupported assertions do not (and cannot) demonstrate that a materially different result would have been likely and thus will not support reopening.

CONTENTIONS, ADMISSIBILITY

The contention is not supported by a concise statement of alleged fact or expert opinion. The intervenor's assertion is not self-evident and is clearly of the class of statements that must be supported by expert opinion. The documents and statements intervenor submitted do not provide the requisite support, and also fail

because neither sets out credentials showing that its author is an expert on the subject.

CONTENTIONS, ADMISSIBILITY

The intervenor's vague claim that it will rely on testimony from an expert witness and government documents does not provide the requisite concise statement of facts or expert support.

CONTENTIONS, ADMISSIBILITY

A material issue means one where resolution of the dispute would make a difference in the outcome of the licensing proceeding.

REOPENING

The contention is not timely because all of the information the intervenor asserts to be newly derived was analyzed in the original license renewal application and regards issues that have been widely recognized for many years.

CONTENTIONS, ADMISSIBILITY

Matters challenging the design of the nuclear power plant are outside the scope of the license renewal proceeding.

MOTIONS TO REOPEN

The absence of a competent affidavit, as required by 10 C.F.R. § 2.326(b), deprives the Licensing Board of the ability (even the opportunity) substantively to consider whether a materially different result would be obtained.

MEMORANDUM AND ORDER

(Corrected Version of September 8, 2011 Memorandum and Order Denying Pilgrim Watch's Requests for Hearing on New Contentions Relating to Fukushima Accident)

In this Memorandum and Order, we address the two proposed new contentions

Pilgrim Watch filed on May 12, 2011¹ and June 1, 2011² concerning Entergy's³ application for a 20-year extension of its operating license for the Pilgrim Nuclear Power Station (Pilgrim).⁴ In 2006, this Board granted Pilgrim Watch's earlier petition to intervene⁵ and admitted two contentions — Contention 1, challenging Entergy's aging management program for buried piping, and Contention 3, challenging Entergy's analysis of severe accident mitigation alternatives.⁶ The Board closed the evidentiary record and terminated these proceedings in 2008⁷ after dismissing Contention 3 on summary disposition⁸ and holding an evidentiary hearing on the merits of Contention 1.9 On March 26, 2010, the Commission remanded a narrow portion of Contention 3 to this Board for reconsideration in accordance with specific instructions. 10 The parties agreed that the remanded portion of Contention 3 could be resolved on the evidentiary record — as supplemented by their written evidentiary submissions — without an oral evidentiary hearing.¹¹ The Board heard oral argument on Contention 3¹² and ruled in favor of Entergy as to the remanded matter by order issued July 19, 2011 (Remanded Issue Order).13

In the time between the remand and the ruling on Contention 3, Pilgrim Watch filed requests for hearing on five new contentions and made a number of related filings. ¹⁴ In our Order dated August 11, 2011 (Pre-Fukushima Order), we ruled

¹ Pilgrim Watch Request for Hearing on Post-Fukushima SAMA Contention (May 12, 2011) [hereinafter Fukushima Recriticality Contention].

² Pilgrim Watch Request for Hearing on a New Contention Regarding Inadequacy of Environmental Report, Post-Fukushima (June 1, 2011) [hereinafter Fukushima DTV Contention].

³ The Applicant Entergy comprises two entities, Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc.

⁴ See 71 Fed. Reg. 15,222, 15,222 (Mar. 27, 2006).

⁵ Request for Hearing and Petition to Intervene by Pilgrim Watch (May 25, 2006) [hereinafter Petition to Intervene].

⁶ See LBP-06-23, 64 NRC 257, 348-49 (2006).

⁷LBP-08-22, 68 NRC 590, 596 (2008); Board Memorandum and Order (Ruling on Pilgrim Watch Motions Regarding Testimony and Proposed Additional Evidence Relating to Pilgrim Watch Contention 1) (June 4, 2008) at 3-4 (unpublished).

⁸LBP-07-13, 66 NRC 131, 137 (2007).

⁹Tr. at 557-874.

¹⁰ See CLI-10-11, 71 NRC 287, 290 (2010).

¹¹ Joint Motion Requesting Resolution of Contention 3 Meteorological Issues on Written Submissions (Feb. 16, 2011) at 1.

¹² Tr. at 784-1018.

¹³LBP-11-18, 74 NRC 29, 55-56 (2011).

¹⁴ The Commonwealth of Massachusetts (Commonwealth) also filed several pleadings before us and the Commission, including one new contention. On May 2, 2011, the Commonwealth moved for the Board to temporarily set aside this proceeding while the Commission considered a petition to suspend (Continued)

in favor of Entergy as to three proposed new contentions that Pilgrim Watch filed prior to the accident at Fukushima. ¹⁵ We herein deny admission to the two proposed new contentions that Pilgrim Watch filed after the accident.

I. PERTINENT BACKGROUND

The general history of this proceeding is thoroughly discussed in our Remanded Issue Order and in our Pre-Fukushima Order, and we do not repeat that discussion here. As to Fukushima-related pleadings and contentions, after the oral argument, on March 12 and 28, 2011, Pilgrim Watch submitted two filings arguing that we should consider concerns related to the recent events at the Fukushima Nuclear Power Plants in Japan in connection with the matters then currently pending before us. ¹⁶ Neither of those two filings stated a new contention. ¹⁷ In the second of those filings Pilgrim Watch argued that the events in question constituted relevant new information of which we should take judicial notice, ¹⁸ and that we should, on the same basis, accept the three new contentions addressed in our Pre-Fukushima Order, require further analysis of the Pilgrim SAMA analysis,

filed by the Commonwealth. Commonwealth of Massachusetts Motion to Hold Licensing Decision in Abeyance Pending Commission Decision Whether to Suspend the Pilgrim Proceeding to Review the Lessons of the Fukushima Accident (May 2, 2011). On June 2, 2011, the Commonwealth filed a hearing request for a new contention challenging the Entergy SAMA analysis because of asserted new information regarding both Spent Fuel Pool (SFP) accidents and severe accident probabilities based upon the events at Fukushima. Commonwealth of Massachusetts' Contention Regarding New and Significant Information Revealed by the Fukushima Radiological Accident (June 2, 2011) at 5-8; see also Commonwealth of Massachusetts' Motion to Admit Contention and, if Necessary, to Reopen Record Regarding New and Significant Information Revealed by Fukushima Accident (June 2, 2011) at 1. Also on June 2, the Commonwealth requested waiver of our regulations providing that SFP issues are outside the scope of a license renewal proceeding such as this. Commonwealth of Massachusetts' Petition for Waiver of 10 C.F.R. Part 51 Subpart A, Appendix B or, in the Alternative, Petition for Rulemaking to Rescind Regulations Excluding Consideration of Spent Fuel Storage Impacts from License Renewal Environmental Review (June 2, 2011). Most recently, the Commonwealth moved to supplement its proposed new contention to address an NRC task force report on Fukushima. Commonwealth of Massachusetts Motion to Supplement Bases to Commonwealth Contention to Address NRC Task Force Report on Lessons Learned from the Radiological Accident at Fukushima (Aug. 11, 2011) at 1-2 (citing Dr. Charles Miller et al., Recommendations for Enhancing Reactor Safety in the 21st Century, The Near-Term Task Force Review of Insight from the Fukushima Dai-Ichi Accident (July 12, 2011) (ADAMS Accession No. 111861807) [hereinafter Near-Term Task Force Report]). We will address matters relating to the Commonwealth in a future order.

¹⁵LBP-11-20, 74 NRC 65, 68-69 (2011).

¹⁶ Pilgrim Watch Memorandum Regarding Fukushima (Mar. 12, 2011) at 1 [hereinafter Fukushima Memo I]; Pilgrim Watch Post-Hearing Memorandum (Mar. 28, 2011) at 1 [hereinafter Fukushima Memo II].

¹⁷ Fukushima Memo I; Fukushima Memo II.

¹⁸ Fukushima Memo II at 1.

and delay any decision on the License Renewal Application "until NRC has evaluated the lessons learned from Fukushima to be assured that the Aging Management Programs for Pilgrim are appropriate." Attached to that latter filing was an editorial from the *Boston Globe* newspaper, urging among other things that "a badly needed reappraisal of nuclear energy safety in the United States" should "start with [the] Pilgrim nuclear station in Plymouth," including revisiting "concerns about the aging cables at Pilgrim and the plant's security." NRC Staff and Entergy opposed those filings. Our colleague discussed, briefly, in her Dissent to our Pre-Fukushima Order, her views regarding the Fukushima-related information submitted in regards to that Order, 22 views which we now address in connection with all of the Fukushima-related information in this Order.

As mentioned above, Pilgrim Watch filed two Fukushima-related proposed new contentions on May 12, 2011 (Fukushima Recriticality Contention) and June 1, 2011 (Fukushima DTV Contention). Entergy and the NRC Staff filed answers to the Fukushima Recriticality Contention on June 6, 2011²³ and to the Fukushima DTV Contention on June 27, 2011.²⁴ Pilgrim Watch filed replies regarding the Fukushima Recriticality Contention on June 13, 2011²⁵ and regarding the Fukushima DTV Contention on July 5, 2011.²⁶ Entergy moved to strike portions of Pilgrim Watch's reply regarding the Fukushima DTV Contention on

¹⁹ *Id.* at 3.

 $^{^{20}}$ Id., Attach. 1, At Pilgrim, NRC must address fuel rods, cables, safety plan, Boston Globe, Mar. 27, 2011 (emphasis omitted).

²¹ Entergy's Reply to Pilgrim Watch Post-Hearing Memorandum (Apr. 7, 2011) at 1; NRC Staff's Response to Pilgrim Watch Post-Hearing Memorandum (Apr. 7, 2011) at 1; Entergy's Objection to Pilgrim Watch's Post-Hearing Memoranda and Other Unauthorized Filings (Apr. 22, 2011) at 1.

²² Separate Statement of Administrative Judge Ann Marshall Young, LBP-11-18, 74 NRC at 60 (2011).

²³ Entergy's Answer Opposing Pilgrim Watch Request for Hearing on Post-Fukushima SAMA Contention (June 6, 2011) [hereinafter Entergy Answer to Fukushima Recriticality Contention]; NRC Staff's Answer in Opposition to Pilgrim Watch's Request for Hearing on Post[-]Fukushima SAMA Contention (June 6, 2011) [hereinafter NRC Staff Answer to Fukushima Recriticality Contention].

²⁴ Entergy's Answer Opposing Pilgrim Watch Request for Hearing on a New Contention Regarding Inadequacy of Environmental Report, Post-Fukushima (June 27, 2011) [hereinafter Entergy Answer to Fukushima DTV Contention]; NRC Staff's Answer in Opposition to Pilgrim Watch's Request for Hearing on a New Contention Regarding Inadequacy of Environmental Report, Post Fukushima (June 27, 2011) [hereinafter NRC Staff Answer to Fukushima DTV Contention].

²⁵ Pilgrim Watch Reply to Entergy's and NRC Staff's Answers to Pilgrim Watch Request for Hearing on Post[-]Fukushima SAMA Contention (June 13, 2011) [hereinafter Reply for Fukushima Recriticality Contention].

²⁶Pilgrim Watch Reply to Entergy's and NRC Staff's Answers to Pilgrim Watch Request for Hearing on [a] New Contention Regarding Inadequacy of Environmental Report, Post Fukushima (July 5, 2011) [hereinafter Reply for Fukushima DTV Contention].

July 15, 2011, 27 and Pilgrim Watch responded to this motion to strike on July 18, 2011. 28

On August 8, 2011, Pilgrim Watch filed a memorandum presenting excerpts from an NRC task force report on Fukushima (Near-Term Task Force Report).²⁹ Pilgrim Watch states that these excerpts are "new significant and material information relevant to [the Fukushima DTV Contention]."³⁰ We have, in reaching the decisions rendered herein, examined and considered all of the information contained in the pleadings (including that memorandum and the document to which it referred).

II. ANALYSIS

For either of the proposed new contentions to be admitted, Pilgrim Watch must satisfy the Commission's demanding regulatory requirements for reopening the record.³¹

Pilgrim Watch, as with its earlier new contentions addressed in our Pre-Fukushima Order, did not file a motion to reopen with regard to either of its Fukushima-related new contentions, instead taking the position it has steadfastly maintained that no such action is required. Pilgrim Watch argues that it "does not seek to reopen anything" because it "does not believe that the record in this proceeding has closed."³² Moreover, as before, it did not file the required affidavits setting forth the factual and/or technical bases for the claim that the criteria of 10 C.F.R. § 2.326(a) have been met.³³ Pilgrim Watch explains that the

²⁷ Entergy Motion to Strike Portions of Pilgrim Watch Reply to Entergy and the NRC Staff Answers Opposing Pilgrim Watch Request for Hearing on a New Contention (July 15, 2011).

²⁸ Pilgrim Watch Reply to Entergy's Motion to Strike Portions of Pilgrim Watch Reply to Entergy and the NRC Staff Answers Opposing Pilgrim Watch's Request for Hearing on a New Contention (07/15/11) (July 18, 2011).

²⁹ Pilgrim Watch Request for Leave to Supplement Pilgrim Watch Request for Hearing on a New Contention Regarding the Inadequacy of the Environmental Report, Post-Fukushima filed June 1, 2011 (Aug. 8, 2011) at 1 (citing Near-Term Task Force Report).

 $^{^{30}}$ Id.

³¹ See 10 C.F.R. § 2.326.

³²Reply for Fukushima Recriticality Contention at 2; *accord* Fukushima DTV Contention at 30 (stating Pilgrim Watch "does not seek to reopen the record" and arguing that section 2.326 "does not apply here, for a simple reason — the record in this proceeding has not been closed" (capitalization altered)). According to Pilgrim Watch, "[t]he record in this proceeding (as contrasted with the record for Contention 1) unquestionably has not been closed." Fukushima DTV Contention at 30.

³³ Pilgrim Watch's Fukushima Recriticality Contention is accompanied by a Statement of David Chanin, which fails to address the reopening standards of section 2.326; instead Mr. Chanin merely states "I have read and reviewed the enclosed proposed contention and fully support all its statements."

"new and significant information from the ongoing Fukushima crisis" it presented "was not part of and was not and could not have been litigated in connection with, either Contention 1 or Contention 3."³⁴ Pilgrim Watch asserts that although "[t]he record in Contention 1 may be closed, and the scope of Contention 3 limited," *Entergy Nuclear Vermont Yankee*, *LLC* (Vermont Yankee Nuclear Power Station) provides that "the proceeding will remain open during the pendency of the remand." Further, Pilgrim Watch pleads that:

[T]his contention should be accepted even if the record had been closed. This Board has the duty to reopen "sua sponte... when [it] becomes aware, from any source, of

Fukushima Recriticality Contention, Attach., Statement of David Chanin at 21 (May 12, 2011). And, although Pilgrim Watch's petition refers us to a document posted on the Gerson Lehrman Group website, *id.* at 8-9 (quoting http://www.glgroup.com/News/TEPCO-Data-Shows-Ongoing-Criticalities-Inside-Leaking-Fukushima-Daiichi-Unit-2-53751.html?cb=1), which, upon examination, appears to have been authored by Mr. Chanin, even if the content of that document had been part of a proper affidavit from Mr. Chanin, it also fails to address any of the reopening standards. Similarly, Pilgrim Watch's Fukushima DTV Contention is accompanied by an affidavit of Arnold Gunderson failing to address reopening standards, stating, in relevant part:

- 8. My declaration is intended to support Pilgrim Watch's Request for Hearing and is specific to issues regarding the inadequacy of Pilgrim's SAMA analysis. The SAMA does not consider new and significant issues raised at Fukushima regarding the lack of containment integrity of Pilgrim's Mark I and demonstrated failure of the direct torus vent designed to save containment during pressure buildup.
 - 9. I have reviewed the Request for Hearing and support its content.
 - 10. I am qualified to testify in support of this Request for Hearing.
- 11. I served as an expert witness for Pilgrim Watch's motion to intervene regarding the insufficiency of the aging management plan for buried pipes/tanks; and became familiar with Pilgrim Station's subsurface environment and its effect on corrosion. This applies directly to Pilgrim's buried DTV piping.

Fukushima DTV Contention, App. A, Affidavit of Arnold Gundersen ¶ 8-11 (June 1, 2011) [hereinafter Gundersen Affidavit].

³⁴Reply for Fukushima Recriticality Contention at 2-3. Pilgrim Watch explicitly states that its filing is not "an attempt to show that a materially different result would be or would have been likely had the newly proffered evidence been considered initially." *Id.* at 3. Pilgrim Watch clarifies that what it seeks "is a hearing on a new contention that raises an issue that was not been [sic] litigated, and could not have been litigated, as part of either Contention 1 or Contention 3 until the events at Fukushima brought forward the MACCS2 code's incapability to model what we now have learned is a credible accident scenario." *Id.* at 3-4.

³⁵ *Id.* at 3 (quoting CLI-10-17, 72 NRC 1, 10-11 n.37 (2010)); *accord* Fukushima DTV Contention at 30 (arguing that although "[t]he evidentiary record relating to Contention 1 was . . . closed some time ago," Pilgrim Watch "does not seek to introduce any new evidence as to Contention 1; rather it seeks to add a new, in scope, contention to the proceeding"). Pilgrim Watch provides a lengthy explanation of its theory of the regulatory requirements and its view that the present circumstances do not require reopening the record. Reply for Fukushima Recriticality Contention at 5-8.

a significant unresolved safety issue or of possible major changes in facts material to the resolution of major environmental issues."³⁶

However, Entergy points out, and the NRC Staff agrees, that "[t]he standards for reopening apply not only when a party is seeking to introduce new evidence on a previously admitted contention after the evidentiary record is closed, but also when a party is seeking to introduce a new contention after the record has been closed."³⁷ Entergy also observes that Pilgrim Watch errs in "claiming that the Commission's procedural requirements for late-filed contentions and reopening a closed record cannot be applied here because they are overridden by NEPA."³⁸ We agree with Entergy and Staff that, as with the first three contentions discussed in our Pre-Fukushima Order, Pilgrim Watch must, as a threshold matter, meet the reopening standards with respect to each of the proposed new contentions we address today for it to be admissible.³⁹

Also, as we noted in our earlier orders, the Commission emphasized, in this proceeding, the need for affidavits to support any motion to reopen, holding that intervenors' speculation that further review of certain issues "might" change some conclusions in the final safety evaluation report did not justify restarting the hearing process.⁴⁰

A. Legal Standards Governing Motion to Reopen the Record

We addressed in depth the standards for reopening a record in our Pre-Fukushima Order, and do not repeat that entire discussion here; rather we hereby incorporate that discussion by reference and set out only particular points.

The standards for reopening the record under 10 C.F.R. § 2.326(a) are as follows:

³⁶Fukushima DTV Contention at 31 (quoting Office of General Counsel, United States Nuclear Regulatory Commission Staff Practice and Procedure Digest, NUREG-0386, Post Hearing Matters § 4.4 at 11-12 (Digest 15 Mar. 2010) (ADAMS Accession No. 101000014)).

³⁷ Entergy Answer to Fukushima Recriticality Contention at 10 (citing 10 C.F.R. § 2.326(d) ("[a] motion to reopen which relates to a contention not previously in controversy among the parties must also satisfy the requirements for nontimely contentions in § 2.309(c)")); Entergy Answer to Fukushima DTV Contention at 10; NRC Staff Answer to Fukushima DTV Contention at 3 ("[T]he Commission's regulations and case law clearly indicate that once the record closes, a party seeking to litigate a genuinely new issue must meet the requirements for reopening the record in 10 C.F.R. § 2.326.").

³⁸ Entergy Answer to Fukushima DTV Contention at 10-11.

³⁹ See LBP-11-20, 74 NRC at 69.

⁴⁰ AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 486 (2008). The CLI-08-23 order involved four NRC proceedings, including the Pilgrim proceeding.

- (1) The motion must be timely. However, an exceptionally grave issue may be considered in the discretion of the presiding officer even if untimely presented;
 - (2) The motion must address a significant safety or environmental issue; and
- (3) The motion must demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially.

And, as we noted in our previous rulings, a motion to reopen must be "accompanied by affidavits that set forth the factual and/or technical bases for the movant's claim that the criteria of paragraph (a) of this section have been satisfied."⁴¹ In such affidavits, "[e]ach of the criteria must be separately addressed, with a specific explanation of why it has been met."⁴²

Additionally, where a motion to reopen relates to a contention not previously in controversy, section 2.326(d) requires that the motion demonstrate that the balance of the nontimely filing factors (*see* 10 C.F.R. § 2.309(c)) favors granting the motion to reopen. The section 2.309(c) factors are as follows:

- (i) Good cause, if any, for the failure to file on time;
- (ii) The nature of the requestor's/petitioner's right under the Act to be made a party to the proceeding;
- (iii) The nature and extent of the requestor's/petitioner's property, financial or other interest in the proceeding;
- (iv) The possible effect of any order that may be entered in the proceeding on the requestor's/petitioner's interest;
- (v) The availability of other means whereby the requestor's/petitioner's interest will be protected;
- (vi) The extent to which the requestor's/petitioner's interests will be represented by existing parties;
- (vii) The extent to which the requestor's/petitioner's participation will broaden the issues or delay the proceeding; and
- (viii) The extent to which the requestor's/petitioner's participation may reasonably be expected to assist in developing a sound record.

Finally, the new contention must also meet the standards for contention admissibility under 10 C.F.R. § 2.309(f)(1).

B. Rulings on New Contentions

1. Pilgrim Watch's May 12 Fukushima Recriticality Contention

Pilgrim Watch's Fukushima Recriticality Contention alleges that:

⁴¹ 10 C.F.R. § 2.326(b).

⁴² *Id*.

The Environmental Report is inadequate post Fukushima Daiichi because Entergy's SAMA analysis ignores new and significant lessons learned regarding the possible off-site radiological and economic consequences in a severe accident.⁴³

Pilgrim Watch asserts that "a longer [radioactive] release can cause offsite consequences that will affect cost-benefit analyses" and that "[t]he Fukushima crisis . . . shows that releases can extend into many days, weeks, and months."⁴⁴ Its concern, Pilgrim Watch explains, is that "[d]ata from TEPCO Unit 2 shows that its nuclear chain reaction continued to generate high levels of I-131 for over a month after scram . . . [whereas] Pilgrim's SAMA source terms have durations of at most 24 hours . . . , the maximum plume duration allowed by the MACCS2 code."⁴⁵ Pilgrim Watch claims its views are supported by the document it refers to from the Gerson Lehrman Group website. ⁴⁶ Pilgrim Watch concludes that this Board "has an obvious duty to re-evaluate the Applicant's SAMA analysis on the basis on this new and significant information and the public health and safety consequences."⁴⁷

To begin with, Pilgrim Watch fails to satisfy the requirements of section 2.326(a)(1) because it does not demonstrate that its motion is timely and fails to make the alternative demonstration that it raises an exceptionally grave issue.

Whether the information is timely in satisfaction of section 2.326(a)(1) turns on whether there is new information, which, because of the specific questions raised by this contention, depends upon how recently the information to support new challenges respecting matters of recriticality and sustained releases from severe accidents (and the characteristics of the MACCS2 code in this regard) was raised. Pilgrim Watch asserts that the information that forms the foundation for its contention is new because the Fukushima Recriticality Contention could not be litigated "until the events at Fukushima brought forward the MACCS2 code's incapability to model what we now have learned is a credible accident scenario." In this regard, however, Pilgrim Watch offers up only generalized (macroscopic)

The code limits the total duration of a radioactive release to no more than four (4) days, if the Applicant chooses to use four plumes occurring sequentially over a four day period. Entergy chose not to take that option and limited its analysis to a single plume having a total duration of the maximum-allowed 24 hours.

Id. at 3 (internal footnotes omitted). Further, Pilgrim Watch asserts "MACCS2 is completely unable to model the impacts of an 8-week release, with the accident at Fukushima Daachi [sic] now entering its third month with no end to the release in sight" and that "this is a generic shortcoming." *Id.* at 6.

⁴³Fukushima Recriticality Contention at 1.

⁴⁴ *Id.* at 3.

⁴⁵ *Id.* at 1. Pilgim Watch also asserts

⁴⁶ *Id.* at 8-9.

⁴⁷ *Id*. at 4.

⁴⁸ Reply for Fukushima Recriticality Contention at 4.

information respecting measurements of radiation; no information is offered, and nothing appears, from the record of this proceeding, to be available, that would provide any reasonably definitive information regarding what was actually going on in the reactor core, the reactor vessel, or the containment as these accidents evolved. Thus, the foundation for Pilgrim Watch's assertion of timeliness is not that there is new information respecting the actual occurrence of recriticality or what went on within the reactor core, but simply that they just learned that these characteristics of a severe accident are "credible" and that they just learned that the MACCS2 code is incapable of modeling them.⁴⁹ Indeed Pilgrim Watch asserts that the "new and significant" information upon which this contention rests is that data at two of the Fukushima plants demonstrate ongoing recriticalities.⁵⁰ The

What is new, of course, is the fact of the accident at the Fukushima Daiichi nuclear power plant in Japan, and whatever practical, "real-world" information it provides to enable improved understanding of matters that may not in themselves be new. The contentions arise out of such new, "real-world" information on the Fukushima accident. Whatever the merits of this information as to any other required criteria, the "newness" and timeliness of it is a separate matter, and this sort of reality-based information is obviously qualitatively different than predictions of accident factors, probabilities, and progressions, no matter how well-founded. The information, whatever other shortcomings it may have, is manifestly "new."

Id. at p. 325. But, as we noted, and our colleague explicitly acknowledged, the data presently available from the events at the Fukushima reactors are sparse and inconclusive. And, notwithstanding her detailed examination of the information provided by experts in the context of consideration of whether or not the challenge could withstand a motion for summary disposition, her own careful repetition in her dissent of that information makes plain that nothing is provided by Pilgrim Watch that can reasonably be considered to be new information respecting the analysis assumptions or analytical methodologies and inputs for SAMA analysis at Pilgrim. Indeed her conclusion that the challenge fails for failure to demonstrate a materially different result is or could be likely if Pilgrim Watch's assertedly new information were considered, implies that there is no explicit new Fukushima-derived information that could be utilized in any SAMA analysis (or to revise any present analysis), and Pilgrim Watch has proffered nothing to suggest any path toward any such revised analysis. Rather both Pilgrim Watch and our colleague simply plead that the reality of the releases at Fukushima (which are purely macroscopic observations without supporting microscopic data or information) must somehow be included in Pilgrim's SAMA analyses, without suggesting anything respecting how the methods of Pilgrim SAMA analyses might be altered to adapt the macroscopic observations from the Fukushima Accidents to the microscopic input, assumptions, and modeling required for SAMA analysis.

[W]e know that criticality is continuing at Fukushima Units 2 and Unit 1, to a lesser extent, because of the continued high findings of I-131 reported by TEPCO. This new and significant (Continued)

⁴⁹ Our colleague finds that both of Pilgrim Watch's new contentions "meet the . . . standards . . . [of] section 2.326(a)(1) and (a)(2), that they be timely filed and raise significant issues." Administrative Judge Ann Marshall Young, Concurring in Part and Dissenting in Part (Sept. 8, 2011) at p. 324 [hereinafter Concurrence and Dissent]. While accepting the fact that "[a]s to Pilgrim Watch's May 2011 'Fukushima Recriticality' contention, . . . it appears that these issues are not themselves new," *id.* at p. 325, she finds that 2.326(a)(1) is satisfied because

⁵⁰ Pilgrim Watch states

NRC Staff answers that "the time to assert that the SAMA analysis was deficient was when the original contentions were filed in this matter, over five years ago."51 Similarly, Entergy answers that the MACCS2 code's asserted inability to model releases longer than 24 hours and to model secondary criticality (recriticality) have been part of the code from the outset of this proceeding.⁵² Entergy points out that the MACCS2 User's Guide, which Pilgrim Watch cites to show that the code cannot model a release longer than 4 days, was available and examined by Pilgrim Watch at commencement of this proceeding because it was published in 1998 and was cited in Pilgrim Watch's initial pleadings in 2006.⁵³ Entergy also points to studies published in 1975 and 1990 that analyzed the potential for recriticality.⁵⁴ Entergy asserts that therefore none of the information that Pilgrim Watch would have us consider to satisfy the requirements of section 2.326(a)(1) is new.⁵⁵ Pilgrim Watch replies that the studies Entergy and the NRC Staff cite "refer to a potential or theoretical 'possibility' of re-criticality, but what is now new and significant is, it asserts, that the accidents at Fukushima show that what can really happen is ongoing releases extending into months — not only at Fukushima but also at the sister reactor Pilgrim.⁵⁶ But if, as our colleague states,⁵⁷ and Pilgrim Watch asserts,⁵⁸ Pilgrim Watch's expert, Mr. Chanin, is expert in SAMA analysis and the ins and outs of the MACCS2 computer code used for the Pilgrim SAMA analyses, he has been aware of the limitation on release durations since the inception of the code itself (which is many years before commencement of this proceeding), and it cannot be rationally asserted that the fact of the

information requires a reanalysis of Pilgrim's SAMA, updating and correcting its assumption that there will be no continued criticality.

Fukushima Recriticality Contention at 7-8.

⁵¹NRC Staff Answer to Fukushima Recriticality Contention at 8.

⁵²Entergy Answer to Fukushima Recriticality Contention at 11-12.

⁵³ Id. at 13 (citing D. Chanin & M.L. Young, Code Manual for MACCS2; User's Guide, NUREG/CR-6613, Vol. 1 (May 1998) (ADAMS Accession No. ML063550020) and Petition to Intervene at 32-33). Entergy also notes that its ER summarizes the MACCS2 code analysis performed for the Pilgrim license renewal, discusses the Pilgrim SAMA analysis, and provides "the release durations for each of the 19 collapsed accident progression bins . . . considered in the SAMA analysis." Id. (citing Entergy, License Renewal Application, Pilgrim Nuclear Power Station, Appendix E; Applicant's Environmental Report § 4.21.5.1.3, tbl. E.1-11 (Jan. 2006) (ADAMS Accession No. ML060300029)).

⁵⁴ Id. at 12 (citing Reactor Safety Study: An Assessment of Accident Risks in U.S. Commercial Nuclear Power Plants, NUREG-75/014 (WASH-1400) (Oct. 1975) (ADAMS Accession No. ML083570090); Office of Nuclear Regulatory Research, Severe Accident Risks for Five U.S. Nuclear Power Plants, NUREG-1150, Vol. 1 (Dec. 1990); and Recriticality in a BWR Following a Core Damage Event, NUREG/CR-5653 (Dec. 1990)).

⁵⁵ *Id.* at 11-13.

⁵⁶ Reply for Fukushima Recriticality Contention at 9 (emphasis omitted).

⁵⁷ Concurrence and Dissent at p. 333.

⁵⁸ Fukushima Recriticality Contention at 6.

code's inability to model these longer releases is new. Moreover, the phenomena of continuing criticalities (recriticalities) and extended-duration offsite radiation releases or even radiation levels in locations onsite are separate; there is no causal link between the possibility for recriticalities and the longer release times, as there could certainly be recriticalities without reactor vessel or containment failure and longer term releases without recriticalities. Considering these two phenomena separately: first, it is plain that the shortcoming of the MACCS2 code (and therefore of the Pilgrim SAMA analysis) regarding modeling long-term releases is not new, and was known at inception of this proceeding; and second, it is clear that there is nothing offered by Pilgrim Watch that supports their view that the phenomenon of ongoing criticalities in a reactor core is new.⁵⁹ We conclude, as Entergy did, that the Fukushima Recriticality Contention, in which "Pilgrim Watch contends that the Fukushima Daiichi accident has revealed that radioactive releases can extend in duration beyond the time period assumed by the MACCS2 Code, and that a damaged reactor core can be subject to recriticality,⁶⁰ which is not contemplated by the MACCS2 Code," regards limitations and phenomena that were widely known, and should have been known to Pilgrim Watch, at the outset of this proceeding, and "thus could have been raised long ago, rendering [it] untimely now."61

Nonetheless, as we noted above, even where a proposed new contention is not timely, section 3.326(a)(1) would permit its admission if it raises an exceptionally grave issue. In this respect, Entergy points out that Pilgrim Watch does not demonstrate the existence of a significant safety or environmental issue, "let alone an 'exceptionally grave' issue required for untimely motions to reopen." Entergy avers that Pilgrim Watch's "unsupported speculation" that "a 'fresh' SAMA analysis taking into account continuing radiological releases and (purported) post-scram criticality" *might* lead the NRC to "require additional

⁵⁹ And we cannot ignore our colleague's repetition of portions of the expert affidavits submitted by the Parties respecting observations from the accidents at Fukushima that plainly demonstrate that it is not obvious that there were any ongoing criticalities. Concurrence and Dissent at pp. 336-44 and 350.

⁶⁰ In the context of this contention, "recriticality" means a secondary criticality condition of the reactor core occurring after the initial shutdown. No particular condition is suggested to be the reason for that return to some critical configuration, but early studies referred to by the Parties treat it as having occurred due to disruption of the core configuration as it heated up, and reconfigured into some new critical configuration.

⁶¹ Entergy Answer to Fukushima Recriticality Contention at 11. Further, as we discuss *supra* p. 297, there is no generic causal relationship between the possibility of secondary criticalities and releases of longer duration, and there is no support for the postulate that there were secondary criticalities and the limitation respecting modeling extended releases is not new.

⁶²Entergy Answer to Fukushima Recriticality Contention at 14.

mitigation measures" simply does not rise to the level required to raise a significant safety issue or *a fortiori* an exceptionally grave issue.⁶³

The NRC Staff also argues that the Fukushima Recriticality Contention does not raise an exceptionally grave issue.⁶⁴ Staff asserts, that, because SAMA analysis is a cost-benefit analysis (which has no direct safety significance) and is not a direct safety analysis, it does not, and by its very nature cannot, raise any exceptionally grave issue.⁶⁵ Following this line of thought, Staff observes that the Commission, in this proceeding, has ruled that "NRC SAMA analyses are not a substitute for, and do not represent, the NRC NEPA analysis of potential impacts of severe accidents."⁶⁶ The NRC Staff asserts that "reference to the recent events at the Fukushima Daiichi Nuclear Plant in Japan, serious as those events are, does not establish that the contention itself raises an exceptionally grave issue."⁶⁷

We agree with Entergy and Staff that Pilgrim Watch has not shown the existence of an exceptionally grave safety or environmental issue.

Nor does Pilgrim Watch satisfy the requirement of section 2.326(a)(2) that the Fukushima Recriticality Contention must address a *significant* safety or environmental issue. As Entergy points out in its answer to the Fukushima DTV Contention, the Commission has indicated that the standard for when an issue is "significant" in the context of reopening a closed record is the same as the standard for when supplementation of an EIS is required, i.e., the "new and significant information must 'paint a "seriously different picture of the environmental landscape." "68 We agree with Entergy that this is an appropriate measure to apply to determine whether an issue raised is significant enough to satisfy the requirements of this provision. This contention contains only unsupported speculation respecting the underlying assertedly new information (recriticality); it does not "paint" any "picture of the environmental landscape," let alone a "seriously different" one. Further, we note that severe accidents are, by their very definition, beyond the design basis of the plant and therefore have a

⁶³ *Id*.

⁶⁴NRC Staff Answer to Fukushima Recriticality Contention at 9.

⁶⁵ Id. at 9

⁶⁶ Id. at 12 (citing CLI-10-11, 71 NRC at 316). We agree with Staff's observation that the NRC's NEPA-related safety and environmental impact analyses are conducted separately from its NEPA alternatives analyses, the latter of these including its SAMA analysis and the former not being required to include remote and speculative events such as severe accidents.

⁶⁷ Id. at 1.

⁶⁸ Entergy Answer to DTV Contention (quoting *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-06-3, 63 NRC 19, 28 (2006)) (emphasis omitted).

probability of occurrence of less than one in a million per year. ⁶⁹ As our colleague recognizes,⁷⁰ the consequences of severe accidents are not included within the NRC's environmental impacts analyses; rather the NRC examines potential plant modifications that might be cost-effective to implement to mitigate such consequences when it performs its SAMA analyses.⁷¹ And here, Pilgrim Watch challenges the results of the Pilgrim SAMA analysis by speculating that there might be other cost-effective mitigation mechanisms if its speculation respecting recriticalities were correct and those recriticalities were somehow included in the SAMA analysis through their speculated increased probabilities of longer term releases. Moreover, Pilgrim Watch offers nothing to link the events at Fukushima to the Pilgrim plant other than the similarity of their designs. We find that the Fukushima Recriticality Contention fails to implicate any alteration in the environmental impacts of the Pilgrim plant, and therefore fails to pass this hurdle.⁷² Moreover, although the foregoing failure in and of itself causes this contention to fail to raise a significant safety or environmental issue, it also fails to do so for the reasons noted above in relation to the exceptionally grave issue criterion. Thus, we conclude that this contention does not raise a significant safety or environmental issue.

⁶⁹ See, e.g., Policy Statement on Severe Reactor Accidents Regarding Future Designs and Existing Plants, 50 Fed. Reg. 32,183 (Aug. 8, 1985); Nuclear Energy Institute; Denial of Petition for Rulemaking, 60 Fed. Reg. 10,834 (Feb. 20, 2001) [hereinafter NEI].

Even though severe accidents have such a low probability of occurrence, the Commission declined in 2001 to determine that severe accidents are remote and speculative events and thereby excepted from the scope of the NRC's NEPA review, because it had "not yet established an agency record that severe accidents may be eliminated from NRC's NEPA reviews . . . the NRC staff ha[d] not developed the necessary basis for concluding that such occurrences are remote and speculative and thus inappropriate for NRC review under NEPA." NEI at 10,839 (emphasis added). For this reason, we believe, although the Commission does not require severe accidents to be included within the design basis of a plant, it perceived a need, under NEPA, to investigate mechanisms for mitigation of such events and require their implementation if such was cost-effective.

⁷⁰Concurrence and Dissent at p. 330.

⁷¹ Our colleague analogizes this situation to that analyzed by a licensing board in *Calvert Cliffs. Id.* at p. 331 (quoting *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant Unit 3), Memorandum and Order (Denying Summary Judgment of Contention 10C, Denying Amended Contention 10C, and Deferring Ruling on Contention 1) (Aug. 26, 2011) (unpublished) at 17-18). But the analogy is inapposite; the issue addressed by that licensing board regarded the question of whether or not alternatives to generation of power via a nuclear power plant should be investigated as part of the applicant's (and ultimately the Staff's) NEPA obligations to examine alternatives to the proposed action of granting the license for a nuclear power plant. The present situation involves no such obligation; it regards, as we noted, the consideration of consequences of very low probability events investigated by the NRC as part of its fulfillment of its NEPA obligations.

⁷²Our colleague summarily declares, without explanation, that this contention does paint that level of a seriously different picture of the environmental landscape. Concurrence and Dissent at p. 329.

Pilgrim Watch also fails to satisfy the requirements of section 2.326(a)(3) to demonstrate that a materially different result would have been likely had the evidence proffered in the Fukushima Recriticality Contention been considered initially. Entergy correctly argues that because Pilgrim Watch does not provide an affidavit addressing the matter, the contention fails to demonstrate that a materially different result would have been likely in this proceeding.⁷³ The NRC Staff argues, and we agree, that the bare unsupported assertions do not (and cannot) demonstrate that a materially different result would have been likely and thus will not support reopening.⁷⁴

Finally, Pilgrim Watch fails to satisfy the requirements of section 2.326(b) to provide an affidavit specifically addressing each reopening criterion. Instead of filing such an affidavit, Pilgrim Watch offers with the unnotarized "Statement of David Chanin," which merely sets forth Mr. Chanin's professional experience and states that he has "read and reviewed the enclosed proposed contention and fully support[s] all its statements." Entergy points out that the Chanin Statement is not a sworn document, does not address section 2.326(a), and does not demonstrate that Chanin is competent under section 2.326(b) to address the reopening standards. Like Entergy, the NRC Staff asserts that the Chanin Statement does not qualify as the opinion of an expert in the field of nuclear chemistry and ongoing

⁷³ See Entergy Answer to Fukushima Recriticality Contention at 15.

⁷⁴NRC Staff Answer to Fukushima Recriticality Contention at 6. Although we do not undertake any evaluation of the relative merits of the expert testimony (because, as our colleague has oft pointed out, it is inappropriate at the contention admissibility stage to evaluate a battle of experts — which is to be addressed in a hearing on the merits), we note that whereas Pilgrim Watch's supporting documentation fails to provide any support for the proposition that a materially different result would be found (nothing provided by Pilgrim Watch either directly or indirectly attributable to Mr. Chanin addresses the matter), Staff proffers sworn affidavits of experts (Dr. Nathan E. Bixler and Dr. S. Tina Ghosh) who provide testimony indicating no different SAMA result could have been likely, *Id.* at 6, 7, and Entergy, similarly, provided sworn Declaration from Drs. Sowdon and O'Kula who testify to the same result. Entergy Answer to Fukushima Recriticality Contention at 17-21.

⁷⁵ Id., Attach., Statement of David Chanin (May 12, 2011) ¶7. We note that the "document" to which Pilgrim Watch refers us on the Gerson Lehrman Group website appears to be authored by Mr. Chanin, but that document, as we discuss in more depth *supra* in note 84, also fails completely to address any of these criteria, so that if it had been incorporated by Mr. Chanin into his "Statement," the combination would still have failed to satisfy the affidavit requirements of section 2.326. Further, if the matter had been relevant, Mr. Chanin's biographical information found on his website states the following as education and relevant proficiencies: "Education: 1980 B.S. in Mathematics, University of New Mexico, Computer Proficiencies: C, C++, FORTRAN 77/90/95, Java, PHP, XHTML, and UNIX scripting/sysadmin/security." Thus, if we were to evaluate the relative merits of the supporting documentation provided by Entergy and Staff and that proffered by Pilgrim Watch (which is not necessary for our finding herein), we would agree with Entergy and Staff that we cannot accept Mr. Chanin's statements in the document referred to by Pilgrim Watch on the Gerson Lehrman Group website, or in his Statement, as anything more than speculation by a person without relevant expertise.

⁷⁶Entergy Answer to Fukushima Recriticality Contention at 9.

criticality.⁷⁷ Staff, in addition, points out that the information excerpted from the Gerson Lehrman Group fails to meet minimal requirements for admissible evidence in this proceeding.⁷⁸ We find that the statement from Mr. Chanin taken together with the document referred to by Pilgrim Watch for support, apparently authored by Mr. Chanin, and found on the Gerson Lehrman Group website, evaluated in their totality and given maximum value, fail to address any of the criteria of section 2.326(a), and therefore fail on their face to satisfy the requirements of section 2.326(b). Thus, resolution by us is not a matter of ignoring the reality of what occurred, or considering form over substance,⁷⁹ but simply the result of a plain and obvious failure by Pilgrim Watch to satisfy the regulatory requirements.

Because Pilgrim Watch failed to meet the requirements of section 2.326 for reopening this closed record, we rule that the Fukushima Recriticality Contention is inadmissible.

Although Pilgrim Watch's failure to satisfy section 2.326 independently requires us to deny this request for hearing, we nonetheless consider the Fukushima Recriticality Contention under the standards of sections 2.309(f)(1) and 2.309(c)(1).

Pilgrim Watch addresses three of the key criteria of section 2.309(f)(1), asserting that:

- (a) the contention satisfies the requirements of section 2.309(f)(1)(iii) to be within the scope of the proceeding because it addresses a flaw in the SAMA analysis, which is a Category 2 issue.⁸⁰ Pilgrim Watch explains that this contention seeks compliance with NEPA⁸¹ and observes that the purpose of NEPA "is to 'help public officials make decisions that are based on understanding of environmental consequences, and take decisions that protect, restore and enhance the environment";⁸²
- (b) the contention satisfies the section 2.309(f)(1)(iv) requirement to raise an issue material to the decision the NRC must make because:

The deficiency highlighted in this contention has enormous independent health and safety significance. Further analysis to evaluate how changes to assumptions discussed herein are likely to significantly increase offsite costs that [sic] justifies requiring Entergy to add mitigation to reduce the risk of a severe accident such as

⁷⁷NRC Staff Answer to Fukushima Recriticality Contention at 4-5.

⁷⁸*Id.* at 4. We agree with Staff; it is appropriate to require that evidence put forth to support a motion satisfy the Commission's admissibility standards in 10 C.F.R. § 2.337(a), which requires that it be relevant, material, and reliable, and there is no demonstration thereof in this instance.

⁷⁹ E.g., Concurrence and Dissent at pp. 365-66.

⁸⁰ Fukushima Recriticality Contention at 4.

⁸¹ *Id.* at 5 (citing 10 C.F.R. § 2.309(f)(2)).

⁸² Id. at 4 (quoting 40 C.F.R. § 1500.1(c) (emphasis by Pilgrim Watch omitted)).

adding plant modifications, operational changes and training to increa[s]e public safety during license renewal.⁸³

and

(c) the contention provides the alleged facts or expert support required by section 2.309(f)(1)(v) through its reference to the Gerson Lehrman document and the Chanin Statement.⁸⁴

Entergy argues that the Fukushima Recriticality Contention "fails to meet the standards for an admissible contention because it raises issues immaterial to this proceeding, lacks specificity, lacks sufficient support, and fails to demonstrate a genuine dispute with the Pilgrim license renewal application." The NRC Staff agrees that the Fukushima Recriticality Contention does not satisfy section 2.309(f)(1), arguing: "[T]he contention lacks a factual and legal basis; it is unsupported by expert opinion; and it does not raise a material issue in dispute." The NRC Staff argues that Pilgrim Watch "fails to meet the basis requirement" under section 2.309(c)(1)(ii) because "it does not explain why the events at Fukushima are relevant to Pilgrim."

Regarding scope and materiality, Entergy observes that "Pilgrim Watch in fact appears to be arguing that Entergy must implement SAMAs in order to protect the public health and safety," which the NRC's license renewal rules do not require

⁸³ Id. at 5-6.

⁸⁴ For support for this assertion, Pilgrim Watch refers to a document from the Gerson Lehrman Group dated April 28, 2011, *id.* at 8, which Pilgrim Watch fails to provide, instead providing a web address. We have previously advised Pilgrim Watch that we do not accord any weight to references to articles that have not been submitted as exhibits. LBP-11-18, 74 NRC at 52 n.126. Nevertheless, we have examined the document to which Pilgrim Watch referred and find that it seems to be an unreviewed website-posted-document from David Chanin in which he makes statements that are apparently quoted by Pilgrim Watch on pages 8 and 9 of its request for hearing on this proposed new contention. These statements are conclusory and, even if taken together with the Chanin "statement" avowing support for the statements in the pleading, fail to either address any of the section 2.326 criteria or to provide any information that would enable us to conclude that (or even address whether) Pilgrim Watch satisfied the requirements of section 2.326(a)(3) to demonstrate that a materially different result would have been likely had the evidence proffered in the Fukushima Recriticality Contention been considered initially. Thus even evaluating the information from the Gerson Lehrman website along with the Chanin Statement and giving it maximum value, the contention fails to satisfy the reopening requirements.

⁸⁵ Entergy Answer to Fukushima Recriticality Contention at 2.

⁸⁶ NRC Staff Answer to Fukushima Recriticality Contention at 1-2.

⁸⁷ *Id.* at 12.

applicants to do. 88 Entergy argues that for this reason the Fukushima Recriticality Contention "exceeds the limited scope of the safety review in a license renewal proceeding" under section 2.309(f)(1)(iii)89 and has not been demonstrated to be "material to the findings that the NRC must make to support license renewal" under section 2.309(f)(1)(iv).90 The NRC Staff also argues that the Fukushima Recriticality Contention does not raise a material issue.91 Staff also notes that although Pilgrim Watch asserts that if the SAMA analysis addressed "releases [that] extend into days, weeks and even months, the offsite consequence will be larger, and this will affect the cost-benefit analysis," Pilgrim Watch does not provide support for this bare assertion which, Pilgrim Watch asserts, demonstrates materiality.92

Regarding support, we agree with Entergy and the NRC Staff who argue that the Fukushima Recriticality Contention fails to satisfy the requirements of section 2.309(f)(1)(v) because it is not supported by a concise statement of alleged fact or expert opinion.⁹³ More particularly, we agree with the NRC Staff's argument that Pilgrim Watch's assertion that recriticality is demonstrated by the relative quantities of radionuclides released "is not self-evident and is clearly of the class of statements that must be supported by expert opinion."94 The Staff concludes, and we agree, that neither the Gerson Lehrman Group document nor the Chanin Statement provides the requisite support respecting issues of recriticality because neither sets out credentials showing that its author is an expert on nuclear chemistry or criticality. 95 Additionally, we concur with Entergy's argument that Pilgrim Watch's vague claim that it will rely on testimony from Mr. Chanin and government documents does not provide the requisite concise statement of facts or expert opinion, 96 and those of both Entergy and the NRC Staff that the document posted to the Gerson Lehrman Group website is insufficient to support admission of a contention.97

⁸⁸ Entergy Answer to Fukushima Recriticality Contention at 27-28 (noting Pilgrim Watch's assertion that "[t]he deficiency highlighted in this contention has enormous independent health and safety significance" and that "further analysis . . . justifies requiring Entergy to add mitigation . . . to increase public safety" (quoting Fukushima Recriticality Contention at 5-6)).

⁸⁹ *Id.* at 27.

⁹⁰ *Id.* at 28.

⁹¹ NRC Staff Answer to Fukushima Recriticality Contention at 14-15.

⁹² *Id*. at 6.

⁹³ Id. at 15; Entergy Answer to Fukushima Recriticality Contention at 29.

⁹⁴ NRC Staff Answer to Fukushima Recriticality Contention at 4 (citing *Nuclear Management Co., LLC* (Palisades Nuclear Plant), LBP-06-10, 63 NRC 314, 352 (2006)).

⁹⁵ *Id.* at 4-5.

⁹⁶Entergy Answer to Fukushima Recriticality Contention at 29.

⁹⁷ *Id.* at 29.

Next we turn to the requirements of section 2.309(f)(1)(vi) that the petitioner must provide sufficient information to show that a genuine dispute exists with respect to a material issue of law or fact. The NRC Staff notes that Pilgrim Watch "ignores the portions of the Pilgrim SAMA analysis that address the station blackout issues that triggered the events at Fukushima."98 We agree with Entergy's observation that the Commission has defined a "material" issue as meaning one where "resolution of the dispute would make a difference in the outcome of the licensing proceeding."99 Entergy argues that Pilgrim Watch's vague speculation that other SAMAs might become cost-effective and its assertions that extended releases and recriticalities are possible, without indication of the size of changes in consequences that could be expected from these alterations, fails to establish that the asserted deficiencies would, if accounted for as requested by Pilgrim Watch, alter the result of the SAMA analysis. 100 We agree, and therefore concur with Entergy who asserts that, because it fails to show it would change the outcome of the SAMA cost-benefit balancing at issue in this portion of this proceeding, and therefore to satisfy the definition of what is material in this context, the contention fails to satisfy the requirements to show a genuine dispute with the application on a material issue.101

Finally, we note that there is absolutely nothing in front of us, in any pleading in this proceeding, nor is there anything we have found on Mr. Chanin's website (which we understand to be www.chaninconsulting.com) that can reasonably be interpreted to advise us that Mr. Chanin has any expertise in physics, reactor physics, the thermohydraulics of core disruption during a core melt accident, the modeling of core disruption phenomena, or the modeling or analysis of the physics of a core whose geometry has been disrupted, all of which are obvious requisite expertises for understanding the potential for a recriticality of a reactor core whose original geometry has been altered by the phenomena that Mr. Chanin speculates (and, perhaps TEPCO believes) has occurred. Thus we agree with Staff and Entergy that, insofar as Mr. Chanin's statements in the document referred to by Pilgrim Watch on the Gerson Lehrman Group website, or in his Statement, address matters of recriticality, we cannot accept them as anything more than speculation by a person without relevant expertise, and therefore Pilgrim Watch fails to satisfy the requirement to provide sufficient information to show that a genuine dispute exists with respect to a material issue of law or fact respecting recriticality issues. 102

⁹⁸ NRC Staff Answer to Fukushima Recriticality Contention at 12.

⁹⁹ Entergy Answer to Fukushima Recriticality Contention at 30 (quoting 54 Fed. Reg. at 33,172).

¹⁰⁰ See id. at 30-32.

¹⁰¹ Id. at 30.

 $^{^{102}}$ We note that there simply is no dispute respecting the inability of the MACCS2 code to model longer term releases.

We agree with Entergy and Staff that the Fukushima Recriticality Contention fails to satisfy the requirements of section 2.309(f)(1), and is therefore inadmissible. More particularly, it fails to satisfy the requirements of sections 2.309(f)(1)(iii) and 2.309(f)(1)(iv) to demonstrate that the issue raised is within the scope of this proceeding and material to the decision the NRC must make. Additionally, the proffered contention fails to satisfy the requirements of section 2.309(f)(1)(v) to provide a concise statement of alleged facts or expert opinions together with references to specific sources and documents, 103 and it fails to satisfy the requirements of section 2.309(f)(1)(vi) to "show" that a genuine dispute exists with the licensee on a material issue of law or fact, any one of which failures is fatal to admissibility of this contention.

Finally, as to the requirements of section 2.309(c)(1) respecting nontimely filed contentions, Pilgrim Watch asserts that all of the factors weigh in its favor. ¹⁰⁴ Entergy answers that "factors one, seven and eight — the three most significant factors — count heavily against Pilgrim Watch" and that the less important factors cannot outweigh these three. ¹⁰⁵

Regarding the first and most important factor, good cause for failing to file on time, Pilgrim Watch asserts:

The Fukushima disaster began on March 11, 2011. The information upon which this contention is based is not yet fully available. However sufficient information has been released by TEPCO to file this request. ¹⁰⁶

Entergy argues that "Pilgrim Watch has failed to demonstrate good cause for its very late-filed contention" "[f]or the same reasons that the contention is not timely under section[] 2.326(a)(1)." Agreeing with Entergy, the NRC Staff maintains that Pilgrim Watch "has not shown good cause" because it "has failed to show that it could not have raised the contention previously." ¹⁰⁸

Regarding the seventh factor, Entergy argues that the proposed new contention would delay the proceeding, which "has entered its sixth year, notwithstanding the Commission's goal to complete license renewal proceedings in two and one half years."¹⁰⁹ Entergy notes that the NRC issued the final environmental and

¹⁰³ The combination of the Chanin Statement and the document attributed to him on the Gerson Lehrman Group website fails to provide the support required by section 2.309(f)(1)(v) and (vi).

¹⁰⁴Fukushima Recriticality Contention at 14-19.

¹⁰⁵ Entergy Answer to Fukushima Recriticality Contention at 25.

¹⁰⁶ Fukushima Recriticality Contention at 14.

¹⁰⁷ Entergy Answer to Fukushima Recriticality Contention at 23.

 $^{^{108}}$ NRC Staff Answer to Fukushima Recriticality Contention at 8.

¹⁰⁹ Entergy Answer to Fukushima Recriticality Contention at 24.

safety review documents in 2007.¹¹⁰ Concerning the eighth factor, Entergy argues Pilgrim Watch cannot reasonably be expected to assist in developing a sound record because it "fails to set out with any particularity the precise issues it plans to cover or what its expert testimony will address" and "nowhere identifies any witness or summarizes any witness testimony for its many assertions regarding ongoing radioactive releases and purported recriticalities."¹¹¹ On these points, Pilgrim Watch argues that the Fukushima Recriticality Contention will not delay the proceeding because Pilgrim Watch has not been "tardy" in responding to information about Fukushima and that its participation is necessary to develop a sound record regarding the subject of the proposed new contention.¹¹²

For the same reasons that we found the Fukushima Recriticality Contention untimely under section 2.326(a)(1), we agree with Entergy and Staff that Pilgrim Watch fails to have the good cause required under section 2.309(c)(1)(i). As we discussed at length above, the possibilities that there could be longer release times and extended periods of recriticalities are simply not new, and the fact of these occurrences at the Fukushima reactors, even if true, has not been linked to the possibilities for similar occurrences at Pilgrim except by the generalized claim that the reactor designs are similar.

Accordingly, we turn to examination of whether Pilgrim Watch has made the requisite compelling showing that the remaining section 2.309(c) criteria weigh in favor of admission of this nontimely contention. For the reasons expressed by Entergy, 113 we find they do not. Thus, we find that, in addition to being inadmissible for failure to satisfy the requirements of sections 2.326 and inadmissible for failure to satisfy the requirements of 2.309(f)(1), this contention is also inadmissible for failure to satisfy the requirements of 2.309(c).

2. Pilgrim Watch's June 1, 2011 Fukushima DTV Contention

Pilgrim Watch's Fukushima DTV Contention alleges that:

Based on new and significant information from Fukushima, the Environmental Report is inadequate post Fukushima Daiichi. Entergy's SAMA analysis ignores new and significant issues raised by Fukushima regarding the probability of both containment failure, and subsequent larger off-site consequences due to failure of the direct torus vent (DTV) to operate.¹¹⁴

¹¹⁰ Id.

¹¹¹ Id. at 24-25.

¹¹² Fukushima Recriticality Contention at 15-19.

¹¹³ Entergy Answer to Fukushima Recriticality Contention at 24-25.

¹¹⁴Fukushima DTV Contention at 1.

The DTV, Pilgrim Watch explains, "is designed to relieve high pressure generated during a severe accident, and to avoid containment failure/explosion."¹¹⁵ Pilgrim Watch asserts that "[p]ost Fukushima Daiichi, it plainly is necessary to redo Pilgrim's SAMA analysis to take into account new and significant information"¹¹⁶ "concerning the likely failure of the DTV to prevent containment failure."¹¹⁷ Specifically, Pilgrim Watch asserts that at Fukushima:

- Properly trained operators decided not to open the DTV when they should have because they feared the effects offsite of significant unfiltered releases;
- (2) When the operators finally decided to open the DTV, they were unable to do so;
- (3) The failure of the DTV to vent led to containment failure/explosions that resulted in significant ongoing offsite consequences. 118

Pilgrim Watch goes on to assert that the Pilgrim plant requires a DTV filter because the lack of such a filter at Fukushima "had significant negative unintended consequences" when use of the vents was delayed while "managers agonized over whether to resort to emergency measures that would allow a substantial amount of radioactive materials to escape into the air." Pilgrim Watch also asserts that Pilgrim's SAMA analysis should require redesign of the DTV so that it is not "dependent on electric power and worker's ability to operate critical valves because power might be cut in an emergency and workers might be incapacitated." Pilgrim Watch concludes that "[t]he offsite consequences of containment failure would be huge."

Referring to Appendix E of the LRA, Pilgrim Watch makes its sole explicit challenge to the License Renewal Application when it observes that the Applicant's SAMA analyses included events wherein the DTV was not opened because the operator failed to operate it, but did not include events wherein the operator declined to operate it.¹²²

Pilgrim Watch asserts that NEPA requires the NRC to consider this new information so that important effects will not be overlooked or underestimated

 $^{^{115}}$ *Id.* at 7.

¹¹⁶ *Id.* at 2.

¹¹⁷ *Id*. at 6.

¹¹⁸ Id.

¹¹⁹ Id. at 8 (quoting id., Exh. 7, Hidden Dangers: Japanese Officials Ignored or Concealed Dangers, N.Y. Times, May 17, 2011).

¹²⁰ Id. at 12-13 (quoting id., Exh. 10, Matthew Wald, U.S. Was Warned on Vents Before Failure at Japan's Plant, N.Y. Times, May 18, 2011).

¹²¹ Id. at 24.

¹²² Id. at 23.

and that the Board must consider the Fukushima events because they impact the quality of the environment and that we cannot rely upon Entergy's SAMA analysis which ignores that data.¹²³

As support for its submittal and its assertions, Pilgrim Watch refers to articles in the *New York Times*, a blog on the Internet, and a variety of articles and papers dating from the middle 1970s to the early 1980s.¹²⁴ Pilgrim Watch also provides the Affidavit of Arnold Gunderson, who states, in relevant part, and without addressing at all the reopening criteria of section 2.326:

8. My declaration is intended to support Pilgrim Watch's Request for Hearing and is specific to issues regarding the inadequacy of Pilgrim's SAMA analysis. The SAMA does not consider new and significant issues raised at Fukushima regarding the lack of containment integrity of Pilgrim's Mark I and demonstrated failure of the direct torus vent designed to save containment during pressure buildup.

. . . .

9. I have reviewed the Request for Hearing and support its content.

. . . .

13. The explosions at Fukushima show that Pilgrim's DTV is unlikely to save Pilgrim's containment and huge amounts of radiation will be released. The subsequent offsite costs incurred from such an event justify additional mitigations to reduce the risk of DTV failure and loss of containment.¹²⁵

Mr. Gundersen provides no technical information, provides nothing explicit regarding operator actions or operation of, and provides no information as to operability or non-operability of the DTVs either at Pilgrim or at the Fukushima plants. Nor does he provide any specific information respecting offsite consequences of severe accidents of any sort nor link anything which occurred at Fukushima to the Pilgrim Plant.

Both Entergy and Staff assert that admission of this contention should be denied because, among other failures, Pilgrim Watch has not satisfied the standards for reopening a closed record.¹²⁶

Entergy answers that Pilgrim Watch's request should be denied because: (a) neither the Request nor the appended Gundersen Affidavit address meets the standards for reopening a closed record; (b) it fails to meet the standards governing a nontimely contention; and (c) it fails to meet the standards for an admissible contention because it raises issues immaterial to this proceeding, lacks

¹²³ *Id.* at 3-4.

¹²⁴ *Id.* at 8-21.

¹²⁵ Id., App. A, Affidavit of Arnold Gundersen at 34.

¹²⁶ Entergy Answer to Fukushima DTV Contention at 9; NRC Staff Answer to Fukushima DTV Contention at 2.

sufficient support, and fails to demonstrate a genuine dispute with the Pilgrim license renewal application. 127

As to failure to satisfy the requirements of section 2.326, Entergy argues generally that:

Pilgrim Watch's Request and claims are factually incorrect because the Pilgrim SAMA analysis is based on a site specific estimate of accident probabilities that fully takes into account pressure build-up within the containment, operator error in failing to vent the containment, failure or inoperability of the DTV itself, and catastrophic failure of the containment. Each of these topics is fully addressed in the Pilgrim SAMA analysis, and nowhere in its contention does Pilgrim Watch challenge the adequacy of the SAMA analysis of these issues. As such, Pilgrim Watch fails to meet the standards governing reopening a closed hearing record, considering a late-filed contention, and admitting a contention. 128

Entergy then asserts that the contention fails to satisfy the requirements of section 2.326 for reopening a closed record, including noting that not only did Pilgrim Watch elect not to address those criteria, but the Gundersen Affidavit fails entirely to address (as is required by section 2.326(b)) the required elements thereof.¹²⁹

Addressing the requirements of section 2.326(a)(1), Entergy asserts that this contention is untimely because it regards the buildup of containment pressure, hydrogen explosion, operator error in failure or delay in attempting to vent the containment, DTV failure or inoperability, potential containment failure or breach, and resulting large offsite consequences, all of which are addressed in the original LRA SAMA analysis and therefore could (and should) have been challenged at that time (rendering such challenges untimely now). 130 Entergy also points out that Pilgrim Watch challenged the absence of a filtered vented containment at the outset of this proceeding and those claims were rejected.¹³¹ Pilgrim Watch asserts it is new and significant information that "an unfiltered vent . . . makes operators hesitant to use the vent until perhaps too late, upping the probability of containment failure/explosion."132 Pilgrim Watch asserts that "the likelihood that the DTV simply won't work when release is required to save the containment" is "new and significant information" because prior to Fukushima, concerns with DTV operational safety focused on preventing operator error from activating the DTV and "mistakenly releas[ing] unfiltered radiation into the environment." ¹³³

¹²⁷ Entergy Answer to Fukushima DTV Contention at 1-2.

¹²⁸ *Id.* at 9.

¹²⁹ *Id.* at 9-10.

¹³⁰ *Id.* at 13-17.

¹³¹ *Id.* at 16.

¹³² Fukushima DTV Contention at 21.

¹³³ *Id.* at 6.

The Staff agrees with Entergy that the Fukushima DTV Contention is untimely, arguing that Pilgrim Watch's own pleadings demonstrate that DTV issues have been discussed for decades. Staff asserts that any indication that the Fukushima accident demonstrates that DTVs are problematic does not present the sort of new information sufficient to overcome the timeliness requirements of our regulations.¹³⁴

Turning to the proviso in section 2.326(a)(1) that an untimely contention could be sufficient if it raises an exceptionally grave issue, Entergy asserts that neither Pilgrim Watch nor Mr. Gundersen has demonstrated (indeed, Mr. Gundersen did not even address the matter and Pilgrim Watch offers no support for such a proposition) that there is an "exceptionally grave" issue raised by this contention. ¹³⁵ Further, Entergy asserts that Pilgrim Watch's argument that redoing the SAMA analysis might result in additional SAMAs becoming cost-effective (which we construe, for this particular portion of our analysis, to also address the question of whether there is an exceptionally grave issue) is nothing more than bare speculation. ¹³⁶

As to the requirements of section 2.326(a)(2) that the motion address a significant safety or environmental issue, Entergy refers us to CLI-06-3 wherein the Commission held, in the context of reopening a closed record, that "new and significant information must 'paint a "seriously different picture of the environmental landscape,"" asserting that should be the standard for when an issue is "significant" within the meaning of this regulation. Pointing to Commission precedent, Entergy avers that the bare speculative assertions of Pilgrim Watch that a reperformance of the SAMA analysis considering the phenomena raised by Pilgrim Watch *might* result in a requirement for additional SAMA implementation fails to satisfy this standard.¹³⁷

¹³⁴NRC Staff Answer to Fukushima DTV Contention at 8-10.

¹³⁵Entergy Answer to Fukushima DTV Contention at 16-18.

¹³⁶ Id. at 18-19. Entergy states that:

^{. . .} Pilgrim Watch makes no attempt to quantify, nor makes any showing, that further accounting for DTV inoperability or the costs associated with the would-be containment failure could make any difference in the Pilgrim SAMA analysis. Similarly insufficient is Pilgrim Watch's unsupported claim of an "increased probability of a severe accident and larger offsite consequences, both justifying additional mitigation." Pilgrim Watch never comes forward with anything other than unsupported, bare assertions and mere speculation that significant increases in offsite consequences are possible and that the SAMA results might be different. Such bare assertions are insufficient to show an exceptionally grave issue for reopening the record.

Id. at 19 (quoting Fukushima DTV Contention at 5 and Oyster Creek, CLI-09-7, 69 NRC at 287 (citing CLI-08-28, 68 NRC at 674)).

¹³⁷ *Id.* at 17-18.

Staff agrees with Entergy that the Fukushima DTV Contention does not rise to the level of a serious safety or environmental issue which would satisfy the requirements of 10 C.F.R. § 2.326(a)(2), explaining that the issue regards a SAMA analysis which Staff's experts characterize in their affidavits as being aimed at "further reduc[ing] the risk from a plant that ha[s] no identified safety vulnerabilities." Rather, it is, Staff argues, an issue that has already been thoroughly examined and is presently being examined by the NRC Task Force on Fukushima. 139

Staff argues that, contrary to Pilgrim Watch's assertion, section 2.326(a)'s third criterion does not apply because the contention does not challenge any prior result of this proceeding; this contention challenges the Staff's conclusions on which SAMAs would be cost-beneficial (which is a "prior result"), and therefore the materially different result criterion applies. ¹⁴⁰ Staff reasons that "to reopen the record under 10 C.F.R. § 2.326(a), Pilgrim Watch must demonstrate that the issues raised by the New Contention would likely change the cost-benefit conclusions in the Pilgrim SAMA analysis by at least a factor of 2," but observes that Pilgrim Watch failed to produce any evidence that there would be any change in the cost-benefit weighing. ¹⁴¹ Staff reasons that Pilgrim Watch's allegations are the sort of bare assertions that the Commission has found insufficient to satisfy the reopening standards. ¹⁴²

With regard to Pilgrim Watch's bare assertion that it has satisfied the requirements of section 2.326(a)(3) to demonstrate that a materially different result would be likely had this new and significant information been available to consider initially because "offsite consequences . . . would far outweigh the cost of mitigations to reduce risk of containment failure," Entergy argues that the Affidavit of Mr. Gundersen fails to provide any support (let alone the specific level of support required by 2.326(b)) for that proposition. It addition, Entergy points out, the articles to which Pilgrim Watch refers for support provide no evidentiary weight. Entergy goes on to challenge the expertise of Mr. Gundersen in SAMA, containment failure and DTV matters, concluding that he is not an

¹³⁸ NRC Staff Answer to Fukushima DTV Contention at 11 (quoting Affidavit of Dr. Nathan E. Bixler and Dr. S. Tina Ghosh in Support of the NRC Staff's Answer in Opposition to Pilgrim Watch's Request for Hearing on Post Fukushima SAMA Contention at 4-5 (June 6, 2011)).

¹³⁹ *Id.* at 11-13.

¹⁴⁰ *Id*. at 3.

¹⁴¹ *Id.* at 6-8.

¹⁴² Id. at 8.

¹⁴³ Fukushima DTV Contention at 29 (citation omitted).

¹⁴⁴Entergy Answer to Fukushima DTV Contention at 20.

¹⁴⁵ *Id*.

appropriate sponsor for the matters Pilgrim Watch raises in this contention. ¹⁴⁶ Moreover, like Entergy, Staff asserts and explains its logic why the contention fails to satisfy the requirements of 10 C.F.R. § 2.326(b) to be supported by an expert affidavit, asserting that Mr. Gundersen has not demonstrated expertise in the areas raised by this contention. Further, Staff asserts that Mr. Gundersen's affidavit fails to provide technical or factual support to enable this pleading to satisfy the requirements of section 2.326(a). ¹⁴⁷

As to the requirements of section 2.326(a) and (b), we find that Pilgrim Watch's contention is not timely because all of the information it asserts to be newly derived from the accidents at Fukushima, except possibly their assertion that operators at Fukushima intentionally failed to operate the DTVs, regard issues respecting plant configuration, equipment, components and operations and operator performance that were analyzed in the original LRA and regard issues that have been widely recognized for many years. To the extent that Pilgrim Watch raises the possibility that the Fukushima operators intentionally decided to not open the DTVs at the proper time or the DTVs themselves did not work at Fukushima, Pilgrim Watch offers nothing to link either the asserted failure of the Fukushima DTVs to operate or the operator actions at the Fukushima plants to what might reasonably be expected of the DTVs at Pilgrim or of operators of the Pilgrim Plant as they comply with the plant procedures and their training, nor does it offer anything to support its implication that adding this possibility would alter the probability associated with DTV failure and thereby materially alter the SAMA cost-benefit analysis. This latter concern is pure speculation. Thus we do not find any "new" information in Pilgrim Watch's observations or challenges to Pilgrim in this contention. We disagree with our colleague who, despite undertaking an extensive discussion and some limited analysis of the statements of experts on the topic of DTV operation and operability, finds that the performance of the operators and plants at Fukushima demonstrate that there is new and significant (with respect to the Pilgrim license renewal application, and therefore specifically to the Pilgrim Plant) information. 148 Although our colleague observes that "Pilgrim Watch maintains that Entergy's 'theoretical assumption' that the DTV would work was the 'underpinning of its assumed probabilities in accident consequences," and that Pilgrim Watch asserts that the "'new and significant issue is the likelihood that the DTV simply won't work when release is required to save the containment,"149 the Dissent errs in its analysis; Pilgrim Watch fails to offer any new information to support that speculation and none is provided by its experts or any of the references it cites. Thus we find no foundation

¹⁴⁶ *Id.* at 20-22.

¹⁴⁷ *Id.* at 13-15.

¹⁴⁸ Concurrence and Dissent at pp. 349-63.

¹⁴⁹ Id. at p. 351 (quoting Fukushima DTV Contention at 5-6).

for our colleague's finding that Pilgrim Watch "has shown that there are genuine disputes on material facts regarding increased probability of containment failure and large release, the role of the DTV in this, and the cost-effectiveness of upgrading the DTV."150 There is simply no substance to our colleague's postulate that looking at the reality of what occurred leads to admissibility, because there is no supporting information, nor is there any definitive data, respecting the occurrences at the Fukushima plants, let alone any information provided that relates these possibilities to the Pilgrim Plant or its operations or operability. Contrary to our colleague's notion that our approach to this Order elevates form over substance. 151 we have looked only to facts, information, and data presented in this proceeding and adhered to solid principles of statutory construction. Thus, we find this contention fails to satisfy the requirements of section 2.326(a)(1) regarding timeliness. In addition, we find, for the reasons set out by Staff and Entergy, that Pilgrim Watch has failed to raise an exceptionally grave issue, and therefore we decline to exercise the discretion granted to us in this portion of our regulations to consider this issue. We similarly find that the motion fails to address a significant safety or environmental issue as required by section 2.326(a)(2)¹⁵² and that it fails to demonstrate that a materially different result would be or would have been likely had the evidence proffered by Pilgrim Watch been considered as is required by section 2.326(a)(3). With regard to both of these findings, we disagree with the view of our colleague that the affidavit of Mr. Gundersen provided by Pilgrim Watch "provid[es] support that is sufficient to warrant further inquiry, and sufficient to show the likelihood of a materially different result, by demonstrating a genuine dispute on material issues of fact,"153 finding it to fail utterly to provide any technical support for this contention and to fail completely to address not only the foundation necessary to establish either a genuine dispute with the application on any material issue of fact or the likelihood of a different result, but also failing to address any of the relevant provisions of section 2.326(a). Further, none of the other sources of information to which Pilgrim Watch refers provides any support whatsoever for these matters. Thus the affidavit of Mr. Gundersen, even when we consider it together with all substance of other information to which Pilgrim Watch refers, fails to satisfy the

¹⁵⁰ *Id.* at p. 363.

¹⁵¹ Id. at pp. 365-66.

¹⁵² As we noted above respecting the Fukushima Recriticality Contention, we agree with Entergy that the standard set out in CLI-06-3 is the relevant measure for determining whether an issue is significant under the requirements of section 2.326(a)(2), and that the Fukushima DTV Contention not only fails to satisfy this criterion, but also fails because it offers only unsupported qualitative speculation, entirely without quantification or challenge to the existing LRA, as to the impact of the issues raised.

¹⁵³ Concurrence and Dissent at p. 365.

requirements of section 2.326(b), thus depriving us of any ability to weigh the otherwise bare claims of Pilgrim Watch. There is no basis whatsoever for us to find that the requirements of section 2.326(a) are addressed, let alone satisfied, by any of these documents.

For the foregoing reasons, we find that Pilgrim Watch's Fukushima DTV Contention is inadmissible for failure to satisfy the requirements of section 2.326.

As with our ruling on Pilgrim Watch's Fukushima Recriticality Contention, although the Fukushima DTV Contention is inadmissible for the foregoing reasons, we now turn to consideration of the requirements of sections 2.309(c) and 2.309(f)(1).

As to the requirements of section 2.309(c), we are persuaded that the information that Pilgrim Watch asserts to be newly derived from the Fukushima accidents (respecting the buildup of containment pressure, hydrogen explosion, DTV failure or inoperability, failure or delay in attempting to vent the containment because of operator error, potential containment failure, and the resulting offsite consequences), does not involve issues for the Pilgrim Plant that are new (i.e., despite the data presently available from events at Fukushima, it is not based upon, or related to, information as to aspects of the Pilgrim plant, personnel actions and analysis that was not previously available). Rather, with the single exception mentioned above, those matters were all part of the plant analysis from the outset of this proceeding, and the shortcomings that Pilgrim Watch now seeks to raise were considered and examined many years ago. As to the particular assertions that the Fukushima operators intentionally did not open the DTVs when it was appropriate to do so, and that the Fukushima DTVs failed to operate when called upon, and therefore the Pilgrim SAMA analysis should be redone to include the possibility that the Pilgrim operators or Pilgrim DTVs might similarly fail, Pilgrim Watch offered no support for their speculation respecting how the Pilgrim operators would react, failed to examine or challenge anything respecting the Pilgrim plant's DTV function or anything in either Pilgrim operator training or Pilgrim operating manuals and failed to support their view that the Pilgrim operators would behave as they assert the Fukushima operators behaved or the Pilgrim DTVs would fail as they assert the Fukushima DTVs did, and therefore failed to base its challenge on any new information regarding the Pilgrim plant or the license renewal application. The mere fact, if true, that the Fukushima operators intentionally failed to open DTVs when appropriate is not related in any fashion by Pilgrim Watch to operator actions at the Pilgrim plant, and the same is true respecting the failure of DTVs, and therefore these asserted failures at the Fukushima plants cannot be deemed to represent "new" information respecting this license renewal application. Therefore, we find that Pilgrim Watch does not have good cause for its failure to file a timely contention. As to the other factors, we agree with Entergy, for the reasons it stated, that admission of this contention at this late stage in this proceeding will substantially broaden and delay the proceeding as specified in 10 C.F.R. § 2.309(c)(1)(vii). Therefore we find that Pilgrim Watch has not overcome the deficiency of failure to have good cause by making a compelling showing regarding the remainder of the factors of section 2.309(c). And, we agree with the Staff who argue that Pilgrim Watch's claims about DTV pipe corrosion are not timely raised because the topic of buried and inaccessible piping has already been litigated in this proceeding. Thus we find that the Fukushima DTV Contention is also inadmissible for failure to satisfy the requirements of section 2.309(c) for nontimely contentions.

Turning, finally, to whether the Fukushima DTV Contention satisfies the requirements of section 2.309(f)(1), we focus upon a few critical elements of that regulation. Pilgrim Watch claims that this contention is material because it highlights a deficiency of "enormous independent health and safety significance." 155

Entergy concludes with an analysis that it asserts shows that Pilgrim Watch has not demonstrated that the factors of 10 C.F.R. § 2.309(c) support admission of this contention¹⁵⁶ and that the strict criteria of 10 C.F.R. § 2.309(f)(1) regarding admissibility of a contention are not satisfied.¹⁵⁷ Importantly, along this vein, we agree with Entergy's assertion, for the reasons it sets out, that Pilgrim Watch has not shown that its claims are material in the context of this contention, which would require that the matters raised would alter the SAMA cost-benefit outcome.¹⁵⁸ Similarly, the Staff asserts that Pilgrim Watch has not demonstrated that the contention is material or supported by an adequate factual basis. Thus, the Staff asserts, it also fails to meet the admissibility requirements applicable to all contentions.¹⁵⁹

Further, the Staff asserts that Pilgrim Watch's speculation that the DTV vent piping is corroded because it is buried cannot support admissibility of this

Pilgrim Watch asserts no facts and provides no explanation showing that, were its concerns accounted for, the risk averted would even approach that mark . . . Pilgrim Watch fails to dispute or otherwise challenge, in light of Fukushima, the adequacy of the severe accident releases evaluated in the Pilgrim SAMA analysis. The severe accident releases used for the Pilgrim SAMA analysis represent a range of releases from small to very large based on the different possible severe accident scenarios for the Pilgrim plant, and include releases that are many times greater than the releases that occurred at the Fukushima reactors. The severe accident releases assumed for the Pilgrim SAMA analysis more than bound the reported releases from Fukushima.

¹⁵⁴NRC Staff Answer to Fukushima DTV Contention at 21-22.

¹⁵⁵ Fukushima DTV Contention at 5.

¹⁵⁶Entergy Answer to Fukushima DTV Contention at 26-31.

¹⁵⁷ Id. at 31-36.

¹⁵⁸ *Id.* at 36-37. Entergy asserts:

Id. at 37 (citing to Entergy Decl. ¶¶ 47, 63-69).

¹⁵⁹NRC Staff Answer to Fukushima DTV Contention at 2.

contention. ¹⁶⁰ In any event, we agree with the Staff that Pilgrim Watch has drawn no connection between the possibility of corrosion of that piping and the asserted flaws in the SAMA analysis made in this contention.

As regards the requirements of 2.309(f)(1)(v), Entergy asserts that:

The late-filed contention is also inadmissible because it is not supported by a concise statement of alleged fact or expert opinion, in contravention of 10 C.F.R. $\S\S2.309(f)(1)(v)$. Pilgrim Watch does not present any expert opinion supporting its new contention. Pilgrim Watch claims that it will rely on testimony from Mr. Gundersen (whose Affidavit accompanying the Request says nothing other than that he supports the Pilgrim Watch Request statements), government documents, and discovery documents from Contention 1... These vague references do not provide the requisite, concise statement of facts or expert opinion. A mere reference to documents, without any explanation of their implications or significance, does not provide an adequate basis for a contention. 161

In this regard, Entergy repeats its assertion that Pilgrim Watch's intent to rely upon documents it identified from websites also fails to satisfy these requirements.

Staff echoes the assertions of Entergy, averring that, and supporting its arguments by going through Pilgrim Watch's claims point by point. We agree with Staff's analysis and its conclusion, for the reasons set out by the Staff and Entergy, that Pilgrim Watch's contention lacks adequate basis, instead relying upon speculation and non-expert information, and that Pilgrim Watch failed to connect their underlying information to the Pilgrim SAMA analysis. 162

As to the requirements of section 2.309(f)(1)(vi) to show a genuine dispute with the applicant over a material issue of law or fact, we agree with Entergy and Staff, for the reasons they set out, who both assert that Pilgrim Watch has failed to show that consideration of the matters concerning it would affect the outcome of the NRC SAMA analysis and therefore do not create a material dispute. ¹⁶³ Pilgrim Watch has simply offered nothing to support its bare speculation. Although we decline to consider competing expert views (as that is only appropriate for a hearing on the merits not for contention admissibility, or for weighing in consideration of satisfaction of reopening requirements vis-à-vis the standards for a grant of summary disposition), and such consideration has not played any part in reaching our decision, Entergy asserts that the attached declarations of its experts demonstrate that there is no genuine issue of material fact raised

¹⁶⁰ *Id.* at 10.

¹⁶¹ Entergy Answer to Fukushima DTV Contention at 35.

¹⁶²NRC Staff Answer to Fukushima DTV Contention at 18-22.

¹⁶³ Entergy Answer to Fukushima DTV Contention at 35-36; NRC Staff Answer to Fukushima DTV Contention at 17-18.

by this contention, ¹⁶⁴ and that this demonstration is dispositive under relevant Commission case law. ¹⁶⁵

We agree with Staff and Entergy that Pilgrim Watch has failed to satisfy the requirements of these two provisions with respect to the Fukushima DTV Contention, and therefore, even if it had not been inadmissible for failure to satisfy the requirements of section 2.326, ¹⁶⁶ or for failure to satisfy the requirements of section 2.309(c), it is inadmissible for failure to satisfy the requirements of section 2.309(f)(1).

Finally we note that Pilgrim Watch's assertions that the DTVs should be modified and that a filter should be added are matters challenging the design of the Pilgrim plant and are outside the scope of this proceeding.

3. Ruling on Both Pilgrim Watch Contentions

With respect to both of its post-Fukushima contentions, Pilgrim Watch contends that its new contentions: (1) need not satisfy the standards for reopening the record in 10 C.F.R. § 2.326; (2) satisfy the contention admissibility standards in 10 C.F.R. § 2.309(f)(1); and (3) satisfy the standards for untimely new contentions in 10 C.F.R. § 2.309(c). ¹⁶⁷ Although Pilgrim Watch did indeed deliver affidavits in connection with the two new contentions, neither addresses, as is required by the Commission's regulations, the reopening standards of section 2.326. The

¹⁶⁴ Specifically, Entergy's experts testify that DTV venting was successful at two of the three Fukushima plants where Pilgrim Watch asserts DTV venting failed, and that containment does not appear to have failed at all three plants. *Id.* at 23-24. Entergy points out that its experts testify that the Pilgrim SAMA analysis includes scenarios wherein a great deal more radioactive products are released than were released in the Fukushima Daiichi accidents, thus making plain the error in Pilgrim Watch's (and Mr. Gundersen's) bare respective assertions that the "offsite consequences of containment failure would be huge" and "huge amounts of radiation will be released," and that such huge consequences were not properly factored into Entergy's SAMA analysis. *Id.* at 25-26.

¹⁶⁵ See infra note 169 and accompanying text.

¹⁶⁶We fail to see any logical factual or legal basis for our colleague's finding "that Pilgrim Watch has shown the likelihood of a materially different result in this proceeding, as required by 10 C.F.R. § 2.32[6](a)(3) and (b), by demonstrating genuine disputes on material issues of fact, concerning the increased probabilities of containment failure and large releases as a result of information arising out of the Fukushima accident, as well as the potential cost-effectiveness of upgrading the DTV as Pilgrim Watch asserts." The argument that there exists, "through the quite detailed support provided for the contention, which Mr. Gundersen supports and effectively adopts as his own," is without foundation, and therefore we disagree with our colleague's conclusion that "Pilgrim Watch has shown that it could defeat a summary disposition motion on the 'complex, fact-intensive issues' that are involved in Pilgrim Watch's June Fukushima DTV Contention." Concurrence and Dissent at p. 366.

¹⁶⁷ Compare Pilgrim Watch Request for Hearing on a New Contention: Inadequacy of Entergy's Aging Management of Non-Environmentally Qualified (EQ) Inaccessible Cables (Splices) at Pilgrim Station at 53, 58 (Jan. 20, 2011) with Reply for Fukushima Recriticality Contention at 2, 8, 14 and Fukushima DTV Contention at 4, 24, 30.

Commission has emphasized, in this docket, the need for affidavits to support any motion to reopen and has held that intervenors' speculation that further review of certain issues "might" change some conclusions in the final safety evaluation report does not justify restarting the hearing process. ¹⁶⁸

For the reasons we discussed at length in our Pre-Fukushima Order regarding three other new contentions filed by Pilgrim Watch and repeated at some length here, neither of these two new contentions may be admitted without satisfaction of all of the requirements for reopening a record, and Pilgrim Watch has intentionally failed to do so. And here, even though there are affidavits (or the like) provided, the actual substance of the supplied information fails abjectly to address the requirements of section 2.326. As we stated in our Pre-Fukushima Order, the absence of a competent affidavit, as required by 10 C.F.R. § 2.326(b) deprives us of the ability (even the opportunity) substantively to consider whether a materially different result would be obtained (as is required by the regulatory reopening standards). 169 Because Pilgrim Watch has failed to satisfy the requirements of section 2.326 with respect to either its Fukushima Recriticality Contention or its Fukushima DTV Contention, we deny Pilgrim Watch's request for a hearing on both. And, as we noted above, even had we found that Pilgrim Watch had satisfied the requirements of section 2.326 with respect to either of these contentions, neither satisfies the requirements of section 2.309(c) regarding nontimely contentions and neither presents an admissible contention when judged by the criteria of section 2.309(f)(1).

Finally, as to our colleague's *sua sponte* recommendations to the Commission, we note the following. The issues presented by the Fukushima accident present broad issues that the NRC is addressing on an industry-wide (i.e., generic) basis. As to the risk to public health and safety presented by continuing operation of United States Nuclear Power Plants, the NRC's Near Term Task Force on the Accident at Fukushima has already reported:

The current regulatory approach, and more importantly, the resultant plant capabilities allow the Task Force to conclude that a sequence of events like the Fukushima accident is unlikely to occur in the United States and some appropriate mitigation measures have been implemented, reducing the likelihood of core damage and radi-

¹⁶⁸ AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 486 (2008). The Commission also held that "Bare assertions and speculation . . . do not supply the requisite support." AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 287 (2009) (citing Oyster Creek, CLI-08-28, 68 NRC at 674). This case involved four NRC proceedings, including the Pilgrim proceeding.

¹⁶⁹ This standard is measured using the Commission's test of whether it has been *shown* that a motion for summary disposition could be defeated. *See Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), CLI-11-2, 73 NRC 333, 346 (2011).

ological releases. Therefore, continued operation and continued licensing activities do not pose an imminent risk to public health and safety.

However, the Task Force also concludes that a more balanced application of the Commission's defense-in-depth philosophy using risk insights would provide an enhanced regulatory framework that is logical, systematic, coherent, and better understood.¹⁷⁰

And, directly addressing the foundation for these contentions, the Task Force concluded:

[T]he current regulatory approach and regulatory requirements continue to serve as a basis for the reasonable assurance of adequate protection of public health and safety until the actions set forth below have been implemented.¹⁷¹

And the Task Force envisions a future expanded comprehensive regulatory framework based upon the existing design basis framework, "complemented with new requirements to establish a more balanced and effective application of defense-in-depth," including the possible expansion of the use of SAMGs (Severe Accident Mitigation Guidelines).¹⁷² But all these respect current licensing basis issues and portend future activities based upon development of a comprehensive understanding of the events at Fukushima — a matter which, if history is any teacher, will take at least several years. In the interim, unless the Commission finds that there is some unique link between the Fukushima accidents and the expected performance of the Pilgrim plant during its period of extended operation (which, it seems to us, would fall within the broad view of the Task Force that "continued operation and continued licensing activities do not pose an imminent risk to public health and safety"), we believe it would be counterproductive for the Commission to single out the Pilgrim plant for particular examination specifically because its license renewal application is presently being litigated or considered by the Commission. The Pilgrim plant is simply one of over twenty BWR Mark-I plants operating in the United States, and, to the extent there are issues raised by the events at Fukushima that have implications for Pilgrim because it is a Mark-I plant, every one of those other plants seems to us to be similarly situated, making such consideration appropriate for generic resolution, not for the "one-off" resolution presented by this proceeding.

¹⁷⁰ Near-Term Task Force Report at vii-viii.

¹⁷¹ *Id.* at 73.

¹⁷² Id. at 21, 49.

III. CONCLUSION AND ORDER

For the foregoing reasons, we find that Pilgrim Watch's new contentions filed May 12, 2011, and June 1, 2011, fail to satisfy the criteria for reopening under 10 C.F.R. § 2.326, the standards for untimely contentions under 10 C.F.R. § 2.309(c), and the contention admissibility criteria of 10 C.F.R. § 2.309(f)(1), each of which failures is in and of itself fatal to admissibility, and their admission is therefore DENIED.

It is so ORDERED.

THE ATOMIC SAFETY AND LICENSING BOARD¹⁷³

Dr. Paul B. Abramson ADMINISTRATIVE JUDGE

Dr. Richard F. Cole ADMINISTRATIVE JUDGE

Rockville, Maryland December 13, 2011

 $^{^{173}}$ Judge Young's separate opinion concurring in part and dissenting in part is attached hereto.

Administrative Judge Ann Marshall Young, Concurring in Part and Dissenting in Part

Introduction

Again, I agree with some, but not all, of my colleagues' conclusions, and provide my own reasoning herein. Specifically, as in my concurrence and dissent to the majority decision in LBP-11-20, I find that the reopening standards of 10 C.F.R. § 2.326 are applicable to the new contentions filed by Intervenor Pilgrim Watch in May and June of 2011. I further find that both of Pilgrim Watch's new contentions, relating to the Pilgrim severe accident mitigation alternatives (SAMA) analysis and how certain new information arising out of the accident at the Fukushima Daiichi nuclear power plant in Japan may inform this analysis, meet the first two of these standards, under section 2.326(a)(1) and (a)(2), that they be timely filed and raise significant issues. I also find that both contentions meet the requirements of 10 C.F.R. § 2.309(c), (f)(1), and (f)(2).

I find that the May "Fukushima Recriticality" Contention does not meet the exacting requirement of demonstrating that a materially different result would be likely, using the standard of showing an ability to defeat a summary disposition motion. But I find that the June "Fukushima DTV" Contention does meet this standard. I also in any case, however, *sua sponte* would recommend to the Commission that it assure that the Staff take a "hard look" at the matters at issue in both contentions, along with any other issues arising out of the Fukushima Dai-ichi accident that relate particularly to General Electric Mark I boiling water reactors. I would further suggest, in the interest of better assuring both public safety and public trust in the process, that this be done prior to deciding whether to grant the pending Application for license renewal, rather than wait to have such matters addressed (generically or otherwise) as operating issues under the plant's current licensing basis.

Before addressing the specifics of the two pending contentions, I begin my analysis with short overviews of some basic concepts that are applicable to the current inquiry.

The Fukushima Daiichi Accident as "New" Information; Timeliness of New Contentions

There are in the pleadings relating to the two new contentions various arguments about whether the information on which the contentions are based is truly "new," so as to support their timeliness, given that some of the technical issues

¹ See infra note 19.

put forward in support of the contentions have been analyzed and considered in various contexts over the years. As to Pilgrim Watch's May 2011 "Fukushima Recriticality" contention, which concerns the Pilgrim SAMA analysis with respect to offsite consequences of a severe accident and the possibility of continuing generation of radiological releases for some period of time after an accident, it appears that these issues are not themselves new, given that they have been addressed in a number of contexts over the years. With respect to Intervenor's June 2011 "Fukushima DTV" contention, which concerns the SAMA analysis and issues surrounding possible operator failure and/or inoperability of the Direct Torus Vent (DTV) at the Pilgrim plant, it likewise appears that various issues relating to the DTV are not new and have in fact been addressed by the NRC and the industry, as argued by Applicant and NRC Staff.

What is new, of course, is the fact of the accident at the Fukushima Daiichi nuclear power plant in Japan, and whatever practical, "real-world" information it provides that may enable improved understanding of issues that may not in themselves be new. The contentions arise out of such new, "real-world" information on the Fukushima accident. Whatever the merits of this information as to any other required criteria, the "newness" and timeliness of it is a separate matter, and this sort of reality-based information is obviously qualitatively different than predictions of accident factors, probabilities, and progressions, no matter how well founded. The information, whatever other shortcomings it may have, is manifestly "new."

Pilgrim Watch's contentions are also supported by other, previously existing information that serves as context and provides additional bases for the contentions. But this circumstance negates neither the "new-ness" of the Fukushima-related information, nor the value of either sort of information, whatever its worth otherwise. Looking at the situation in the plain light of day, I find that Applicant and Staff in their arguments seem to have developed a somewhat purposeful blind spot in this regard and, as with some of their other arguments, tend to fall into a sort of overzealous, "overkill" syndrome (which can at times undermine their overall credibility). The accident at Fukushima happened, and it happened at reactors of the same model as the Pilgrim reactor. In this light, not to consider information concerning the *severe accident* at the Fukushima plant as "new" information that is relevant to the Pilgrim SAMA analysis — the *severe accident* mitigation alternatives analysis — including those aspects of it that concern containment failure, offsite consequences, and the functioning and use of the DTV, would seem to be short-sighted, if not indeed absurd.

I note Entergy's and Staff's arguments that the contentions are based on information found in articles that are not all in the best form for evidentiary purposes. Under the circumstances, however, I am not inclined to exclude contentions on this basis alone, or find reliance on such articles to be unreasonable per se, when as a practical matter there appears at this time to be relatively less

of the sort of more direct and reliable information that would be preferable, for the obvious reason that information and analysis on the accident will proceed at a rate dependent on when new facts become available. Nor does this circumstance negate the "new-ness" of the Fukushima-related information.

It may be that in the end, after all possible information from Fukushima is available and analyzed in detail from all angles, Entergy and the NRC Staff may be proven right in arguing in effect that no new information that would be even arguably useful in a SAMA analysis (even one concerning a 40-year-old Mark I BWR) will be forthcoming. But at the present time, it would seem to me that the better part of wisdom suggests at least *considering* the information and whether it might lead to revisions in the Pilgrim SAMA analysis and in the end to greater assurance of public safety. Moreover, while I note that the NRC Staff has been directed by the Commission to produce papers prioritizing the Near-Term Task Force's recommendations² and outlining which ones should be implemented without delay, this does not automatically mandate the denial of any contentions addressing Fukushima-related (and indeed Task Force-related) subjects — particularly since the Commission has allowed for 18 months to "consider the Task Force's first and broadest recommendation, a call for revising the NRC's regulatory approach."³

I further note, with respect to the Near-Term Task Force recommendations and the June 2011 Fukushima DTV contention, that Applicant argues *inter alia* that "a cursory review of [the Task Force Report] information indicates that it is neither new nor materially different than the information Pilgrim Watch included in its request for hearing on [the DTV] issue," that "the factors that led to [the] Fukushima accident are specific to that site and would not occur at Pilgrim," and that "Pilgrim Watch cannot credibly contend that further consideration of the Fukushima accident scenario would materially alter the results of the Pilgrim SAMA analysis." Pilgrim Watch argues *inter alia* to the effect that information from Fukushima could change the probabilities that are assigned to various items in the SAMA analysis, as well as the cost-benefit conclusions, in contrast to Entergy's apparent view that even the probabilities would not be changed one whit. Although I do not find by any means that Pilgrim Watch has shown that it will prevail on the one contention I would admit, I do find it has made a sufficient showing with respect to that contention, and would doubt in any event

² See Dr. Charles Miller et al., 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) (ADAMS Accession No. ML111861807).

³NRC News Release, Commission Seeks Prompt Action on Japan Task Force Recommendations (Aug. 19, 2011).

⁴Entergy's Opposition to Pilgrim Watch's Request to Supplement Request for Hearing on Contention Concerning the Direct Torus Vent (Aug. 18, 2011) at 3-5.

that information from either Fukushima or the Task Force would be irrelevant and useless to analysis of the issues raised in both of Pilgrim Watch's contentions. I would, rather, think that erring on the side of caution and at least looking at the information would be in order, except to the extent that the matters are about to become the subject of rulemaking.⁵

Such consideration would seem to be particularly appropriate given that the Pilgrim plant is in the unique position of being the *only* General Electric Mark I BWR plant whose license renewal application is currently pending. Applicant and Staff essentially argue to the effect that license renewal is a relatively insignificant step in the larger context of continuing operation under the current licensing basis, and that any issues arising out of the Fukushima accident will be handled in that context. But this approach may err on the side of giving insufficient attention to a decision whether to take the affirmative step of renewing, for an additional 20 years, a license for a 40-year-old plant that would, but for such renewal, expire.

I realize that, for the Applicant, having earlier knowledge of the outcome of this process would be better for it from a business planning perspective, and that, particularly in these economic times, this concern is not to be underestimated. However, the license remains in effect until the license renewal decision is ultimately rendered, and taking the time to ensure that due regard is given to any lessons learned from Fukushima appears to me to be fully appropriate. Given the fact of the Fukushima accident, and the fact that it involved — and continues to involve — reactors of the same design as the Pilgrim reactor, I find that taking the time to pause and consider whatever information is available at this point and in the near future should ensure a more informed decision on the license renewal application, and one which will better assure the public that all relevant issues arising out of the Fukushima accident have been seriously considered and taken into account.

More specifically on the timeliness of the new contentions, I note first, regarding the May 2011 "Fukushima Recriticality" contention, Pilgrim Watch's observation that the "Fukushima disaster began on March 11, 2011," and that the "information upon which this contention is based is not yet fully available," and its further assertions that "sufficient information has been released by TEPCO to file this request," that it could not have presented the information earlier, and that it "acted reasonably and promptly after learning of the new information,"

⁵ See Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 345 (1999). I note in addition that, were a 95th percentile rather than the mean used in the SAMA analysis, as I have previously discussed, this, together with other relevant issues, including those currently raised, might indeed change the SAMA cost-benefit conclusions. See LBP-11-18, Separate Statement of Administrative Judge Ann Marshall Young at 60 n.11 [hereinafter LBP-11-18 Separate Statement].

which constitutes good cause for not filing it earlier.⁶ Similarly, regarding its June "Fukushima DTV" contention, Intervenor states that the information on which it is based "is new and could not have been presented earlier, and that Pilgrim Watch acted promptly after learning of the new information."⁷

Based on the foregoing, I find that, because both of Pilgrim Watch's contentions are centrally based on Fukushima-related information in one form or another, with other information merely providing additional context and basis to show the significance of the central Fukushima-related asserted facts, they were timely filed as required by section 2.326(a)(1); timely submitted and based on not-previously-available information that is materially different than any prior information, as required by section 2.309(f)(2)(i)-(iii); and that such prior unavailability in any event constitutes good cause for the time of filing as required by section 2.309(c)(1)(i).

As to the other subsections of section 2.309(c)(1), I also find in Pilgrim Watch's favor, with the exception of subpart (vii) and possibly subpart (viii). It has already been determined that Pilgrim Watch has an interest and right as a party to this proceeding,⁸ which carries with it the reality that whatever order is ultimately issued in this proceeding will affect such interest, and there appears to be no other party raising the concerns stated in the contention. Obviously, admitting the contention would delay the proceeding somewhat,⁹ but I would not find this consideration outweighs the good cause provision of subpart (i), the factor given the greatest weight in a section 2.309(c) analysis.¹⁰ And on subpart (viii), it is clear that Pilgrim Watch is limited in its resources, but I would also note that it appears to have a combination of experts — a nuclear engineer and an expert in the MACCS2 Code used in the SAMA analysis — who would likely be able together to address very well all relevant issues in both contentions sufficiently to warrant the granting of a hearing.

⁶ Pilgrim Watch Request for Hearing on Post Fukushima SAMA Contention (May 12, 2011) at 14-15 [hereinafter May 2011 or Fukushima Recriticality Contention] (citing *Texas Utilities Electric Co.* (Comanche Peak Steam Electric Station, Units 1 and 2), CLI-92-12, 36 NRC 62, 69-73 (1992)).

⁷ Pilgrim Watch Request for Hearing on a New Contention Regarding Inadequ[a]cy of Environmental Report, Post Fukushima (June 1, 2011) at 25 [hereinafter June 2011 Contention or Fukushima DTV Contention].

⁸LBP-06-23, 64 NRC 257, 271, 348 (2006).

⁹ Of course, as I have previously observed, the fact that the Applicant may continue to operate pending a final decision on its license renewal application, *see* 10 C.F.R. § 2.109, minimizes the negative impact of any delay. *See* LBP-11-20 Separate Statement, 74 NRC at 100 n.46.

¹⁰ See, e.g., Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-10-17, 72 NRC 1, 53 n.304 (2010).

The Fukushima Daiichi Accident as Supporting the "Significance" of the New Contentions

I would further find that information regarding the Fukushima accident is clearly "significant," as required at 10 C.F.R. § 2.326(a)(2), both as a matter of obvious fact, and with specific reference to the Pilgrim SAMA analysis, including those aspects of it that concern containment failure, offsite consequences, and the functioning and use of the DTV (the latter of which, I note, was one circumstance that, early on after the accident, was cited as a distinguishing factor between U.S. plants and Fukushima Daiichi, given that the latter reactors did not have such vents — before it was discovered that they did in fact have them).

This is not to say that there are no issues with respect to the quality and completeness of available information provided by Intervenor that relates to the Fukushima accident, or that Pilgrim Watch has raised these issues in a faultless manner. But not to take into account information arising out of the Fukushima accident that might, as I discuss above, provide new insights on aspects of the Pilgrim SAMA analysis seems, again, to be short-sighted. However "significance" is defined, the Fukushima accident and its aftermath have (as any such severe accident would do) clearly "paint[ed] a 'seriously different picture of the environmental landscape'" with respect to nuclear power reactors, particularly Mark I BWRs such as the Pilgrim plant.

Principles Relating to SAMA Analyses and NEPA

I note Pilgrim Watch's arguments based on the Supreme Court's *Marsh* decision, that:

The NRC must consider new and significant information arising from the accident at Fukushima before relicensing Pilgrim NPS whether or not that information ultimately leads to modification of licensing requirements. "Regardless of its eventual assessment of the significance of the information, the [agency] ha[s] a duty to take a hard look at the proferred [sic] evidence..."

The fundamental purpose of the National Environmental Policy Act, NEPA, is to "help public officials make decisions that are based on understanding of environmental consequences, and take decisions that protect, restore and enhance the environment." ¹²

¹¹ See Entergy's Answer Opposing Pilgrim Watch Request for Hearing on a New Contention Regarding Inadequacy of Environmental Report, Post-Fukushima (June 27, 2011) at 18 (quoting *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-06-3, 63 NRC 19, 28 (2006)).

¹² June 2011 "Fukushima DTV" Contention at 3 (citing *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 385 (1989); 42 USC § 4332; 40 C.F.R. § 1500.1(c)).

Also, as the Commission stated in CLI-10-11,

There is no NEPA requirement to use the best scientific methodology, and NEPA "should be construed in the light of reason if it is not to demand" virtually infinite study and resources. Nor is an environmental impact statement intended to be a "research document," reflecting the frontiers of scientific methodology, studies and data. . . .

Significantly, NRC SAMA analyses are not a substitute for, and do not represent, the NRC NEPA analysis of potential impacts of severe accidents. The NRC's GEIS for license renewal provides a generic evaluation of severe accident impacts and the technical basis for the NRC's conclusion that "the probability-weighted consequences of atmospheric releases, fallout onto open bodies of water, releases to groundwater, and societal and economic impacts from severe accidents are small for all plants." Because the GEIS provides a severe accident impacts analysis that envelopes the potential impacts at *all* existing plants, the environmental impacts of severe accidents during the license renewal term already have been addressed generically in bounding fashion.

The SAMA analysis is a site-specific *mitigation* analysis. For a mitigation analysis, NEPA "demands 'no fully developed plan' or 'detailed examination of specific measures which will be employed' to mitigate adverse environmental effects...."¹³

I do not read the Commission's discussion to mean that it will not take the requisite "hard look" at the SAMA analysis, and indeed the NRC Staff does address the SAMA analysis in the EIS for the Pilgrim Plant. I note also that, while NEPA "does not mandate particular results," its purposes include

ensur[ing] that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision.¹⁵

Thus, it may well be argued, as Pilgrim Watch does, that the NRC should

¹³ CLI-10-11, 71 NRC 287, 315-16 (2010) (citing Hells Canyon Alliance v. U.S. Forest Service, 227 F.3d 1170, 1185 (9th Cir. 2000); Natural Resources Defense Council, Inc. v. Hodel, 865 F.2d 288, 294 (D.C. Cir. 1988); Town of Winthrop v. Federal Aviation Administration, 535 F.3d 1, 11-13 (1st Cir. 2008); 10 C.F.R. Part 51, Subpart A, Appendix B, Table B-1 (regarding "severe accidents"); GEIS, Final Report, Vol. 1 at 5-12 to 5-106; Catawba/McGuire, CLI-03-17, 58 NRC at 431 (quoting Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 353 (1989)).

¹⁴ See Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 29, Regarding Pilgrim Nuclear Power Station, Final Report (July 2007) § 5.2; Appendix G.

¹⁵ Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349-50 (1989).

supplement the Pilgrim EIS to incorporate consideration of any information reasonably available from and relating to the Fukushima accident, given that the reactors there are of the same model as the Pilgrim reactor. Of course, NEPA "does not mandate *how* [an] agency must fulfill its obligations" under the statute. ¹⁶ Therefore, unless Pilgrim Watch meets all of the relevant requirements (which I have listed in the Introduction above), this board may not order a hearing on these NEPA issues.

I do note, however, in this regard, the reasoning of another Licensing Board in the *Calvert Cliffs* proceeding, addressing the applicant's argument that in that case that

no remedy is necessary because revising the FEIS would not alter the NRC Staff's conclusions. This is in substance an argument for the application of the doctrine of harmless error. That doctrine, however, has only limited application in NEPA cases, and none where the agency has failed to take the required hard look at environmental consequences and alternatives. . . .

NRC Staff cannot evade its NEPA obligation to thoroughly explore reasonable alternatives by claiming that doing so would not change its conclusions. Even if the Staff's conclusions would in fact remain unchanged, one of NEPA's primary goals is fostering informed public participation in the decision making process. Providing the public with accurate and complete information concerning the environmental consequences of the proposed action and alternatives is essential to fulfilling that goal. . . . "[w]ithout substantive, comparative environmental impact information regarding other possible courses of action, the ability of an EIS to inform agency deliberation and facilitate public involvement would be greatly degraded." 17

The *Calvert Cliffs* Board applied this standard in determining whether to grant summary disposition of a contention involving alternatives to that proposed project, and denied the motion, based in part on the quoted reasoning. ¹⁸ Following this logic, it would seem to be arguable that, where an adjudicatory proceeding has commenced and a NEPA-related issue has arisen in that context, the matter must be addressed in that same context. I address the impact of the preceding

¹⁶ Massachusetts v. NRC, 522 F.3d 115, 130 (1st Cir. 2008) (emphasis in original) (citing 42 U.S.C. §4332; Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc., 462 U.S. 87, 100-01, 103 (1983); Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 548 (1978)).

¹⁷ Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), Memorandum and Order (Denying Summary Judgment of Contention 10C, Denying Amended Contention 10C, and Deferring Ruling on Contention 1) (Aug. 26, 2011) (unpublished) at 17-18 (citing California Wilderness Coalition v. U.S. Department of Energy, 631 F.3d 1072, 1105-06 (9th Cir. 2011); Robertson, 490 U.S. at 349-50; New Mexico ex rel. Richardson v. Bureau of Land Management, 565 F.3d 683, 708 (10th Cir. 2009)).

¹⁸ *Id.* at 20.

principle in my discussion below of Pilgrim Watch's June 2011 "Fukushima DTV" Contention.

Principles Relating to the Materially Different Result and Affidavit Requirements of 10 C.F.R. § 2.326(a)(3) and (b), and the Expert Support Provided by Intervenor

As I have previously observed, the Commission has stated that the standard for determining whether a party has met the "materially different result" requirements of 10 C.F.R. § 2.326(a)(3) and (b) is whether the party can defeat a motion for summary disposition.¹⁹ I note also the Commission's summary of principles relating to summary disposition in CLI-10-11,²⁰ as well as its finding that "complex, fact-intensive issues [are] best left for the Board's consideration in the first instance."²¹

On the other hand, with respect to Entergy's and Staff's arguments that Pilgrim Watch's experts do not demonstrate their expertise in all relevant subject areas, there is also some early Appeal Board case law quoting, from 10 C.F.R. § 2.749(b) as it then read, the following language: "Affidavits shall set forth such facts as would be admissible in evidence and shall show affirmatively that the affiant is competent to testify to the matters stated therein."22 At the present time, there are two pertinent provisions relating to summary disposition, that of 10 C.F.R. § 2.1205, requiring "affidavits to support statements of fact" and that in ruling on such motions the standards of subpart G shall apply; and 10 C.F.R. § 2.710 (part of Subpart G), which contains two somewhat contradictory provisions: First, it states in subsection (a) that parties opposing summary disposition may file an answer "with or without affidavits." Then, in subsection (b), it states that "Affidavits must set forth the facts that would be admissible in evidence and must demonstrate affirmatively that the affiant is competent to testify to the matters stated in the affidavit." It does not specify what an answer filed "without affidavits" must show.

¹⁹ See Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-11-2, 73 NRC 333, 346 (2011); LBP-11-20, Administrative Judge Ann Marshall Young, Concurring in Part and Dissenting in Part, at 103-04 & n.72.

²⁰ See CLI-10-11, 71 NRC at 297-98.

²¹ Id. at 305.

²² Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), ALAB-443, 6 NRC 741, 755 (1977). The Appeal Board in Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), ALAB-950, 33 NRC 492, 500-01 (1991), also noted section 2.749(b), indicating as well that a licensing board was not in error in finding a person not "competent" to address technical issues in responding to a motion for summary disposition, whether under that section or the general NRC evidentiary standard of evidence having to be "relevant, material, and reliable." Id. at 501 (emphasis in original).

As I indicate above, Pilgrim Watch has two experts who together would seem to have the expertise to address on some level all the issues raised in the two contentions at issue. However, Mr. David Chanin, the expert for the May "Fukushima Recriticality" contention, speaks not only to the SAMA analysis, on which he appears to me to be undisputedly an expert as one of the developers of the MACCS2 Code, but also to issues of criticality and interpreting the significance of various levels of Iodine-131 in this regard, matters clearly more in the area of expertise of a nuclear engineer.²³ Nonetheless, I do not necessarily find that Mr. Chanin is not competent to testify on nuclear criticality issues; although outside his normal areas of expertise, it appears he has some familiarity with, and expertise on, the other concepts involved in the May Fukushima Recriticality contention, based on his long experience working in the nuclear arena.

As for the expert for the June "Fukushima DTV" contention, Mr. Gundersen is a nuclear engineer, who appears to have broad experience that I find is sufficient to enable him to speak with some expertise on the subject of the June 2011 Fukushima DTV contention.

In the end, in any event, I do not base my conclusion with respect to the May contention and the "materially different result" issue of section 2.326(a)(3) on the expertise issue, and merely note the issue here in the interest of clarity, given that it has been rather extensively argued by both Entergy and the Staff. I base the conclusion, rather, on the failure of Pilgrim Watch to demonstrate in the May contention, as required in a summary disposition context, the existence of a genuine issue of material fact with respect to the complex matters in question. Mr. Chanin makes statements that purport to dispute Entergy's position. But their less detailed, more conclusory, and at times imprecise quality undermines the message they impart when considered in terms of disputing the relatively complex, detailed, and precise presentations of facts Entergy and Staff experts put forward. From a summary disposition perspective, which is the one the Commission has defined for meeting the requirement of 10 C.F.R. § 2.326(a)(3), it is difficult to conclude that Pilgrim Watch has sufficiently demonstrated a

²³I note that, when I say the expert "speaks to" various issues, I am referring to his essentially adopting the basis provided for the contention as his own, as well as being the author of an article quoted by Intervenor in the May 2011 Fukushima Recriticality Contention. The same applies to Mr. Gunderson's adopting as his own the basis provided by Intervenor for the contention. Although the better form would obviously be to produce a separate and precise sworn Affidavit, I would tend to look to the substance rather than the form, particularly with a *pro se* intervenor, so long as what is presented meets a reasonable level of clarity, and other parties are not unduly prejudiced. As I noted in my concurrence and dissent to LBP-11-20, 73 NRC at 96 n.26, in NRC proceedings, *pro se* litigants are generally not held to the same high standards of pleading and practice as parties with counsel. *See, e.g., Vermont Yankee I,* CLI-10-17, 72 NRC at 45 n.246; *U.S. Enrichment Corp.* (Paducah, Kentucky Gaseous Diffusion Plant), CLI-01-23, 54 NRC 267, 272 (2001); *Consolidated Edison Co. of New York* (Indian Point, Unit 2), LBP-83-5, 17 NRC 134, 136 (1983).

genuine dispute with the statements of fact presented by Entergy and the NRC Staff through their experts, with respect to the May 2011 Fukushima Recriticality contention.²⁴

I turn now to the specifics of Pilgrim Watch's May and June contentions and the extent to which they meet the requirements of 10 C.F.R. §§ 2.309(f)(1) and 2.326(a)(3) and (b).

Pilgrim Watch May 12, 2011, "Fukushima Recriticality" Contention

Pilgrim Watch in this contention states:

The Environmental Report is inadequate post Fukushima Daiichi because Entergy's SAMA analysis ignores new and significant lessons learned regarding the possible off-site radiological and economic consequences in a severe accident.²⁵

More specifically, Intervenor asserts as follows:

Data from TEPCO Unit 2 [(a GE Mark 1 reactor very similar to Pilgrim)] shows that its nuclear chain reaction continued to generate high levels of I-131 for over a month after scram despite the efforts of TEPCO to terminate chain reaction by injection of borated water. Pilgrim's SAMA source terms have durations of at most 24 hours duration, the maximum plume duration allowed by the MACCS2 code, which assumes that once the accident begins with reactor scram, a reactor completely ceases production of "fresh" short-lived iodines, such as I-131, which pose great radiological hazard if inhaled or ingested. By design, MACCS2 is unable to model the consequences of an accident at a reactor where the fission chain reaction continues apace despite reactor scram.²⁶

Intervenor states that "[t]his phenomenon was also noted at the Chernobyl Unit 4 accident of April 26, 1986," in which "the nuclear chain reaction was observed to greatly accelerate and reach a peak on May 1, 1986, which resulted in large

²⁴ Pilgrim Watch in effect concedes this, remarking in more than one place in its pleadings that this proceeding is not now at the summary disposition stage. *See, e.g.*, Pilgrim Watch Reply to Entergy's and NRC Staff's Answers to Pilgrim Watch Request for Hearing on Post Fukushima SAMA Contention (June 13, 2011) [hereinafter PW 6/13/11 Reply]; Pilgrim Watch Reply to Entergy's and NRC Staff's Answers to Pilgrim Watch Request for Hearing on a New Contention Regarding Inadequacy of Environmental Report, Post Fukushima (July 5, 2011) at 16 n.8, 24 [hereinafter PW 7/5/11 Reply].

²⁵ Fukushima Recriticality Contention at 1.

²⁶ *Id.* at 1-2.

unanticipated radiation exposures at the May Day parade in Kiev."²⁷ Intervenor further argues:

It seems possible that the accident containment measures taken at both Chernobyl and Fukushima introduced neutron moderators which allowed the fission reaction that had probably been stopped to later begin anew. Because of the huge design differences between the two reactors, their ongoing chain reactions indicate a fundamental shortcoming in not just the MACCS2 code, but with all PRAs conducted using tools based on the NRC's PRA Procedures Guide. All known reactor accident analysis codes assume that I-131 available for release from a reactor core's inventory decreases according to its 8-day radiological half-life. No consequence code in the world allows the modeling of releases from reactor cores where the fission chain reaction continues many weeks after scram. While the resumption of fission at Chernobyl may have been ascribed to the graphite-moderated design, such is not the case at Fukushima and Pilgrim.²⁸

Positing that the "purpose of a SAMA review is to ensure that any plant changes that have a potential for significantly improving severe accident safety performance are identified and addressed," Pilgrim Watch observes that, "[i]n the SAMA analysis process, the applicant analyzes costs of damages and costs of clean-up," but argues that "NRC policy permits the Applicant to use a SAMA analysis code (MACCS2) that underestimates consequences" Examples suggested by Intervenor include the inability of the MACCS2 Code to model a release lasting longer than 4 days (with the Pilgrim SAMA analysis limiting the duration to 24 hours), and the inability of the code to model "the continual production of I-131 and I-134," which prevents it from showing the costs of such contaminants "get[ting] to people both by milk and by fresh leafy-vegetable consumption."

Pilgrim Watch urges that its May 2011 contention is within the scope of this proceeding because it relates to the SAMA analysis, a category 2 issue, and argues that it also falls under the National Environmental Policy Act's (NEPA's) "fundamental purpose" of "help[ing] public officials make decisions that are based on understanding of environmental consequences, and take decisions that *protect, restore and enhance the environment.*" "32 Intervenor further argues that "reasonably foreseeable" environmental impacts that have "catastrophic consequences, even

²⁷ *Id.* at 2.

 $^{^{28}}$ Id.

²⁹ Id.

³⁰ *Id.* at 3.

³¹ *Id.* at 4.

³² *Id.* (quoting 40 C.F.R. § 1500.1(c) (emphasis added by Intervenor)).

if their probability of occurrence is low," must be considered in the Pilgrim EIS.³³ Moreover, Intervenor contends, "NRC regulations require that 'to the extent that there are important qualitative considerations or factors that cannot be quantified, these considerations or factors will be discussed in qualitative terms."³⁴

Citing certain licensing board decisions for the proposition that "[w]here a contention alleges a deficiency or error in the application, the deficiency or error must have some independent health and safety significance," Intervenor argues that the "deficiency highlighted in this contention has enormous independent health and safety significance," and is material under 10 C.F.R. § 2.309(f)(1)(iv). Thus, it is argued:

Further analysis to evaluate how changes to assumptions [as posed by the contention] are likely to significantly increase offsite costs that justifies requiring Entergy to add mitigation to reduce the risk of a severe accident such as adding plant modifications, operational changes and training to increace [sic] public safety during license renewal.³⁶

Supported by the statement of Mr. Chanin, Pilgrim Watch explains how the code is unable to model the impacts of a release of more than four days, citing this as part of the basis for the contention.³⁷ The other part of the basis cited for the contention is the asserted fact that "criticality is continuing at Fukushima . . . because of the continued high findings of I-131 reported by TEPCO," which is characterized as "new and significant information" that "requires a reanalysis of Pilgrim's SAMA, updating and correcting its assumption that there will be no continued criticality."³⁸ Pilgrim Watch supports this argument with an online article authored by Mr. Chanin.³⁹

To illustrate the relative levels of detail and precision of the parties' respective expert offerings of the parties, I quote extensively herein from their expert statements, starting with that of Mr. Chanin, who in his article states as follows:

³³ *Id.* at 4-5 (quoting 40 C.F.R. § 1502.22(b)(1)).

³⁴ *Id.* at 5 (quoting 10 C.F.R. § 51.71(d)).

³⁵ Id. (quoting Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), LBP-04-15, 60 NRC 81, 89 (2004); citing *Private Fuel Storage*, L.L.C. (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 179-80 (1998), aff'd in part, CLI-98-13, 48 NRC 26 (1998))

³⁶ *Id.* at 5-6.

³⁷ Id. at 6; Attached Statement of David Chanin at 20.

³⁸ May 2011 Contention at 7-8.

³⁹ *Id.* at 8-9 (quoting from article found at http://www.glgroup.com/News/TEPCO-Data-Shows-Ongoing-Criticalities-Inside-Leaking-Fukushima-Daiichi-Unit-2-53751.html?cb=1 [hereinafter GLG article]).

Data released on April 28, 2011 by TEPCO is now unequivocal in showing ongoing criticalities at Unit 2, with a peak on April 13. TEPCO graphs of radioactivity versus-time in water under each of the six reactors show an ongoing nuclear chain reaction creating high levels of "fresh" I-131 in Unit 2, the same reactor pressure vessel (RPV) with a leak path to reactor floor, aux building, and outdoor trenches, that is uncontrollably leaking high levels of I-131, Cs-134, Cs-137 into the Pacific Ocean.

Analysis

When a nuclear reactor goes "critical" the fissioning of U-235 or Pu-239 becomes a self-sustaining process, called a chain reaction. Fissile material hit by a neutron splits (or fissions) into two atoms with atomic numbers between ~90 and ~140 while "throwing off" a few neutrons which then hit other fissile atoms, and the reaction then continues until it's stopped, usually by dropping the control rods, or reactor scram.

During normal reactor operation, short-lived nuclides like I-131 (8 day) that pose high radiological hazard are created, but they decay quickly. The half-life of I-131 is much shorter than the refueling cycle, and I-131 reaches an equilibrium value quickly. In contrast, the cesium radionuclides that are created decay much more slowly. Reactor inventories of Cs-134 (2 years) and Cs-137 (30 years) gradually rise during the cycle, reaching a maximum at end of cycle.

When Units 1-3 were all scrammed on March 11, 2011 because of the earthquake caused station blackout, the chain reaction of splitting fissile U-235 and Pu-239 into numerous fission products came to an immediate stop. Reactor scram means that neutron-absorbing control rods are dropped into the reactor core to absorb enough neutrons that the chain reaction ceases. Because I-131 has no long-lived "parent" to "feed it" by parent decay, the levels of I-131 in scrammed reactors with intact geometry will decrease exponentially with an 8-day half-life; after 5 half-lives (40 days) the I-131 levels are only 3% of what they were at scram.

But instead of seeing that expected decrease in I-131 levels relative to Cs-134 and Cs-137 in the regular TEPCO press releases, I-131 was seen to be increasing, instead of decreasing as the physics said it should.

Before TEOCO's [sic] April 28 press release with accompanying graphs and table, it seemed that something strange was happening with the elevated I-131 levels, but until this latest news, it was impossible to know where, exactly, was the source of the high I-131 levels.

The answer is clear if you look at the graphs of groundwater radioactivity measurements from all six reactors. "Outlier" Unit 2 is very different; it has I-131 levels roughly 20 times its levels of Cs-134/137. The only possible source of I-131 would be "pockets" of molten core in the Unit 2 RPV settled in such a way that the boron in the injected water is insufficient to stop the localized criticalities.⁴⁰

⁴⁰ *Id.* (quoting GLG article).

The referenced graphs are reproduced to support the arguments made in the article.⁴¹

Pilgrim Watch summarizes its continuing criticality argument as follows:

In summary, the reactors scrammed on March 11. Once that happened, U-235 should have no longer fissioned, and I-131 should have had no "parent" which would decay to create more I-131 as an ongoing process. At the time of the sc[r]am (t-0) the Bq of I-131 and Cs-134 and Cs-137 would all have been approximately equal; after five 1-131 half-lives, the "reactor density" radioactivity of I-131 should be only about 3% of the original.

But the above data by TEPCO reported, for example, on April 19, 2011 show instead of the level of I-131 being **below** the levels of the two cesium nuclides, I-131 is often twice as high as the two cesium nuclides reported.

The only apparent explanation is that, after almost two months, at least one of the scammed [sic] reactors (likely reactor 2) is still critical. This Lesson learned at Fukushima, that continued criticality can continue long after a reactor is sc[r]ammed, requries [sic] Entergy to perform a fresh analysis to evaluate how these changes to assumptions and the resulting uncertainties would affect the overall cost benefit analysis. 42

In conclusion, Intervenor states:

Pilgrim Watch intends principally to rely upon government documents and testimony from David I. Chanin. It would be unreasonable at this date to expect a totally unfunded group to provide detailed testimony from these experts at this time. If it were so required, most members of the public, non-profit public interest groups, and local governments would be unable to file due to lack of resources. Resources for these groups necessarily must be preserved for expert witnesses required at the summary disposition and hearing stage of these proceedings. We trust that it is not the intent of the Commission to restrict participation only to insiders with deep pockets.

. . . .

With respect to adequate assurance of public health and safety, we respectfully request that the Board accepts this Request for Hearing so that public health and safety will be properly protected.⁴³

⁴¹ *Id.* at 10-13.

⁴² *Id.* at 13.

⁴³ *Id.* I note that Mr. Chanin's experience is impressive, and includes "more than 25 years of professional experience in the development, application, maintenance, and verification/validation of large scientific codes, primarily for assessing the environmental impacts of radiological releases, and have worked with various federal agencies and contractors, including the United States Department of Energy (DOE), the United States Nuclear Regulatory Commission (NRC), and Sandia National (Continued)

I find the most significant challenges raised by the NRC Staff and Entergy to be those concerning (1) the extent to which the May 2011 contention meets the requirement of 10 C.F.R. § 2.326(a)(3) that it demonstrate the likelihood of a materially different result, and (2) the sufficiency of the expert support for the allegation of continuing criticality and releases, and the underlying claim that the information cited about levels of I-131 in comparison to cesium establish ongoing criticality. As indicated above, both Staff and Applicant claim that Mr. Chanin has not shown that he is an expert for purposes of addressing criticality issues.⁴⁴ In addition, both Staff and Entergy argue that it is not clear in any event that there was significant continuing criticality at Fukushima, where most of the release occurred early in the accident, and that Intervenor's assertions do not demonstrate that a materially different result would be likely, because it is not shown that any new cost-beneficial SAMAs would result from changing the input to the SAMA analysis. 45 According to Staff, any possible such continuing criticality would only "slightly change the source terms for a small subset of accidents in the SAMA analysis."46

NRC Staff provides the Affidavit of its experts, Dr. Nathan E. Bixler and Dr. S. Tina Ghosh, who provide a 10-page discussion of, among other things, the fact that the Pilgrim SAMA analysis considers station blackout and includes, among seven potentially cost-beneficial SAMAs, five that are mitigation measures for loss-of-power scenarios.⁴⁷ They state that "re-criticality is unlikely and the assertions [of Pilgrim Watch and Mr. Chanin] are more simply explained from the known and well studied methods for iodine and cesium behavior during an accident," including the following:

In a typical BWR at the middle of fuel cycle, there would be about 3×10^{18} bequerels

Laboratories, as a senior risk analyst, project leader, and as a consulting expert, to review, evaluate, and develop risk models to assess the economic and environmental impacts of radiological releases in commercial, military, and government sectors." *Id.* at 20, Statement of David Chanin. He also indicates among other things in his Statement that he "consult[s] as an independent expert to assess the consequences of accidental or intentional releases of radioactive materials to the atmosphere," and that he has "read and reviewed the enclosed proposed contention and fully support[s] all its statements." *Id.* at 20-21.

⁴⁴ See NRC Staff's Answer in Opposition to Pilgrim Watch's Request for Hearing on Post-Fukushima SAMA Contention (June 6, 2011) at 1-9, 15 [hereinafter Staff Answer to May 2011 Contention]; Entergy's Answer Opposing Pilgrim Watch Request for Hearing on Post-Fukushima SAMA Contention (June 6, 2011) at 16 [hereinafter Entergy Answer to May 2011 Contention].

⁴⁵ See, e.g., Staff Answer to May 2011 Contention at 6-7; Entergy Answer to May 2011 Contention at 17.

⁴⁶ Staff Answer to May 2011 Contention at 7, 12.

⁴⁷ Affidavit of Dr. Nathan E. Bixler and Dr. S. Tina Ghosh in Support of the NRC Staff's Answer in Opposition to Pilgrim Watch's Request for Hearing on Post Fukushima SAMA Contention (June 6, 2011) at 1-2.

of ¹³¹I, 4×10¹⁷ bequerels of ¹³⁴Cs, and 4×10¹⁷ of ¹³⁷Cs. Thus, there is almost 10 times more ¹³¹I than there is of either of the cesium isotopes mentioned in the PW contention. Because the rate of buildup of these isotopes differs during normal operation of the reactor, this ratio would be even higher early in the fuel cycle and would diminish to a factor of about 5 at end of fuel cycle (just before refueling). There is no point during the fuel cycle that the activity of ¹³¹I would be roughly equal to the activities of the cesium isotopes.

Following reactor shutdown, these isotopes would decay according to their half lives, which are 8 days for ¹³¹I, 2 years for ¹³⁴Cs, and 30 years for ¹³⁷Cs. Because the half lives of the two cesium isotopes are much longer than the timeframe discussed in the PW contention, their activities would diminish only a little. On the other hand, the activity of ¹³¹I would decrease by half over each 8-day period. That means that at 16 days after reactor shutdown, the activity of ¹³¹I in the reactor would still be about twice that of the cesium isotopes; at 32 days after reactor shutdown, the activity of ¹³¹I in the reactor would be about half that of the cesium isotopes; at 48 days after reactor shutdown, the activity of ¹³¹I in the reactor would be about one tenth that of the cesium isotopes. It is important to understand that these ratios only apply under the assumption that ratios of iodine and cesium utilize the entire core inventory or that the source being measured is proportional to the iodine to cesium ratios found in the core.

The plots of sub-drain activities provided in the PW contention extend to 4/27, which is 47 days after the accident began on 3/11/2011. If the releases of the iodine and cesium isotopes from the containment were in proportion to their activities in the reactor core, then we would expect the ¹³¹I would to be about one tenth that of the cesium isotopes on 4/27. But, iodine can be released in a variety of chemical forms, of which only one is bound with cesium. The current models predict that much of the late release of iodine from the containment is in the form of molecular iodine (I_2), which tends to evolve from the iodine dissolved in the aqueous solution in the wet well of the containment. Molecular iodine is very volatile. This increased volatility over forms of cesium results in more efficient transport of the iodine into the environment than the less volatile cesium. Transport of molecular iodine from the containment increases the level of iodine contamination in the vicinity of the plant, but does not increase the level of cesium contamination.

The likely explanation for the larger activity of ¹³¹I compared with ¹³⁴Cs and ¹³⁷Cs observed in the groundwater collected in the sub-drain at Unit 2 . . . is that greater quantities of iodine continued to be released into the groundwater than of cesium due to the more efficient transport mechanisms for iodine. This explanation agrees very well with our current understanding of how molecular iodine evolves from the aqueous solution in the wet well over an extended period. On the other hand, there is little continuing release of cesium from the wet well because cesium tends to remain dissolved in the aqueous solution.

The activities represented in the samples drawn from the groundwater discussed in the PW contention represent an extremely tiny fraction of the remaining ¹³¹I

activity in the reactor. The observed groundwater activities can easily be explained by continuing evolution of iodine from the containment. Thus, there is no reason to believe that a nuclear chain reaction was required to produce the ¹³¹I found in these samples. As stated above, it is far more likely that continuing evolution of molecular iodine from the wet well caused the elevated levels of ¹³¹I in the groundwater samples. ⁴⁸

In addition, Staff experts state the following on possible recriticality:

Even if re-criticality were to occur, it would not have a material effect on the SAMA analysis. Achieving sustained critical reaction in a light-water reactor core of US design requires: (1) favorable geometry and (2) sufficient moderator (water). During a severe accident, when the core materials are melted and geometry is lost, it is not easy to achieve good conditions for re-criticality. Control rod materials (poisons) will be part of the fuel melt too, and sufficient water and the right configuration (geometry) must be present to sustain a chain reaction. Although re-criticality might occur in very small isolated pockets of slumped (melted) fuel where sufficient water is present. Such conditions, if possible, would occur in only small localized regions, for short periods of time. It would be nothing like producing 100% power from the entire core.

The net effect of re-criticality (if it occurred) would be to slightly change the source terms for a small subset of accidents in the SAMA analysis. For these accidents, the change in source term would be a small fraction of the total source term (e.g., small increase in short-lived isotopes such as ¹³¹I later in time from the start of the accident). The subset of accidents that might be affected is also limited to a small fraction. Hence the net effect on source term is expected to be a small fraction of a small fraction, resulting in no appreciable change in the SAMA results (which we previously noted would require at least a doubling of benefits before the next SAMA on the list could become potentially cost-beneficial. . . .).⁴⁹

Entergy provides the affidavit of Dr. Thomas L. Sowdon, who has a bachelor's degree in nuclear engineering, a master's in radiation health physics, and a doctorate in occupational and environmental epidemiology, and Dr. Kevin R. O'Kula, who has a bachelor's degree in applied and engineering physics and master's and doctoral degrees in nuclear engineering. Supporting their assertions with several tables, these gentlemen state among other things the following:

While it is possible that a recritical configuration developed periodically or in-

 $^{^{48}}$ Id. ¶¶ 12-16.

⁴⁹ *Id*. ¶¶ 17-18.

⁵⁰ Declaration of Dr. Thomas L. Sowdon and Dr. Kevin R. O'Kula in Support of Entergy's Answer Opposing Pilgrim Watch Request for Hearing on Post-Fukushima Contention (June 6, 2011) ¶¶ 2, 6.

termittently in small, localized portions of the reactor core debris, many other phenomena could give rise to the relatively higher levels of I-131 reported in some locations at Fukushima. For example, the melting and boiling point differences and other chemical property differences between iodine and cesium, the timing of fuel becoming uncovered and percentage of fuel becoming damaged, thermal conditions, the geometry of the fuel, and other factors can all play a role.

In particular, it is well known that iodine and cesium behave very differently in both wet and dry environments. . . .

Any post-scram recriticality events that may have occurred or are still occurring at Fukushima would add little to the overall releases caused by the energetic events, such as the hydrogen explosions that occurred at the Fukushima facilities in the first week after the earthquake and tsunami. Similarly, any post-scram recriticality events would add little to the overall releases due to the energetic events assumed in the Pilgrim SAMA analysis. This arises from a host of technical reasons not recognized or addressed in Pilgrim Watch's proposed new contention. These include the following:

- The low-enriched uranium fuel assemblies used in light water reactors, such as Pilgrim, require precise spacing and geometry, the absence of control materials or "poisons" and an appropriate ratio of water to fuel to sustain criticality and generate steady-state power during normal operation. Water is a necessary moderator for criticality to proceed. If changing conditions that occur in the reactor core as the fuel undergoes fission and is consumed are not managed during reactor operation, the nuclear chain reaction will terminate because all of these requirements will not be met.
- Core degradation under severe accident conditions destroys the carefully
 designed geometry of the fuel assemblies and changes the water to fuel ratio
 needed to maintain the chain reaction. The melting and mixing of the fuel with
 the fuel cladding, control material, and other reactor components in the core
 will act to stop the chain reaction as the core becomes molten, loses it shape,
 and becomes more diluted.
- The molten core, now better described as core debris, flows into the lower parts
 of the reactor vessel. As the molten core debris cools into irregular shape(s)
 and porosity it is difficult to sustain fission through the overwhelming majority
 of the core debris.
- The addition of water onto the core debris may infrequently lead to conditions favoring recriticality, but these will tend to be near the surface of the core debris, irregularly occurring and localized in pockets. At best, these portions of the core would be very small fractions of the fully functional core. Accordingly, the levels of I-131, Cs-137, and other radionuclides generated from potential intermittent recriticality in the core debris would at best be many orders of magnitude below the levels of radionuclides produced in a fully functional reactor where all requirements are met over the full core volume. This situation

sharply contrasts with the fully functional reactor core inventory assumed under the severe accident conditions for the Pilgrim SAMA analysis.

- In addition, if a chain reaction does occur, it will not be sustainable for very long. The water-to-fuel atom ratio will be favorable only momentarily and other geometry factors such as lack of efficient transfer of the energy from the reaction will tend to stop the nuclear chain reaction. In this respect, recritical events tend to be self-dispersive in nature such that once recritical, the energetics of the criticality are sufficient to break apart the critical combination of materials, thereby ceasing the chain reaction.
- Moreover, aside from the evolution of noble gases from the limited recriticality
 events, most of the fission products will be contained by the overlying water
 layer over the core debris that is necessary for recriticality. In other words,
 the fission products produced by the recriticality will be largely removed or
 "scrubbed" by the same water that gives rise to the recriticality.
- Finally, the energetics of this event in the core debris is significantly less than those accompanying the severe accidents considered in the Pilgrim SAMA analysis. The analysis in NUREG/CR-5635 suggested that favorable conditions might exist for a more energetic recriticality in the first day following an initiating event. Given the length of time that has passed since the Fukushima initiating event took place, the level of energy release from potential recriticality events will be very small at best, short term, and negligible compared to the large, elevated release source terms due to the energetic events that are the basis for the Pilgrim SAMA analysis.

[T]he doses that the public would receive from a low-level release occurring over an extended period of time is greatly exceeded by the larger, elevated releases due to the energetic events analyzed in the Pilgrim SAMA analysis. In this respect, the source terms assumed for the radioactive releases in the Pilgrim SAMA analysis have significant margin in severity over that represented by the events at Fukushima, even assuming the longer term, but low-magnitude, radioactive releases, including those from potential intermittent recriticality events.

The overall source term in the case of a severe accident includes the type and amount of radionuclides, the heat energy in the plume associated with the release (which will cause the plume to rise), the height of the release, the timing of release, and the maximum plume duration considered. A separate source term is developed for each of the 19 postulated accident scenarios from the Pilgrim PSA [probabilistic safety assessment] or CAPBs [collapsed accident progression bins] . . . The 19 CAPBs are based on the plant-specific Pilgrim PSA and account for postulated system, structure, and component failures, the status of the reactor pressure vessel, the status of the containment, and accident sequence timing. Each CAPB represents a different combination of plant feature status and release mechanism and have a characteristic frequency and source term release based on attributes of the accident. The CAPBs represent a range of plant radioactivity releases from small to very large and have different characteristics to describe the occurrence of core damage, the

occurrence of vessel breach, primary system pressure at vessel breach, the location of containment failure, the timing of containment failure, and the occurrence of core-concrete interactions. The CAPBs used for the Pilgrim SAMA analysis include accident releases that are far more severe in magnitude and are immediately airborne compared to those from any intermittent recriticality releases from Fukushima.

In summary, the Pilgrim SAMA analysis source term is quantitatively larger than, and bounds the combined releases from, all of the Fukushima damaged reactor facilities and would more than bound any continuing low-level releases from Fukushima. When accounting for the fact that Fukushima involves more than one damaged reactor, the large margin in the Pilgrim SAMA analysis is even more pronounced when considered on a per reactor basis. Because of the large margins in the Pilgrim SAMA analysis, Pilgrim Watch's claims are immaterial to, and would have no impact on, the results of the Pilgrim SAMA analysis.⁵¹

Both Staff and Entergy argue that, in light of the expert affidavits they provide, Pilgrim Watch's poorly supported arguments fail to show that a materially different result could result with respect to the subjects of its May 2011 Contention.⁵² In addition, Staff urges, any deficiency in the SAMA analysis is "inherent in the analysis itself," which Staff contends Intervenor in effect recognizes in referring to "a fundamental shortcoming in not just the MACCS2 code but all PRAs [probabilistic risk assessments] conducted using tools based on the NRC's PRA Procedure Guide."53 Staff insists that "[i]f the deficiency is inherent in the SAMA analysis, it is a deficiency that has existed since the [filing of the ER, which] included that allegedly deficient analysis."54 Moreover, Staff states that the SAMA analysis considers potential challenges from seismic/tsunami events that could trigger station blackout and includes SAMAs that mitigate loss-of-power scenarios including station blackout, and points out that Intervenor does not address these or explain why they are not sufficient in light of Fukushima. 55 In any event, Staff argues, "as the Commission has made clear, the SAMA analysis is not supposed to model actual severe accidents; it is a tool to be used for the purpose of identifying potentially cost-beneficial severe accident mitigation alternatives."⁵⁶

⁵¹ *Id.* ¶¶ 14, 15, 29, 35-36, 41.

⁵² Staff Answer to May 2011 Contention at 6-7; Entergy Answer to May 2011 Contention at 15-21.

⁵³ Staff Answer to May 2011 Contention at 8 (citing May 2011 Contention at 2).

⁵⁴ Id. Staff also cites CLI-10-11 for the proposition that the Commission has "explicitly held that the MACCS2 Code is acceptable for the purposes of preparing SAMA analyses." Id. at 14 (citing CLI-10-11, 71 NRC at 291). I note, however, that this argument conveniently ignores that the Commission in CLI-10-11 actually remanded part of a contention, expressly permitting Pilgrim Watch to challenge part of the MACCS2 Code.

⁵⁵ Staff Answer to May 2011 Contention at 11-12.

⁵⁶ *Id.* at 14 (citing CLI-10-11, 71 NRC at 291).

As to concerns about contaminated food and water, these are, according to Entergy,

immaterial because more than 80% of the population dose in the current SAMA analysis is incurred in the long-term phase after the accident, and contaminated food and water can be interdicted by authorities until contamination levels are sufficiently safe. The food and water ingestion pathway would thus not contribute significantly to the SAMA cost-benefit analysis.⁵⁷

I note finally the following novel argument of Staff: Staff admits that its experts agree that "there is no computer code capable of modeling severe accidents for a SAMA analysis that is currently capable of modeling an extended but slow release over 8 weeks." According to Staff, its experts note that some codes "can model extended releases," but point out that such models "are more appropriate for emergency planning modeling of specific plumes in actual accidents, rather than the modeling that occurs in a SAMA analysis." Staff goes on:

If no code can model the kind of release it claims is occurring at Fukushima, then PW is raising an issue that, by its own admission, cannot change the SAMA analysis. If the MACCS2 Code cannot be changed easily to address PW's concerns, there can be no material change in the resulting SAMA cost-benefit analysis, and the contention is inadmissible for failing to raise a material issue in dispute. . . . It is also inadmissible as it raises an issue that is not susceptible of resolution in this proceeding. 60

In the end, Staff contends that Pilgrim Watch does not support its claim "that the ratio of iodine to cesium establishes ongoing criticality at Fukushima" with expert support.⁶¹

Entergy concludes on the criticality issue as follows:

[T]he severe accident releases used for the Pilgrim SAMA analysis represent a range of releases from small to very large based on the different possible severe accident

 $^{^{57}}$ Entergy Answer to May 2011 Contention at 19 (citing Entergy Decl. at $\P\,32$).

⁵⁸ Staff Answer to May 2011 Contention at 14-15.

⁵⁹ *Id.* at 15.

⁶⁰ Id. (citing CLI-10-11, 71 NRC at 317-18; *Peach Bottom*, ALAB-216, 8 AEC at 20-21). With respect to this argument it might be observed that Pilgrim Watch states that no code is "currently capable of modeling an extended but slow release," as Staff recognizes. This does not, of course, address future capability, or mean that "there can be no material change in the resulting SAMA costbenefit analysis." Just as the Commission in remanding parts of Contention 3 permitted Intervenor to challenge aspects of the MACCS2 code, with sufficient support it would appear a challenge to the aspects of the code currently in question might well be appropriate.

⁶¹ *Id.* at 15.

scenarios for the Pilgrim plant, and include releases that are many times greater than the releases that occurred at the Fukushima reactors. . . . The severe accident releases assumed for the Pilgrim SAMA analysis more than bound the releases from Fukushima many times over, and would more than bound any continuing low-level releases such as those from postulated intermittent recriticality. . . . The overall source term in the case of a severe accident includes the type and amount of radionuclides, the heat energy in the plume associated with the release, the height of the release, the timing of release, and the maximum plume duration. . . . Pilgrim Watch does not even address the type and amount of radionuclides contained in releases, the heat energy in the plume associated with a [sic] releases, the height of releases, and the timing of releases considered in the SAMA analysis. Nor does Pilgrim Watch make any showing that consideration of its concerns would increase the benefit (risk averted) by a factor of more than two that is necessary to change the results of the SAMA analysis. As such, Pilgrim Watch's newly proffered contention fails to raise a material dispute. ⁶²

Pilgrim Watch in its Reply to Entergy and the Staff again insists that it does not seek to reopen the record and argues among other things that "[t]he only reasonable hypothesis is that releases in a severe accident that are not limited to 24 hours but rather extend into days, weeks and months will increase offsite consequences affecting the cost-benefit analysis." With respect to studies cited by Entergy and Staff on recriticality, Intervenor says that they "beg the issue," because:

The studies that they cite refer to a potential or theoretical "possibility" of recriticality, but what is now new and significant is that, as shown at Fukushima, what can really happen is ongoing releases extending into months — not only at Fukushima but also at the sister reactor Pilgrim. In discussing the "theoretical" possibility of re-criticality, the studies referred to by Entergy and Staff never talk about the duration of releases — the key dispute.

.... The maximum release duration that Entergy indicates that they modeled is $2\frac{1}{2}$ hours. 64

Intervenor also suggests that the studies Entergy and Staff reference indicate knowledge on their part of recriticality, which was never disclosed by them in the SAMA and MACCS2 Code context.⁶⁵ Reiterating that "further analysis" is needed, Intervenor also cites an early study by the NRC that it says countered the argument in some of the studies referenced by Entergy and Staff claiming little

⁶² Entergy Answer to May 2011 Contention at 31-32 (citing Entergy Decl. ¶¶ 34-42).

⁶³ PW 6/13/11 Reply at 3.

⁶⁴ Id. at 9-10 (emphasis in original).

⁶⁵ *Id.* at 11.

or no recriticality. Specifically, although Pilgrim Watch refers to the document it cites as "NUREG-07," I have determined that they apparently intended to cite NUREG-0772, a 1981 document issued by the Staff, in which it was among other things found that radionuclide releases from certain accident sequences studied in the 1975 Reactor Safety Study (which is cited by Entergy's experts in their Declaration⁶⁶) "may have been significantly overpredicted," but that others were not.⁶⁷

Pilgrim Watch contends that Entergy's arguments and those of its experts are overly optimistic, challenges the lack of basis for the statement in Entergy's expert Declaration that "there would simply be a 'low-level release occurring over [the] extended period," and doubts the accidents analyzed in Entergy's Pilgrim SAMA analysis involve "much larger" releases than at Fukushima. 68 It argues that

It is clear that Pilgrim Watch is not required to prove whether there would or would not be additional mitigation required after a reanalysis that modeled releases of longer duration and varied magnitude. This is because (i) the proceeding has not developed to summary disposition; and (ii) Entergy has not done the reanalysis now required. Therefore neither Pilgrim Watch nor Entergy can show that "there would be no changes in the results of the SAMA analysis" because the reanalysis required by NEPA to consider the new and significant information has not been done.⁶⁹

Further, in addition to arguing that this is not the stage for summary disposition, Intervenor argues that, even if it is, if there is any doubt it should be denied, and that there are material facts in dispute.⁷⁰

Arguing that the contention does establish a dispute, Intervenor characterizes such dispute as being "about the MACCS2 code used by Entergy in its SAMA [being] insufficient because it is unable to model releases of sufficient duration; and that they are required to figure out how to do this because releases of much longer duration are credible events post Fukushima — new and significant information." I note finally Pilgrim Watch's argument challenging Entergy's assertion that Intervenor did not show that its claim would affect the outcome and that to change the cost-benefit analysis the risk averted would need to be doubled. Intervenor again raises its earlier arguments, in support of that part of Contention 3 recently ruled on, about the SAMA analysis using "inadequate

⁶⁶ See Entergy Decl. ¶ 20 (citing WASH-1400 (NUREG-75/014), Reactor Safety Study, An Assessment of Accident Risks in U.S. Commercial Nuclear Power Plants (Oct. 1975)).

⁶⁷ Technical Bases for Estimating Fission Product Behavior During LWR Accidents, NUREG-0772 (June 1981), Abstract at ii.

⁶⁸ PW 6/13/11 Reply at 17-18.

⁶⁹ *Id.* at 19.

⁷⁰ Id. at 25.

⁷¹ *Id.* at 21.

assumptions/limitations in the [MACCS2] code and Entergy's inputs into the code."⁷²

Conclusions on May 2011 Fukushima Recriticality Contention

First, I find that the Fukushima Recriticality Contention meets the requirements of 10 C.F.R. § 2.309(f)(1). It is evident that Pilgrim Watch provides the specific statement of the issue and the brief explanation of the basis for the contention required by section 2.309(f)(1)(i) and (ii). Further, the SAMA-related issues the contention raises are clearly within the scope of this proceeding, as required under subsection (iii). Next, the contention is also sufficiently supported to meet the requirements of subsection (v). Finally, regarding the requirements of subsections (iv) and (vi) on materiality and showing a genuine dispute on a material issue of law or fact, whether or not the contention meets the "materially different result" reopening standard, I find Pilgrim Watch has provided enough for purposes of contention admissibility to demonstrate that the issues it raised are material to the findings the NRC must make in this license renewal proceeding, and to show a genuine dispute on a material issue. Mr. Chanin's article, along with the other exposition put forward in the contention and adopted as his own by Mr. Chanin, raise issues that are significant, relevant, and material, and that demonstrate a genuine dispute, sufficiently to warrant further inquiry and analysis.

Where the contention is weak is on the requirements of 10 C.F.R. § 2.326(a)(3) and (b) for a showing of a materially different result, and for an affidavit that meets certain requirements. Again, I look to the reality and not just the form, but here, I find the contention does not measure up, notwithstanding that I find it raises issues that do indeed warrant further inquiry, exploration, and analysis. I can also appreciate many of Pilgrim Watch's arguments, notwithstanding that they are not presented in the best manner and that many broad underlying arguments, such as that the standards for reopening do not apply, are in error. For example, in a sense Staff and Applicant's arguments on continuing criticality seem counterintuitive, in that it would seem that months of releases would have to be significant on some level. And it is difficult to believe that information from Fukushima would not change *any* inputs on probability of various accident scenarios and related inputs.

However, when the respective presentations of Intervenor, NRC Staff, and Entergy are considered in the context of summary disposition and whether a genuine dispute on a material issue has been shown, Pilgrim Watch has a higher hurdle to overcome, as it recognizes in its arguments that "this is not summary disposition." Too much of its presentation indeed consists of indications that further analysis is in order, or of what appears to be true, or bare assertions such

⁷² Id. at 23.

as what "the only reasonable hypothesis" would be. The positions of Entergy and the Staff on issues of recriticality and how significant any releases resulting from it would be may not be correct, and may in fact be overoptimistic. But even though others might at some point do so, Pilgrim Watch has not demonstrated a genuine dispute on these matters, based on the information presented in support of its May 2011 contention.

Pilgrim Watch June 1, 2011, Contention

In this contention Pilgrim Watch asserts the following:

Based on new and significant information from Fukushima, the Environmental Report is inadequate post Fukushima Daiichi. Entergy's SAMA analysis ignores new and significant issues raised by Fukushima regarding the probability of both containment failure, and subsequent larger off-site consequences due to failure of the direct torus vent (DTV) to operate.⁷³

Intervenor goes on to state that, "[i]n its SAMA analysis for PNPS, Entergy followed conventional NRC practice and assumed very low probabilities, not only that any accident would occur at all, but also that in the event of an accident there would not be:"

- (i) Pressure-build up within the containment;
- (ii) A significant delay in even attempting to vent the containment because of operator error;
- (iii) Failure/Inoperability of the Direct Torus Vent; and
- (iv) Catastrophic failure of the containment.⁷⁴

Asserting that the "NRC years ago recognized that 'Mark I failure within the first few hours following core melt would appear rather likely;' a 90% likelihood of containment failure," Pilgrim Watch contends that "[t]he events at Fukushima showed that there is an equally high likelihood that the supposed 'fix,' the DTV, will fail also."⁷⁵ Intervenor states that "[t]hree direct torus vents should have opened, one at each of the three Fukushima Mark I reactors," but that "[a]ll three failed to do so; and, as expected, all three containments failed."⁷⁶ Based on this, it is alleged that "Entergy's prior SAMA analysis, based on hopeful, purely

⁷³ June 2011 Contention at 1.

⁷⁴ *Id.* at 1-2.

 $^{^{75}}$ *Id.* at 2.

⁷⁶ *Id*.

theoretical 'facts' was plainly inadequate," and thus "[i]t must be required to conduct a new analysis — based on what Fukushima has taught about reality."⁷⁷

Pilgrim Watch supports its June contention with the Affidavit of Arnold Gundersen⁷⁸ and a number of other documents including the 1992 Pilgrim Individual Plant Examination for Internal Events Per GL-88-20,⁷⁹ various NRC and Atomic Energy Commission documents relating to pressure in containments and direct torus vents,⁸⁰ correspondence between the NRC and the Pilgrim station regarding issues including the DTV,⁸¹ and various articles relating to Fukushima and filtered vents.⁸² Mr. Gundersen has bachelor's and master's degrees in nuclear engineering, more than 35 years of professional nuclear experience, and states further as follows:

My declaration is intended to support Pilgrim Watch's Request for Hearing and is specific to issues regarding the inadequacy of Pilgrim's SAMA analysis. The SAMA does not consider new and significant issues raised at Fukushima regarding the lack of containment integrity of Pilgrim's Mark I and demonstrated failure of the direct torus vent designed to save containment during pressure buildup.

I have reviewed the Request for Hearing and support its content.

. . .

[F]or more than six years, I have disputed the NRC's stand that containment systems simply do not and cannot leak, in testimony and in correspondence with the NRC; events at Fukushima have proven my testimony as true.

The explosions at Fukushima show that Pilgrim's DTV is unlikely to save Pilgrim's containment and huge amounts of radiation will be released. The subsequent offsite costs incurred from such an event justify additional mitigations to reduce the risk of DTV failure and loss of containment.⁸³

Stating that the "purpose of a SAMA review is to ensure that any plant changes that have a potential for significantly improving severe accident safety performance are identified and addressed," Pilgrim Watch contends that "it plainly is necessary to redo Pilgrim's SAMA analysis to take into account new and significant information learned from Fukushima regarding the probability of containment failure in the event of an accident and the concomitant probability

⁷⁷ Id.

⁷⁸ June 2011 Fukushima DTV Contention at 33.

⁷⁹ *Id.*, Exhibit 1.

⁸⁰ Id., Exhibits 3A-3C, 5.

⁸¹ *Id.*, Exhibits 11, 12.

⁸² Id., Exhibits 4, 6-10.

⁸³ Id. at 34, Affidavit of Arnold Gundersen ¶¶ 8-9, 12-13.

of a significantly larger volume of off-site radiological releases."⁸⁴ It argues *inter alia* that even if not quantifiable, important qualitative considerations must also be addressed in an EIS, ⁸⁵ and that we "must consider issues raised by Fukushima prior to relicensing . . . because those events "plainly show that, even if they are not yet all conclusively understood, the environmental impacts of . . . relicensing . . . may 'affect the quality of the human environment in a significant manner or to a significant extent not already considered."⁸⁶ Because NEPA requires that agencies consider environmental impacts before decisions are made to ensure that "important effects will not be overlooked or underestimated only to be discovered after resources have been committed," we are urged not to rely on Entergy's 2006 SAMA analysis for the Pilgrim plant.⁸⁷

Pilgrim Watch recounts that almost 40 years ago a "serious design flaw" was discovered in GE Mark I BWRs for which the direct torus vent was then required by the NRC "to relieve pressure in order to save the containment by releasing unfiltered material directly into the air." Pilgrim Watch maintains that Entergy's "theoretical assumption" that the DTV would work was the "underpinning of its assumed probabilities in accident consequences." Pilgrim Watch asserts that the "only real tests of the DTV — Unit 1, Unit 2, and Unit 3 at Fukushima, Marsh 2011 — all failed." It asserts that the "new and significant information concerning the likely failure of the DTV to prevent containment failure that now must be considered in Pilgrim's SAMA analysis includes:

- (1) Properly trained operators decided not to open the DTV when they should have because they feared the effects offsite of significant unfiltered releases;
- (2) When the operators finally decided to open the DTV, they were unable to do so;
- (3) The failure of the DTV to vent led to containment failure/explosions that resulted in significant ongoing offsite consequences.⁹¹

In addition, the "new and significant issue is the likelihood that the DTV simply won't work when release is required to save the containment." ⁹²

⁸⁴ June 2011 Fukushima DTV Contention at 2.

⁸⁵ Id. at 3 (citing 10 C.F.R. § 51.71).

⁸⁶ Id. at 4 (citing Marsh, 490 U.S. at 374, 372-73).

⁸⁷ Id. (citing Robertson, 490 U.S. at 349).

⁸⁸ *Id.* at 5.

⁸⁹ Id.

⁹⁰ *Id*. at 6.

⁹¹ *Id*.

⁹² *Id*.

Pilgrim Watch notes that as early as 1972, Dr. Stephen Hanauer, an AEC safety official, recommended:

[T]hat the Mark 1 pressure suppression system be discontinued and any further designs not be accepted for construction permits. Hanauer's boss, Joseph Hendrie (later an NRC Commissioner) essentially agreed with Hanauer, but denied the recommendation on the grounds that it could mean the end the nuclear power industry in the $U.S.^{93}$

Also, Intervenor states that three GE Nuclear engineers publicly resigned, "citing dangerous shortcomings in the GE design," 94 and claims that an "NRC analysis of the potential failure of the Mark I under accident conditions concluded in a 1985 report that, 'Mark I failure within the first few hours following core melt would appear rather likely." 95 In addition, Intervenor notes the past and present opposition of Harold Denton, a well-respected former NRC official, to the Mark I containment. 96

Asserting that Fukushima proved these concerns to be correct, Intervenor also provides the following quotation from a 1990 NRC Staff response to an inquiry about the DTV, which follows discussion about the DTV:

During some ATWS [anticipated transient without scram] events, the pressure in the containment will rapidly increase. Venting pressure could be reached in a matter of minutes rather than hours. Therefore, venting may not prevent containment failure because of the high containment pressurization rate but would provide additional time to scram the reactor and delay the core melt.⁹⁷

Pilgrim Watch alleges that "[a]s a result of GE's design deficiency, the original design for a passive containment system was compromised in favor of a system that relied entirely on human control, despite all the associate[d] risks of error and technical failure," and further that the "design was further compromised by the NRC's now highly questionable decision not to require that any release be

⁹³ Id. at 7 (citing memoranda Exhibits 3A-C to June 2011 Contention) (ADAMS Accession Nos. ML1115304441, ML1115304431, ML1115304461).

⁹⁴ June 2011 Contention at 7 (citing Exhibit 4, found at http://www.bellona.org/articles/articles_2011/fautly_hydrogen_vents).

⁹⁵ Id.

⁹⁶ Id. at 7-8 (citing Reactor Design in Japan Has Long Been Questioned, N.Y. Times, March 15, 2011, in which Tom Zeller referenced "Denton Urges NRC to Settle Doubts About Mark I Containment," Inside NRC, McGraw-Hill, Vol. 8, No. 12, June 9, 1986).

⁹⁷ *Id.* at 8 (quoting from Chairman Kenneth M. Carr, Responses to Concerns Raised by W.R. Griffin, June 21, 1990, Enclosure 2, Response to Question 12, page 5 (Exh. 5 to June 2011 Contention) (ADAMS Accession No. 1115304410)).

filtered."98 Despite a recommendation on filtered venting, Pilgrim Watch avers, the NRC never followed up on this, and the absence of such a filter at Fukushima caused "significant negative unintended consequences" that were in part due to a "several-hour delay in a decision to use the vents, as . . . managers agonized over whether to resort to emergency measures that would allow a substantial amount of radioactive materials to escape into the air."99

Intervenor notes that "Entergy's estimate of the cost of filtering the DTV at Pilgrim is \$3 million, . . . peanut[s] when compared to the damage from an unfiltered release, to say nothing of the costs of a containment failure occasioned by an intentional decision not to vent." Stating that an engineer at a Minnesota reactor warned about these problems and recommended "rupture disks, relatively thin sheets of steel that break and allows venting without any operator command or moving parts when the pressure reaches a specified level," Pilgrim Watch further asserts that the NRC "gave into" the industry who questioned how a disk could be closed after an event. Intervenor nonetheless notes that the Pilgrim DTV has a rupture disk, but points out that it is "downstream of valves" that "are normally closed and are designed to be opened either remotely from the control room or manually, and that the DTV "will vent excess pressure from the containment *only* if [these] normally closed valves . . . can be opened." 103

At Fukushima, Intervenor states, personnel were "unable to open the normally closed valves in all three DTVs." The normally closed valves could not be opened from the control room, making the next step "to try to open the isolation valves manually — but this also proved impossible at Fukushima since radiation levels were too high." Thus, Intervenor suggests, at Pilgrim, where the control room has "2 key locked switches in series that have to be opened manually when the need to use the DTV occurs," the same thing could occur. Pilgrim Watch states that, contrary to initial reports that the Fukushima reactors did not have DTVs, its understanding is that they had the same unfiltered vents that Pilgrim has. Pilgrim has.

⁹⁸ *Id*. at 9.

⁹⁹Id. (citing Hiroko Tabuchi et al., Hidden Dangers: Japanese Officials Ignored or Concealed Danger, N.Y. Times, May 17, 2011) (Exhibit 7 to June 2011 Contention)).

¹⁰⁰ Id. at 9 n.8.

¹⁰¹ *Id.* at 12.

¹⁰² *Id*.

¹⁰³ Id. at 16.

¹⁰⁴ *Id.* at 17.

¹⁰⁵ Id.

¹⁰⁶ Id.

¹⁰⁷ Id. at 12.

Pilgrim Watch supports this contention with references to NUREG-0772, noted above, ¹⁰⁸ as well as additional articles, one stating that three mechanisms the industry and the NRC use to "falsely trivialize offsite consequences" actually work as follows:

For accidents in which the damage is sufficient to open large pathways from the core to the containment, there will not be sufficient water available to trap the radioactive materials of concern, nor will the pathway be so torturous that a significant amount will[s]tick to surfaces before reaching the containment atmosphere. Similarly [i]f the containment fails early enough, there will be insufficient time for aerosols to settle in the reactor building floor. 109

Intervenor suggests that redundancy to the DTV valves is not present but should be, and that two DC batteries should be required for the DTV, a 125VDC Bus "A" and a 125VDC Bus "B." Intervenor also suggests that piping related to the DTV is buried underground and is therefore susceptible to corrosion. 111

Summarizing and concluding its arguments and facts in support of its June 2011 contention, Pilgrim Watch advocates "new probability calculations, and contends that the NRC should, as members of the Near-Term Task Force indicated it was doing, "look[] at the effectiveness of the containment venting strategies," based on two new significant pieces of information from Fukushima: First, "that we now know that an unfiltered vent has unintended consequences beyond poisoning unnecessarily offsite neighborhoods — It makes operators hesitant to use the vent until perhaps too late, upping the probability of containment failure/explosions." Second, the "likely failure of the DTV itself," based on the three failures of the DTVs at Fukushima." Further, Intervenor contends:

The final cost of the Fukushima disaster remains to be calculated, but it is clearly billions of dollars. Entergy did not properly factor either reasonable probabilities of DTV failure, or the likely cost of failure, into its SAMA. Had Entergy done so, more SAMAs (such as DTV filters and redundant vent lines) are likely to be justified and the risk for the public will be reduced significantly.¹¹²

Pilgrim Watch notes the Application's consideration of an accident sequence in which there is "operator failure to recognize the need to vent the torus," but argues that "Entergy's SAMA does not consider what actually happened at

 $^{^{108}\,}See\,supra$ note 67 and accompanying text.

¹⁰⁹ June 2011 Fukushima DTV Contention at 19 (citing Bulletin of Atomic Scientists: Containment of a Reactor Meltdown, Frank von Hippel, March 15, 2011, n.16 (Exhibit 6 to Contention)).

¹¹⁰ Id. at 20 (citing Id., Exhibit 1).

¹¹¹ Id.

¹¹² Id. at 22.

Fukushima — operators consciously deciding not to open the DTV for fear of serious contamination offsite, or failure of the DTV itself."¹¹³ Cited as supporting a finding of a "materially different result" is the assertion that "[t]he offsite consequences, without addressing the deficiencies cited in the foregoing, would far outweigh the cost of mitigations to reduce risk of containment failure."¹¹⁴ Further:

In its SAMA analysis for PNPS, Entergy assumed very low probabilities, not only that any accident would occur at all, but also that in the event of an accident there would not be: pressure-build up within the containment; a significant delay in even attempting to vent the containment because of operator error; failure/inoperability of the Direct Torus Vent; and catastrophic failure of the containment and offsite consequences/costs. The NRC years ago recognized that "Mark I failure within the first few hours following core melt would appear rather likely;" a 90% likelihood of containment failure.

The events at Fukushima showed that there is an equally high likelihood that the supposed "fix," the DTV, will fail also. Three Direct Torus Vents should have opened, one at each of three Fukushima Mark I reactors. All three failed to do so; and, as expected, all three containments failed.

Entergy's prior SAMA analysis, based on hopeful, purely theoretical "facts" was plainly inadequate. It must be required to conduct a new analysis — based on what Fukushima has taught about reality. And in so doing, the "fixes" recommended would be cost effective to reduce very significant and unnecessary risk. 115

Finally, Pilgrim Watch suggests that we have a duty to reopen the proceeding *sua sponte*. ¹¹⁶

The NRC Staff argues that Pilgrim Watch's June 2011 Fukushima DTV Contention does not meet the reopening requirements of 10 C.F.R. § 2.326, is not based on evidence that would likely change the outcome of the proceeding, is not timely, does not concern a significant safety issue, is not accompanied by an appropriate affidavit from an appropriate expert, and is not material or supported by an adequate factual basis.¹¹⁷ Staff insists that Pilgrim Watch does not demonstrate a likely change in the cost-benefit conclusions of the SAMA

¹¹³ Id. at 23.

¹¹⁴ Id. at 29.

¹¹⁵ Id. at 29-30.

¹¹⁶ *Id.* at 31.

¹¹⁷ NRC Staff's Answer in Opposition to Pilgrim Watch's Request for Hearing on a New Contention Regarding Inadequacy of Environmental Report, Post Fukushima (June 27, 2011) at 2.

analysis, which would require a doubling of averted costs or benefits, ¹¹⁸ but rather just "vaguely alleges that some additional SAMAs 'are likely to be justified.'" ¹¹⁹ Noting the age of some of Pilgrim Watch's sources, Staff asserts that the DTV contention could have been raised in the initial hearing request. ¹²⁰ Reiterating its experts' explanation of what a SAMA analysis is, Staff avers that "the SAMA analysis has no direct safety significance [and] merely augments existing programs to identify environmental mitigation alternatives that could 'further reduce the risk at a plant that ha[s] no identified safety vulnerabilities.' Accordingly, it does not, and indeed it cannot, raise an exceptionally serious issue." ¹²¹

In addition, Staff argues, the work of the Near-Term Task Force, "further decreases the significance of Pilgrim Watch's claims" and illustrates that it is "duplicative," addressing only "issues that have already been thoroughly studied and are being studied by the NRC in other contexts." Next, Staff questions the expertise of Mr. Gundersen in the subject of SAMA analyses, which "require modeling of extremely complex time and physical condition dependent phenomena." Because Pilgrim Watch has not demonstrated any "additional, potentially cost-beneficial SAMAs," Staff asserts, it does not raise a material issue in the June contention. 124 Nor, Staff urges, does the contention have an adequate factual basis, providing only "bare assertions and speculation" and unreliable articles. 125 Staff argues:

Moreover, even if United States operators refrained from venting, the SAMA analysis already contains an uncertainty factor that accounts for human error. Pilgrim Watch has not attempted to show how the facts cited in the newspaper article would impact the existing provision for human error in the uncertainty factor. 126

¹¹⁸ *Id.* at 6-7. Staff notes that the SAMA analysis, while not finding that installation of a filtered vent would reduce core damage frequency, did find that it "would reduce population dose by 18%," with a benefit ranging from \$827,000 to \$1,220,000. *Id.* at 7 n.4.

¹¹⁹ Id. at 8 (citing June 2011 Contention at 29).

¹²⁰ Id. at 10.

¹²¹ Id. at 11 (citing Bixler and Ghost Affidavit responding to May 2011 Contention at 4-5).

¹²² *Id.* at 12-13. Staff also denies that Pilgrim Watch has "demonstrated that the information in the New Contention provides a 'seriously different picture of the environmental impact' of relicensing." *Id.* at 13 n.9.

¹²³ *Id.* at 15.

¹²⁴ Id. at 18.

¹²⁵ Id. at 18-20.

¹²⁶ Id. at 20 (citing Pilgrim Nuclear Power Station, Applicant's Environmental Report, Operating License Renewal Sage, Attachment E, at E.1-2 (Jan. 27, 2006) (ADAMS Accession No. ML060300029)).

Characterizing Pilgrim Watch's discussion of the unpredicted failure of the DTVs in Japan as speculation, Staff faults Pilgrim Watch for "not provid[ing] any information or testimony to indicate how that speculation will impact the SAMA analysis." In addition, the reference to corrosion in underground pipes is speculative and unconnected to the SAMA analysis, Staff argues. 128

Entergy likewise argues that the June 2011 Fukushima DTV Contention fails to demonstrate a genuine dispute with the Application, in addition to not addressing or meeting the reopening or late-filed contention standards, failing to show materiality, and lacking sufficient support. ¹²⁹ Entergy claims that Pilgrim Watch is "factually incorrect because the Pilgrim SAMA analysis is based on a site specific estimate of accident probabilities that fully takes into account pressure build-up within the containment, operator error in failing to vent the containment, failure or inoperability of the DTV itself, and catastrophic failure of the containment." ¹³⁰ Applicant also notes that "how" NEPA requirements are met are in the discretion of the agency, and a hearing is not mandated. ¹³¹

Further, in addition to making various arguments on timeliness and the standard for significance that are similar to ones previously made and which I will not recount here, Entergy criticizes Pilgrim Watch for failing to quantify costs associated with DTV inoperability, and engaging in mere speculation and bare assertions, with no support. Challenging the expertise of Mr. Gundersen, Entergy takes issue with the exact experience that he had, suggesting that he overstates it by claiming to be a Senior Vice President for nuclear licensee, when in fact this was for a materials licensee and not a power plant licensee, and claims he lacks expertise in DTV reliability, containment failure, and SAMA analysis.

Entergy provides in support of its own arguments an official report of the Government of Japan, which indicates that DTV operations, although difficult, were "successfully undertaken" at two of the reactor units, and that, although two of the secondary containments were damaged, only one unit suffered primary containment failure. ¹³⁴ Entergy goes on to claim that the Pilgrim SAMA analysis "fully address[es]" pressure build-up, operator error and DTV failure, hydrogen

¹²⁷ *Id*.

¹²⁸ *Id.* at 21-22.

 $^{^{129}\}mbox{Entergy}$ Answer to June 2011 Fukushima DTV Contention at 1-2.

¹³⁰ Id. at 9.

¹³¹ *Id.* at 11.

¹³² Id. at 19-20.

¹³³ Id. at 21-22.

¹³⁴ *Id.* at 23-24.

explosion, containment breach, and much larger radioactive releases than at Fukushima. 135

Entergy also provides the Declaration of Dr. O'Kula, Joseph R. Lynch, and Lori Ann Potts, the latter two of whom hold bachelor's degrees in mechanical engineering and nuclear engineering, respectively. They provide a very detailed exposition of the Pilgrim SAMA analysis as it relates to DTV operation and failure, containment failure, and hydrogen explosions, among other things. They assert that Pilgrim Watch's characterization of Fukushima as involving a catastrophic failure of the primary containments for all three units is incorrect, citing the Report of the Japanese Government noted above. They acknowledge that the report is a "preliminary" report, but put it forward as providing a comprehensive and relatively accurate portrayal of the accident that summarizes "known facts concerning the accident." They state that this report summarizes its results as follows:

DTVs were successfully operated for at least Units 1 and 3. Furthermore, while it is clear that the reactor building structures, or secondary containments, of Units 1 and 3 were damaged by explosions likely caused by hydrogen accumulation and ignition within those structures, there is absolutely no evidence suggesting "catastrophic" failures of those units' primary containments, which house the reactor vessels. These units' primary containments continue to contain the overwhelming majority of their respective core inventories. Indeed, it is estimated that for Fukushima Units 1 and 3, approximately 99% of the radionuclide content remains contained. Report at IV-42–IV-43, IV-75 (estimating core inventory release fractions for Fukushima Units 1 and 3). Although the known facts are less clear with respect to whether the Unit 2 DTV was operated and the status of its primary containment, the Report estimates that 93%-99% of the radionuclide inventory remains contained. See Report at IV-42–IV-43, IV-59, IV-75 (estimating core inventory release fractions for Fukushima Units 1-3).

¹³⁵ *Id.* at 24-25.

¹³⁶ Declaration of Joseph R. Lynch, Lori Ann Potts, and Dr. Kevin R. O'Kula in Support of Entergy's Answer Opposing Pilgrim Watch Request for Hearing on a New Contention Regarding Inadequacy of Environmental Report, Post-Fukushima (June 27, 2011) at 1-3.

¹³⁷ *Id.* at 6 (citing Report of Japanese Government to the IAEA Ministerial Conference on Nuclear Safety — The Accident at TEPCO's Fukushima Nuclear Power Stations, Nuclear Emergency Response Headquarters, Government of Japan (June 2011) (Exhibit 4 to Declaration)). The declarants also cite an International Atomic Energy Agency (IAEA) Report that is consistent with the Japanese report, entitled "Mission Report: The Great East Japan Earthquake Expert Mission," IAEA International Fact Finding Expert Mission of the Fukushima Daiichi NPP Accident Following the Great East Japan Earthquake Tsunami (May 24–June 2, 2011). *Id.* at 7 n.4.

¹³⁸ *Id*. ¶ 14.

¹³⁹ *Id*.

Declarants state that, "[c]omparatively, the releases assumed in the Pilgrim SAMA analysis for containment failure are much larger than the apparent releases from all three Fukushima units combined." ¹⁴⁰

Describing the Pilgrim DTV, declarants state:

Venting through the DTV requires no external power as the primary containment pressure provides the motive force. The system lineup is achieved by opening two separate valves, whose normal electrical and pneumatic power are "essential" (i.e., supported by multiple, redundant, dedicated electrical and pneumatic supplies), and the system is also designed to be operated manually. A 30 pound-force per square inch gauge ("psig") rupture disk is in the flowpath to preclude inadvertent releases from the system. The Control Room Shift Manager has the authority to direct operation of the system in accordance with Pilgrim specific procedures. The system was designed, installed, and approved between 1986 and 1989 and has been subject to routine and regular maintenance. Training on the operation of the system is part of the licensed operator training program.

The NRC's Extensive Damage Mitigation Guidelines ("EDMGs"), which are a series of requirements implemented by the NRC following the events of September 11, 2001, further enhance operators' ability to utilize the DTV and address other severe accident mitigation parameters in circumstances where no external power sources may be available. Procedural guidance, trained and licensed personnel, and pre-staged equipment are available for manual, local operation of both DTV valves, should the diverse and redundantly powered valves of the normal system, the containment atmospheric control system, and the DTV system not be available because of loss of power.¹⁴¹

Noting that the Japanese Report details when and how DTV venting operations were undertaken for each unit, the declarants point out that it indicates that work at Unit 1 was difficult but judged to have been accomplished when pressure was reduced, and that similarly it was difficult to achieve in Unit 3, but confirmed by increased radiation levels and decreased pressure. They indicate the Report says it is not clear whether the DTV in Unit 2 was successfully operated. ¹⁴² Further, they note that the Report "questions the effectiveness of the venting system." ¹⁴³

Entergy's experts also state that Pilgrim's DTV differs from the Fukushima DTVs, undercutting the comparisons made by Pilgrim Watch.¹⁴⁴ Specifically, they state:

¹⁴⁰ Id.

 $^{^{141}}$ Id. ¶¶ 17-18.

¹⁴² *Id*. ¶¶ 23-24.

 $^{^{143}}$ Id. \P 25.

 $^{^{144}}$ Id. \P 26.

First, Pilgrim is a single unit plant that does not share vent lines with other units. Second, the Pilgrim DTV was constructed of welded piping over its entire length, and designed, built, and qualified to the same criteria as the Pilgrim primary containment, and this level of quality is maintained until the piping exits the secondary containment. This means that the DTV pipe does not connect with any other systems until exiting the secondary containment, thus minimizing the potential for any leakage of gases into the secondary containment (i.e., reactor building) such as which occurred at Fukushima. . . . In addition, Pilgrim has diverse, redundant sources of offsite power [and its] design is different. The external electrical sources utilize different physical routing, and are spatially isolated from each other, with overhead and underground routes precluding failures of one source adversely affecting the other source. 145

In addition, they state:

Pilgrim's procedures for DTV operation differ significantly from those governing the Fukushima DTVs. The Report's description of how those procedures were carried out at Fukushima also varies significantly from how Pilgrim's procedures would be carried out under similar circumstances.

. . . .

the Fukushima procedures call for DTV operation before maximum operating pressure is reached when RHR is available, or, if RHR is unavailable, the procedures call for DTV use before twice the maximum operating pressure is reached. In both cases, the DTV can be used only with authorization from the chief of emergency response headquarters. ¹⁴⁶

In describing Pilgrim's procedures, they state the following:

First, Entergy's operational and severe accident procedures clearly identify the actions that are to be undertaken by plant personnel under different plant circumstances. These procedures require Entergy to vent the primary containment using the DTV long before the Fukushima operators attempted that same operation. Pilgrim Emergency Operating Procedures EOP-03 and 5.4.6 detail the steps that operators are to follow, starting at a containment pressure of 2.2 psig, for venting using the standby gas treatment system ("SGTS") to restore containment pressure to less than 2.2 psig. Multiple piping pathways are available to reduce containment pressure below 2.2 psig.

. . . .

Second, Pilgrim's procedures provide the Control Room Shift Manager with the authority and direction to utilize the DTV long before reaching a level that could

 $^{^{145}}$ Id. ¶ 27 (citing Japanese Report at 9).

 $^{^{146}}$ Id. \P 28.

challenge the primary containment, so that authorization from someone outside the plant is not needed. Based on multiple references in the Japanese Government Report, the level of authority required to allow use of the DTVs at Fukushima was a "Minister" level in the government. With multiple nuclear units involved, and infrastructure unavailable because of the earthquake, tsunami, and nuclear emergency, the delays in operating the DTV are therefore explainable, but would not be analogous to Pilgrim, where the decision and authority to operate the DTV rest with the control room Shift Manager. 147

Declarants state that the Pilgrim SAMA analysis "assumed realistic probabilities that an accident would occur, and considered pressure buildup within the primary containment, operator error . . . , failure of the DTV to operate as intended, primary containment breach, and large radioactive releases," and provides a great amount of detail explaining how these factors are identified and taken into account. 148

One illustrative example addresses human reliability factors, a concern of Pilgrim Watch's. On this, Entergy experts state:

[T]he probability that the operators will fail to vent containment using the DTV is considered in basic event CIV-XHE-FO-DTV. The failure probability for this event was calculated using PRA Human Reliability Analysis ("HRA") techniques. HRA evaluates the individual tasks necessary to perform an action, the time available to perform the action, the time it takes to perform the action, and factors which influence the ability of the operators to successfully perform the action. The factors influencing the ability of an operator to successfully perform an action are called performance shaping factors. Consideration of the impact of each performance shaping factor is plant-specific and sequence-specific. Also, the influences are confirmed by such techniques as talk-throughs, walkdowns, field observations, simulations, and examination of past events in order to be realistic. Examples of performance shaping factors considered in the Pilgrim HRA include the following:

- Applicability and suitability of training and experience.
- Suitability of relevant procedures and administrative controls.
- Availability and clarity of instrumentation (cues to take actions as well as to confirm expected plant response to the action).
- Time available and time required to complete the action, including the impact of concurrent and competing activities.
- Complexity of required diagnosis and response.
- Workload, time pressure and stress.

¹⁴⁷ *Id*. ¶¶ 31-32.

 $^{^{148}} Id. \, \P\, 42; \, \P\P\, 43\text{-}53.$

- Team/crew dynamics and crew characteristics.
- Available staffing and resources.
- Ergonomic quality of human-system interface.
- Environment in which the action needs to be performed.
- Accessibility and operability of equipment to be manipulated.
- The need for special tools (keys, ladders, hoses, clothing such as to enter a radiation area).
- Communications (strategy and coordination) as well as whether one can be easily heard.
- Special fitness needs for situations expected to involve the use of heavy or awkward tools/equipment, carrying hoses, climbing, etc.
- Consideration of "realistic" accident sequence diversions and deviations (e.g., extraneous alarms, failed instruments, outside discussions, sequence evolution not exactly like that trained on).

Thus, the Pilgrim SAMA analysis considers a wide range of factors affecting human performance. 149

Declarants describe how the SAMA analysis does consider early containment breach and hydrogen explosions, as well as large releases, which they state "bound several times over the releases that occurred from Fukushima." They also note the following change in information as it became available:

Subsequent to the development of the comparisons in the Sowdon/O'Kula Declaration, the Japanese authorities increased their estimate of the radioactive release from Fukushima by about 22% above the estimates used in the Sowdon/O'Kula Declaration. This increase has no effect on the conclusions drawn from the comparisons made in Table 5 of the Sowdon/O'Kula Declaration. As noted there, "even if Fukushima radionuclide release estimates were to double, CAPB-15 (which contributes over 80% of the PDR and OECR to the Pilgrim SAMA analysis) would still bound the estimated I-131 releases from all of the Fukushima facilities by about a factor of two (1.78) and the estimated Cs-137 releases by about a factor of three (2.66). Thus, the radionuclide releases assumed in the Pilgrim SAMA analysis far exceed actual releases at Fukushima.

. . .

In addition, the fraction of the Fukushima Units' core inventories released into the environment, based on measurements and computer model backed calculations

¹⁴⁹ *Id*. ¶¶ 56-57.

 $^{^{150}}$ Id. \P 63; $\P\P$ 58-59.

reported to date by the Japanese government, Report at IV-42–IV-43, IV-59, IV-75, is more than bounded by the Pilgrim SAMA-basis CAPBs. 151

In reply, Pilgrim Watch contends that a dispute exists on at least the increased probability of containment failure and a large release, and the cost-effectiveness of upgrading the DTV,¹⁵² and argues that it has provided sufficient information to establish a dispute "regarding the probability of containment failure and subsequent larger off-site consequences due to failure of the [DTV]."¹⁵³

Conclusions on June 2011 Fukushima DTV Contention

I find Intervenor has made all the requisite showings in this contention, notwithstanding the information provided in the Entergy experts' Declaration, including their explanation of information from the preliminary Japanese report on, for example, which DTVs operators were able to open, and how quickly and successfully. Of course, the information from that report, which provides useful detail on what occurred during the accident, should not be discounted, but it should also be recognized that it is also not finally determinative on all issues it addresses. The question is, whether a dispute on any issues has been shown by Pilgrim Watch.

I find that Intervenor has shown that there are genuine disputes on material facts regarding increased probability of containment failure and a large release, the role of the DTV in this, and the cost-effectiveness of upgrading the DTV. Intervenor demonstrates these disputes through information relating to the Fukushima accident, as well as older information that provides additional insights on aspects of the accident and on any accident that might occur at another Mark I BWR like Pilgrim.

The Fukushima-related information is not quantified, but as Intervenor argues, citing 10 C.F.R. § 51.71, this rule requires that, "[t]o the extent that there are important qualitative considerations or factors that cannot be quantified, these considerations or factors will be discussed in qualitative terms." ¹⁵⁴ Intervenors

¹⁵¹ Id. ¶ 66-67 (citing Sowdon/O'Kula Declaration at 24 n.16).

¹⁵² PW 7/5/11 Reply at 16.

¹⁵³ *Id.* at 26. I do not address Entergy's Motion to Strike Portions of Pilgrim Watch Reply to Entergy and the NRC Staff Answers Opposing Pilgrim Watch Request for Hearing on a New Contention (July 15, 2011), because I do not find the information at issue to be necessary to my conclusions. If there were ever to be a hearing on the matters at issue in the June 2011 Contention, however, some of the information Entergy challenges might well be relevant such that it should be considered along with any other relevant evidence. In any event, whatever the ultimate outcome on the matters at issue, it would seem inappropriate not to consider whatever evidence is available and relevant on any issue in dispute.

¹⁵⁴ 10 C.F.R. § 51.71(d).

urge that, "it plainly is necessary to redo Pilgrim's SAMA analysis to take into account new and significant information learned from Fukushima regarding the probability of containment failure in the event of an accident and the concomitant probability of a significantly larger volume of off-site radiological releases."¹⁵⁵

It would indeed seem to me to be "plain" and almost self-evident that a severe accident involving the same type of reactor, even one occurring in a foreign country where earthquakes and tsunamis may be more likely, would need at least to be taken into account in determining the probabilities to assign to various accidents and consequences analyzed in the SAMA analysis, as well as to the cost-benefit analysis relating to the DTV filter mitigation alternative. As the Licensing Board in the Calvert Cliffs proceeding observed, "NRC Staff cannot evade its NEPA obligation to thoroughly explore reasonable alternatives by claiming that doing so would not change its conclusions,"156 and the same would reasonably seem to apply in the SAMA analysis context of the June contention. In this instance this NEPA obligation might or might not mandate that the Staff require Entergy to redo the SAMA analysis, taking what is known about the Fukushima accident into account with respect to the probabilities questioned by Pilgrim Watch. I find, however, that it does warrant a further "hard look" by the Staff with respect to the SAMA analysis, and possible supplementation of the EIS, prior to a decision on the License Renewal Application.

Again, I realize that to do this would cause additional delay in this proceeding, which I agree should be avoided to the extent possible and reasonable. However, I find that Pilgrim Watch has shown that the Fukushima accident constitutes good cause for reexamining the probability calculations in the SAMA analysis.

Entergy has provided a great deal of information on what the status quo is with respect to the Pilgrim SAMA analysis, including human reliability factors, as well as information suggesting that only one DTV failed and only one primary containment failed. But matters of human reliability and training are, of course, dependent on how well they are implemented, and most of the other information provided by Entergy, while describing what is included in the Pilgrim SAMA analysis, does not necessarily indicate that the provisions of the SAMA analysis are immune to challenge, or unchangeable in the face of new information. And while information on the fact of the Fukushima accident and some of its consequences is becoming clearer, even if not quantifiable, the Japanese report on the extent of the DTV failures is preliminary.

I do not find that any of the information provided by Entergy negates any dispute on the issues in question in Pilgrim Watch's June 2011 contention. Nor, I find, do the Staff's arguments — including those relating to, for example, the

¹⁵⁵ June 2011 Fukushima DTV Contention at 2.

¹⁵⁶ See supra text accompanying note 17.

need to show a "doubling of averted costs or benefits," and to the expertise of Mr. Gundersen — negate a dispute. Also, as I note *supra*, it is possible that using the 95th percentile rather than the mean in the SAMA analysis could make a difference, and this issue is still before the Commission on appeal.¹⁵⁷

In reaching the preceding conclusions, I look back to our consideration of Contention 3, which was initially admitted based on information that was on a par with the current information provided by Pilgrim Watch, and which was ultimately remanded by the Commission after summary disposition was granted by a majority of the board, based on a similar level of evidence. Just as in this instance, Pilgrim Watch was unable with respect to Contention 3 to show whether or how the outcome of the SAMA cost-benefit conclusions would be changed, ¹⁵⁸ but the Commission nonetheless reversed the summary disposition ruling and remanded for a new hearing on parts of the original contention. That ruling implicitly acknowledged that it is, as a practical matter, unreasonable to expect, even in a reopening context, any intervenor, even one with large resources, to challenge particular minute and complex calculations and computer modeling in a SAMA analysis on the level Entergy and Staff seek to require at this point. Nor can this Intervenor be expected to be precisely correct on every fact arising out of the Fukushima accident, given the progressive nature of the production of such information, which even the Japanese report recognizes.

But Pilgrim Watch does provide detailed challenges, with support, on the issues raised in its June 2011 contention. Mr. Gundersen is a nuclear engineer with years of experience in multiple areas including nuclear plant operation, nuclear safety assessments, reliability engineering, and criticality analysis, to name just a few. He adopts the whole of Pilgrim Watch's June 2011 contention and basis as his own, and I would accept this as reasonable given Pilgrim Watch's pro se status, just as I would accept as legitimate support for the contention the sources Intervenor uses, whether or not they are all as authoritative as the Japanese and IAEA reports Entergy provides, the first of which, as Entergy concedes, is admittedly "preliminary," and the second of which must certainly be so as well. This is not to say that I accept Pilgrim Watch's sources as true, merely that I accept them as providing support that is sufficient to warrant further inquiry, and sufficient to show the likelihood of a materially different result, by demonstrating a genuine dispute on material issues of fact.

Again, as with Pilgrim Watch's January 2011 Cables Contention, I look at the substance and reality of what Pilgrim Watch provides, and do not find it appropriate to deny its June 2011 contention on the basis that Intervenor did

¹⁵⁷ See supra note 5.

¹⁵⁸ See CLI-10-11, 71 NRC at 301-02.

¹⁵⁹ June 2011 Contention at 33.

not file a formal motion to reopen or that Mr. Gundersen did not include in his Affidavit everything that he clearly indicates he supports in the contention and its basis, or formally swear to his Affidavit's truthfulness, an easily curable defect, to the extent it is a defect. To so deny the contention would again, in my view, be to elevate form over substance, and fail to appropriately take into account Pilgrim Watch's *pro se* status. And to proceed in this manner does not violate any regulatory provisions or reasonable standards of fair play, nor does it constitute supplying for the intervenor any required elements.

To be sure, much of the information Pilgrim Watch provides in support of the contention is old, but as indicated above, this information merely provides context and support for its central premise that new information from Fukushima raises significant issues with respect to the probability of containment failure, large releases, DTV failure, and whether the DTV should be upgraded by adding a filter.

In sum, I find that Pilgrim Watch has shown the likelihood of a materially different result in this proceeding, as required by 10 C.F.R. § 2.326(a)(3) and (b), by demonstrating genuine disputes on material issues of fact, concerning the increased probabilities of DTV failure, containment failure, and large releases, as a result of information arising out of the Fukushima accident, as well as the potential need for and cost-effectiveness of upgrading the DTV as Pilgrim Watch asserts. I find that, through the quite detailed support provided for the contention, which Mr. Gundersen supports and effectively adopts as his own, Pilgrim Watch has shown that it could defeat a summary disposition motion on the "complex, fact-intensive issues" that are involved in Pilgrim Watch's June Fukushima DTV Contention. As the Commission observed in CLI-10-11, "genuine factual questions remain" with respect to the complex — and important — matters at issue. 161

I also find that the June 2011 DTV Contention meets the requirements of 10 C.F.R. § 2.309(f)(1). Again, it is evident that Pilgrim Watch provides the specific statement of the issue and the brief explanation of the basis for the contention required by section 2.309(f)(1)(i) and (ii). Further, the SAMA-related issues the contention raises are clearly within the scope of this proceeding, as required under subsection (iii). Next, as discussed above, the contention is also sufficiently supported to meet the requirements of subsection (v). Finally, regarding the requirements of subsection (iv) and (vi) on materiality and showing a genuine dispute on a material issue of law or fact, as discussed with reference to the "materially different result" reopening standard, I find Pilgrim Watch has provided enough to demonstrate a genuine dispute on material issues of fact.

¹⁶⁰ See CLI-10-11, 71 NRC at 305.

¹⁶¹ Id. at 307.

I would therefore admit the June 2011 "Fukushima DTV" contention, unless, as a result of the Near-Term Task Force Recommendations, it is in the near future determined that the matters at issue will soon be the subject of rulemaking.

Sua Sponte Recommendation

In conclusion, NRC case law supports the practice of licensing boards *sua sponte* raising significant environmental and safety issues.¹⁶² This practice should be used sparingly, of course, but when issues are deemed sufficiently significant, precedent supports it as a responsibility. Therefore, with all due respect for both the NRC Staff and the Applicant, as well as for the Commission and its time in these days of challenging circumstances on several fronts, I find that there are significant issues warranting my *sua sponte* making the following recommendation to the Commission:

That, to the extent that the issues raised by Pilgrim Watch in its May and June 2011 Fukushima-related contentions do not ultimately through appeal end up again before this Licensing Board, the Commission consider having the Staff look more closely — take a "hard look" — into the issues raised in these contentions, as well as any other issues arising out of the Fukushima Daiichi accident that relate particularly to Mark I BWR reactors, prior to any decision on the license renewal application, for the purpose of supplementing at least the SAMA analysis part of the Pilgrim EIS, as appropriate based on new and significant information arising out of the accident at the Fukushima Daiichi nuclear power plant, as informed by existing information. I believe this would serve the interests of both public safety and public trust in the process the NRC utilizes for attending to such safety and environmental issues, which I find is particularly warranted given the seriousness of the Fukushima accident and the effect it has had on public perceptions of the safety of nuclear power — a public who must trust those responsible for regulating this very complex and important area of human enterprise, which can serve the public well, but can also threaten it in the event of accidents like that at Fukushima. Whatever the outcome of such an inquiry, in my view taking such a "hard look" would provide an important public service, in addition to satisfying relevant NEPA requirements.

I understand the time implications of this, and do not recommend it lightly, but find these issues to be sufficiently significant to warrant such action.

¹⁶² See, e.g., Consolidated Edison Co. of New York (Indian Point, Units 1, 2, and 3), ALAB-319, 3 NRC 188, 190 (1976); Tennessee Valley Authority (Hartsville Nuclear Plant, Units 1A, 2A, 1B, and 2B), ALAB-380, 5 NRC 572 (1977); Houston Lighting and Power Co. (South Texas Project, Units 1 and 2), LBP-85-8, 21 NRC 516, 519 (1985).

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Thomas S. Moore, Chairman Paul S. Ryerson Richard E. Wardwell

In the Matter of

Docket No. 63-001-HLW (ASLBP No. 09-892-HLW-CAB04)

U.S. DEPARTMENT OF ENERGY (High-Level Waste Repository)

September 30, 2011

In light of current fiscal constraints and consistent with the Commission's Memorandum and Order of September 9, 2011, CLI-11-7, 74 NRC 212, the Board suspends the proceeding on the Department of Energy's application for authorization to construct a national high-level nuclear waste repository at Yucca Mountain, Nevada.

MEMORANDUM AND ORDER

(Suspending Adjudicatory Proceeding)

This adjudicatory proceeding concerns the application of the Department of Energy (DOE) for authorization to construct a national high-level nuclear waste repository at Yucca Mountain, Nevada.

On March 3, 2010, DOE moved to withdraw the application with prejudice.¹ On June 29, 2010, this Board denied the motion on the ground that the Nuclear Waste Policy Act of 1982, as amended, does not permit DOE to withdraw

¹U.S. Department of Energy's Motion to Withdraw (Mar. 3, 2010).

the application.² On June 30, 2010, the Secretary of the Commission invited participants to submit briefs on an expedited schedule as to whether it should review, and reverse or uphold, the Board's decision.³

On September 9, 2011, the Commission announced that it was evenly divided on whether to take the affirmative action of overturning or upholding the Board's decision.⁴ The Board's decision to deny DOE's motion to withdraw, LBP-10-11, therefore stands.

The 7-year history of this adjudicatory proceeding has involved the work of six Licensing Boards in three phases: (1) preliminary document discovery and case management matters before the Pre-License Application Presiding Officer Board and the Advisory Pre-License Application Presiding Officer Board; (2) consideration of initial petitions and identification of participants and admitted contentions by three separate Construction Authorization Boards (i.e., CAB-01, CAB-02, CAB-03); and (3) consideration of additional proffered contentions, new petitions, and various case management matters by this Board (the fourth Construction Authorization Board — CAB-04). The full history of the adjudicatory proceeding is contained in the principal substantive and procedural rulings of the six Licensing Boards and of the Commission, as well as in certain key pleadings of the parties, as set forth in the attached Appendix.

As of this date, fifteen parties have been permitted to intervene in the proceeding: (1) the State of Nevada; (2) the Nuclear Energy Institute; (3) Nye County, Nevada; (4) the four Nevada Counties of Churchill, Esmeralda, Lander, and Mineral (jointly); (5) the State of California; (6) Clark County, Nevada; (7) the County of Inyo, California; (8) White Pine County, Nevada; (9) the Joint Timbisha Shoshone Tribal Group; (10) the Native Community Action Council; (11) the State of Washington; (12) the State of South Carolina; (13) Aiken County, South Carolina; (14) the Prairie Island Indian Community; and (15) the National Association of Regulatory Utility Commissioners. Two Nevada counties — Eureka County and Lincoln County — have been permitted to participate as interested governmental bodies pursuant to 10 C.F.R. § 2.315(c), and the Florida Public Service Commission was permitted to participate as amicus curiae. Two hundred eighty-eight admitted contentions are pending. They would be ripe for adjudication at evidentiary hearings after deposition discovery, issuance by the NRC Staff of applicable Safety Evaluation Reports and (in the case of contentions arising under the National Environmental Policy Act) any necessary supplementation by the NRC Staff of DOE's Environmental Impact Statement.

Although we have been informed that the agency has current appropriated

²LBP-10-11, 71 NRC 609, 629 (2010).

³ Secretary Order (June 30, 2010) at 1 (unpublished).

⁴CLI-11-7, 74 NRC 212, 212 (2011).

Fiscal Year 2011 Nuclear Waste Funds (NWFs) that could be carried over into the next fiscal year, there are no Full-Time Equivalent (FTE) positions (i.e., federal employee positions) requested in the President's Fiscal Year 2012 Budget for Yucca Mountain High-Level Waste activities. Therefore, because both future appropriated NWF dollars and FTEs for this proceeding are uncertain, and consistent with the Commission's Memorandum and Order of September 9, 2011, this proceeding is suspended.

It is so ORDERED.

THE ATOMIC SAFETY AND LICENSING BOARD

Thomas S. Moore, Chairman ADMINISTRATIVE JUDGE

Paul S. Ryerson ADMINISTRATIVE JUDGE

Richard E. Wardwell ADMINISTRATIVE JUDGE

Rockville, Maryland September 30, 2011

APPENDIX

1. Pre-License Application Presiding Officer (PAPO)/Advisory Pre-License Application Presiding Officer (APAPO)

Date	Entity	Citation	Title/Description
7/7/2004	Commission	CLI-04-20, 60 NRC 15 (2004)	Commission Appointment of Pre-License Application Presiding Officer (PAPO) in Accordance with 10 C.F.R. § 2.1010
7/8/2004	ASLBP Chief Administrative Judge	69 Fed. Reg. 42,218 (July 14, 2004)	Establishment of PAPO Atomic Safety and Licensing Board
8/31/2004	PAPO Board	LBP-04-20, 60 NRC 300 (2004)	Memorandum and Order Granting State of Nevada's July 12, 2004 Motion to Strike DOE's Licensing Support Network (LSN) Document Collection Certification
11/10/2004	Commission	CLI-04-32, 60 NRC 469 (2004)	Commission Memorandum and Order Advising That It Is Holding DOE's Appeal of LBP-04-20 in Abeyance
1/24/2005	PAPO Board	(unpublished)	First Case Management Order Regarding Preparation of Privilege Logs
7/8/2005	PAPO Board	(unpublished)	Second Case Management Order Regarding Pre-License Application Phase Document Discovery and Dispute Resolution
9/22/2005	PAPO Board	LBP-05-27, 62 NRC 478 (2005)	Memorandum and Order Granting State of Nevada's June 6, 2005 Motion to Compel DOE to Place Draft License Application on the LSN
2/2/2006	Commission	CLI-06-5, 63 NRC 143 (2006)	Commission Memorandum and Order Reversing PAPO Board's Decision (LBP-05-27) Requiring DOE to Place the Draft License Application on the LSN
2/9/2006	PAPO Board	(unpublished)	Order Suspending Monthly Supplementation Requirement
2/16/2006	PAPO Board	(unpublished)	Memorandum and Order Regarding Deletions of Documents from the LSN
7/6/2007	PAPO Board	(unpublished)	Revised Second Case Management Order Regarding Pre-License Application Phase Document Discovery and Dispute Resolution

Date	Entity	Citation	Title/Description
8/16/2007	PAPO Board	(unpublished)	Order Amending Appendix H of the Revised Second Case Management Order
8/30/2007	PAPO Board	(unpublished)	Third Case Management Order Concerning Procedures Regarding Official Use Only Information, Naval Nuclear Propulsion Information, and Unclassified Controlled Nuclear Information
8/31/2007	PAPO Board	(unpublished)	Memorandum Alerting Commission to the Possibility of Significant Delays in the High-Level Waste Proceeding Because of the Months It Will Take Potential Parties to the Proceeding to Gain Access to Safeguards Information
10/5/2007	PAPO Board	(unpublished)	Fourth Case Management Order Concerning Electronic Filing, the Digital Data Management System (DDMS), Safeguards Information, and Other Items
11/1/2007	PAPO Board	(unpublished)	Fifth Case Management Order Regarding Supplementation, Correction, and Changing of Privilege Logs
1/4/2008	PAPO Board	LBP-08-1, 67 NRC 37 (2008)	Memorandum Setting Forth Full Reasoning for Denying Nevada's Motion to Strike DOE's Certification of LSN Document Collection
2/13/2008	ASLBP Chief Administrative Judge	73 Fed. Reg. 9358 (Feb. 20, 2008)	Establishment of Advisory Pre-License Application Presiding Officer (APAPO) Board Pursuant to COMSECY-07-0030
3/20/2008	ASLBP Chief Administrative Judge	73 Fed. Reg. 16,077 (Mar. 26, 2008)	Notice of APAPO Board Reconstitution
3/31/2008	APAPO Board	(unpublished)	Memorandum Requesting That the Commission Grant Additional Authority to Issue Binding Case Management Orders
4/23/2008	PAPO Board	LBP-08-5, 67 NRC 205 (2008)	Memorandum and Order Denying DOE's Motion to Strike State of Nevada's LSN Document Collection Certification
6/17/2008	Commission	CLI-08-12, 67 NRC 386 (2008)	Memorandum and Order Affirming PAPO Board's Decision in LBP-08-1 Denying Nevada's Motion to Strike DOE's LSN Document Collection Certification

Date	Entity	Citation	Title/Description
6/17/2008	Commission	CLI-08-14, 67 NRC 402 (2008)	Memorandum and Order Authorizing APAPO Board to Issue Binding Case Management Orders
6/20/2008	APAPO Board	LBP-08-10, 67 NRC 450 (2008)	APAPO Case Management Order Concerning Petitions to Intervene, Contentions, Responses and Replies, Standing Arguments, and Referencing or Attaching Supporting Materials
8/13/2008	Commission	CLI-08-18, 68 NRC 246 (2008)	Memorandum and Order Modifying Schedule in 10 C.F.R. Part 2, Appendix D to Allow Filing of Petitions to Intervene Within Sixty Days of Notice of Hearing
8/22/2008	ASLBP Chief Administrative Judge	(unpublished)	Memorandum of Atomic Safety and Licensing Board Panel Responding to August 13, 2008 Commission Request for Scheduling Comments
9/8/2008	Commission	CLI-08-22, 68 NRC 355 (2008)	Memorandum and Order Affirming PAPO Board's Decision in LBP-08-5 Denying DOE's Motion to Strike Nevada's LSN Document Collection Certification
10/17/2008	Commission	CLI-08-25, 68 NRC 497 (2008); 73 Fed. Reg. 63,029 (Oct. 22, 2008)	Notice of Hearing and Opportunity to Petition for Leave to Intervene on DOE Application for Authority to Construct a Geologic Repository at Yucca Mountain, Nevada
6/5/2009	PAPO Board	(unpublished)	Sixth Case Management Order Regarding State of Nevada's Access to Classified Information

2. Construction Authorization Boards 01, 02, 03 (CAB-01, CAB-02, CAB-03) and Pertinent Pleadings

Date	Entity/ies	Citation	Title/Description
12/19/2008	Nye County, Nevada		Nye County, Nevada Petition to Intervene and Contentions
12/19/2008	Nevada Counties of Churchill, Esmeralda, Lander, and Mineral		Nevada Counties of Churchill, Esmeralda, Lander, and Mineral Petition to Intervene
12/19/2008	State of Nevada		State of Nevada's Petition to Intervene as a Full Party
12/19/2008	Nuclear Energy Institute		The Nuclear Energy Institute's Petition to Intervene
12/20/2008	State of California		State of California's Petition for Leave to Intervene in the Hearing
12/22/2008	Native Community Action Council		Native Community Action Council Petition to Intervene as a Full Party
12/22/2008	Clark County, Nevada		Clark County, Nevada's Request for Hearing, Petition to Intervene and Filing of Contentions
12/22/2008	White Pine County, Nevada		White Pine County's Request for Hearing and Petition for Leave to Intervene Including Supporting Contentions on the Application by the U.S. Department of Energy for Authority to Construct a Geologic Repository at a Geologic Repository Operations Area at Yucca Mountain
12/22/2008	Timbisha Shoshone Tribe		Timbisha Shoshone Tribe's Petition for Leave to Intervene in the Hearing
12/22/2008	County of Inyo, California		Petition for Leave to Intervene by the County of Inyo, California on an Application by the U.S. Department of Energy for Authority to Construct a Geologic High-Level Waste Repository at a Geologic Repository Operations Area at Yucca Mountain, Nevada

Date	Entity/ies	Citation	Title/Description
12/22/2008	Timbisha Shoshone Yucca Mountain Oversight Program Non-Profit Corporation (TSO)		Timbisha Shoshone Yucca Mountain Oversight Program Non-Profit Corporation Petition to Intervene as a Full Party
1/16/2009	ASLBP Chief Administrative Judge	74 Fed. Reg. 4477 (Jan. 26, 2009)	Establishment of Three Atomic Safety and Licensing Boards (Construction Authorization Boards (CABs) 01, 02, and 03) to Preside over Petitions to Intervene and Requests to Participate in the High-Level Waste Repository Construction Authorization Application Proceeding
1/29/2009	CAB-01, CAB-02, CAB-03	(unpublished)	Joint CABs' Case Management Order #1 Adopting Prior PAPO and APAPO Case Management Orders and Setting Times for Filing New and Amended Contentions
3/5/2009	TSO		Amended Petition of TSO to Intervene as a Full Party
5/11/2009	CAB-01, CAB-02, CAB-03	LBP-09-6, 69 NRC 367 (2009)	Joint CABs Memorandum and Order Rulings on Intervention Petitions (Identifying Participants) and Admitting Contentions
5/12/2009	State of Nevada		State of Nevada's New Contentions Based on Final NRC Rule
6/8/2009	State of Nevada		State of Nevada's New Contentions Based on DOE's February 19, 2009 License Application Update
6/10/2009	Clark County, Nevada		Clark County, Nevada's New Contention Arising from the Department of Energy's February 19, 2009 License Application Update
6/30/2009	Commission	CLI-09-14, 69 NRC 580 (2009)	Memorandum and Order Reversing CABs' Ruling in LBP-09-6 on the Admissibility of Four Contentions

3. Construction Authorization Board 04 (CAB-04) and Pertinent Pleadings

Date	Entity	Citation	Title/Description
6/19/2009	ASLBP Chief Administrative Judge	74 Fed. Reg. 30,644 (June 26, 2009)	Establishment of Atomic Safety and Licensing Board Construction Authorization Board 4 (CAB-04) to Preside Over Matters Regarding Discovery, LSN Compliance, New or Amended Contentions, Grouping or Consolidation of Contentions, Scheduling, and Case Management Matters
7/21/2009	CAB-04	(unpublished)	Order Concerning Phased Schedule for Deposition Discovery Due to NRC Staff's Announcement of Serial Issuance of Safety Evaluation Reports (SERs) over Three Years and the NRC Staff's Inability to Comply with 10 C.F.R. Part 2, Appendix D
8/27/2009	CAB-04	(unpublished)	Order Granting Party Status to the Native Community Action Council
8/27/2009	CAB-04	(unpublished)	Order Granting Party Status to the Joint Timbisha Shoshone Tribal Group
9/30/2009	CAB-04	(unpublished)	Case Management Order #2 Identifying Phase I Contentions and Outlining Procedures for: Contention Consolidation and Grouping, Identification of Witnesses, Depositions, Document Production, and Dispute Resolution
12/22/2009	CAB-04	(unpublished)	Order Concerning LSN Administrator (LSNA) Memorandum Alerting Board to Potential LSN Technical Problems Should LSN Be Decommissioned
12/30/2009	CAB-04	(unpublished)	Order Consolidating and Grouping Certain Contentions
2/1/2010	CAB-04	(unpublished)	Case Management Order #3 Extending Phase I Deposition Discovery Through January 31, 2011 Due to NRC Staff's Announced Delay for Issuance of SER Volume 3 from September 2010 to November 2010
2/16/2010	CAB-04	(unpublished)	Order Granting DOE's Motion for Stay of Proceeding Until Resolution of DOE's Expected Motion to Withdraw License Application

Date	Entity	Citation	Title/Description
2/26/2010	State of South		Petition of the State of South Carolina to
	Carolina		Intervene
3/3/2010	State of		State of Washington's Petition for Leave
	Washington		to Intervene and Request for Hearing
3/4/2010	Aiken		Petition of Aiken County, South
	County, South		Carolina, to Intervene
	Carolina		
3/15/2010	National		National Association of Regulatory
	Association of Regulatory		Utility Commissioners Petition to Intervene
	Utility Com-		intervene
	missioners		
3/15/2010	Prairie		Petition to Intervene of the Prairie Island
	Island Indian		Indian Community
	Community		·
4/6/2010	CAB-04	(unpublished)	Memorandum and Order Suspending
			Briefing and Consideration of DOE's
			Withdrawal Motion Pending Guidance from U.S. Court of Appeals for
			District of Columbia Circuit in Actions
			Challenging DOE's Authority to
			Withdraw its License Application
4/23/2010	Commission	CLI-10-13,	Memorandum and Order Vacating
		71 NRC 387	CAB-04's April 6, 2010 Suspension
		(2010)	Order and Directing Board to Decide
<u> </u>			DOE's Motion to Withdraw Application
6/29/2010	CAB-04	LBP-10-11,	Memorandum and Order Granting
		71 NRC 609 (June 29,	Intervention to Five New Petitioners and Denying DOE's Withdrawal Motion
		2010)	Deliying DOL's Withdrawar Motion
6/30/2010	Secretary	(unpublished)	Order Setting Expedited Briefing
0,20,2010	of the	(unpuension)	Schedule on Whether Commission
	Commission		Should Review, and Reverse or Uphold,
			LBP-10-11 Denying DOE's Motion to
			Withdraw Application
7/15/2010	Commissioner	(unpublished)	Notice of Recusal by Commissioner
	Apostolakis		George Apostolakis in High-Level Waste
0/11/2010		/ III I	Adjudicatory Proceeding
8/11/2010	Commissioner	(unpublished)	Commissioner William D. Magwood, IV Decision Refusing Recusal on the
	Magwood		Motion of the State of Washington, the
			State of South Carolina, Aiken County,
			South Carolina, and White Pine County,
			Nevada for Recusal/Disqualification
			(5 1

Date	Entity	Citation	Title/Description
8/11/2010	Commissioner Ostendorff	(unpublished)	Commissioner William C. Ostendorff Decision Refusing Recusal on the Motion of the State of Washington, the State of South Carolina, Aiken County, South Carolina, and White Pine County, Nevada for Recusal/Disqualification
12/14/2010	CAB-04	LBP-10-22, 72 NRC 661 (Dec. 14, 2010)	Memorandum and Order Deciding Phase I Legal Issues and Denying Rule Waiver Petitions
2/25/2011	CAB-04	(unpublished)	Memorandum and Order Denying DOE's Motion to Renew Temporary Suspension of the Proceeding
3/24/2011	CAB-04	(unpublished)	Order Dismissing Five Nevada Safety
			Contentions
4/11/2011	CAB-04	(unpublished)	Order Directing All Parties to Preserve LSN Collections in PDF Format and to Submit LSN Document Collections Together with Associated Bibliographic Files to the Secretary of the Commission on Optical Storage Media for Inclusion into the Docket
5/10/2011	CAB-04	(unpublished)	Order Dismissing Nuclear Energy
			Institute Safety Contention 05
5/13/2011	CAB-04	(unpublished)	Order Granting DOE's Motion for Clarification of Board's April 11, 2011 Order, Allowing DOE to Submit LSN Collection on External Hard Drives, and Exempting DOE from Other Agency Information Technology Requirements
5/20/2011	CAB-04	(unpublished)	Memorandum and Order Granting DOE's Motion to Quash Depositions and Warning That Board Expects the State of Nevada to Withdraw Additional Deposition Notices In Light of Events Beyond Board's and Parties' Control
6/9/2011	CAB-04	(unpublished)	Order Granting in Part and Denying in Part NRC Staff's Reconsideration Motion of Board's April 11, 2011 Order and Providing that NRC Staff Need Not Duplicate Its Collection in the Agencywide Documents Access and Management System (ADAMS) and that (Continued)

Date	Entity	Citation	Title/Description
			the Secretary of the Commission Need Only Place Documents in ADAMS as Funding Permits
7/13/2011	CAB-04	(unpublished)	Memorandum and Order Granting in Part DOE's Motion to Dismiss by Dismissing One Nevada Safety Contention and Parts of Three Others
7/26/2011	LSNA	(unpublished)	Memorandum of LSNA that LSN will Cease Operations on or about August 5, 2011
7/28/2011	CAB-04	(unpublished)	Order Suspending LSN Document Collection Supplementation Effective August 2, 2011 but Directing Parties to Retain LSN Document Collections for Potential LSN Reconstitution
9/9/2011	Commission	CLI-11-7, 74 NRC 212 (Sept. 9, 2011)	Memorandum and Order Announcing Commission Divided 2-2 on Whether to Take Affirmative Action on LBP-10-11 Denying DOE's Motion to Withdraw License Application and Directing Board to Complete All Necessary and Appropriate Case Management Activities, Including Documenting the History of the Proceeding by Close of Fiscal Year 2011
9/16/2011	CAB-04	(unpublished)	Order Directing LSNA to Submit DOE Employee Concern Program Documents to Secretary of the Commission and Each Party to Retain All Documentary Material Represented in LSN Only by Bibliographic Header Information
9/28/2011	CAB-04	(unpublished)	Memorandum and Order Dismissing Without Prejudice Timbisha Shoshone Tribal Council's Motion for Recognition as Representative of Timbisha Shoshone Indian Tribe
9/30/2011	CAB-04	LBP-11-24, 74 NRC 368 (Sept. 30, 2011)	Memorandum and Order Suspending High-Level Waste Adjudicatory Proceeding

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Michael M. Gibson, Chairman Dr. Gary S. Arnold Dr. Randall J. Charbeneau

In the Matter of

Docket Nos. 52-012-COL 52-013-COL (ASLBP No. 09-885-08-COL-BD01)

NUCLEAR INNOVATION NORTH AMERICA LLC (South Texas Project, Units 3 and 4)

September 30, 2011

In this 10 C.F.R. Part 52 proceeding regarding the application of Nuclear Innovation North America LLC (NINA or Applicant) for combined licenses (COL) to construct and operate two new nuclear units, using the Advanced Boiling Water Reactor (ABWR) certified design, at its site in Matagorda County, Texas, ruling on a motion by Intervenors seeking to admit one new contention, alleging that statutory and regulatory prohibitions on foreign ownership, control, or domination (FOCD) forbid the licensing of the proposed facility, the Licensing Board grants Intervenors' motion, admitting Contention FC-1.

REGULATIONS: INTERPRETATION (10 C.F.R. § 50.38) FOREIGN OWNERSHIP, CONTROL, OR DOMINATION

According to Commission guidance, an entity is under foreign ownership, control, or domination "whenever a foreign interest has the 'power,' direct or indirect, whether or not exercised, to direct or decide matters affecting the management or

operations of the applicant." Final Standard Review Plan on Foreign Ownership, Control, or Domination, 64 Fed. Reg. 52,355, 52,358 (Sept. 28, 1999), *cited with approval in Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 920 (2009). However, the Commission has cautioned that there is no specific ownership percentage above which it would conclusively find that an applicant is per se controlled by foreign interests. 64 Fed. Reg. at 52,358; *Calvert Cliffs*, CLI-09-20, 70 NRC at 920. Rather, foreign control "must be interpreted in light of all the information that bears on who in the corporate structure exercises control over what issues and what rights may be associated with certain types of shares." 64 Fed. Reg. at 52,358; *Calvert Cliffs*, CLI-09-20, 70 NRC at 920-21.

REGULATIONS: INTERPRETATION (10 C.F.R. § 50.38) FOREIGN OWNERSHIP, CONTROL, OR DOMINATION

Even substantial foreign funding or involvement — where "a foreign entity contributes 50%, or more, of the costs of constructing a reactor" or "participates in the project review" and is "consulted on policy and costs issues" — does not require a finding of foreign control, where safeguards ensure U.S. national defense and security. 64 Fed. Reg. at 52,358.

REGULATIONS: INTERPRETATION (10 C.F.R. § 50.38) FOREIGN OWNERSHIP, CONTROL, OR DOMINATION

The Atomic Energy Act (AEA) and the Commission's FOCD regulations prohibit licensees from being owned, controlled, or dominated by a foreign entity. Therefore, as a prospective licensee, an applicant must not be owned, controlled, or dominated by a foreign entity for it to obtain a license. That an applicant's Combined License Application (COLA) parses duties under the license, envisioning that it would have sole authority to construct the proposed facility while a co-license applicant would have sole authority to operate the proposed facility, is simply an irrelevant distinction for claiming that one of the applicants should not be subject to a FOCD inquiry. Both are prospective licensees subject to the limitations on foreign ownership, control, or domination.

RULES OF PRACTICE: CONTENTION ADMISSIBILITY

At the contention admissibility stage of a proceeding, Intervenors need not marshal their evidence as though preparing for an evidentiary hearing. *See, e.g., U.S. Department of Energy* (High-Level Waste Repository), LBP-09-6, 69

NRC 367, 416 (2009) (noting that requiring petitioners to proffer additional and conclusive support for the effect of their proposed contention "would improperly require . . . Boards to adjudicate the merits of contentions before admitting them"). Intervenors need only raise a genuine dispute as to the COLA, e.g., the effectiveness of the negation action plan at combating unlawful foreign ownership, control, or domination.

MEMORANDUM AND ORDER

(Ruling on Admissibility of Intervenors' New Foreign Control Contention)

This proceeding concerns the application of Nuclear Innovation North America LLC (NINA) for combined licenses (COLs) that would permit the construction and operation of two new nuclear reactor units, proposed South Texas Project (STP) Units 3 and 4, on a site near Bay City, Texas, where STP Units 1 and 2 currently operate. Intervenors (the Sustainable Energy and Economic Development (SEED) Coalition, the South Texas Association for Responsible Energy, and Public Citizen) have moved for leave to file a new contention, FC-1, alleging that statutory and regulatory prohibitions on foreign ownership, control, and domination (FOCD) forbid the licensing of proposed STP Units 3 and 4:

Contention FC-1: Applicant, [NINA], has not demonstrated that its STP Units 3 and 4 joint venture with Toshiba, is not owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government contrary to 42 U.S.C. § 2133(d) and 10 C.F.R § 50.38.¹

For the reasons stated below, we grant Intervenors' motion, concluding that FC-1 is admissible.

I. BACKGROUND

A. Procedural History

On May 16, 2011, Intervenors moved for leave to file FC-1.2 NINA opposes

¹ Intervenors' Motion for Leave to File a New Contention Based on Prohibitions Against Foreign Control (May 16, 2011) at 1 (Intervenors FC-1 Motion).

 $^{^{2}}$ Id.

admission of FC-1,³ while the NRC Staff does not oppose admission of FC-1.⁴ Intervenors submitted a reply on June 21, 2011.⁵

On July 8, 2011, NINA notified the Board and the parties that it had submitted to the NRC an update to Part 1 of its COL application (COLA), including a new Appendix 1D with its FOCD negation action plan.⁶ We directed the parties to submit briefs regarding the effect this COLA revision might have on the admissibility of FC-1.⁷ Intervenors, NINA, and the Staff each filed briefs on July 29, 2011.⁸

Again on August 5, 2011, NINA notified the Board and the parties that it had responded to a request for additional information (RAI) concerning FOCD issues from the Staff.⁹ We advised the parties that this RAI response¹⁰ would be discussed at the pending oral argument.¹¹ On August 17, 2011, we held oral argument on FC-1 in Austin, Texas.¹²

B. Relevant Corporate Entities for FOCD Analysis

We outline below the nationality and relationship of the various corporate entities implicated by FC-1. As opposed to the traditional licensing model of a single entity pursuing a license, several entities are pursuing different aspects of a license in this proceeding. In effect the prospective licensees are seeking a license and treating it as a bundle of distinct rights. The license as requested would permit different entities different rights with respect to owning, constructing, possessing,

³ [NINA's] Answer Opposing New Contention Based on Prohibition Against Foreign Control (June 10, 2011) (NINA Answer).

⁴NRC Staff's Answer to Intervenors' Motion for Leave to File a New Contention Based on Prohibitions Against Foreign Control (June 10, 2011) (Staff Answer).

⁵ Intervenors' Consolidated Reply to Staff and Applicant's Answer to Intervenors' Motion for Leave to File New Contention FC-1 (June 21, 2011) (Intervenors Reply).

⁶ See Letter from John E. Matthews, Counsel for Nuclear Innovation North America, LLC, to Atomic Safety and Licensing Board (July 8, 2011) at 1 (NINA Letter Amending COLA).

⁷Tr. at 1277-79 (July 20, 2011) (Aug. 17, 2011).

⁸ Intervenors' Supplemental Brief Relating to New Contention FC-1 (July 29, 2011) (Intervenors Supplemental Brief); [NINA's] Brief Regarding Effect of Application Update on Proposed Contention FC-1 (July 29, 2011) (NINA Supplemental Brief); NRC Staff's Brief on Applicant's Filing Related to the Foreign Control Contention (July 29, 2011) (Staff Supplemental Brief).

⁹ See Letter from John E. Matthews, Counsel for Nuclear Innovation North America, LLC, to Atomic Safety and Licensing Board (Aug. 5, 2011).

¹⁰*Id.*, Attach., South Texas Project Units 3 and 4, Docket Nos. 52-012 and 52-013, Response to Request for Additional Information (Aug. 4, 2011) (RAI Response).

¹¹Licensing Board Memorandum and Order (Scope of Oral Argument on FC-1) (Aug. 8, 2011) at 1 (unpublished).

¹² Tr. at 1273-1394.

using, and operating STP Units 3 and 4. Chief among these prospective licensees, NINA is the lead applicant seeking the license on behalf of all other prospective licensees. ¹³

1. Nuclear Innovation North America LLC (NINA)

NINA is the license applicant with overall responsibility for the COLA, including design and quality activities conducted prior to issuance of the requested licenses. ¹⁴ Specifically, pursuant to Revision 6 of the COLA, NINA seeks a license to construct, possess, and use STP Units 3 and 4. ¹⁵ NINA is a Delaware limited liability company. ¹⁶ Currently, NINA is owned by NRG Energy, Inc. and Toshiba American Nuclear Energy Corporation in proportions of 89.5% and 10.5%, respectively. However, NINA has recently entered into an agreement with Stone & Webster Inc. (S&W), a Louisiana corporation, whereby S&W has the option to acquire an ownership interest in NINA. ¹⁷ NINA's ownership may change in accordance with the respective capital contributions of its owners. ¹⁸

2. NINA Texas 3 LLC (NINA 3) and NINA Texas 4 LLC (NINA 4)

NINA 3 and NINA 4 are Delaware limited liability companies. NINA 3 and NINA 4 are wholly owned subsidiaries of NINA Investments LLC (NINA Investments), a Delaware limited liability company, which in turn is a wholly owned subsidiary of NINA Investments Holdings LLC (NINA Holdings), a Delaware limited liability company, which itself is a wholly owned subsidiary of NINA. 19 Through its wholly owned subsidiaries, NINA owns 100% of NINA 3 and NINA 4. In Revision 6 of the COLA, NINA 3 has applied for a license to possess STP Unit 3 and own a 92.375% undivided interest therein, 20 and NINA 4 has applied for a license to possess STP Unit 4 and own a 92.375% undivided interest therein. 21

¹³ Applicants for the COLs are NINA 3, NINA 4, CPS Energy, STPNOC, and NINA, identified *supra* pp. 384-86. NINA Letter Amending COLA, attach., [STP] Units 3 & 4 COLA Pt. 1, Rev. 6, at 1.0-5 (COLA Pt. 1, Rev. 6).

¹⁴ *Id.* at 1.0-4 to -5.

¹⁵ *Id.* at 1.0-3 to -4.

¹⁶ *Id.* at 1.0-5.

¹⁷ *Id.* at 1.0-6.

¹⁸ Id. at 1.0-5.

¹⁹ *Id.* at 1.0-8.

²⁰ *Id.* at 1.0-3.

²¹ *Id*.

3. NRG Energy, Inc. (NRG Energy)

NRG Energy is a Delaware corporation engaged in wholesale power generation. It is publicly owned and traded on the New York Stock Exchange.²² In Revision 6 to the COLA, NRG Energy reportedly owns 89.5% of NINA. As noted above, however, NRG's ownership stake in NINA may change in the future based on capital contributions from other owners.²³

4. City Public Service Board of the City of San Antonio (CPS Energy)

CPS Energy is a Texas municipal utility and an independent Board of the City of San Antonio.²⁴ CPS Energy has applied for a license to possess and own a 7.625% undivided interest in STP Units 3 and 4.²⁵

5. Toshiba American Nuclear Energy Corporation (TANE)

TANE is a wholly owned subsidiary of Toshiba America, Inc., a Delaware corporation, which is a wholly owned subsidiary of Toshiba Corporation, a Japanese corporation. In Revision 6 to the COLA, TANE reportedly owns 10.5% of NINA. As noted above, however, NINA's ownership may change in the future based on capital contributions from other owners. TANE — from owning 90% or more of NINA.

6. South Texas Project Nuclear Operating Company (STPNOC)

STPNOC would hold no ownership interest in STP Units 3 and 4. Instead, as described in Revision 6 to the COLA, STPNOC applies to possess, use, and operate STP Units 3 and 4.²⁹ NINA proposes that STPNOC would be responsible for the operation, maintenance, modification, decontamination, and decommissioning of STP Units 3 and 4 (just as STPNOC currently is responsible for STP Units 1 and 2). Authority for such activities would transfer to STPNOC

²² Id. at 1.0-7 to -8.

²³ *Id.* at 1.0-5.

²⁴ *Id.* at 1.0-9.

²⁵ *Id.* at 1.0-3.

²⁶ *Id.* at 1.0-5.

²⁷ *Id*.

²⁸ *Id.* at 1.0-7.

²⁹ *Id.* at 1.0-3 to -4.

after the Commission makes requisite findings under 10 C.F.R. \S 52.103(g) that COL acceptance criteria have been met.³⁰

C. Relevant Information in Public Documents or Filings

1. Revision 4 to Part 1 of COLA (October 5, 2010)31

Revision 4 to Part 1 of NINA's COLA states:

NINA is currently owned approximately 89.5% by NRG Energy and 10.5% by Toshiba America Nuclear, a Delaware corporation. Toshiba America Nuclear is a wholly owned subsidiary of Toshiba America, Inc., a Delaware corporation, which is a wholly owned subsidiary of Toshiba Corporation, a Japanese corporation Toshiba America Nuclear itself is indirectly owned, controlled and dominated by a foreign corporation. However, Toshiba America Nuclear is only a minority (approximately 10.5%), non-controlling investor in an intermediate holding company in the corporate ownership chain of NINA 3 and NINA 4. NINA currently is controlled by NRG Energy, which owns approximately 89.5% of NINA, and Toshiba America Nuclear is not able to exercise domination or control over NINA or any of the subsidiaries controlled by NINA.³²

The COLA also explains NINA's negation action plan, i.e., those aspects of NINA's governance structure intended to negate FOCD. First, there would be a security subcommittee of NINA's board of directors that would be composed of "two independent directors who are U.S. citizens and a U.S. citizen director appointed directly or indirectly by NRG Energy." According to the COLA, the security subcommittee is to have ultimate control over all matters relating to the license. Second, there would be a separate body, referred to as a nuclear advisory committee. According to the COLA, the nuclear advisory committee is to provide independent oversight throughout the design, construction, and operation of STP Units 3 and 4, with respect to any matter relating to nuclear safety, quality, security, or reliability. NINA indicates that the nuclear advisory committee is to be composed of independent individuals who are U.S. citizens, but who are

³⁰ *Id.* at 1.0-10.

³¹ [STP] Units 3 & 4 COLA Pt. 1, Rev. 4 (Oct. 5, 2010) (ADAMS Accession No. ML102860171) (COLA Pt. 1, Rev. 4).

³² Id. at 1.0-16.

³³ *Id.* at 1.0-16; *see also* Tr. at 1349 (Aug. 17, 2011).

³⁴COLA Pt. 1, Rev. 4, at 1.0-16 to -17.

³⁵ *Id.* at 1.0-19; *see also* Tr. at 1349 (Aug. 17, 2011).

not officers, directors, or employees of NINA, STPNOC, or any of the STP Unit owners or their affiliates.³⁶

2. NRG Energy Press Release (April 19, 2011)

In a press release issued on April 19, 2011, NRG Energy announced that "it will write down its investment in the development of South Texas Project units 3&4."³⁷ NRG Energy further stated that "while it will cooperate with and support its current partners and any prospective future partners in attempting to develop STP 3&4 successfully, NRG will not invest additional capital in the STP development effort."³⁸ As a result, as of March 2011, NINA "suspended indefinitely all detailed engineering work and other pre-construction activities and dramatically reduced the [South Texas] project workforce."³⁹ Going forward, NRG stated that TANE "will be responsible for funding ongoing costs to continue the licensing process."⁴⁰

Days later, at an April 21, 2011 subcommittee meeting of the Advisory Committee on Reactor Safeguards (ACRS), NINA's manager of regulatory affairs, Scott Head, stated that Toshiba, which had been "providing the majority of the funding for the last number of months," would now provide all funding — "100 percent." According to Mr. Head, because of that funding and because of Toshiba's desire to "move forward with the COL review and the efforts to obtain a COL," the STP Units 3 and 4 effort would continue. 42 Mr. Head acknowledged that NINA "will be approaching the NRC regarding a change in the corporate structure and the ownership structure of the project. And [NINA] will at that point in time be dealing with the foreign ownership, the ramifications that come with significant foreign ownership of the project."

3. Revision 6 to Part 1 and Appendix 1D of COLA (June 23, 2011)

In June 2011, NINA submitted Revision 6 to Part 1 of the COLA, amending

³⁶ COLA Pt. 1, Rev. 4, at 1.0-19.

³⁷ NINA Answer, Attach. 1, Press Release: NRG Energy, Inc. Provides Greater Clarity on the South Texas Nuclear Development Project (STP 3&4) (Apr. 19, 2011) at 1 (NRG Energy Press Release).

³⁸ Id. at 1.

³⁹ *Id*.

⁴⁰ *Id*.

⁴¹ NINA Answer, Attach. 1, Official Transcript of Proceedings, U.S. Nuclear Regulatory Commission, Advisory Committee on Reactor Safeguards ABWR Subcommittee Meeting (Apr. 21, 2011) at 9 (ADAMS Accession No. ML111220150) (Head Statements).

⁴² *Id*. at 9.

 $^{^{43}}$ *Id*.

Part 1 and introducing Appendix 1D. With Revision 6, NINA introduced five principal changes relevant to FC-1.

First, NINA asserted that

[i]f there are any material changes in the ownership percentages among the current owners, e.g., 5% or more variance from the ownership percentages previously described in the COLA, NINA will notify the NRC in a timely manner and identify the change in the next update to the COLA. If any new material investors join in the ownership of NINA, NINA will also notify NRC of such owners, and the investors will be identified in the next update to the COLA.

Second, NINA formalized the negation action plan by moving the textual description of the plan from Part 1 to an entirely new Appendix 1D.⁴⁵

Third, the security subcommittee of the NINA Board will be established no later than the first pouring of any safety-related concrete for STP Units 3 and 4.46

Fourth, members of the security subcommittee and the NINA CEO will execute a certificate acknowledging NINA's protective measures in the negation action plan and pledging to "assure that the [NRC] is advised of any violation of, attempt to violate, or attempt to circumvent any of the provisions" of the negation action plan.⁴⁷

Fifth, NINA will assure that the U.S. owners at all times hold at least 10% of the equity of NINA.⁴⁸ Taking into account CPS Energy's 7.625% ownership interest, NINA asserts that indirect foreign ownership of proposed STP Units 3 and 4 will never exceed 85%.⁴⁹

4. NINA Response to Staff Request for Additional Information (RAI) (August 4, 2011)

On May 5, 2011, NRG made a 10-Q filing with the Securities and Exchange Commission stating that "NRG ceased to have a controlling financial interest in NINA at the end of the first quarter of 2011." Based on that statement, the Staff requested NINA to explain the impacts of this development on FOCD.

⁴⁴COLA Pt. 1, Rev. 6, at 1.0-6.

⁴⁵ *Id.* at 1D.1-1; Tr. at 1349 (Aug. 17, 2011).

⁴⁶COLA Pt. 1, Rev. 6, at 1D.1-2; Tr. at 1349-50 (Aug. 17, 2011). Under Revision 4, NINA did not specify the time for establishing the security subcommittee, which produced some ambiguity as to whether it could be deferred until the beginning of operation.

⁴⁷COLA Pt. 1, Rev. 6, at 1D.1-8; Tr. at 1350 (Aug. 17, 2011).

⁴⁸ COLA Pt. 1, Rev. 6, at 1D.1-4; Tr. at 1353 (Aug. 17, 2011).

⁴⁹ COLA Pt. 1, Rev. 6, at 1.0-7.

⁵⁰ RAI Response at 1.

⁵¹ *Id.* at 1.

In response, NINA indicated that the NRG Energy statements on the "controlling financial interest[s]" of NINA dealt only with NRG Energy accounting decisions that had no FOCD implications. According to NINA, NRG Energy's choice to deconsolidate its financial statements with those of NINA was a consequence of, *inter alia*, NRG Energy's choice to write off its NINA investment earlier in the spring.⁵² According to NINA, merely writing off the investment does not affect the FOCD of NINA. Yet as NINA acknowledges, without NRG Energy funding, NINA is free to pursue alternative funding sources — foreign or domestic.⁵³

II. LEGAL STANDARDS

A. Contention Admissibility

New contentions may be admitted as long as they (a) meet the timely contention criteria in 10 C.F.R. § 2.309(f)(2) or the nontimely contention criteria in 10 C.F.R. § 2.309(c)(1), and (b) fulfill the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1). We have reviewed the standards for new contentions on multiple occasions. ⁵⁴ Thus we do not reiterate them in full here, but rather provide a brief summary of them.

1. Timely New Contentions Under 10 C.F.R. § 2.309(f)(2)

A timely new contention may be filed with leave of the presiding officer if:

- (i) The information upon which the . . . new contention is based was not previously available;
- (ii) The information upon which the . . . new contention is based is materially different than information previously available; and
- (iii) The . . . new contention has been submitted in a timely fashion based on the availability of the subsequent information.⁵⁵

The Board's Initial Scheduling Order in this proceeding specifies that new contentions are "submitted in a timely fashion" if filed "within thirty (30) days of

⁵² *Id.* at 2.

⁵³ *Id.* at 3.

⁵⁴ See LBP-11-7, 73 NRC 254, 277-80 (2011); South Texas Project Nuclear Operating Co. (South Texas Project, Units 3 and 4), LBP-10-14, 72 NRC 101, 107-09 (2010); LBP-10-2, 71 NRC 190, 209-10 (2010).

⁵⁵ 10 C.F.R. § 2.309(f)(2)(i)-(iii).

the date when the new and material information on which it is based first becomes available."56

2. Admissibility Under 10 C.F.R. $\S 2.309(f)(1)$

In addition to meeting the requirements for timely new contentions pursuant to 10 C.F.R. § 2.309(f)(2)(i)-(iii) or nontimely contentions pursuant to 10 C.F.R. § 2.309(c), all contentions must satisfy the general contention admissibility requirements of 10 C.F.R. § 2.309(f)(1). To be admissible, all contentions must:

- (i) provide a specific statement of the issue of law or fact to be raised or controverted . . . ;
 - (ii) provide a brief explanation of the basis for the contention;
- (iii) demonstrate that the issue raised in the contention is within the scope of the proceeding;
- (iv) demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
- (v) provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and
- (vi) provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.⁵⁷

B. Foreign Ownership, Control, or Domination

Section 102 of the Atomic Energy Act of 1954 (AEA) states that commercial licenses for utilization or production facilities for industrial or commercial purposes shall be issued according to the terms of section 103 of the AEA.⁵⁸ AEA § 103d provides, *inter alia*, that "[n]o license may be issued to an alien or any

⁵⁶ Licensing Board Initial Scheduling Order (Oct. 20, 2009) at 8 (unpublished) (ISO).

⁵⁷ 10 C.F.R. § 2.309(f)(1)(i)-(vi).

⁵⁸ Atomic Energy Act of 1954 as amended, 42 U.S.C. § 2132(a). For this proceeding, production and utilization facilities include nuclear reactors such as proposed STP Units 3 and 4. *See* 10 C.F.R. § 50.2 (defining production and utilization facilities).

corporation or other entity if the Commission knows or has reason to believe it is *owned*, *controlled*, or *dominated* by an alien, a foreign corporation, or a foreign government."⁵⁹ NRC regulations interpret AEA § 103d with much the same language, specifying that

[a]ny person who is a citizen, national, or agent of a foreign country, or any corporation, or other entity which the Commission knows or has reason to believe is *owned*, *controlled*, or *dominated* by an alien, a foreign corporation, or a foreign government, shall be ineligible to apply for and obtain a license.⁶⁰

According to Commission guidance, an entity is under foreign ownership, control, or domination "whenever a foreign interest has the 'power,' direct or indirect, whether or not exercised, to direct or decide matters affecting the management or operations of the applicant." However, the Commission has cautioned that there is no specific ownership percentage above which it would conclusively find that an applicant is *per se* controlled by foreign interests. Rather, foreign control "must be interpreted in light of all the information that bears on who in the corporate structure exercises control over what issues and what rights may be associated with certain types of shares." And yet, although a FOCD inquiry should be focused on "safeguarding the national defense and security," the Commission identified a series of other factors that deserve consideration as well:

(1) the extent of the proposed partial ownership of the reactor; (2) whether the applicant is seeking the authority to operate the reactor; (3) whether the applicant has interlocking directors or officers and details concerning the relevant companies; (4) whether the applicant would have any access to restricted data; and (5) details concerning ownership of the foreign parent company.⁶⁴

Taking such a multifaceted view of FOCD, even substantial foreign funding or involvement — where "a foreign entity contributes 50%, or more, of the costs of constructing a reactor" or "participates in the project review" and is "consulted

⁵⁹ 42 U.S.C. § 2133(d) (emphasis added).

⁶⁰ 10 C.F.R. § 50.38 (emphasis added).

⁶¹ Final Standard Review Plan on Foreign Ownership, Control, or Domination, 64 Fed. Reg. 52,355, 52,358 (Sept. 28, 1999), cited with approval in Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 920 (2009).

⁶² 64 Fed. Reg. at 52,358; *Calvert Cliffs*, CLI-09-20, 70 NRC at 920.

^{63 64} Fed. Reg. at 52,358; *Calvert Cliffs*, CLI-09-20, 70 NRC at 920-21.

⁶⁴ 64 Fed. Reg. at 52,358; Calvert Cliffs, CLI-09-20, 70 NRC at 921.

on policy and costs issues" — does not require a finding of foreign control, where safeguards ensure U.S. national defense and security.⁶⁵

III. ANALYSIS

A. Timeliness

Intervenors filed FC-1 in response to an NRG Energy press release, dated April 19, 2011, and clarifying statements that Scott Head, NINA's manager of regulatory affairs, made days later. 66 According to Intervenors, earlier revisions to NINA's COLA had already disclosed the partial foreign ownership of NINA — 10.5% foreign ownership by TANE and 89.5% domestic ownership by NRG Energy. 67 But for the first time on April 19, 2011, NRG Energy "announced its withdrawal of future investment capital, leaving TANE responsible for funding ongoing costs to continue the licensing process." 68 In effect, TANE would henceforth be the only contributing party left in the NINA COLA process. As a result, Intervenors claim that TANE is the *de facto* controlling owner of NINA, despite owning a smaller *de jure* share of NINA. 69

While Staff deems FC-1 to be timely, based on the date of the NRG Energy press release, NINA challenges the timeliness of FC-1; NINA's timeliness arguments, however, are largely off target. NINA argues that FC-1 does not satisfy the late-filed contention criteria in 10 C.F.R. § 2.309(f)(2) because, first, NINA's ownership has not changed — contrary to Intervenors' allegations — and, second, even if there were an ownership change, existing revisions to the COLA for proposed STP Units 3 and 4 already disclose the likelihood of increased foreign participation in NINA and fully describe NINA's plan for addressing the FOCD issue. NINA mischaracterizes FC-1, however. In FC-1, Intervenors challenge the control prong of the prohibition on FOCD, not the ownership prong. Details of NINA's foreign ownership interests and the fact those interests

^{65 64} Fed. Reg. at 52,358.

⁶⁶ Intervenors FC-1 Motion at 2.

⁶⁷ Id. at 2 (citing COLA, Pt. 1, Rev. 5, §§ 1.2, 1.5).

⁶⁸ *Id.* at 2.

⁶⁹ *Id.* at 2, 6.

⁷⁰ Staff Answer at 5.

⁷¹ NINA Answer at 13-14.

⁷² *Id.* at 13-14.

⁷³ The very title of Intervenors' motion challenges the foreign control of NINA: Intervenors' Motion for Leave to File a New Contention Based on Prohibitions Against *Foreign Control*. Intervenors FC-1 Motion at 1 (emphasis added). Intervenors repeat their challenge to the foreign control of NINA (Continued)

may change were disclosed as early as 2010 with Revision 4 to Part 1 of the COLA.⁷⁴ Intervenors concede as much, even suggesting that NINA has been candid about the presence of foreign owners and the possibility of future changes in NINA's ownership, however ambiguous those disclosures may have been.⁷⁵

NINA does make one timeliness argument regarding FC-1 that deserves consideration. NINA argues that in August 2010, the public had notice that TANE would replace NRG Energy as the principal source of funding for proposed STP Units 3 and 4 based on an NRG Energy presentation to investors. According to NINA, a timely contention would have been triggered at that time because it was in August 2010 when Toshiba went to funding 90 percent of the project. As discussed below, however, we do not view this disclosure to be sufficiently informative that it would render FC-1 not timely.

Before the NRG Energy press release on April 19, 2011, the public had no reasonable basis for surmising that NRG Energy would write off its investment in STP Units 3 and 4, much less that, in its place, TANE would assume exclusive, principal funding authority. This break in funding authority was not evident

throughout their pleadings. Id. at 6 ("[I]t would appear that Toshiba is now functioning as the majority owner of NINA.") (emphasis added); id. at 7 ("[D]ue to NRG's withdrawal, current data reveal that NINA . . . has transformed from an applicant backed by [a] domestic interest . . . to an applicant that is now . . . controlled by a foreign interest.") (emphasis added); id. at 9 ("Because the eligibility of NINA as a licensee turns on a determination of whether NINA is controlled by NRG, as stated in the COLA, or Toshiba as alleged by the Intervenors and supported by the April 2011 releases, this issue is material to the proceeding.") (emphasis added); Intervenors Supplemental Brief at 2 ("This omission only serves to further blur the very issue that Intervenors have attempted to resolve; that is, which entity is functionally controlling NINA?") (emphasis added); id. ("[T]here are unresolved issues of foreign control . . . that have not been resolved by Applicant's Rev. 06.") (emphasis added); id. at 3 ("Even in the absence of a formal change in corporate ownership as indicated by Mr. Head, it is the Intervenors' position that Toshiba exercises functional control of NINA's STP 3 & 4 operations.") (emphasis added); id. at 3 ("[A]lthough the Applicant has offered a Negation Action Plan in an effort to mitigate the potential foreign control, domination or influence over nuclear safety, security and reliability matters, the plan is ineffective.") (emphasis added); id. at 5 ("Intervenors offer that foreign funding is weighty indicia of prohibited foreign control and domination.") (emphasis added); id. at 5 ("[M]oney often equals control and the power to direct the actions of the licensee and that effective mitigation of prohibited foreign influence requires diversified funding not controlled by a foreign entity.") (emphasis added). And during oral argument, Intervenors reiterated their challenge to the foreign control of NINA. Tr. at 1384 (Aug. 17, 2011) ("In this case where we have only one source of funding that's compensating directors and the rest of the folks on down the line, I don't think it's satisfactory to conclude that there is no chance of direct or indirect, exercised or not exercised foreign control or domination.") (emphasis added).

⁷⁴COLA, Pt. 1, Rev. 4, at 1.0-4, -16.

⁷⁵ Intervenors FC-1 Motion at 2; Intervenors Reply at 2.

⁷⁶Contention FC-1 Oral Argument Documents (Aug. 17, 2011), Attach. 1, NRG's Second Quarter 2010 Results Presentation (Aug. 2, 2010) (NRG Investor Presentation).

⁷⁷ Tr. at 1326 (Aug. 17, 2011).

from previously available information. NINA argues that the break in funding authority was known as early as August 2010, based on an NRG Investor Presentation. We disagree. The NRG Investor Presentation at most indicates that NRG Energy had found a partner to "shoulder more of the spend[ing]" on the project and that for the "near-term project activities" Toshiba would provide "interim funding measures to cover the NRG [funding] gap." At the time, NRG Energy represented itself as still supporting proposed STP Units 3 and 4 with both substantial financial and fiduciary obligations. The NRG Investor Presentation offered no indication that NRG Energy would write off its investment in the project, ostensibly pulling out, and that TANE would step up as the sole funding source for the remainder of the licensing process. Once NRG Energy took those actions, Intervenors timely filed FC-1 on May 16, 2011 — within 30 days of the NRG Energy press release on April 19, 2011. Accordingly, we conclude that Intervenors timely filed FC-1 under 10 C.F.R. § 2.309(f)(2) and our ISO.

B. Admissibility

Intervenors contend that NINA is improperly controlled by the Japanese corporation Toshiba through Toshiba's downstream Delaware subsidiary, TANE. Intervenors argue that Toshiba exercises control through its funding of NINA and the licensing process. If Intervenors are correct, NINA would not be able to apply for a COL under the AEA and Commission regulations.⁸² We analyze FC-1 according to the six contention admissibility criteria in turn.

First, FC-1 contains a "specific statement of the issue of law or fact" sought to be litigated, as required by 10 C.F.R. § 2.309(f)(1)(i). It asserts that NINA is ineligible to apply for a COL because NINA is controlled by a foreign corporation — Toshiba. Under both the AEA and Commission regulations, applicants for

⁷⁸ At oral argument, Staff affirmed its position that Intervenors timely filed FC-1 in response to NRG Energy's April 19, 2011 press release: "[F]inancing can demonstrate control. So the April 19 press release indicated that Toshiba would be responsible for all future funding, and NRG would stop, in fact, sinking additional capital in STP's development efforts." Tr. at 1335 (Aug. 17, 2011). The Staff views the April 19 press release as the first time it realized there was "a situation where there would be a single foreign entity with a potentially large controlling interest." Tr. at 1336 (Aug. 17, 2011).

⁷⁹ NRG Investor Presentation at 8-9.

^{80 10} C.F.R. § 2.309(f)(2); ISO at 8.

At oral argument, Intervenors stated that the August 4 NINA RAI Response, while not providing new information, offered further support for FC-1 by affirming information in the NRG Energy Press Release — that TANE would be the exclusive, principal funding source for NINA. Tr. at 1344-45 (Aug. 17, 2011).

⁸¹Because we find the contention timely filed we need not address the alternative grounds for admitting nontimely contentions set forth in 10 C.F.R. § 2.309(c).

^{82 42} U.S.C. § 2133(d); 10 C.F.R § 50.38.

an NRC license may not be controlled by "an alien, a foreign corporation, or a foreign government."83

Second, Intervenors provide a "brief explanation of the basis for the contention" as required by 10 C.F.R. § 2.309(f)(1)(ii). Intervenors explain that although Toshiba, through TANE, only owns a minority of NINA, "Toshiba is now the only contributing party in the NINA application process," as indicated by the April 19 NRG Energy press release. Secondary in the NRG has withdrawn from continued capital contributions, . . . it would appear that Toshiba is now functioning as the majority owner of NINA. Secondary to Intervenors, this position gives Toshiba "control of the duties delineated in the COLA," i.e., decisions and actions associated with nuclear safety and security. Secondary in the NRG's withdrawal . . . NINA . . . has transformed from an applicant backed by [a] domestic interest before April 19, 2011 to an applicant that is now . . . controlled by a foreign interest.

Third, FC-1 is "within the scope" of this proceeding. FC-1 calls into question NINA's eligibility to apply for or receive a combined operating license, the subject of this proceeding. 88 As such, Intervenors' FOCD issue is within the scope of this licensing proceeding. 89

Fourth, Intervenors demonstrate that the "issue raised in [FC-1] is material to the findings the NRC must make to support" granting the proposed license. ⁹⁰ To issue a COL or even to entertain an application for a COL, the Commission cannot "know[] or ha[ve] reason to believe [the applicant] is . . . controlled by an alien, a foreign corporation, or a foreign government." NINA's eligibility merely to apply for a COL is therefore material to this licensing proceeding. ⁹²

Fifth, Intervenors provide a "concise statement of the alleged facts or expert opinions which support [their] position" that NINA is controlled by a foreign corporation. Intervenors assert that the NRG Energy press release and statements by Scott Head prove that Toshiba — through its funding authority — has established control over NINA and the licensing process for proposed STP Units

^{83 42} U.S.C. § 2133(d); 10 C.F.R § 50.38.

⁸⁴ Intervenors FC-1 Motion at 6.

⁸⁵ Id.

⁸⁶ Id. at 6-7 (citing COLA, Rev. 5, § 1.5).

⁸⁷ Id. at 7.

⁸⁸ Id. at 8.

 $^{^{89}\,\}mbox{See}$ Calvert Cliffs, CLI-09-20, 70 NRC at 921.

⁹⁰ See 10 C.F.R. § 2.309(f)(1)(iv).

⁹¹ 10 C.F.R. § 50.38; *see also id.* § 52.75(a) ("Any person except one excluded by § 50.38 of this chapter may file an application for a combined license for a nuclear power facility").

⁹² See Calvert Cliffs, CLI-09-20, 70 NRC at 921.

^{93 10} C.F.R. § 2.309(f)(1)(v).

3 and 4.94 According to Intervenors, the press release and statements divulge that NRG Energy has written off its investment in NINA, effectively pulling out, and that TANE would step up and assume exclusive, principal funding authority.95 As a result of this break and shift in funding, Intervenors claim that Toshiba will control NINA.96

Sixth, Intervenors "provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact." In its COLA, NINA states that it has "implemented the STP 3&4 Negation Action Plan (NAP) to provide requirements and guidance to ensure negation of potential foreign ownership, control or domination (FOCD) over the STP 3&4 licenses held by NINA, NINA 3, NINA 4 and CPS Energy." NINA explains that the negation action plan relies on a defense-in-depth strategy, based on guidance provided in the Commission's SRP on foreign ownership, control, or domination. As a result, NINA considers that its "measures effectively negate the risk that the foreign owned parent companies might exercise control, domination, or influence over matters that are required to be under U.S. control pursuant to the terms of 10 CFR 50.38 and Section 103.d of the [AEA]."

Intervenors dispute the COLA's assertion that NINA is not controlled by a foreign corporation; in essence, Intervenors allege that NINA's negation action plan is ineffective. ¹⁰² As support, Intervenors claim that Toshiba's role as the funding authority for NINA, as well as for the licensing process, grants Toshiba effective control of the project that far exceeds its ownership share of NINA. ¹⁰³ According to Intervenors, funding has long been recognized as a source of control.

⁹⁴ Intervenors FC-1 Motion at 3-8.

⁹⁵ *Id.* at 6; Intervenors Reply at 3.

⁹⁶ Intervenors FC-1 Motion at 6.

⁹⁷ See 10 C.F.R. § 2.309(f)(1)(vi).

⁹⁸ COLA Pt. 1, Rev. 6, at 1.0-18.

⁹⁹ NINA details the negation action plan in Appendix 1D to Revision 6 of the COLA. Two significant features of the plan include establishing a security subcommittee within NINA, composed of a majority independent U.S. directors, and a nuclear advisory committee for NINA, also composed of independent U.S. citizens. *Id.* at 1D-2 to -3, -6 to -9, -12 to -13.

¹⁰⁰ Id. at 1.0-18.

 $^{^{101}}$ Id.

¹⁰² Intervenors FC-1 Motion at 9 (citing COLA Pt. 1, Rev. 5, § 1.5); Intervenors Reply at 7; Intervenors Supplemental Brief at 3. Whereas Intervenors point to section 1.5 of Revision 5 to the COLA regarding foreign ownership restrictions, the text of that section in Revision 6 is now contained in a revised section 1.5 and new appendix 1D.

¹⁰³ Intervenors FC-1 Motion at 9; Intervenors Reply at 7; Intervenors Supplemental Brief at 3-4 ("Ultimately, it appears that Toshiba provides funding to the very bodies that are supposed to govern matters of nuclear safety, security and reliability").

Simply put, "money often equals control." ¹⁰⁴ But more specifically to the question of FOCD, Intervenors argue that the Commission's SRP on FOCD identifies six examples of measures that may be sufficient to negate foreign influence and four out of the six measures specifically address minimization of foreign financial ties with applicants. ¹⁰⁵

NINA concedes that where foreign ownership exists, foreign control may follow. ¹⁰⁶ And "appropriate negation measures [must be] adopted to assure U.S. control over matters of concern under the AEA." ¹⁰⁷ NINA argues, however, that the COLA's negation action plan does negate foreign control, or at least that it is designed to do so. ¹⁰⁸ According to NINA, Intervenors have failed to identify any deficiencies in the negation action plan, for instance with the composition and power of the security subcommittee. ¹⁰⁹

To NINA's answer, Intervenors urge that arguing about the effectiveness of particular aspects of the negation action plan "inherently go[es] to the merits of the contention and not its admissibility." We agree. At the contention admissibility stage of a proceeding, Intervenors need not marshal their evidence as though preparing for an evidentiary hearing. It Intervenors need only raise a genuine dispute as to the COLA, here the effectiveness of the negation action plan. Rather than quelling the dispute, Applicant's arguments highlight the disagreement: Intervenors claim that for Toshiba funding authority equals control; while NINA counters that its plan negates control. Accordingly, Intervenors show that FC-1 creates a genuine dispute with the COLA.

Before concluding, we note a novel, yet fundamentally flawed, argument first proffered by NINA at oral argument. According to NINA, although NINA is indeed partly foreign owned, STPNOC is not. And if issued, the license would grant authority to operate STP Units 3 and 4 solely to STPNOC.¹¹³ In fact, NINA represents that it would have no authority over operation because its rights would effectively cease upon the completion of construction — specifically at the loading

¹⁰⁴ Intervenors Supplemental Brief at 5.

¹⁰⁵ *Id.* at 5.

¹⁰⁶ NINA Answer at 12, 22-23.

¹⁰⁷ Id. at 12.

 $^{^{108}}$ Id. at 24.

¹⁰⁹ Id. at 24; NINA Supplemental Brief at 5.

¹¹⁰ Intervenors Reply at 7.

¹¹¹ See, e.g., U.S. Department of Energy (High-Level Waste Repository), LBP-09-6, 69 NRC 367, 416 (2009) (noting that requiring petitioners to proffer additional and conclusive support for the effect of their proposed contention "would improperly require . . . Boards to adjudicate the merits of contentions before admitting them").

¹¹² Cf. Calvert Cliffs, CLI-09-20, 70 NRC at 921.

¹¹³Tr. at 1296, 1298, 1301 (Aug. 17, 2011).

of fuel.¹¹⁴ In other words, NINA is seeking a license to construct and STPNOC a license to operate STP Units 3 and 4.¹¹⁵ Based on this construction/operation distinction, NINA argues that because operation of a nuclear reactor involves greater national security interests than construction of a nuclear reactor, only STPNOC — the entirely domestic entity — would be subject to a FOCD inquiry, as opposed to NINA — the partly foreign entity.¹¹⁶

NINA's argument fails. The AEA and the Commission's FOCD regulations prohibit licensees from being owned, controlled, or dominated by a foreign entity. NINA is a prospective licensee. Therefore, NINA must not be owned, controlled, or dominated by a foreign entity for it to obtain a license. That the COLA parses duties under the license, envisioning that NINA would have sole authority to construct STP Units 3 and 4 and STPNOC would have sole authority to operate STP Units 3 and 4, is simply an irrelevant distinction for a FOCD inquiry.

IV. CONCLUSION

For the foregoing reasons, proposed Contention FC-1 is *admitted*. It is so ORDERED.

THE ATOMIC SAFETY AND LICENSING BOARD

Michael M. Gibson, Chairman ADMINISTRATIVE JUDGE

Gary S. Arnold ADMINISTRATIVE JUDGE

Randall J. Charbeneau ADMINISTRATIVE JUDGE

Rockville, Maryland September 30, 2011

¹¹⁴ Tr. at 1294, 1357-57, 1360 (Aug. 17, 2011).

 $^{^{115}\,\}mathrm{Tr.}$ at 1293, 1296, 1301-02 (Aug. 17, 2011).

¹¹⁶ Tr. at 1294-95, 1297-98, 1305 (Aug. 17, 2011).

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

OFFICE OF FEDERAL AND STATE MATERIALS AND ENVIRONMENTAL MANAGEMENT PROGRAMS

Mark A. Satorius, Director

In the Matter of

Docket No. 40-09083

U.S. ARMY INSTALLATION
MANAGEMENT COMMAND

October 29, 20111

The Petitioner requested that the Nuclear Regulatory Commission (NRC) investigate whether, counter to applicable law and regulations, the United States Army (the Army) possessed or released into the environment depleted uranium (DU) from spent spotting rounds after the expiration of NRC License SUB-459 and, were the NRC to determine that such a violation had occurred, to assess against the Army the maximum penalty permitted by law. The Petitioner requested that any assessed monetary penalties be applied to the environmental remediation of DU contamination at the Schofield Barracks and Pohakuloa Training Area installations in Hawaii.

The final Director's decision on this petition was issued on October 29, 2011. That decision addressed the three items requested by the Petitioner. The activities requested by the Petitioner were granted in part and denied in part.

With respect to the first item, the NRC Staff initiated an investigation into the apparent violation of the NRC's regulations in 10 C.F.R. § 40.3 and took enforcement action against the Army.

With respect to the second and third items, consistent with the NRC Enforcement Policy, the NRC chose not to impose any civil penalty against the Army for the noticed violation because: (1) the Army installations in Hawaii have not been previously the subject of escalated enforcement action; (2) the Army identified

¹Editor's Note: Although this Decision was issued in October, it was inadvertently assigned an issuance number prior to a decision that was issued in September and thus is being published in this issue to maintain the numerical order of the issuances.

and notified the NRC of the presence of radioactive material; and, finally, (3) the Army implemented corrective actions in response to the discovery of the presence of the DU. Further, if the NRC were to have chosen to impose a civil penalty, the law does not provide for the application of that assessed civil penalty to the environmental remediation of DU contamination as requested by the Petitioner because fines assessed for violations of NRC requirements are sent to the U.S. Treasury. Therefore, these portions of the Petition were denied.

DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

By e-mail dated March 4, 2010, Isaac D. Harp (the Petitioner) filed a petition (the Petition) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML100640665) pursuant to Title 10 of the *Code of Federal Regulations* (10 C.F.R.), section 2.206, "Requests for action under this subpart," with the U.S. Nuclear Regulatory Commission (NRC or the Commission).

Copies of the Petition and other publicly available records are available for inspection at the Commission's Public Document Room (PDR) at One White Flint North, Public File Area O1 F21, 11555 Rockville Pike (first floor), Rockville, Maryland, and from the NRC's ADAMS Electronic Reading Room on the NRC Web site at http://www.nrc.gov/reading-rm/adams.html. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the reference staff in the NRC Public Document Room by telephone at 1-800-397-4209 or 301-415-4737, or by e-mail to PDR.Resource@nrc.gov.

A. Action Requested

The Petitioner requested that the NRC investigate whether, counter to applicable law and regulations, the United States Army (the Army) possessed or released into the environment depleted uranium (DU) from spent spotting rounds after the expiration of NRC License SUB-459 and, were the NRC to determine that such a violation had occurred, to assess against the Army the maximum penalty permitted by law. The Petitioner requested that any assessed monetary penalties be applied to the environmental remediation of DU contamination at the Schofield Barracks and Pohakuloa Training Area installations in Hawaii.

B. Petitioner's Basis for the Requested Action

The basis for the Petitioner's requests was that the Army's NRC License SUB-459 expired on October 31, 1964, and consequently, if any DU was possessed or released into the environment by the Army after the license expiration date, such action was unlawful and subject to enforcement action by the NRC.

C. Determination for NRC Review Under 10 C.F.R. § 2.206

The Petition was assigned to the NRC's Office of Federal and State Materials and Environmental Management Programs (FSME) for review. FSME's Petition Review Board (PRB) met with the Petitioner by teleconference on April 14, 2010, and the Petitioner provided additional information in support of the Petition. The transcript of this meeting was treated as a supplement to the Petition and is available at ADAMS Accession No. ML111240096. On April 14, 2010, the PRB made an initial recommendation that the Petition met the acceptance criteria for review. On April 22, 2010, the Petition Manager informed the Petitioner that the PRB had recommended that the Petition be accepted for review and the Petition Manager offered the Petitioner a second opportunity to address the PRB. This opportunity was declined. By letter dated April 26, 2010 (ADAMS Accession No. ML101100139), the NRC formally communicated to the Petitioner the PRB's recommendation to accept the Petition for review under 10 C.F.R. § 2.206. On April 26, 2010, the NRC provided notice that NRC would treat the Petition pursuant to 10 C.F.R. § 2.206 (ADAMS Accession No. ML101100139).

After full consideration of the Petition, including the additional information supplied by the Petitioner at the April 14, 2010 teleconference, FSME grants, in part, and denies, in part, the Petition, as explained below.

II. BACKGROUND

Between 1962 and 1968, the Army received and used DU (which the NRC licenses as source material) at test-firing ranges located at two installations in Hawaii: Schofield Barracks and Pohakuloa Training Area. DU was incorporated into the body of spotting rounds used in connection with the Davy Crockett weapons system. As a result of the testing of the Davy Crockett weapon system, DU was likely scattered throughout the firing ranges at the Hawaiian installations. The Army has indicated to the NRC Staff that it believes that it discontinued testing of the Davy Crockett weapon system in Hawaii in 1968. NRC License SUB-459 authorized the Army to manufacture the spotting rounds containing DU and to transfer those rounds to field units for military use from 1961 through 1973. At the request of the Army, NRC License SUB-459 was allowed by

the NRC to expire in April 1978 (ADAMS Accession Nos. ML111080529 and ML111080531).

In November 2006, the Army notified the NRC of the discovery of DU at the Army's Schofield Barracks installation on the island of Oahu, Hawaii (ADAMS Accession No. ML070650224). Specifically, an Army contractor visually discovered spotting round fragments while performing "range clearing" exercises for unexploded ordinance. From November 2006 through February 2007, the NRC and Army staffs discussed the presence of the DU at Schofield Barracks (ADAMS Accession No. ML070650224). In February 2007, the Army sent a letter to the NRC outlining its investigation of the DU found at Schofield Barracks and indicated that it might need a license to possess the quantity of DU it believed to be present (ADAMS Accession No. ML070650679). The Army also suggested in the letter that before submitting such a license application, it would determine the total number of installations that might contain DU from spent spotting rounds used in connection with the Davy Crockett weapon system. In March 2007, the NRC Staff sent a letter to the Army stating that the approach suggested by the Army was reasonable (ADAMS Accession No. ML070710239). In August 2007, the Army verbally notified the NRC that it had discovered DU contamination at the Pohakuloa Training Area installation. On November 6, 2008, the Army submitted a license application to the NRC for a license to possess the quantities of DU believed by the Army to be present at various Army installations, including, in addition to the two Hawaiian installations, Forts Benning (Georgia), Campbell (Kentucky), Carson (Colorado), Hood (Texas), Knox (Kentucky), Lewis (Washington), and Riley (Kansas) (ADAMS Accession No. ML090070095). On November 16, 2010, the NRC held a license application meeting with the Army at NRC headquarters. At that meeting, the Army informed the NRC Staff of the current status of its investigation of the extent of DU contamination at Army installations and indicated that DU contamination may be present at 17 installations (ADAMS Accession No. ML103360437).

In addition, on October 29, 2010, technical and project management staff from the Army met with NRC Staff at NRC headquarters to discuss planned construction activities in areas known to contain DU at the Schofield Barracks installation. At the meeting, the Army reported that it had removed DU (utilizing the services of Cabrera Services, Inc., an NRC-licensed remediation contractor) from a portion of the Schofield Barracks installation as part of a project to construct a Battle Area Complex (BAX) at Schofield Barracks (ADAMS Accession No. ML103130409). On November 24, 2010, the NRC Staff issued a letter to the Army outlining what decommissioning activities could and could not be undertaken by Cabrera Services in support of the Army's plan to construct a BAX at the Schofield Barracks installation (ADAMS Accession No. ML103160174). In that letter, the NRC Staff communicated to the Army that any maintenance activities that might occur within areas believed to be contaminated with DU at the

identified installations would need to be conducted in accordance with a radiation safety program approved by the NRC via an NRC-issued license. Accordingly, such maintenance activities would need to be suspended until a radiation safety program was approved via an NRC-issued license.

On April 5, 2011, the NRC requested a predecisional enforcement conference (PEC) with the Army to discuss an apparent violation of the NRC's regulations in 10 C.F.R. § 40.3, in that the Army apparently possessed DU at multiple installations without an NRC license and, consequent to that, may have performed decommissioning at the Schofield Barracks installation without proper NRC authorization (ADAMS Accession No. ML110660245). The purpose of the PEC was to obtain information to assist the NRC in making an informed enforcement decision. In addition, the PEC provided the Army with the opportunity to present its perspective on the apparent violation and any other information that the Army believed the NRC should take into consideration in making an enforcement decision. The PEC was held on May 10, 2011. A summary of the results of the PEC is available at ADAMS Accession No. ML111590184.

III. DISCUSSION

The Petition requested that the NRC investigate whether, contrary to applicable law and regulations, the Army possessed or released into the environment DU from spent spotting rounds after the expiration of NRC License SUB-459. As noted, NRC License SUB-459 permitted the Army to distribute spotting rounds containing DU from 1961 through 1973. NRC License SUB-459 was allowed to expire, at the Army's request, in 1978. In light of this, the Petition raises a valid concern about the continued possession of licensable quantities of DU at various installations by the Army without an NRC license to do so. Title 10 of the Code of Federal Regulations, section 40.3 states, in part, that persons may not receive title to, own, receive, possess, use, transfer, or dispose of source material unless authorized in a specific or general license issued by the Commission. Contrary to 10 C.F.R. § 40.3, the Army is in possession of DU, a source material, in the form of spent spotting rounds (expended prior to 1968) at firing ranges located at Schofield Barracks and Pohakuloa Training Area, in excess of the exempt and general use limits, without authorization in a specific or general license issued by the NRC. In addition to the two installations in Hawaii, the Army has identified the presence of DU spotting rounds in licensable quantities of source material at Forts Benning and Gordon (Georgia), Campbell (Kentucky), Carson (Colorado), Hood (Texas), Knox (Kentucky), Lewis and Yakima Training Center (Washington), Bragg (North Carolina), Polk (Louisiana) Sill (Oklahoma), Jackson (South Carolina), Hunter-Liggett (California), Greeley (Alaska), Dix

(New Jersey), and Riley (Kansas) without authorization via a specific license issued by the Commission.

Based upon this information, and in accordance with the NRC's Enforcement Policy, the NRC has issued a Severity Level III Notice of Violation to the Army (ADAMS Accession No. ML111680087). Therefore, insofar as the NRC has undertaken certain activities requested by the Petition, that being the initiation of an investigation to determine whether the Army possesses DU in licensable quantities without authorization from the NRC to do so and the issuance of an enforcement action based on that investigation, the NRC grants that portion of the Petition concerned with such activities.

In addition, the Petition requests that, if the NRC determines that a violation has occurred, to assess against the Army the maximum penalty permitted by law, and asks that any assessed monetary fines be applied to the environmental remediation of DU contamination at the Schofield Barracks and Pohakuloa Training Area installations in Hawaii, if the law provides for such action. Consistent with the NRC Enforcement Policy (www.nrc.gov/aboutnrc/regulatory/enforcement/enfore-pol.html), the NRC chose not to impose any civil penalty against the Army for the noticed violation because: (1) the Army installations in Hawaii have not been previously the subject of escalated enforcement action; (2) the Army identified and notified the NRC of the presence of radioactive material; and, finally, (3) the Army implemented corrective actions in response to the discovery of the presence of the DU. Further, even if the NRC were to have chosen to impose a civil penalty, it is the position of the NRC that the law does not provide for the application of that assessed civil penalty to the environmental remediation of DU contamination as requested by the Petitioner because fines assessed for violations of NRC requirements are sent to the U.S. Treasury. Therefore, this portion of the Petition has been denied.

IV. CONCLUSION

Based on the information summarized above, the NRC Staff concludes that the activities requested by the Petitioner have been granted in part and denied in part, in that the NRC Staff initiated an investigation into the apparent violation of the NRC's regulations in 10 C.F.R. § 40.3 and took enforcement action against the Army. The portion of the Petition relating to the assessment of the maximum penalty permitted by law and the use of assessed monetary penalties for environmental remediation, for the reasons discussed, is denied.

As provided in 10 C.F.R. § 2.206(c), a copy of this Director's Decision will be filed with the Secretary of the Commission for the Commission to review. As provided for by this regulation, the Decision will constitute the final action of the

Commission 25 days after the date of the Decision unless the Commission, on its own motion, institutes a review of the Decision within that time.

FOR THE NUCLEAR REGULATORY COMMISSION

Cynthia A. Carpenter, Deputy Director Office of Federal and State Materials and Environmental Management Programs

Dated at Rockville, Maryland, this 29th day of October 2011.

ATTACHMENT TO THE FINAL DIRECTOR'S DECISION

COMMENTS ON THE PROPOSED DIRECTOR'S DECISION FROM THE PETITIONER AND A MEMBER OF THE PUBLIC, AND THE U.S. NUCLEAR REGULATORY STAFF RESPONSES

The U.S. Nuclear Regulatory Commission (NRC) sent a copy of the proposed Director's Decision to the Petitioner and to the U.S. Army, Installation Management Command for comment on August 8, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML111990117 and ML111990137). The Petitioner responded with comments by e-mail on August 21, 2011 (ADAMS Accession No. ML112521226) and included comments from a member of the public. The U.S. Army did not provide comments on the proposed Director's Decision. The Petitioner's and the member of the public's comments and the NRC responses to the comments are provided below.

Violation Date Discrepancy

Petitioner's Comment

While reviewing the NRC's Notice of Violation (NOV) to the Army (ADAMS at ML111680087), I discovered a significant discrepancy on the time period that NRC License SUB-459 provided for manufacture, distribution, use, and possession of Davy Crocket spotting rounds. My conclusion, after review of the original and several revised and renewed versions of license SUB-459, is that two (2) versions of SUB-459 did in fact provide for Davy Crocket spotting rounds, in addition both versions expired on October 31, 1964. This contradicts the NRC's statement contained in the Notice of Violation on the period that the date that the Army's violations began. The NRC states that the violations began April, 1978 after the last version of SUB-459 expired. It appears the specific allowances provided for under each of the several revisions and renewals of NRC license SUB-459 have not been considered by the NRC. I have attached five (5) versions of SUB-459 to confirm that they also do not provide for Davy Crocket spotting rounds beyond October 31, 1964 later versions are available on ADAMS.

- SUB-459 11-1-61 (provides for spotting rounds) Expired October 31, 1964.
- SUB-459 Amended 10-62 (provides for spotting rounds and artillery rounds)
 Expired October 31, 1964.
- 3) SUB-459 Amended 8-63 (provides for small arms ammunition and artillery rounds) Expired October 31, 1964.

- SUB-459 Renewed 4-65 (provides for explosive devices) Expired April 30, 1968.
- SUB-459 Renewed 5-68 (provides for explosive devices) Expired April 30, 1973.

NRC Response

The Petitioner's comment pertains to the Notice of Violation (NOV), not the proposed Director's Decision.

The Petitioner requested that the NRC take enforcement action by initiating an investigation into the potential violation of NRC License SUB-459 and if it was determined that a violation occurred to apply the full penalty permissible by law. The Petitioner also requested that any monetary fines be used for remediation of the Schofield Barracks and Pohakuloa Training Areas in Hawaii.

Based upon the NRC's investigation, the NRC issued a Severity Level III violation to the U.S. Army for violation of 10 C.F.R. § 40.3. Regardless of the date that the violation began (i.e., 1964 as the Petitioner believes, or 1978, as NRC has stated) the NRC determined that the U.S. Army is in violation of 10 C.F.R. § 40.3 (i.e., possession of source material without a license) and the NRC issued an NOV for this violation.

The Petitioner's comment does not change the proposed Director's Decision's finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

Authorization

Petitioner's Comment

I note that the several versions of license SUB-459 that I have reviewed and attached appear to be scanned copies that do not include authorizing signatures. Many documents include type written names and titles under the signature lines, while the original version does not include even a type written name. I would like to know if AEC/NRC licenses lacking authorized signatures are actually authorized licenses. I am of the opinion that in order for a federal license involving source material to be duly authorized, that the license must include the signature of the agency representative providing authorization. If the NRC is of the opinion that authorizing signatures are not required on such documents, please point me to the regulation/code/rule that provides exemption. Thank you in advance.

NRC Response

The Petitioner's comment does not pertain to the proposed Director's Decision.

Rather, it is a request for clarification on the validity of a copy of an archived licensing document.

The copies of the licenses available to NRC Staff in the NRC and National Archives and Records Administration (NARA) records are tools used by the Staff to determine the status of the licenses in the past. Many of the records are aged and, due to the technology in use at the time (in many instances self carbon-coping paper), may not be as clear or readable as those generated today and the page with a legible signature may no longer be available.

The Petitioner's conclusion about the validity of an apparently unsigned copy of a license does not change the NRC Staff's conclusions regarding the Army's possession of source material without a license, nor does it provide new information indicating that a new 2.206 Petition is warranted.

As such, the Petitioner's comment does not change the proposed Director's Decision's finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

Recordkeeping

Petitioner's Comment

All those involved in this matter now realize that the Army failed to maintain accurate and complete records on the amount of source material that they shipped and released into the environment of the several states noted in the NOV, including Hawaii. We also understand that the Army failed to maintain records on the specific locations where source material was released, both with, and as I have pointed out, without a license after October 31, 1964. At 10 CFR § 74.19 Recordkeeping, we find that recordkeeping by licensees is required yet there is no mention of this in the NOV to the Army or the Proposed Director's Decision. Particular attention should be given to 10 CFR § 74.19 (a)(3), which states: Each record of receipt, acquisition, or physical inventory of special nuclear material that must be maintained pursuant to paragraph (a)(1) of this section must be retained as long as the licensee retains possession of the material and for 3 years following transfer or disposal of the material. (emphasis added) If this regulation was not in effect in the 1960s, it is in effect now and should be considered.

NRC Response

The Petitioner states that the U.S. Army failed to maintain records pursuant to 10 C.F.R. Part 74. However, the U.S. Army did keep records sufficient to develop the Archive Search Report (ASR), the basis for its estimate of the rounds at each range. The U.S. Army has stated that it was not aware of the rounds on the ranges and that, when it became aware of the existence of such rounds, the U.S. Army began the ASR development process to determine the extent of the material on

U.S. Army installations. Therefore, the existence of the ASR developed by the U.S. Army is patent evidence that the Army did keep records of the distribution of M101 spotting rounds to test ranges.

What the Petitioner presents is not new information, as the U.S. Army notified NRC that material was on the ranges and has engaged in efforts to determine the extent of material contamination upon discovery of the presence of the material at the HI installations.

Fundamentally, the Petitioner's comment does not change the proposed Director's Decision's finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

Amount of Source Material Discrepancy

Petitioner's Comment

The Army made very few records available to the NRC prior to and during the investigation. Unfortunately, it appears that the NRC has very limited records as well. Although the Army and NRC records are clearly far from complete, it appears that the NRC has concluded that the one record on the shipment of Davy Crockett spotting rounds to Hawaii (714 rounds) is sufficient to conclude that this is a full account of the number of spotting rounds shipped to Hawaii regardless of other evidence such as the number of firing pistons observed at Hawaii sites. Information compiled in reports by government agencies such as the Army Corps of Engineers, citizen research, and reports by independent consultants suggest that the number of spotting rounds shipped to Hawaii exceeds the single record recovered by the Army. Mr. Peter Strauss, independent environmental consultant estimated that there may be as many as 2,000 depleted uranium rounds at the Pohakuloa Training Area (PTA) alone. Mr. Strauss' analysis was based on government reports estimating that between 120 and 400 Davy Crockett firing pistons are scattered around impact ranges at PTA, and that each piston would have fired up to five spotting rounds. In addition, Army Colonel, Howard Killian presented to the Hawaii County Council and the local media that it would require at least 2000 spotting rounds to qualify soldiers on a Davy Crockett Weapons System.

NRC Response

The Petitioner's comment refers to the number of rounds on the ranges. The amount of DU, while important for environmental monitoring, is not relevant to the proposed Director's Decision or the violation of 10 C.F.R. § 40.3 (unless the amount is below the 10 C.F.R. § 40.13(a) limit). As such, this comment does not present new information regarding the violation of 10 C.F.R. § 40.3.

As such, the Petitioner's comment presents no new information relevant to the

proposed Director's Decision's finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

Surface Source Material Dumpsite

Petitioner's Comment

The NRC is not requiring removal or cleanup of source materials from known contaminated sites, which constitutes unwritten NRC approval to the Army for open surface source material dumpsites. No version of SUB-459 provides for establishing source material dumpsites in areas contaminated with Davy Crockett spotting rounds. 10 CFR PART 61 provides the licensing requirements for land disposal of radioactive waste. Like Record Keeping above, if this regulation was in effect in the 1960s, it is in effect now and should be considered. The Army did not apply for a license for land disposal and the NRC did not grant a land disposal license to the Army. The NRC did not provide the Army with an exemption to 10 CFR Part 61. Exemptions must meet the following requirements: The exemption is authorized by law, will not endanger life or property or the common defense and security, and is otherwise in the public interest. Surface source material dumpsites will endanger life, is clearly not in the public interest, and it is questionable if the NRC has the lawful authority to provide an exemption for a source material dumpsites when the NRC and the Army remain uncertain on where specifically the source material is located.

NRC Response

The Petitioner is incorrect in his assertion that the ranges are radioactive waste disposal facilities subject to regulation pursuant to 10 C.F.R. Part 61.

The U.S. Army license application for possession only of source material is the appropriate vehicle for the licensing of the material on the ranges. Such a license would be decommissioned in accordance with 10 C.F.R. Part 20, Subpart E when terminated. The possession license requested by the U.S. Army will not, if granted, authorize decommissioning and, as such, the U.S. Army will need to develop a decommissioning plan to support the decommissioning of the ranges.

The Petitioner's comment does not present any new information relevant to the proposed Director's Decision's finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

Forgotten Sites

Petitioner's Comment

The NRC failed to cite the Makua Military Training Area on Oahu as a location of potential source material contamination. The potential that this area may be

contaminated is evidenced by the Army's own admissions that they may have used Davy Crocket weapons system spotting rounds at the Makua Military Training Area, in addition to other sources such as the Army Corps of Engineers report. The Army remains uncertain about this area due to their lack of records, the heavy brush overgrowth that prevented them from conducting a thorough aerial survey, and unexploded ordinance making a thorough ground survey of the Makua Military Training Area potentially hazardous. The Army's application for an after-the-fact license to possess depleted uranium spotting rounds states, "Installations currently subject to further investigation include: Aberdeen Proving Ground, MD; Fort Dix, NJ; and Makua Military Reservation, HI." The NRC should requiring monitoring for depleted uranium on the island of Kaho'olawe. The US military and their allies used the island of Kaho'olawe for training between 1941 and 1990. This is a potential site where secret weapons such as Davy Crockett may have been used. More information is available here: http://www.globalsecurity.org/military/facility/kahoolawe.htm.

NRC Response

The U.S. Army reviewed records pertaining to the Makua Military Training Area as part of its ASR and determined that such area did not contain DU from the testing of the Davy Crockett weapon system. The sites listed in the NOV are examples of sites where the U.S. Army is presently in violation of 10 C.F.R. § 40.3. The NRC Staff has concluded that, based on its review of the U.S. Army's ASR, that the U.S. Army's determinations of the locations of use for the Davy Crockett weapon system and its corresponding estimates of the number of rounds that may be present on the ranges are reasonable. If additional sites are identified in the future, the U.S. Army will be required to apply for a license amendment to possess the DU located at those additional sites.

The Petitioner's comment does not change the proposed Director's Decision's finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

Shared Responsiblities

Petitioner's Comment

Both the Army and the NRC, as user and regulatory agency respectively, share responsibility for not keeping track and maintaining records of source material use and disposition licensed under SUB-459.

NRC Response

This comment is not germane to the proposed Director's Decision.

Therefore, the Petitioner's comment does not change the proposed Director's

Decision's finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

Unnecessary Exposure

Petitioner's Comment

The NRC is exposing military personnel and the public health and safety to unnecessary risk. The NRC is not requiring a cleanup of source material or a halt to military training activities at contaminated sites. The NRC is not pursing removal of source material contaminated sites from the Department of Defense inventory of active military training areas. Fine particles of source material are easily ingested through inhalation when liberated by live-fire and other military training, civilian contractor activities, and high winds. Pohakuloa Training Area is currently in use as a live-fire training area for small arms, artillery, etc, and an aircraft missile, rocket, and inert bombing impact area.

NRC Response

As part of the ongoing licensing process, the U.S. Army is developing a radiation safety plan (RSP). When implemented as part of the approved license, the RSP would proceduralize measures to be taken to protect the public health and safety.

The Petitioner's comment does not provide new information relevant to the proposed Director's Decision's finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

No Site Decommissioning

Petitioner's Comment

The NRC is not requiring measures for future decommissioning of source material contaminated sites as provided for under § 40.36 Financial assurance and record-keeping for decommissioning. § 40.36 (f) Each person licensed under this part shall keep records of information important to the decommissioning of a facility in an identified location until the site is released for unrestricted use. Before licensed activities are transferred or assigned in accordance with § 40.41 (b) licensees shall transfer all records described in this paragraph to the new licensee. In this case, the new licensee will be responsible for maintaining these records until the license is terminated. If records important to the decommissioning of a facility are kept for other purposes, reference to these records and their locations may be used. § 40.41 (f) (3) Except for areas containing depleted uranium used only for shielding or as penetrators in unused munitions, a list contained in a single document and updated every 2 years, of the following: (i) All areas designated and formerly designated as

restricted areas as defined under 10 CFR 20.1003; (ii) All areas outside of restricted areas that require documentation under § 40.36(f)(1); (iii) All areas outside of restricted areas where current and previous wastes have been buried as documented under 10 CFR 20.2108; and (iv) All areas outside of restricted areas that contain material such that, if the license expired, the licensee would be required to either decontaminate the area to meet the criteria for decommissioning in 10 CFR part 20, subpart E, or apply for approval for disposal under 10 CFR 20.2002.

NRC Response

When licensed, the Army would be required to comply with 10 C.F.R. § 40.36. The U.S. Army's license would not allow decommissioning without the submission and approval by the NRC of a decommissioning plan.

The Petitioner's comment does not change the proposed Director's Decision's finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

Unauthorized Decommissioning Activities at Schofield Barracks

Petitioner's Comment

The NRC is already aware of this issue but apparently failed to consider it in the proposed no-action decision.

NRC Response

This issue raised by the Petitioner, was investigated by the NRC, and correspondingly considered as part of the NRC's enforcement process to disposition the U.S. Army's violation of 10 C.F.R. § 40.3.

As such, the Petitioner's comment does not change the proposed Director's Decision's finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

Undue Notification Delay

Petitioner's Comment

From my research effort, it appears that the Army did not report formally notifying the NRC of their unlicensed possession of source material for over a year after a civilian contractor discovered it. Perhaps the Army and NRC held informal discussion on this matter? Details at: http://pbadupws.nrc.gov/docs/ML0706/ML070650224.pdf. Citizens informed the public of the source material discovery before the Army. More details provided by Kyle Kajihiro, American Friends Service Committee can be viewed here: http://pbadupws.nrc.gov/docs/ML0930/ML093070738.pdf.

NRC Response

This issued raised by the Petitioner was considered by the NRC as part of its enforcement process. The NRC determined that the U.S. Army had informed NRC in a time frame and a manner that were acceptable.

The Petitioner's comment does not change the proposed Director's Decision's finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

Unacceptable Detection and Monitoring

Petitioner's Comment

Details at: http://pbadupws.nrc.gov/docs/ML0929/ML092940675.pdf.

NRC Response

This document is a discussion of the licensing and monitoring of DU. The NRC Staff is currently reviewing the U.S. Army's license application and monitoring for DU would be addressed in the Environmental Radiation Monitoring Plan supporting the license application.

The Petitioner's comment does not change the proposed Director's Decision's finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

Potential Conflict of Interest

Petitioner's Comment

A potential conflict of interest revealed itself following the recent discovery of a declassified Secret U.S. Army Weapons Command document titled: *Project Management of the Davy Crockett Weapons System 1958–1962 (U)*. This declassified document reveals that in late 1957, the U.S. Atomic Energy Commission announced that they had successfully developed a light, sub-kiloton warhead. This warhead became the primary component in the Battle Group Atomic Delivery System, which was renamed *Davy Crockett Weapons System* in August 1958. The Energy Reorganization Act of 1974 divided the functions of the Atomic Energy Commission to its offspring, the Energy Research and Development Administration (now the United States Department of Energy), and the Nuclear Regulatory Commission

NRC Response

The Petitioner's comment is not germane to the proposed Director's Decision's

finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

Improper Administrative Procedures

Petitioner's Comment

It is clear that the NRC failed to conduct a comprehensive review of all available information and laws resulting in the NRC decision that their enforcement investigation was sufficient to warrant no enforcement action beyond the issuance of a written NOV to the Army. There is clearly an absence of a rational connection between the facts found and the information and decision documented in the NOV. There has been an error of judgment on behalf of the NRC; an action not based upon consideration of relevant factors and so is arbitrary, capricious, an abuse of discretion or otherwise not in accordance with law. The Administrative Procedure Act provides for relief under such circumstances. I refer you to review the Administrative Procedure Act, 5 U.S.C., Section 706. — Scope of review, (2)(A), which reads: To the extent necessary to decision and when presented, the reviewing court shall decide all relevant questions of law, interpret constitutional and statutory provisions, and determine the meaning or applicability of the terms of an agency action. The reviewing court shall — (2) hold unlawful and set aside agency action, findings, and conclusions found to be — (A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.

NRC Response

This comment was forwarded to the appropriate staff in the NRC for further review and evaluation.

However, the Petitioner's comment does not change the proposed Director's Decision's finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

Request

Petitioner's Comment

I request the NRC establish of a Special Task Force to work cooperatively to resolve this matter. I request the Special Task Force include representatives of:

- 1) NRC,
- 2) Department of Defense,
- 3) State Department,
- 4) Office of the U.S. Attorney General,
- 5) Environmental Protection Agency, Region 9,
- 6) State of Hawaii Department of Land and Natural Resources,

- 7) State of Hawaii Office of Hawaiian Affairs,
- 8) State of Hawaii Department of Health,
- Six (6) citizen representatives from Hawaii to be selected by myself as the requestor of NRC enforcement action against the Army, and
- 10) At least one (1) citizen representative of each affected state, other than Hawaii, listed in the NOV if interested citizen representatives of those states so desire to participate.

Establishment of a Special Task Force is provided for under Chapter 1, Section 1.13 of the Nuclear Regulatory Commission Enforcement Manual, Revision 7 dated October 1, 2010. For the sake of transparency, all Special Task Force representatives should be involved in developing the charter or tasking memorandum of the Special Task Force. The charter or tasking memorandum of the Task Force might include a process of arbitration with the intent of achieving a reasonable and satisfactory resolve. The Army has greatly contaminated Hawaii's environment with over 800 chemical, biological, radiological, and unexploded munitions sites. Citizen involvement and oversight of source material detection, monitoring, and cleanup is long overdue.

NRC Response

Contrary to Mr. Harp's assertion, the NRC Enforcement Manual does not provide a mechanism for the establishment of a Task Force as described, and requested, by Mr. Harp.

The Task Forces envisioned by the Enforcement Manual are comprised of NRC Staff and do not include external participants.

Thus, the request made by Mr. Harp does not constitute a comment on the proposed Director's Decision's finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

Request

Petitioner's Comment

Army and NRC records concerning source material from the Davy Crockett Weapons System are clearly incomplete. Therefore, I request that the NRC require Comprehensive and Independent Testing and Monitoring, WITH citizen oversight. This is necessary to determine the full extent of radiation contamination at PTA, Schofield, and other suspected Hawaii sites, as well as other sites listed in the NOV. Without the citizen oversight provision, public trust in testing and monitoring will remain absent.

NRC Response

This request made by Mr. Harp does not constitute a comment on the proposed Director's Decision's finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

Urgent Request

Petitioner's Comment

While the NRC considers the above comments, request to establish a Special Task Force to bring resolve to this matter, and request for independent testing and monitoring with citizen oversight, I have a request of a more immediate nature. I request that the NRC open an immediate investigation to determine if the Army or any other branches of the U.S. Department of Defense imported depleted uranium 1) small arms ammunition, 2) artillery rounds, 3) hand grenades, 4) mines, 5) warheads, and 6) other explosive devices to Hawaii, as well as to other sites specified in the NRC's NOV to the Army. Like the Davy Crockett spotting rounds, there may be other sources that are unaccounted for. This request is made due to the fact that revisions and renewals to NRC license SUB-459 provided for these depleted uranium weapons.

NRC Response

Mr. Harp's request was forwarded to appropriate NRC Staff for review and evaluation. Based on the Staff's evaluation, the request fails to provide sufficient facts to support a petition pursuant to 10 C.F.R. § 2.206.

The request made by Mr. Harp does not constitute a comment on the proposed Director's Decision's finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

Reminder

Petitioner's Comment

In conclusion, I remind everyone again that Hawaii is not a lawful state of the United States. Hawaii remains an independent nation under prolonged belligerent United States military occupation, which began on January 16, 1893 with the unlawful landing of United States military troops in Hawaii. This can be confirmed through review of U.S. Public Law 103-150. A thorough explanation of the historical relationship between the United States and Hawaii is provided by Dr. David "Keanu" Sai, Political Professor at this website: http://www2.hawaii.edu/~anu/.

Geneva Conventions of 12 August 1949, signed 08 December 1949 by United States Minister Vincent, Ratified by the United States of America 08 February 1955: Section III. Occupied territories

Art. 53. Any destruction by the Occupying Power of real or personal property belonging individually or collectively to private persons, or to the State, or to other public authorities, or to social or cooperative organizations, is prohibited, except where such destruction is rendered absolutely necessary by military operations. (emphasis added) The United States had several alternative sites for Davy Crockett and other depleted uranium experiments as presented by the long list of sites contained in the NOV to the Army.

NRC Response

This issue raised by Mr. Harp is not germane to the proposed Director's Decision's finding that NRC investigated the U.S. Army's possession of DU without a license and issued an NOV for the violation.

Comments by Member of the Public

I have read the Notice of Violation (NOV) prepared by the Nuclear Regulatory Commission (NRC) against the U.S. Army for illegal possession of radioactive materials in Hawaii (EA-10-49, August 1, 2011).

While I am pleased that the NRC recognizes the possession without license as a violation, I find it disturbing that a proper discussion and meaningful assigned penalty has not been assessed. Here, I am not referring to a less than hand-slap fine of \$3,500. In fact, I would not doubt that it would take more to process such a fine between two large government agencies than the amount assessed.

The accuracy of the various issues can be addressed separately. As examples of some that need attention are: How was the use of depleted uranium (DU) discovered at PTA? How many rounds were actually fired? When did the initial radioactive material possession license for DU really expire?

A general concern is that from the late 1960s through today, it appears that there was inadequate (more likely none at all) processes addressing the identification, potential hazard, distribution, and remediation of the existing materials. In short, there is great uncertainty on where the radioactive material is and what might have been its transport fate during the intervening 40 years. Even if there is a claim that subsequent licenses not specifically addressing DU were adequate to cover the possession, there are no records to indicate proper procedures were followed in its handling.

I would have hoped that the NRC would have strongly addressed this issue requiring proper handling. DU was ignored for those 40 years§

I believe it is necessary to require several efforts to establish empirical, not speculative, information on the location and form of DU and that it should be part of the NOV.

First, there must be adequate on-site search. At one time, the U.S. Army had announced that they, through their contractor Cabrera, were going to place a very sensitive detector on a helicopter and fly a few feet above the terrain in hopes of detecting the low energy radiation from DU. As far as I know, this was not done. Some sort of wide-area search must be implemented. There is an effort at Schofield Barracks, Oahu for locating and removal of DU in the active training areas. No less an effort should be undertaken at Pohakuloa, Hawaii. I believe one report issued by the U.S. Army noted a few DU spotting rounds or fragments were located at Pohakuloa and they were buried at the site, in effect a decommissioning activity that also should be subject to possible violation review under 10 CFR 40.3.

Second, there must be a comprehensive and rigorous monitoring program. What has been done to date is woefully inadequate both for airborne materials and for ground searching. For this monitoring, particularly the airborne portion, I would not hesitate to recommend that it be turned over completely to a citizens' watch group and funded by the U.S. Army.

Recognizing the possibility that the first two suggestions will be summarily rejected by the U.S. Army, there is another alternative to be considered.

Third, the notice of violation should state clearly that the use of the radiation suspect areas be totally off limits to any type of trespass. It should not be used for any type of training exercise, whether just personnel and light vehicles or as a firing impact range. Another explanation is that it might be converted in form to being unrecognizable or even buried after 40 years of training exercises in those suspect areas. It does not really matter. If the material cannot be found and removed, the area must be declared off limits to any type of activity. Proposed monitoring, as in the draft radiation protection plan, is inadequate. It is not enough to monitor boots, tires, or tracks for suspected radiation, but there should be active air sampling monitors on those persons and vehicles, including rotary wing aircraft. The best solution is to sequester the area from all types of use. Of course, there is the possibility that if the DU material cannot be found where it is suspected, then it is likely someplace else.

These actions should be included in this NOV. The lack of oversight when not covered by a license has created unknown conditions that may have or could be conducive to distributing the radioactive material off site. If not included in the NOV, then these conditions must be addressed in any future license. Yet, it seems somewhat ludicrous to issue a license for possession of a material that no one seems to know where is.

NRC Response

Offsite monitoring and range access control would be addressed as part of the license for the involved sites. With that said, Dr. Reimer's comments do not touch upon the draft Director's Decision's finding that NRC cited the U.S. Army for violating 10 C.F.R. § 40.3.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Eric J. Leeds, Director

In the Matter of

Docket No. 50-271 (License No. DPR-28)

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

September 9, 2011

The Petitioner requested that the Nuclear Regulatory Commission (NRC) take enforcement actions against Entergy Nuclear Operations, Inc., the operator of Vermont Yankee, as result of inoperability of main steam safety relief valves (SRVs). Mr. Thomas Saporito requested in his petition that the NRC: (1) issue a confirmatory order requiring the Licensee to immediately bring the reactor in question to a cold shutdown mode of operation; (2) issue a civil penalty against the Licensee; (3) remove the Licensee's employees responsible for this matter from NRC-licensed activities for a period of no less than 5 years; and (4) perform an immediate NRC investigation and inspection of the VY nuclear facility to ensure that all nuclear safety-related systems are properly operational in accordance with the Licensee's Technical Specifications (TS) and NRC license.

The final Director's Decision on this petition was issued on September 9, 2011. The petition cited problems related to inoperability of main steam SRVs due to leakage through the shaft to piston thread seals. Due to the redundancy in Automatic Depressurization System (ADS) design, the availability of the high-pressure core injection system, and the availability of a safety-class backup nitrogen supply, the ability to depressurize the reactor was maintained, and there was no potential adverse impact to public health and safety. Therefore, no reports were required pursuant to 10 C.F.R. § 50.72. On December 22, 2010, under the LER timely reporting requirements of 10 C.F.R. § 50.73(a)(2)(i)(B), Entergy

submitted LER 05000271/2010-002-00&01: Inoperability of Main Steam Safety Relief Valves Due to Degraded Thread Seals within 60 days after the discovery of the event that was determined to be reportable, on October 25, 2010. The NRC resident inspectors reviewed LER 05000271/2010-002-00&01 and documented their inspection results in the NRC Integrated Inspection Report 05000271/2011002 dated April 29, 2011 (ADAMS Accession No. ML111190386), which also included the LER closeout review and two licensee-identified violations related to the discovery of the SRV issue.

The NRC has decided to deny Petitioner's request to bring VY to a cold shutdown mode of operation and to perform an immediate NRC investigation and inspection of VY, but has granted the petition, in part, concerning the inoperability of main steam SRVs. The NRC Integrated Inspection Report 05000271/2011002 dated April 29, 2011, documented an LER closeout review and two licensee-identified violations related to the discovery of the SRV issue. Petitioner's concern regarding the inoperability of SRVs at VY has been adequately resolved such that no further action is needed.

DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

By letter dated January 14, 2011, Mr. Thomas Saporito has requested that pursuant to Title 10 of the Code of Federal Regulations (10 C.F.R.), section 2.206, "Requests for action under this subpart," the U.S. Nuclear Regulatory Commission (NRC) take action with regard to the Vermont Yankee Nuclear Power Station (VY). Mr. Saporito requested in his petition that the NRC: (1) issue a confirmatory order requiring the Licensee to immediately bring the reactor in question to a cold shutdown mode of operation; (2) issue a civil penalty against the Licensee; (3) remove the Licensee's employees responsible for this matter from NRC-licensed activities for a period of no less than 5 years; and (4) perform an immediate NRC investigation and inspection of the VY nuclear facility to ensure that all nuclear safety-related systems are properly operational in accordance with the Licensee's Technical Specifications (TS) and NRC license. The Petition Review Board (PRB) met on January 24, 2011, to discuss the petition and denied the request for immediate action to bring VY to a cold shutdown mode of operation and to perform an immediate NRC investigation and inspection of VY because the PRB did not identify any urgent public health and safety concerns that would warrant an immediate shutdown and NRC investigation and inspection. On January 24, 2011, Mr. Saporito was informed of the PRB's decision on the immediate action, and he requested an opportunity to address the PRB before its

initial meeting to provide supplemental information for the Board's consideration. By teleconference on January 26, 2011, Mr. Saporito provided information to the PRB as further explanation and support for the petition. A copy of the transcript is available in the NRC's Agencywide Documents Access and Management System (ADAMS) under Accession No. ML110330256. The PRB met on February 2, 2011, to discuss the petition and made an initial recommendation to accept the petition, in part, concerning the failure of relief valves because this issue met the criteria for review. On February 8, 2011, Mr. Saporito was informed of the PRB's initial recommendation to accept the petition, in part, and Mr. Saporito requested another opportunity to address the PRB to provide comments on the PRB's initial recommendation and additional information in support of the petition. By teleconference on February 14, 2011, Mr. Saporito provided information to the PRB in support of his request for an immediate shutdown and an immediate NRC investigation and inspection of VY. The PRB confirmed its initial recommendation because the additional information provided on February 14, 2011, did not change the PRB's decision to deny the request for immediate action.

In an acknowledgment letter dated March 28, 2011 (ADAMS Accession No. ML110601262), the NRC informed the Petitioner that the petition was accepted, in part, for review under 10 C.F.R. § 2.206, and had been referred to the Office of Nuclear Reactor Regulation for appropriate action. After full consideration of the petition, the Office of Nuclear Reactor Regulation has decided to accept the petition, in part, concerning the inoperability of main steam safety relief valves (SRVs) due to leakage through the shaft to piston thread seals. This issue met the criteria for review.

Copies of the petition are available for inspection at the Commission's Public Document Room (PDR) at One White Flint North, Public File Area O1 F21, 11555 Rockville Pike (first floor), Rockville, Maryland, and from the NRC's Agencywide Documents Access and Management System (ADAMS) Public Electronic Reading Room on the NRC Web site at http://www.nrc.gov/reading-rm/adams.html under ADAMS Accession No. ML110190233. Persons who do not have access to ADAMS or who have problems in accessing the documents in ADAMS should contact the NRC PDR reference staff by telephone at 1-800-397-4209 or 301-415-4737, or by e-mail to PDR.Resource@nrc.gov.

II. DISCUSSION

The petition cited problems related to inoperability of main steam SRVs due to leakage through the shaft to piston thread seals. On August 1, 2011, the Petitioner provided comments on the Proposed Director's Decision, in which the petitioner stated "The licensee's failure to timely notify the NRC about the subject (relief

valves) failure and inoperability under 10 C.F.R. \S 50.72, is clearly a violation of NRC regulations and requirements which warrants escalated enforcement action on the part of NRC to be taken against the licensee." The Petitioner also cited as stated in 10 C.F.R. \S 50.72(b) "Non-emergency events," as a basis for the petition request, which states "the licensee shall notify the NRC as soon as practical and in all cases within one hour of the occurrence, any deviation from a plant's technical specification authorized pursuant to \S 50.54(x) of this part." As stated in 10 C.F.R. \S 50.54(x), "A licensee may take reasonable action that departs from a license condition or a technical specification (contained in a license issued under this part) in an emergency when this action is immediately needed to protect the public health and safety and no action consistent with license conditions and technical specifications that can provide adequate or equivalent protection is immediately apparent."

This event does not fall under the requirements of 10 C.F.R. § 50.72(b) because the Licensee did not intentionally depart from a technical specification. The relief valve failure and inoperability was the as-found component condition during the refueling outage, which potentially affected the ability of the SRVs to satisfy design actuation requirements. This event met the requirements of 10 C.F.R. § 50.73, "Licensee event report [LER] system." Due to the redundancy in Automatic Depressurization System (ADS) design, the availability of the high-pressure core injection system, and the availability of a safety-class backup nitrogen supply, the ability to depressurize the reactor was maintained, and there was no potential adverse impact to public health and safety. Therefore, no reports were required pursuant to 10 C.F.R. § 50.72. On December 22, 2010, under the LER timely reporting requirements of 10 C.F.R. § 50.73(a)(2)(i)(B), Entergy submitted LER 05000271/2010-002-00&01: Inoperability of Main Steam Safety Relief Valves Due to Degraded Thread Seals within 60 days after the discovery of the event that was determined to be reportable on October 25, 2010. The NRC resident inspectors reviewed LER 05000271/2010-002-00&01 and documented their inspection results in NRC Integrated Inspection Report 05000271/2011002 dated April 29, 2011 (ADAMS Accession No. ML111190386), which also included the LER closeout review and two licensee-identified violations related to the discovery of the SRV issue.

During the 2010 refueling outage, the pneumatic actuators for the four main steam SRVs were tested and leakage was identified through the shaft-to-piston thread seal that was in excess of the design requirement on two of the four SRVs. Material testing determined that the apparent cause of the degraded thread seal condition was thermal degradation. The thread seals were replaced and tested on all four SRVs prior to startup from the 2010 refueling outage. Entergy determined that this potentially affected the ability of the SRVs to perform their manual and automatic depressurization function, as required by TSs, since the leakage impacted the ability of the SRVs to satisfy design actuation requirements. Entergy

determined that there was firm evidence that this condition may have existed for a period of time greater than allowed by TSs, and therefore this event was reportable under the requirements of 10 C.F.R. § 50.73(a)(2)(i)(B). The inspectors reviewed the subject LER 05000271/2010-002-00&01, the as-found condition during the refueling outage, the subsequent material testing and analysis, and Entergy's evaluation of the condition. A violation of very low safety significance (Green) was identified by the Licensee. The enforcement aspects of this finding are discussed below.

The following violations of very low safety significance (Green) were identified by the Licensee and are violations of NRC requirements that meet the criteria of the NRC Enforcement Policy for being dispositioned as noncited violations.

TS 3.5.F, "Automatic Depressurization System," allows up to one of four SRVs in the automatic depressurization system to be inoperable for up to 7 days at any time the reactor steam pressure is above 150 psig with irradiated fuel within the vessel, or an orderly shutdown of the reactor shall be initiated and the reactor pressure shall be reduced to less than 150 psig within 24 hours. In addition, TS 3.6.D, "Safety and Relief Valves," requires the reactor to be shut down and pressure brought below 150 psig within 24 hours with two (2) or more SRVs inoperable. Contrary to the above, Entergy determined that two (2) of the four (4) SRVs were inoperable for a period of time greater than allowed by TSs. This determination was based on pneumatic actuator thread seal leakage that was identified during testing of the pneumatic SRV actuators in the 2010 refueling outage. Entergy determined the leakage to be in excess of design requirements. This condition has been entered in the Licensee's corrective action program and corrective actions have been developed.

The NRC inspectors determined that this finding was more than minor because it adversely affected the Mitigation Systems cornerstone objective of ensuring the reliability of systems that respond to initiating events to prevent undesirable consequences. The NRC inspectors determined that the function for core decay removal was affected since the safety function of the ADS valves is to depressurize the reactor to allow for low-pressure coolant injection. The inspectors determined that this finding was not greater than Green, because subsequent laboratory analysis and engineering evaluation documented in Entergy Operability Recommendation concluded that sufficient margin was available in the safety-class backup supply to the pneumatic actuation system. The NRC inspectors reviewed Entergy's laboratory results and Operability Recommendation and concluded that the ADS function would have been met under the worst-case leakage for all design-basis conditions.

III. CONCLUSION

Based on the above, the Office of Nuclear Reactor Regulation has decided to deny Petitioner's request to bring VY to a cold shutdown mode of operation and to perform an immediate NRC investigation and inspection of VY, but has granted the petition, in part, concerning the inoperability of main steam SRVs. The NRC Integrated Inspection Report 05000271/2011002 dated April 29, 2011, documented an LER closeout review and two licensee-identified violations related to the discovery of the SRV issue. Petitioner's concern regarding the inoperability of SRVs at VY has been adequately resolved such that no further action is needed.

As provided in 10 C.F.R. § 2.206(c), a copy of this Director's Decision will be filed with the Secretary of the Commission for the Commission to review. As provided for by this regulation, the Decision will constitute the final action of the Commission 25 days after the date of the Decision unless the Commission, on its own motion, institutes a review of the Decision within that time.

FOR THE NUCLEAR REGULATORY COMMISSION

Eric J. Leeds, Director Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland, this 9th day of September 2011.

- AP1000 DESIGN CERTIFICATION AMENDMENT (10 C.F.R. Part 52)
 - REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket No. NRC-2010-0131 (RIN 3150-AI81); CLI-11-5, 74 NRC 141 (2011)
- AREVA ENRICHMENT SERVICES, LLC
 - MATERIALS LICENSE; MEMORANDUM AND ORDER; Docket No. 70-7015; CLI-11-4, 74 NRC 1 (2011)
 - MATERIALS LICENSE; SECOND AND FINAL PARTIAL INITIAL DECISION
 - (Uncontested/Mandatory Hearing on Environmental Matters); Docket No. 70-7015-ML (ASLBP No. 10-899-02-ML-BD01); LBP-11-26, 74 NRC 499 (2011)
- CALVERT CLIFFS NUCLEAR PROJECT, LLC
 - REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket No. 52-016-COL; CLI-11-5, 74 NRC 141 (2011)
- CROW BUTTE RESOURCES, INC.
 - LICENSE RENEWAL; MEMORANDUM (Bringing Matter of Concern to Commission's Attention); Docket No. 40-8943 (ASLBP No. 08-867-08-OLA-BD01); LBP-11-30, 74 NRC 627 (2011)
- DETROIT EDISON COMPANY
 - REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket No. 52-033-COL; CLI-11-5, 74 NRC 141 (2011)
- DOMINION VIRGINIA POWER
 - COMBINED LICENSE; MEMORANDUM AND ORDER (Denying Dominion's Motion for Clarification of LBP-11-10); Docket No. 52-017-COL (ASLBP No. 08-863-01-COL); LBP-11-22, 74 NRC 259 (2011)
 - REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket No. 52-017-COL; CLI-11-5, 74 NRC 141 (2011)
- DUKE ENERGY CAROLINAS, LLC
 - COMBINED LICENSE; MEMORANDUM AND ORDER (Denying Motions to Reopen Closed Proceedings and Intervention Petition/Hearing Request as Premature); Docket Nos. 52-018-COL, 52-019-COL (ASLBP No. 11-913-01-COL-BD01); LBP-11-27, 74 NRC 591 (2011)
 - COMBINED LICENSE; MEMORANDUM AND ORDER (Denying Motions to Reinstate Contention); Docket Nos. 52-018-COL, 52-019-COL (ASLBP No. 11-913-01-COL-BD01); LBP-11-36, 74 NRC 768 (2011)
 - REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket Nos. 52-018-COL, 52-019-COL; CLI-11-5, 74 NRC 141 (2011)
- ENERGY NORTHWEST
 - LICENSE RENEWAL; MEMORANDUM AND ORDER (Denying Motions to Reopen Closed Proceedings and Intervention Petition/Hearing Request as Premature); Docket No. 50-397-LR (ASLBP No. 11-912-03-LR-BD01); LBP-11-27, 74 NRC 591 (2011)
 - LICENSE RENEWAL; MEMORANDUM AND ORDER (Denying Motions to Reinstate Contention); Docket No. 50-397-LR (ASLBP No. 11-912-03-LR-BD01); LBP-11-36, 74 NRC 768 (2011)
 - REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket No. 50-397-LR; CLI-11-5, 74 NRC 141 (2011)

ENTERGY NUCLEAR GENERATION COMPANY

- LICENSE RENEWAL; PARTIAL INITIAL DECISION (Rejecting, Upon Remand, Pilgrim Watch's Challenge to Meteorological Modeling in SAMA Analysis in Entergy's License Renewal Application); Docket No. 50-293-LR (ASLBP No. 06-848-02-LR); LBP-11-18, 74 NRC 29 (2011)
- LICENSE RENEWAL; MEMORANDUM AND ORDER (Denying Pilgrim Watch's Requests for Hearing on Certain New Contentions); Docket No. 50-293-LR (ASLBP No. 06-848-02-LR); LBP-11-20, 74 NRC 65 (2011)
- LICENSE RENEWAL; MEMORANDUM AND ORDER (Corrected Version of September 8, 2011 Memorandum and Order Denying Pilgrim Watch's Requests for Hearing on New Contentions Relating to Fukushima Accident); Docket No. 50-293-LR (ASLBP No. 06-848-02-LR); LBP-11-23, 74 NRC 287 (2011)
- LICENSE RENEWAL; MEMORANDUM AND ORDER (Denying Commonwealth of Massachusetts' Request for Stay, Motion for Waiver, and Request for Hearing on a New Contention Relating to Fukushima Accident); Docket No. 50-293-LR (ASLBP No. 06-848-02-LR); LBP-11-35, 74 NRC 701 (2011)
- REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket No. 50-293-LR; CLI-11-5, 74 NRC 141 (2011)
- ENTERGY NUCLEAR OPERATIONS, INC.
 - LICENSE RENEWAL; MEMORANDUM AND ORDER; Docket Nos. 50-247-LR, 50-286-LR; CLI-11-14, 74 NRC 801 (2011)
 - LICENSE RENEWAL; MEMORANDUM AND ORDER (Ruling on Motion and Cross-Motions for Summary Disposition of NYS-35/36); Docket Nos. 50-247-LR, 50-286-LR (ASLBP No. 07-858-03-LR-BD01); LBP-11-17, 74 NRC 11 (2011)
 - LICENSE RENEWAL; PARTIAL INITIAL DECISION (Rejecting, Upon Remand, Pilgrim Watch's Challenge to Meteorological Modeling in SAMA Analysis in Entergy's License Renewal Application); Docket No. 50-293-LR (ASLBP No. 06-848-02-LR); LBP-11-18, 74 NRC 29 (2011)
 - LICENSE RENEWAL; MEMORANDUM AND ORDER (Denying Pilgrim Watch's Requests for Hearing on Certain New Contentions); Docket No. 50-293-LR (ASLBP No. 06-848-02-LR); LBP-11-20, 74 NRC 65 (2011)
 - LICENSE RENEWAL; MEMORANDUM AND ORDER (Corrected Version of September 8, 2011 Memorandum and Order Denying Pilgrim Watch's Requests for Hearing on New Contentions Relating to Fukushima Accident); Docket No. 50-293-LR (ASLBP No. 06-848-02-LR); LBP-11-23, 74 NRC 287 (2011)
 - LICENSE RENEWAL; MEMORANDUM AND ORDER (Denying Commonwealth of Massachusetts' Request for Stay, Motion for Waiver, and Request for Hearing on a New Contention Relating to Fukushima Accident); Docket No. 50-293-LR (ASLBP No. 06-848-02-LR); LBP-11-35, 74 NRC 701 (2011)
 - REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket No. 50-293-LR; CLI-11-5, 74 NRC 141 (2011)
 - REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket Nos. 50-247-LR, 50-286-LR; CLI-11-5, 74 NRC 141 (2011)
 - REQUEST FOR ACTION; DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206; Docket No. 50-271 (License No. DPR-28); DD-11-6, 74 NRC 420 (2011)
 - REQUEST FOR ACTION; FINAL DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206; Docket No. 50-271 (License No. DPR-28); DD-11-7, 74 NRC 787 (2011)
- ENTERGY NUCLEAR VERMONT YANKEE, LLC
 - REQUEST FOR ACTION; DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206; Docket No. 50-271 (License No. DPR-28); DD-11-6, 74 NRC 420 (2011)
- ENTERGY OPERATIONS, INC.
 - REQUEST FOR ACTION; FINAL DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206; Docket No. 50-458 (License No. NPF-47); DD-11-7, 74 NRC 787 (2011)
- ESBWR DESIGN CERTIFICATION AMENDMENT (10 C.F.R. Part 52)
 - REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket No. NRC-2010-0135 (RIN-3150-AI85); CLI-11-5, 74 NRC 141 (2011)

FIRSTENERGY NUCLEAR OPERATING COMPANY

LICENSE RENEWAL; MEMORANDUM AND ORDER (Denying Motion to Admit New Contention); Docket No. 50-346-LR (ASLBP No. 11-907-01-LR-BD01); LBP-11-34, 74 NRC 685 (2011) REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket No. 50-346-LR; CLI-11-5, 74 NRC 141 (2011)

FLORIDA POWER & LIGHT COMPANY

- COMBINED LICENSE; MEMORANDUM AND ORDER (Denying Request to Suspend Licensing Proceeding, Granting Motion to Supplement, and Denying Admission of Proposed New Fukushima Contention); Docket Nos. 52-040-COL, 52-041-COL (ASLBP No. 10-903-02-COL-BD01); LBP-11-33, 74 NRC 675 (2011)
- LICENSE AMENDMENT; MEMORANDUM AND ORDER (Denying Petition for Leave to Intervene and Request for Hearing); Docket No. 50-335-LA (ASLBP No. 11-911-01-LA-BD01); LBP-11-29, 74 NRC 612 (2011)
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HONEYWELL INTERNATIONAL, INC.

MATERIALS LICENSE AMENDMENT; MEMORANDUM AND ORDER (Granting Request for Hearing); Docket No. 40-3392-MLA (ASLBP No. 11-910-01-MLA-BD01); LBP-11-19, 74 NRC 61 (2011)

LUMINANT GENERATION COMPANY, LLC

- COMBINED LICENSE; Docket Nos. 52-034-COL, 52-035-COL; MEMORANDUM AND ORDER; CLI-11-9, 74 NRC 233 (2011)
- COMBINED LICENSE; MEMORANDUM AND ORDER (Denying Motions to Reopen Closed Proceedings and Intervention Petition/Hearing Request as Premature); Docket Nos. 52-034-COL, 52-035-COL (ASLBP No. 11-914-02-COL-BD01); LBP-11-27, 74 NRC 591 (2011)
- COMBINED LICENSE; MEMORANDUM AND ORDER (Denying Motions to Reinstate Contention); Docket Nos. 52-034-COL, 52-035-COL (ASLBP No. 11-914-02-COL-BD01); LBP-11-36, 74 NRC 768 (2011)
- REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket Nos. 52-034-COL, 52-035-COL; CLI-11-5, 74 NRC 141 (2011)

NEXTERA ENERGY SEABROOK, LLC

- LICENSE RENEWAL; MEMORANDUM AND ORDER (Denying Motions to Admit New Contention); Docket No. 50-443-LR (ASLBP No. 10-906-02-LR-BD01); LBP-11-28, 74 NRC 604 (2011)
- REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket No. 50-443-LR; CLI-11-5, 74 NRC 141 (2011)

NUCLEAR INNOVATION NORTH AMERICA LLC

- COMBINED LICENSE; MEMORANDUM AND ORDER; Docket Nos. 52-012-COL, 52-013-COL; CLI-11-6, 74 NRC 203 (2011)
- COMBINED LICENSE; MEMORANDUM AND ORDER (Ruling on Admissibility of Intervenors' New Foreign Control Contention); Docket Nos. 52-012-COL, 52-013-COL; LBP-11-25, 74 NRC 380 (2011)
- COMBINED LICENSE; FIRST PARTIAL INITIAL DECISION (Ruling on Contention CL-2); Docket Nos. 52-012-COL, 52-013-COL (ASLBP No. 09-885-08-COL-BD01); LBP-11-38, 74 NRC 817 (2011)
- COMBINED LICENSE; MEMORANDUM AND ORDER (Ruling on Admissibility of Intervenors' New Contention Regarding Fukushima Task Force Report); Docket No. 52-012-COL, 52-013-COL (ASLBP No. 09-885-08-COL-BD01); LBP-11-39, 74 NRC 862 (2011)
- REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket Nos. 52-012-COL, 52-013-COL; CLI-11-5, 74 NRC 141 (2011)

OLD DOMINION ELECTRIC COOPERATIVE

- COMBINED LICENSE; MEMORANDUM AND ORDER (Denying Dominion's Motion for Clarification of LBP-11-10); Docket No. 52-017-COL (ASLBP No. 08-863-01-COL); LBP-11-22, 74 NRC 259 (2011)
- REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket No. 52-017-COL; CLI-11-5, 74 NRC 141 (2011)

PACIFIC GAS AND ELECTRIC COMPANY

- LICENSE RENEWAL; MEMORANDUM AND ORDER; Docket Nos. 50-275-LR, 50-323-LR; CLI-11-11, 74 NRC 427 (2011)
- LICENSE RENEWAL; MEMORANDUM, ORDER, AND REFERRAL (Denying Motion to Admit New Contention and Referring Ruling to Commission); Docket Nos. 50-275-LR, 50-323-LR (ASLBP No. 10-900-01-LR-BD01); LBP-11-32, 74 NRC 654 (2011)
- REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket Nos. 50-275-LR, 50-323-LR; CLI-11-5, 74 NRC 141 (2011)

PPL BELL BEND, LLC

- COMBINED LICENSE; MEMORANDUM AND ORDER (Denying Motions to Reopen Closed Proceedings and Intervention Petition/Hearing Request as Premature); Docket No. 52-039-COL (ASLBP No. 11-914-02-COL-BD01); LBP-11-27, 74 NRC 591 (2011)
- REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket No. 52-039-COL; CLI-11-5, 74 NRC 141 (2011)

PROGRESS ENERGY CAROLINAS, INC.

REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket Nos. 52-022-COL, 52-023-COL; CLI-11-5, 74 NRC 141 (2011)

PROGRESS ENERGY FLORIDA, INC.

- COMBINED LICENSE; MEMORANDUM AND ORDER; Docket Nos. 52-029-COL, 52-030-COL; CLI-11-10, 74 NRC 251 (2011)
- COMBINED LICENSE; MEMORANDUM AND ORDER (Granting Motion for Summary Disposition of Contention 8A); Docket Nos. 52-029-COL, 52-030-COL (ASLBP No. 09-879-04-COL-BD01); LBP-11-31, 74 NRC 643 (2011)
- REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket Nos. 52-029-COL, 52-030-COL; CLI-11-5, 74 NRC 141 (2011)

SANTEE COOPER

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SHIELDALLOY METALLURGICAL CORPORATION

MATERIALS LICENSE AMENDMENT; MEMORANDUM AND ORDER; Docket No. 40-7102-MLA (License Amendment Request); CLI-11-12, 74 NRC 460 (2011)

SOUTH CAROLINA ELECTRIC & GAS COMPANY

REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket Nos. 52-027-COL, 52-028-COL; CLI-11-5, 74 NRC 141 (2011)

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket Nos. 52-027-COL, 52-028-COL; CLI-11-5, 74 NRC 141 (2011)

SOUTH TEXAS PROJECT NUCLEAR OPERATING COMPANY

LICENSE RENEWAL; MEMORANDUM AND ORDER (Ruling on Petition for Leave to Intervene and Request for Hearing); Docket Nos. 50-498-LR, 50-499-LR (ASLBP No. 11-909-02-LR-BD01); LBP-11-21, 74 NRC 115 (2011)

SOUTHERN NUCLEAR OPERATING COMPANY

- COMBINED LICENSE; MEMORANDUM AND ORDER; Docket Nos. 52-025-COL, 52-026-COL; CLI-11-8, 74 NRC 214 (2011)
- COMBINED LICENSE; MEMORANDUM AND ORDER (Denying Motions to Reopen Closed Proceedings and Intervention Petition/Hearing Request as Premature); Docket Nos. 52-025-COL, 52-026-COL (ASLBP Nos. 11-914-02-COL-BD01, 11-913-01-COL-BD01); LBP-11-27, 74 NRC 591 (2011)
- COMBINED LICENSE; MEMORANDUM AND ORDER (Denying Motions to Reinstate Contention); Docket Nos. 52-025-COL, 52-026-COL (ASLBP Nos. 11-914-02-COL-BD01, 11-913-01-COL-BD01); LBP-11-36, 74 NRC 768 (2011)
- REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket Nos. 52-025-COL, 52-026-COL; CLI-11-5, 74 NRC 141 (2011)

TENNESSEE VALLEY AUTHORITY

- COMBINED LICENSE; MEMORANDUM AND ORDER (Ruling on Request to Admit New Contention); Docket Nos. 52-014-COL, 52-015-COL (ASLBP No. 08-864-02-COL-BD01); LBP-11-37, 74 NRC 774 (2011)
- REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket No. 50-391-OL; CLI-11-5, 74 NRC 141 (2011)
- REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket Nos. 52-014-COL, 52-015-COL; CLI-11-5, 74 NRC 141 (2011)
- UNION ELECTRIC COMPANY d/b/a AMEREN MISSOURI
 - REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket No. 52-037-COL; CLI-11-5, 74 NRC 141 (2011)
- U.S. ARMY INSTALLATION MANAGEMENT COMMAND
 - REQUEST FOR ACTION; DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206; Docket No. 40-09083; DD-11-5, 74 NRC 399 (2011)
- U.S. DEPARTMENT OF ENERGY
 - CONSTRUCTION AUTHORIZATION; MEMORANDUM AND ORDER; Docket No. 63-001-HLW; CLI-11-7, 74 NRC 212 (2011); CLI-11-13, 74 NRC 635 (2011); CLI-11-15, 74 NRC 815 (2011)
- CONSTRUCTION AUTHORIZATION; MEMORANDUM AND ORDER (Suspending Adjudicatory Proceeding); Docket No. 63-001-HLW (ASLBP No. 09-892-HLW-CAB04); LBP-11-24, 74 NRC 368 (2011)
- VIRGINIA ELECTRIC AND POWER COMPANY
 - COMBINED LICENSE; MEMORANDUM AND ORDER (Denying Dominion's Motion for Clarification of LBP-11-10); Docket No. 52-017-COL (ASLBP No. 08-863-01-COL); LBP-11-22, 74 NRC 259 (2011)
 - REQUEST FOR ACTION; MEMORANDUM AND ORDER; Docket No. 52-017-COL; CLI-11-5, 74 NRC 141 (2011)

LEGAL CITATIONS INDEX CASES

- Abourezk v. Reagan, 785 F.2d 1043, 1053 (D.C. Cir. 1986), aff d, 484 U.S. 1 (1987)

 NRC is bound by the unambiguous language of its own regulations; LBP-11-22, 74 NRC 276 (2011)

 Advanced Medical Systems, Inc. (One Factory Row, Geneva, Ohio 44041), CLI-93-22, 38 NRC 98, 102
 - the standard for deciding motions for summary disposition in Subpart L proceedings closely parallels the standard used by the federal courts in deciding motions for summary judgment; LBP-11-31, 74 NRC 648 (2011)
- Advanced Medical Systems, Inc. (One Factory Row, Geneva, Ohio 44041), CLI-94-6, 39 NRC 285, 297
 - appellants must clearly identify the errors in the decision below and ensure that their brief contains sufficient information and cogent argument to alert the other parties and the Commission to the precise nature of and support for their claims; CLI-11-8, 74 NRC 220 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 121 (2006) in the absence of clear error or abuse of discretion, the Commission defers to board rulings on threshold issues; CLI-11-8, 74 NRC 220 (2011); CLI-11-11, 74 NRC 431 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124 (2007), aff'd, New Jersey Department of Environmental Protection v. NRC, 561 F.3d 132 (3d Cir. 2009) applicants should rely on the generic environmental impact statement for terrorism-related issues in a license renewal application: CLI-11-11, 74 NRC 455 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124, 128 (2007), aff'd, New Jersey Department of Environmental Protection v. NRC, 561 F.3d 132 (3d Cir. 2009) within the geographic boundary of the Ninth Circuit, NRC may not exclude NEPA terrorism contentions categorically; CLI-11-11, 74 NRC 456 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124, 129 (2007), aff'd, New Jersey Department of Environmental Protection v. NRC, 561 F.3d 132 (3d Cir. 2009) NEPA does not require NRC to consider the environmental consequences of hypothetical terrorist attacks on NRC-licensed facilities; CLI-11-11, 74 NRC 456 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124, 130 n.28 (2007), aff'd, New Jersey Department of Environmental Protection v. NRC, 561 F.3d 132 (3d Cir. 2009) NRC's security program addresses not only current operations, but also extends into the license renewal term; CLI-11-11, 74 NRC 458 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124, 131-32 (2007), aff'd, New Jersey Department of Environmental Protection v. NRC, 561 F.3d 132 (3d Cir. 2009) as an alternative ground for excluding a NEPA terrorism contention, NRC Staff's determination in the generic environmental impact statement that the environmental impacts of a terrorist attack were bounded by those impacts resulting from internally initiated events is sufficient to address the environmental impacts of terrorism; CLI-11-11, 74 NRC 456 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 476 (2008) although NRC rules require that motions be addressed to the presiding officer when a proceeding is pending, suspension motions are best addressed to the Commission; CLI-11-5, 74 NRC 158 (2011) intervention petitioners may not challenge the adequacy of the safety evaluation report, but may file contentions challenging the combined license application based on new information in the SER; LBP-11-22. 74 NRC 273 n.72 (2011)

- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 484 (2008) suspension of licensing proceedings is a drastic action that is not warranted absent immediate threats to public health and safety or other compelling reason; CLI-11-5, 74 NRC 158 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 484-85 (2008)
 - petitions to suspend multiple license renewal proceedings in view of an Inspector General's report on the agency's license renewal process were considered pursuant to the Commission's inherent supervisory authority over agency proceedings; CLI-11-5, 74 NRC 158 (2011)
 - the Commission may consider the rulemaking request of a nonparty as an exercise of its inherent supervisory powers authority over agency proceedings; CLI-11-5, 74 NRC 174 n.132 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 486 (2008) intervenors' speculation that further review of certain issues might change some conclusions in the final safety evaluation report does not justify restarting the hearing process; LBP-11-20, 74 NRC 76 (2011); LBP-11-23, 74 NRC 295, 321 (2011); LBP-11-35, 74 NRC 718 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC 658, 668 (2008) the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention; LBP-11-20, 74 NRC 77 n.75 (2011); LBP-11-35, 74 NRC 743 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC 658, 668-69
 - proponents of a motion to reopen bear a heavy burden; CLI-11-8, 74 NRC 221 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC 658, 670, 674 (2008)
- a mere showing that changes to the severe accident mitigation alternatives analysis results are possible or likely or probable is not enough to reopen a record; LBP-11-35, 74 NRC 729 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC 658, 672-73 (2008)
 - the ability of a totally unfunded group to provide testimony from experts is not taken into account in ruling on motions to reopen; LBP-11-20, 74 NRC 94 n.15 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC 658, 674 (2008) bare assertions are insufficient to show an exceptionally grave issue for reopening the record; CLI-11-8, 74 NRC 226 n.48 (2011); LBP-11-23, 74 NRC 313 n.136, 321 (2011)
 - where the record has been closed, NRC rules impose a deliberately heavy burden on an intervenor seeking to reopen the record to consider additional evidence, including evidence on a new contention: LBP-11-20, 74 NRC 77-78 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC 658, 675-76
 - conclusory language is not sufficient to support an appeal; CLI-11-8, 74 NRC 225 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC 658, 677 (2008) because it relates to Staff's position on the reviewability of the Board's decision, Staff's statement regarding its inclination not to revise the FSEIS is presented for the first time in Staff's answer; CLI-11-14, 74 NRC 808 (2011)
 - filings not otherwise authorized by NRC rules are allowed only where necessity or fairness dictates; CLI-11-14, 74 NRC 807 (2011)
 - replies may not contain new information that was not raised in either the petition or answers, but arguments that respond to the petition or answers are not precluded, whether they are offered in rebuttal or in support; CLI-11-14, 74 NRC 809 n.45 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 259-61 (2009)
 - NRC rules deliberately place a heavy burden on proponents of contentions, who must challenge aspects of license applications with specificity, backed up with substantive technical support, mere conclusions or speculation being insufficient; CLI-11-5, 74 NRC 169 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260 (2009) although a board may view petitioner's supporting information in a light favorable to petitioner, NRC contention admissibility rules require petitioner (not the board) to supply all the elements for a valid intervention petition; LBP-11-20, 74 NRC 78 (2011); LBP-11-29, 74 NRC 618 (2011)

- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260, 275-77 (2009)
 - absent error of law or abuse of discretion, the Commission defers to licensing board rulings on contention admissibility; CLI-11-9, 74 NRC 237 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260, 276 (2009)
 - intervenors must assert a sufficiently specific challenge that demonstrates that further inquiry is warranted; CLI-11-9, 74 NRC 247 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260, 278 (2009)
 - at the contention admissibility stage, the burden is on intervenors to demonstrate a deficiency in the application; CLI-11-9, 74 NRC 243-44 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 261 (2009) good cause for failure to file on time is the most important late-filing factors; LBP-11-32, 74 NRC 662 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 263 (2009) the "reasonable assurance" standard for aging management programs does not require a 95% confidence level of compliance; LBP-11-18, 74 NRC 37 n.46 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 271-72 (2009)
 - there simply would be no end to NRC licensing proceedings if petitioners could ignore timeliness requirements and add new contentions at their convenience based on information that could have formed the basis for a timely contention at the outset of the proceeding; LBP-11-20, 74 NRC 85 n 109 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 273-74 (2009)
 - enhancement to a program does not constitute new information sufficient to support a new contention; LBP-11-20, 74 NRC 87 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 274 (2009) a contention challenging an enhanced monitoring program adopted by applicant is inadmissible because intervenor had not challenged the original unenhanced monitoring program; LBP-11-20, 74 NRC 98 (2011)
 - as a matter of law and logic, if applicant's enhanced monitoring program is inadequate, then applicant's unenhanced monitoring program was a fortiori inadequate, and intervenor had a regulatory obligation to challenge it in its original petition to intervene; LBP-11-20, 74 NRC 87 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 286-87 (2009)
 - a heavier burden applies to motions to reopen than to proponents of contentions in ongoing proceedings; CLI-11-5, 74 NRC 169 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 287 (2009) a mere showing that changes to the severe accident mitigation alternatives analysis results are possible or likely or probable is not enough to reopen an record; LBP-11-35, 74 NRC 729 (2011)
 - bare assertions are insufficient to show an exceptionally grave issue for reopening the record; LBP-11-23, 74 NRC 313 n.136, 321 (2011)
 - the burden of satisfying the reopening requirements is a heavy one, and proponents bear the burden of meeting all of the requirements; LBP-11-20, 74 NRC 81, 84 n.108 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), LBP-06-16, 63 NRC 737, 744 (2006)
 - the licensing board dismissed all pending contentions on mootness grounds due to new information, which ordinarily would terminate the proceeding, but the board permitted new contentions to be filed on the new information before terminating the proceeding; LBP-11-22, 74 NRC 285 (2011)
- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), LBP-06-22, 64 NRC 229, 244 (2006)
 - boards do not adjudicate disputed facts at the contention admission stage; LBP-11-21, 74 NRC 125 (2011)

- AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), LBP-06-22, 64 NRC 229, 246
 - as a matter of law and logic, if applicant's enhanced monitoring program is inadequate, then applicant's unenhanced monitoring program was a fortiori inadequate, and intervenor had a regulatory obligation to challenge it in its original petition to intervene; LBP-11-20, 74 NRC 87 (2011)
- Anderson v. Liberty Lobby, 477 U.S. 242, 247-52, 255 (1986)
 - if reasonable minds could differ as to the import of the evidence, summary disposition is not appropriate; LBP-11-20, 74 NRC 103-04 n.72 (2011)
- Anderson v. Liberty Lobby, 477 U.S. 242, 250 (1986)
 - with regard to the first criterion for summary disposition, the correct inquiry is whether there are material factual issues that properly can be resolved only by a finder of fact because they may reasonably be resolved in favor of either party; LBP-11-31, 74 NRC 648 (2011)
- Anderson v. Liberty Lobby, 477 U.S. 242, 255 (1986)
 - in deciding motions for summary disposition, all facts are to be construed in the light most favorable to the nonmoving party; LBP-11-31, 74 NRC 648 (2011)
- Andrew Siemaszko, CLI-06-16, 63 NRC 708, 720-21 (2006)
 - boards must not redraft an inadmissible contention to cure deficiencies and thereby render it admissible; CLI-11-11, 74 NRC 437 (2011)
- Animal Defense Council v. Hodel, 840 F.2d 1432, 1439 (9th Cir. 1988)
 - an environmental impact statement that contains an incomplete or misleading comparison of alternatives is deficient; LBP-11-21, 74 NRC 137 n.126 (2011)
- Arizona Public Service Co. (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155 (1991)
 - boards must not redraft an inadmissible contention to cure deficiencies and thereby render it admissible; CLI-11-11, 74 NRC 437 (2011)
- Arizona Public Service Co. (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991)
 - failure to comply with any of the contention pleading requirements precludes admission of a contention; LBP-11-21, 74 NRC 125 (2011)
 - licensing boards are discouraged from adding material to bolster a petitioner's or party's arguments or pleadings; CLI-11-11, 74 NRC 447 n.113, 451 (2011)
- Arizona Public Service Co. (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 156 (1991)
 - at the contention admissibility stage, the burden is on intervenors to demonstrate a deficiency in the application; CLI-11-9, 74 NRC 243-44 (2011)
 - intervenors must assert a sufficiently specific challenge that demonstrates that further inquiry is warranted; CLI-11-9, 74 NRC 247 (2011)
- Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc., 462 U.S. 87, 97 (1983)

 NEPA has a dual purpose of ensuring that federal officials fully take into account the environmental consequences of a federal action before reaching major decisions and informing the public, Congress, and other agencies of those consequences; LBP-11-35, 74 NRC 766 n.13 (2011)
- Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc., 462 U.S. 87, 97-98 (1983)

 NEPA requires agencies to take a hard look at environmental consequences prior to taking major actions; LBP-11-38, 74 NRC 830 n.86 (2011)
- Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc., 462 U.S. 87, 100-01, 103 (1983)

 NEPA does not mandate how an agency must fulfill its obligations under the statute; LBP-11-23, 74

 NRC 331 (2011)
- Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc., 462 U.S. 87, 101 (1983)
- NRC has discretion to resolve issues generically by rulemaking; CLI-11-11, 74 NRC 451 (2011)
- Baltimore Gas & Electric Co. (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 349-50 (1998)
 - the process of revising an application after its initial submission and docketing is explained; LBP-11-22, 74 NRC 271 (2011)

- Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1213 (9th Cir. 1998)
 merely offering general statements about possible effects and some risk does not constitute a hard
 look at environmental impacts absent a justification regarding why more definitive information could
 not be provided; LBP-11-26, 74 NRC 545 (2011); LBP-11-38, 74 NRC 830-31 (2011)
- Bruesewitz v. Wyeth LLC, 131 S. Ct. 1068, 1076 (2011)
 - applying the rule of statutory construction that the mention of one thing implies the exclusion of another, the fact that the regulation sets forth three specific circumstances in which a board's jurisdiction ends implies that jurisdiction does not end in other circumstances not listed; LBP-11-22, 74 NRC 277 (2011)
- Burke v. Kodak Retirement Income Plan, 336 F.3d 103, 107-08 (2d Cir. 2003)
 - a notice failing to contain a specific time limit for administrative review, as required by federal regulations, does not trigger a time bar; LBP-11-19, 74 NRC 63 n.9 (2011)
- California Wilderness Coalition v. U.S. Department of Energy, 631 F.3d 1072, 1105-06 (9th Cir. 2011) without substantive, comparative environmental impact information regarding other possible courses of action, the ability of an environmental impact statement to inform agency deliberation and facilitate public involvement would be greatly degraded; LBP-11-23, 74 NRC 331 (2011)
- Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915 (2009)
 - NRC follows contemporaneous judicial concepts of standing, which call for showing of a concrete and particularized injury that is fairly traceable to the challenged action and is likely to be redressed by a favorable decision, where the injury is to an interest arguably within the zone of interests protected by the governing statute; LBP-11-29, 74 NRC 616 (2011)
 - to show standing, a hearing request must state petitioner's name, address, and telephone number, nature of its right under the applicable statutes to be made a party, nature and extent of property, financial, or other interest in the proceeding, and possible effect of any decision or order that may be issued on its interest; LBP-11-29, 74 NRC 616 (2011)
- Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915-16 (2009)
 - in most licensing proceedings, petitioners are presumed to have standing if they live or have frequent contacts within 50 miles of the facility that is the subject of the proceeding; LBP-11-29, 74 NRC 616 (2011)
- Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915-16 & n.15 (2009)
 - in reactor license renewal proceedings, petitioner is presumed to have standing to intervene without the need to specifically plead injury, causation, and redressability if petitioner lives within 50 miles of the nuclear power facility; LBP-11-21, 74 NRC 122 (2011)
- Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 920 (2009)
 - an entity is under foreign ownership, control, or domination whenever a foreign interest has the power, direct or indirect, whether or not exercised, to direct or decide matters affecting the management or operations of the applicant; LBP-11-25, 74 NRC 391 (2011)
 - there is no specific ownership percentage above which it would conclusively find that an applicant is per se controlled by foreign interests; LBP-11-25, 74 NRC 391 (2011)
- Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 920-21 (2009)
 - foreign control must be interpreted in light of all the information that bears on who in the corporate structure exercises control over what issues and what rights may be associated with certain types of shares; LBP-11-25, 74 NRC 391 (2011)
- Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 921 (2009)
 - a foreign control inquiry should be focused on safeguarding the national defense and security as well as five other factors; LBP-11-25, 74 NRC 391 (2011)
 - applicant's eligibility merely to apply for a combined license is material to a combined license proceeding; LBP-11-25, 74 NRC 395 (2011)

- Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-09-15, 70 NRC
 - contention dismissal based on mootness is a jurisdictional ruling, not a decision on the merits of the claim; LBP-11-22, 74 NRC 270 n.61 (2011)
- Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-10-24, 72 NRC 720, 729-30 (2010)
 - contentions may challenge the adequacy of the review contained in the Staff's NEPA documents; LBP-11-22, 74 NRC 273 n.72 (2011)
- Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant), CLI-00-11, 51 NRC 297, 299 (2000) parties should not seek interlocutory review by invoking the grounds under which the Commission might exercise its supervisory authority; CLI-11-14, 74 NRC 813 (2011)
- Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant), CLI-01-11, 53 NRC 370, 387-88 (2001) an accident sequence with a probability conservatively estimated at 2.0×10^{-7} per reactor year is remote and speculative for the purposes of NEPA; LBP-11-38, 74 NRC 859 (2011)
- Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant, Units 1-4), ALAB-526, 9 NRC 122, 123-24, 124 n.3 (1979)
 - after a board has authorized issuance of applicant's permits and the Commission has remanded a specific question to board, the board's jurisdiction is limited to what was remanded to it, and the board lacks jurisdiction over a newly filed intervention petition; LBP-11-20, 74 NRC 76 n.71 (2011)
- Carolina Power & Light Co. (Shearon Harris Nuclear Power Station, Units 1; H.B. Robinson Plant, Unit 2), DD-06-1, 63 NRC 133, 140 (2006)
 - for contentions that fall within the facility's current licensing basis, petitioner may seek action on its concerns by either filing a petition for rulemaking under 10 C.F.R. 2.802 or submitting an enforcement petition under 10 C.F.R. 2.206; LBP-11-21, 74 NRC 134 n.115 (2011)
- Chevron, U.S.A. v. Natural Resources Defense Council, Inc., 467 U.S. 837 (1984)
 - a court cannot defer to interpretive proposals offered by counsel at oral argument and affirm on the basis of that reading when the statute does not plainly compel the reading being proposed; CLI-11-12, 74 NRC 470 (2011)
- Citizens Against Burlington v. Busey, 938 F.2d 190, 195-96 (D.C. Cir. 1991)
 - reasonable alternatives under NEPA are limited to those alternatives that will bring about the ends of the proposed action; LBP-11-21, 74 NRC 137 (2011)
- City of Grapevine v. Department of Transportation, 17 F.3d 1502, 1506 (D.C. Cir. 1994) reasonable alternatives under NEPA are limited to those alternatives that will bring about the ends of the proposed action; LBP-11-21, 74 NRC 137 (2011)
- Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 92 (1993) NRC follows contemporaneous judicial concepts of standing, which call for a showing of a concrete and particularized injury that is fairly traceable to the challenged action and is likely to be redressed by a favorable decision, where the injury is to an interest arguably within the zone of interests protected by the governing statute; LBP-11-29, 74 NRC 616 (2011)
- Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), ALAB-443, 6 NRC 741, 755 (1977)
 - affidavits shall set forth such facts as would be admissible in evidence and shall show affirmatively that the affiant is competent to testify to the matters stated therein; LBP-11-23, 74 NRC 332 (2011)
- Comcast Corp. v. Federal Communications Commission, 526 F.3d 763, 769 n.2 (D.C. Cir. 2008)
- courts presume that federal agencies act in good faith; LBP-11-39, 74 NRC 868 n.21 (2011) Commonwealth Edison Co. (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185, 191
 - in license amendment proceedings, petitioners may not claim standing simply upon a residence or visits near the plant, unless the proposed action quite obviously entails an increased potential for offsite consequences; LBP-11-29, 74 NRC 616 (2011)
- Communities, Inc. v. Busey, 956 F.2d 619, 626 (6th Cir. 1992)
- agency NEPA requirements are tempered by a practical rule of reason; LBP-11-18, 74 NRC 38 (2011)
- Connecticut Yankee Atomic Power Co. (Haddam Neck Plant), CLI-01-25, 54 NRC 368, 373-74 (2001)
 - labor and expense of pursuing litigation that petitioner sought to curtail do not constitute irreparable harm; CLI-11-10, 74 NRC 256 n.24 (2011)

- Connecticut Yankee Atomic Power Co. (Haddam Neck Plant), CLI-01-25, 54 NRC 368, 374 (2001) expansion of issues for litigation that results from a board action does not have a pervasive and unusual effect on the litigation; CLI-11-10, 74 NRC 256 n.24 (2011)
- Consolidated Edison Co. of New York (Indian Point, Unit 2), LBP-83-5, 17 NRC 134, 136 (1983) in NRC proceedings, pro se litigants are generally not held to the same high standards of pleading and practice as parties with counsel; LBP-11-20, 74 NRC 96 n.26 (2011); LBP-11-23, 74 NRC 333 n.23 (2011)
- Consolidated Edison Co. of New York (Indian Point, Units 1, 2, and 3), ALAB-319, 3 NRC 188, 190 (1976)
 - licensing boards may raise significant environmental and safety issues sua sponte; LBP-11-23, 74 NRC 367 (2011)
- Consolidated Edison Co. of New York (Indian Point, Units 1, 2, and 3), ALAB-319, 3 NRC 188, 193 (1976)
 - because the licensing board's hearing had concluded and the seismic issues raised in the proceeding had been resolved or abandoned, the adequacy of the seismic design of the facility was a matter within the jurisdiction of the NRC Staff; LBP-11-22, 74 NRC 284 (2011)
- Consumers Energy Co. (Palisades Nuclear Plant), CLI-07-18, 65 NRC 399, 409 (2007)
 - each organization member seeking representation must qualify for standing in his or her own right, the interests that the representative organization seeks to protect must be germane to its own purpose, and neither the asserted claim nor the requested relief must require an individual member to participate in the organization's legal action; LBP-11-29, 74 NRC 617, 619 (2011)
 - to demonstrate representational standing, an organization must show that at least one of its members would be affected by the agency's approval of the requested license, identify such members, and establish (preferably through an affidavit) that such members have authorized it to act as their representative and to request a hearing on their behalf; LBP-11-29, 74 NRC 617 (2011)
- Consumers Power Co. (Midland Plant, Units 1 and 2), CLI-74-5, 7 AEC 19, 31 (1974), rev'd on other grounds, CLI-97-15, 46 NRC 294 (1997)
 - applicant may bear the burden of proof on contentions asserting deficiencies in its environmental report and where applicant becomes a proponent of a particular challenged position set forth in the environmental impact statement; LBP-11-38, 74 NRC 830 (2011)
- Costle v. Pacific Legal Foundation, 445 U.S. 198, 204 (1980)
 - lack of clarity about which electrical cables might be subject to any saltwater environment, however high or low the concentration, and about the effects of and efforts to address this, is a level of concern sufficient to warrant further inquiry and exploration; LBP-11-20, 74 NRC 113-14 (2011)
- Crow Butte Resources, Inc. (In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 336 (2009)
 - on appeal, the Commission will defer to a board's rulings on contention admissibility absent an error of law or abuse of discretion; CLI-11-11, 74 NRC 431 (2011)
- Crow Butte Resources, Inc. (In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 365 & n.178 (2009)
 - piecemeal appeals during ongoing licensing board proceedings are generally disfavored; CLI-11-6, 74 NRC 210 (2011)
- Crow Butte Resources, Inc. (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 549 n.61 (2009) good cause for failure to file on time is the most important late-filing factor; LBP-11-32, 74 NRC 662 (2011)
- Crow Butte Resources, Inc. (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 552-53 (2009) contention pleading rules are designed to ensure that only well-defined issues are admitted for hearing and a board should not add material not raised by a petitioner in order to render a contention admissible; CLI-11-11, 74 NRC 437, 457 (2011)
 - it is intervention petitioner's responsibility to put others on notice as to the issues it seeks to litigate in a proceeding; CLI-11-11, 74 NRC 457 (2011)
- Crow Butte Resources, Inc. (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 562, 573 (2009) bare assertions are insufficient to support a contention; CLI-11-11, 74 NRC 452 n.139 (2011)

- Curators of the University of Missouri (TRUMP-S Project), CLI-95-8, 41 NRC 386, 395 (1995)
 a dynamic licensing process is followed in Commission licensing proceedings; LBP-11-22, 74 NRC 271 (2011)
- Defenders of Wildlife v. Andrus, 627 F.2d 1238, 1243-44 (D.C. Cir. 1980)
 - NEPA applies to agencies of the federal government, not to private parties such as applicants for NRC licenses; LBP-11-32, 74 NRC 666 (2011)
- Department of Transportation v. Public Citizen, 541 U.S. 752, 767-69 (2004)
 - the rule of reason is inherent in NEPA and its implementing regulations; LBP-11-38, 74 NRC 831 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 213 (2003)
 - rules on contention admissibility are strict by design; LBP-11-21, 74 NRC 125 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-08-17, 68 NRC 231, 233 (2008)
 - contention admissibility requirements are strict by design in order to help assure that the NRC hearing process will be appropriately focused on disputes that can be resolved in the adjudication; LBP-11-29, 74 NRC 618 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 120 (2009)
 - a motion to file new or amended contentions must address the motion to reopen standards after an intervention petition has been denied; LBP-11-20, 74 NRC 92 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 120, 122-23 (2009)
 - NRC's rules of procedure do not permit the filing of notice pleadings, i.e., general, vague, or unsupported claims intended to act as placeholders for later elaboration; LBP-11-21, 74 NRC 133 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 120-21 (2009)
 - a licensing board's use of the reopening standard to evaluate the admissibility of contentions submitted after the board denied petitioners' hearing request was affirmed on appeal; LBP-11-22, 74 NRC 283 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 122-23 (2009)
 - appellants may not amend their contentions on appeal; CLI-11-8, 74 NRC 221 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 124 (2009)
 - when petitioner proposes a new contention after the record has closed, petitioner must address the reopening standards contemporaneously with a late-filed intervention petition, which must satisfy the standards for both contention admissibility and late filing; CLI-11-8, 74 NRC 226 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 125 (2009)
 - speculation by an expert cannot form the basis for admission of a contention on the basis of the matter being exceptionally grave; LBP-11-20, 74 NRC 89 n.125 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 126 (2009)
 - failure to address the requirements of 10 C.F.R. 2.309(c) and (f)(2) is reason enough to reject proposed new contentions; LBP-11-21, 74 NRC 134 n.111 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), LBP-02-5, 55 NRC 131, 145 (2002), aff d, CLI-02-27, 56 NRC 367, 371-72 (2002)
 - post-9/11 motion to reopen satisfied rules for reopening the record and for late-filed contentions, but contention involving a license amendment request for reconfiguring a spent fuel pool was inadmissible; CLI-11-5, 74 NRC 170 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001), petition for reconsideration denied, CLI-02-1, 55 NRC 1 (2002)
 - rules on contention admissibility are strict by design; LBP-11-22, 74 NRC 278 (2011)

- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349 358-59 (2001)
 - rules on contention admissibility are strict by design; LBP-11-21, 74 NRC 125 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 365 (2001)
 - for management integrity and character to be a viable contention, there must be a direct and obvious relationship between these issues and the challenged licensing action; CLI-11-8, 74 NRC 231 n.83 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 636 (2004)
 - failure to comply with any of the contention pleading requirements precludes admission of a contention; LBP-11-21, 74 NRC 125 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 637-38 (2004)
 - NRC's license renewal process concerns a particularized and limited inquiry into the potential impacts of an additional 20 years of nuclear power plant operation, not day-to-day operational issues; LBP-11-21, 74 NRC 129 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 639 n.25 (2004)
 - appellants must clearly identify the errors in the decision below and ensure that their brief contains sufficient information and cogent argument to alert the other parties and the Commission to the precise nature of and support for their claims; CLI-11-8, 74 NRC 220 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 639-40 (2004)
 - failure of petitioner to cite even a single specific deficiency in the application precludes satisfaction of the specificity requirement of 10 C.F.R. 2.309(f)(1)(vi); LBP-11-29, 74 NRC 622 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 559-60 (2005)
 - the Commission has endorsed a four-pronged test for grant of a rule waiver; LBP-11-35, 74 NRC 714 (2011)
 - to waive the generic assessment in NRC regulations to permit adjudication of issues involving the environmental impact of spent fuel pool accidents in a license renewal proceeding, the Commission must conclude that the rule's strict application would not serve the purpose for which it was adopted; CLI-11-11, 74 NRC 449 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 560 (2005)
 - for a rule waiver request to be granted, all four factors must be met; LBP-11-35, 74 NRC 714-15 (2011)
 - use of "and" in the list of requirements for rule waiver means that all four factors must be met; CLI-11-11, 74 NRC 452 n.138 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 560-61 (2005)
 - emergency planning is neither germane to age-related degradation nor unique to the period covered by a license renewal application; LBP-11-35, 74 NRC 715 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 561 (2005)
 - challenges to 10 C.F.R. 50.54(hh)(2) are neither germane to age-related degradation nor unique to the license renewal period; LBP-11-21, 74 NRC 131 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 562 (2005)
 - the "uniqueness" factor of the rule waiver test is interpreted; LBP-11-35, 74 NRC 717 (2011)
- Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), LBP-04-15, 60 NRC 81, 89 (2004)
 - where a contention alleges a deficiency or error in the application, the deficiency or error must have some independent health and safety significance; LBP-11-23, 74 NRC 336 (2011)

- Dominion Nuclear North Anna, LLC (Early Site Permit for North Anna ESP Site), CLI-07-27, 66 NRC 215, 230 & n.79 (2007)
 - in mandatory hearings, Commission discussion regarding alternative site review supplements the environmental impact statement; LBP-11-26, 74 NRC 536 n.13 (2011)
- Dominion Nuclear North Anna, LLC (Early Site Permit for North Anna ESP Site), CLI-07-27, 66 NRC 215, 235-36 & n.115 (2007)
 - information may be unavoidably incomplete or unavailable, and under those circumstances, a final environmental impact statement can overcome this deficiency if it states that fact, explains how the missing information is relevant, sets forth the existing information, and evaluates the environmental impacts to the best of the agency's ability; CLI-11-11, 74 NRC 444 n.94 (2011)
 - NRC looks to Council on Environmental Quality regulations for guidance, but is not bound by them; CLI-11-11, 74 NRC 444 (2011)
- Dominion Nuclear North Anna, LLC (Early Site Permit for North Anna ESP Site), LBP-06-24, 64 NRC 360, 365 (2006)
 - the licensing board chose to terminate the contested portion of the proceeding after granting summary disposition on the only pending contentions, but the board did not state that its decision was compelled by either precedent or regulation; LBP-11-22, 74 NRC 285 (2011)
- Dominion Nuclear North Anna, LLC (Early Site Permit for North Anna ESP Site), LBP-07-9, 65 NRC 539, 559-60 (2007)
 - boards are to make independent environmental judgments with respect to certain NEPA findings, though even then they need not rethink or redo every aspect of NRC Staff's environmental findings or undertake their own fact-finding activities; LBP-11-26, 74 NRC 519 (2011)
- Dr. James E. Bauer (Order Prohibiting Involvement in NRC-Licensed Activities), LBP-95-7, 41 NRC 323, 328 (1995)
 - the time for applicant to request a hearing should be tolled until notice is issued if NRC Staff fails to provide the notice and hearing opportunity mandated by 10 C.F.R. 2.103(b); LBP-11-19, 74 NRC 63 n.9 (2011)
- Dubois v. U.S. Department of Agriculture, 102 F.3d 1273, 1291 (1st Cir. 1996)
 - NEPA has a dual purpose of ensuring that federal officials fully take into account the environmental consequences of a federal action before reaching major decisions and informing the public, Congress, and other agencies of those consequences; LBP-11-35, 74 NRC 766 n.13 (2011)
- Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-01-28, 54 NRC 393 (2001), reconsideration denied, CLI-02-2, 55 NRC 5 (2002)
 - petitions to suspend multiple license renewal proceedings in view of an Inspector General's report on the agency's license renewal process were considered pursuant to the Commission's inherent supervisory authority over agency proceedings; CLI-11-5, 74 NRC 158 (2011)
 - requests to suspend or hold proceedings in abeyance following the September 11 terrorist attacks, as well as more recently, were considered pursuant to the Commission's inherent supervisory authority over agency proceedings; CLI-11-5, 74 NRC 158 (2011)
- Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-01-28, 54 NRC 393, 398-401 (2001), reconsideration denied, CLI-02-2, 55 NRC 5 (2002)
 - petition for suspension of proceeding following 9/11 attack was denied; CLI-11-5, 74 NRC 156 (2011)
- Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-05-15, 62 NRC 53, 54 (2005)
 - boards may continue the adjudicatory proceeding until the deadlines for filing proposed new contentions have expired and the board has resolved all admitted and proposed contentions filed within the deadlines; LBP-11-22, 74 NRC 271 (2011)
 - proceedings are terminated after all admitted contentions had been resolved and the time for late-filed contentions arising out of information in the Staff's final safety evaluation report has expired without the filing of any such contentions; LBP-11-22, 74 NRC 273 n.75, 285 (2011)
- Duke Energy Carolinas, LLC (William States Lee III Nuclear Station, Units 1 and 2), CLI-09-21, 70 NRC 927, 931 (2009)
 - for power reactors, NRC Staff review should encompass emissions from the uranium fuel cycle as well as from construction and operation of the facility to be licensed; LBP-11-26, 74 NRC 541 (2011)

- under NEPA, NRC must assess the environmental impacts of a proposed facility, including those impacts associated with greenhouse gas emissions by the proposed facility; LBP-11-26, 74 NRC 545 (2011)
- Duke Energy Carolinas, LLC (William States Lee III Nuclear Station, Units 1 and 2), LBP-08-17, 68 NRC 431, 443 (2008)
 - consideration of an admissible contention can be deferred, where appropriate, but an inadmissible one cannot; LBP-11-28, 74 NRC 610 (2011)
- Duke Energy Corp. (Catawba Nuclear Station, Units 1 and 2), CLI-04-6, 59 NRC 62, 67 (2004) licensing boards are not empowered to superintend, to any extent, the conduct of Staff technical reviews; LBP-11-30, 74 NRC 633 (2011)
- Duke Energy Corp. (Catawba Nuclear Station, Units 1 and 2), CLI-04-6, 59 NRC 62, 74 (2004) licensing boards lack authority to direct the Secretary's administrative activities regarding the handling of documents; CLI-11-13, 74 NRC 641 (2011)
- Duke Energy Corp. (Catawba Nuclear Station, Units 1 and 2), CLI-04-21, 60 NRC 21, 27-28 (2004) based on his qualifications in education and experience, intervenors' witness was found qualified to testify but not specifically on issues related to nuclear engineering, such as events at the Fukushima Dai-ichi plant, core damage frequency calculations, and effectiveness of SAMDAs; LBP-11-38, 74 NRC 834 (2011)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-20, 54 NRC 211, 214 (2001)
 - boards may not commence a hearing on environmental issues before the final environmental impact statement is issued, and may only commence a hearing with respect to safety issues prior to issuance of the final safety evaluation report if it will expedite the proceeding without adversely impacting the Staff's ability to complete its evaluations in a timely manner; LBP-11-22, 74 NRC 272 n.69 (2011)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-27, 54 NRC 385 (2001)
 - requests to suspend or hold proceedings in abeyance following the September 11 terrorist attacks, as well as more recently, were considered pursuant to the Commission's inherent supervisory authority over agency proceedings; CLI-11-5, 74 NRC 158 (2011)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-27, 54 NRC 385, 388, 390-91 (2001)
 - abeyance of proceeding denied where proceeding was at an early stage, there was no risk of immediate threat to public health and safety, there were non-terrorism-related contentions to be considered, and the only "harm" to petitioner would be inevitable litigation costs; CLI-11-5, 74 NRC 157, 163 (2011)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-27, 54 NRC 385, 388, 391 (2001)
 - any changes in NRC rules post-9/11 that might bear on license renewal reviews could be addressed via late-filed contentions; CLI-11-5, 74 NRC 157 (2011)
 - post-9/11 abeyance of proceeding is unnecessary because there would be time to apply any new rules that might result from the generic review of terrorism-related issues; CLI-11-5, 74 NRC 157 (2011)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-27, 54 NRC 385, 388, 392 (2001)
 - motion to dismiss operating license renewal application or hold the proceeding in abeyance pending the Commission's comprehensive post-September 11 review of its rules and policies is denied; CLI-11-5, 74 NRC 157 (2011)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 5 (2002)
 - the purpose of the severe accident mitigation alternatives review is to ensure than any plant changes in hardware, procedures, or training that could significantly improving severe accident safety performance are identified and assessed; LBP-11-17, 74 NRC 21 (2011); LBP-11-18, 74 NRC 40 n.60 (2011)

- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 8 (2002)
 - for an admissible contention petitioners did not have to prove outright that a SAMA analysis was deficient; CLI-11-11, 74 NRC 443 (2011)
 - portion of a contention asserting that applicant failed to consider the results of a particular study in its SAMA analysis is admissible; CLI-11-11, 74 NRC 443 (2011)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 11-12 (2002)
 - petitioner must approximate the relative cost and benefit of a challenged SAMA or provide at least some ballpark consequence and implementation costs should the SAMA be performed; CLI-11-11, 74 NRC 442 (2011)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358, 363 (2002)
 - license renewal safety review is limited to the matters specified in 10 C.F.R. Part 54, which focus on the management of aging for certain systems, structures, and components, and review of time-limited aging analyses; LBP-11-21, 74 NRC 126 (2011)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 379 (2002)
 - the scope of a contention is limited to the issues of law and fact pleaded with particularity in the contention and any factual and legal material in support thereof; LBP-11-38, 74 NRC 833 (2011)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 382 (2002)
 - board's designation of a contention as a contention of omission is a means to limit its scope; CLI-11-11, 74 NRC 443 n.92 (2011)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 382-84 (2002)
 - licensing boards have commonly afforded intervenors the opportunity to propose new contentions to challenge the new information, even though no contention is pending; LBP-11-22, 74 NRC 277
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 383 (2002)
 - alleged defects in applicant's environmental report may be mooted by the content of NRC's environmental impact statement or supplemental environmental impact statement; LBP-11-28, 74 NRC 608 (2011)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLL-02-28 56 NRC 373 388 n 77 (2002)
 - a severe accident mitigation alternative need not be implemented during a particular plant's license renewal review if the Commission is concurrently resolving the safety improvement achieved by that SAMA through a generic process attached to the agency's review of all plants' current licensing bases; LBP-11-17, 74 NRC 25 (2011)
 - NEPA does not mandate the particular decisions that an agency must reach, only the process the agency must follow while reaching decisions; LBP-11-17, 74 NRC 27 n.77 (2011)
 - NRC shall require backfitting of a facility only when it determines that there will be a substantial increase in the overall protection of the public health and safety or the common defense and security and the direct and indirect costs of implementation are justified in view of this increased protection; LBP-11-17, 74 NRC 22 n.53 (2011)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 428 (2003)
 - to be admissible, contentions must include specific grievances beyond mere notice pleading; LBP-11-29, 74 NRC 618 (2011)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 431 (2003)
 - because severe accident mitigation alternatives analysis is site-specific, NEPA demands no fully developed plan or detailed examination of specific measures that will be used to mitigate adverse environmental effects; LBP-11-18, 74 NRC 37 (2011); LBP-11-23, 74 NRC 330 (2011)

- sufficiency of the NRC's hard look at the benefits of SAMAs in comparison to their costs is subject to litigation in a license renewal proceeding; LBP-11-17, 74 NRC 21 (2011)
- Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999) it is intervention petitioner's responsibility to put others on notice as to the issues it seeks to litigate; CLI-11-11, 74 NRC 457 (2011)
- Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334-35 (1999) rules on contention admissibility are strict by design; LBP-11-21, 74 NRC 125 (2011)
- Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 345 (1999) admission of contentions that NRC may ultimately deal with generically through notice-and-comment rulemaking is precluded; LBP-11-32, 74 NRC 663 (2011)
 - erring on the side of caution and at least looking at the information would be in order, except to the extent that the matters are about to become the subject of rulemaking; LBP-11-23, 74 NRC 327
 - petitioners may not raise in adjudicatory proceedings contentions attacking the agency's rules and regulations or contentions that are the subject of ongoing rulemakings; LBP-11-29, 74 NRC 618 (2011)
- Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), ALAB-825, 22 NRC 785, 790 (1985) hearing notices are the means by which the Commission identifies the subject matter of the hearings and delegates to boards the authority to conduct proceedings; LBP-11-22, 74 NRC 274 (2011) licensing boards may exercise only the jurisdiction conferred upon them by the Commission; LBP-11-22, 74 NRC 274 (2011)
- Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1049 (1983) although all environmental contentions may, in a general sense, ultimately challenge NRC's compliance with NEPA, NRC regulations expressly permit the lodging of contentions against an applicant's environmental report well before release of NRC's NEPA documents; LBP-11-38, 74 NRC 830 (2011)
 - for NEPA contentions, the burden of proof shifts to NRC Staff, because NRC, not the applicant, bears the ultimate burden of complying with NEPA; LBP-11-38, 74 NRC 829-30 (2011)
- Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), LBP-83-8A, 17 NRC 282, 285 (1983)

 NRC cannot delegate its NEPA responsibilities to a private party; LBP-11-32, 74 NRC 666 n.29

 (2011)
- Duquesne Light Co. (Beaver Valley Power Station, Unit 1), ALAB-109, 6 AEC 243, 246 (1973)
 a carry-over contention must be subjected to especially careful scrutiny by the board at the prehearing stage; LBP-11-34, 74 NRC 696 (2011)
 - contentions cannot be automatically discarded by a hearing board simply because they repeat contentions advanced in a different proceeding; LBP-11-34, 74 NRC 696 (2011)
- English v. General Electric Co., 496 U.S. 72, 81 (1990)
 - the 1959 amendments to the Atomic Energy Act were intended generally to increase the states' role in regulation of nuclear materials; CLI-11-12, 74 NRC 473-74 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-08-2, 67 NRC 31, 34 (2008)
 - a partial initial decision is one rendered following an evidentiary hearing on one or more contentions, but that does not dispose of the entire matter; CLI-11-6, 74 NRC 209 (2011); CLI-11-10, 74 NRC 255 (2011)
 - grant of summary disposition where other contentions are pending is not a final decision and is appealable only upon a showing that the standards for interlocutory review have been met; CLI-11-6, 74 NRC 209 n.38 (2011); CLI-11-14, 74 NRC 810 (2011)
 - parties may file a petition for review of licensing board full or partial initial decisions, both of which are considered to be final; CLI-11-14, 74 NRC 810 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-08-2, 67 NRC 31, 34 n.14 (2008) the basis for allowing immediate appellate review of partial initial decisions rests on prior appeal board decisions permitting review of a licensing board ruling that disposes of a major segment of the case or terminates a party's right to participate; CLI-11-14, 74 NRC 810-11 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-08-2, 67 NRC 31, 35 (2008)
 - a board's disputed legal ruling does not necessarily warrant immediate interlocutory review; CLI-11-6, 74 NRC 208 n.31 (2011)

- NRC disfavor of piecemeal appeals leads it to grant interlocutory review only upon a showing of extraordinary circumstances; CLI-11-14, 74 NRC 811 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-09-11, 69 NRC 529, 533 (2009) the key consideration in determining materiality of a SAMA contention is whether it purports to show that an additional SAMA should have been identified as potentially cost-beneficial; CLI-11-11, 74 NRC 441 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 290-91 (2010) severe accident mitigation alternatives are safety enhancements such as a new hardware item or procedure intended to reduce the risk of severe accidents; LBP-11-33, 74 NRC 680 n.7 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 291 (2010) if the cost of implementing a particular severe accident mitigation alternative is greater than its estimated benefit, the SAMA is not considered cost-beneficial to implement; LBP-11-33, 74 NRC 680 n.7 (2011)
 - severe accident mitigation design alternatives analysis examines whether implementing a SAMDA would decrease the probability-weighted consequences of severe accidents; LBP-11-38, 74 NRC 826 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 293-94 n.26 (2010)
 - a license renewal applicant is compelled to implement safety-related severe accident mitigation alternatives that deal with aging management; LBP-11-17, 74 NRC 22 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 294 n.26 (2010) severe accident mitigation alternatives unrelated to aging management need not be implemented pursuant to the NRC's license renewal safety review under Part 54; LBP-11-17, 74 NRC 25 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 297 (2010) the correct inquiry with regard to the first criterion for summary disposition is whether there are material factual issues that properly can be resolved only by a finder of fact because they may reasonably be resolved in favor of either party; LBP-11-31, 74 NRC 648 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 315-16 (2010) although there will always be more data that could be gathered, agencies must have some discretion to draw the line and move forward with decisionmaking; LBP-11-38, 74 NRC 831-32 (2011) environmental impact statements are not intended to be research documents, reflecting the frontiers of scientific methodology, studies, and data: LBP-11-38, 74 NRC 831 (2011)
 - in judging adequacy of a severe accident mitigation design alternatives analysis, the pertinent legal question becomes not whether plainly better SAMDA analysis assumptions or methodologies could have been employed, or whether a particular SAMDA analysis could have been refined further; LBP-11-38, 74 NRC 832 (2011)
 - NEPA allows agencies to select their own methodology as long as that methodology is reasonable; LBP-11-38, 74 NRC 832 (2011)
 - NEPA should be construed in the light of reason if it is not to demand virtually infinite study and resources; LBP-11-38, 74 NRC 831 (2011)
- there is no NEPA requirement to use the best scientific methodology; LBP-11-38, 74 NRC 831 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 316-17 (2010) NRC inquiry is to ascertain whether it looks genuinely plausible that inclusion of an additional factor or use of other assumptions or models may change the cost-benefit conclusions for the severe accident mitigation design alternatives analysis; LBP-11-38, 74 NRC 832 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 453-54 (2010) the current licensing basis is the set of NRC requirements (including regulations, orders, technical specifications, and license conditions) applicable to a specific plant, and includes the licensee's written, docketed commitments for ensuring compliance with applicable NRC requirements and the plant-specific design basis; LBP-11-17, 74 NRC 21-22 n.48 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 453-56 (2010) license renewal review is a limited one, focused on aging management issues; CLI-11-5, 74 NRC 164 (2011)

- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 453-56, 460-63
 - the scope of license renewal safety review is explained; CLI-11-11, 74 NRC 435 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 471, 477 (2010) generic analysis remains appropriate for spent fuel pool accidents in license renewal proceedings; LBP-11-35, 74 NRC 716 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-15, 71 NRC 479, 482 (2010) to be admissible, contentions must include specific grievances beyond mere notice pleading; LBP-11-29, 74 NRC 618 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-22, 72 NRC 202, 208-09 (2010) NEPA requires NRC to provide a reasonable mitigation alternatives analysis, containing reasonable estimates, including, where appropriate, full disclosures of any known shortcomings in available methodology, incomplete or unavailable information and significant uncertainties, and a reasoned evaluation of whether and to what extent these or other considerations credibly could or would alter the analysis on which SAMDAs are considered; LBP-11-38, 74 NRC 832 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-28, 72 NRC 553, 554 (2010) the Commission generally defers to licensing boards on case management issues; CLI-11-13, 74 NRC 640 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), LBP-06-23, 64 NRC 257, 340 (2006) to evaluate the impact of a fault on current operations, a probabilistic risk assessment rather than a deterministic analysis is the accepted and standard practice in SAMA analyses; CLI-11-11, 74 NRC 439 (2011)
- Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), LBP-11-23, 74 NRC 287, 324 (2011) (Young, J., concurring in part and dissenting in part)
 - the board has ruled on these Fukushima-related hearing requests and rejected them pursuant to 10 C.F.R. 2.326, 2.309(c), and 2.309(f)(1); CLI-11-5, 74 NRC 164-64 n.91 (2011)
- Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), CLI-08-7, 67 NRC 187,192 (2008) the Commission generally defers to licensing boards on case management issues; CLI-11-13, 74 NRC 640 (2011)
- Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), CLI-09-6, 69 NRC 128, 133-37 (2009) appellate review of interlocutory licensing board orders is disfavored, and will be undertaken as a discretionary matter only in extraordinary circumstances; CLI-11-10, 74 NRC 256 (2011)
- Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), CLI-09-6, 69 NRC 128, 137 (2009) piecemeal appeals during ongoing licensing board proceedings are generally disfavored; CLI-11-6, 74 NRC 210 (2011)
- Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), CLI-09-6, 69 NRC 128, 138 (2009) the Commission disfavors requests to invoke its inherent supervisory authority over adjudications; CLI-11-13, 74 NRC 637 n.11 (2011)
- Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), CLI-10-30, 72 NRC 564, 568 (2010) admission of a contention that might require further explanation of severe accident mitigation alternatives cost-benefit analysis did not have a pervasive and unusual effect on the litigation; CLI-11-6, 74 NRC 209 n.38 (2011)
 - a board's disputed legal ruling does not necessarily warrant immediate interlocutory review; CLI-11-6, 74 NRC 208 n.31 (2011)
- Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), LBP-08-13, 68 NRC 43, 64 (2008) contentions that amount to an attack on applicable statutory requirements or represent a challenge to the basic structure of the Commission's regulatory process must be rejected; LBP-11-29, 74 NRC 618 (2011)
- Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), LBP-10-13, 71 NRC 673, 678 & n.12 (2010)
 - the current licensing basis is the set of NRC requirements (including regulations, orders, technical specifications, and license conditions) applicable to a specific plant, and includes the licensee's written, docketed commitments for ensuring compliance with applicable NRC requirements and the plant-specific design basis; LBP-11-17, 74 NRC 21 (2011)

- Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), LBP-10-13, 71 NRC 673, 679 n.17 (2010) sufficiency of the NRC's hard look at the benefits of SAMAs in comparison to their costs is subject to litigation in a license renewal proceeding; LBP-11-17, 74 NRC 21 (2011)
- Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), LBP-10-13, 71 NRC 673, 679 & n.18 (2010)
 - a license renewal applicant is compelled to implement safety-related severe accident mitigation alternatives that deal with aging management; LBP-11-17, 74 NRC 22 (2011)
- Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), LBP-10-13, 71 NRC 673, 679 & n.19 (2010)
 - NRC Staff has authority to require implementation of non-aging-management severe accident mitigation alternatives through its current licensing basis backfit review under Part 50 or through setting conditions of the license renewal; LBP-11-17, 74 NRC 22 (2011)
- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-07-3, 65 NRC 13, 22 (2007), aff'd, Massachusetts v. United States, 522 F.3d 115 (1st Cir. 2008)
 - NRC Staff could seek Commission permission to suspend one or more of the generic determinations in the license renewal environmental rules, and include a new analysis in pending, plant-specific environmental impact statements; CLI-11-5, 74 NRC 175 (2011)
- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-07-3, 65 NRC 13, 22 n.37 (2007), aff'd, Massachusetts v. United States, 522 F.3d 115 (1st Cir. 2008)
 - request to suspend license renewal proceedings pending disposition of a rulemaking petition is premature; CLI-11-5, 74 NRC 174 (2011)
- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-10-17, 72 NRC 1 (2010)
 - the Commission generally defers to licensing boards on case management issues; CLI-11-13, 74 NRC 640 (2011)
- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-10-17, 72 NRC 1, 10 n 37 (2010)
 - during pendency of remand, intervenors are free to submit a motion to reopen the record pursuant to 10 C.F.R. 2.326, should they seek to address any genuinely new issues related to the license renewal application that previously could not have been raised; LBP-11-20, 74 NRC 76 n.70 (2011)
 - if a proceeding remains open only on a limited issue, intervenors must submit a motion to reopen to address any genuinely new issues related to the license renewal application that previously could not have been raised; LBP-11-20, 74 NRC 92 (2011)
 - the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention; LBP-11-20, 74 NRC 77 n.75 (2011)
- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-10-17, 72 NRC 1, 10-11 n.37 (2010)
- a proceeding will remain open during the pendency of a remand; LBP-11-23, 74 NRC 294 (2011) Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-10-17, 72 NRC 1, 36, 38 (2010)
 - a commitment to implement an aging management plan that NRC finds is consistent with the GALL Report constitutes one acceptable method for compliance, but this does not insulate such an approach from challenge by an intervenor, and is not binding on a licensing board in an adjudication; LBP-11-20, 74 NRC 104 n.73 (2011)
- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-10-17, 72 NRC 1, 45 n.246 (2010)
 - in NRC proceedings, pro se litigants are generally not held to the same high standards of pleading and practice as parties with counsel; LBP-11-20, 74 NRC 96 n.26 (2011); LBP-11-23, 74 NRC 333 n.23 (2011)
- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-10-17, 72 NRC 1, 53 n.304 (2010)
 - good cause for late filing is given the greatest weight in a section 2.309(c) analysis; LBP-11-23, 74 NRC 328 (2011)

- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-11-2, 73 NRC 333, 337 (2011)
 - rationale for NRC's policy of generally disfavoring the filing of new contentions at the eleventh hour of an adjudication is based on the doctrine of finality, which states that at some point, an adjudicatory proceeding must come to an end; LBP-11-20, 74 NRC 77 (2011)
- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-11-2, 73 NRC 333, 338 (2011)
 - a request for hearing regarding a newly proffered contention cannot be admitted unless it satisfies the stringent standards for reopening the record; LBP-11-20, 74 NRC 77 n.75 (2011)
 - the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention; CLI-11-8, 74 NRC 222 n.39 (2011)
- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-11-2, 73 NRC 333, 338-39 (2011)
 - there simply would be no end to NRC licensing proceedings if petitioners could ignore timeliness requirements and add new contentions at their convenience based on information that could have formed the basis for a timely contention at the outset of the proceeding; LBP-11-20, 74 NRC 85 n.109 (2011)
- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-11-2, 73 NRC 333, 344 (2011)
 - an NRC Information Notice that merely summarized information that was previously available is not new information upon which a new contention can be based; LBP-11-20, 74 NRC 82-83 (2011)
- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-11-2, 73 NRC 333, 346 (2011)
 - the standard for a motion to reopen is measured using the Commission's test of whether it has been shown that a motion for summary disposition could be defeated; LBP-11-20, 74 NRC 81 n.94, 94 (2011); LBP-11-23, 74 NRC 321 n.169, 332 (2011)
- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-11-2, 73 NRC 333, 348 (2011)
 - intervenor did not come close to demonstrating a likelihood that it would have prevailed on the merits of a new contention and that its success would have materially altered the outcome of the proceeding; LBP-11-20, 74 NRC 83, 84 n.108 (2011)
- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-04-28, 60 NRC 548, 553 (2004)
 - extended power uprate proceedings trigger application of the 50-mile proximity presumption, given that such license applications entail an obvious increase in the potential for offsite consequences; LBP-11-29, 74 NRC 619 (2011)
- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-04-33, 60 NRC 749, 753 (2004)
 - a dynamic licensing process is followed in Commission licensing proceedings; LBP-11-22, 74 NRC 271 (2011)
- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-06-14, 63 NRC 568, 571-76 (2006)
 - new contentions filed after the record has closed must satisfy the timeliness requirement of either 10 C.F.R. 2.309(f)(2) or 2.309(c), and the admissibility requirements of section 2.309(f)(1); LBP-11-22, 74 NRC 269 (2011)
- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-07-15, 66 NRC 261, 266 n.11 (2007)
 - motions seeking admission of new or amended contentions must be filed within 30 days of the date the information that forms the basis for the contention becomes available; CLI-11-8, 74 NRC 218 n.8 (2011)
- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-10-19, 72 NRC 529, 531, 552 (Attach. A) (2010), aff'd, CLI-11-2, 73 NRC 333 (2011)
 - the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention; LBP-11-22, 74 NRC 269 (2011)

- Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-10-19, 72 NRC 529, 543-548 (2010)
 - amendment to aging management plan extended the AMP for medium-voltage cables to also cover low-voltage cables; LBP-11-20, 74 NRC 99 n.42 (2011)
- Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5, 39 (2005) for the mandatory uncontested proceeding on uranium enrichment facility license, a licensing board is to conduct a simple sufficiency review rather than a de novo review on both safety and environmental issues: LBP-11-26, 74 NRC 519 (2011)
- Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5, 39-40 (2005) NRC Staff's underlying technical and factual findings are not open to board reconsideration unless, after a review of the record, the board finds the NRC Staff review inadequate or its findings insufficient; LBP-11-26, 74 NRC 519 (2011)
- Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site), CLI-06-20, 64 NRC 15, 21-22 (2006) in a mandatory hearing, a licensing board must narrow its inquiry to those topics or sections in Staff documents that it deems most important and should concentrate on portions of the documents that do not on their face adequately explain the logic, underlying facts, and applicable regulations and guidance; LBP-11-26, 74 NRC 519-20 (2011)
- Fansteel, Inc. (Muskogee, Oklahoma, Site), CLI-03-13, 58 NRC 195, 203 (2003) mere notice pleading is insufficient for contention admission; LBP-11-21, 74 NRC 125 (2011) petitioner cannot rest its contentions on bare assertions and speculation; LBP-11-21, 74 NRC 128, 133 (2011)
- Fansteel, Inc. (Muskogee, Oklahoma, Site), CLI-03-13, 58 NRC 195, 204-05 (2003) boards will not hunt for information that the agency's procedural rules require be explicitly identified and fully explained; CLI-11-8, 74 NRC 222 (2011)
- FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), LBP-11-34, 74 NRC 685 (2011)
 - Fukushima-related contentions were dismissed as premature; LBP-11-39, 74 NRC 870 (2011)
- FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), LBP-11-34, 74 NRC 685, 689 (2011)
 - admissibility of Fukushima-related contentions is determined; LBP-11-37, 74 NRC 779 n.3 (2011)
- FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), LBP-11-34, 74 NRC 685, 696-97 (2011)
 - Fukushima-related contention is denied for failure of its proponent to contact the other parties to resolve the issue presented by the contention prior to its submission, for failure to show that the contention is within the scope of the proceeding or is material to the findings NRC must make, and for failure to reference any specific portion of the application at issue; LBP-11-37, 74 NRC 783 n.6 (2011)
- FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), LBP-11-34, 74 NRC 685, 697-98 (2011)
 - absent voluntary action by applicant to amend its environmental report, intervenor wishing to raise new or revised post-ER environmental concerns must await issuance of Staff's draft environmental impact statement; LBP-11-37, 74 NRC 784 (2011)
- FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), LBP-11-34, 74 NRC 685, 698-99 (2011)
 - Fukushima-related contention based on a Staff Requirements Memorandum are inadmissible because the SRM does not define or impose any new requirements arising from the Fukushima accident and thus fails to establish a genuine dispute on a material issue of law or fact; LBP-11-37, 74 NRC 784 n.7 (2011)
- Florida Power & Light Co. v. Lorion, 470 U.S. 729, 731 (1985)
 - for contentions that fall within the facility's current licensing basis, petitioner may seek action on its concerns by either filing a petition for rulemaking under 10 C.F.R. 2.802 or submitting an enforcement petition under 10 C.F.R. 2.206; LBP-11-21, 74 NRC 134 n.115 (2011)

- Florida Power & Light Co. (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-06-21, 64 NRC 30, 33 (2006)
 - failure to read NRC regulations carefully does not constitute good cause for accepting late-filed petitions; LBP-11-34, 74 NRC 693 (2011)
- Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989)
 - in reactor license renewal proceedings, petitioner is presumed to have standing to intervene without the need to specifically plead injury, causation, and redressability if petitioner lives within 50 miles of the nuclear power facility; LBP-11-21, 74 NRC 122 (2011)
- Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329-30 (1989)
 - in license amendment proceedings, petitioners may not claim standing simply upon a residence or visits near the plant, unless the proposed action quite obviously entails an increased potential for offsite consequences; LBP-11-29, 74 NRC 616 (2011)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), ALAB-950, 33 NRC 492, 500-01 (1991)
 - a licensing board was not in error in finding a person not competent to address technical issues in responding to a motion for summary disposition; LBP-11-23, 74 NRC 332 (2011)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-91-13, 34 NRC 185, 188 (1991)
 - licensing boards may not raise issues sua sponte when the sole intervenor has withdrawn from the proceeding; LBP-11-22, 74 NRC 282 (2011)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-91-13, 34 NRC 185, 188 n.1 (1991)
 - adjudicatory proceedings terminate if intervenor either settles or abandons all of its contentions; LBP-11-22, 74 NRC 271 n.64 (2011)
 - once the sole intervenor in a proceeding withdraws, the proceeding is been brought to a close; LBP-11-22, 74 NRC 282 (2011)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 7 (2001)
 - relevant issues for an additional 20 years of reactor plant operation differ from those when a reactor plant is first built and licensed; LBP-11-21, 74 NRC 129 (2011)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 7-8 (2001)
 - license renewal safety review is limited to the matters specified in 10 C.F.R. Part 54, which focus on the management of aging for certain systems, structures, and components, and the review of time-limited aging analyses; LBP-11-21, 74 NRC 126 (2011)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 8 (2001)
 - applicants must demonstrate how their programs will be effective in managing the effects of aging during the proposed period of extended operation, at a detailed component and structure level, rather than at a more generalized system level; LBP-11-21, 74 NRC 126-27 (2011)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 9 (2001)
 - entertaining contentions in a license renewal proceeding that challenge the current licensing basis would be both unnecessary and wasteful given ongoing agency oversight, review, and enforcement; LBP-11-21, 74 NRC 127 (2011)
 - many safety questions that relate to plant aging become important during the extended renewal term since the design of some components may have been based upon a service lifetime of only 40 years; LBP-11-21, 74 NRC 129 (2011)
 - the current licensing basis includes licensee's commitments remaining in effect that were made in docketed licensing correspondence such as licensee responses to NRC bulletins, generic letters, and enforcement actions, as well as licensee commitments documented in NRC safety evaluations or licensee event reports; LBP-11-21, 74 NRC 130 n.86 (2011)

- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 9-10 (2001)
 - while the license renewal process seeks to mitigate the detrimental effects of aging from operation beyond the initial license term, everyday public health and safety are ensured by the comprehensive and continuous process of operational oversight; LBP-11-21, 74 NRC 130 (2011)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 10 (2001)
 - safety culture, operational history, quality assurance, quality control, management competence, human factors, and emergency planning issues are beyond the scope of a license renewal proceeding; LBP-11-21, 74 NRC 129-30 (2011)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 11 (2001)
 - Category 1 issues are not subject to challenge in a relicensing proceeding, absent a waiver, because they involve environmental effects that are essentially similar for all plants and need not be assessed repeatedly on a site-specific basis; LBP-11-21, 74 NRC 132 (2011)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 13 (2001)
 - the aging-based safety review set out in Part 54 is analytically separate from Part 51's environmental inquiry and does not in any sense restrict NEPA; LBP-11-17, 74 NRC 21 (2011)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-6, 73 NRC 149, 169 n.13 (2011)
 - organizations may claim standing on their own behalf; LBP-11-29, 74 NRC 617 n.15 (2011)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-33, 74 NRC 675 (2011)
 - Fukushima-related contentions were dismissed as premature; LBP-11-39, 74 NRC 870 (2011)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-33, 74 NRC 675, 678-79 (2011)
 - admissibility of Fukushima-related contentions is determined; LBP-11-37, 74 NRC 779 n.3(2011)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-33, 74 NRC 675, 681 n.9 (2011)
 - applicant may update an environmental report if relevant new and significant information becomes available, but is under no regulatory or statutory obligation to effect such an update; LBP-11-34, 74 NRC 697 n.78 (2011)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-33, 74 NRC 675, 681-82 (2011)
 - absent voluntary action by applicant to amend its environmental report, intervenor wishing to raise new or revised post-ER environmental concerns must await issuance of Staff's draft environmental impact statement; LBP-11-37, 74 NRC 784 (2011)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-33, 74 NRC 675, 682 n.12 (2011)
 - petitioners may amend their contentions or file new contentions if the draft supplemental environmental impact statement differs significantly from the data or conclusions in applicant's documents; LBP-11-34, 74 NRC 698 (2011)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-33, 74 NRC 675, 683 (2011)
 - Fukushima-related contention based on a Staff Requirements Memorandum are inadmissible because the SRM does not define or impose any new requirements arising from the Fukushima accident and thus fails to establish a genuine dispute on a material issue of law or fact; LBP-11-37, 74 NRC 784 n.7 (2011)
 - issuance of a Staff Requirements Memorandum directing Staff to implement "without delay" the recommendations of the Fukushima Task Force does not render contentions admissible; LBP-11-36, 74 NRC 772 (2011)

- Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111 118-22 (1995)
 - admission of a management integrity contention relied on references to a serious incident involving shutdown of the reactor, management responsible for the incident remained in place, and a purported climate of reprisals for bringing forward safety issues, and reference to at least one expert witness in support of the contention; CLI-11-11, 74 NRC 436 n.47 (2011)
- Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 120 (1995)
 - past or current performance could inform the review of a license renewal application; CLI-11-11, 74 NRC 433 (2011)
- Georgia Power Co. (Vogtle Electric Generating Plant, Units 1 and 2), CLI-93-16, 38 NRC 25, 31-32 (1993) challenges to an applicant's or licensee's character require sufficient support; CLI-11-9, 74 NRC 249 n.92 (2011)
- GPU Nuclear, Inc. (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 207 (2000) absent documentary support, NRC has declined to assume that licensees will contravene its regulations; CLI-11-9, 74 NRC 249 n.92 (2011)
 - inspection reports could be seen as objective evidence that applicant may not adequately manage aging in the future; CLI-11-11, 74 NRC 433 n.28 (2011)
- GPU Nuclear, Inc. (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 208 (2000) bare assertions and speculation do not meet the Commission's standard of a concise statement of the alleged facts or expert opinions together with references to the specific sources and documents upon which the petitioner relies; LBP-11-21, 74 NRC 133 (2011)
- GUARD v. NRC, 753 F.2d 1144, 1146 (D.C. Cir. 1985)
 - NRC is bound by the unambiguous language of its own regulations; LBP-11-22, 74 NRC 276 (2011)
- Gulf States Utilities Co. (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 51 (1994)
 lack of clarity about which electrical cables might be subject to any saltwater environment, however high or low the concentration, and about the effects of and efforts to address this, is a level of concern sufficient to warrant further inquiry and exploration; LBP-11-20, 74 NRC 113-14 (2011)
- Heartland Regional Medical Center v. Leavitt, 415 F.3d 24, 29-30 (D.C. Cir. 2005) an agency that cures a problem identified by a court is free to reinstate the original result on remand; CLI-11-12, 74 NRC 469 n.20 (2011)
- Hells Canyon Alliance v. U.S. Forest Service, 227 F.3d 1170, 1185 (9th Cir. 2000) for a mitigation analysis, NEPA demands no fully developed plan or detailed examination of specific measures that will be employed to mitigate adverse environmental effects; LBP-11-23, 74 NRC 330
- Houston Lighting and Power Co. (South Texas Project, Units 1 and 2), LBP-85-8, 21 NRC 516, 519 (1985) licensing boards may raise significant environmental and safety issues sua sponte; LBP-11-23, 74 NRC 367 (2011)
- Huang v. Immigration and Naturalization Service, 47 F.3d 615, 617-18 (3d Cir. 1995) notice of appeal of immigration judge's deportation order was timely filed because regulations governing timing of appeals were ambiguous; LBP-11-19, 74 NRC 63 n.12 (2011)
- Hydro Resources, Inc. (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-99-22, 50 NRC 3, 14
 - new information requiring NRC Staff to prepare supplemental environmental review documents must present a seriously different picture of the environmental impact of the proposed project from what was previously envisioned; LBP-11-27, 74 NRC 601 (2011)
 - the measure of "significance" is whether the new information presents a seriously different picture of the environmental impact of the proposed project from what was previously envisioned; LBP-11-35, 74 NRC 751 n.218 (2011)
 - to merit additional NRC Staff environmental review, new information must present a seriously different picture of the environmental impact of the proposed project from what was previously envisioned; CLI-11-5, 74 NRC 168 (2011)
- Hydro Resources, Inc. (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 55 (2001) reasonable alternatives under NEPA are limited to those alternatives that will bring about the ends of the proposed action; LBP-11-21, 74 NRC 137 (2011)

- Hydro Resources, Inc. (P.O. Box 15910, Rio Rancho, NM 87174), CLI-04-39, 60 NRC 657, 659 (2004) agency decisions regarding the need to supplement an environmental impact statement based on new and significant information are subject to the rule of reason; LBP-11-26, 74 NRC 536 n.13 (2011)
- Hydro Resources, Inc. (P.O. Box 777, Crownpoint, NM 87313), CLI-06-9, 64 NRC 417, 419 (2006) the Fukushima accident does not provide a seriously different picture of the environmental impact of the proposed uranium enrichment facility from what was previously envisioned; LBP-11-26, 74 NRC 536 n.13 (2011)
- Hydro Resources, Inc. (P.O. Box 777, Crownpoint, NM 87313), LBP-06-19, 64 NRC 53, 62 (2006) the twin aims of NEPA require the agency to consider all environmental impacts of a proposed action and to inform the public that it has conducted that review; LBP-11-17, 74 NRC 26 nn.70 (2011)
- International Uranium (USA) Corp. (White Mesa Uranium Mill), CLI-01-21, 54 NRC 247, 252 (2001) organizations may claim standing on their own behalf; LBP-11-29, 74 NRC 617 n.15 (2011)
- Interstate Commerce Commission v. Jersey City, 322 U.S. 503, 514-15 (1944)
- rehearings are not matters of right, but are pleas to discretion; LBP-11-20, 74 NRC 77 n.77 (2011) Investment Co. Institute v. Board of Governors of the Federal Reserve System, 551 F.2d 1270, 1282-83
- Investment Co. Institute v. Board of Governors of the Federal Reserve System, 551 F.2d 1270, 1282-83 (D.C. Cir. 1977)
 - applicant is excused from filing in the wrong court because the rules are unclear; LBP-11-19, 74 NRC 63 n.12 (2011)
- Kansas Gas & Electric Co. (Wolf Creek Generating Station, Unit 1), ALAB-462, 7 NRC 320, 338 (1978) proponents of motions to reopen the record bear a heavy burden; LBP-11-22, 74 NRC 270 (2011)
- Kerr-McGee Chemical Corp. (West Chicago Rare Earths Facility), CLI-96-2, 43 NRC 13, 15 (1996) although transfer of pending license applications to an agreement state is not precluded on the ground that NRC and licensee had already devoted resources to the application when it was before the NRC, litigation at NRC had actually reached the point of NRC approval of an onsite plan at the time of the transfer of authority; CLI-11-12, 74 NRC 486 n.104 (2011)
- Kleppe v. Sierra Club, 427 U.S. 390, 410 n.21 (1976)
 - the only role for a court is to ensure that the agency has taken a hard look at environmental consequences; LBP-11-17, 74 NRC 22 n.52 (2011)
- Limerick Ecology Action, Inc. v. NRC, 869 F.2d 719 (3d Cir. 1989)
 - NRC must include consideration of certain severe accident mitigation alternatives in environmental reviews performed under NEPA § 102(2) in conjunction with operating license applications; CLI-11-5, 74 NRC 167 n.100 (2011)
- Limerick Ecology Action, Inc. v. NRC, 869 F.2d 719, 737 (3d Cir. 1989)
 - it cannot be said that consideration of Fukushima-related issues could not affect the ultimate decision on a license renewal application; LBP-11-35, 74 NRC 766 (2011)
- Limerick Ecology Action. Inc. v. NRC. 869 F.2d 719. 739 (3d Cir. 1989)
 - consideration of remote and speculative impacts is not required by NEPA; LBP-11-38, 74 NRC 859 (2011)
- Long Island Lighting Co. (Shoreham Nuclear Power Station), ALAB-156, 6 AEC 831, 836 (1973) according to the rule of reason, an agency need only address reasonably foreseeable impacts, not those that are remote and speculative or inconsequentially small; LBP-11-38, 74 NRC 831 (2011) NEPA's hard look at environmental impacts is tempered by a rule of reason; LBP-11-38, 74 NRC 831 (2011)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-900, 28 NRC 275, 288 (1988)
 NRC is bound by the unambiguous language of its own regulations; LBP-11-22, 74 NRC 276 (2011)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), LBP-83-30, 17 NRC 1132, 1135, 1138
 - standards for reopening the record clearly do apply to a proposed new contention after all issues, except matters unrelated to the proposed new contention, have been litigated and the record has been closed; LBP-11-20, 74 NRC 77 n.75 (2011)
- Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 87-88 (1998) in assessing greenhouse gas impacts, NRC must devote its resources to taking a hard look at the issue: LBP-11-26, 74 NRC 545 (2011)

- NEPA does not mandate substantive results but rather imposes procedural restraints on agencies, requiring them to take a hard look at the environmental impacts of a proposed action and reasonable alternatives to that action: LBP-11-38. 74 NRC 830 (2011)
- NEPA's procedural obligation is carried out through an agency's issuance of an environmental impact statement documenting the agency's hard look at potential environmental impacts of the proposed action and reasonable alternatives thereto; LBP-11-39, 74 NRC 868 (2011)
- Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 88 (1998) taking a hard look at environmental impacts fosters both informed decisionmaking and informed public participation, and thus ensures that NRC does not act on incomplete information, only to regret its decision after it is too late to correct it; LBP-11-26, 74 NRC 545 (2011); LBP-11-38, 74 NRC 831 (2011)
- Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 89 (1998) the adjudicatory record, board decision, and any Commission appellate decisions become, in effect, part of the final environmental impact statement; CLI-11-6, 74 NRC 209 (2011); LBP-11-38, 74 NRC 832 (2011)
- Louisiana Energy Services, L.P. (Claiborne Enrichment Center), LBP-96-25, 44 NRC 331, 338-39 (1996) applicant may bear the burden of proof on contentions asserting deficiencies in its environmental report and where the applicant becomes a proponent of a particular challenged position set forth in the environmental impact statement; LBP-11-38, 74 NRC 830 (2011)
- Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-04-25, 60 NRC 223, 225 (2004) replies may not contain new information that was not raised in either the petition or answers, but arguments that respond to the petition or answers are not precluded, whether they are offered in rebuttal or in support; CLI-11-14, 74 NRC 809 n.45 (2011)
- Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-04-32, 60 NRC 223, 224 (2004) reply briefs cannot be used to present entirely new facts or arguments in an attempt to reinvigorate thinly supported contentions; LBP-11-34, 74 NRC 694 (2011)
- Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-06-22, 64 NRC 37, 46 (2006) new material is outside the proper scope of a reply; CLI-11-14, 74 NRC 809 n.45 (2011)
- Louisiana Energy Services, L.P. (National Enrichment Facility), LBP-05-13, 61 NRC 385, 443, petition for review denied, CLI-05-28, 62 NRC 721, 726 (2005)
 - previously recognized availability policy for domestic enrichment services supports a NEPA finding of a need for the construction and operation of uranium enrichment facilities; LBP-11-26, 74 NRC 533 (2011)
- Louisiana Energy Services, L.P. (National Enrichment Facility), LBP-05-13, 61 NRC 385, 444-45, petition for review denied, CLI-05-28, 62 NRC 721, 726 (2005)
 - evidence of significant actual utility commitments provides a compelling showing in support of the need for uranium enrichment facility; LBP-11-26, 74 NRC 535 (2011)
- Louisiana Energy Services, L.P. (National Enrichment Facility), LBP-06-8, 63 NRC 241, 258-59 (2006) NEPA's hard look at environmental impacts is tempered by a rule of reason; LBP-11-38, 74 NRC 831 (2011)
- Louisiana Power and Light Co. (Waterford Steam Electric Station, Unit 3), CLI-86-1, 23 NRC 1, 4-5 (1986)
 - licensing boards are discouraged from adding material to bolster a petitioner's or party's arguments or pleadings; CLI-11-11, 74 NRC 447 n.113 (2011)
- Louisiana Power and Light Co. (Waterford Steam Electric Station, Unit 3), CLI-86-1, 23 NRC 1, 5 (1986) the burden of satisfying the reopening requirements is a heavy one, and proponents of a reopening motion bear the burden of meeting all of the requirements; LBP-11-20, 74 NRC 81 (2011)
- Luminant Generation Co., LLC (Comanche Peak Nuclear Power Plant, Units 3 and 4), LBP-11-4, 73 NRC 91, 128 (2011)
 - the licensing board chose to terminate the adjudications when faced with no pending contentions, but did not state that it was compelled to do so by Commission precedent or agency regulation; LBP-11-22, 74 NRC 285 (2011)

- Luminant Generation Co., LLC (Comanche Peak Nuclear Power Plant, Units 3 and 4), LBP-11-36, 74 NRC 768, 771-72 (2011)
 - Fukushima-related contention based on a Staff Requirements Memorandum are inadmissible because the SRM does not define or impose any new requirements arising from the Fukushima accident and thus fails to establish a genuine dispute on a material issue of law or fact; LBP-11-37, 74 NRC 784 n.7 (2011)
- Marsh v. Oregon Natural Resources Council, 490 U.S. 360 (1989)
 - although petitioner's participation may broaden or delay the proceeding, this factor may not be relied on to exclude a contention, because NRC has a duty to consider new and significant information that arises before it makes its licensing decisions; LBP-11-35, 74 NRC 738 (2011)
- Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 371 (1989)
 - taking a hard look at environmental impacts fosters both informed decisionmaking and informed public participation, and thus ensures that NRC does not act on incomplete information, only to regret its decision after it is too late to correct it; LBP-11-26, 74 NRC 545 (2011); LBP-11-38, 74 NRC 831 (2011)
- Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 371 n.14 (1989) environmental implications of new and significant information must be considered under NEPA before NRC may grant renewed operating licenses; LBP-11-32, 74 NRC 663 (2011)
- Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 372-73, 374 (1989)
 - even if severe accidents are not yet all conclusively understood, the environmental impacts of relicensing may affect the quality of the human environment in a significant manner or to a significant extent not already considered; LBP-11-23, 74 NRC 351 (2011)
- Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 373 (1989)
 - a requirement to supplement environmental analysis every time any new information, such as recommended but not yet adopted regulatory reform, comes to light would render agency decisionmaking intractable, always awaiting updated information only to find the new information outdated by the time a decision is made; LBP-11-28, 74 NRC 610 (2011)
 - to merit additional NRC Staff environmental review, new information must present a seriously different picture of the environmental impact of the proposed project from what was previously envisioned; CLI-11-5, 74 NRC 168 (2011)
- Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 373-74 (1989)
 - agency decisions regarding the need to supplement an environmental impact statement based on new and significant information are subject to the rule of reason; LBP-11-26, 74 NRC 536 n.13 (2011)
- Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 385 (1989)
 - the fundamental purpose of the National Environmental Policy Act is to help public officials make decisions that are based on understanding of environmental consequences, and make decisions that protect, restore, and enhance the environment; LBP-11-23, 74 NRC 329 (2011)
- Massachusetts v. NRC, 522 F.3d 115, 130 (1st Cir. 2008)
 - NEPA does not mandate how an agency must fulfill its obligations under the statute; LBP-11-23, 74 NRC 331 (2011)
- Massachusetts v. NRC, 878 F.2d 1516, 1520 (1st Cir. 1989)
 - for contentions that fall within the facility's current licensing basis, petitioner may seek action on its concerns by either filing a petition for rulemaking under 10 C.F.R. 2.802 or submitting an enforcement petition under 10 C.F.R. 2.206; LBP-11-21, 74 NRC 134 n.115 (2011)
- Massachusetts v. NRC, 924 F.2d 311, 333-36 (D.C. Cir. 1991)
 - parties were not permitted to raise issues or there was no opportunity for hearing on a particular issue; LBP-11-20, 74 NRC 91 n.3 (2011)
- Mississippi Power & Light Co. (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-130, 6 AEC 423, 426 (1973)
 - boards do not adjudicate disputed facts at the contention admission stage; LBP-11-21, 74 NRC 125 (2011)

- National Treasury Employees Union v. Federal Labor Relations Authority, 30 F.3d 1510, 1514 (D.C. Cir. 1004)
 - agencies can reach exactly the same result on a remanded issue as long as they rely on the correct view of a law that they previously misinterpreted, or as long as they explain themselves better or develop better evidence for their position; CLI-11-12, 74 NRC 469 n.20 (2011)
- Natural Resources Defense Council, Inc. v. Hodel, 865 F.2d 288, 294 (D.C. Cir. 1988)
 - for a mitigation analysis, NEPA demands no fully developed plan or detailed examination of specific measures that will be employed to mitigate adverse environmental effects; LBP-11-23, 74 NRC 330 (2011)
- New Jersey Environmental Federation v. NRC, No. 09-2567, 2011 WL 1878642, at *7 (3rd Cir. May 18, 2011)
 - licensing board's ruling denying admission of a contention challenging an enhanced monitoring program adopted by applicant because intervenor had not challenged the original unenhanced monitoring program was reasonable and not an abuse of discretion; LBP-11-20, 74 NRC 98 (2011)
- New Jersey Environmental Federation v. NRC, No. 09-2567, 2011 WL 1878642, at *9-10 (3rd Cir. May 18, 2011)
 - if a proceeding remains opens only on a limited issue, intervenors must submit a motion to reopen to address any genuinely new issues related to the license renewal application that previously could not have been raised; LBP-11-20, 74 NRC 92 (2011)
- New Mexico ex rel. Richardson v. Bureau of Land Management, 565 F.3d 683, 708 (10th Cir. 2009) without substantive, comparative environmental impact information regarding other possible courses of action, the ability of an environmental impact statement to inform agency deliberation and facilitate public involvement would be greatly degraded; LBP-11-23, 74 NRC 331 (2011)
- NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), LBP-11-2, 73 NRC 28, 53-56 (2011) affidavit supporting motion to reopen renders contention admissible; LBP-11-20, 74 NRC 102 n.59 (2011)
- NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), LBP-11-28, 74 NRC 604 (2011) Fukushima-related contentions were dismissed as premature; LBP-11-39, 74 NRC 870 (2011)
- NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), LBP-11-28, 74 NRC 604, 606-07 (2011) admissibility of Fukushima-related contentions is determined; LBP-11-37, 74 NRC 779 n.3 (2011)
- NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), LBP-11-28, 74 NRC 604, 609 (2011) petitioner has not provided a potentially plausible case that the Task Force findings and recommendations on the Fukushima accident will paint a seriously different picture of the environmental impacts; LBP-11-32, 74 NRC 671 (2011)
- NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), LBP-11-28, 74 NRC 604, 609-10 (2011) intervenor's challenge to NRC's compliance with NEPA in light of the NRC's Fukushima Task Force Report is premature; LBP-11-33, 74 NRC 681-82 (2011)
- NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), LBP-11-28, 74 NRC 610 & n.35 (2011) in the future the Commission might provide relevant guidance regarding the proper time frame for adjudicating Fukushima-related contentions; LBP-11-39, 74 NRC 871 n.42 (2011)
- North Atlantic Energy Service Corp. (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 219 (1999) at the contention pleading stage, parties must come forward with sufficiently detailed grievances to allow a board to conclude that genuine disputes exist justifying a commitment of adjudicatory resources; LBP-11-21, 74 NRC 133 (2011)
- Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481, 484 (2010)
 - a board erred in admitting a contention pertaining to a plant's safety culture; CLI-11-11, 74 NRC 435 (2011)
- Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481, 490 (2010)
 - license renewal should not include a new, broad-scoped inquiry into compliance that is separate from and parallel to ongoing compliance oversight activity; CLI-11-11, 74 NRC 435 (2011)

- Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481 491 (2010)
 - conceptual issues such as operational history, quality assurance, quality control, management competence, and human factors are excluded from license renewal review in favor of a safety-related review focusing on maintaining particular functions of certain physical systems, structures, and components; CLI-11-11, 74 NRC 435 (2011)
 - operating license renewal applicants must make a detailed assessment, conducted on passive, safety-related physical systems, structures, and components of the plant; LBP-11-21, 74 NRC 129 (2011)
 - safety culture, operational history, quality assurance, quality control, management competence, human factors, and emergency planning issues are beyond the scope of a license renewal proceeding; LBP-11-21, 74 NRC 129-30 (2011)
- Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481, 492 (2010)
 - NRC's license renewal process concerns a particularized and limited inquiry into the potential impacts of an additional 20 years of nuclear power plant operation, not day-to-day operational issues; LBP-11-21, 74 NRC 129 (2011)
 - to the extent petitioner believes there are existing management competence questions that merit immediate action, then its remedy is to direct Staff's attention to those matters by filing a request for action under 10 C.F.R. 2.206; CLI-11-11, 74 NRC 437 (2011)
- Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481, 493 n.56 (2010)
 - although sufficiency of the application and NRC Staff's environmental review of that application are proper targets of contentions, sufficiency of Staff's safety review of the application is not; LBP-11-29, 74 NRC 620 n.37 (2011)
 - intervention petitioners may not challenge the adequacy of the safety evaluation report, but may file contentions challenging the combined license application based on new information in the SER; LBP-11-22, 74 NRC 273 n.72 (2011)
- Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481, 493-94 (2010)
 - a safety evaluation report did not add a last piece of information, but merely compiled and organized preexisting information; CLI-11-8, 74 NRC 225 (2011)
- Northside Sanitary Landfill, Inc. v. Thomas, 849 F.2d 1516, 1520 (D.C. Cir. 1988)
 - dialogue between administrative agencies and the public is a two-way street; CLI-11-12, 74 NRC 488 (2011)
- Nuclear Fuel Services, Inc. (Erwin, Tennessee), LBP-05-8, 61 NRC 202, 207 (2005)
 - NEPA imposes a procedural requirement on an agency's decisionmaking process by mandating that an agency consider the environmental impacts of a proposed action and inform the public that it has taken those impacts into account in making its decision; LBP-11-17, 74 NRC 22 n.52 (2011)
- Nuclear Information and Resource Service v. NRC, 918 F.2d 189, 195 (1990), aff'd and rev'd on reh'g on other grounds, 969 F.2d 1169 (D.C. Cir. 1992)
 - although the Commission retains broad authority to define standards and thresholds for determining when new information raises a material issue of a plant's conformity with the Atomic Energy Act, if such information is presented, it must provide a hearing upon request; LBP-11-22, 74 NRC 282 (2011)
 - arbitrary and unreasonable restrictions on the right to a hearing would violate AEA § 189a; LBP-11-22, 74 NRC 282 (2011)
- Nuclear Innovation North America LLC (South Texas Project, Units 3 and 4) CLI-11-06, 74 NRC 203, 208-09 (2011)
 - the adjudicatory record and board decision and any Commission appellate decisions become, in effect, part of the final environmental impact statement; LBP-11-38, 74 NRC 832 (2011)
- Nuclear Innovation North America LLC (South Texas Project, Units 3 and 4), CLI-11-6, 74 NRC 203, 210-11 (2011)
 - Fukushima-related petitions for suspension of proceeding and rescission of regulations that make generic conclusions about environmental impacts of severe reactor and spent fuel pool accidents and

- that preclude consideration of those issues in individual licensing proceedings are denied; LBP-11-39, 74 NRC 865 n.5 (2011)
- Nuclear Innovation North America LLC (South Texas Project, Units 3 and 4), LBP-11-7, 73 NRC 254, 277-80 (2011)
 - new contentions may be admitted as long as they meet the timeliness criteria in 10 C.F.R. 2.309(f)(2) or the nontimely contention criteria in section 2.309(c)(1) and fulfill the contention admissibility requirements of 10 C.F.R. 2.309(f)(1); LBP-11-39, 74 NRC 866 (2011)
- Nuclear Innovation North America LLC (South Texas Project, Units 3 and 4), LBP-11-7, 73 NRC 254, 292-93 (2011)
 - at the contention admissibility stage, petitioners need not marshal their evidence as though preparing for an evidentiary hearing; LBP-11-21, 74 NRC 125 n.46 (2011)
- Nuclear Management Co., LLC (Monticello Nuclear Generating Plant), CLI-06-6, 63 NRC 161, 163 (2006) judicial concepts of standing are generally followed in NRC proceedings; LBP-11-21, 74 NRC 121 (2011)
- Nuclear Management Co., LLC (Palisades Nuclear Plant), CLI-06-17, 63 NRC 727, 732 (2006)
 - if a contention as originally pleaded did not satisfy 10 C.F.R. 2.309(f)(1), a reply cannot remediate the deficiency by introducing, for the first time, references to a genuine dispute with the license application at issue; LBP-11-34, 74 NRC 694 n.62 (2011)
 - reply briefs must focus narrowly on the legal or factual arguments first presented in the original motion or petition or raised in the answers to it; LBP-11-34, 74 NRC 694 (2011)
- Nuclear Management Co., LLC (Palisades Nuclear Plant), LBP-06-10, 63 NRC 314, 352 (2006) petitioner's assertion that recriticality is demonstrated by the relative quantities of radionuclides released is not self-evident and is clearly of the class of statements that must be supported by expert opinion: LBP-11-23, 74 NRC 306 (2011)
- Pa'ina Hawaii, LLC, CLI-10-18, 72 NRC 56, 74 (2010)
 - because NEPA is premised on a rule of reason, NRC need only consider reasonable alternatives to a proposed action; LBP-11-26, 74 NRC 545 (2011)
 - in assessing greenhouse gas impacts, NRC must devote its resources to taking a hard look at the issue: LBP-11-26, 74 NRC 545 (2011)
 - NRC must rigorously explore and objectively analyze environmental impacts, so that merely offering general statements about possible effects and some risk does not constitute a hard look absent a justification regarding why more definitive information could not be provided; LBP-11-26, 74 NRC 545 (2011); LBP-11-38, 74 NRC 830-31 (2011)
- Pacific Gas & Electric Co. v. State Energy Resource Conservation & Development Commission, 461 U.S. 190, 209 (1983)
 - the 1959 amendments to the Atomic Energy Act were intended generally to increase the states' role in regulation of nuclear materials; CLI-11-12, 74 NRC 473-74 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-410, 5 NRC 1398, 1405 (1977)
 - expert witnesses must have the requisite education, training, skill, or experience in operation of a nuclear power plant or in probabilistic risk assessment to support a contention; LBP-11-35, 74 NRC 737 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-756, 18 NRC 1340, 1344 (1983)
 - proponents of motions to reopen the record bear a heavy burden; LBP-11-22, 74 NRC 270 (2011) reopening motions must show that a different result would have been reached initially if the material had been considered; LBP-11-20, 74 NRC 84 n.108 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-775, 19 NRC 1361, 1365-66 (1984)
 - reopening motions must show that a different result would have been reached initially if the material had been considered; LBP-11-20, 74 NRC 84 n.108 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-775, 19 NRC 1361, 1366 (1984)
 - for a reopening motion to be timely presented, movant must show that the issue sought to be raised could not have been raised earlier; LBP-11-20, 74 NRC 85 n.110 (2011)

- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-880, 26 NRC 449 460-61 (1987)
 - information may be unavoidably incomplete or unavailable, and under those circumstances, a final environmental impact statement can overcome this deficiency if it states that fact, explains how the missing information is relevant, sets forth the existing information, and evaluates the environmental impacts to the best of the agency's ability; CLI-11-11, 74 NRC 444 n.94 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-81-5, 13 NRC 361, 364-65 (1981)
 - in the post-TMI time frame, the Commission, although providing for some modified procedures, continued to apply existing rules for filing new contentions and motions to reopen the record; CLI-11-5, 74 NRC 170 (2011)
 - where initial decisions have been issued, the record should not be reopened to take evidence on some accident-related issue unless the party seeking reopening shows that there is significant new evidence, not included in the record, that materially affects the decision; CLI-11-5, 74 NRC 154 n.43 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-08-1, 67 NRC 1, 4-5 (2008)
 - within the geographic boundary of the Ninth Circuit, NRC may not categorically exclude NEPA terrorism contentions; CLI-11-11, 74 NRC 456 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 441-42 (2011)
 - the required level of demonstration by petitioners of cost-effectiveness of other severe accident mitigation alternatives is case and issue specific; LBP-11-35, 74 NRC 752 n.223 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 444 (2011)
 - NRC, as an independent regulatory agency, is not bound by those portions of Council on Environmental Quality NEPA regulations that have a substantive impact on the way in which the Commission performs its regulatory functions; LBP-11-35, 74 NRC 750 n.214 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 453 (2011)
 - NRC will evaluate all technical and policy issues related to the Fukushima event to identify potential research, generic issues, changes to the reactor oversight process, rulemakings, and adjustments to the regulatory framework that should be conducted by NRC; LBP-11-35, 74 NRC 761 n.241 (2011)
 - NRC's comprehensive evaluation of the Fukushima event includes consideration of those facilities that may be subject to seismic activity or tsunamis and of lessons learned that may apply to spent fuel pools that are part of the U.S. nuclear fleet; LBP-11-35, 74 NRC 761 n.241 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 457 (2011)
 - even assuming that petitioner intended to challenge the discussion of mitigation measures in applicant's environmental report, petitioner's unsupported statement falls short of the information required to show the existence of a genuine dispute; LBP-11-35, 74 NRC 758-59 n.237 (2011)
 - it is petitioner's responsibility to put others on notice as to the issues it seeks to litigate in the proceeding; LBP-11-35, 74 NRC 758-59 n.237 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 457-58 (2011)
 - NRC can and will make appropriate adjustments to regulatory requirements if necessary; LBP-11-35, 74 NRC 750 n.212 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-10-15, 72 NRC 257, 288 (2010)
 - the NEPA review in license renewal proceedings is not limited to aging management-related issues; LBP-11-17, 74 NRC 21 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-11-32, 74 NRC 654 (2011)
 - Fukushima-related contentions were dismissed as premature; LBP-11-39, 74 NRC 870 (2011)

- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-11-32, 74 NRC 654 658-60 (2011)
- admissibility of Fukushima-related contentions is determined; LBP-11-37, 74 NRC 779 n.3 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-11-32, 74 NRC 654, 665 (2011)
 - intervenor's challenge to NRC's compliance with NEPA in light of the NRC's Fukushima Task Force Report is premature; LBP-11-33, 74 NRC 681-82 (2011)
 - nothing in NEPA, which applies to agencies of the federal government, can be read to require an applicant to update its environmental report; LBP-11-34, 74 NRC 697 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-11-32, 74 NRC 654, 665-68 (2011)
 - petitioner's assertion that applicant's environmental report must be supplemented to take account of allegedly new and significant information is, as a procedural matter, unfounded and must be rejected; LBP-11-33, 74 NRC 681 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-11-32, 74 NRC 654, 665-70 (2011)
 - absent voluntary action by applicant to amend its environmental report, intervenor wishing to raise new or revised post-ER environmental concerns must await issuance of Staff's draft environmental impact statement; LBP-11-37, 74 NRC 784 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-11-32, 74 NRC 654, 671 (2011)
 - contention is inadmissible for failure to show that a genuine dispute exists with applicant on a material issue of law or fact; LBP-11-33, 74 NRC 683 (2011)
 - Fukushima-related contention based on a Staff Requirements Memorandum is inadmissible because the SRM does not define or impose any new requirements arising from the Fukushima accident and thus fails to establish a genuine dispute on a material issue of law or fact; LBP-11-37, 74 NRC 784 n.7 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-11-32, 74 NRC 654, 672-73 (2011)
 - issuance of a Staff Requirements Memorandum directing Staff to implement "without delay" the recommendations of the Fukushima Task Force does not render contentions admissible; LBP-11-36, 74 NRC 772 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-02-23, 56 NRC 230 (2002)
 - bearing in mind the history of Commission actions following the TMI accident, the Commission looks to the more recent post-9/11 suspension-of-proceedings cases for the framework under which it considers Fukushima-related petitions; CLI-11-5, 74 NRC 157 (2011)
 - petitions to suspend multiple license renewal proceedings in view of an Inspector General's report on the agency's license renewal process were considered pursuant to the Commission's inherent supervisory authority over agency proceedings; CLI-11-5, 74 NRC 158 (2011)
 - requests to suspend or hold proceedings in abeyance following the September 11 terrorist attacks, as well as more recently, were considered pursuant to the Commission's inherent supervisory authority over agency proceedings; CLI-11-5, 74 NRC 158 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-02-23, 56 NRC 230, 237 (2002)
 - although NRC rules require that motions be addressed to the presiding officer when a proceeding is pending, suspension motions are best addressed to the Commission; CLI-11-5, 74 NRC 158 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-02-23, 56 NRC 230, 239 (2002)
 - post-9/11 request for suspension of proceeding was denied because no danger to public health and safety would result from mere continuation of the adjudicatory proceeding; CLI-11-5, 74 NRC 161 (2011)

- Pacific Gas and Electric Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-1, 67 NRC 1, 5-8 (2008)
 - if good cause for late filing is not shown, boards may still permit the filing, but petitioner or intervenor must make a strong showing on the other factors; LBP-11-32, 74 NRC 662 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-26, 68 NRC 509, 521 (2008)
 - applicant in a licensing proceeding must meet its burden of proof by a preponderance of the evidence; LBP-11-38, 74 NRC 829 n.77 (2011)
- Pacific Gas and Electric Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-26, 68 NRC 509, 526 (2008), petition for review denied on other grounds, San Luis Obispo Mothers for Peace v. NRC, 635 F.3d 1109 (9th Cir. 2011)
 - NRC Staff's final environmental impact statement and the adjudicatory record become part of the environmental record of the decision; CLI-11-6, 74 NRC 209 (2011); LBP-11-38, 74 NRC 832 (2011)
- Pennsylvania Power & Light Co. (Susquehanna Steam Electric Station, Units 1 and 2), ALAB-693, 16 NRC 952, 955-56 (1982)
 - conclusory language is not sufficient to support an appeal; CLI-11-8, 74 NRC 225 (2011)
- Petition for Rulemaking to Amend 10 C.F.R. § 54.17(c), CLI-11-1, 73 NRC 1, 3 n.5 (2011)
 - the Commission may consider the rulemaking request of a nonparty as an exercise of its inherent supervisory powers over proceedings; CLI-11-5, 74 NRC 174 n.132 (2011)
- Petition for Rulemaking to Amend 10 C.F.R. § 54.17(c), CLI-11-1, 73 NRC 1, 5-6 (2011)
 - the ordinary burden to parties pursuing litigation pending the rulemaking do not justify disrupting ongoing reviews; CLI-11-5, 74 NRC 175 (2011)
- Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681, 705-07 (1985)
 - the adjudicatory record, board decision, and any Commission appellate decisions become, in effect, part of the final environmental impact statement; CLI-11-6, 74 NRC 209 (2011); LBP-11-38, 74 NRC 832 (2011)
- Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20-21 (1974)
 - a contention is inadmissible if it fails to raise a material issue in dispute or raises an issue that is not susceptible to resolution; LBP-11-23, 74 NRC 345 (2011)
 - challenges to the basic regulatory structure of NRC's design basis and generic environmental impacts already assessed through rulemaking are inadmissible; LBP-11-32, 74 NRC 663 (2011)
- Portland General Electric Co. (Trojan Nuclear Plant), ALAB-796, 21 NRC 4, 5 (1985)
 - adjudicatory proceedings terminate if intervenor either settles or abandons all of its contentions; LBP-11-22, 74 NRC 271 n.64 (2011)
 - if parties settle their dispute after a hearing, the board should dismiss the adjudication; LBP-11-22, 74 NRC 283 (2011)
- Potential Implications of Chernobyl Accident for All NRC-Licensed Facilities, DD-87-21, 26 NRC 520 (1987)
 - post-accident request for suspension of proceeding was denied because no danger to public health and safety would result from mere continuation of the adjudicatory proceeding; CLI-11-5, 74 NRC 161 (2011)
- Potomac Electric Power Co. (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79, 85, 89 (1974)
 - no rule or regulation of the Commission, or any provision thereof, concerning the licensing of production and utilization facilities, source material, special nuclear material, or byproduct material is subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding; CLI-11-8, 74 NRC 229 (2011)
- Powertech (USA), Inc. (Dewey-Burdock In Situ Uranium Recovery Facility), LBP-10-16, 72 NRC 361, 398 (2010)
 - boards will not hunt for information that the agency's procedural rules require be explicitly identified and fully explained; CLI-11-8, 74 NRC 222 (2011)

- PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), CLI-10-7, 71 NRC 133, 139 (2010) intervention petitioner bears the burden of providing facts sufficient to establish its standing; LBP-11-21, 74 NRC 122 (2011)
- PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), CLI-10-7, 71 NRC 133, 139-40 (2010) petitioner may correct or supplement its showing on standing; LBP-11-21, 74 NRC 123 (2011)
- PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), LBP-11-27, 74 NRC 591 (2011)
- Fukushima-related contentions were dismissed as premature; LBP-11-39, 74 NRC 870 (2011)
- PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), LBP-11-27, 74 NRC 591, 594 (2011), motion to reinstate contention denied, Luminant Generation Co., LLC (Comanche Peak Nuclear Power Plant, Units 3 and 4), LBP-11-36, 74 NRC 768 (2011)
 - admissibility of Fukushima-related contentions is determined; LBP-11-37, 74 NRC 779 n.3 (2011)
- PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), LBP-11-27, 74 NRC 591, 599-602 (2011) claims for relief from Fukushima-related events are premature; LBP-11-37, 74 NRC 783-84 (2011)
- PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), LBP-11-27, 74 NRC 591, 601-02 (2011)
 Fukushima-related contention was found inadmissible because it was premature; LBP-11-34, 74 NRC 699 (2011)
- PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), LBP-11-27, 74 NRC 591, 602 n.54 (2011) petitioner's attempt to tie NEPA environmental justice claim to Fukushima Task Force report is an improper effort to interpose concerns that could have been raised at the outset of the proceeding; LBP-11-37, 74 NRC 785 (2011)
- PPL Susquehanna, LLC (Susquehanna Steam Electric Station, Units 1 and 2), LBP-07-4, 65 NRC 281, 303-04 (2007)
 - bare assertions in a contention run afoul of NRC's intention to focus the hearing process and provide notice to the other parties; LBP-11-21, 74 NRC 128 (2011)
- PPL Susquehanna LLC (Susquehanna Steam Electric Station, Units 1 and 2), LBP-07-10, 66 NRC 1, 18, aff'd on other grounds, 66 NRC 101 (2007)
 - extended power uprate proceedings trigger application of the 50-mile proximity presumption, given that such license applications entail an obvious increase in the potential for offsite consequences; LBP-11-29, 74 NRC 619 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-00-24, 52 NRC 351, 353 (2000)
 - to the extent that the board's admissibility decisions regarding contentions are appealable at the end of the case, it makes sense for the board to consider all related arguments at the same time; CLI-11-6, 74 NRC 210 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-1, 53 NRC 1, 5 (2001) a board's disputed legal ruling does not necessarily warrant immediate interlocutory review; CLI-11-6, 74 NRC 208 n.31 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-12, 53 NRC 459, 461 (2001)
 - review of a board's certified question that raises a significant and novel issue whose early resolution will materially advance the orderly disposition of the proceeding is granted; CLI-11-4, 74 NRC 2 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376 (2001) petitions to suspend multiple license renewal proceedings in view of an Inspector General's report on the agency's license renewal process were considered pursuant to the Commission's inherent supervisory authority over agency proceedings; CLI-11-5, 74 NRC 158 (2011)
 - requests to suspend or hold proceedings in abeyance following the September 11 terrorist attacks, as well as more recently, were considered pursuant to the Commission's inherent supervisory authority over agency proceedings; CLI-11-5, 74 NRC 158 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 378 (2001)
 - post-9/11 suspension was neither necessary nor appropriate where shipments of spent fuel to the facility were at least 2 years down the road; CLI-11-5, 74 NRC 161 (2011)

- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 380 (2001)
 - for suspension of licensing proceedings, petitioners must show that continuation of proceedings, pending consideration of a rulemaking petition, would jeopardize the public health and safety, prove an obstacle to fair and efficient decisionmaking, or prevent appropriate implementation of any pertinent rule or policy changes that might emerge from NRC's continued evaluation of the impacts of the Fukushima accident; CLI-11-5, 74 NRC 158, 174 (2011); LBP-11-33, 74 NRC 691 (2011); LBP-11-34, 74 NRC 691 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 380-81 (2001)
 - petition for suspension of proceeding following 9/11 attack was denied because even if the licensing, construction, and shipping processes went forward as planned, no radiological materials would be present onsite for at least 2 years, so there was no immediate threat to public safety; CLI-11-5, 74 NRC 156 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 381 (2001)
 - NRC has a responsibility to go forward with other regulatory and enforcement activities even while the agency conducts its review of the Fukushima accident; CLI-11-5, 74 NRC 163-64 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 381-83 (2001)
 - petition for suspension of proceeding following 9/11 attack was denied because the interest in efficient adjudication would best be served if the proceeding went forward to resolve the numerous safety and environmental issues, many with no link to terrorism at issue; CLI-11-5, 74 NRC 157 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 383-84 (2001)
 - for licenses that NRC issues before completing its Fukushima review, any new Fukushima-driven requirements can be imposed later, if necessary to protect the public health and safety; CLI-11-5, 74 NRC 166 (2011)
 - petition for suspension of proceeding following 9/11 attack was denied because continuing the proceeding would not thwart regulatory review and suspending the proceeding was not necessary to guarantee that the full benefit of the agency's post-September 11 review would be realized at the proposed facility; CLI-11-5, 74 NRC 157 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348 (2002)
 - NEPA has a dual purpose of ensuring that federal officials fully take into account the environmental consequences of a federal action before reaching major decisions and informing the public, Congress, and other agencies of those consequences; LBP-11-35, 74 NRC 766 n.13 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 139 (2004)
 - mere notice pleading is insufficient for contention admission, but petitioner does not have to prove its contentions at the admissibility stage; LBP-11-21, 74 NRC 125 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-05-12, 61 NRC 345, 348 (2005)
 - parties seeking to reopen a closed record to introduce a new issue must back their claim with enough evidence to withstand summary disposition when measured against their opponent's contravening evidence; LBP-11-35, 74 NRC 732 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-05-12, 61 NRC 345, 350 (2005)
 - a party seeking to reopen a closed record to raise a new matter faces an elevated burden to lay a proper foundation for its claim; LBP-11-20, 74 NRC 84 n.108 (2011)
 - no reopening of the evidentiary hearing will be required if the documents submitted in response to the motion demonstrate that there is no genuine unresolved issue of fact; LBP-11-35, 74 NRC 732 (2011)

- the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention; CLI-11-8, 74 NRC 222 (2011); LBP-11-20, 74 NRC 77 n.75 (2011); LBP-11-22, 74 NRC 269 (2011)
- to justify granting a motion to reopen, the moving papers must be strong enough, in the light of any opposing filings, to avoid summary disposition; CLI-11-8, 74 NRC 222-23 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-05-12, 61 NRC 345, 350 n.18 (2005)
 - rationale for NRC's policy of generally disfavoring the filing of new contentions at the eleventh hour of an adjudication is based on the doctrine of finality, which states that at some point, an adjudicatory proceeding must come to an end; LBP-11-20, 74 NRC 77 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-05-19, 62 NRC 403, 406 (2005)
 - requirements for reopening a closed record were applied to a proposed new contention submitted after the licensing board had conducted a lengthy evidentiary hearing and both the board and the Commission had issued their decisions on the merits; LBP-11-22, 74 NRC 270 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-06-3, 63 NRC 19, 21-22 (2006)
 - parties may move to reopen the case to allow litigation of a new version of a previously rejected contention, even if the licensing board has closed the evidentiary record and the Commission had issued its final decision authorizing Staff to issue the license for the proposed facility; LBP-11-22, 74 NRC 268 n.43 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-06-3, 63 NRC 19, 21-23 (2006)
 - requirements for reopening a closed record were applied to a proposed new contention submitted after the licensing board had conducted a lengthy evidentiary hearing and both the board and the Commission had issued their decisions on the merits; LBP-11-22, 74 NRC 270 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-06-3, 63 NRC 19, 24 (2006) parties that have successfully intervened in a licensing proceeding may propose new contentions for litigation until the license is issued; LBP-11-22, 74 NRC 267-68 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-06-3, 63 NRC 19, 28 (2006) allegedly new and significant information must paint a seriously different picture of the environmental landscape; LBP-11-35, 74 NRC 729 (2011)
 - however "significance" is defined, the Fukushima accident and its aftermath have (as any such severe accident would do) clearly painted a seriously different picture of the environmental landscape; LBP-11-23, 74 NRC 329 (2011)
 - the standard for when an issue is "significant" in the context of reopening a closed record is the same as the standard for when supplementation of an environmental impact statement is required, i.e., the new and significant information must paint a seriously different picture of the environmental landscape; LBP-11-23, 74 NRC 301 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-06-3, 63 NRC 19, 29 (2006) environmental impact statements must be supplemented when there is new and significant information that will paint a seriously different picture of the environmental landscape; LBP-11-35, 74 NRC 751 n.217 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999)
 - failure to comply with any of the contention pleading requirements precludes admission of a contention; LBP-11-21, 74 NRC 125 (2011)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 179-80 (1998), aff'd in part, CLI-98-13, 48 NRC 26 (1998)
 - where a contention alleges a deficiency or error in the application, the deficiency or error must have some independent health and safety significance; LBP-11-23, 74 NRC 336 (2011)

- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-37, 54 NRC 476, 483-87 (2001), aff'd, CLI-02-25, 56 NRC 340, 357 (2002)
 - the board applied the late-filing standards to a post-9/11 contention related to the risk of a terrorist attack on the ISFSI and found the contention timely but denied admission of both its safety and environmental aspects; CLI-11-5, 74 NRC 170 (2011)
- Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-08-15, 68 NRC 1, 4 (2008)
 - challenging features of the AP1000 standard design is a matter for a design certification rulemaking, not a combined license proceeding; CLI-11-8, 74 NRC 230 (2011)
- Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-10-9, 71 NRC 245, 251 (2010)
 - appellants seeking oral argument must show how oral argument will assist the Commission in reaching a decision; CLI-11-8, 74 NRC 220 (2011)
- Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-10-9, 71 NRC 245, 278 n.205 (2010)
 - although the entire record is considered on appeal, including pleadings that appellants ask to be adopted by reference, the Commission's decision responds to the arguments made explicitly in the appellate brief; CLI-11-8, 74 NRC 219 (2011)
- Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-2, 71 NRC 27, 29, 46-48 (2010)
 - absent error of law or abuse of discretion, the Commission defers to licensing board rulings on contention admissibility; CLI-11-9, 74 NRC 237 (2011)
- Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-2, 71 NRC 27, 34 (2010), affirming LBP-09-10, 70 NRC 51, 87 (2009)
 - Part 51, not NEPA, is the source of the legal requirements applicable to the applicant's environmental report; LBP-11-32, 74 NRC 666 (2011)
- Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-2, 71 NRC 27, 46 (2010)
 - NEPA only mandates examination of reasonably foreseeable environmental impacts of a proposed project; LBP-11-33, 74 NRC 683 (2011)
 - the environmental impact statement's hard look must examine reasonably foreseeable environmental impacts emanating from the proposed action; LBP-11-39, 74 NRC 868 (2011)
- Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), CLI-11-10, 74 NRC 251, 254-56 (2011)
 - resolution of one contention where there are other contentions pending does not constitute disposition of a major segment of the case, because the outcome of a decision on the license renewal application is undetermined; CLI-11-14, 74 NRC 811 (2011)
- Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), CLI-11-10, 74 NRC 251, 255 (2011)
 - parties may file a petition for review of licensing board full or partial initial decisions, both of which are considered to be final; CLI-11-14, 74 NRC 810 (2011)
- Public Citizen v. NRC, 573 F.3d 916, 926 (9th Cir. 2009)
 - protecting against the threat of air attacks is not within licensees' responsibilities because a private security force cannot reasonably be expected to defend against such attacks and adequate protection is ensured through the actions of other federal agencies with defense capabilities and air-safety expertise; CLI-11-4, 74 NRC 6 n.26 (2011)
- Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-471, 7 NRC 477, 489 n.8 (1978), rev'd on other grounds, CLI-97-15, 46 NRC 294 (1997)
 - applicant may bear the burden of proof on contentions asserting deficiencies in its environmental report and where the applicant becomes a proponent of a particular challenged position set forth in the environmental impact statement; LBP-11-38, 74 NRC 830 (2011)
- Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-731, 17 NRC 1073, 1074-75 (1983)
 - a board order is appealable when it disposes of a major segment of the case or terminates a party's right to participate; CLI-11-10, 74 NRC 255 (2011)

- the basis for allowing immediate appellate review of partial initial decisions rests on prior appeal board decisions permitting review of a licensing board ruling that disposes of a major segment of the case or terminates a party's right to participate; CLI-11-14, 74 NRC 810-11 (2011)
- Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-886, 27 NRC 74, 78 (1988)
- when a motion to reopen is untimely, the section 2.326(a)(1) "exceptionally grave" test supplants the section 2.326(a)(2) "significant safety or environmental issue" test; CLI-11-8, 74 NRC 225 (2011)
- Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-899, 28 NRC 93, 97 & n.11 (1988), aff'd in part and remanded in part on other matters, Massachusetts v. NRC, 924 F.2d 311 (D.C. Cir.) (1991), cert. denied, 502 U.S. 899 (1991)
 - intervenor is not free to change the focus of its admitted contention, at will, as the litigation progresses; LBP-11-38, 74 NRC 833 (2011)
- Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-915, 29 NRC 427, 432 (1989)
 - licensing boards are discouraged from adding material to bolster a petitioner's or party's arguments or pleadings; CLI-11-11, 74 NRC 447 n.113 (2011)
- Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-940, 32 NRC 225, 243
 - to demonstrate a significant safety issue, petitioners must establish either that uncorrected errors endanger safe plant operation or that there has been a breakdown of the quality assurance program sufficient to raise legitimate doubt as to the plant's capability of being operated safely; LBP-11-35, 74 NRC 730, 750-51 (2011)
- Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-942, 32 NRC 395, 428 (1990)
 - lack of clarity about which electrical cables might be subject to any saltwater environment, however high or low the concentration, and about the effects of and efforts to address this, is a level of concern sufficient to warrant further inquiry and exploration; LBP-11-20, 74 NRC 113-14 (2011)
- Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), CLI-90-10, 32 NRC 218, 221 (1990)
 - the burden of satisfying the reopening requirements is a heavy one, and proponents must meet all requirements; LBP-11-20, 74 NRC 81 (2011)
- Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2), ALAB-573, 10 NRC 775, 787 (1979) conclusory language is not sufficient to support an appeal; CLI-11-8, 74 NRC 225 (2011)
- Riverkeeper, Inc. v. Collins, 359 F.3d 156, 158 (2d Cir. 2004)
 - for contentions that fall within the facility's current licensing basis, petitioner may seek action on its concerns by either filing a petition for rulemaking under 10 C.F.R. 2.802 or submitting an enforcement petition under 10 C.F.R. 2.206; LBP-11-21, 74 NRC 134 n.115 (2011)
- Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989)
 - NEPA has a dual purpose of ensuring that federal officials fully take into account the environmental consequences of a federal action before reaching major decisions and informing the public, Congress, and other agencies of those consequences; LBP-11-35, 74 NRC 766 n.13 (2011)
 - NEPA requires that agencies consider environmental impacts before decisions are made to ensure that important effects will not be overlooked or underestimated only to be discovered after resources have been committed; LBP-11-23, 74 NRC 351 (2011)
- Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349-50 (1989)
 - although NEPA does not mandate particular results, its purposes include ensuring that NRC, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts and will make available the relevant information to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision; LBP-11-23, 74 NRC 330 (2011)
 - without substantive, comparative environmental impact information regarding other possible courses of action, the ability of an environmental impact statement to inform agency deliberation and facilitate public involvement would be greatly degraded; LBP-11-23, 74 NRC 331 (2011)

- Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989)
 - NEPA does not mandate particular decisions that an agency must reach, only the process the agency must follow while reaching decisions; LBP-11-17, 74 NRC 27 n.77 (2011)
- Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350-51 (1989)
 - NEPA imposes procedural obligations on federal agencies proposing to take actions significantly affecting the quality of the human environment; LBP-11-39, 74 NRC 867-68 (2011)
- Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 351 (1989)
 - NEPA prohibits uninformed agency action; LBP-11-17, 74 NRC 27 (2011)
- Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 352 (1989)
 - sufficiency of NRC's hard look at the benefits of severe accident mitigation alternatives in comparison to their costs is subject to litigation in a license renewal proceeding; LBP-11-17, 74 NRC 21 (2011)
- Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 352-53 (1989) to the extent a board would have NRC Staff elaborate on its analysis, the board's decision does not appear patently unreasonable; CLI-11-14, 74 NRC 813 (2011)
- Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 353 (1989)
 - for a mitigation analysis, NEPA demands no fully developed plan or detailed examination of specific measures that will be employed to mitigate adverse environmental effects; LBP-11-23, 74 NRC 330 (2011)
- Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 353 n.16 (1989)
 - because NEPA imposes no substantive requirement that mitigation measures actually be taken, it should not be read to require agencies to obtain an assurance that third parties will implement particular measures; CLI-11-14, 74 NRC 813 n.68 (2011)
- Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 354-55, 359 (1989)
- NEPA does not require a worst-case analysis; LBP-11-38, 74 NRC 831 (2011)
- Robertson v. Methow Valley Citizens Counsel, 490 U.S. 332, 354-56 (1989)
 - the severe accident mitigation alternatives analysis is neither a worst-case nor a best-case impacts analysis; LBP-11-18, 74 NRC 37-38 (2011)
- Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993), review declined, CLI-94-2, 39 NRC 91 (1994)
 - petitions that lack alleged facts or expert opinions to support the contention are inadmissible; LBP-11-29, 74 NRC 621 (2011)
- San Luis Obispo Mothers for Peace v. NRC, 449 F.3d 1016 (9th Cir. 2006)
 - impacts of attacks on reactors are cognizable under NEPA, an evaluation of mitigation measures is required by NEPA and NRC regulations, and an evaluation of measures to mitigate attacks on nuclear reactors cannot be found in the license renewal generic environmental impact statement; CLI-11-11, 74 NRC 454 (2011)
- San Luis Obispo Mothers for Peace v. NRC, 751 F.2d 1287, 1316-17 (D.C. Cir. 1984), vacated in part, 760 F.2d 1320 (D.C. Cir. 1985) (en banc), and aff'd, 789 F.2d 26 (D.C. Cir. 1985) (en banc), cert. denied, 479 U.S. 923 (1986)
 - parties were not permitted to raise issues or there was no opportunity for hearing on a particular issue; LBP-11-20, 74 NRC 91 n.3 (2011)
- Save the Bay, Inc. v. U.S. Corps of Engineers, 610 F.2d 322, 326 (5th Cir. 1980)
 - NEPA applies to agencies of the federal government, not to private parties such as applicants for NRC licenses; LBP-11-32, 74 NRC 666 (2011)
- Scientists' Institute for Public Information, Inc. v. AEC, 481 F.2d 1079, 1092 (D.C. Cir. 1973) NEPA only requires reasonable forecasting; LBP-11-38, 74 NRC 831 (2011)
- Securities and Exchange Commission v. Chenery Corp., 318 U.S. 80 (1943)
 - a court cannot defer to interpretive proposals offered by counsel at oral argument and affirm on the basis of that reading when the statute does not plainly compel the reading being proposed; CLI-11-12, 74 NRC 470 (2011)
- Seminole Nation v. United States, 316 U.S. 286, 296-97 (1942)
 - the federal government bears a trust responsibility to Native American tribes, and the NRC, as a federal agency, owes a fiduciary duty to tribes and their members; LBP-11-30, 74 NRC 632 (2011)

- Sequoyah Fuels Corp., CLI-94-4, 39 NRC 187, 189 n.1 (1994)
 - replies may not contain new information that was not raised in either the petition or answers, but arguments that respond to the petition or answers are not precluded, whether they are offered in rebuttal or in support; CLI-11-14, 74 NRC 809 (2011)
- Sequoyah Fuels Corp. and General Atomics (Gore, Oklahoma Site), CLI-94-11, 40 NRC 55, 59 n.2 (1994) although the Atomic Safety and Licensing Appeal Panel is no longer in existence, the decisions of its appeals boards continue to be binding to the degree they concern a regulation or regulatory matter that has not been revised or otherwise materially altered; LBP-11-34, 74 NRC 696 n.70 (2011)
- Sequoyah Fuels Corp. and General Atomics (Gore, Oklahoma Site), CLI-94-11, 40 NRC 55, 61-62 (1994) labor and expense of pursuing litigation that petitioner sought to curtail do not constitute irreparable harm; CLI-11-10, 74 NRC 256 n.24 (2011)
- Sequoyah Fuels Corp. and General Atomics (Gore, Oklahoma Site), CLI-94-11, 40 NRC 55, 62-63 (1994) expansion of issues for litigation that results from a board action does not have a pervasive and unusual effect on the litigation; CLI-11-10, 74 NRC 256 n.24 (2011)
- Shaw AREVA MOX Services, LLC (Mixed Oxide Fuel Fabrication Facility), CLI-09-2, 69 NRC 55, 63 (2009)
 - licensing boards lack authority to direct the Staff's nonadjudicatory actions; CLI-11-14, 74 NRC 813 n.70 (2011)
- Shaw AREVA MOX Services, LLC (Mixed Oxide Fuel Fabrication Facility), CLI-09-2, 69 NRC 55, 65 (2009)
 - if intervenors file a new or amended contention, with supporting materials, within 60 days after pertinent information first becomes available, then the contention will be deemed timely filed and intervenors will not have to satisfy the late-filing requirements of 10 C.F.R. 2.309(c) or the requirements for reopening the record; LBP-11-22, 74 NRC 281 (2011)
- Shaw AREVA MOX Services, LLC (Mixed Oxide Fuel Fabrication Facility), CLI-09-2, 69 NRC 55, 65-66 n.48 (2009)
 - reopening the record is an extraordinary action and proponents bear a heavy burden; LBP-11-22, 74 NRC 269-70 (2011)
- Shaw AREVA MOX Services, LLC (Mixed Oxide Fuel Fabrication Facility), CLI-09-2, 69 NRC 55, 66 (2009)
 - adjudications must have a defined endpoint; LBP-11-22, 74 NRC 273 (2011)
- Shieldalloy Metallurgical Corp. v. NRC, 624 F.3d 489, 492-93 (D.C. Cir. 2010)
 - federal agencies would be acting arbitrarily and capriciously if they did not look at relevant data and sufficiently explain a rational nexus between the facts found in their review and the choice they make as a result of that review; LBP-11-17, 74 NRC 22-23 (2011)
- Shieldalloy Metallurgical Corp. v. NRC, 624 F.3d 489, 494 (D.C. Cir. 2010)
 - state requests for limited agreements will be considered by NRC only if the state can identify discrete categories of material or classes of licensed activity that can be reserved to NRC authority without undue confusion to the regulated community or burden to NRC resources and can be applied logically and consistently to existing and future licensees over time; CLI-11-12, 74 NRC 469-70 (2011)
- Shieldalloy Metallurgical Corp. v. NRC, 624 F.3d 489, 495 (D.C. Cir. 2010)
 - NRC has discretion to negotiate the terms of an agreement with a state requesting authority over nuclear materials; CLI-11-12, 74 NRC 474 (2011)
- Shieldalloy Metallurgical Corp. (Decommissioning of the Newfield, New Jersey Facility), CLI-09-1, 69 NRC 1, 5 (2009)
 - unrestricted release is the preferable method for terminating radioactive materials licenses; CLI-11-12, 74 NRC 491 (2011)
- Sierra Club v. Environmental Protection Agency, 995 F.2d 1478, 1485 (9th Cir. 1993)
 - NEPA applies to agencies of the federal government, not to private parties such as applicants for NRC licenses; LBP-11-32, 74 NRC 666 (2011)
- Sierra Club v. Froehlke, 816 F.2d 205, 210 (5th Cir. 1987)
 - agency decisions regarding the need to supplement an environmental impact statement based on new and significant information are subject to the rule of reason; LBP-11-26, 74 NRC 536 n.13 (2011)

- to merit additional NRC Staff environmental review, new information must present a seriously different picture of the environmental impact of the proposed project than what was previously envisioned; CLI-11-5, 74 NRC 168 (2011)
- Sierra Club v. Marsh, 976 F.2d 763 (1st Cir. 1992)
 - the environmental impact statement's hard look must examine reasonably foreseeable environmental impacts emanating from the proposed action; LBP-11-39, 74 NRC 868 (2011)
- South Carolina Electric & Gas Co. (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 7 (2010)
- petitioner may correct or supplement its showing on standing; LBP-11-21, 74 NRC 123 (2011)
- South Carolina Electric & Gas Co. (Virgil C. Summer Nuclear Station, Units 2 and 3), LBP-10-6, 71 NRC 350, 357-58, 385-86 (2010), aff'd, CLI-10-21, 72 NRC 197 (2010)
 - the licensing board terminated the proceeding on remand from the Commission when it found that petitioners had proffered no admissible contentions; LBP-11-22, 74 NRC 283 (2011)
- South Texas Project Nuclear Operating Co. (South Texas Project, Units 3 and 4), CLI-10-16, 71 NRC 486, 489-90 (2010)
 - piecemeal appeals during ongoing licensing board proceedings are generally disfavored; CLI-11-6, 74 NRC 210 (2011)
- South Texas Project Nuclear Operating Co. (South Texas Project, Units 3 and 4), LBP-10-2, 71 NRC 190, 209-10 (2010)
 - standards for admission of new contentions are reviewed; LBP-11-25, 74 NRC 389 (2011)
- South Texas Project Nuclear Operating Co. (South Texas Project, Units 3 and 4), LBP-10-14, 72 NRC 101, 107-09 (2010)
 - new contentions may be admitted as long as they meet the timeliness criteria in 10 C.F.R. 2.309(f)(2) or the nontimely contention criteria in section 2.309(c)(1) and fulfill the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1); LBP-11-39, 74 NRC 866 (2011)
 - standards for admission of new contentions are reviewed; LBP-11-25, 74 NRC 389 (2011)
- Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), CLI-07-17, 65 NRC 392, 394 (2007)
 - completion of NRC Staff's final environmental review document always must precede the conduct of hearings on environmental issues; LBP-11-30, 74 NRC 631 (2011)
- Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), CLI-07-17, 65 NRC 392, 395 (2007)
 - boards may not commence a hearing on environmental issues before the final environmental impact statement is issued, and may only commence a hearing with respect to safety issues prior to issuance of the final safety evaluation report if it will expedite the proceeding without adversely impacting the Staff's ability to complete its evaluations in a timely manner; LBP-11-22, 74 NRC 272 n.69 (2011)
- Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), CLI-10-5, 71 NRC 90, 100 (2010) the scope of a contention is limited to the issues of law and fact pleaded with particularity in the contention and any factual and legal material in support thereof; LBP-11-38, 74 NRC 833 (2011)
- Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-09-7, 69 NRC 613, 631-32 (2009)
 - environmental impact statements are subject to a rule of reason that grants the agency a degree of deference exempting it from examining impacts that it in good faith deems to be remote and speculative or inconsequentially small; LBP-11-39, 74 NRC 868 (2011)
- Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-09-19, 70 NRC 433, 503-04 (2009)
 - there is no agency requirement that applicant submit a redress plan relative to preconstruction activities or, absent state or local requirements, take any remediation action regarding preconstruction activities if it decides not to complete the project or is denied agency authorization to construct and operate the facility; LBP-11-26, 74 NRC 539 (2011)
- Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), LBP-09-3, 69 NRC 139, 154 (2009)
 - petitions that lack alleged facts or expert opinions to support the contention are inadmissible; LBP-11-29, 74 NRC 621 (2011)

- Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), LBP-10-8, 71 NRC 433 (2010)
 - the low-level radioactive waste plan outlined in applicant's final safety analysis report complies with 10 C.F.R. 52.97(a)(3); CLI-11-10, 74 NRC 256-57 (2011)
- Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), LBP-10-8, 71 NRC 433, 447 (2010)
 - the licensing board chose to terminate the adjudications when faced with no pending contentions, but did not state that it was compelled to do so by Commission precedent or agency regulation; LBP-11-22, 74 NRC 285 (2011)
- Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), LBP-10-21, 72 NRC 616, 630, 631-32, 644-47, 648-58 (2010)
 - the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel appointed a new board (consisting of the same members as the old board), which held that the new contention submitted after termination of the proceeding did not meet the reopening standard, deemed that contention untimely and inadmissible, and again terminated the adjudicatory proceeding; LBP-11-22, 74 NRC 285 n.136 (2011)
- Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), LBP-10-21, 72 NRC 616, 631-32, 644-47 (2010)
 - a newly constituted board applied the reopening standard to new contentions filed after the prior proceeding was terminated for want of pending or admitted contentions; LBP-11-22, 74 NRC 269 n.50 (2011)
- Statement of Policy on Adjudicatory Proceedings, CLI-98-12, 48 NRC 18 (1998)
 - NRC has a responsibility to go forward with other regulatory and enforcement activities even while the agency conducts its review of the Fukushima accident: CLI-11-5, 74 NRC 163-64 (2011)
- Statement of Policy on Conduct of Licensing Proceedings, CLI-81-8, 13 NRC 452, 454 (1981) parties' other professional obligations do not relieve them of their obligations to meet regulatory deadlines; LBP-11-34, 74 NRC 693 n.52 (2011)
- Statement of Policy: Further Commission Guidance for Power Reactor Operating Licenses, CLI-80-42, 12 NRC 654, 661 (1980)
 - in the post-TMI time frame, the Commission, although providing for some modified procedures, continued to apply the existing rules for filing new contentions and motions to reopen the record; CLI-11-5, 74 NRC 170 (2011)
- System Energy Resources, Inc. (Early Site Permit for Grand Gulf ESP Site), CLI-07-10, 65 NRC 144, 146 (2007)
 - within the geographic boundary of the Ninth Circuit, NRC may not exclude NEPA terrorism contentions categorically; CLI-11-11, 74 NRC 456 (2011)
- Tennessee Valley Authority (Bellefonte Nuclear Plants, Units 1 and 2), CLI-10-26, 73 NRC 474, 476 (2010) parties' other professional obligations do not relieve them of their obligations to meet regulatory deadlines; LBP-11-34, 74 NRC 693 n.52 (2011)
- Tennessee Valley Authority (Bellefonte Nuclear Power Plant, Units 3 and 4), LBP-11-37, 74 NRC 774 (2011)
 - Fukushima-related contentions were dismissed as premature; LBP-11-39, 74 NRC 870 (2011)
- Tennessee Valley Authority (Hartsville Nuclear Plant, Units 1A, 2A, 1B, and 2B), ALAB-380, 5 NRC 572 (1977)
 - licensing boards may raise significant environmental and safety issues sua sponte; LBP-11-23, 74 NRC 367 (2011)
- Tennessee Valley Authority (Sequoyah Nuclear Plant, Units 1 and 2; Watts Bar Nuclear Plant, Unit 1), LBP-02-14, 56 NRC 15, 23 (2002)
 - statutes articulating the relevant zone of interests in NRC proceedings are the Atomic Energy Act and the National Environmental Policy Act; LBP-11-29, 74 NRC 616 n.10 (2011)
- Tennessee Valley Authority (Watts Bar Nuclear Plant, Unit 2), CLI-10-12, 71 NRC 319, 322-23 (2010) in weighing the timeliness factors for motions to reopen, greatest weight is accorded to good cause for failure to file on time; CLI-11-8, 74 NRC 227 (2011)

- Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Unit 1), ALAB-868, 25 NRC 912, 924 n 42 (1987)
 - an issue on appeal is not properly briefed by incorporating by reference papers filed with the licensing board; CLI-11-8, 74 NRC 219 n.13 (2011)
- Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Unit 2), CLI-93-2, 37 NRC 55, 59 n.4 (1993)
 - appellants seeking oral argument must show how oral argument will assist the Commission in reaching a decision; CLI-11-8, 74 NRC 220 (2011)
- Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Unit 2), CLI-93-11, 37 NRC 251, 255 (1993)
 - petitioner's failure to specifically address the section 2.309(c)(1) factors in its motion to reopen is a potentially fatal omission; CLI-11-8, 74 NRC 227 n.59 (2011)
- Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 NRC 370, 384 (1992)
 - petitions that lack alleged facts or expert opinions to support the contention are inadmissible; LBP-11-29, 74 NRC 621 (2011)
- Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Units 1 and 2), CLI-92-1, 35 NRC 1, 6 n.5 (1992)
 - despite rulings dismissing a contention as moot and declining to admit two other contentions, the licensing proceeding remains in existence; LBP-11-22, 74 NRC 267 (2011)
- Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Units 1 and 2), CLI-92-12, 36 NRC 62, 68-69 (1992)
 - appellants seeking oral argument must show how oral argument will assist the Commission in reaching a decision: CLJ-11-8, 74 NRC 220 (2011)
- Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Units 1 and 2), CLI-92-12, 36 NRC 62, 69-73 (1992)
 - petitioner must act reasonably and promptly after learning of the new information on which its motion to reopen is based; LBP-11-23, 74 NRC 328 (2011)
- Toledo Edison Co. (Davis-Besse Nuclear Power Station), ALAB-300, 2 NRC 752, 758 (1975) board orders are appealable when they dispose of a major segment of the case or terminate a party's right to participate; CLI-11-10, 74 NRC 255 (2011)
- Town of Winthrop v. Federal Aviation Administration, 535 F.3d 1, 11-13 (1st Cir. 2008) for a mitigation analysis, NEPA demands no fully developed plan or detailed examination of specific measures that will be employed to mitigate adverse environmental effects; LBP-11-23, 74 NRC 330 (2011)
- U.S. Department of Energy (High-Level Waste Repository), CLI-08-12, 67 NRC 386, 393 (2008) filings not otherwise authorized by NRC rules are allowed only where necessity or fairness dictates; CLI-11-14, 74 NRC 807 (2011)
- U.S. Department of Energy (High-Level Waste Repository), CLI-10-13, 71 NRC 387, 388 n.6 (2010) the Commission disfavors requests to invoke its inherent supervisory authority over adjudications; CLI-11-13, 74 NRC 637 n.11 (2011)
- U.S. Department of Energy (High-Level Waste Repository), LBP-08-10, 67 NRC 450, 455 (2008) rarely should the basis for a contention require more than a sentence or two; LBP-11-34, 74 NRC 699 n.89 (2011)
- U.S. Department of Energy (High-Level Waste Repository), LBP-09-6, 69 NRC 367, 416 (2009) requiring petitioners to proffer additional and conclusive support for the effect of their proposed contention would improperly require boards to adjudicate the merits of contentions before admitting them; LBP-11-21, 74 NRC 125 n.46 (2011); LBP-11-25, 74 NRC 397 n.111 (2011)
- U.S. Enrichment Corp. (Paducah, Kentucky Gaseous Diffusion Plant), CLI-01-23, 54 NRC 267, 272 (2001) in NRC proceedings, pro se litigants are generally not held to the same high standards of pleading and practice as parties with counsel; LBP-11-20, 74 NRC 96 n.26 (2011); LBP-11-23, 74 NRC 333 n.23 (2011)
- U.S. Postal Service v. Gregory, 534 U.S. 1, 10 (2001)
 - Staff's deference to the expertise of other federal and state agencies to set and monitor the financial soundness of institutions issuing letters of credit is reasonable; CLI-11-4, 74 NRC 6 n.27 (2011)

- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141 (2011)
 - new contentions on the safety and environmental implications of the NRC Task Force Report on the Fukushima Dai-ichi accident are premature and must be denied on that basis without regard to any other considerations; LBP-11-27, 74 NRC 595 (2011); LBP-11-37, 74 NRC 783 (2011)
 - the Commission declined to suspend adjudications or any final licensing decisions because of the Fukushima accident, finding no imminent risk to public health and safety or to common defense and security; CLI-11-8, 74 NRC 232 (2011); CLI-11-10, 74 NRC 257 n.28 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 145-46 (2011)
 - requests to suspend ongoing adjudicatory and licensing activities pending full consideration of the safety and environmental implications of the Fukushima accident are denied; LBP-11-34, 74 NRC 689 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 146 (2011)
 NRC understanding of the details of the failure modes at the Fukushima Dai-ichi site continues to evolve and NRC continues to learn more about the extent of the damage at the site; LBP-11-28, 74 NRC 607 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 147 (2011) the Fukushima Task Force was to review NRC processes and regulations to determine, among other
 - things, whether the agency should make additional improvements to its regulatory system; LBP-11-27, 74 NRC 594 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 147-48 n.6 (2011) any changes adopted as a result of the Fukushima accident or the Task Force Report can and will be implemented through the normal regulatory process; LBP-11-28, 74 NRC 607 (2011); LBP-11-32, 74 NRC 659 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 147-49 (2011)
 NRC continues to consider the nuclear events in Japan, and the agency is in the process of implementing and prioritizing actions to be taken in response to the Fukushima accident; CLI-11-14, 74 NRC 812 n.66 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 152-56 (2011)
 Commission responses to requests for suspension of reactor licensing reviews and associated adjudications in the wake of the Three Mile Island accident and 9/11 terrorist attacks are discussed; LBP-11-37, 74 NRC 784 n.8 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 161 (2011)
 lack of a specific link between the relief requested and the particulars of the individual applications makes it difficult to conclude that moving forward with any individual licensing decision or proceeding will have a negative impact on public health and safety; LBP-11-35, 74 NRC 716 n.63
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 163 (2011)
 - for pending license renewal applications, where the period of extended operation will not begin for at least a year, there is no imminent threat to public health and safety that requires suspension of licensing proceedings or decisions; LBP-11-35, 74 NRC 710 (2011)
 - NRC has the authority to ensure that certified designs and combined licenses include appropriate Commission-directed changes before operation; CLI-11-6, 74 NRC 211 (2011); CLI-11-8, 74 NRC 232 (2011); CLI-11-10, 74 NRC 257 n.28 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 163-64 (2011)
 - it is unnecessary to cease current licensing activities because NRC has authority to, and will, address Fukushima-related matters with future rulemaking and requirements to be applied to then-operating plants if the information it obtains so warrants; LBP-11-35, 74 NRC 745 n.200 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 164 (2011)
 - NRC's ongoing regulatory and oversight processes provide reasonable assurance that each facility complies with its current licensing basis, which can be adjusted by future Commission order or by modification to the facility's operating license outside the renewal proceeding; CLI-11-11, 74 NRC 458 (2011); LBP-11-35, 74 NRC 713 (2011)
 - the Commission does not believe that an imminent risk will exist during the time period needed to apply any necessary Fukushima-related changes to operating plants, whether a license renewal application is pending or not; LBP-11-35, 74 NRC 749 n.212 (2011)

- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 164-65 (2011) speculatory support for petitioners' request that licensing decisions be put on hold until NRC has completed its Fukushima studies and developed appropriate information is insufficient; LBP-11-35, 74 NRC 749 n 211 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 166 (2011)
 - for licenses that NRC issues before completing its Fukushima review, any new Fukushima-driven requirements can be imposed later, if necessary to protect the public health and safety; LBP-11-35, 74 NRC 749 n.212 (2011)
 - moving forward with decisions and proceedings will have no effect on NRC's ability to implement necessary rule or policy changes that might come out of its review of the Fukushima accident; LBP-11-32, 74 NRC 659 (2011); LBP-11-35, 74 NRC 710-11 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 166-67 (2011)
 - although the Task Force Report on the Fukushima accident did not justify initiating a generic NEPA review, the Commission acknowledged that new and significant information may come to light that must be considered in individual reactor licensing proceedings; LBP-11-32, 74 NRC 664 (2011)
 - NRC need not conduct a separate generic NEPA analysis regarding whether the Fukushima events constitute new and significant information under NEPA that must be analyzed as a part of the environmental review for new reactor and license renewal decisions; LBP-11-32, 74 NRC 659 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 167 (2011) because the full implications of the Fukushima events for U.S. facilities are unknown, any generic
 - NEPA duty is premature; LBP-11-27, 74 NRC 600-01 (2011); LBP-11-28, 74 NRC 608 (2011); LBP-11-32, 74 NRC 659 (2011); LBP-11-33, 74 NRC 682 (2011)
 - if new and significant Fukushima-related information comes to light that requires consideration as part of the ongoing preparation of application-specific NEPA documents, the agency will assess the significance of that information, as appropriate; LBP-11-33, 74 NRC 682 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 167, 170-71 (2011)
 - the Commission declined to provide guidance as to when a Fukushima contention, challenging an individual environmental impact statement, would be mature; LBP-11-32, 74 NRC 669 n.34 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 167-68 (2011) new information requiring NRC Staff to prepare supplemental environmental review documents must present a seriously different picture of the environmental impact of the proposed project than what was previously envisioned; LBP-11-27, 74 NRC 601 (2011); LBP-11-28, 74 NRC 609 (2011);
 - LBP-11-39, 74 NRC 868 (2011) the measure of "significance" is whether the new information presents a seriously different picture of the environmental impact of the proposed project from what was previously envisioned; LBP-11-35, 74 NRC 751 n.218 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 169 (2011)
 - NRC regulations and case law already provide clear and uniform standards to determine the timeliness of motions to add new contentions on the Fukushima accident; LBP-11-32, 74 NRC 660 (2011)
 - NRC rules deliberately place a heavy burden on proponents of contentions, who must challenge aspects of license applications with specificity, backed up with substantive technical support, mere conclusions or speculation being insufficient; LBP-11-35, 74 NRC 718 n.70, 751 n.219 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 170 (2011)
 - boards are encouraged to seek guidance from the Commission with regard to new contentions based on the Fukushima accident: LBP-11-32, 74 NRC 671 (2011)
 - individual reactor adjudications should go forward, including those that may involve proposed contentions based on issues implicated by the Fukushima events; LBP-11-32, 74 NRC 660 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 171 (2011)
 - in the future the Commission might provide relevant guidance regarding the proper time frame for adjudicating Fukushima-related contentions; LBP-11-39, 74 NRC 871 n.42 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 174 (2011)
 - for suspension of licensing proceedings, petitioners must show that continuation of proceedings, pending consideration of a rulemaking petition, would jeopardize the public health and safety, prove an obstacle to fair and efficient decisionmaking, or prevent appropriate implementation of any

- pertinent rule or policy changes that might emerge from NRC's continued evaluation of the impacts of the Fukushima accident; LBP-11-33, 74 NRC 679 n.5 (2011); LBP-11-34, 74 NRC 691 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 174-75 (2011)
 - depending on the timing and outcome of the NRC Staff's resolution of Fukushima-related rulemaking petitions, the Staff itself could seek Commission permission to suspend one or more of the generic determinations in the license renewal environmental rules and include a new analysis in pending, plant-specific environmental impact statements; LBP-11-35, 74 NRC 761 n.241 (2011)
 - spent fuel storage pool matters will be addressed, if studies of implications from Fukushima warrant, through more generic regulatory reform; LBP-11-35, 74 NRC 717 (2011)
- Union Electric Co. (Callaway Plant, Unit 2), CLI-11-5, 74 NRC 141, 175-76 (2011)
 - Fukushima-related contentions were denied as premature; LBP-11-36, 74 NRC 770 (2011)
 - Fukushima-related petitions for suspension of proceeding and rescission of regulations that make generic conclusions about environmental impacts of severe reactor and spent fuel pool accidents and that preclude consideration of those issues in individual licensing proceedings are denied; LBP-11-33, 74 NRC 678 (2011); LBP-11-39, 74 NRC 865 n.5 (2011)
- Union of Concerned Scientists v. NRC, 735 F.2d 1437, 1443 (D.C. Cir. 1984)
 - Atomic Energy Act §189a has been interpreted to require that hearings must encompass all material factors bearing on the licensing decision raised by the requester; LBP-11-22, 74 NRC 269, 270, 275 (2011)
- Union of Concerned Scientists v. NRC, 735 F.2d 1437, 1444-45 (D.C. Cir. 1984)
 - parties were not permitted to raise issues or there was no opportunity for hearing on a particular issue; LBP-11-20, 74 NRC 91 n.3 (2011)
- Union of Concerned Scientists v. NRC, 735 F.2d 1437, 1447 (D.C. Cir. 1984)
 - the Atomic Energy Act does not grant NRC the discretion to eliminate from the hearing, material issues in its licensing decision; LBP-11-22, 74 NRC 282 (2011)
- Union of Concerned Scientists v. NRC, 920 F.2d 50, 55 n.4 (D.C. Cir. 1990)
 - for contentions that fall within the facility's current licensing basis, petitioner may seek action on its concerns by either filing a petition for rulemaking under 10 C.F.R. 2.802 or submitting an enforcement petition under 10 C.F.R. 2.206; LBP-11-21, 74 NRC 134 n.115 (2011)
- Union of Concerned Scientists v. NRC, 920 F.2d 50, 55-56 (D.C. Cir. 1990)
 - NRC may impose reasonable requirements on new contentions when those requirements are related to legitimate agency goals such as avoiding needless duplication and delay; LBP-11-22, 74 NRC 282 (2011)
- United States v. Chemical Foundation, Inc., 272 U.S. 1, 14-15 (1926)
 - a presumption of regularity attaches to the actions of government agencies; CLI-11-4, 74 NRC 6 n.27 (2011)
- United States v. Mead Corp., 533 U.S. 218 (2001)
 - a court cannot defer to interpretive proposals offered by counsel at oral argument and affirm on the basis of that reading when the statute does not plainly compel the reading being proposed; CLI-11-12, 74 NRC 470-71 (2011)
- United States v. Mitchell, 463 U.S. 206, 224 (1983)
 - the federal government bears a trust responsibility to Native American tribes, and the NRC, as a federal agency, owes a fiduciary duty to tribes and their members; LBP-11-30, 74 NRC 632 (2011)
- United States v. Monzel, Nos. 11-3008, 11-3009, 2011 WL 1466365 at *2 (D.C. Cir. Apr. 19, 2011)
 - "shall" is a term of legal significance, in that it is mandatory or imperative, not merely precatory; CLI-11-12, 74 NRC 472 n.36 (2011)
- USEC Inc. (American Centrifuge Plant), CLI-06-9, 63 NRC 433, 437 (2006)
 - contention admissibility standards are deliberately strict, and any contention that does not satisfy NRC requirements will be rejected; CLI-11-8, 74 NRC 228 (2011)
- USEC Inc. (American Centrifuge Plant), CLI-06-9, 63 NRC 433, 439 (2006)
 - replies may not contain new information that was not raised in either the petition or answers, but arguments that respond to the petition or answers are not precluded, whether they are offered in rebuttal or in support; CLI-11-14, 74 NRC 809 n.45 (2011)

- USEC Inc. (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 457 (2006)
 - it is not up to boards to search through pleadings or other materials to uncover arguments and support never advanced by intervenors; LBP-11-34, 74 NRC 697 (2011)
- USEC Inc. (American Centrifuge Plant), LBP-07-6, 65 NRC 429, 473 (2007)
 - previously recognized availability policy for domestic enrichment services supports a NEPA finding of a need for the construction and operation of uranium enrichment facilities; LBP-11-26, 74 NRC 533 (2011)
- Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 548 (1978)
 - NEPA does not mandate how an agency must fulfill its obligations under the statute; LBP-11-23, 74 NRC 331 (2011)
- Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 551, 553 (1978)
 - the impact of Fukushima-related issues on pending applications should be analyzed at a time and in a manner that fully takes into account not every alternative device and thought conceivable by the mind of man, but every significant aspect of the environmental impact of the sought license renewal; LBP-11-35, 74 NRC 766 n.13 (2011)
- Vermont Yankee Nuclear Power Corp. v. NRC, 435 U.S. 519, 554 (1978)
 - lack of clarity about which electrical cables might be subject to any saltwater environment, however high or low the concentration, and about the effects of and efforts to address this, is a level of concern sufficient to warrant further inquiry and exploration; LBP-11-20, 74 NRC 113-14 (2011)
- Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), ALAB-138, 6 AEC 520, 523 (1973)
 - for a reopening motion to be timely presented, movant must show that the issue sought to be raised could not have been raised earlier; LBP-11-20, 74 NRC 85 n.110 (2011)
 - to justify granting a motion to reopen, the moving papers must be strong enough, in the light of any opposing filings, to avoid summary disposition; CLI-11-8, 74 NRC 223 (2011)
- Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 44 (1989)
 - consideration of remote and speculative impacts is not required by NEPA; LBP-11-38, 74 NRC 859 (2011)
 - NRC may decline to examine remote and speculative risks or events with inconsequentially small probabilities; LBP-11-26, 74 NRC 545 (2011)
- Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 163 (2000)
 - when seeking to intervene in a representational capacity, an organization must identify at least one member who is affected by the licensing action and who qualifies for standing in his or her own right, and show that the member has authorized the organization to intervene on his or her behalf; LBP-11-21, 74 NRC 122 (2011)
- Virginia Electric and Power Co. (North Anna Power Station, Unit 3), LBP-10-17, 72 NRC 501, 507-08, 517 (2010)
 - licensing boards have commonly afforded intervenors the opportunity to propose new contentions to challenge new information, even though no contention is pending; LBP-11-22, 74 NRC 277 (2011)
- Washington Public Power Supply System (WPPSS Nuclear Project No. 3), LBP-96-21, 44 NRC 134, 136 (1996)
 - Part 51, not NEPA, is the source of the legal requirements applicable to the applicant's environmental report; LBP-11-32, 74 NRC 666 (2011)
- Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-94-3, 39 NRC 95, 102 n.10 (1994) an organization seeking to intervene in its own right must allege that the challenged action will cause a cognizable injury to its interests or to the interests of its members; LBP-11-21, 74 NRC 122 (2011)
- Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 6 (1996) judicial concepts of standing require that petitioner establish that it has suffered a distinct and palpable harm that constitutes injury-in-fact within the zone of interests arguably protected by the governing

- statute and that the injury can fairly be traced to the challenged action and is likely to be redressed by a favorable decision; LBP-11-21, 74 NRC 121 n.22 (2011)
- once parties demonstrate standing, they will then be free to assert any contention, which, if proven, will afford them the relief they seek; LBP-11-21, 74 NRC 122 (2011); LBP-11-29, 74 NRC 616 (2011)
- Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 249 (1996) lack of clarity about which electrical cables might be subject to any saltwater environment, however high or low the concentration, and about the effects of and efforts to address this, is a level of concern sufficient to warrant further inquiry and exploration; LBP-11-20, 74 NRC 111-12 (2011)
- Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-05-15, 61 NRC 365, 381 (2005) contentions that neither explain how the application is inadequate nor identify which sections of the application are inadequate are inadmissible; LBP-11-21, 74 NRC 128 (2011)

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10 C.F.R. 2.4

"presiding officer" in NRC adjudicatory proceedings is defined; LBP-11-22, 74 NRC 277 n.92 (2011)

10 C.F.R. 2.103(b)

if NRC Staff finds that an application does not comply with regulatory requirements, it must inform applicant in writing of the nature of any deficiencies or the reason for the proposed denial and the deadline for seeking a hearing; LBP-11-19, 74 NRC 63 n.8 (2011)

10 C.F.R. 2.103(b)(2)

in denying an exemption request, Staff is required to inform applicant of the deadline for seeking a hearing; LBP-11-19, 74 NRC 62 n.7 (2011)

10 C.F.R. 2.109(b)

a power reactor licensee may preserve its license by filing a renewal application at least 5 years before its license is set to expire, affording the Staff ample time to complete the required environmental and safety reviews; LBP-11-30, 74 NRC 629 n.5 (2011)

10 C.F.R. 2.206

- if petitioner is concerned about the sufficiency of the ongoing oversight of a nuclear power plant and its current evacuation plan, it has the option of requesting a modification, suspension, or revocation of its operating license; LBP-11-29, 74 NRC 623 (2011)
- request for action against reactor facilities that have projected shortfalls in their decommissioning trust funds is denied in part and granted in part; DD-11-7, 74 NRC 788-800 (2011)
- request for cold shutdown because of inoperability of main steam safety relief valves is denied but petitioner's concerns about the SRVs have been resolved; DD-11-6, 74 NRC 421-25 (2011)
- request for enforcement action against U.S. Army for post-license-expiration possession and release into the environment of depleted uranium from spent spotting rounds is granted in part and denied in part; DD-11-5, 74 NRC 400-419 (2011)
- to the extent petitioner believes there are existing management competence questions that merit immediate action, then its remedy is to direct the Staff's attention to those matters by filing a request for action; CLI-11-11, 74 NRC 437 (2011)

10 C.F.R. 2.302(c), (e)

service of a filing is not complete until accompanied by a certificate of service and a request for oral argument; LBP-11-21, 74 NRC 121 n.15 (2011)

10 C.F.R. 2.309

a newly constituted board applied the reopening standard to new contentions filed after the prior proceeding was terminated for want of pending or admitted contentions; LBP-11-22, 74 NRC 269 n.50 (2011)

10 C.F.R. 2.309(a)

- a contested hearing is not required if no petitioner has satisfied the criteria for intervention; LBP-11-22, 74 NRC 275 (2011)
- for a request for hearing and petition to intervene to be granted, petitioner must establish that it has standing and propose at least one admissible contention; LBP-11-21, 74 NRC 121 (2011); LBP-11-22, 74 NRC 278 (2011); LBP-11-29, 74 NRC 616, 617 (2011)
- intervention petition is denied for failure to proffer an admissible contention; LBP-11-21, 74 NRC 119 (2011)

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10 C.F.R. 2.309(b)(3)(i)-(ii)

intervention petitions must be filed within 60 days based on the documents then in existence, meaning that the petition must be based on the documents submitted with the application; LBP-11-22, 74 NRC 271 (2011)

10 C.F.R. 2.309(c)

- a request for hearing regarding a newly proffered contention cannot be admitted unless it satisfies the stringent standards for reopening the record; LBP-11-20, 74 NRC 77 n.75 (2011)
- even when a proposed new contention is not found timely, it may be admitted if it meets a balancing of the eight nontimely filing factors; LBP-11-39, 74 NRC 867 n.15 (2011)
- good cause for failure to file on time is the most important late-filing factors; LBP-11-32, 74 NRC 662 (2011)
- if intervenors file a new or amended contention, with supporting materials, within 60 days after pertinent information first becomes available, then the contention will be deemed timely filed and intervenors will be absolved of their obligation to satisfy the late-filing requirements; LBP-11-22, 74 NRC 281 (2011)
- should requirements for reopening the record be satisfied, the requirements for untimely contentions must also be satisfied, as well as the contention admissibility criteria of section 2.309(f)(1); LBP-11-35, 74 NRC 718 (2011)
- the proper mechanism for raising Fukushima-related, application-specific concerns in ongoing combined license cases is to file a new contention, consistent with the procedural rules applicable to the proceeding; CLI-11-5, 74 NRC 150 n.19 (2011)
- to the extent that issues appropriately within the scope of license renewal are identified, NRC procedural rules provide avenues for the submission of proposed contentions on those issues; CLI-11-5, 74 NRC 164 (2011)
- where a motion to reopen relates to a contention not previously in controversy, section 2.326(d) requires that the motion demonstrate that the balance of the nontimely filing factors favors granting the motion to reopen; LBP-11-23, 74 NRC 296 (2011)

10 C.F.R. 2.309(c)(1)

- if a proposed new contention is not timely under section 2.309(f)(2)(iii), then the proponent must address the eight criteria of this section; LBP-11-32, 74 NRC 662 (2011)
- 10 C.F.R. 2.309(c)(1)(i)-(viii)
 - a motion to reopen that relates to a contention not previously in controversy among the parties must also satisfy the requirements for nontimely contentions; CLI-11-8, 74 NRC 226 (2011)

10 C.F.R. 2.309(d)

a hearing request and party status as an intervenor may only be granted to a petitioner if it demonstrates standing and proffers at least one admissible contention; LBP-11-22, 74 NRC 278 (2011); LBP-11-29, 74 NRC 616 (2011)

10 C.F.R. 2.309(d)(1)

to show standing, a hearing request must state petitioner's name, address, and telephone number, nature of its right under the applicable statutes to be made a party, nature and extent of property, financial, or other interest in the proceeding, and possible effect of any decision or order that may be issued on its interest; LBP-11-29, 74 NRC 616 (2011)

10 C.F.R. 2.309(d)(1)(i)

although NRC regulations mandate that a petition contain the name, address, and telephone number of petitioner, the Commission's hearing notice advises prospective petitioners not to include personal privacy information, such as home addresses or home phone numbers in their filings; LBP-11-21, 74 NRC 123 (2011)

10 C.F.R. 2.309(d)(1)(i)-(iv)

a proper showing of standing includes the name, address, and telephone number of petitioner, nature of petitioner's right under a relevant statute to be made a party, nature and extent of petitioner's property, financial, or other interest in the proceeding, and possible effect of any decision or order that might be issued on petitioner's interest; LBP-11-21, 74 NRC 121 (2011)

10 C.F.R. 2.309(e)

if petitioner fails to show standing pursuant to section 2.309(d), a board may grant discretionary standing when at least one requestor/petitioner has established standing and at least one admissible contention has been admitted so that a hearing will be held; LBP-11-29, 74 NRC 617 (2011)

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10 C.F.R. 2.309(f)

- a hearing request and party status as an intervenor may only be granted to a petitioner if it demonstrates standing and proffers at least one admissible contention; LBP-11-22, 74 NRC 278 (2011); LBP-11-29, 74 NRC 616, 617 (2011)
- the proper mechanism for raising Fukushima-related, application-specific concerns in ongoing combined license cases is to file a new contention, consistent with the procedural rules applicable to the proceeding; CLI-11-5, 74 NRC 150 n.19 (2011)

10 C.F.R. 2.309(f)(1)

- a hearing request or petition to intervene must set forth with particularity the contentions sought to be raised by satisfying the six criteria; LBP-11-21, 74 NRC 124 (2011)
- a motion to reopen will not be granted unless all of the criteria of this section are satisfied; CLI-11-8, 74 NRC 221-22 (2011); LBP-11-20, 74 NRC 91 (2011)
- a request for hearing regarding a newly proffered contention cannot be admitted unless it satisfies the stringent standards for reopening the record; LBP-11-20, 74 NRC 77 n.75 (2011)
- all contentions must satisfy the general contention admissibility requirements; LBP-11-25, 74 NRC 390 (2011); LBP-11-39, 74 NRC 867 (2011)
- if reopening standards are inapplicable, or if reopening criteria have been satisfied, a new contention must also meet the standards for contention admissibility; LBP-11-35, 74 NRC 718, 719 (2011)
- intervenor may propose new contentions based on the Fukushima accident, the SER, the new SEIS, or other sources of new and materially different information, provided that it does so promptly after the new information becomes available and that it successfully fulfills the general contention admissibility requirements; LBP-11-22, 74 NRC 268 (2011)
- motions to reopen must include affidavits setting forth the factual and/or technical bases for the claim that the criteria of this section have been met; LBP-11-23, 74 NRC 293 (2011)
- new contentions filed after the record has closed must also meet the standards for contention admissibility; LBP-11-20, 74 NRC 78 (2011); LBP-11-23, 74 NRC 296 (2011)
- standards for reopening the record are discussed; LBP-11-23, 74 NRC 295-96 (2011)

10 C.F.R. 2.309(f)(1)-(2)

to the extent that issues appropriately within the scope of license renewal are identified, NRC procedural rules provide avenues for the submission of proposed contentions on those issues; CLI-11-5, 74 NRC 164 (2011)

10 C.F.R. 2.309(f)(1)(i)-(vi)

- a request for hearing or petition for leave to intervene must explain proposed contentions with particularity; CLI-11-8, 74 NRC 228 (2011)
- any contention, regardless of when it is filed, must meet the requirements of this section; LBP-11-20, 74 NRC 92 (2011); LBP-11-32, 74 NRC 662 (2011)
- intervenors must assert a sufficiently specific challenge that demonstrates that further inquiry is warranted; CLI-11-9, 74 NRC 247 (2011)
- new contentions must satisfy the six requirements of this section; LBP-11-34, 74 NRC 696 (2011)
- to be admissible, each contention must satisfy six pleading requirements; LBP-11-29, 74 NRC 617 (2011) 10 C.F.R. 2.309(f)(1)(ii)
 - providing a brief explanation of the basis for a contention is but one of the six requirements for establishing that a contention is admissible; LBP-11-34, 74 NRC 698 (2011)

10 C.F.R. 2.309(f)(1)(iii)

- assertions of a need to implement filtered vented containment are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 757 (2011)
- challenges to applicant's compliance with the loss-of-large-areas requirements of 10 C.F.R. 50.54(hh)(2) are not admissible because they are not within the scope of a license renewal proceeding; LBP-11-21, 74 NRC 129 (2011)
- challenges to extensive damage mitigation guidelines are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 757 (2011)
- challenges to NRC's assumptions about operators' capability to mitigate an accident are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 757 (2011)
- challenges to NRC's excessive secrecy regarding accident mitigation measures are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 757 (2011)

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- challenges to NRC's previous rejection of petitioner's concerns regarding environmental impacts of high-density pool storage of spent fuel are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 757 (2011)
- challenges to spent fuel pools are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 757 (2011)
- litigability of the adequacy of applicant's efforts to address current operational issues is excluded from a license renewal proceeding; CLI-11-11, 74 NRC 435 (2011)
- suppositions/speculation regarding effectiveness of hydrogen control mechanisms are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 757 (2011)

10 C.F.R. 2.309(f)(1)(iii)-(iv)

Fukushima-related contention is denied for failure to show that the contention is within the scope of the proceeding or is material to the findings NRC must make to support the requested licensing action; LBP-11-37, 74 NRC 783 n.6 (2011)

10 C.F.R. 2.309(f)(1)(iv)

- alleged deficiencies or errors in a license application must have some independent health and safety significance; LBP-11-23, 74 NRC 336 (2011)
- petitioners speculation that, because of the Fukushima accident, NRC would consider a much broader and more rigorous array of severe accident mitigation alternatives than have been previously considered fails to satisfy the materiality requirement; LBP-11-35, 74 NRC 757 (2011)

10 C.F.R. 2.309(f)(1)(v)

- bare assertions and speculation do not meet the Commission's standard of a concise statement of the alleged facts or expert opinions together with references to the specific sources and documents upon which the petitioner relies; LBP-11-21, 74 NRC 133 (2011)
- contentions must be raised with sufficient detail to put the parties on notice of the issues to be litigated; CLI-11-11, 74 NRC 437 (2011)
- petitions that lack alleged facts or expert opinions to support the contention are inadmissible; LBP-11-29, 74 NRC 621 (2011)
- support required for a contention necessarily will depend on the issue sought to be litigated; CLI-11-11, 74 NRC 442 (2011)

10 C.F.R. 2.309(f)(1)(vi)

- at the contention admissibility stage, the burden is on intervenors to demonstrate a deficiency in the application; CLI-11-9, 74 NRC 243-44 (2011)
- contention is inadmissible for failure to show that a genuine dispute exists with applicant on a material issue of law or fact; LBP-11-33, 74 NRC 682-83 (2011)
- Fukushima-related contention based on a Staff Requirements Memorandum is inadmissible because the SRM does not define or impose any new requirements arising from the Fukushima accident and thus fails to establish a genuine dispute on a material issue of law or fact; LBP-11-37, 74 NRC 784 n.7 (2011)
- Fukushima-related contention is denied for failure to reference any specific portion of the application at issue; LBP-11-37, 74 NRC 783 n.6 (2011)
- intervention petitions must be filed within 60 days based on the documents then in existence, meaning that the petition must be based on the documents submitted with the application; LBP-11-22, 74 NRC 271 (2011)
- other than hypothesizing that there will be a failure of the nuclear reactor vessel because of increased stress brought by the proposed license amendment request, the contention does not provide sufficient information to show that a genuine dispute exists; LBP-11-29, 74 NRC 621 (2011)
- petitioner has the burden to provide alleged facts or expert opinion sufficient to establish a genuine dispute of material fact or law with the license application; LBP-11-21, 74 NRC 137-38 (2011)
- petitions that lack alleged facts or expert opinions to support the contention are inadmissible; LBP-11-29, 74 NRC 621 (2011)
- support required for a contention necessarily will depend on the issue sought to be litigated; CLI-11-11, 74 NRC 442 (2011)
- to show a genuine dispute with applicant on a material issue of law or fact, a contention must include references to specific portions of the application that petitioner disputes and the supporting reasons for each dispute; CLI-11-9, 74 NRC 244 n.65 (2011)

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where NRC Staff has yet to complete any draft or final environmental or safety review, contentions must challenge the application itself; LBP-11-29, 74 NRC 620 (2011)

10 C.F.R. 2.309(f)(2)

- although all environmental contentions may, in a general sense, ultimately challenge NRC's compliance with NEPA, NRC regulations expressly permit the lodging of contentions against applicant's environmental report well before release of NRC's NEPA documents; LBP-11-38, 74 NRC 830 (2011)
- at the outset of proceeding, NEPA contentions are to be based on applicant's environmental report; LBP-11-32, 74 NRC 661 n.15, 665 n.27, 669 n.34(2011)
- contentions must be based on documents or other information available at the time the petition is to be filed, such as the application, supporting safety analysis report, environmental report, or other supporting document filed by an applicant or licensee, or otherwise available to a petitioner; LBP-11-29, 74 NRC 620 n.37 (2011)
- for a new contention to be admissible, the new information must, in and of itself, be sufficient to support its admissibility; LBP-11-20, 74 NRC 82 (2011)
- for a reopening motion to be timely presented, movant must show that the issue sought to be raised could not have been raised earlier; LBP-11-20, 74 NRC 85 n.110 (2011)
- if a contention is based upon new information, it must meet the standards of this section; LBP-11-35, 74 NRC 719 (2011)
- if new information becomes available that, e.g., an endangered species has been living on the site or that the facility has been leaking tritium into the groundwater, then a new contention alleging that the environmental report as originally filed did not comply with Part 51 may be filed; LBP-11-32, 74 NRC
- intervenor may propose new contentions based on the Fukushima accident, the SER, the new SEIS, or other sources of new and materially different information, provided that it does so promptly after the new information becomes available and that it successfully fulfills the general contention admissibility requirements; LBP-11-22, 74 NRC 268 (2011)
- new environmental contentions may be filed if data or conclusions in the draft environmental impact statement differ significantly from the data or conclusions in the environmental report: LBP-11-32, 74 NRC 670 (2011); LBP-11-33, 74 NRC 682 n.12 (2011); LBP-11-34, 74 NRC 698 (2011); LBP-11-39, 74 NRC 866 (2011)
- NRC preserves the right to a hearing when an application is amended by allowing new or amended contentions to be filed in response to material new information; LBP-11-22, 74 NRC 264 (2011)
- where a supplemental environmental impact statement is being prepared, intervenor may submit proposed new contentions based on new information, including new information in the SER and Staff NEPA documents; LBP-11-22, 74 NRC 272 (2011)

10 C.F.R. 2.309(f)(2)(i)-(iii)

- timely new contentions may be filed with leave of the presiding officer if information on which they are based was not previously available and is materially different than information previously available, and they have been submitted in a timely fashion based on the availability of the subsequent information; LBP-11-25, 74 NRC 389 (2011); LBP-11-39, 74 NRC 866 (2011)
- timely new or amended contentions may be admitted if it meets three pleading requirements; LBP-11-32, 74 NRC 661 (2011)

10 C.F.R. 2.309(f)(2)(iii)

- by filing proposed new or amended contentions within the time specified in the initial scheduling order, petitioner satisfies timeliness requirements but would still have to satisfy the other requirements of section 2.309(f)(2) or the requirements of section 2.309(c), as well as the contention admissibility requirements of 10 C.F.R. 2.309(f)(1); LBP-11-22, 74 NRC 262-63 (2011)
- new contentions are deemed timely if filed within 30 days of the date when the new and material information on which they are based first became available; LBP-11-39, 74 NRC 867 (2011) 10 C.F.R. 2.309(h)(2)
- a reply must be filed within 7 days after the filing of answers to an intervention petition; LBP-11-21, 74 NRC 120 n.14 (2011)

10 C.F.R. 2.309(h)(3)

parties do not have an automatic right to respond to reply briefs; LBP-11-34, 74 NRC 695 (2011)

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10 C.F.R. 2.311(b)

briefs on appeal must conform to the requirements stated in section 2.341(c)(2); CLI-11-8, 74 NRC 219 (2011)

10 C.F.R. 2.311(d)(1)

this section provides for appeals as of right on the question whether a request for hearing should have been wholly denied; CLI-11-11, 74 NRC 431 (2011)

10 C.F.R. 2.315(a)

boards may entertain oral and written limited appearance statements from members of the public in connection with a mandatory uncontested proceeding; LBP-11-26, 74 NRC 517, 535 n.13 (2011) 10 C.F.R. 2.318(a)

three occasions that could trigger termination of the presiding officer's jurisdiction are delineated; LBP-11-22, 74 NRC 276 (2011)

where an amended version of a dismissed contention was pending before the board, the board retains jurisdiction to decide whether to admit the proposed contention; LBP-11-22, 74 NRC 263 (2011) 10 C.F.R. 2.319

boards have the duty to conduct a fair and impartial hearing according to law, and have all the powers necessary to that end; LBP-11-22, 74 NRC 282 (2011)

boards must exercise all the powers necessary to control the prehearing and hearing process, to avoid delay, and to maintain order; LBP-11-22, 74 NRC 280 (2011)

presiding officers have the duty to conduct a fair and impartial hearing according to law, to take appropriate action to control the prehearing and hearing process, to avoid delay and to maintain order, and have all the powers necessary to those ends; LBP-11-22, 74 NRC 280 (2011)

the Commission generally defers to licensing boards on case management issues; CLI-11-13, 74 NRC 640 (2011)

10 C.F.R. 2.319(l)

should a licensing board decision raise novel legal or policy questions, boards are to certify to the Commission those questions that would benefit from Commission consideration; CLI-11-5, 74 NRC 170 (2011); LBP-11-32, 74 NRC 671-72 (2011)

10 C.F.R. 2.323(b)

Fukushima-related contention is denied for failure of its proponent to contact the other parties to resolve the issue presented by the contention prior to its submission; LBP-11-37, 74 NRC 783 n.6 (2011)

motions to admit new contentions must be rejected if they do not include a certification by movant's attorney or representative that movant has made a sincere effort to contact other parties and resolve the issues raised in the motion, and that movant's efforts have been unsuccessful; LBP-11-34, 74 NRC 695 (2011)

10 C.F.R. 2.323(c)

parties do not have an automatic right to respond to reply briefs; LBP-11-34, 74 NRC 695 (2011) replies to motions that would otherwise be unauthorized are allowed if there are compelling circumstances, such as where the moving party demonstrates that it could not reasonably have anticipated the arguments to which it seeks leave to reply; CLI-11-14, 74 NRC 808 n.39 (2011) 10 C.F.R. 2.323(f)

boards are authorized to refer a ruling to the Commission if the board determines that the decision or ruling involves a novel issue that merits Commission review at the earliest opportunity; CLI-11-5, 74 NRC 170 (2011); LBP-11-32, 74 NRC 671-72 (2011)

licensing board refers ruling that applicant has no legal duty to supplement an originally compliant environmental report to incorporate new and significant information that arises after the ER was duly submitted; LBP-11-32, 74 NRC 657 (2011)

10 C.F.R. 2.323(f)(1)

boards should refer rulings that raise novel or legal policy issues that would benefit from Commission review; CLI-11-11, 74 NRC 455 (2011)

10 C.F.R. 2.325

applicant in a licensing proceeding must meet its burden of proof by a preponderance of the evidence; LBP-11-38, 74 NRC 829 (2011)

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10 C.F.R. 2.326

- a heavier burden applies to motions to reopen than to proponents of contentions in ongoing proceedings; CLI-11-5, 74 NRC 169 (2011)
- a newly constituted board applied the reopening standard to new contentions filed after the prior proceeding was terminated for want of pending or admitted contentions; LBP-11-22, 74 NRC 269 n.50 (2011)
- bare assertions and speculation do not supply the requisite support to satisfy the standards for reopening a record; LBP-11-35, 74 NRC 729 (2011)
- for new contentions to be admitted after the record has closed, petitioner must satisfy the Commission's demanding regulatory requirements for reopening the record; LBP-11-20, 74 NRC 69 (2011); LBP-11-23, 74 NRC 293, 295 n.37 (2011); LBP-11-35, 74 NRC 718 (2011)
- intervenor must show that a materially different result would be likely if the new contention is admitted; LBP-11-22, 74 NRC 281 (2011)
- new contentions filed after the record has closed must satisfy the timeliness requirement of either 10 C.F.R. 2.309(f)(2) or 2.309(c), and the admissibility requirements of section 2.309(f)(1), as well as the reopening requirements; LBP-11-22, 74 NRC 269 n.54 (2011)
- the proper mechanism for raising Fukushima-related, application-specific concerns in ongoing combined license cases is to file a new contention, consistent with the procedural rules applicable to the proceeding; CLI-11-5, 74 NRC 150 n.19 (2011)
- the term "closed record" refers to a record developed at an evidentiary hearing; LBP-11-22, 74 NRC 281 (2011)

10 C.F.R. 2.326(a)

- motions to reopen must be timely, must address a significant safety or environmental issue, and must demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially; LBP-11-20, 74 NRC 74-75 (2011); LBP-11-35, 74 NRC 718 (2011)
- 10 C.F.R. 2.326(a)(1)
- contention that the frequency of occurrence of severe accidents is erroneously underestimated should have been raised at the outset of the license renewal proceeding and thus is untimely; LBP-11-35, 74 NRC 748 (2011)
- exceptionally grave issues may be considered in the discretion of the presiding officer even if untimely presented; LBP-11-20, 74 NRC 75 n.62 (2011); LBP-11-35, 74 NRC 728 (2011)
- 10 C.F.R. 2.326(a)(1)-(3)
- reopening criteria that must be satisfied are discussed; LBP-11-20, 74 NRC 92 (2011)
- 10 C.F.R. 2.326(a)(3)
 - this section expressly refers to a motion to reopen a closed record to consider additional evidence and newly proffered evidence; LBP-11-22, 74 NRC 281 (2011)
- 10 C.F.R. 2.326(b)
- affidavits setting forth the factual and/or technical bases for the claim that the reopening criteria have been met must address each of the criteria separately, with a specific explanation of why it has been met; CLI-11-8, 74 NRC 222 (2011); LBP-11-20, 74 NRC 75, 92 (2011); LBP-11-23, 74 NRC 296 (2011); LBP-11-35, 74 NRC 724, 753 (2011)
- motions to reopen must be accompanied by affidavits that set forth the factual and/or technical bases for the movant's claim that the criteria of paragraph (a) of this section have been satisfied; CLI-11-8, 74 NRC 222 (2011); LBP-11-20, 74 NRC 75 (2011); LBP-11-23, 74 NRC 296 (2011); LBP-11-35, 74 NRC 718-19, 753 (2011)
- supporting affidavits must be given by competent individuals with knowledge of the facts alleged, or by experts in the disciplines appropriate to the issues raised; CLI-11-8, 74 NRC 222 (2011); LBP-11-35, 74 NRC 737 (2011)
- the absence of a competent affidavit deprives the board of the ability or even the opportunity to substantively consider whether a materially different result would be obtained as is required by the regulatory reopening standards; LBP-11-23, 74 NRC 321 (2011)
- 10 C.F.R. 2.326(d)
 - a motion to reopen that relates to a contention not previously in controversy among the parties must also satisfy the requirements for nontimely contentions in section 2.309(c); CLI-11-8, 74 NRC 226 (2011);

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- LBP-11-20, 74 NRC 78, 92 (2011); LBP-11-23, 74 NRC 295 n.37, 296 (2011); LBP-11-35, 74 NRC 719 (2011)
- criteria for reopening a closed record when the motion relates to a contention not previously in controversy are set out; LBP-11-20, 74 NRC 76 (2011)
- the rule is not intended to be limited to motions seeking only to submit additional evidence relating to a previously admitted contention; LBP-11-20, 74 NRC 91 (2011)

10 C.F.R. 2.332(a)

shortly after a hearing request has been granted, the board must set a schedule to govern the proceeding; LBP-11-22, 74 NRC 279 (2011)

10 C.F.R. 2.332(b)

boards must use the applicable Model Milestones in 10 C.F.R. Part 2, Appendix B as a starting point for the schedule, but the board shall make appropriate modifications based upon the circumstances of each case; LBP-11-22, 74 NRC 279 (2011)

10 C.F.R. 2.332(d)

boards may not commence a hearing on environmental issues before the final environmental impact statement is issued, and may only commence a hearing with respect to safety issues prior to issuance of the final safety evaluation report if it will expedite the proceeding without adversely impacting the Staff's ability to complete its evaluations in a timely manner; LBP-11-22, 74 NRC 272 n.69 (2011); LBP-11-30, 74 NRC 631 (2011)

10 CFR 2335

- Category 1 issues are not subject to challenge in a relicensing proceeding, absent a waiver, because they involve environmental effects that are essentially similar for all plants and need not be assessed repeatedly on a site-specific basis; LBP-11-21, 74 NRC 132 (2011)
- challenges to the ABWR design certification are impermissible; LBP-11-38, 74 NRC 844 (2011)
- intervenors may not impose an additional requirements that are not present in a regulation; CLI-11-9, 74 NRC 242 (2011)
- no rule or regulation of the Commission, or any provision thereof, concerning the licensing of production and utilization facilities, source material, special nuclear material, or byproduct material is subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding; CLI-11-8, 74 NRC 229 (2011)
- parties with new and significant information that could undermine the rationale for a Commission regulation must seek a rulemaking instead of challenging the regulation in a particular proceeding unless the information uniquely applies to a given adjudication; LBP-11-35, 74 NRC 715-16 (2011)
- the term "petition" in this section refers to the waiver petition, not a petition to intervene; CLI-11-11, 74 NRC 448 n.116 (2011)
- to the extent that petitioner challenges the generic environmental impact statement, its remedy is a petition for rulemaking or a petition for a waiver of the rules based on circumstances; CLI-11-11, 74 NRC 456 (2011)

10 C.F.R. 2.335(a)

- absent a waiver or exception from the presiding officer, no rule or regulation of the Commission, or any provision thereof, concerning the licensing of production and utilization facilities is subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding; LBP-11-21, 74 NRC 125, 136, 140 (2011); LBP-11-29, 74 NRC 617-18 (2011); LBP-11-35, 74 NRC 714 (2011)
- absent a waiver, contentions challenging applicable statutory requirements or NRC regulations are not admissible; CLI-11-8, 74 NRC 229 (2011);
- board admitted a contention on a conditional basis, pending Commission ruling on merits of petition for waiver of NRC regulations; CLI-11-11, 74 NRC 444 (2011)
- use of "and" in the list of requirements for rule waiver means that all four factors must be met; CLI-11-11, 74 NRC 452 n.138 (2011)

10 C.F.R. 2.335(b)

- a party to an adjudicatory proceeding may petition for a waiver of a specified Commission rule or regulation or any provision thereof; CLI-11-11, 74 NRC 448 (2011)
- an exception to the general rule that NRC regulations are not subject to challenge in adjudicatory proceedings is provided; CLI-11-11, 74 NRC 448 (2011)

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- rule waiver petitions must be accompanied by an affidavit that identifies the specific aspects of the subject matter of the proceeding as to which the application of the rule or regulation would not serve the purposes for which it was adopted; CLI-11-11, 74 NRC 448, 449 n.123 (2011)
- the sole ground for petition of waiver or exception is that special circumstances with respect to the subject matter of the particular proceeding are such that the application of the rule or regulation or a provision of it would not serve the purposes for which it was adopted; CLI-11-11, 74 NRC 448 (2011); LBP-11-35, 74 NRC 714 (2011)
- to waive the generic assessment in NRC regulations to permit adjudication of issues involving the environmental impact of spent fuel pool accidents in this license renewal proceeding, the Commission must conclude that the rule's strict application would not serve the purpose for which it was adopted; CLI-11-11, 74 NRC 449 (2011)
- 10 C.F.R. 2.335(b)-(c)
 - presiding officers must dismiss any petition for waiver that does not make a prima facie showing of special circumstances with respect to the subject matter of the particular proceeding such that application of the rule or regulation would not serve the purposes for which it was adopted; LBP-11-35, 74 NRC 714 (2011)
- 10 C.F.R. 2.335(d)
- the Commission may direct further proceedings as it considers appropriate to aid its determination; CLI-11-11, 74 NRC 448 n.117 (2011)
- 10 CFR 2.337(a)
- boards accord each exhibit weight to the extent that it is relevant, material, and reliable; LBP-11-18, 74 NRC 36 (2011)
- it is appropriate to require that evidence put forth to support a motion to reopen satisfy the Commission's admissibility standards which require that it be relevant, material, and reliable; LBP-11-23, 74 NRC 304 n.78 (2011)
- 10 C.F.R. 2.337(f)(1)
- boards may take official notice of any fact of which a court of the United States may take judicial notice or of any technical or scientific fact within the knowledge of the Commission as an expert body; LBP-11-20, 74 NRC 101 n.56 (2011)
- 10 C.F.R. 2.340
- the automatic stay provisions were removed in 2007; CLI-11-5, 74 NRC 155 n.49 (2011)
- 10 C.F.R. 2.341(b)
 - with the board's termination of the proceeding, the board's interlocutory rulings on contention admissibility became ripe for appeal; CLI-11-9, 74 NRC 236 (2011)
- 10 C.F.R. 2.341(b)(1)
- petitions for review are allowed after a full or partial initial decision, both of which are considered final decisions; CLI-11-10, 74 NRC 255 (2011); CLI-11-14, 74 NRC 810 (2011)
- 10 C.F.R. 2.341(b)(1)-(3)
- parties may choose whether to submit a petition for review, an answer in support of the petition, or neither; CLI-11-14, 74 NRC 808 n.36 (2011)
- 10 C.F.R. 2.341(b)(4)(i)-(v)
- the Commission will grant a petition for review at its discretion, giving due weight to the existence of a substantial question with respect to one or more of the considerations of this section; CLI-11-9, 74 NRC 237 (2011)
- 10 C F R 2 341(c)(2)
 - briefs on appeal are limited to 30 pages in length, absent Commission order directing otherwise; CLI-11-8, 74 NRC 219 (2011)
- page limit for appellate briefs excludes tables of content and citation, appropriate exhibits, and statutory or regulatory extracts; CLI-11-8, 74 NRC 219 (2011)
- 10 C.F.R. 2.341(f)(1)
- review of a board's certified question that raises a significant and novel issue whose early resolution will materially advance the orderly disposition of the proceeding is granted; CLI-11-4, 74 NRC 2 (2011) 10 C.F.R. 2.341(f)(2)
 - interlocutory review of board rulings is permitted when petitioner demonstrates either that the ruling threatens the petitioner with immediate and irreparable harm or the ruling has a pervasive and unusual

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effect on the structure of the proceeding; CLI-11-6, 74 NRC 209 (2011); CLI-11-14, 74 NRC 811 (2011)

10 C.F.R. 2.341(f)(2)(i)-(ii)

denial of summary disposition neither threatens the Staff with immediate and serious irreparable impact which could not be alleviated through a petition for review of the presiding officer's final decision nor affects the basic structure of the proceeding in a pervasive or unusual manner; CLI-11-10, 74 NRC 256 (2011)

10 CFR 2 342

this provision explicitly authorizing stay applications is available only to parties to adjudicatory proceedings seeking stays of decisions or actions of a presiding officer pending the filing and resolution of a petition for review; CLI-11-5, 74 NRC 158 (2011)

10 C.F.R. 2.343

in its discretion, the Commission may allow oral argument upon the request of a party made in a petition for review, brief on review, or upon its own initiative; CLI-11-8, 74 NRC 219 n.15 (2011)

10 C.F.R. 2.710

the contradictory provisions of subsections (a) and (b) are discussed; LBP-11-23, 74 NRC 332 (2011) the standard for deciding motions for summary disposition in Subpart L proceedings closely parallels the standard used by the federal courts in deciding motions for summary judgment; LBP-11-31, 74 NRC 648 (2011)

10 C.F.R. 2.710(b)

if reasonable minds could differ as to the import of the evidence, summary disposition is not appropriate; LBP-11-20, 74 NRC 103-04 n.72 (2011)

10 C.F.R. 2.710(d)(2)

motions for summary disposition will be granted if there is no genuine issue as to any material fact and the moving party is entitled to a decision as a matter of law; LBP-11-17, 74 NRC 20 n.40 (2011); LBP-11-31, 74 NRC 648, 649 (2011)

10 C.F.R. 2.714(a)(1)

where the time for filing contentions had expired in a given case, no new TMI-related contentions would be accepted absent a showing of good cause and a balancing of the late-filing factors; CLI-11-5, 74 NRC 154 (2011)

10 C.F.R. 2.749(b)

affidavits shall set forth such facts as would be admissible in evidence and shall show affirmatively that the affiant is competent to testify to the matters stated therein; LBP-11-23, 74 NRC 332 (2011)

10 C.F.R. 2.758(d) (2004)

if on the basis of the petition, affidavit, and any response provided for in paragraph (b) of this section, the presiding officer determines that a prima facie showing has been made, the presiding officer shall, before ruling thereon, certify the matter directly to the Commission; CLI-11-11, 74 NRC 448 n.116 (2011)

10 C.F.R. 2.764

the Commission temporarily suspended the immediate effectiveness rule following the Three Mile Island accident; CLI-11-5, 74 NRC 153 (2011)

10 C.F.R. 2.802

parties with new and significant information that could undermine the rationale for a Commission regulation must seek a rulemaking instead of challenging the regulation in a particular proceeding unless the information uniquely applies to a given adjudication; LBP-11-35, 74 NRC 715-16 (2011)

to the extent that petitioner challenges the generic environmental impact statement, its remedy is a petition for rulemaking or a petition for a waiver of the rules based on circumstances; CLI-11-11, 74 NRC 456 (2011)

10 C.F.R. 2.802(d)

a rulemaking petitioner may request that the Commission suspend all or any part of any licensing proceeding to which the petitioner is a party pending disposition of the petition for rulemaking; CLI-11-5, 74 NRC 173 (2011)

licensing boards (as opposed to the Commission) are not empowered to grant a request to suspend a licensing proceeding pending disposition of a rulemaking petition; LBP-11-33, 74 NRC 679 n.5 (2011)

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10 C.F.R. 2.1019(i)

the licensing board directed parties defending depositions to make efforts to identify and obtain Licensing Support Network documents that must be indexed for the benefit of other parties and to circulate those indexes as soon as practicable; CLI-11-13, 74 NRC 638 n.14 (2011)

10 C.F.R. 2.1205

- affidavits are required to support statements of fact, and in ruling on summary disposition motions the standards of subpart G shall apply; LBP-11-23, 74 NRC 332 (2011)
- the test for the "materially different result" requirement of section 2.326(a)(3), is whether it has been shown that a motion for summary disposition could be defeated; LBP-11-20, 74 NRC 94 (2011) 10 C.F.R. 2.1205(c)
- in a proceeding governed by Subpart L, the board is to apply the standards of Subpart G when ruling on motions for summary disposition; LBP-11-17, 74 NRC 20 n.40 (2011)
- successful motions for summary disposition must show that movant is entitled to a decision as a matter of law; LBP-11-31, 74 NRC 649 (2011)
- summary disposition of a contention is appropriate when there no longer exists any genuine dispute over a material fact and the moving party is entitled to judgment as a matter of law; LBP-11-17, 74 NRC 20 (2011)
- the standard for deciding motions for summary disposition in Subpart L proceedings is found in section 2.710; LBP-11-31, 74 NRC 648 (2011)

10 C.F.R. 2.1207

in a proceeding to be conducted under Subpart L, the evidentiary record is opened upon the filing of the first initial written statements of position and written testimony with supporting affidavits on the admitted contentions; LBP-11-22, 74 NRC 281 n.112 (2011)

10 C.F.R. Part 2, Appendix B

in an uncontested operating license proceeding, the Commission would informally review the Staff recommendations, and the license would issue only after Commission action; CLI-11-5, 74 NRC 153 n.34 (2011)

10 C.F.R. Part 2, Appendix B, § II

- boards should develop schedules that will provide a fair and expeditious procedure for resolving new or amended contentions that might be proposed during the course of the proceeding, not just those already admitted; LBP-11-22, 74 NRC 279 (2011)
- filing of new contentions based on the SER and Staff NEPA documents is expressly contemplated by the Model Milestones and scheduling orders; LBP-11-22, 74 NRC 272 (2011)
- the Model Milestones permit the filing of proposed late-filed contentions on the Safety Evaluation Report and necessary National Environmental Policy Act documents within 30 days of the issuance of those documents: LBP-11-22, 74 NRC 262, 279 (2011)
- when establishing a schedule, boards are to consider NRC's interest in providing a fair and expeditious resolution of the issues sought to be admitted for adjudication in the proceeding, along with other factors; LBP-11-22, 74 NRC 279 (2011)

10 C.F.R. 20.1003

- ALARA is defined as every reasonable effort to maintain exposures to radiation as far below the dose limits in Part 20 as is practical consistent with the purpose for which the licensed activity is undertaken; CLI-11-12, 74 NRC 480 (2011)
- the ALARA principle as used in NRC regulations does not mean as low as achievable as a comparison between achievable doses, but rather as low as reasonably achievable below the dose limits; CLI-11-12, 74 NRC 491 (2011)

10 C.F.R. 20.1101(b)

- ALARA is a general requirement for all doses to members of the public established in the radiation protection programs in Part 20, including the license termination dose criteria; CLI-11-12, 74 NRC 480 (2011)
- licensee must establish that the dose to a member of the public with legally enforceable institutional controls in place will not exceed 25 mrem per year, and is as low as reasonably achievable; CLI-11-12, 74 NRC 481 (2011)
- the ALARA requirement in this section applies to the dose criteria for license termination; CLI-11-12, 74 NRC 481 (2011)

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10 C.F.R. 20.1301

dose limit for individual members of the public from a licensed activity is a total effective dose equivalent of 100 millirem per year; CLI-11-12, 74 NRC 480 (2011)

10 C.F.R. 20.1401(d)

agreement states may adopt license termination requirements that incorporate more conservative dose calculation methodologies than NRC requirements; CLI-11-12, 74 NRC 482-83 (2011)

10 C.F.R. 20.1402

dose limit for license termination is a constraint within the public dose limit of 25 mrem per year to members of the public; CLI-11-12, 74 NRC 480 (2011)

for license termination under either restricted use or unrestricted use, dose to a member of the public must not only be 25 mrem per year or lower but also as low as reasonably achievable; CLI-11-12, 74 NRC 481 (2011)

sites not eligible for restricted release must be remediated to unrestricted use; CLI-11-12, 74 NRC 481 (2011)

terminating a license for unrestricted use allows no dependence on governmental monitoring of engineered barriers and land-use restrictions to achieve a maximum dose of 25 mrem per year to a member of the public; CLI-11-12, 74 NRC 480-81 (2011)

10 C.F.R. 20.1403

for license termination under either restricted use or unrestricted use, doses to a member of the public must not only be 25 mrem per year or lower but also as low as reasonably achievable; CLI-11-12, 74 NRC 481 (2011)

if a licensee is able to demonstrate initial eligibility for restricted release, it must then show that the restricted-release dose criteria will be met; CLI-11-12, 74 NRC 481 (2011)

terminating a license for restricted use relies on legally enforceable institutional controls to achieve the 25 mrem dose limit; CLI-11-12, 74 NRC 481 (2011)

10 C.F.R. 20.1403(a)

ALARA-based analysis must be performed to identify whether a site is eligible or ineligible for further consideration of restricted release; CLI-11-12, 74 NRC 481 (2011)

initial eligibility demonstration employs a cost-benefit analysis, either a conventional ALARA analysis or an analysis of net public or environmental harm, which incorporates a subset of the factors used in a conventional ALARA analysis; CLI-11-12, 74 NRC 481 (2011)

10 C.F.R. 20.1403(b)

dose limit for license termination is a constraint within the public dose limit of 25 mrem per year to members of the public; CLI-11-12, 74 NRC 480 (2011)

licensee must establish that the dose to a member of the public with legally enforceable institutional controls in place will not exceed 25 mrem per year, and is as low as reasonably achievable; CLI-11-12, 74 NRC 481 (2011)

10 C.F.R. 20.1403(e)

if institutional controls fail and engineered barriers have degraded over a period of time, the dose to a member of the public will not exceed 100 mrem per year, or 500 mrem per year under certain circumstances, and is as low as reasonably achievable; CLI-11-12, 74 NRC 481-82 (2011)

New Jersey has adopted license termination requirements that incorporate more conservative dose calculation methodologies than NRC requirements; CLI-11-12, 74 NRC 483 (2011)

10 C.F.R. Part 20, App. B

Part 70 applicants are required to establish a radiological monitoring program to monitor and report the release of radiological gaseous and liquid effluents to the environment; LBP-11-26, 74 NRC 565 (2011) 10 C.F.R. Part 20, App. B, tbl. 2

minimum detectable concentrations for gaseous effluent and evaporator condensate must be 5% or less of the concentrations listed in the table; LBP-11-26, 74 NRC 570 n.32 (2011)

10 C.F.R. 30.4

"commencement of construction" includes clearing of land, excavation, or other substantial action that would adversely affect the natural environment of a site; LBP-11-26, 74 NRC 538 (2011)

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10 C.F.R. 30.33(a)(5)

for a proposed nuclear materials-related activity, commencement of construction relative to that activity prior to a favorable Staff conclusion regarding the NEPA cost-benefit balance is grounds for denial of the authorization to conduct that activity; LBP-11-26, 74 NRC 538 (2011)

preconstruction activities that are allowed under Part 50 are also allowed for materials licenses; LBP-11-26, 74 NRC 539 (2011)

10 C.F.R. 30.35(a)-(b)

the financial assurance requirements are structured according to the quantity of material that will be authorized for possession and use; CLI-11-4, 74 NRC 9 (2011)

10 C.F.R. 30.35(f)(2)

applicant's commitment to provide a letter of credit issued by a financial institution whose operations are regulated and examined by a federal or state agency is sufficient to satisfy decommissioning funding assurance requirements; CLI-11-4, 74 NRC 2 (2011); LBP-11-26, 74 NRC 517-18 (2011)

10 C F R 30 35(f)(2)(ii

an acceptable trustee includes an appropriate state or federal government agency or an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency; CLI-11-4, 74 NRC 4 n.15 (2011)

because it has chosen a surety method, licensee must ensure that the letter of credit is payable to a trust established for decommissioning costs; CLI-11-4, 74 NRC 3 (2011)

10 C.F.R. Part 30, Appendix A, § II.B

financial tests for parent company guarantees and self-guarantees require that an independent certified public accountant review the data used in the financial test and require that the licensee inform NRC within 90 days of any matters coming to the auditor's attention that cause the auditor to believe that the data specified in the financial test should be adjusted and that the company no longer passes the test; CLI-11-4, 74 NRC 7 n.31 (2011)

10 C.F.R. Part 30, Appendix C

request for hearing on Staff denial of permission to use an alternate method for demonstrating decommissioning funding assurance is granted; LBP-11-19, 74 NRC 62 (2011)

10 C.F.R. Part 30, Appendix C, § II.B(2)

financial tests for parent company guarantees and self-guarantees require that an independent certified public accountant review the data used in the financial test and require that the licensee inform NRC within 90 days of any matters coming to the auditor's attention that cause the auditor to believe that the data specified in the financial test should be adjusted and that the company no longer passes the test; CLI-11-4, 74 NRC 7 n.31 (2011)

10 C.F.R. 40.3

assessment of monetary penalty against U.S. Army for possession of depleted uranium without a license is denied; DD-11-5, 74 NRC 404 (2011)

possession of depleted uranium at multiple installations without an NRC license and performance of decommissioning at a military installation without proper NRC authorization is a violation; DD-11-5, 74 NRC 403 (2011)

10 C.F.R. 40.4

"commencement of construction" includes clearing of land, excavation, or other substantial action that would adversely affect the natural environment of a site; LBP-11-26, 74 NRC 538 (2011)

10 C.F.R. 40.32(e)

for a proposed nuclear materials-related activity, commencement of construction relative to that activity prior to a favorable Staff conclusion regarding the NEPA cost-benefit balance is grounds for denial of authorization to conduct that activity; LBP-11-26, 74 NRC 538 (2011)

preconstruction activities that are allowed under Part 50 are also allowed for materials licenses; LBP-11-26, 74 NRC 539 (2011)

10 C.F.R. 40.36(a)-(b)

the financial assurance requirements are structured according to the quantity of material that will be authorized for possession and use; CLI-11-4, 74 NRC 9 (2011)

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10 C.F.R. 40.36(b)(2), (d)

certification of financial assurance may state that the appropriate assurance will be obtained after the application has been approved and the license issued but before the receipt of licensed material; CLI-11-4, 74 NRC 9 n.43 (2011)

10 C.F.R. 40.36(d)

request for an exemption that would enable it to provide decommissioning funding on a forward-looking, incremental basis, at a rate proportional to the then-current decontamination and decommissioning liability is granted; CLI-11-4, 74 NRC 3 n.4 (2011)

10 C.F.R. 40.36(e)

request for hearing on Staff denial of permission to use an alternative method for demonstrating decommissioning funding assurance is granted; LBP-11-19, 74 NRC 62 (2011)

10 C.F.R. 40.36(e)(2)

applicant's commitment to provide a letter of credit issued by a financial institution whose operations are regulated and examined by a federal or state agency is sufficient to satisfy decommissioning funding assurance requirements; CLI-11-4, 74 NRC 2 (2011); LBP-11-26, 74 NRC 517-18 (2011)

10 C.F.R. 40.36(e)(2)(ii)

an acceptable trustee includes an appropriate state or federal government agency or an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency; CLI-11-4, 74 NRC 4 n.15 (2011)

because it has chosen a surety method, licensee must ensure that the letter of credit is payable to a trust established for decommissioning costs; CLI-11-4, 74 NRC 3 (2011)

10 C.F.R. 40.42(a)

having submitted its license renewal application more than 30 days prior to the scheduled expiration of its current license, licensee is allowed to continue operations under that license; LBP-11-30, 74 NRC 631 (2011)

when licensee has made timely and sufficient application for a renewal, a license with reference to an activity of a continuing nature does not expire until the application has been finally determined by the agency; LBP-11-30, 74 NRC 629 n.5 (2011)

10 C.F.R. 50.2

production and utilization facilities include nuclear power reactors; LBP-11-25, 74 NRC 390 n.58 (2011) the current licensing basis includes plant-specific design-basis information as documented in the most recent final safety analysis report; LBP-11-21, 74 NRC 130 (2011)

10 C.F.R. 50.9(a)

information provided to NRC by an applicant must be complete and accurate in all material respects; LBP-11-32, 74 NRC 668 n.31 (2011)

10 C.F.R. 50.9(b)

applicants shall notify NRC of information identified by applicant as having, for the regulated activity, a significant implication for public health and safety or common defense and security; LBP-11-32, 74 NRC 668 n.31 (2011)

10 C.F.R. 50.10(a)(2)

activities that are no longer considered "construction" are listed; LBP-11-26, 74 NRC 539 n.14 (2011) 10 C.F.R. 50.33

the limited scope of review called for under Part 54, renewal of a license for a research reactor, is essentially a fresh operating license review; CLI-11-11, 74 NRC 436 n.47 (2011)

10 C.F.R. 50.33(f)

the source of funds for operating and maintenance expenses would be unaffected by a transaction for decommissioning funding; CLI-11-4, 74 NRC 7 n.30 (2011)

10 C.F.R. 50.34

the limited scope of review called for under Part 54, renewal of a license for a research reactor, is essentially a fresh operating license review; CLI-11-11, 74 NRC 436 n.47 (2011)

10 C.F.R. 50.38

no license may be issued to an alien or any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government; LBP-11-25, 74 NRC 391 (2011)

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to issue a combined license or entertain an application for a COL, the Commission cannot know or have reason to believe applicant is controlled by an alien, a foreign corporation, or a foreign government; LBP-11-25, 74 NRC 394-95 (2011)

10 C.F.R. 50.47(a)(1)(i)

license amendment requests do not require an updated or separate emergency plan unless such a plan would be germane to the type of license amendment request under review or is part of a licensee's periodic update of emergency plans; LBP-11-29, 74 NRC 622 (2011)

NRC explicitly requires an emergency plan for initial reactor operating licenses but does not require it for reactor operating license renewals; LBP-11-29, 74 NRC 622-23 (2011)

10 C.F.R. 50.49(a)

licensees are required to establish a program for qualifying certain defined electric equipment; LBP-11-20, 74 NRC 111 (2011)

10 C.F.R. 50.49(b)

safety-related electric equipment that must be environmentally qualified is described; LBP-11-20, 74 NRC 111 (2011)

10 C.F.R. 50.49(c)

environmental qualification of electric equipment important to safety located in an environment that would at no time be significantly more severe than the environment that would occur during normal plant operation is not included within the scope of this section; LBP-11-20, 74 NRC 112 (2011)

10 C F R 50 54(hh)(2)

apparent gaps in this regulation are outlined; LBP-11-21, 74 NRC 139-40 (2011)

challenge to applicant's compliance with this section falls outside the scope of a license renewal proceeding; LBP-11-21, 74 NRC 131 (2011)

challenges to this provision are neither germane to age-related degradation nor unique to the license renewal period; LBP-11-21, 74 NRC 130 (2011)

current reactor licensees comply with the requirements of this section through conditions on their operating licenses; LBP-11-21, 74 NRC 131 (2011)

evaluation of existing dose projection models or a dose assessment are not required; CLI-11-9, 74 NRC 244 (2011)

licensees must 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; CLI-11-5, 74 NRC 149 n.14 (2011)

severe accident mitigative strategy requirements for licensees are set forth; CLI-11-9, 74 NRC 238 (2011) this section applies to both current reactor licensees under Part 50 and new applicants for licensees under Part 52; LBP-11-21, 74 NRC 130 (2011)

this section requires use of readily available resources and identification of potential practicable areas for the use of beyond-readily-available resources, indicating NRC's preference for practicability; CLI-11-9, 74 NRC 243 n.57 (2011)

10 C.F.R. 50.54(x)

licensee may take reasonable action that departs from a license condition or a technical specification in an emergency when the action is immediately needed to protect the public health and safety and no action consistent with license conditions and technical specifications that can provide adequate or equivalent protection is immediately apparent; DD-11-6, 74 NRC 423 (2011)

10 C.F.R. 50.55a(b), 50.55a(g)(4)

this section on inservice inspections incorporates by reference the requirements of section XI of the ASME Boiler and Pressure Vessel Code; CLI-11-8, 74 NRC 230 (2011)

10 C.F.R. 50.71

the current licensing basis includes plant-specific design-basis information as documented in the most recent final safety analysis report; LBP-11-21, 74 NRC 130 (2011)

10 C.F.R. 50.72

licensee's failure to timely notify NRC about safety relief valve failure and inoperability is a violation; DD-11-6, 74 NRC 422-23 (2011)

10 C.F.R. 50.72(b)

licensee must notify NRC as soon as practical, and in all cases within 1 hour of the occurrence, of any deviation from a plant's technical specifications; DD-11-6, 74 NRC 423 (2011)

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10 C.F.R. 50.73

relief valve failure and inoperability found during the refueling outage, which potentially affected the ability of the SRVs to satisfy design actuation requirements, meets the requirements for a licensee event report; DD-11-6, 74 NRC 423 (2011)

10 C.F.R. 50.73(a)(2)(i)(B)

evidence that relief valve failure and inoperability may have existed for a period of time greater than allowed by technical specifications is a reportable event; DD-11-6, 74 NRC 423 (2011)

10 C.F.R. 50.75(b) and (c)

estimated amount of decommissioning funds must be reported to NRC; DD-11-7, 74 NRC 790 (2011) 10 C.F.R. 50.75(c)

licensees may use a site-specific methodology to determine the decommissioning funding needed as long as the amount is greater than the decommissioning cost estimate derived from formulas in this section; DD-11-7, 74 NRC 791 (2011)

licensees must use the formulas in this section to estimate the minimum funding amount needed for radiological decommissioning; DD-11-7, 74 NRC 791 (2011)

10 C.F.R. 50.75(e)(1)(v)

contracts that licensee is relying on for decommissioning funding must be reported to NRC; DD-11-7, 74 NRC 791 (2011)

10 C.F.R. 50.75(e)(2)

NRC reserves the right to review, as necessary, the rate of accumulation of decommissioning funds and to take additional actions, as appropriate on a case-by-case basis, to ensure an adequate accumulation of decommissioning funds; DD-11-7, 74 NRC 791, 792 (2011)

10 C.F.R. 50.75(f)(1) and (2)

power reactor licensees must report decommissioning funding assurance information to NRC at least once every 2 years; DD-11-7, 74 NRC 790 (2011)

10 C.F.R. 50.109

backfitting includes the modification of or addition to systems, structures, components, or designs of a facility; LBP-11-17, 74 NRC 17 n.19 (2011)

10 C.F.R. 50.109(a)(3)

NRC shall require the backfitting of a facility only when it determines that there is a substantial increase in the overall protection of the public health and safety or the common defense and security to be derived from the backfit and that the direct and indirect costs of implementation for that facility are justified in view of this increased protection; LBP-11-17, 74 NRC 22 n.53, 26 (2011)

10 C.F.R. Part 50, App. E

license amendment requests do not require an updated or separate emergency plan unless such a plan would be germane to the type of license amendment request under review or is part of a licensee's periodic update of emergency plans; LBP-11-29, 74 NRC 622 (2011)

10 C.F.R. 51.1

because the Commission has established a requirement to provide information to be used by NRC staff in fulfillment of its obligation under the National Environmental Policy Act, suitability of applicant's SAMA analysis must be judged by the requirements of NEPA; LBP-11-18, 74 NRC 37 (2011)

10 C.F.R. 51.10(a)

NRC, as an independent regulatory agency, is not bound by those portions of CEQ's NEPA regulations that have a substantive impact on the way in which NRC performs its regulatory functions; CLI-11-11, 74 NRC 444 (2011)

to evaluate a license renewal application for a nuclear power reactor, NRC reviews the management of aging effects and time-limited aging analysis of particular safety-related functions of the plant's systems, structures, and components pursuant to 10 C.F.R. Part 54 the environmental impacts and alternatives to the proposed action in accordance with Part 51; LBP-11-17, 74 NRC 21 (2011)

10 C.F.R. 51.14(a)(3)

the purpose of applicant's environmental report is to assist NRC in preparing the agency's own environmental analysis; LBP-11-28, 74 NRC 608 (2011)

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10 C.F.R. 51.14(b)

irrespective of the cause of the impact or the appropriate level of administrative scrutiny, for the purpose of NEPA evaluation, NRC regulations categorize impacts into direct, indirect, and cumulative; LBP-11-26, 74 NRC 546 (2011)

10 C.F.R. 51.20(b)(2)

NRC's review of a COL application is the type of proposed action obliging the Staff to prepare an environmental impact statement or a supplement thereto; LBP-11-39, 74 NRC 868 (2011)

10 C.F.R. 51.41

as a practical matter, Staff relies heavily upon applicant's environmental report in preparing its environmental impact statement; LBP-11-38, 74 NRC 830 (2011)

NRC Staff is empowered to issue requests for additional information relevant to an applicant's environmental report; LBP-11-33, 74 NRC 681 n.9 (2011); LBP-11-34, 74 NRC 697 (2011)

10 CFR 51 45

severe accident mitigation alternatives must be considered in environmental reports; CLI-11-5, 74 NRC 167 n.100 (2011)

10 C.F.R. 51.45(b)(3)

applicant's environmental report must provide sufficient information about alternatives to enable NRC Staff to prepare an environmental impact statement in compliance with NEPA; LBP-11-21, 74 NRC 137 n.126 (2011)

10 C.F.R. 51.45(c)

as a practical matter, Staff relies heavily upon applicant's environmental report in preparing its environmental impact statement; LBP-11-38, 74 NRC 830 (2011)

license renewal applicant's environmental report must contain a consideration of alternatives for reducing adverse impacts for all Category 2 license renewal issues in Appendix B; LBP-11-21, 74 NRC 132 (2011)

10 C.F.R. 51.50(c)

an environmental report is required for a combined license application; CLI-11-5, 74 NRC 167 n.100 (2011)

10 C.F.R. 51.50(c)(1)(iii)

environmental reports must include new information when a prior license has been issued for the facility, and the ER in question is associated with a subsequent license for the same facility; LBP-11-32, 74 NRC 667 (2011)

10 C.F.R. 51.51(a)

contributions of the uranium fuel cycle must be evaluated and added to the environmental costs of a proposed new nuclear power plant; LBP-11-26, 74 NRC 543 (2011)

10 C.F.R. 51.53(b)

section 51.53(c)(3)(iv) does not apply to license amendment applicants requesting a power uprate; LBP-11-29, 74 NRC 624 (2011)

10 C.F.R. 51.53(b)(2)

the costs and benefits of the energy-efficient building code are essential to determine whether the adoption of an energy-efficient building code should be included as an alternative; LBP-11-21, 74 NRC 136 (2011)

10 C.F.R. 51.53(c)

license renewal applicants need not provide a site-specific analysis of the environmental impacts of spent fuel storage in their environmental report; CLI-11-11, 74 NRC 445 (2011)

10 C.F.R. 51.53(c)(2)

a license renewal environmental report is not required to include discussion of need for power; LBP-11-21, 74 NRC 136 (2011)

discussion of the economic costs and benefits of the proposed action and alternatives is required if such costs and benefits are essential for a determination regarding the inclusion of an alternative in the range of alternatives considered; LBP-11-21, 74 NRC 136 (2011)

purpose of the regulation is described; CLI-11-11, 74 NRC 449 (2011)

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10 C.F.R. 51.53(c)(3)(i)

- because Category 1 issues already have been reviewed on a generic basis, applicant's environmental report need not provide a site-specific analysis of these issues; CLI-11-11, 74 NRC 445 (2011); LBP-11-21, 74 NRC 132 (2011)
- challenges to the basic regulatory structure of the NRC's design basis and generic environmental impacts already assessed through rulemaking are inadmissible; LBP-11-32, 74 NRC 663 (2011)
- 10 C.F.R. 51.53(c)(3)(i)-(ii)
- environmental impacts of license renewal are classified as either Category 1, which are generically addressed by the NRC's generic environmental impact statement for license renewal, or Category 2, which are analyzed on a site-specific basis; LBP-11-17, 74 NRC 21 (2011)
- 10 C.F.R. 51.53(c)(3)(ii)
- license renewal applicants must provide a plant-specific analysis of issues designated as Category 2; CLI-11-11, 74 NRC 445 n.99 (2011); LBP-11-21, 74 NRC 132 (2011)
- 10 C.F.R. 51.53(c)(3)(ii)(L)
- at the contention admissibility stage, it is simply not appropriate for boards to decide what additional information, if any, is necessary to cure a claimed deficiency in a license application; CLI-11-11, 74 NRC 439-40 (2011)
- for license renewal, analysis of the potential mitigation of, and alternatives to, severe accidents is required on a site-specific basis; LBP-11-17, 74 NRC 25 (2011)
- for operating license renewal, if NRC Staff has not previously considered severe accident mitigation alternatives for the applicant's plant in an environmental impact statement or related supplement or in an environmental assessment, applicant's environmental report must contain a consideration of SAMAs; LBP-11-17, 74 NRC 21, 27 (2011); LBP-11-18, 74 NRC 37 (2011); LBP-11-21, 74 NRC 132 (2011)
- NEPA requires NRC to provide a reasonable mitigation alternatives analysis, containing reasonable estimates, including, where appropriate, full disclosures of any known shortcomings in available methodology, incomplete or unavailable information and significant uncertainties, and a reasoned evaluation of whether and to what extent these or other considerations credibly could or would alter the analysis on which SAMDAs are considered; LBP-11-38, 74 NRC 832 (2011)
- site-specific consideration of severe accident mitigation alternatives is required at the time of license renewal unless a previous consideration of such alternatives regarding plant operation has been included in a final environmental impact statement, final environmental assessment, or a related supplement; CLI-11-5, 74 NRC 166 n.100 (2011)
- the final supplemental environmental impact statement must demonstrate that the NRC Staff has received sufficient information to take a hard look at severe accident mitigation alternatives; LBP-11-17, 74 NRC 27 (2011)
- 10 C.F.R. 51.53(c)(3)(iv)
 - applicant is not barred from voluntarily supplementing its environmental report; LBP-11-32, 74 NRC 668 n.30 (2011)
- environmental reports must include new information when a prior license has been issued for the facility, and the ER in question is associated with a subsequent license for the same facility; LBP-11-32, 74 NRC 667 (2011)
- for an operating license renewal stage, the environmental report must contain any new and significant information regarding the environmental impacts of license renewal of which applicant is aware; LBP-11-29, 74 NRC 624 (2011); LBP-11-32, 74 NRC 666, 667 (2011)
- NRC Staff is not barred from filing a request for additional information asking the applicant to supplement the environmental report; LBP-11-32, 74 NRC 668 n.30 (2011)
- the phrase "new" requires that the environmental report include environmental information that is new as compared to the original ER for the same facility and new as of the time of submission of the required ER, but does not impose a continuing duty to supplement an ER that was compliant when submitted; LBP-11-32, 74 NRC 667 (2011)
- this section does not apply to license amendment applicants requesting a power uprate; LBP-11-29, 74 NRC 624 (2011)

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10 C.F.R. 51.53(d)

environmental reports must include new information when a prior license has been issued for the facility, and the ER in question is associated with a subsequent license for the same facility; LBP-11-32, 74 NRC 667 (2011)

10 C.F.R. 51.71

even if not quantifiable, important qualitative considerations must also be addressed in an environmental impact statement; LBP-11-23, 74 NRC 345 (2011)

10 C.F.R. 51.71(a)

the purpose of applicant's environmental report is to assist NRC in preparing the agency's own environmental analysis; LBP-11-28, 74 NRC 608 (2011)

10 C.F.R. 51.71(d)

applicant's radiological measurements and monitoring program is subject to scrutiny; LBP-11-26, 74 NRC 565 (2011)

to the extent that there are important qualitative considerations or factors that cannot be quantified, these considerations or factors will be discussed in qualitative terms; LBP-11-23, 74 NRC 336 (2011)

10 C.F.R. 51.72

only where new information presents a seriously different picture of the environmental impact of the proposed project from what was previously envisioned is supplementation of an environmental impact statement required; LBP-11-39, 74 NRC 868 (2011)

10 C.F.R. 51.72(a)

circumstances under which NRC Staff must prepare supplemental environmental review documents are described; CLI-11-5, 74 NRC 167 (2011); LBP-11-33, 74 NRC 682 n.12 (2011)

NRC Staff must include new and significant information in the supplemental draft environmental impact statement: LBP-11-34, 74 NRC 697-98 (2011)

NRC Staff must supplement the draft environmental impact statement if there are substantial changes in the proposed action that are relevant to environmental concerns or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; LBP-11-33, 74 NRC 681 (2011)

10 C.F.R. 51.72(a)(2)

draft environmental impact statements must capture and address any new and significant information that arises in the interval after the applicant files its originally compliant environmental report; LBP-11-32, 74 NRC 667, 669 n.33 (2011)

if recommendations of the NRC's Near-Term Task Force review of the Fukushima Dai-ichi accident constitute relevant new and significant information, then the draft supplemental environmental impact statement must address it; LBP-11-28, 74 NRC 608 (2011)

supplement to the draft or final environmental impact statement is required if there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; LBP-11-28, 74 NRC 609 (2011); LBP-11-32, 74 NRC 662, 672 (2011)

where NRC intends to mandate that an originally compliant environmental document be supplemented, it does so explicitly; LBP-11-32, 74 NRC 666-67 (2011)

10 C.F.R. 51.72(b)

NRC Staff has the option of preparing a supplement to a draft or final environmental impact statement when, in its opinion, preparation of a supplement will further the purposes of NEPA; CLI-11-5, 74 NRC 167 n.103 (2011)

10 C.F.R. 51.92(a)

circumstances under which NRC Staff must prepare supplemental environmental review documents are described; CLI-11-5, 74 NRC 167 n.103 (2011); LBP-11-33, 74 NRC 681, 682 n.12 (2011)

10 C.F.R. 51.92(a)(1)-(2)

before taking a proposed action, Staff must issue a supplemental environmental impact statement if there are substantial changes in the proposed action that are relevant to environmental concerns or there are new and significant circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; LBP-11-39, 74 NRC 868 (2011)

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10 C.F.R. 51.92(a)(2)

- a supplement to the draft or final environmental impact statement is required if there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; LBP-11-32, 74 NRC 662, 668, 672 (2011)
- where NRC intends to mandate that an originally compliant environmental document be supplemented, it does so explicitly; LBP-11-32, 74 NRC 667 (2011)
- 10 C.F.R. 51.92(c)
- NRC Staff has the option of preparing a supplement to a draft or final environmental impact statement when, in its opinion, preparation of a supplement will further the purposes of NEPA; CLI-11-5, 74 NRC 167 n.103 (2011)
- 10 C.F.R. 51.95(c)(4)
- environmental impacts of license renewal are classified as either Category 1, which are generically addressed by the NRC's generic environmental impact statement for license renewal, or Category 2, which are analyzed on a site-specific basis; LBP-11-17, 74 NRC 21 (2011)
- 10 C.F.R. 51.103(a)(4)
- once NRC completes its environmental review, its record of decision must state whether NRC has taken all practicable measures within its jurisdiction to avoid or minimize environmental harm from the alternative selected, and if not, to explain why those measures were not adopted, and summarize any license conditions and monitoring programs adopted in connection with mitigation measures; LBP-11-17, 74 NRC 22 (2011)
- 10 C.F.R. Part 51, Subpart A, Appendix A, §4
- as part of its NEPA analysis, NRC must provide information that addresses the purpose and need for the proposed action; LBP-11-26, 74 NRC 521 (2011)
- 10 C.F.R. Part 51, Subpart A, Appendix A, §7
- regardless of their classification as direct, indirect, or cumulative, impacts that are reasonably foreseeable are to be assessed in an environmental impact statement; LBP-11-26, 74 NRC 546 (2011)
- 10 C.F.R. Part 51, Subpart A, Appendix B
- purpose of the regulation is described; CLI-11-11, 74 NRC 449 (2011)
- 10 C.F.R. Part 51, Subpart A, Appendix B, n.2
 - Category 2 issues must be reviewed on a site-specific basis because they have not been determined to be essentially similar for all plants; LBP-11-21, 74 NRC 132 (2011)
- 10 C.F.R. Part 51, Subpart A, Appendix B, tbl. B-1
- environmental impacts of license renewal are classified as either Category 1, which are generically addressed by the NRC's generic environmental impact statement for license renewal, or Category 2, which are analyzed on a site-specific basis; LBP-11-17, 74 NRC 21 (2011)
- for a mitigation analysis, NEPA demands no fully developed plan or detailed examination of specific measures that will be employed to mitigate adverse environmental effects; LBP-11-23, 74 NRC 330 (2011)
- for generic analysis of severe accidents, the probability-weighted consequences of atmospheric releases, fallout onto open bodies of water, releases to groundwater, and societal and economic impacts of severe accidents are of small significance for all plants; CLI-11-5, 74 NRC 166 n.100 (2011)
- if NRC Staff has not already considered site-specific severe accident mitigation alternatives for a facility, they must be considered as part of applicant's environmental report and ultimately as part of NRC Staff's supplemental EIS in a power reactor license renewal proceeding; LBP-11-17, 74 NRC 21 (2011)
- 10 C.F.R. Part 51, Subpart A, Appendix B, table B-1 n.3 as a tool for assessing the significance of potential impacts, NRC regulations establish a standard scheme; LBP-11-26, 74 NRC 546 (2011)
- 10 C.F.R. Part 52
- this part governs issuance of early site permits, standard design certifications, combined licenses, standard design approvals, and manufacturing licenses for nuclear power facilities; LBP-11-21, 74 NRC 131 (2011)
- 10 C.F.R. 52.47(a)(23), (27)
 - applications for certified reactor designs include a probabilistic risk assessment for severe accidents; LBP-11-38, 74 NRC 825 (2011)

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10 C.F.R. 52.63(a)(1)

challenging features of the AP1000 standard design is a matter for a design certification rulemaking, not a combined license proceeding; CLI-11-8, 74 NRC 230 (2011)

10 C.F.R. 52.63(a)(5)

challenging features of the AP1000 standard design is a matter for a design certification rulemaking, not a combined license proceeding; CLI-11-8, 74 NRC 230 (2011)

in making its combined license findings, the Commission will treat as resolved those matters resolved in the issuance of a design certification rule; LBP-11-38, 74 NRC 844 n.186 (2011)

10 C.F.R. 52.75(a)

any person except one excluded by section 50.38 may file an application for a combined license for a nuclear power facility; LBP-11-25, 74 NRC 395 n.91 (2011)

10 C.F.R. 52.79

applicant's plan to postpone most of its decisions about low-level radioactive waste disposal does not violate this section; LBP-11-31, 74 NRC 649 (2011)

10 C.F.R. 52.79(a)

information in the FSAR for controlling and limiting radioactive effluents and radiation exposures must be sufficient to enable the Commission to reach a final conclusion on all safety matters that must be resolved by the Commission before issuance of a combined license; LBP-11-31, 74 NRC 649 (2011)

motion for summary disposition is granted because there is no genuine issue or dispute as to any material fact and applicant's low-level radioactive waste plan satisfies the requirements of this section; LBP-11-31, 74 NRC 52.79(a) (2011)

10 C.F.R. 52.79(a)(3)

combined license applications must provide a level of information on plans to manage and store low-level radioactive waste onsite sufficient to enable the Commission to conclude that the application will comply with 10 C.F.R. Part 20; CLI-11-10, 74 NRC 253 (2011)

information in the FSAR must include the means for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in Part 20; LBP-11-31, 74 NRC 649 (2011)

10 C.F.R. 52.79(a)(11)

a combined license application must describe the programs, and their implementation, necessary to ensure that systems and components meet the requirements of the ASME Boiler and Pressure Vessel Code and the ASME Code of Operation and Maintenance of Nuclear Power Plants in accordance with section 50.55a; CLI-11-8, 74 NRC 230 (2011)

10 C.F.R. 52.80(d)

COL applications must include a description and plans for implementation of the guidance and strategies required by section 50.54(hh)(2) for severe accident mitigation; CLI-11-9, 74 NRC 238 (2011)

evaluation of existing dose projection models or a dose assessment is not required; CLI-11-9, 74 NRC 244 (2011)

this section mandates compliance with the agency's loss-of-large-areas requirements in 10 C.F.R. 50.54(hh)(2), but does not apply to a license renewal proceeding; LBP-11-21, 74 NRC 131 (2011) 10 C.F.R. 52.97

the extent and type of information required in a COL application regarding the question of long-term, onsite low-level radioactive waste storage is disputed; CLI-11-10, 74 NRC 255 (2011)

10 C.F.R. Part 52, Appendix A, § VI.B.7

issues surrounding severe accident mitigation design alternatives that have been resolved by regulation may not be challenged in a combined license adjudication; CLI-11-6, 74 NRC 205, 206 (2011) 10 C.F.R. Part 54

nonpower reactors, including research and test reactors, differ as a class from nuclear power plants and are not covered by this Part; CLI-11-11, 74 NRC 436 n.47 (2011)

this part governs the issuance of renewed operating license; LBP-11-21, 74 NRC 131 (2011)

10 C.F.R. 54.1

Part 54 governs issuance of renewed operating licenses and renewed combined licenses for nuclear power plants licensed pursuant to sections 103 or 104b of the Atomic Energy Act and Title II of the Energy Reorganization Act; CLI-11-11, 74 NRC 436 n.47 (2011)

10 C.F.R. 54.3

a facility's current licensing basis contains any license conditions; LBP-11-21, 74 NRC 131 (2011)

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- NRC's ongoing regulatory process ensures that the current licensing basis of an operating plant remains acceptably safe; LBP-11-21, 74 NRC 127 (2011)
- operating license renewal applicants must reassess time-limited aging analyses made during the original license term and based upon the length of the original license term; LBP-11-21, 74 NRC 129 (2011)
- the current licensing basis includes licensee's commitments remaining in effect that were made in docketed licensing correspondence such as licensee responses to NRC bulletins, generic letters, and enforcement actions, as well as licensee commitments documented in NRC safety evaluations or licensee event reports; LBP-11-21, 74 NRC 130 n.86 (2011)
- 10 C.F.R. 54.3(a)
- the current licensing basis is the set of NRC requirements (including regulations, orders, technical specifications, and license conditions) applicable to a specific plant, and includes the licensee's written, docketed commitments for ensuring compliance with applicable NRC requirements and the plant-specific design basis; LBP-11-17, 74 NRC 21 (2011)
- 10 C.F.R. 54.4
- the scope of license renewal is addressed; LBP-11-20, 74 NRC 108 (2011)
- 10 C.F.R. 54.4(a)
- safety-related systems, structures, and components are those relied upon to remain functional during and following design-basis events to ensure specific functions; LBP-11-20, 74 NRC 110 (2011) 10 C.F.R. 54.13(a)
- information provided to NRC by an applicant must be complete and accurate in all material respects; LBP-11-32, 74 NRC 668 n.31 (2011)
- 10 C.F.R. 54.13(b)
- applicants shall notify NRC of information identified by applicants as having, for the regulated activity, a significant implication for public health and safety or common defense and security; LBP-11-32, 74 NRC 668 n.31 (2011)
- 10 C.F.R. 54.21
- contents of a license renewal application are described; LBP-11-20, 74 NRC 111 (2011)
- 10 C.F.R. 54.21(a)(3)
 - operating license renewal applicants must demonstrate how they will adequately manage the effects of aging during the proposed renewal term; LBP-11-21, 74 NRC 129 (2011)
- 10 C.F.R. 54.21(b)
- applicant must update its license renewal application annually to reflect changes in its current licensing basis, but such updating does not explicitly extend to the environmental report; LBP-11-32, 74 NRC 665, 668 n.31 (2011)
- 10 C.F.R. 54.21(c)
- operating license renewal applicants must reassess time-limited aging analyses made during the original license term and based upon the length of the original license term; LBP-11-21, 74 NRC 129 (2011)
- a commitment to implement an aging management plan that NRC finds is consistent with the GALL Report constitutes one acceptable method for compliance; LBP-11-20, 74 NRC 104 n.73 (2011)
- 10 C.F.R. 54.29(a)
- a narrow and specific contention that alleges facts, with supporting documentation, of a longstanding and continuing pattern of noncompliance or management difficulties that are reasonably linked to whether licensee will actually be able to adequately manage aging in accordance with the current licensing basis during the period of extended operation can be an admissible contention; CLI-11-11, 74 NRC 433 n.27 (2011)
- 10 C.F.R. 54.29(a)(1)
- an operating license may be renewed if NRC finds, among other things, that actions have been identified and have been or will be taken to manage the effects of aging during the period of extended operation on the functionality of certain identified structures and components; CLI-11-11, 74 NRC 432 (2011)
- 10 C.F.R. 54.29(a)-(b)
- scope of reactor operating license renewal review is outlined; LBP-11-17, 74 NRC 21 (2011) 10 C.F.R. 54.29(b)
- a license renewal cannot be granted unless and until all the applicable requirements of 10 C.F.R. Part 51 have been satisfied; LBP-11-17, 74 NRC 27 n.76 (2011)

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for a license renewal to be issued, the Commission must determine that the applicable requirements of 10 C.F.R. Part 51, Subpart A have been satisfied; LBP-11-18, 74 NRC 37 (2011) 10 C.F.R. 54,33(c)

the current licensing basis of an operating license shall continue during the license renewal period, but these conditions may be supplemented or amended as necessary to protect the environment during the term of the renewed license and will be derived from information contained in the supplement to the environmental report, as analyzed and evaluated in the NRC record of decision; LBP-11-17, 74 NRC 22 (2011)

10 C.F.R. 70.4

"commencement of construction" includes clearing of land, excavation, or other substantial action that would adversely affect the natural environment of a site; LBP-11-26, 74 NRC 538 (2011)

10 C.F.R. 70.23(a)(7)

for a proposed nuclear materials-related activity, commencement of construction relative to that activity prior to a favorable Staff conclusion regarding the NEPA cost-benefit balance is grounds for denial of the authorization to conduct that activity; LBP-11-26, 74 NRC 538 (2011)

preconstruction activities that are allowed under Part 50 are also allowed for materials licenses; LBP-11-26, 74 NRC 539 (2011)

10 C.F.R. 70.25(a)

depending on the quantity of material, Part 70 license applicants must submit either a decommissioning funding plan or a certification of financial assurance; CLI-11-4, 74 NRC 9 (2011)

10 C.F.R. 70.25(a)(1)

applicant seeking a specific license associated with a uranium enrichment facility must submit a decommissioning funding plan; CLI-11-4, 74 NRC 9 (2011)

10 C.F.R. 70.25(a)-(b)

the financial assurance requirements are structured according to the quantity of material that will be authorized for possession and use; CLI-11-4, 74 NRC 9 (2011)

10 C.F.R. 70.25(b)(1)-(2)

depending on the quantity of material, Part 70 license applicants must submit either a decommissioning funding plan or a certification of financial assurance; CLI-11-4, 74 NRC 9 (2011)

10 C.F.R. 70.25(b)(2)

certification of financial assurance may state that the appropriate assurance will be obtained after the application has been approved and the license issued but before the receipt of licensed material; CLI-11-4, 74 NRC 9 n.43 (2011)

certifications of financial assurance, which are used by applicants seeking to possess smaller quantities of material, are governed by this subsection; CLI-11-4, 74 NRC 9 (2011)

NRC Staff authorization permitting applicant to defer execution of any final letters of credit for decommissioning financial assurance until after a license is issued but before receipt of licensed material might be problematic; LBP-11-26, 74 NRC 518 (2011)

10 C.F.R. 70.25(d)

possession limits associated with a certification of financial assurance are set forth in this subsection; CLI-11-4, 74 NRC 9 (2011)

10 C.F.R. 70.25(e)

applicant seeking a specific license for a uranium enrichment facility is required to submit a decommissioning funding plan consistent with this subsection; CLI-11-4, 74 NRC 9 (2011)

deferral of execution of the financial instruments until after the license has issued is not allowed for a uranium enrichment facility; CLI-11-4, 74 NRC 9 (2011)

each decommissioning funding plan must include a signed original of the instrument obtained to provide financial assurance for decommissioning at the time the plan is submitted; CLI-11-4, 74 NRC 9 (2011) request for an exemption that would enable it to provide decommissioning funding on a forward-looking,

incremental basis, at a rate proportional to the then-current decontamination and decommissioning liability is granted; CLI-11-4, 74 NRC 3 n.4 (2011)

10 C.F.R. 70.25(f)(2)

applicant's commitment to provide a letter of credit issued by a financial institution whose operations are regulated and examined by a federal or state agency is sufficient to satisfy decommissioning funding assurance requirements; CLI-11-4, 74 NRC 2 (2011); LBP-11-26, 74 NRC 517-18 (2011)

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10 C.F.R. 70.25(f)(2)(ii)

an acceptable trustee includes an appropriate state or federal government agency or an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency; CLI-11-4, 74 NRC 4 n.15 (2011)

because it has chosen a surety method, licensee must ensure that the letter of credit is payable to a trust established for decommissioning costs; CLI-11-4, 74 NRC 3 (2011)

10 C.F.R. 70.59

Part 70 applicants are required to establish a radiological monitoring program to monitor and report the release of radiological gaseous and liquid effluents to the environment; LBP-11-26, 74 NRC 565 (2011)

NRC defers to other agencies with greater expertise on an issue; CLI-11-4, 74 NRC 6 (2011)

10 C.F.R. 73.1

licensees must establish and maintain systems to protect against acts of radiological sabotage and to prevent the theft or diversion of special nuclear material; CLI-11-4, 74 NRC 6 (2011)

12 C.F.R. 3.14, 4.6, and Subpart E

federal financial regulatory agencies regularly examine banks within their jurisdiction, generally at 12- or 18-month intervals; CLI-11-4, 74 NRC 5 n.21 (2011)

36 C.F.R. 60.4

historical/cultural resources are considered eligible for listing on the National Register of Historic Places if they meet one or more of four criteria; LBP-11-26, 74 NRC 576 (2011)

40 C.F.R. Part 50

EPA's National Ambient Air Quality Standards set maximum levels for air pollutants in the ambient air deemed to provide protection for human health and welfare; LBP-11-26, 74 NRC 555 (2011)

40 C.F.R. 1500.1(c)

NEPA's fundamental purpose is helping public officials make decisions that are based on understanding of environmental consequences and that protect, restore, and enhance the environment; LBP-11-17, 74 NRC 27 (2011); LBP-11-23, 74 NRC 304, 329, 335 (2011)

40 C.F.R. 1502.14

consideration of alternatives "is the heart of the environmental impact statement; LBP-11-35, 74 NRC 750 (2011)

40 C.F.R. 1502.16(e)

because federal agencies typically describe their consideration of the energy requirements of a proposed action, in the context of that analysis agencies should evaluate greenhouse gas emissions; LBP-11-26, 74 NRC 550 n.21 (2011)

40 C.F.R. 1502.22

at the contention admissibility stage, it is simply not appropriate for boards to decide what additional information, if any, is necessary to cure a claimed deficiency in a license application; CLI-11-11, 74 NRC 439-40 (2011)

information may be unavoidably incomplete or unavailable, and under those circumstances, a final environmental impact statement can overcome this deficiency if it states that fact, explains how the missing information is relevant, sets forth the existing information, and evaluates the environmental impacts to the best of the agency's ability; CLI-11-11, 74 NRC 444 n.94 (2011)

probabilistic analysis of the risks posed by the Shoreline Fault is essential to the SAMA, and must be included unless the cost is exorbitant; CLI-11-11, 74 NRC 439 (2011)

Staff's ability to satisfy its NEPA obligations will be undermined if applicant either fails to include seismic information in its SAMA analysis, or, in omitting the information, fails to explain its absence and justify that the overall costs of obtaining it are exorbitant; CLI-11-11, 74 NRC 438, 439 (2011)

40 C.F.R. 1502.22(b)(1)

reasonably foreseeable environmental impacts that have catastrophic consequences, even if their probability of occurrence is low, must be considered in the environmental impact statement; LBP-11-23, 74 NRC 336 (2011)

40 C.F.R. 1508.7

cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time; LBP-11-26, 74 NRC 546 (2011)

LEGAL CITATIONS INDEX REGULATIONS

irrespective of the cause of the impact or the appropriate level of administrative scrutiny, for the purpose of NEPA evaluation, NRC regulations categorize impacts into direct, indirect, and cumulative; LBP-11-26, 74 NRC 546 (2011)

40 C.F.R. 1508.8

- because federal agencies typically describe their consideration of the energy requirements of a proposed action, in the context of that analysis agencies should evaluate greenhouse gas emissions; LBP-11-26, 74 NRC 550 (2011)
- direct impacts are those caused by the action that is the subject of the environmental impact statement, and occurring at the same time and place as that action, while indirect impacts are caused by the action at a later time or more distant place, yet are still reasonably foreseeable; LBP-11-26, 74 NRC 546 (2011)
- irrespective of the cause of the impact or the appropriate level of administrative scrutiny, for the purpose of NEPA evaluation, NRC regulations categorize impacts into direct, indirect, and cumulative; LBP-11-26, 74 NRC 546 (2011)
- 40 C.F.R. 1508.25
- irrespective of the cause of the impact or the appropriate level of administrative scrutiny, for the purpose of NEPA evaluation, NRC regulations categorize impacts into direct, indirect, and cumulative; LBP-11-26, 74 NRC 546 (2011)
- 40 C.F.R. 1508.27
 - agencies should consider both the context and intensity of environmental impacts; LBP-11-26, 74 NRC 546 (2011)

LEGAL CITATIONS INDEX STATUTES

5 U.S.C. § 558(c)

when licensee has made timely and sufficient application for a renewal, a license with reference to an activity of a continuing nature does not expire until the application has been finally determined by the agency; LBP-11-30, 74 NRC 629 n.5 (2011)

Administrative Procedure Act, 5 U.S.C. § 706(2)(A)

arbitrary and unreasonable restrictions on the right to a hearing would violate the prohibition on agency action that is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; LBP-11-22, 74 NRC 282 (2011)

Atomic Energy Act, 53, 63, 42 U.S.C. § 2073, 2093

NRC has clear statutory authority to regulate the construction and operation of a uranium enrichment facility; LBP-11-26, 74 NRC 518-19 (2011)

Atomic Energy Act, 102, 42 U.S.C. § 2132(a)

commercial licenses for utilization or production facilities for industrial or commercial purposes shall be issued according to the terms of section 103 of the AEA; LBP-11-25, 74 NRC 390 (2011)

Atomic Energy Act, 103, 42 U.S.C. § 2133(d)

no license may be issued to an alien or any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government; LBP-11-25, 74 NRC 390-91 (2011)

Atomic Energy Act, 189a, 42 U.S.C. § 2239(a)

NRC needs to conduct only a single licensing action and adjudicatory proceeding to authorize construction and operation and a mandatory hearing regarding the application and the Staff's associated safety and environmental reviews, despite the absence of a petitioner challenging applicant's request; LBP-11-26, 74 NRC 519 (2011)

this section has been interpreted to require that the hearing must encompass all material factors bearing on the licensing decision raised by the requester; LBP-11-22, 74 NRC 269, 275, 276 (2011)

Atomic Energy Act, 189a(1)(A), 42 U.S.C. § 2239(a)(1)(A)

the Commission, but not a licensing board, has the power to address a protracted delay in the proceeding and to direct appropriate remedial measures; LBP-11-30, 74 NRC 628 (2011)

the Commission shall grant a hearing to and admit as a party to any licensing proceeding any person whose interest may be affected by the proceeding; LBP-11-22, 74 NRC 269 (2011); LBP-11-29, 74 NRC 615 (2011)

Atomic Energy Act, 193, 42 U.S.C. § 2243

NRC needs to conduct only a single licensing action and adjudicatory proceeding to authorize construction and operation and a mandatory hearing regarding the application and the Staff's associated safety and environmental reviews, despite the absence of a petitioner challenging applicant's request; LBP-11-26, 74 NRC 519 (2011)

Atomic Energy Act, 274, 42 U.S.C. § 2021 (2011)

NRC is authorized to enter into agreements with the governor of any state providing for transfer of regulatory authority to the state over specified categories of nuclear material; CLI-11-12, 74 NRC 464 (2011)

prior to entering into an agreement with a state, NRC must find that a state's regulatory program is adequate to protect the public health and safety with respect to the materials the state seeks to regulate, and compatible with NRC's program for regulation of such materials; CLI-11-12, 74 NRC 464 (2011)

STATUTES

Atomic Energy Act, 274a(1), 42 U.S.C. § 2021(a)(1)

the central purpose and policy animating the agreement-state legislation is to recognize the interests of the states in the peaceful uses of atomic energy; CLI-11-12, 74 NRC 473 (2011)

the stated purpose of the legislation is to clarify the respective responsibilities under the AEA of the states and NRC with respect to the regulation of byproduct, source, and special nuclear materials; CLI-11-12, 74 NRC 471-72 (2011)

Atomic Energy Act, 274a(3)

the purpose of this act is to promote an orderly regulatory pattern between NRC and state governments with respect to nuclear development and use and regulation of byproduct, source, and special nuclear materials; CLI-11-12, 74 NRC 476 (2011)

Atomic Energy Act, 274b, 42 U.S.C § 2021(b)

NRC is authorized to enter into agreements with a state with respect to any one or more of a variety of classes of nuclear materials; CLI-11-12, 74 NRC 470 (2011)

Atomic Energy Act, 274c(1), 42 U.S.C. § 2021(c)(1)

NRC has clear statutory authority to regulate the construction and operation of a uranium enrichment facility; LBP-11-26, 74 NRC 518-19 (2011)

Atomic Energy Act, 274d, 42 U.S.C § 2021(d)

this subsection is construed as providing the specific conditions under which the Commission shall exercise the general legal authority granted to it under subsection b; CLI-11-12, 74 NRC 472 (2011)

this subsection is construed as requiring NRC to enter into an agreement for state regulation of the particular categories of nuclear materials that a state certifies it both desires to regulate and has established a program for, provided that NRC finds the state's program for regulation of such materials to be adequate and compatible; CLI-11-12, 74 NRC 473 (2011) Atomic Energy Act, 274j, 42 U.S.C. § 2021(j) (2011)

NRC retains power to revoke agreements with states and to restore NRC regulatory authority; CLI-11-12, 74 NRC 498 (2011)

Clean Air Act, 42 U.S.C. § 7409(b)

EPA's National Ambient Air Quality Standards set maximum levels for air pollutants in the ambient air deemed to provide protection for human health and welfare; LBP-11-26, 74 NRC 555 (2011)

Clean Air Act, 42 U.S.C. § 7410(a)(1)

EPA has granted authority to Idaho to implement, maintain, and enforce its own EPA-compliant air quality programs through State Ambient Air Quality Standards; LBP-11-26, 74 NRC 555 (2011)

Clean Air Act, 42 U.S.C. § 7411

EPA possesses authority to set numerical standards for air pollutants from emission sources, which would include the proposed uranium enrichment facility; LBP-11-26, 74 NRC 555 (2011)

Federal Records Act, 44 U.S.C. §§ 2101-18, 2901-09, 3101-07, 3301-24

the Department of Energy has independent records retention obligations regarding creation, management, and disposal of records; CLI-11-13, 74 NRC 639 n.16 (2011)

National Environmental Policy Act, 42 U.S.C. § 4332

NEPA's procedural obligation is carried out through an agency's issuance of an environmental impact statement documenting the agency's hard look at potential environmental impacts of the proposed action and reasonable alternatives thereto; LBP-11-39, 74 NRC 868 (2011)

nothing in NEPA, which applies to agencies of the federal government, can be read to require an applicant to update its environmental report; LBP-11-34, 74 NRC 697 (2011)

the environmental impact statement's hard look must examine reasonably foreseeable environmental impacts emanating from the proposed action; LBP-11-39, 74 NRC 868 (2011)

National Environmental Policy Act, 42 U.S.C. § 4322(2)

NEPA applies to agencies of the federal government, not to private parties such as applicants for NRC licenses; LBP-11-32, 74 NRC 666 (2011)

National Environmental Policy Act, 102(2)(C), 42 U.S.C. § 4332(2)(C)

agencies must prepare an environmental impact statement before approving any major federal action that will significantly affect the quality of the human environment; LBP-11-38, 74 NRC 830 (2011)

NEPA imposes procedural obligations on federal agencies proposing to take actions significantly affecting the quality of the human environment; LBP-11-39, 74 NRC 867-68 (2011)

STATUTES

NRC Staff must consult with and obtain the comments of any federal agency that has jurisdiction by law or special expertise with respect to any environmental impact involved; LBP-11-26, 74 NRC 587 (2011)

National Historic Preservation Act, 106

the area of potential effect of a federal undertaking must be designated, and the lead federal agency must consult with the SHPO regarding the presence and protection of historic and cultural resources in the designated area, as well as any federally recognized Native American groups with an ancestral interest in the property, to determine if resources important to the tribe are present; LBP-11-26, 74 NRC 576 (2011)

National Historic Preservation Act, 16 U.S.C. § 470

all adverse effects to any NRHP-eligible historic or cultural resource must be considered during any federal undertaking, such as an NRC licensing action for a proposed uranium enrichment facility; LBP-11-26, 74 NRC 576 (2011)

LEGAL CITATIONS INDEX OTHERS

- 128 Cong. Rec. S17506 (Sept. 11, 1959) (Remark of Sen. Anderson)
 - there would be confusion and possible conflict between federal and state regulations and uncertainty on the part of the industry and possible jeopardy to the public health and safety if the Atomic Energy Act had continued to remain silent as to the regulatory role of the states; CLI-11-12, 74 NRC 474 n.44 (2011)
- Fed. R. Evid. 201
 - judicial notice may be taken of any fact not subject to reasonable dispute in that it is either generally known within the territorial jurisdiction of the trial court or capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned; LBP-11-20, 74 NRC 101 n.56 (2011)
- Federal-State Relationships in the Atomic Energy Field: Hearings Before the Joint Committee on Atomic Energy, 86th Cong. at 301 (1959) (Joint Committee Hearings) (testimony of Robert Lowenstein, Atomic Energy Commission, Office of the General Counsel)
- the stated purpose of AEA § 274 is to clarify the respective responsibilities under the AEA of the states and the Commission with respect to the regulation of byproduct, source, and special nuclear materials; CLI-11-12, 74 NRC 472 (2011)
- Levin, R., A Blackletter Statement of Federal Administrative Law, 54 Admin. L. Rev. 1, 44-45 (2003) agencies can reach exactly the same result on a remanded issue as long as they rely on the correct view of a law that they previously misinterpreted, or as long as they explain themselves better or develop better evidence for their position; CLI-11-12, 74 NRC 469 n.20 (2011)
- Mandelker, Daniel R., NEPA Law and Litigation §§ 1.1, 8.18 (2d ed. 2008)
 - NEPA applies to agencies of the federal government, not to private parties such as applicants for NRC licenses; LBP-11-32, 74 NRC 666 (2011)
- N.J. Admin. Code § 7:28-12.3
 - license termination is permitted under limited restricted use for sites where only institutional controls are used or restricted use for sites where both institutional controls and engineered controls are used; CLI-11-12. 74 NRC 494 (2011)
- N.J. Admin. Code § 7:28-6.1(a)
 - public doses for all Part 20 radiation protection programs must be as low as reasonably achievable and a basic radiation protection public dose standard of 100 mrem per year is required; CLI-11-12, 74 NRC 482 (2011)
- N.J. Admin. Code § 7:28-12.8, 12.9, 12.10
 - New Jersey has two restricted-release options that permit license termination under specified soil concentration levels; CLI-11-12, 74 NRC 494 (2011)
- N.J. Admin. Code § 7:28-12.8(a)(1), 12.9, 12.10, and 12.11
 - licensee is required to show, using concentration tables or dose modeling, that, for unrestricted use remedial action, limited restricted use remedial action, or a restricted use remedial action, the total effective dose equivalent to members of the public would not be more than 15 mrem per year; CLI-11-12, 74 NRC 482 (2011)
- N.J. Admin. Code § 7:28-12.8(b) and (c)
 - radioactively contaminated ground and surface water must be remediated in accordance with New Jersey water quality requirements; CLI-11-12, 74 NRC 483 (2011)

OTHERS

- N.J. Admin. Code § 7:28-12.10(d)
 - New Jersey has adopted license termination requirements that incorporate more conservative dose calculation methodologies than NRC requirements; CLI-11-12, 74 NRC 482-83 (2011)
- N.J. Admin. Code §§ 7:28-12.10(e), 7:28-12.11(e)
 - New Jersey has adopted license termination requirements that incorporate more conservative dose calculation methodologies than NRC requirements; CLI-11-12, 74 NRC 483 (2011)
- N.J. Admin. Code § 7:28-12.11
 - licensees may petition for restricted release using alternative remediation standards, under which license termination is based on dose modeling instead of soil concentration levels; CLI-11-12, 74 NRC 494 (2011)
- N.J. Admin. Code § 7:28-12.11(e)
 - restricted-release decommissioning requires that doses to members of the public resulting from a simultaneous and complete failure of institutional and engineering controls not exceed 100 mrem per year; CLI-11-12, 74 NRC 495 (2011)
- Report by the Joint Committee on Atomic Energy: Amendments to the Atomic Energy Act of 1954, as amended, with Respect to Cooperation with the States, H.R. Rep. No. 86-1125, 86th Cong., 1st Sess. at 3
 - in enacting AEA § 274, Congress acknowledged the significant interest of the states in regulating radiation hazards that do not involve interstate, national, or international considerations; CLI-11-12, 74 NRC 473 (2011)
- Report by the Joint Committee on Atomic Energy: Amendments to the Atomic Energy Act of 1954, as amended, with Respect to Cooperation with the States, H.R. Rep. No. 86-1125, 86th Cong., 1st Sess. at 8
 - in enacting AEA § 274, Congress acknowledged the significant interest of the states in regulating radiation hazards that are local and limited in nature; CLI-11-12, 74 NRC 473 (2011)
- Selected Materials on Federal-State Cooperation in the Atomic Energy Field, 86th Cong., 1st Sess. at 27 (1959)
 - the Commission may enter into an agreement under AEA § 274a with any state if the conditions of state certification and Commission finding of adequacy and compatibility are met; CLI-11-12, 74 NRC 473 (2011)
- 2A Singer, Norman J., Statutes and Statutory Construction § 47:38, at 393-95 (6th ed. 2000) 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; CLI-11-9, 74 NRC 242 (2011)

ABEYANCE OF APPEAL

given the posture of the case, the Commission declines to decide a petition for review but will allow petitioner to file a motion to reinstate its petition should the proceeding be reactivated at a future time; CLI-11-15, 74 NRC 815 (2011)

ABEYANCE OF PROCEEDING

- petitioner's request to hold the license renewal proceeding in abeyance until the Commission resolves petitioner's request to suspend the proceeding pending evaluation of the Fukushima accident is denied because the Commission has denied the suspension request; LBP-11-35, 74 NRC 701 (2011)
- post-9/11 abeyance of a proceeding was denied where the proceeding was at an early stage, there was no risk of immediate threat to public health and safety, there were non-terrorism-related contentions to be considered, and the only harm to petitioner would be inevitable litigation costs; CLI-11-5, 74 NRC 141 (2011)
- the Commission may consider requests to suspend or hold proceedings in abeyance pursuant to its inherent supervisory authority over agency proceedings; CLI-11-5, 74 NRC 141 (2011)

ACCIDENTS

to waive the generic assessment in NRC regulations to permit adjudication of issues involving the environmental impact of spent fuel pool accidents in this license renewal proceeding, the Commission must conclude that the rule's strict application would not serve the purpose for which it was adopted; CLI-11-11, 74 NRC 427 (2011)

See also Design Basis Accident

ACCIDENTS, SEVERE

- although the likelihood of severe accidents occurring is lower than that for design basis accidents, consequences of severe accidents are generally greater; LBP-11-38, 74 NRC 817 (2011)
- an accident sequence with a probability conservatively estimated at 2.0×10^{-7} per reactor year is remote and speculative for the purposes of NEPA; LBP-11-38, 74 NRC 817 (2011)
- applications for certified reactor designs include a probabilistic risk assessment for severe accidents; LBP-11-38, 74 NRC 817 (2011)
- COL applications must include a description and plans for implementation of the guidance and strategies required by section 50.54(hh)(2) for severe accident mitigation; CLI-11-9, 74 NRC 233 (2011)
- contention that the frequency of occurrence of severe accidents is erroneously underestimated should have been raised at the outset of the license renewal proceeding and thus is untimely; LBP-11-35, 74 NRC 701 (2011)
- Fukushima-related petitions for suspension of proceeding and rescission of regulations that make generic conclusions about environmental impacts of severe reactor and spent fuel pool accidents and that preclude consideration of those issues in individual licensing proceedings are denied; LBP-11-39, 74 NRC 862 (2011)
- generic analysis remains appropriate for spent fuel pool accidents in license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)
- severe accidents are reactor accidents more severe than design basis accidents and involve substantial damage to the reactor core; LBP-11-38, 74 NRC 817 (2011)
- where initial decisions have been issued, the record should not be reopened to take evidence on some accident-related issue unless the party seeking reopening shows that there is significant new evidence, not included in the record, that materially affects the decision; CLI-11-5, 74 NRC 141 (2011)

ADJUDICATORY PROCEEDINGS

See Abeyance of Proceeding; Combined License Proceedings; Dismissal of Proceeding; High-Level Waste Repository Proceeding; Independent Spent Fuel Storage Installation Proceedings; License Renewal Proceedings; Operating License Proceedings; Operating License Renewal Proceedings; Suspension of Proceeding; Termination of Proceeding

ADMINISTRATIVE PROCEDURE ACT

a federal agency would be acting arbitrarily and capriciously if it did not look at relevant data and sufficiently explain a rational nexus between the facts found in its review and the choice it makes as a result of that review; LBP-11-17, 74 NRC 11 (2011)

AESTHETIC IMPACTS

visual impact of operation of a uranium enrichment facility on the quality of recreational experience is discussed; LBP-11-26, 74 NRC 499 (2011)

AFFIDAVITS

- absence of a competent affidavit deprives the board of the ability or opportunity to substantively consider whether a materially different result would be obtained as is required by the regulatory reopening standards; LBP-11-23, 74 NRC 287 (2011)
- an expert's affidavit supporting a motion to reopen must supply the factual and legal foundation for assertions that the reopening criteria are satisfied; LBP-11-20, 74 NRC 65 (2011)
- each of the criteria for a motion to reopen must be separately addressed in an affidavit, with a specific explanation of why it has been met; LBP-11-35, 74 NRC 701 (2011)
- evidence to support a motion to reopen must be relevant, material, and reliable; LBP-11-23, 74 NRC 287 (2011)
- factual and/or technical bases for the claim that the reopening criteria have been met must address each of the criteria separately, with a specific explanation of why it has been met; LBP-11-20, 74 NRC 65 (2011); LBP-11-23, 74 NRC 287 (2011)
- motions to reopen must be accompanied by affidavits that set forth the factual and/or technical bases for the movant's claim that the criteria of 10 C.F.R. 2.326(a) have been satisfied; CLI-11-8, 74 NRC 214 (2011); LBP-11-20, 74 NRC 65 (2011); LBP-11-23, 74 NRC 287 (2011); LBP-11-35, 74 NRC 701 (2011)
- motions to reopen shall set forth such facts as would be admissible in evidence and shall show affirmatively that the affiant is competent to testify to the matters stated therein; LBP-11-23, 74 NRC 287 (2011)
- petitioner's assertion that recriticality is demonstrated by the relative quantities of radionuclides released is not self-evident and is clearly of the class of statements that must be supported by expert opinion; LBP-11-23, 74 NRC 287 (2011)
- supporting affidavits must be given by competent individuals with knowledge of the facts alleged, or by experts in the disciplines appropriate to the issues raised; CLI-11-8, 74 NRC 214 (2011); LBP-11-35, 74 NRC 701 (2011)
- to meet the waiver standard, the party seeking a waiver must attach an affidavit that, among other things, states with particularity the special circumstances claimed to justify the waiver or exception requested; CLI-11-11, 74 NRC 427 (2011)

AGING MANAGEMENT

- a commitment to implement an aging management plan that NRC finds is consistent with the GALL Report constitutes one acceptable method for compliance, but does not insulate such an approach from challenge by an intervenor, and is not binding on a licensing board in an adjudication; LBP-11-20, 74 NRC 65 (2011)
- a license renewal applicant is compelled to implement safety-related severe accident mitigation alternatives that deal with aging management; LBP-11-17, 74 NRC 11 (2011)
- a narrow and specific contention that alleges facts, with supporting documentation, of a longstanding and continuing pattern of noncompliance or management difficulties that are reasonably linked to whether licensee will actually be able to adequately manage aging in accordance with the current licensing basis during the period of extended operation can be an admissible contention; CLI-11-11, 74 NRC 427 (2011)
- amendment to aging management plan extended the AMP for medium-voltage cables to also cover low-voltage cables; LBP-11-20, 74 NRC 65 (2011)

- an operating license may be renewed if NRC finds, among other things, that actions have been identified and have been or will be taken to manage the effects of aging during the period of extended operation on the functionality of certain identified structures and components: CLI-11-11, 74 NRC 427 (2011)
- applicants must demonstrate how their programs will be effective in managing the effects of aging during the proposed period of extended operation, at a detailed component and structure level, rather than at a more generalized system level; LBP-11-21, 74 NRC 115 (2011)
- challenges to section 50.54(hh)(2) are neither germane to age-related degradation nor unique to the license renewal period; LBP-11-21, 74 NRC 115 (2011)
- conceptual issues such as operational history, quality assurance, quality control, management competence, and human factors are excluded from license renewal review in favor of a safety-related review focusing on maintaining particular functions of certain physical systems, structures, and components; CLI-11-11. 74 NRC 427 (2011)
- emergency planning is neither germane to age-related degradation nor unique to the period covered by a license renewal application; LBP-11-35, 74 NRC 701 (2011)
- inspection reports could be seen as objective evidence that applicant may not adequately manage aging in the future; CLI-11-11, 74 NRC 427 (2011)
- license renewal review is a limited one, focused on aging management issues; CLI-11-5, 74 NRC 141
- license renewal safety review is limited to the matters specified in 10 C.F.R. Part 54, which focus on the management of aging for certain systems, structures, and components, and the review of time-limited aging analyses; LBP-11-21, 74 NRC 115 (2011)
- many safety questions that relate to plant aging become important during the extended renewal term since the design of some components may have been based upon a service lifetime of only 40 years; LBP-11-21, 74 NRC 115 (2011)
- NRC Staff's obligations under Part 51 and NEPA are not limited to only those severe accident mitigation alternatives that address aging management; LBP-11-17, 74 NRC 11 (2011)
- NRC's license renewal process concerns a particularized and limited inquiry into the potential impacts of an additional 20 years of nuclear power plant operation, not day-to-day operational issues; LBP-11-21, 74 NRC 115 (2011)
- the "reasonable assurance" standard for aging management programs does not require a 95% confidence level of compliance; LBP-11-18, 74 NRC 29 (2011)
- the aging-based safety review set out in Part 54 is analytically separate from Part 51's environmental inquiry and does not in any sense restrict NEPA; LBP-11-17, 74 NRC 11 (2011)
- the NEPA review in license renewal proceedings is not limited to aging management-related issues; LBP-11-17, 74 NRC 11 (2011)
- to evaluate an operating license renewal application, the NRC reviews the management of aging effects and time-limited aging analysis of particular safety-related functions of the plant's systems, structures, and components pursuant to 10 C.F.R. Part 54 and the environmental impacts and alternatives to the proposed action in accordance with Part 51; LBP-11-17, 74 NRC 11 (2011)

AGREEMENT STATE PROGRAMS

- a state's regulations are not inherently unfair because they may be designed to effectuate a state-desired regulatory outcome; CLI-11-12, 74 NRC 460 (2011)
- Criterion 25 of NRC's policy statement does not relate to substantive standards or the regulatory outcome of a pending license application, even where a license application has been pending at the NRC for an extended period; CLI-11-12, 74 NRC 460 (2011)
- if a regulated entity believes that a state's program, as implemented, is unlawful or contrary to public health and safety, it may raise its agreement-state performance concerns with NRC; CLI-11-12, 74 NRC 460 (2011)
- litigation at NRC had actually reached the point of NRC approval of an onsite plan at the time of the transfer of authority to an agreement state; CLI-11-12, 74 NRC 460 (2011)
- New Jersey's license termination regulations are not less protective than or incompatible with NRC's in making the terms of restricted release considerably more difficult than those for unrestricted release; CLI-11-12, 74 NRC 460 (2011)

- NRC addresses agreement-state performance concerns through its Integrated Materials Performance Evaluation Program process or through an independent agreement-state performance concern evaluation, depending on the performance concern raised; CLI-11-12, 74 NRC 460 (2011)
- NRC is authorized to enter into agreements with the governor of any state providing for transfer of regulatory authority to the state over specified categories of nuclear material; CLI-11-12, 74 NRC 460 (2011)
- NRC may not, over the objections of a state desiring jurisdiction and for reasons other than health and safety or compatibility, retain regulatory authority over pending applications involving a nuclear materials category otherwise transferred to a state; CLI-11-12, 74 NRC 460 (2011)
- NRC retains power under AEA § 274j to revoke agreements with states and to restore NRC regulatory authority; CLI-11-12, 74 NRC 460 (2011)
- prior to entering into an agreement with a state, NRC must find that a state's regulatory program is adequate to protect the public health and safety with respect to the materials the state seeks to regulate, and compatible with NRC's program for regulation of such materials; CLI-11-12, 74 NRC 460 (2011)
- state requests for limited agreements will be considered by NRC only if the state can identify discrete categories of material or classes of licensed activity that can be reserved to NRC authority without undue confusion to the regulated community or burden to NRC resources and can be applied logically and consistently to existing and future licensees over time; CLI-11-12, 74 NRC 460 (2011)
- the mandatory language used in Atomic Energy Act § 274d is construed as requiring NRC to enter into an agreement for state regulation of the particular categories of nuclear materials that a state certifies it both desires to regulate and has established a program for, provided NRC finds the state's program to be adequate and compatible; CLI-11-12, 74 NRC 460 (2011)
- the purpose of Criterion 25 of NRC's policy statement is to ensure that licensing records are transferred to and received by the new agreement state in an orderly manner that ensures that no pending licensing actions will be significantly delayed or that no records will be lost or misplaced as a result of the transition of authority; CLI-11-12, 74 NRC 460 (2011)

AGREEMENT STATES

states should be provided with flexibility in program implementation to accommodate individual state preferences, state legislative direction, and local needs and conditions, including the flexibility to incorporate more stringent, or similar, requirements; CLI-11-12, 74 NRC 460 (2011)

AIR POLLUTION

- air quality impacts of particulate matter are discussed; LBP-11-26, 74 NRC 499 (2011)
- EPA also has granted authority to some states to implement, maintain, and enforce their own EPA-compliant air quality programs through State Ambient Air Quality Standards; LBP-11-26, 74 NRC 499 (2011)
- EPA's National Ambient Air Quality Standards set maximum levels for air pollutants in the ambient air deemed to provide protection for human health and welfare; LBP-11-26, 74 NRC 499 (2011)
- in parallel with NRC Staff's role under NEPA to assess environmental impacts, the Environmental Protection Agency possesses authority under the Clean Air Act to set numerical standards for air pollutants from emission sources; LBP-11-26, 74 NRC 499 (2011)
- NRC Staff assesses air quality impacts as a matter of course, categorizing them as small, medium, or large; LBP-11-26, 74 NRC 499 (2011)
- prediction of air dispersion based on defined parameters in the planetary boundary layer is discussed; LBP-11-26, 74 NRC 499 (2011)
- surface roughness, albedo, and Bowen ratio inputs to the AERMOD model are discussed; LBP-11-26, 74 NRC 499 (2011)
- the AERMOD model for demonstrating compliance with EPA regulations and for state air quality protection planning is discussed; LBP-11-26, 74 NRC 499 (2011)

ALARA

- every reasonable effort must be made to maintain exposures to radiation as far below the dose limits in Part 20 as is practical consistent with the purpose for which the licensed activity is undertaken; CLI-11-12, 74 NRC 460 (2011)
- the ALARA requirement in section 20.1101(b) applies to the dose criteria for license termination; CLI-11-12, 74 NRC 460 (2011)

ALARA PRINCIPLE

- as used in NRC regulations, ALARA does not mean as low as achievable as a comparison between achievable doses, but rather as low as reasonably achievable below the dose limits; CLI-11-12, 74 NRC 460 (2011)
- either as a general regulatory principle or as used in NRC's license termination rule, the principle does not incorporate or call for any comparative analysis of doses from restricted and unrestricted release; CLI-11-12, 74 NRC 460 (2011)
- small doses of radiation below dose limits, while safe and acceptable, may have some associated risk and should be reduced below limits when reasonable; CLI-11-12, 74 NRC 460 (2011)
- the principle has been incorporated into the restricted-use portion of the license termination rule to screen out sites that should be removing contamination to achieve unrestricted use; CLI-11-12, 74 NRC 460 (2011)

AMENDMENT OF CONTENTIONS

- a motion to file new or amended contentions must address the motion to reopen standards after an intervention petition has been denied; LBP-11-20, 74 NRC 65 (2011)
- appellants may not amend their contentions on appeal; CLI-11-8, 74 NRC 214 (2011)
- by filing proposed new or amended contention within the time specified in the initial scheduling order, petitioner satisfies timeliness requirements but would still have to satisfy the other requirements of section 2.309(f)(2) or the requirements of section 2.309(c), as well as the contention admissibility requirements of 10 C.F.R. 2.309(f)(1); LBP-11-22, 74 NRC 259 (2011)
- intervenor is not free to change the focus of its admitted contention, at will, as the litigation progresses; LBP-11-38, 74 NRC 817 (2011)
- NRC preserves the right to a hearing when an application is amended by allowing new or amended contentions to be filed in response to material new information; LBP-11-22, 74 NRC 259 (2011)
- petitioner may amend its contentions or file new contentions if there are data or conclusions in the NRC draft or final environmental impact statement or any supplements thereto, that differ significantly from the data or conclusions in applicant's documents; LBP-11-33, 74 NRC 675 (2011); LBP-11-34, 74 NRC 685 (2011)
- reply briefs cannot be used to present entirely new facts or arguments in an attempt to reinvigorate thinly supported contentions; LBP-11-34, 74 NRC 685 (2011)
- where an amended version of a dismissed contention was pending before the board, the board retains jurisdiction to decide whether to admit the proposed contention; LBP-11-22, 74 NRC 259 (2011)

AMENDMENT OF REGULATIONS

applying principles of statutory interpretation, the board declined to insert addition requirements into the regulations 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; CLI-11-9, 74 NRC 233 (2011)

APPEAL PANEL

although the Atomic Safety and Licensing Appeal Panel is no longer in existence, the decisions of its appeals boards continue to be binding to the degree they concern a regulation or regulatory matter that has not been revised or otherwise materially altered; LBP-11-34, 74 NRC 685 (2011)

APPEALS

- a board order is appealable when it disposes of a major segment of the case or terminates a party's right to participate; CLI-11-10, 74 NRC 251 (2011)
- appellants seeking oral argument must show how oral argument will assist the Commission in reaching a decision; CLI-11-8, 74 NRC 214 (2011)
- grant of summary disposition where other contentions are pending is not a final decision, and is appealable only upon a showing that the standards for interlocutory review have been met; CLI-11-14, 74 NRC 801 (2011)
- in its discretion, the Commission may allow oral argument upon the request of a party made in a petition for review, brief on review, or upon its own initiative; CLI-11-8, 74 NRC 214 (2011)
- parties may choose whether to submit a petition for review, an answer in support of the petition, or neither; CLI-11-14, 74 NRC 801 (2011)
- petitions for review are allowed after a full or partial initial decision, both of which are considered final decisions; CLI-11-10, 74 NRC 251 (2011); CLI-11-14, 74 NRC 801 (2011)

- section 2.311(d)(1) provides for appeals as of right on the question of whether a request for hearing should have been wholly denied; CLI-11-11, 74 NRC 427 (2011)
- the procedural rule governing appeals in a 10 C.F.R. Part 2, Subpart J proceeding provides for review only in the limited circumstances prescribed in the rule; CLI-11-13, 74 NRC 635 (2011)

See also Abeyance of Appeal; Briefs, Appellate

APPEALS, INTERLOCUTORY

- a partial initial decision is one rendered following an evidentiary hearing on one or more contentions, but that does not dispose of the entire matter; CLI-11-6, 74 NRC 203 (2011)
- admission of a contention that might require further explanation of severe accident mitigation alternatives cost-benefit analysis did not have a pervasive and unusual effect on the litigation; CLI-11-6, 74 NRC 203 (2011)
- allowing an environmental challenge to continue after the environmental impact statement has issued does not constitute a merits ruling that the Staff's review document is inadequate; CLI-11-6, 74 NRC 203 (2011)
- appellate review of interlocutory licensing board orders is disfavored and will be undertaken as a discretionary matter only in extraordinary circumstances; CLI-11-10, 74 NRC 251 (2011)
- because a board makes a disputed legal ruling does not necessarily warrant immediate Commission action; CLI-11-6, 74 NRC 203 (2011)
- denial of summary disposition does not constitute a full or partial initial decision warranting immediate Commission review; CLI-11-10, 74 NRC 251 (2011)
- denial of summary disposition neither threatens NRC Staff with immediate and serious irreparable impact that could not be alleviated through a petition for review of the presiding officer's final decision nor affects the basic structure of the proceeding in a pervasive or unusual manner; CLI-11-10, 74 NRC 251 (2011)
- expansion of issues for litigation that results from a board action does not have a pervasive and unusual effect on the litigation; CLI-11-10, 74 NRC 251 (2011)
- grant of summary disposition on a particular contention is an interlocutory ruling appealable at the end of the case; CLI-11-6, 74 NRC 203 (2011)
- labor and expense of pursuing litigation that petitioner sought to curtail do not constitute irreparable harm; CLI-11-10, 74 NRC 251 (2011)
- piecemeal appeals during ongoing licensing board proceedings are generally disfavored; CLI-11-6, 74 NRC 203 (2011)
- review of board rulings is permitted when petitioner demonstrates either that the ruling threatens the petitioner with immediate and irreparable harm or the ruling has a pervasive and unusual effect on the structure of the proceeding; CLI-11-6, 74 NRC 203 (2011)
- the board's denial of a summary disposition motion did not constitute a de facto partial initial decision or a final decision on the merits, ripe for Commission review; CLI-11-6, 74 NRC 203 (2011)

APPELLATE REVIEW

- in the absence of clear error or abuse of discretion, the Commission defers to its boards' rulings on such threshold issues: CLJ-11-8, 74 NRC 214 (2011); CLJ-11-9, 74 NRC 233 (2011)
- parties seeking interlocutory review must show that the issue to be reviewed threatens the party adversely affected by it with immediate and serious irreparable impact which, as a practical matter, could not be alleviated through a petition for review of the presiding officer's final decision or affects the basic structure of the proceeding in a pervasive or unusual manner; CLI-11-14, 74 NRC 801 (2011)
- review of a board's certified question that raises a significant and novel issue whose early resolution will materially advance the orderly disposition of the proceeding is granted; CLI-11-4, 74 NRC 1 (2011)
- the adjudicatory record, board decision, and any Commission appellate decisions become, in effect, part of the final environmental impact statement; CLI-11-6, 74 NRC 203 (2011)
- the basis for allowing immediate appellate review of partial initial decisions rests on prior appeal board decisions permitting review of a licensing board ruling that disposes of a major segment of the case or terminates a party's right to participate; CLI-11-14, 74 NRC 801 (2011)
- the Commission will defer to a board's rulings on contention admissibility absent an error of law or abuse of discretion; CLI-11-11, 74 NRC 427 (2011)

- the Commission will grant a petition for review at its discretion, giving due weight to the existence of a substantial question with respect to one or more of the considerations of 10 C.F.R. 2.341(b)(4)(i)-(v); CLI-11-9, 74 NRC 233 (2011)
- where the Commission has a thorough written record containing adequate information on which to base a decision, there is no need for oral argument; CLI-11-8, 74 NRC 214 (2011)
- with the board's termination of the proceeding, the board's interlocutory rulings on contention admissibility became ripe for appeal; CLI-11-9, 74 NRC 233 (2011)

APPLICANTS

- applicant in a licensing proceeding must meet its burden of proof by a preponderance of the evidence; LBP-11-38, 74 NRC 817 (2011)
- in denying an exemption request, Staff is required to inform applicant of the deadline for seeking a hearing; LBP-11-19, 74 NRC 61 (2011)
- the time for applicant to request a hearing should be tolled until notice is issued if NRC Staff fails to provide the notice and hearing opportunity mandated by 10 C.F.R. 2.103(b); LBP-11-19, 74 NRC 61 (2011)

ASME CODE

- a combined license application must describe the programs, and their implementation, necessary to ensure that systems and components meet the requirements of the ASME Boiler and Pressure Vessel Code and the ASME Code of Operation and Maintenance of Nuclear Power Plants in accordance with 10 C.F.R. 50.55a; CLI-11-8, 74 NRC 214 (2011)
- requirements of section XI of the ASME Boiler and Pressure Vessel Code on inservice inspections are incorporated by reference in 10 C.F.R. 50.55a(b) and 50.55a(g)(4); CLI-11-8, 74 NRC 214 (2011)

ATOMIC ENERGY ACT

- commercial licenses for utilization or production facilities for industrial or commercial purposes shall be issued according to the terms of section 103; LBP-11-25, 74 NRC 380 (2011)
- extreme delay in the completion of Staff's environmental review, and thus the equal delay in hearing the Intervenors' claim of injury, raises issues of compliance with section 189a of the Atomic Energy Act; LBP-11-30, 74 NRC 627 (2011)
- NRC has clear statutory authority to regulate the construction and operation of a uranium enrichment facility; LBP-11-26, 74 NRC 499 (2011)
- NRC is authorized to enter into agreements with the governor of any state providing for transfer of regulatory authority to the state over specified categories of nuclear material; CLI-11-12, 74 NRC 460 (2011)
- NRC is not granted the discretion to eliminate from the hearing, material issues in its licensing decision; LBP-11-22, 74 NRC 259 (2011)
- NRC may not, over the objections of a state desiring jurisdiction and for reasons other than health and safety or compatibility, retain regulatory authority over pending applications involving a nuclear materials category otherwise transferred to a state; CLI-11-12, 74 NRC 460 (2011)
- NRC retains power under section 274j to revoke agreements with states and to restore NRC regulatory authority: CLI-11-12, 74 NRC 460 (2011)
- section 189a has been interpreted to require that the hearing must encompass all material factors bearing on the licensing decision raised by the requester; LBP-11-22, 74 NRC 259 (2011)
- terminating an adjudication has significant implications for the rights of intervenors under section 189a; LBP-11-22, 74 NRC 259 (2011)
- the Commission shall grant a hearing to and admit as a party to any licensing proceeding any person whose interest may be affected by the proceeding; LBP-11-22, 74 NRC 259 (2011); LBP-11-29, 74 NRC 612 (2011)
- the Commission, but not a licensing board, has the power to address a protracted delay in the proceeding and to direct appropriate remedial measures; LBP-11-30, 74 NRC 627 (2011)
- the mandatory language used in AEA § 274d is construed as requiring NRC to enter into an agreement for state regulation of the particular categories of nuclear materials that a state certifies it both desires to regulate and has established a program for, provided NRC finds the state's program to be adequate and compatible; CLI-11-12, 74 NRC 460 (2011)
- to evaluate an operating license renewal application, NRC reviews the management of aging effects and time-limited aging analysis of particular safety-related functions of the plant's systems, structures, and

components pursuant to 10 C.F.R. Part 54 and the environmental impacts and alternatives to the proposed action in accordance with Part 51; LBP-11-17, 74 NRC 11 (2011)

BACKFITTING

- modification of or addition to systems, structures, components, or designs of a facility are included; LBP-11-17, 74 NRC 11 (2011)
- NRC shall require backfitting of a facility only when it determines that there is a substantial increase in the overall protection of the public health and safety or the common defense and security and that the costs of implementation are justified in view of this increased protection; LBP-11-17, 74 NRC 11 (2011)
- NRC Staff has authority to require implementation of non-aging-management severe accident mitigation alternatives through its current licensing basis backfit review under Part 50 or through setting conditions of the license renewal; LBP-11-17, 74 NRC 11 (2011)

BENEFIT-COST ANALYSIS

- accounting for the meteorological patterns, atmospheric transport modeling, and data issues raised by intervenor cannot credibly alter which severe accident mitigation alternatives are potentially cost-beneficial to implement; LBP-11-18, 74 NRC 29 (2011)
- adequacy of a SAMDA analysis is judged not by whether plainly better assumptions or methodologies could have been used or the analysis refined further but whether it looks genuinely plausible that inclusion of an additional factor or use of other assumptions or models may change the cost-benefit conclusions for the SAMDA analysis; LBP-11-38, 74 NRC 817 (2011)
- admission of a contention that might require further explanation of severe accident mitigation alternatives cost-benefit analysis did not have a pervasive and unusual effect on the litigation; CLI-11-6, 74 NRC 203 (2011)
- contributions of the uranium fuel cycle must be evaluated and added to the environmental costs of a proposed new nuclear power plant; LBP-11-26, 74 NRC 499 (2011)
- costs and benefits of the energy-efficient building code are essential to determine whether the adoption of the code should be included as an alternative; LBP-11-21, 74 NRC 115 (2011)
- discussion of the economic costs and benefits of the proposed action and alternatives is required if such costs and benefits are essential for a determination regarding the inclusion of an alternative in the range of alternatives considered; LBP-11-21, 74 NRC 115 (2011)
- for a proposed nuclear materials-related activity, commencement of construction relative to that activity prior to a favorable Staff conclusion regarding the NEPA cost-benefit balance is grounds for denial of the authorization to conduct that activity; LBP-11-26, 74 NRC 499 (2011)
- goal of a severe accident mitigation alternatives analysis is to identify potential changes to a nuclear power plant or its operations that might reduce the risk or likelihood or impact, or both, of a severe reactor accident for which the benefit of implementing the changes outweighs the cost of the implementation; LBP-11-18, 74 NRC 29 (2011)
- if the cost of implementing a particular severe accident mitigation alternative is greater than its estimated benefit, the SAMA is not considered cost-beneficial to implement; LBP-11-33, 74 NRC 675 (2011) initial eligibility for restricted release is determined; CLI-11-12, 74 NRC 460 (2011)
- petitioner must approximate the relative cost and benefit of a challenged SAMA or provide at least some ballpark consequence and implementation costs should the SAMA be performed; CLI-11-11, 74 NRC 427 (2011)
- scaling severe accident mitigation design alternatives implementation costs (inflation rate, regional cost-of-living adjustment, risk reduction factor) and implementation benefits (discount rate, power pricing data, power market effects, consumer impacts, power price spikes, loss of grid) is discussed; LBP-11-38, 74 NRC 817 (2011)
- sea-breeze effect and hot-spot effect must cause the expected average offsite damages to increase by at least a factor of 2 for the next most costly severe accident mitigation alternative to be cost-effective; LBP-11-18, 74 NRC 29 (2011)
- severe accident mitigation alternatives analysis is a cost-benefit analysis, not a direct safety analysis, and thus does not raise any exceptionally grave issues; LBP-11-23, 74 NRC 287 (2011)
- sufficiency of the NRC's hard look at the benefits of severe accident mitigation alternatives in comparison to their costs is subject to litigation in a license renewal proceeding; LBP-11-17, 74 NRC 11 (2011)

the required level of demonstration by petitioners of cost-effectiveness of other severe accident mitigation alternatives is case and issue specific; LBP-11-35, 74 NRC 701 (2011)

BRIEFS

parties are expected to adhere to page-limit requirements, or timely seek leave for an enlargement of the page limitation; CLI-11-14, 74 NRC 801 (2011)

BRIEFS, APPELLATE

- although the entire record is considered on appeal, including pleadings that appellants ask to be adopted by reference, the Commission's decision responds to the arguments made explicitly in the appellate brief; CLI-11-8, 74 NRC 214 (2011)
- an issue on appeal is not properly briefed by incorporating by reference papers filed with the licensing board; CLI-11-8, 74 NRC 214 (2011)
- appellants may not amend their contentions on appeal; CLI-11-8, 74 NRC 214 (2011)
- appellants must clearly identify the errors in the decision below and ensure that their brief contains sufficient information and cogent argument to alert the other parties and the Commission to the precise nature of and support for their claims; CLI-11-8, 74 NRC 214 (2011)
- briefs are limited to 30 pages, absent Commission order directing otherwise; CLI-11-8, 74 NRC 214 (2011)
- briefs on appeal must conform to the requirements stated in section 2.341(c)(2); CLI-11-8, 74 NRC 214 (2011)
- conclusory statement that appellants proved their position is not sufficient to show clear error or abuse of discretion on the part of the board; CLI-11-8, 74 NRC 214 (2011)
- page limit for appellate briefs excludes tables of contents and citations, appropriate exhibits, and statutory or regulatory extracts; CLI-11-8, 74 NRC 214 (2011)

BURDEN OF PERSUASION

- a heavier burden applies to motions to reopen than to proponents of contentions in ongoing proceedings; CLI-11-5, 74 NRC 141 (2011)
- at the contention admissibility stage, the burden is on intervenors to demonstrate a deficiency in the application; CLI-11-9, 74 NRC 233 (2011)
- intervention petitioner bears the burden of providing facts sufficient to establish its standing; LBP-11-21, 74 NRC 115 (2011)
- NRC rules deliberately place a heavy burden on proponents of contentions, who must challenge aspects of license applications with specificity, backed up with substantive technical support, mere conclusions or speculation being insufficient; CLI-11-5, 74 NRC 141 (2011)
- satisfying the reopening requirements is a heavy burden, and proponents mustf meet all of the requirements; LBP-11-20, 74 NRC 65 (2011)

BURDEN OF PROOF

- applicant may bear the burden of proof on contentions asserting deficiencies in its environmental report and where the applicant becomes a proponent of a particular challenged position set forth in the environmental impact statement; LBP-11-38, 74 NRC 817 (2011)
- for NEPA contentions, the burden of proof shifts to NRC Staff, because NRC, not applicant, bears the ultimate burden of complying with NEPA; LBP-11-38, 74 NRC 817 (2011)

CABLES

- amendment to aging management plan extended the AMP for medium-voltage cables to also cover low-voltage cables; LBP-11-20, 74 NRC 65 (2011)
- lack of clarity about which electrical cables might be subject to any saltwater environment, however high or low the concentration, and about the effects of and efforts to address this, is a level of concern sufficient to warrant further inquiry and exploration; LBP-11-20, 74 NRC 65 (2011)

CASE MANAGEMENT

- boards must exercise all the powers necessary to control the prehearing and hearing process, to avoid delay, and to maintain order; LBP-11-22, 74 NRC 259 (2011)
- boards must use the applicable Model Milestones in 10 C.F.R. Part 2, Appendix B as a starting point for the schedule, but the board shall make appropriate modifications based upon the circumstances of each case; LBP-11-22, 74 NRC 259 (2011)

- boards should develop schedules that will provide a fair and expeditious procedure for resolving new or amended contentions that might be proposed during the course of the proceeding, not just those already admitted; LBP-11-22, 74 NRC 259 (2011)
- NRC may impose reasonable requirements on new contentions when those requirements are related to legitimate agency goals such as avoiding needless duplication and delay; LBP-11-22, 74 NRC 259 (2011)
- presiding officers have the duty to conduct a fair and impartial hearing according to law, to take appropriate action to control the prehearing and hearing process, to avoid delay and to maintain order, and have all the powers necessary to those ends; LBP-11-22, 74 NRC 259 (2011)
- shortly after a hearing request has been granted, the board must set a schedule to govern the proceeding; LBP-11-22, 74 NRC 259 (2011)
- the Atomic Energy Act does not grant NRC the discretion to eliminate from the hearing, material issues in its licensing decision; LBP-11-22, 74 NRC 259 (2011)
- the Commission generally defers to the Board on case management issues; CLI-11-13, 74 NRC 635 (2011)
- when establishing a schedule, boards are to consider NRC's interest in providing a fair and expeditious resolution of the issues sought to be admitted for adjudication, along with other factors; LBP-11-22, 74 NRC 259 (2011)

CERTIFICATE OF SERVICE

service of a filing is not complete until accompanied by a certificate of service and a request for oral argument; LBP-11-21, 74 NRC 115 (2011)

CERTIFICATION

- depending on the quantity of material, Part 70 license applicants must submit either a decommissioning funding plan or a certification of financial assurance; CLI-11-4, 74 NRC 1 (2011)
- financial assurance certification may state that the appropriate assurance will be obtained after the application has been approved and the license issued but before the receipt of licensed material; CLI-11-4, 74 NRC 1 (2011)
- financial assurance certifications, which are used by applicants seeking to possess smaller quantities of material, are governed by 10 C.F.R. 70.25(b)(2); CLI-11-4, 74 NRC 1 (2011)
- motions to admit new contentions must be rejected if they do not include a certification by movant's attorney or representative that movant has made a sincere effort to contact other parties and resolve the issues raised in the motion, and that movant's efforts have been unsuccessful; LBP-11-34, 74 NRC 685 (2011)
- possession limits associated with a certification of financial assurance are set forth in 10 C.F.R. 70.25(d); CLI-11-4, 74 NRC 1 (2011)

See also Design Certification

CERTIFIED QUESTIONS

- if on the basis of the petition, affidavit, and any response provided for in 2.758(b), the presiding officer determines that a prima facie showing has been made, the presiding officer shall, before ruling thereon, certify the matter directly to the Commission; CLI-11-11, 74 NRC 427 (2011)
- review of a board's certified question that raises a significant and novel issue whose early resolution will materially advance the orderly disposition of the proceeding is granted; CLI-11-4, 74 NRC 1 (2011)
- should a licensing board decision raise novel legal or policy questions, boards are to certify to the Commission those questions that would benefit from Commission consideration; CLI-11-5, 74 NRC 141 (2011); LBP-11-32, 74 NRC 654 (2011)

CIVIL PENALTIES

assessment of monetary penalty against U.S. Army for possession of depleted uranium without a license is denied: DD-11-5, 74 NRC 399 (2011)

CLEAN AIR ACT

in parallel with NRC Staff's role under NEPA to assess environmental impacts, the Environmental Protection Agency possesses authority under the Act to set numerical standards for air pollutants from emission sources; LBP-11-26, 74 NRC 499 (2011)

COMBINED LICENSE APPLICATION

an environmental report is required; CLI-11-5, 74 NRC 141 (2011)

- applicant must describe the programs, and their implementation, necessary to ensure that systems and components meet the requirements of the ASME Boiler and Pressure Vessel Code and the ASME Code of Operation and Maintenance of Nuclear Power Plants in accordance with section 50.55a; CLI-11-8, 74 NRC 214 (2011)
- applicant must provide a level of information on plans to manage and store low-level radioactive waste onsite sufficient to enable the Commission to conclude that the application will comply with 10 C.F.R. Part 20; CLI-11-10, 74 NRC 251 (2011)
- COL applications must include a description and plans for implementation of the guidance and strategies required by section 50.54(hh)(2) for severe accident mitigation; CLI-11-9, 74 NRC 233 (2011)
- evaluation of existing dose projection models or a dose assessment is not required by 10 C.F.R. 52.80(d) and 50.54(hh)(2); CLI-11-9, 74 NRC 233 (2011)
- intervention petitioners may not challenge the adequacy of the safety evaluation report, but may file contentions challenging the combined license application based on new information in the SER; LBP-11-22, 74 NRC 259 (2011)
- NRC's review of a COL application is the type of proposed action obliging Staff to prepare an environmental impact statement or a supplement thereto; LBP-11-39, 74 NRC 862 (2011)
- postponing choice between several options for radioactive waste management, each of which is concretely stated and compliant with 10 C.F.R. 52.79(a), does not violate the regulation; LBP-11-31, 74 NRC 643 (2011)

COMBINED LICENSE PROCEEDINGS

- a contested hearing is not required if no petitioner has satisfied the criteria for intervention; LBP-11-22, 74 NRC 259 (2011)
- in making its findings, the Commission will treat as resolved those matters resolved in the issuance of a design certification rule; LBP-11-38, 74 NRC 817 (2011)
- issues surrounding severe accident mitigation design alternatives that have been resolved by regulation may not be challenged in a combined license adjudication; CLI-11-6, 74 NRC 203 (2011)
- the proper mechanism for raising Fukushima-related, application-specific concerns in ongoing combined license cases is to file a new contention, consistent with the applicable procedural rules; CLI-11-5, 74 NRC 141 (2011)

COMBINED LICENSES

- NRC has the authority to ensure that certified designs and combined licenses include appropriate Commission-directed changes before operation; CLI-11-8, 74 NRC 214 (2011); CLI-11-10, 74 NRC 251 (2011)
- section 50.54(hh)(2) applies to both current reactor licensees under Part 50 and new applicants for licenses under Part 52; LBP-11-21, 74 NRC 115 (2011)
- to issue a combined license or entertain an application for a COL, the Commission cannot know or have reason to believe applicant is controlled by an alien, a foreign corporation, or a foreign government; LBP-11-25, 74 NRC 380 (2011)
- to the extent NRC's review of the Fukushima accident leads to new rules applicable to any pending application, the Commission has sufficient authority and time to apply them to any new license that may be issued; CLI-11-5, 74 NRC 141 (2011)
- with respect to new reactor licenses, the Commission has authority to ensure that certified designs and combined licenses include appropriate Commission-directed changes before operation; CLI-11-6, 74 NRC 203 (2011)

COMMISSIONERS, AUTHORITY

- the Commission disfavors requests to invoke its inherent supervisory authority over adjudications; CLI-11-13, 74 NRC 635 (2011)
- the Commission, but not a licensing board, has the power to address a protracted delay in the proceeding and to direct appropriate remedial measures; LBP-11-30, 74 NRC 627 (2011)

COMMON DEFENSE AND SECURITY

even substantial foreign funding or involvement where a foreign entity contributes 50% or more of the costs of constructing a reactor or participates in the project review and is consulted on policy and costs issues does not require a finding of foreign control, where safeguards ensure U.S. national defense and security; LBP-11-25, 74 NRC 380 (2011)

protecting against the threat of air attacks is not within licensees' responsibilities because a private security force cannot reasonably be expected to defend against such attacks and adequate protection is ensured through the actions of other federal agencies with defense capabilities and air-safety expertise;

COMPLIANCE

- a commitment to implement an aging management plan that NRC finds is consistent with the GALL Report constitutes one acceptable method for compliance; LBP-11-20, 74 NRC 65 (2011)
- although NRC guidance documents are not legally binding, and compliance with them is not required, they describe an acceptable approach to compliance with NRC rules; CLI-11-4, 74 NRC 1 (2011)
- conceptual issues such as operational history, quality assurance, quality control, management competence, and human factors are excluded from license renewal review in favor of a safety-related review focusing on maintaining particular functions of certain physical systems, structures, and components; CLI-11-11, 74 NRC 427 (2011)
- current reactor licensees comply with the requirements of section 50.54(hh)(2) through conditions on their operating licenses; LBP-11-21, 74 NRC 115 (2011)
- license renewal should not include a new, broad-scoped inquiry into compliance that is separate from and parallel to ongoing compliance oversight activity; CLI-11-11, 74 NRC 427 (2011)
- NRC's ongoing regulatory and oversight processes provide reasonable assurance that each facility complies with its current licensing basis, which can be adjusted by future Commission order or by modification to the facility's operating license outside the renewal proceeding; CLI-11-11, 74 NRC 427 (2011)
- the "reasonable assurance" standard for aging management programs does not require a 95% confidence level of compliance; LBP-11-18, 74 NRC 29 (2011)

CONFIDENTIALITY

although NRC regulations mandate that a petition contain the name, address, and telephone number of petitioner, the Commission's hearing notice advises prospective petitioners not to include personal privacy information, such as home addresses or home phone numbers, in their filings; LBP-11-21, 74 NRC 115 (2011)

CONSIDERATION OF ALTERNATIVES

- an environmental impact statement that contains an incomplete or misleading comparison of alternatives is deficient; LBP-11-21, 74 NRC 115 (2011)
- because NEPA is premised on a rule of reason, NRC need only consider reasonable alternatives to a proposed action; LBP-11-26, 74 NRC 499 (2011)
- consideration of alternatives is the heart of the environmental impact statement; LBP-11-35, 74 NRC 701 (2011)
- discussion of the economic costs and benefits of the proposed action and alternatives is required if such costs and benefits are essential for a determination regarding the inclusion of an alternative in the range of alternatives considered; LBP-11-21, 74 NRC 115 (2011)
- for an operating license renewal, if NRC Staff has not previously considered severe accident mitigation alternatives for the applicant's plant in an environmental impact statement or related supplement or in an environmental assessment, applicant's environmental report must contain a consideration of alternatives to mitigate severe accidents; LBP-11-18, 74 NRC 29 (2011)
- license renewal applicant's environmental report must contain a consideration of alternatives for reducing adverse impacts for all Category 2 license renewal issues in Appendix B; LBP-11-21, 74 NRC 115 (2011)
- reasonable alternatives under NEPA are limited to those alternatives that will bring about the ends of the proposed action; LBP-11-21, 74 NRC 115 (2011)
- severe accident mitigation alternatives analysis is neither a worst-case nor a best-case impacts analysis, and the agency's obligations under NEPA are tempered by a practical rule of reason; LBP-11-18, 74 NRC 29 (2011)
- the costs and benefits of the energy-efficient building code are essential to determine whether the adoption of an energy-efficient building code should be included as an alternative; LBP-11-21, 74 NRC 115 (2011)

use of mean consequences in severe accident mitigation alternatives analysis is consistent with NRC policy and precedent, whereas the 95th percentile approach is akin to a worst-case scenario analysis, which is not required by NRC; LBP-11-18, 74 NRC 29 (2011)

CONSTRUCTION

- activities that are no longer considered "construction" are listed; LBP-11-26, 74 NRC 499 (2011) "commencement of construction" includes clearing of land, excavation, or other substantial action that would adversely affect the natural environment of a site; LBP-11-26, 74 NRC 499 (2011)
- for a proposed nuclear materials-related activity, commencement of construction relative to that activity prior to a favorable Staff conclusion regarding the NEPA cost-benefit balance is grounds for denial of the authorization to conduct that activity; LBP-11-26, 74 NRC 499 (2011)
- for power reactors, NRC Staff review should encompass emissions from the uranium fuel cycle as well as from construction and operation of the facility to be licensed; LBP-11-26, 74 NRC 499 (2011)

CONSTRUCTION OF MEANING

"shall" is a term of legal significance, in that it is mandatory or imperative, not merely precatory; CLI-11-12, 74 NRC 460 (2011)

CONSULTATION DUTY

- areas of potential effect of a federal undertaking must be designated, and the lead federal agency must consult with the state historic preservation office regarding the presence and protection of historic and cultural resources in the designated area, as well as any federally recognized Native American groups with an ancestral interest in the property, to determine if resources important to the tribe are present; LBP-11-26, 74 NRC 499 (2011)
- Fukushima-related contention is denied for failure of its proponent to contact the other parties to resolve the issue presented by the contention prior to its submission; LBP-11-37, 74 NRC 774 (2011)
- motions to admit new contentions must be rejected if they do not include a certification by movant's attorney or representative that movant has made a sincere effort to contact other parties and resolve the issues raised in the motion, and that movant's efforts have been unsuccessful; LBP-11-34, 74 NRC 685 (2011)

CONTAINMENT DESIGN

assertions of a need to implement filtered vented containment are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)

CONTENTIONS

- a commitment to implement an aging management plan that NRC finds is consistent with the GALL Report constitutes one acceptable method for compliance, but does not insulate such an approach from challenge by an intervenor, and is not binding on a licensing board in an adjudication; LBP-11-20, 74 NRC 65 (2011)
- although all environmental contentions may, in a general sense, ultimately challenge NRC's compliance with NEPA, NRC regulations expressly permit the lodging of contentions against an applicant's environmental report well before release of NRC's NEPA documents; LBP-11-38, 74 NRC 817 (2011)
- although the Task Force Report on the Fukushima accident did not justify initiating a generic NEPA review, the Commission acknowledged that new and significant information may come to light that must be considered in individual reactor licensing proceedings; LBP-11-32, 74 NRC 654 (2011)
- applicant may bear the burden of proof on contentions asserting deficiencies in its environmental report and where the applicant becomes a proponent of a particular challenged position set forth in the environmental impact statement; LBP-11-38, 74 NRC 817 (2011)
- at the outset of proceedings, NEPA contentions are to be based on the applicant's environmental report; LBP-11-32, 74 NRC 654 (2011)
- designation of a contention as a contention of omission is a means to limit its scope; CLI-11-11, 74 NRC 427 (2011)
- in the future the Commission might provide relevant guidance regarding the proper time frame for adjudicating Fukushima-related contentions; LBP-11-39, 74 NRC 862 (2011)
- once a petitioner successfully demonstrates standing, it will then be free to assert any contention, which, if proved, will afford it the relief it seeks; LBP-11-29, 74 NRC 612 (2011)
- petitioner seeking a hearing must demonstrate standing and proffer at least one admissible contention; LBP-11-29, 74 NRC 612 (2011)

- the Model Milestones permit intervenors' proposed late-filed contentions on SER and necessary NEPA documents to be filed within 30 days of the issuance of those documents; LBP-11-22, 74 NRC 259
- the proper mechanism for raising Fukushima-related, application-specific concerns in ongoing combined license cases is to file a new contention, consistent with the applicable procedural rules; CLI-11-5, 74 NRC 141 (2011)

See also Amendment of Contentions

CONTENTIONS, ADMISSIBILITY

- a board erred in admitting a contention pertaining to a plant's safety culture; CLI-11-11, 74 NRC 427 (2011)
- a hearing request or petition to intervene must set forth with particularity the contentions sought to be raised by satisfying six criteria; LBP-11-21, 74 NRC 115 (2011)
- a license renewal environmental report is not required to include discussion of need for power; LBP-11-21, 74 NRC 115 (2011)
- a motion to file new or amended contentions must address the motion to reopen standards after an intervention petition has been denied; LBP-11-20, 74 NRC 65 (2011)
- a motion to reopen relating to a new contention must also satisfy the requirements for nontimely contentions in section 2.309(c); LBP-11-20, 74 NRC 65 (2011)
- a narrow and specific contention that alleges facts, with supporting documentation, of a longstanding and continuing pattern of noncompliance or management difficulties that are reasonably linked to whether licensee will actually be able to adequately manage aging in accordance with the current licensing basis during the period of extended operation can be an admissible contention; CLI-11-11, 74 NRC 427 (2011)
- a request for hearing or petition for leave to intervene must explain proposed contentions with particularity; CLI-11-8, 74 NRC 214 (2011)
- a request for hearing regarding a newly proffered contention cannot be admitted unless it satisfies the stringent standards for reopening the record; LBP-11-20, 74 NRC 65 (2011)
- a safety evaluation report did not add a last piece of information, but merely compiled and organized preexisting information; CLI-11-8, 74 NRC 214 (2011)
- absent a waiver, contentions challenging applicable statutory requirements or NRC regulations are not admissible; LBP-11-21, 74 NRC 115 (2011); LBP-11-35, 74 NRC 701 (2011)
- absent documentary support, NRC has declined to assume that licensees will contravene its regulations; CLI-11-9, 74 NRC 233 (2011)
- absent error of law or abuse of discretion, the Commission defers to licensing board rulings on contention admissibility; CLI-11-9, 74 NRC 233 (2011)
- absent voluntary action by applicant to amend its environmental report, intervenor wishing to raise new or revised post-ER environmental concerns must await issuance of Staff's draft environmental impact statement; LBP-11-37, 74 NRC 774 (2011)
- admission of a contention that might require further explanation of severe accident mitigation alternatives cost-benefit analysis did not have a pervasive and unusual effect on the litigation; CLI-11-6, 74 NRC 203 (2011)
- admission of a management integrity contention relied on references to a serious incident involving shutdown of the reactor, management responsible for the incident remaining in place, and a purported climate of reprisals for bringing forward safety issues, and reference to at least one expert witness in support of the contention; CLI-11-11, 74 NRC 427 (2011)
- admission of contentions that NRC may ultimately deal with generically through notice-and-comment rulemaking is precluded; LBP-11-32, 74 NRC 654 (2011)
- all contentions, regardless of when they are filed, must satisfy the six criteria specified in 10 C.F.R. 2.309(f)(1)(i)-(vi); LBP-11-20, 74 NRC 65 (2011); LBP-11-32, 74 NRC 654 (2011); LBP-11-39, 74 NRC 862 (2011)
- allowing an environmental challenge to continue after the environmental impact statement has issued does not constitute a merits ruling that the Staff's review document is inadequate; CLI-11-6, 74 NRC 203 (2011)
- although a board may view petitioner's supporting information in a light favorable to the petitioner, it cannot do so by ignoring NRC contention admissibility rules, which require petitioner (not the board) to

- supply all of the required elements for a valid intervention petition; LBP-11-20, 74 NRC 65 (2011); LBP-11-29, 74 NRC 612 (2011)
- although sufficiency of the application and NRC Staff's environmental review of that application are proper targets of contentions, sufficiency of NRC Staff's safety review of the application is not; LBP-11-29, 74 NRC 612 (2011)
- an enhancement to a program does not constitute new information sufficient to support a new contention; LBP-11-20, 74 NRC 65 (2011)
- an exception to the general rule that NRC regulations are not subject to challenge in adjudicatory proceedings is provided; CLI-11-11, 74 NRC 427 (2011)
- an exceptionally grave issue may be considered in the discretion of the presiding officer even if untimely presented; LBP-11-35, 74 NRC 701 (2011)
- an NRC Information Notice that merely summarized information that was previously available is not new information upon which a new contention can be based; LBP-11-20, 74 NRC 65 (2011)
- as a matter of law and logic, if applicant's enhanced monitoring program is inadequate, then applicant's unenhanced monitoring program was a fortiori inadequate, and intervenor had a regulatory obligation to challenge it in its original petition to intervene; LBP-11-20, 74 NRC 65 (2011)
- as an alternative ground for excluding a NEPA terrorism contention, NRC Staff's determination in the generic environmental impact statement that the environmental impacts of a terrorist attack were bounded by those resulting from internally initiated events is sufficient to address the environmental impacts of terrorism; CLI-11-11, 74 NRC 427 (2011)
- assertions of a need to implement filtered vented containment are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)
- at the admissibility stage, a board evaluates whether a petitioner has provided sufficient support to justify admitting the contention for further litigation; CLI-11-8, 74 NRC 214 (2011)
- at the admissibility stage, it is simply not appropriate for boards to decide what additional information, if any, is necessary to cure a claimed deficiency in a license application; CLI-11-11, 74 NRC 427 (2011)
- at the admissibility stage, parties must come forward with sufficiently detailed grievances to allow a board to conclude that genuine disputes exist justifying a commitment of adjudicatory resources; LBP-11-21, 74 NRC 115 (2011)
- at the admissibility stage, petitioners need not marshal their evidence as though preparing for an evidentiary hearing; LBP-11-21, 74 NRC 115 (2011)
- at the admissibility stage, the burden is on intervenors to demonstrate a deficiency in the application; CLI-11-9, 74 NRC 233 (2011)
- bare assertions are insufficient to support a contention; CLI-11-11, 74 NRC 427 (2011)
- bare assertions in a contention run afoul of NRC's intention to focus the hearing process and provide notice to the other parties; LBP-11-21, 74 NRC 115 (2011)
- board admitted a contention on a conditional basis, pending Commission ruling on merits of petition for waiver of NRC regulations; CLI-11-11, 74 NRC 427 (2011)
- boards do not adjudicate disputed facts at the contention admission stage; LBP-11-21, 74 NRC 115 (2011)
- carry-over contentions must be subjected to especially careful scrutiny by the board at the prehearing stage; LBP-11-34, 74 NRC 685 (2011)
- Category 1 issues are not subject to challenge in a relicensing proceeding, absent a waiver, because they involve environmental effects that are essentially similar for all plants and need not be assessed repeatedly on a site-specific basis; LBP-11-21, 74 NRC 115 (2011)
- challenges to an applicant's or licensee's character require sufficient support; CLI-11-9, 74 NRC 233 (2011)
- challenges to extensive damage mitigation guidelines are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)
- challenges to NRC's assumptions about operators' capability to mitigate an accident are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)
- challenges to NRC's excessive secrecy regarding accident mitigation measures are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)

- challenges to NRC's previous rejection of petitioner's concerns regarding environmental impacts of high-density pool storage of spent fuel are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)
- challenges to section 50.54(hh)(2) are neither germane to age-related degradation nor unique to the license renewal period; LBP-11-21, 74 NRC 115 (2011)
- challenges to the ABWR design certification are impermissible; LBP-11-38, 74 NRC 817 (2011)
- challenges to the basic regulatory structure of the NRC's design basis and generic environmental impacts already assessed through rulemaking are inadmissible; LBP-11-32, 74 NRC 654 (2011)
- challenges to the design of the nuclear power plant are outside the scope of the license renewal proceeding; LBP-11-23, 74 NRC 287 (2011)
- challenging features of the AP1000 standard design is a matter for a design certification rulemaking, not a combined license proceeding; CLI-11-8, 74 NRC 214 (2011)
- claims for relief from Fukushima-related events are premature; LBP-11-37, 74 NRC 774 (2011)
- conceptual issues such as operational history, quality assurance, quality control, management competence, and human factors are excluded from license renewal review in favor of a safety-related review focusing on maintaining particular functions of certain physical systems, structures, and components; CLI-11-11, 74 NRC 427 (2011)
- consideration of an admissible contention can be deferred, where appropriate, but an inadmissible one cannot; LBP-11-28, 74 NRC 604 (2011)
- contention admissibility requirements are strict by design in order to help assure that the NRC hearing process will be appropriately focused upon disputes that can be resolved in the adjudication; LBP-11-29, 74 NRC 612 (2011)
- contention copied from an unrelated license renewal proceeding is inadmissible because the two-sentence introduction does not refer to the license renewal application or environmental report at issue; LBP-11-34, 74 NRC 685 (2011)
- contention dismissal based on mootness is a jurisdictional ruling, not a decision on the merits of the claim; LBP-11-22, 74 NRC 259 (2011)
- contention fails to satisfy the good cause requirements of 10 C.F.R. 2.309(c)(i) because its foundational argument does not rest upon new and materially different information and could and should have been filed at the outset of the proceeding; LBP-11-35, 74 NRC 701 (2011)
- contention is inadmissible for failure to show that a genuine dispute exists with applicant on a material issue of law or fact; LBP-11-33, 74 NRC 675 (2011)
- contention pleading rules are designed to ensure that only well-defined issues are admitted for hearing and a board should not add material not raised by a petitioner in order to render a contention admissible; CLI-11-11, 74 NRC 427 (2011)
- contention regarding limitations and phenomena that were widely known, and should have been known to intervenor, at the outset of the proceeding, and thus could have been raised long ago, is untimely; LBP-11-23, 74 NRC 287 (2011)
- contention that indicates neither positive nor negative impact from proposed severe accident mitigation alternative implementation does not paint the required seriously different picture of the environmental landscape to reopen the record; LBP-11-35, 74 NRC 701 (2011)
- contention that the frequency of occurrence of severe accidents is erroneously underestimated should have been raised at the outset of the license renewal proceeding and thus is untimely; LBP-11-35, 74 NRC 701 (2011)
- contentions cannot be automatically discarded by a hearing board simply because they repeat contentions advanced in a different proceeding; LBP-11-34, 74 NRC 685 (2011)
- contentions may challenge the adequacy of the review contained in the Staff's NEPA documents; LBP-11-22, 74 NRC 259 (2011)
- contentions must be based on documents or other information available at the time the petition is to be filed, such as the application, supporting safety analysis report, environmental report, or other supporting document filed by an applicant or licensee, or otherwise available to a petitioner; LBP-11-29, 74 NRC 612 (2011)
- contentions must be raised with sufficient detail to put the parties on notice of the issues to be litigated; CLI-11-11, 74 NRC 427 (2011)

- contentions must include specific grievances beyond mere notice pleading; LBP-11-29, 74 NRC 612
- contentions that amount to an attack on applicable statutory requirements or represent a challenge to the basic structure of the Commission's regulatory process must be rejected; LBP-11-29, 74 NRC 612 (2011)
- contentions that challenge applicant's compliance with the loss-of-large-areas requirements of 10 C.F.R. 50.54(hh)(2) are not admissible because they are not within the scope of a license renewal proceeding; LBP-11-21, 74 NRC 115 (2011)
- contentions that neither explain how the application is inadequate nor identify which sections of the application are inadequate are inadmissible; LBP-11-21, 74 NRC 115 (2011)
- during pendency of remand, intervenors are free to submit a motion to reopen the record pursuant to 10 C.F.R. 2.326, should they seek to address any genuinely new issues related to the license renewal application that previously could not have been raised; LBP-11-20, 74 NRC 65 (2011)
- emergency planning is neither germane to age-related degradation nor unique to the period covered by a license renewal application; LBP-11-35, 74 NRC 701 (2011)
- entertaining contentions in a license renewal proceeding that challenge the current licensing basis would be both unnecessary and wasteful, given ongoing agency oversight, review, and enforcement; LBP-11-21, 74 NRC 115 (2011)
- evaluation of a contention at the admissibility stage should not be confused with evaluation at the merits stage; CLI-11-8, 74 NRC 214 (2011)
- even when a proposed new contention is not found timely, it may be admitted if it meets a balancing of the eight nontimely filing factors; LBP-11-39, 74 NRC 862 (2011)
- facts and issues raised in a contention are not in controversy and subject to a full evidentiary hearing unless the proposed contention is admitted: CLI-11-8, 74 NRC 214 (2011)
- failure of petitioner to cite even a single specific deficiency in the application precludes satisfaction of the specificity requirement of 10 C.F.R. 2.309(f)(1)(vi); LBP-11-29, 74 NRC 612 (2011)
- failure to comply with any of the contention pleading requirements precludes admission of a contention; LBP-11-21, 74 NRC 115 (2011)
- for a reopening motion to be timely presented, movant must show that the issue sought to be raised could not have been raised earlier; LBP-11-20, 74 NRC 65 (2011)
- for a request for hearing and petition to intervene to be granted, petitioner must establish that it has standing and propose at least one admissible contention; LBP-11-21, 74 NRC 115 (2011)
- for an admissible contention, petitioners do not have to prove outright that a SAMA analysis was deficient; CLI-11-11, 74 NRC 427 (2011)
- for contentions that fall within the facility's current licensing basis, petitioner may seek action on its concerns by either filing a petition for rulemaking under 10 C.F.R. 2.802 or submitting an enforcement petition under 10 C.F.R. 2.206; LBP-11-21, 74 NRC 115 (2011)
- for management integrity and character to be a viable contention, there must be a direct and obvious relationship between these issues and the challenged licensing action; CLI-11-8, 74 NRC 214 (2011)
- Fukushima-related contention based on a Staff Requirements Memorandum is inadmissible because the SRM does not define or impose any new requirements arising from the Fukushima accident and thus fails to establish a genuine dispute on a material issue of law or fact; LBP-11-37, 74 NRC 774 (2011)
- Fukushima-related contention is denied for failure of its proponent to contact the other parties to resolve the issue presented by the contention prior to its submission; LBP-11-37, 74 NRC 774 (2011)
- Fukushima-related contention is denied for failure to reference any specific portion of the application at issue; LBP-11-37, 74 NRC 774 (2011)
- Fukushima-related contention is denied for failure to show the contention is within the scope of the proceeding or is material to the findings NRC must make to support the requested licensing action; LBP-11-37, 74 NRC 774 (2011)
- Fukushima-related contentions were dismissed as premature; LBP-11-34, 74 NRC 685 (2011); LBP-11-36, 74 NRC 768 (2011); LBP-11-39, 74 NRC 862 (2011)
- generic analysis remains appropriate for spent fuel pool accidents in license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)

- if a contention as originally pleaded did not satisfy 10 C.F.R. 2.309(f)(1), a reply cannot remediate the deficiency by introducing, for the first time, references to a genuine dispute with the license application at issue; LBP-11-34, 74 NRC 685 (2011)
- if a contention is based upon new information, it must meet the standards of 10 C.F.R. 2.309(f)(2); LBP-11-35, 74 NRC 701 (2011)
- if a proposed new contention is not timely under section 2.309(f)(2)(iii), then proponent must address the eight criteria of 10 C.F.R. 2.309(c)(1); LBP-11-32, 74 NRC 654 (2011)
- if good cause for late filing is not shown, boards may still permit the filing, but petitioner or intervenor must make a strong showing on the other factors; LBP-11-32, 74 NRC 654 (2011)
- if reopening standards are inapplicable, or if reopening criteria have been satisfied, a new contention must also meet the standards for contention admissibility; LBP-11-35, 74 NRC 701 (2011)
- in an ongoing proceeding in which a hearing petition has been granted and there are contentions pending for merits resolution, intervenors must satisfy two sets of requirements to gain the admission of a newly proffered contention; LBP-11-37, 74 NRC 774 (2011)
- in making contention admissibility decisions, boards appropriately apply their technical and legal expertise to evaluate the proposed contention and its support; CLI-11-8, 74 NRC 214 (2011)
- inspection reports could be seen as objective evidence that applicant may not adequately manage aging in the future; CLI-11-11, 74 NRC 427 (2011)
- intervenor's challenge to NRC's compliance with NEPA in light of the NRC's Fukushima Task Force Report is premature; LBP-11-33, 74 NRC 675 (2011)
- intervenors may not impose an additional requirement that is not present in a regulation; CLI-11-9, 74 NRC 233 (2011)
- intervenors must assert a sufficiently specific challenge that demonstrates that further inquiry is warranted; CLJ-11-9, 74 NRC 233 (2011)
- intervenors must demonstrate a genuine dispute suitable for evidentiary hearing; LBP-11-28, 74 NRC 604 (2011)
- intervenors' speculation that further review of certain issues might change some conclusions in the FSAR does not justify restarting the hearing process; LBP-11-20, 74 NRC 65 (2011)
- intervention petition is denied for failure to proffer an admissible contention; LBP-11-21, 74 NRC 115 (2011)
- intervention petitioners may not challenge the adequacy of the safety evaluation report, but may file contentions challenging the combined license application based on new information in the SER; LBP-11-22, 74 NRC 259 (2011)
- intervention petitions must be filed within 60 days based on the documents then in existence, meaning that the petition must be based on the documents submitted with the application; LBP-11-22, 74 NRC 259 (2011)
- issuance of a Staff Requirements Memorandum directing Staff to implement "without delay" the recommendations of the Fukushima Task Force does not render contentions admissible; LBP-11-36, 74 NRC 768 (2011)
- issues surrounding severe accident mitigation design alternatives that have been resolved by regulation may not be challenged in a combined license adjudication; CLI-11-6, 74 NRC 203 (2011)
- it is intervention petitioner's responsibility to put others on notice as to the issues it seeks to litigate in a proceeding; CLI-11-11, 74 NRC 427 (2011); LBP-11-35, 74 NRC 701 (2011)
- lack of clarity about which electrical cables might be subject to any saltwater environment, however high or low the concentration, and about the effects of and efforts to address this, is a level of concern sufficient to warrant further inquiry and exploration; LBP-11-20, 74 NRC 65 (2011)
- license renewal should not include a new, broad-scoped inquiry into compliance that is separate from and parallel to ongoing compliance oversight activity; CLI-11-11, 74 NRC 427 (2011)
- licensing boards have commonly afforded intervenors the opportunity to propose new contentions to challenge the new information, even though no contention is pending; LBP-11-22, 74 NRC 259 (2011)
- litigability of the adequacy of applicant's efforts to address current operational issues is excluded from a license renewal proceeding; CLI-11-11, 74 NRC 427 (2011)
- materiality of a SAMA contention is based on whether it purports to show that an additional SAMA should have been identified as potentially cost-beneficial; CLI-11-11, 74 NRC 427 (2011)
- mere notice pleading is insufficient for contention admission; LBP-11-21, 74 NRC 115 (2011)

- motion to admit a new contention arguing that applicant's environmental report fails to satisfy NEPA because it does not address findings and recommendations raised by Task Force Report on the Fukushima Dai-ichi accident is denied as premature and insufficiently focused on the license renewal application; LBP-11-28, 74 NRC 604 (2011)
- motions to admit new contentions must be rejected if they do not include a certification by movant's attorney or representative that movant has made a sincere effort to contact other parties and resolve the issues raised in the motion, and that movant's efforts have been unsuccessful; LBP-11-34, 74 NRC 685 (2011)
- new contention is inadmissible because it neither points to nor references any specific portion of the application that is disputed; LBP-11-35, 74 NRC 701 (2011)
- new contentions are deemed timely if filed within 30 days of the date when the new and material information on which they are based first became available; CLI-11-8, 74 NRC 214 (2011); LBP-11-39, 74 NRC 862 (2011)
- new contentions may be admitted as long as they meet the timeliness criteria in 10 C.F.R. 2.309(f)(2) or the nontimely contention criteria in section 2.309(c)(1) and fulfill the contention admissibility requirements of 10 C.F.R. 2.309(f)(1); LBP-11-39, 74 NRC 862 (2011)
- new contentions must satisfy the six requirements of 10 C.F.R. 2.309(f)(1)(i)-(vi); LBP-11-34, 74 NRC 685 (2011)
- new contentions on the safety and environmental implications of the NRC Task Force Report on the Fukushima Dai-ichi accident are premature and must be denied on that basis without regard to any other considerations; LBP-11-27, 74 NRC 591 (2011)
- no rule or regulation of the Commission, or any provision thereof, concerning the licensing of production and utilization facilities, source material, special nuclear material, or byproduct material is subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding; CLI-11-8, 74 NRC 214 (2011)
- NRC regulations and case law already provide clear and uniform standards to determine the timeliness of motions to add new contentions on the Fukushima accident; LBP-11-32, 74 NRC 654 (2011)
- NRC rules deliberately place a heavy burden on proponents of contentions, who must challenge aspects of license applications with specificity, backed up with substantive technical support, mere conclusions or speculation being insufficient; CLI-11-5, 74 NRC 141 (2011); LBP-11-35, 74 NRC 701 (2011)
- once parties demonstrate standing, they will then be free to assert any contention, which, if proven, will afford them the relief they seek; LBP-11-21, 74 NRC 115 (2011)
- other than hypothesizing that there will be a failure of the nuclear reactor vessel because of increased stress brought by the proposed license amendment request, the contention does not provide sufficient information to show that a genuine dispute exists; LBP-11-29, 74 NRC 612 (2011)
- parties may seek leave of the board to file new contentions that challenge the sufficiency of Staff's NEPA documents where information on which new contentions are based was not previously available and is materially different than information previously available and has been submitted in a timely fashion based on the availability of the subsequent information; LBP-11-39, 74 NRC 862 (2011)
- parties with new and significant information that could undermine the rationale for a Commission regulation must seek a rulemaking instead of challenging the regulation in a particular proceeding unless the information uniquely applies to a given adjudication; LBP-11-35, 74 NRC 701 (2011)
- petitioner cannot rest its contentions on bare assertions and speculation; LBP-11-21, 74 NRC 115 (2011) petitioner does not have to prove its contentions at the admissibility stage; LBP-11-21, 74 NRC 115 (2011)
- petitioner fails to specifically explain why a materially different result would have been likely had information currently available from the Fukushima accident been considered ab initio in the severe accident mitigation alternatives analysis or why that information presents a significant safety or environmental issue; LBP-11-35, 74 NRC 701 (2011)
- petitioner must approximate the relative cost and benefit of a challenged SAMA or provide at least some ballpark consequence and implementation costs should the SAMA be performed; CLI-11-11, 74 NRC 427 (2011)
- petitioner proffers no new information on station blackout or mitigation measures, and the events therefore cannot form the basis for an assertion of timeliness of a motion to reopen; LBP-11-35, 74 NRC 701 (2011)

- petitioner's assertion that applicant's environmental report must be supplemented to take account of allegedly new and significant information is, as a procedural matter, unfounded and must be rejected; LBP-11-33, 74 NRC 675 (2011)
- petitioner's assertion that recriticality is demonstrated by the relative quantities of radionuclides released is not self-evident and is clearly of the class of statements that must be supported by expert opinion; LBP-11-23, 74 NRC 287 (2011)
- petitioner's attempt to tie NEPA environmental justice claim to Fukushima Task Force report is an improper effort to interpose concerns that could have been raised at the outset of the proceeding; LBP-11-37, 74 NRC 774 (2011)
- petitioners may not raise in adjudicatory proceedings contentions attacking the agency's rules and regulations or contentions that are the subject of ongoing rulemakings; LBP-11-29, 74 NRC 612 (2011) petitions that lack alleged facts or expert opinions to support the contentions are inadmissible; LBP-11-29, 74 NRC 612 (2011)
- portion of a contention asserting that applicant failed to consider the results of a particular study in its SAMA analysis is admissible; CLI-11-11, 74 NRC 427 (2011)
- post-9/11 motion to reopen satisfied rules for reopening the record and for late-filed contentions, but contention involving a license amendment request for reconfiguring a spent fuel pool was inadmissible; CLI-11-5, 74 NRC 141 (2011)
- potential to broaden or delay a proceeding may not be relied on to exclude a contention because NRC has a duty to consider new and significant information that arises before it makes its licensing decisions; LBP-11-35, 74 NRC 701 (2011)
- proponents of contentions must challenge aspects of license applications with specificity, backed up with substantive technical support, mere conclusions or speculation being insufficient, but an even heavier burden applies to motions to reopen; LBP-11-35, 74 NRC 701 (2011)
- providing a brief explanation of the basis for a contention is but one of the six requirements for establishing that a contention is admissible; LBP-11-34, 74 NRC 685 (2011)
- rarely should basis for a contention require more than a sentence or two; LBP-11-34, 74 NRC 685 (2011) relevant issues for an additional 20 years of reactor plant operation differ from those when a reactor plant is first built and licensed; LBP-11-21, 74 NRC 115 (2011)
- requiring petitioners to proffer additional and conclusive support for the effect of their proposed contention would improperly require boards to adjudicate the merits of contentions before admitting them; LBP-11-21, 74 NRC 115 (2011); LBP-11-25, 74 NRC 380 (2011)
- rules on contention admissibility are strict by design; LBP-11-21, 74 NRC 115 (2011); LBP-11-22, 74 NRC 259 (2011)
- safety culture, operational history, quality assurance, quality control, management competence, human factors, and emergency planning issues are beyond the scope of a license renewal proceeding; LBP-11-21, 74 NRC 115 (2011)
- section 2.309(c)(vii) weighs heavily against admission of a contention because the addition of a hearing on its subject matter will unduly broaden the issues and materially delay the proceeding; LBP-11-35, 74 NRC 701 (2011)
- should requirements for reopening the record be satisfied, the requirements for untimely contentions must also be satisfied, as well as the contention admissibility criteria of section 2.309(f)(1); LBP-11-35, 74 NRC 701 (2011)
- showing necessary to demonstrate that a materially different result in the outcome of the severe accident mitigation alternatives analysis would be or would have been likely had the newly proffered evidence been considered initially is discussed; LBP-11-35, 74 NRC 701 (2011)
- speculation by an expert cannot form the basis for admission of a contention on the basis of the matter being exceptionally grave; LBP-11-20, 74 NRC 65 (2011)
- standards are deliberately strict, and any contention that does not satisfy NRC requirements will be rejected; CLI-11-8, 74 NRC 214 (2011)
- standards for admission of new contentions are reviewed; LBP-11-25, 74 NRC 380 (2011)
- sufficiency of the NRC's hard look at the benefits of severe accident mitigation alternatives in comparison to their costs is subject to litigation in a license renewal proceeding; LBP-11-17, 74 NRC 11 (2011)
- support required for a contention necessarily will depend on the issue sought to be litigated; CLI-11-11, 74 NRC 427 (2011)

- suppositions/speculation regarding effectiveness of hydrogen control mechanisms are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)
- the board applied the late-filing standards to a post-9/11 contention related to the risk of a terrorist attack on the ISFSI and found the contention timely but denied admission of both the safety and environmental aspects of the contention; CLI-11-5, 74 NRC 141 (2011)
- the Commission will defer to a board's rulings on contention admissibility absent an error of law or abuse of discretion; CLI-11-11, 74 NRC 427 (2011)
- the Commission will grant a petition for review at its discretion, giving due weight to the existence of a substantial question with respect to one or more of the considerations of 10 C.F.R. 2.341(b)(4)(i)-(v); CLI-11-9, 74 NRC 233 (2011)
- the scope of a contention is limited to the issues of law and fact pleaded with particularity and any factual and legal material in support thereof; LBP-11-38, 74 NRC 817 (2011)
- the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention; CLI-11-8, 74 NRC 214 (2011); LBP-11-20, 74 NRC 65 (2011); LBP-11-22, 74 NRC 259 (2011); LBP-11-35, 74 NRC 701 (2011)
- the standard for determining whether a materially different result would be obtained is measured using the Commission's test of whether it has been shown that a motion for summary disposition could be defeated: LBP-11-20, 74 NRC 65 (2011)
- there simply would be no end to NRC licensing proceedings if petitioners could ignore timeliness requirements and add new contentions at their convenience based on information that could have formed the basis for a timely contention at the outset of the proceeding; LBP-11-20, 74 NRC 65 (2011)
- timely new contentions challenging the sufficiency of Staff's NEPA documents may be filed where data or conclusions in these documents differ significantly from data or conclusions in previous versions of these documents or in the applicant's environmental report; LBP-11-39, 74 NRC 862 (2011)
- timely new or amended contentions may be admitted if they meet three pleading requirements; LBP-11-32, 74 NRC 654 (2011)
- to be admissible, each contention must satisfy six pleading requirements; LBP-11-29, 74 NRC 612 (2011) to demonstrate a significant safety issue, petitioners must establish either that uncorrected errors endanger safe plant operation, or that there has been a breakdown of the quality assurance program sufficient to raise legitimate doubt as to the plant's capability of being operated safely; LBP-11-35, 74 NRC 701
- to show a genuine dispute with 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; CLI-11-9, 74 NRC 233 (2011)
- to the extent petitioner believes there are existing management competence questions that merit immediate action, then its remedy is to direct the Staff's attention to those matters by filing a request for action in accordance with 10 C.F.R. 2.206; CLI-11-11, 74 NRC 427 (2011)
- to the extent that petitioner challenges the generic environmental impact statement, its remedy is a petition for rulemaking or a petition for a waiver of the rules based on circumstances; CLI-11-11, 74 NRC 427 (2011)
- to waive the generic assessment in NRC regulations to permit adjudication of issues involving the environmental impact of spent fuel pool accidents in this license renewal proceeding, the Commission must conclude that the rule's strict application would not serve the purpose for which it was adopted; CLI-11-11, 74 NRC 427 (2011)
- until NRC defines and imposes on licensees new requirements arising from the Fukushima events, such requirements are highly speculative; LBP-11-33, 74 NRC 675 (2011)
- until NRC Staff issues its draft or final environmental impact statement, it cannot plausibly be argued that the document is inadequate or otherwise fails to satisfy NEPA; LBP-11-33, 74 NRC 675 (2011)
- where a contention alleges a deficiency or error in the application, the deficiency or error must have some independent health and safety significance; LBP-11-23, 74 NRC 287 (2011)
- where a motion to reopen relates to a contention not previously in controversy, the motion must demonstrate that the balance of the nontimely filing factors in section 2.309(c) favors granting the motion to reopen; LBP-11-20, 74 NRC 65 (2011)

- where a supplemental environmental impact statement is being prepared, intervenor may submit proposed new contentions based on new information, including new information in the SER and Staff NEPA documents: LBP-11-22, 74 NRC 259 (2011)
- where an amended version of a dismissed contention was pending before the board, the board retains jurisdiction to decide whether to admit the proposed contention; LBP-11-22, 74 NRC 259 (2011)
- where the time for filing contentions had expired in a given case, no new TMI-related contentions would be accepted absent a showing of good cause and a balancing of the late-filing factors; CLI-11-5, 74 NRC 141 (2011)
- whether a proposed alternative method for estimating a macroscopic frequency of occurrence of a severe offsite radiological release should have been used in the severe accident mitigation alternatives analysis could have been raised when the original license renewal application was submitted and thus is not timely. LBP-11-35. 74 NRC 701 (2011)
- with the board's termination of the proceeding, the board's interlocutory rulings on contention admissibility became ripe for appeal; CLI-11-9, 74 NRC 233 (2011)

CONTENTIONS, LATE-FILED

- a licensing board's dismissal of all pending contentions on mootness grounds due to new information ordinarily would terminate the proceeding, but new contentions could be filed on new information before termination of the proceeding; LBP-11-22, 74 NRC 259 (2011)
- a motion to file new or amended contentions must address the motion to reopen standards after an intervention petition has been denied; LBP-11-20, 74 NRC 65 (2011)
- a motion to reopen that relates to a contention not previously in controversy among the parties must also satisfy the requirements for nontimely contentions in section 2.309(c); CLI-11-8, 74 NRC 214 (2011); LBP-11-23, 74 NRC 287 (2011)
- a party that has successfully intervened in a licensing proceeding may propose new contentions for litigation until the license is issued; LBP-11-22, 74 NRC 259 (2011)
- a request for hearing regarding a newly proffered contention cannot be admitted unless it satisfies the stringent standards for reopening the record; LBP-11-20, 74 NRC 65 (2011)
- a safety evaluation report did not add a last piece of information, but merely compiled and organized preexisting information: CLI-11-8, 74 NRC 214 (2011)
- all contentions, regardless of when they are filed must satisfy the six criteria specified in 10 C.F.R. 2.309(f)(1)(i)-(vi); LBP-11-20, 74 NRC 65 (2011); LBP-11-32, 74 NRC 654 (2011)
- an enhancement to a program does not constitute new information sufficient to support a new contention; LBP-11-20, 74 NRC 65 (2011)
- an exceptionally grave issue may be considered in the discretion of the presiding officer even if untimely presented; LBP-11-35, 74 NRC 701 (2011)
- an NRC Information Notice that merely summarized information that was previously available is not new information upon which a new contention can be based; LBP-11-20, 74 NRC 65 (2011)
- any changes in NRC rules post-9/11 that might bear on license renewal reviews could be addressed via late-filed contentions; CLI-11-5, 74 NRC 141 (2011)
- as a matter of law and logic, if applicant's enhanced monitoring program is inadequate, then applicant's unenhanced monitoring program was a fortiori inadequate, and intervenor had a regulatory obligation to challenge it in its original petition to intervene; LBP-11-20, 74 NRC 65 (2011)
- boards should develop schedules that will provide a fair and expeditious procedure for resolving new or amended contentions that might be proposed during the course of the proceeding, not just those already admitted; LBP-11-22, 74 NRC 259 (2011)
- by filing proposed new or amended contention within the time specified in the initial scheduling order, petitioner satisfies timeliness requirements but would still have to satisfy the other requirements of section 2.309(f)(2) or the requirements of section 2.309(c), as well as the contention admissibility requirements of 10 C.F.R. 2.309(f)(1); LBP-11-22, 74 NRC 259 (2011)
- contention fails to satisfy the good cause requirements of 10 C.F.R. 2.309(c)(i) because its foundational argument does not rest on new and materially different information and could and should have been filed at the outset of the proceeding; LBP-11-35, 74 NRC 701 (2011)
- contention regarding limitations and phenomena that were widely known, and should have been known to intervenor, at the outset of the proceeding, and thus could have been raised long ago, is untimely; LBP-11-23, 74 NRC 287 (2011)

- contention that the frequency of occurrence of severe accidents is erroneously underestimated should have been raised at the outset of the license renewal proceeding and thus is untimely; LBP-11-35, 74 NRC 701 (2011)
- even when a proposed new contention is not found timely, it may be admitted if it meets a balancing of the eight nontimely filing factors; LBP-11-39, 74 NRC 862 (2011)
- filing of new contentions based on the SER and Staff NEPA documents is expressly contemplated by the Model Milestones; LBP-11-22, 74 NRC 259 (2011)
- for a reopening motion to be timely presented, movant must show that the issue sought to be raised could not have been raised earlier; LBP-11-20, 74 NRC 65 (2011)
- good cause for late filing is given the greatest weight in a section 2.309(c) analysis; LBP-11-23, 74 NRC 287 (2011); LBP-11-32, 74 NRC 654 (2011)
- if a contention is based upon new information, it must meet the standards of 10 C.F.R. 2.309(f)(2); LBP-11-35, 74 NRC 701 (2011)
- if a proposed new contention is not timely under section 2.309(f)(2)(iii), then the proponent must address the eight criteria of 10 C.F.R. 2.309(c)(1); LBP-11-32, 74 NRC 654 (2011)
- if good cause for late filing is not shown, boards may still permit the filing, but petitioner or intervenor must make a strong showing on the other factors; LBP-11-32, 74 NRC 654 (2011)
- if Intervenors file a new or amended contention, with supporting materials, within 60 days after pertinent information first becomes available, then the contention will be deemed timely filed and intervenors will not have to satisfy the late-filing requirements of 10 C.F.R. 2.309(c) or the requirements for reopening the record; LBP-11-22, 74 NRC 259 (2011)
- if new information becomes available that, e.g., an endangered species has been living on the site or that the facility has been leaking tritium into the groundwater, then a new contention alleging that the environmental report as originally filed did not comply with Part 51 may be filed; LBP-11-32, 74 NRC 654 (2011)
- if reopening standards are inapplicable, or if reopening criteria have been satisfied, a new contention must also meet the standards for contention admissibility; LBP-11-35, 74 NRC 701 (2011)
- in an ongoing proceeding in which a hearing petition has been granted and there are contentions pending for merits resolution, intervenors must satisfy two sets of requirements to gain the admission of a newly proffered contention; LBP-11-37, 74 NRC 774 (2011)
- intervenor may propose new contentions based on the Fukushima accident, the SER, the new SEIS, or other sources of new and materially different information, provided that it does so promptly after the new information becomes available and that it successfully fulfills the general contention admissibility requirements; LBP-11-22, 74 NRC 259 (2011)
- licensing boards have commonly afforded intervenors the opportunity to propose new contentions to challenge new information, even though no contention is pending; LBP-11-22, 74 NRC 259 (2011)
- motions seeking admission of new or amended contentions must be filed within 30 days of the date the information that forms the basis for the contention becomes available; CLI-11-8, 74 NRC 214 (2011)
- new contention is inadmissible because it neither points to nor references any specific portion of the application that is disputed: LBP-11-35, 74 NRC 701 (2011)
- new contentions filed after the record has closed must satisfy the timeliness requirement of either 10 C.F.R. 2.309(f)(2) or 2.309(c), and the admissibility requirements of section 2.309(f)(1); LBP-11-22, 74 NRC 259 (2011); LBP-11-39, 74 NRC 862 (2011)
- new contentions on the safety and environmental implications of the NRC Task Force Report on the Fukushima Dai-ichi accident are premature and must be denied on that basis without regard to any other considerations; LBP-11-27, 74 NRC 591 (2011)
- new environmental contentions may be filed if data or conclusions in the draft or final environmental impact statement differ significantly from the data or conclusions in the environmental report; LBP-11-32, 74 NRC 654 (2011); LBP-11-33, 74 NRC 675 (2011)
- NRC preserves the right to a hearing when an application is amended by allowing new or amended contentions to be filed in response to material new information; LBP-11-22, 74 NRC 259 (2011)
- petitioner must act reasonably and promptly after learning of the new information on which its motion to reopen is based; LBP-11-23, 74 NRC 287 (2011)

- petitioner proffers no new information on station blackout or mitigation measures, and the events therefore cannot form the basis for an assertion of timeliness of a motion to reopen; LBP-11-35, 74 NRC 701
- petitioners may amend their contentions or file new contentions if the supplemental draft environmental impact statement differs significantly from the data or conclusions in applicant's documents; LBP-11-34, 74 NRC 685 (2011)
- post-9/11 motion to reopen satisfied rules for reopening the record and for late-filed contentions, but contention involving a license amendment request for reconfiguring a spent fuel pool was inadmissible; CLI-11-5, 74 NRC 141 (2011)
- rationale for NRC's policy of generally disfavoring the filing of new contentions at the eleventh hour of an adjudication is based on the doctrine of finality, which states that at some point, an adjudicatory proceeding must come to an end; LBP-11-20, 74 NRC 65 (2011)
- section 2.309(c)(vii) weighs heavily against admission of a contention because the addition of a hearing on its subject matter will unduly broaden the issues and materially delay the proceeding; LBP-11-35, 74 NRC 701 (2011)
- standards for admission of new contentions are reviewed; LBP-11-25, 74 NRC 380 (2011)
- the board applied the late-filing standards to a post-9/11 contention related to the risk of a terrorist attack on the ISFSI and found the contention timely but denied admission of both the safety and environmental aspects of the contention; CLI-11-5, 74 NRC 141 (2011)
- the Model Milestones permit the filing of proposed late-filed contentions on the Safety Evaluation Report and necessary National Environmental Policy Act documents within 30 days of the issuance of those documents; LBP-11-22, 74 NRC 259 (2011)
- the presiding officer has discretion to consider an exceptionally grave issue even if untimely presented; LBP-11-20, 74 NRC 65 (2011)
- the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention; CLI-11-8, 74 NRC 214 (2011); LBP-11-20, 74 NRC 65 (2011); LBP-11-22, 74 NRC 259 (2011)
- there simply would be no end to NRC licensing proceedings if petitioners could ignore timeliness requirements and add new contentions at their convenience based on information that could have formed the basis for a timely contention at the outset of the proceeding; LBP-11-20, 74 NRC 65 (2011)
- timely new contentions may be filed with leave of the presiding officer if information on which they are based was not previously available and is materially different than information previously available and they have been submitted in a timely fashion based on the availability of the subsequent information; LBP-11-25, 74 NRC 380 (2011)
- when a motion to reopen is untimely, the section 2.326(a)(1) "exceptionally grave" test supplants the section 2.326(a)(2) "significant safety or environmental issue" test; CLI-11-8, 74 NRC 214 (2011)
- where a motion to reopen relates to a contention not previously in controversy, the motion must demonstrate that the balance of the nontimely filing factors in section 2.309(c) favors granting the motion to reopen; LBP-11-20, 74 NRC 65 (2011)
- where a motion to reopen relates to a contention not previously in controversy, the motion must demonstrate that the balance of the nontimely filing factors of 10 C.F.R. 2.309(c) favors granting the motion to reopen; LBP-11-23, 74 NRC 287 (2011); LBP-11-35, 74 NRC 701 (2011)
- where a supplemental environmental impact statement is being prepared, intervenor may submit proposed new contentions based on new information, including new information in the SER and Staff NEPA documents; LBP-11-22, 74 NRC 259 (2011)
- where initial decisions have been issued, the record should not be reopened to take evidence on some accident-related issue unless the party seeking reopening shows that there is significant new evidence, not included in the record, that materially affects the decision; CLI-11-5, 74 NRC 141 (2011)
- where the time for filing contentions had expired in a given case, no new TMI-related contentions would be accepted absent a showing of good cause and a balancing of the late-filing factors; CLI-11-5, 74 NRC 141 (2011)
- whether a proposed alternative method for estimating a macroscopic frequency of occurrence of a severe offsite radiological release should have been used in the severe accident mitigation alternatives analysis could have been raised when the original license renewal application was submitted and thus is not timely; LBP-11-35, 74 NRC 701 (2011)

CONTESTED LICENSE APPLICATIONS

a contested hearing is not required if no petitioner has satisfied the criteria for intervention; LBP-11-22, 74 NRC 259 (2011)

COUNCIL ON ENVIRONMENTAL QUALITY

NRC looks to CEQ regulations for guidance, but is not bound by them; CLI-11-11, 74 NRC 427 (2011) NRC, as an independent regulatory agency, is not bound by those portions of CEQ NEPA regulations that have a substantive impact on the way in which the Commission performs its regulatory functions; LBP-11-35, 74 NRC 701 (2011)

COUNCIL ON ENVIRONMENTAL QUALITY GUIDELINES

CEQ has recognized that information may be unavoidably incomplete or unavailable, and that under those circumstances, a final environmental impact statement can overcome this deficiency if it states that fact, explains how the missing information is relevant, sets forth the existing information, and evaluates the environmental impacts to the best of the agency's ability; CLI-11-11, 74 NRC 427 (2011)

CRITICALITY

petitioner's assertion that recriticality is demonstrated by the relative quantities of radionuclides released is not self-evident and is clearly of the class of statements that must be supported by expert opinion; LBP-11-23, 74 NRC 287 (2011)

CULTURAL RESOURCES

all adverse effects to any historic or cultural resource eligible for listing on the National Register must be considered during any federal undertaking; LBP-11-26, 74 NRC 499 (2011)

areas of potential effect of a federal undertaking must be designated, and the lead federal agency must consult with the state historic preservation office regarding the presence and protection of historic and cultural resources in the designated area, as well as any federally recognized Native American groups with an ancestral interest in the property, to determine if resources important to the tribe are present; LBP-11-26, 74 NRC 499 (2011)

historical/cultural resources are considered eligible for listing on the National Register of Historic Places if they meet one or more of four criteria; LBP-11-26, 74 NRC 499 (2011)

CUMULATIVE IMPACTS ANALYSIS

impacts can result from individually minor but collectively significant actions taking place over a period of time; LBP-11-26, 74 NRC 499 (2011)

CURRENT LICENSING BASIS

applicant must update its license renewal application annually to reflect changes in its CLB, but such updating does not explicitly extend to the environmental report; LBP-11-32, 74 NRC 654 (2011)

entertaining contentions in a license renewal proceeding that challenge the current licensing basis would be both unnecessary and wasteful, given ongoing agency oversight, review, and enforcement; LBP-11-21, 74 NRC 115 (2011)

for contentions that fall within the facility's CLB, petitioner may seek action on its concerns by either filing a petition for rulemaking under 10 C.F.R. 2.802 or submitting an enforcement petition under 10 C.F.R. 2.206; LBP-11-21, 74 NRC 115 (2011)

litigability of the adequacy of applicant's efforts to address current operational issues is excluded from a license renewal proceeding; CLI-11-11, 74 NRC 427 (2011)

NRC shall require backfitting of a facility only when it determines that there is a substantial increase in the overall protection of the public health and safety or the common defense and security and that the costs of implementation are justified in view of this increased protection; LBP-11-17, 74 NRC 11 (2011)

NRC Staff has authority to require implementation of non-aging-management severe accident mitigation alternatives through its CLB backfit review under Part 50 or through setting conditions of license renewal; LBP-11-17, 74 NRC 11 (2011)

NRC's ongoing regulatory and oversight processes provide reasonable assurance that each facility complies with its current licensing basis, which can be adjusted by future Commission order or by modification to the facility's operating license outside the renewal proceeding; CLI-11-11, 74 NRC 427 (2011)

the CLB includes licensee's commitments remaining in effect that were made in docketed licensing correspondence such as licensee responses to NRC bulletins, generic letters, and enforcement actions, as

- well as licensee commitments documented in NRC safety evaluations or licensee event reports; LBP-11-21, 74 NRC 115 (2011)
- the CLB of an operating license shall continue during the license renewal period, but these conditions may be supplemented or amended as necessary to protect the environment during the term of the renewed license and will be derived from information contained in the supplement to the environmental report, as analyzed and evaluated in the NRC record of decision; LBP-11-17, 74 NRC 11 (2011)
- the CLBs includes plant-specific design-basis information as documented in the most recent final safety analysis report; LBP-11-21, 74 NRC 115 (2011)

DEADLINES

- a notice failing to contain a specific time limit for administrative review, as required by federal regulations, does not trigger a time bar; LBP-11-19, 74 NRC 61 (2011)
- a reply must be filed within 7 days after the filing of answers to an intervention petition; LBP-11-21, 74 NRC 115 (2011)
- if intervenors file a new or amended contention, with supporting materials, within 60 days after pertinent information first becomes available, then the contention will be deemed timely filed and intervenors will not have to satisfy the late-filing requirements of 10 C.F.R. 2.309(c) or the requirements for reopening the record; LBP-11-22, 74 NRC 259 (2011)
- if NRC Staff finds that an application does not comply with regulatory requirements, it must inform applicant in writing of the nature of any deficiencies or the reason for the proposed denial and the deadline for seeking a hearing; LBP-11-19, 74 NRC 61 (2011)
- if the 20-day deadline for requesting a hearing in 10 C.F.R. 2.103(b) applies, NRC Staff's failure to comply with its own responsibilities under that provision bars Staff from invoking it; LBP-11-19, 74 NRC 61 (2011)
- in denying an exemption request, Staff is required to inform applicant of the deadline for seeking a hearing; LBP-11-19, 74 NRC 61 (2011)
- intervention petitions must be filed within 60 days based on the documents then in existence, meaning that the petition must be based on the documents submitted with the application; LBP-11-22, 74 NRC 259 (2011)
- new contentions are deemed timely if filed within 30 days of the date when the new and material information on which they are based first became available; LBP-11-39, 74 NRC 862 (2011)
- parties' other professional obligations do not relieve them of their obligations to meet regulatory deadlines: LBP-11-34, 74 NRC 685 (2011)
- the Model Milestones permit intervenors' proposed late-filed contentions on SER and necessary NEPA documents to be filed within 30 days of the issuance of those documents; LBP-11-22, 74 NRC 259 (2011)
- the time for applicant to request a hearing should be tolled until notice is issued if NRC Staff fails to provide the notice and hearing opportunity mandated by 10 C.F.R. 2.103(b); LBP-11-19, 74 NRC 61
- where applicant has raised sufficient question as to the appropriate deadline, the board may conclude that it would be unfair to penalize applicant on account of what might be ambiguity in NRC's own regulations; LBP-11-19, 74 NRC 61 (2011)

DECISION ON THE MERITS

- allowing an environmental challenge to continue after the environmental impact statement has issued does not constitute a merits ruling that the Staff's review document is inadequate; CLI-11-6, 74 NRC 203 (2011)
- boards do not adjudicate disputed facts at the contention admission stage; LBP-11-21, 74 NRC 115 (2011)
- contention dismissal based on mootness is a jurisdictional ruling, not a decision on the merits of the claim; LBP-11-22, 74 NRC 259 (2011)
- evaluation of a contention at the contention admissibility stage should not be confused with evaluation at the merits stage; CLI-11-8, 74 NRC 214 (2011)
- requiring petitioners to proffer additional and conclusive support for the effect of their proposed contention would improperly require boards to adjudicate the merits of contentions before admitting them; LBP-11-21, 74 NRC 115 (2011); LBP-11-25, 74 NRC 380 (2011)

DECISIONS

although the Atomic Safety and Licensing Appeal Panel is no longer in existence, the decisions of its appeals boards continue to be binding to the degree they concern a regulation or regulatory matter that has not been revised or otherwise materially altered; LBP-11-34, 74 NRC 685 (2011)

See Initial Decisions; Partial Initial Decisions; Record of Decision

DECOMMISSIONING

- a benefit-cost analysis is used to determine initial eligibility for restricted release; CLI-11-12, 74 NRC 460 (2011)
- agreement state license termination regulations are not less protective than or incompatible with NRC's in making the terms of restricted release considerably more difficult than those for unrestricted release; CLI-11-12, 74 NRC 460 (2011)
- dose limit for license termination is a constraint within the public dose limit of 25 mrem per year to members of the public; CLI-11-12, 74 NRC 460 (2011)
- if institutional controls fail and engineered barriers have degraded over a period of time, the dose to a member of the public will not exceed 100 mrem per year, or 500 mrem per year under certain circumstances, and is as low as reasonably achievable; CLI-11-12, 74 NRC 460 (2011)
- litigation at NRC has actually reached the point of NRC approval of an onsite plan at the time of the transfer of authority to an agreement state; CLI-11-12, 74 NRC 460 (2011)
- NRC explicitly expressed a preference for unrestricted release in adopting its license termination rule; CLI-11-12, 74 NRC 460 (2011)
- NRC regulations neither explicitly nor implicitly require a comparison of the levels of protection afforded by the unrestricted and restricted decommissioning options; CLI-11-12, 74 NRC 460 (2011)
- unrestricted release and restricted release are both available as independent regulatory options that would provide adequate protection to the public health and safety if the applicable dose and other criteria are met; CLI-11-12, 74 NRC 460 (2011)

DECOMMISSIONING FUNDING

- an acceptable trustee includes an appropriate state or federal government agency or an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency; CLI-11-4, 74 NRC 1 (2011)
- applicant's commitment to provide a letter of credit issued by a financial institution whose operations are regulated and examined by a federal or state agency is sufficient to satisfy decommissioning funding assurance requirements; CLI-11-4, 74 NRC 1 (2011); LBP-11-26, 74 NRC 499 (2011)
- because it has chosen a surety method, licensee must ensure that the letter of credit is payable to a trust established for decommissioning costs; CLI-11-4, 74 NRC 1 (2011)
- certification of financial assurance may state that the appropriate assurance will be obtained after the application has been approved and the license issued but before the receipt of licensed material; CLI-11-4, 74 NRC 1 (2011)
- certifications of financial assurance, which are used by applicants seeking to possess smaller quantities of material, are governed by 10 C.F.R. 70.25(b)(2); CLI-11-4, 74 NRC 1 (2011)
- contracts that licensee is relying on for decommissioning funding must be reported to NRC; DD-11-7, 74 NRC 787 (2011)
- federal financial regulatory agencies regularly examine banks within their jurisdiction, generally at 12- or 18-month intervals; CLI-11-4, 74 NRC 1 (2011)
- financial assurance requirements are structured according to the quantity of material that will be authorized for possession and use: CLI-11-4, 74 NRC 1 (2011)
- financial tests for parent company guarantees and self-guarantees require that an independent certified public accountant review the data used in the financial test and require that the licensee inform NRC within 90 days of any matters that cause the auditor to believe that the data specified in the financial test should be adjusted and that the company no longer passes the test; CLI-11-4, 74 NRC 1 (2011)
- licensees may use a site-specific methodology to determine the decommissioning funding needed as long as the amount is greater than the decommissioning cost estimate derived from formulas in 10 C.F.R. 50.75(c); DD-11-7, 74 NRC 787 (2011)
- licensees must use the formulas in 10 C.F.R. 50.75(c) to estimate the minimum funding amount needed for radiological decommissioning; DD-11-7, 74 NRC 787 (2011)

- NRC reserves the right to review, as necessary, the rate of accumulation of decommissioning funds and to take additional actions, as appropriate on a case-by-case basis, to ensure an adequate accumulation of decommissioning funds; DD-11-7, 74 NRC 787 (2011)
- NRC Staff authorization permitting applicant to defer execution of any final letters of credit for decommissioning financial assurance until after a license is issued but before receipt of licensed material might be problematic; LBP-11-26, 74 NRC 499 (2011)
- possession limits associated with a certification of financial assurance are set forth in 10 C.F.R. 70.25(d); CLI-11-4, 74 NRC 1 (2011)
- power reactor licensees must report decommissioning funding assurance information to NRC at least once every 2 years; DD-11-7, 74 NRC 787 (2011)
- request for action against reactor facilities that have projected shortfalls in their decommissioning trust funds is denied in part and granted in part; DD-11-7, 74 NRC 787 (2011)
- request for an exemption that would enable licensee to provide decommissioning funding on a forward-looking, incremental basis, at a rate proportional to the then-current decontamination and decommissioning liability is granted; CLI-11-4, 74 NRC 1 (2011)
- request for hearing on Staff denial of permission to use an alternative method for demonstrating decommissioning funding assurance is granted; LBP-11-19, 74 NRC 61 (2011)
- Staff's deference to the expertise of other federal and state agencies to set and monitor the financial soundness of institutions issuing letters of credit is reasonable; CLI-11-4, 74 NRC 1 (2011)
- the source of funds for operating and maintenance expenses would be unaffected by a transaction for decommissioning funding; CLI-11-4, 74 NRC 1 (2011)

DECOMMISSIONING FUNDING PLANS

- applicant seeking a specific license for a uranium enrichment facility is required to submit a plan consistent with 10 C.F.R. 70.25(e); CLI-11-4, 74 NRC 1 (2011)
- deferral of execution of the financial instruments until after the license has issued is not allowed for a uranium enrichment facility; CLI-11-4, 74 NRC 1 (2011)
- depending on the quantity of material, Part 70 license applicants must submit either a decommissioning funding plan or a certification of financial assurance; CLI-11-4, 74 NRC 1 (2011)
- each plan must include a signed original of the instrument obtained to provide financial assurance for decommissioning at the time the plan is submitted; CLI-11-4, 74 NRC 1 (2011)

DEFERRAL OF HEARING

until the safety evaluation report and Staff NEPA documents have been issued, a licensing board is generally prohibited from holding the hearing on the license application; LBP-11-22, 74 NRC 259 (2011)

DEFERRAL OF RULING

consideration of an admissible contention can be deferred, where appropriate, but an inadmissible one cannot; LBP-11-28, 74 NRC 604 (2011)

DEFINITIONS

- ALARA is defined as every reasonable effort to maintain exposures to radiation as far below the dose limits in Part 20 as is practical consistent with the purpose for which the licensed activity is undertaken; CLI-11-12, 74 NRC 460 (2011)
- an entity is under foreign ownership, control, or domination whenever a foreign interest has the power, direct or indirect, whether or not exercised, to direct or decide matters affecting the management or operations of the applicant; LBP-11-25, 74 NRC 380 (2011)
- "closed record" refers to a record developed at an evidentiary hearing; LBP-11-22, 74 NRC 259 (2011) "commencement of construction" includes clearing of land, excavation, or other substantial action that would adversely affect the natural environment of a site; LBP-11-26, 74 NRC 499 (2011)
- cumulative impacts are those that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions; LBP-11-26, 74 NRC 499 (2011)
- design or procedural modifications that could mitigate the consequences of a severe accident are known as severe accident mitigation alternatives; LBP-11-38, 74 NRC 817 (2011)
- direct impacts are those caused by the action that is the subject of the environmental impact statement, and occurring at the same time and place as that action, while indirect impacts are caused by the action

- at a later time or more distant place, yet are still reasonably foreseeable; LBP-11-26, 74 NRC 499 (2011)
- large environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource; LBP-11-26, 74 NRC 499 (2011)
- "material issue" is one where resolution of the dispute would make a difference in the outcome of the licensing proceeding; LBP-11-23, 74 NRC 287 (2011)
- moderate environmental effects are sufficient to noticeably alter but not to destabilize important attributes of the resource; LBP-11-26, 74 NRC 499 (2011)
- "partial initial decision" is one rendered following an evidentiary hearing on one or more contentions, but that does not dispose of the entire matter; CLI-11-6, 74 NRC 203 (2011); CLI-11-10, 74 NRC 251 (2011)
- "presiding officer" in NRC adjudicatory proceedings is defined in 10 C.F.R. 2.4; LBP-11-22, 74 NRC 259 (2011)
- production and utilization facilities include nuclear power reactors; LBP-11-25, 74 NRC 380 (2011) safety-related systems, structures, and components are those relied upon to remain functional during and following design-basis events to ensure specific functions; LBP-11-20, 74 NRC 65 (2011)
- severe accident mitigation alternatives are safety enhancements such as a new hardware item or procedure intended to reduce the risk of severe accidents; LBP-11-33, 74 NRC 675 (2011)
- severe accident mitigation alternatives are somewhat broader than severe accident mitigation design alternatives, which focus on design changes and do not consider procedural modifications; LBP-11-38, 74 NRC 817 (2011)
- severe accident mitigation design alternatives analyses examine whether implementing a SAMDA would decrease the probability-weighted consequences of severe accidents; LBP-11-38, 74 NRC 817 (2011)
- severe accidents are reactor accidents more severe than design basis accidents and involve substantial damage to the reactor core; LBP-11-38, 74 NRC 817 (2011)
- small environmental effects are not detectable or are so minor that they would neither destabilize nor noticeably alter any important attribute of the resource; LBP-11-26, 74 NRC 499 (2011)
- the "rule of reason" is a judicial device to ensure that common sense and reason are not lost in the rubric of regulation; LBP-11-26, 74 NRC 499 (2011)

DELAY OF PROCEEDING

- Congress assumed that individuals establishing a right to be heard in opposition to a license application would be heard with reasonable expedition: LBP-11-30, 74 NRC 627 (2011)
- extreme delay in the completion of Staff's environmental review, and thus the equal delay in hearing intervenors' claim of injury, raises issues of compliance with section 189a of the Atomic Energy Act; LBP-11-30, 74 NRC 627 (2011)
- potential to broaden or delay a proceeding may not be relied on to exclude a contention because NRC has a duty to consider new and significant information that arises before it makes its licensing decisions; LBP-11-35, 74 NRC 701 (2011)
- the Commission, but not a licensing board, has the power to address a protracted delay in the proceeding and to direct appropriate remedial measures; LBP-11-30, 74 NRC 627 (2011)

DEPARTMENT OF ENERGY

DOE has independent records retention obligations regarding creation, management, and disposal of records; CLI-11-13, 74 NRC 635 (2011)

DEPLETED URANIUM

- possession of depleted uranium at multiple installations without an NRC license and performance of decommissioning at a military installation without proper NRC authorization is a violation of 10 C.F.R. 40.3; DD-11-5, 74 NRC 399 (2011)
- request for enforcement action against U.S. Army for post-license-expiration possession and release into the environment of depleted uranium from spent spotting rounds is granted in part and denied in part; DD-11-5, 74 NRC 399 (2011)

DESIGN

challenges to the design of the nuclear power plant are outside the scope of the license renewal proceeding; LBP-11-23, 74 NRC 287 (2011)

See also Containment Design

DESIGN BASIS

the current licensing basis includes plant-specific design-basis information as documented in the most recent final safety analysis report; LBP-11-21, 74 NRC 115 (2011)

DESIGN BASIS ACCIDENT

- although the likelihood of severe accidents occurring is lower than that for design basis accidents, consequences of severe accidents are generally greater; LBP-11-38, 74 NRC 817 (2011)
- severe accidents are reactor accidents more severe than design basis accidents and involve substantial damage to the reactor core; LBP-11-38, 74 NRC 817 (2011)

DESIGN CERTIFICATION

- applications for certified reactor designs include a probabilistic risk assessment for severe accidents; LBP-11-38, 74 NRC 817 (2011)
- challenging features of the standard reactor design is a matter for a design certification rulemaking, not a combined license proceeding; CLI-11-8, 74 NRC 214 (2011); LBP-11-38, 74 NRC 817 (2011)
- in making its combined license findings, the Commission will treat as resolved those matters resolved in the issuance of a design certification rule; LBP-11-38, 74 NRC 817 (2011)
- NRC has authority to ensure that certified designs and combined licenses include appropriate Commission-directed changes before operation; CLI-11-8, 74 NRC 214 (2011); CLI-11-10, 74 NRC 251 (2011)

DISMISSAL OF PROCEEDING

- despite rulings dismissing a contention as moot and declining to admit two other contentions, the licensing proceeding remains in existence; LBP-11-22, 74 NRC 259 (2011)
- if the parties settle their dispute after a hearing, the board should dismiss the adjudication; LBP-11-22, 74 NRC 259 (2011)

DOCUMENTARY MATERIAL

the Commission exercises its inherent supervisory authority to direct the board to complete all necessary and appropriate case management activities, including disposal of all matters currently pending before it and comprehensively documenting the full history of the adjudicatory proceeding; CLI-11-7, 74 NRC 212 (2011)

DOCUMENTATION

the licensing board directed parties defending depositions to make efforts to identify and obtain Licensing Support Network documents that must be indexed for the benefit of other parties and to circulate those indexes as soon as practicable; CLI-11-13, 74 NRC 635 (2011)

DOSE LIMITS

- ALARA is defined as every reasonable effort to maintain exposures to radiation as far below the dose limits in Part 20 as is practical consistent with the purpose for which the licensed activity is undertaken; CLI-11-12, 74 NRC 460 (2011)
- if institutional controls fail and engineered barriers have degraded over a period of time, the dose to a member of the public will not exceed 100 mrem per year, or 500 mrem per year under certain circumstances, and is as low as reasonably achievable; CLI-11-12, 74 NRC 460 (2011)
- limit for individual members of the public from a licensed activity is a total effective dose equivalent of 100 millirem per year; CLI-11-12, 74 NRC 460 (2011)
- limit for license termination is a constraint within the public dose limit of 25 mrem per year to members of the public; CLI-11-12, 74 NRC 460 (2011)
- NRC regulations neither explicitly nor implicitly require a comparison of the levels of protection afforded by the unrestricted and restricted decommissioning options; CLI-11-12, 74 NRC 460 (2011)
- public doses for all Part 20 radiation protection programs must be as low as reasonably achievable and a basic radiation protection public dose standard of 100 mrem per year is required; CLI-11-12, 74 NRC 460 (2011)
- small doses of radiation below dose limits, while safe and acceptable, may have some associated risk and should be reduced below limits when reasonable; CLI-11-12, 74 NRC 460 (2011)
- the ALARA principle as used in NRC regulations does not mean as low as achievable as a comparison between achievable doses, but rather as low as reasonably achievable below the dose limits; CLI-11-12, 74 NRC 460 (2011)

- the ALARA principle has been incorporated into the restricted-use portion of the license termination rule to screen out sites that should be removing contamination to achieve unrestricted use; CLI-11-12, 74 NRC 460 (2011)
- the ALARA principle, either as a general regulatory principle or as used in NRC's license termination rule, does not incorporate or call for any comparative analysis of doses from restricted and unrestricted release; CLI-11-12, 74 NRC 460 (2011)

DOSE, RADIOLOGICAL

Staff guidance documents outline acceptable methods for designing a radiological monitoring program and submitting required semiannual reports specifying principal radionuclide releases to unrestricted areas for the purpose of estimating maximum potential annual public doses from such releases; LBP-11-26, 74 NRC 499 (2011)

DOSIMETRY

evaluation of existing dose projection models or a dose assessment is not required by 10 C.F.R. 52.80(d) and 50.54(hh)(2); CLI-11-9, 74 NRC 233 (2011)

DRAFT ENVIRONMENTAL IMPACT STATEMENT

- absent voluntary action by applicant to amend its environmental report, intervenor wishing to raise new or revised post-ER environmental concerns must await issuance of Staff's DEIS; LBP-11-37, 74 NRC 774 (2011)
- any new and significant information that arises in the interval after the applicant files its originally compliant environmental report must be captured and addressed; LBP-11-32, 74 NRC 654 (2011)
- if recommendations of the NRC's Near-Term Task Force review of the Fukushima Dai-ichi accident constitute relevant new and significant information, then the DEIS must address them; LBP-11-28, 74 NRC 604 (2011)
- NRC Staff must supplement the DEIS if there are substantial changes in the proposed action that are relevant to environmental concerns or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; LBP-11-33, 74 NRC 675 (2011); LBP-11-34, 74 NRC 685 (2011)
- petitioners may amend their contentions or file new contentions if the supplemental DEIS differs significantly from the data or conclusions in applicant's documents; LBP-11-34, 74 NRC 685 (2011)
- supplement to the DEIS or FEIS is required if there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; LBP-11-32, 74 NRC 654 (2011)
- until NRC Staff issues its DEIS or FEIS, it cannot plausibly be argued that the document is inadequate or otherwise fails to satisfy NEPA; LBP-11-33, 74 NRC 675 (2011)

EARLY SITE PERMITS

section 50.54(hh)(2) applies to both current reactor licensees under Part 50 and new applicants for licenses under Part 52; LBP-11-21, 74 NRC 115 (2011)

ECONOMIC EFFECTS

- discussion of the economic costs and benefits of the proposed action and alternatives is required if such costs and benefits are essential for a determination regarding the inclusion of an alternative in the range of alternatives considered; LBP-11-21, 74 NRC 115 (2011)
- the ability of a totally unfunded group to provide testimony from experts is not taken into account in ruling on motions to reopen; LBP-11-20, 74 NRC 65 (2011)

ELECTRICAL EQUIPMENT

- amendment to aging management plan extended the AMP for medium-voltage cables to also cover low-voltage cables; LBP-11-20, 74 NRC 65 (2011)
- licensees are required to establish a program for qualifying certain defined electric equipment; LBP-11-20, 74 NRC 65 (2011)
- safety-related equipment that must be environmentally qualified is described; LBP-11-20, 74 NRC 65 (2011)
- See also Environmental Qualification of Electrical Equipment

EMERGENCIES

licensee may take reasonable action that departs from a license condition or a technical specification in an emergency when the action is immediately needed to protect the public health and safety and no action

consistent with license conditions and technical specifications that can provide adequate or equivalent protection is immediately apparent; DD-11-6, 74 NRC 420 (2011)

EMERGENCY PLANNING

contention is neither germane to age-related degradation nor unique to the period covered by a license renewal application; LBP-11-35, 74 NRC 701 (2011)

this issue is beyond the scope of a license renewal proceeding; LBP-11-21, 74 NRC 115 (2011)

EMERGENCY PLANS

a license amendment request does not require an updated or separate emergency plan unless such a plan would be germane to the type of license amendment request under review or is part of a licensee's periodic update of emergency plans; LBP-11-29, 74 NRC 612 (2011)

ENERGY EFFICIENCY

the costs and benefits of the energy-efficient building code are essential to determine whether the adoption of an energy-efficient building code should be included as an alternative; LBP-11-21, 74 NRC 115 (2011)

ENFORCEMENT ACTIONS

request for action against reactor facilities that have projected shortfalls in their decommissioning trust funds is denied in part and granted in part; DD-11-7, 74 NRC 787 (2011)

request for cold shutdown because of inoperability of main steam safety relief valves is denied but petitioner's concern about the SRVs have been resolved; DD-11-6, 74 NRC 420 (2011)

request for enforcement action against U.S. Army for post-license-expiration possession and release into the environment of depleted uranium from spent spotting rounds is granted in part and denied in part; DD-11-5, 74 NRC 399 (2011)

the current licensing basis includes licensee's commitments remaining in effect that were made in docketed licensing correspondence such as licensee responses to NRC bulletins, generic letters, and enforcement actions, as well as licensee commitments documented in NRC safety evaluations or licensee event reports; LBP-11-21, 74 NRC 115 (2011)

ENVIRONMENTAL ANALYSIS

NEPA imposes procedural obligations on federal agencies proposing to take actions significantly affecting the quality of the human environment; LBP-11-39, 74 NRC 862 (2011)

ENVIRONMENTAL ASSESSMENT

for operating license renewal, if NRC Staff has not previously considered severe accident mitigation alternatives for applicant's plant in an environmental impact statement or related supplement or in an EA, applicant's environmental report must contain a consideration of alternatives to mitigate severe accidents; LBP-11-18, 74 NRC 29 (2011); LBP-11-21, 74 NRC 115 (2011)

ENVIRONMENTAL EFFECTS

as an alternative ground for excluding a NEPA terrorism contention, NRC Staff's determination in the generic environmental impact statement that the environmental impacts of a terrorist attack were bounded by those resulting from internally initiated events is sufficient to address the environmental impacts of terrorism; CLI-11-11, 74 NRC 427 (2011)

cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time; LBP-11-26, 74 NRC 499 (2011)

direct impacts are those caused by the action that is the subject of the environmental impact statement, and occurring at the same time and place as that action, while indirect impacts are caused by the action at a later time or more distant place, yet are still reasonably foreseeable; LBP-11-26, 74 NRC 499 (2011)

irrespective of the cause of the impact or the appropriate level of administrative scrutiny, for the purpose of NEPA evaluation, NRC regulations categorize impacts into direct, indirect, and cumulative; LBP-11-26, 74 NRC 499 (2011)

large effects are clearly noticeable and are sufficient to destabilize important attributes of the resource; LBP-11-26, 74 NRC 499 (2011)

moderate effects are sufficient to noticeably alter but not to destabilize important attributes of the resource; LBP-11-26, 74 NRC 499 (2011)

NEPA does not require NRC to consider the environmental consequences of hypothetical terrorist attacks on NRC-licensed facilities; CLI-11-11, 74 NRC 427 (2011)

- small effects are not detectable or are so minor that they would neither destabilize nor noticeably alter any important attribute of the resource; LBP-11-26, 74 NRC 499 (2011)
- the Fukushima accident does not provide a seriously different picture of the environmental impact of a proposed uranium enrichment facility from what was previously envisioned; LBP-11-26, 74 NRC 499 (2011)
- to waive the generic assessment in NRC regulations to permit adjudication of issues involving the environmental impact of spent fuel pool accidents in this license renewal proceeding, the Commission must conclude that the rule's strict application would not serve the purpose for which it was adopted; CLI-11-11, 74 NRC 427 (2011)
- within the geographic boundary of the Ninth Circuit, NRC may not exclude NEPA terrorism contentions categorically; CLI-11-11, 74 NRC 427 (2011)
- ENVIRONMENTAL IMPACT STATEMENT
- agencies must prepare an environmental impact statement before approving any major federal action that will significantly affect the quality of the human environment; LBP-11-38, 74 NRC 817 (2011)
- agencies need only address reasonably foreseeable impacts, not those that are remote and speculative or inconsequentially small; LBP-11-38, 74 NRC 817 (2011)
- agencies should consider both the context and intensity of environmental impacts; LBP-11-26, 74 NRC 499 (2011)
- all adverse effects to any NRHP-eligible historic or cultural resource must be considered during any federal undertaking; LBP-11-26, 74 NRC 499 (2011)
- alleged defects in applicant's environmental report may be mooted by the content of NRC's EIS or supplemental EIS; LBP-11-28, 74 NRC 604 (2011)
- allowing an environmental challenge to continue after the EIS has issued does not constitute a merits ruling that the Staff's review document is inadequate; CLI-11-6, 74 NRC 203 (2011)
- an EIS that contains an incomplete or misleading comparison of alternatives is deficient; LBP-11-21, 74 NRC 115 (2011)
- applicant and Staff treatment of need for the construction and operation of uranium enrichment facilities should explain why the proposed action is needed, describe the underlying need for the proposed action, but should not be written merely as a justification of the proposed action or to alter the choice of alternatives; LBP-11-26, 74 NRC 499 (2011)
- applicant's environmental report must provide sufficient information about alternatives to enable NRC Staff to prepare an EIS in compliance with NEPA; LBP-11-21, 74 NRC 115 (2011)
- as a practical matter, Staff relies heavily upon applicant's environmental report in preparing its EIS; LBP-11-38, 74 NRC 817 (2011)
- as a tool for assessing the significance of potential impacts, NRC regulations establish a standard scheme; LBP-11-26, 74 NRC 499 (2011)
- as part of its NEPA analysis, NRC must provide information that addresses the purpose and need for the proposed action; LBP-11-26, 74 NRC 499 (2011)
- because federal agencies typically describe their consideration of the energy requirements of a proposed action, in the context of that analysis agencies should evaluate greenhouse gas emissions; LBP-11-26, 74 NRC 499 (2011)
- consideration of alternatives is the heart of the EIS; LBP-11-35, 74 NRC 701 (2011)
- contentions may challenge the adequacy of the review contained in the Staff's NEPA documents; LBP-11-22, 74 NRC 259 (2011)
- direct impacts are those caused by the action that is the subject of the EIS, and occurring at the same time and place as that action, while indirect impacts are caused by the action at a later time or more distant place, yet are still reasonably foreseeable; LBP-11-26, 74 NRC 499 (2011)
- EISs are not intended to be research documents, reflecting the frontiers of scientific methodology, studies, and data; LBP-11-38, 74 NRC 817 (2011)
- EISs are subject to a rule of reason that grants the agency a degree of deference exempting it from examining impacts that it in good faith deems to be remote and speculative or inconsequentially small; LBP-11-39, 74 NRC 862 (2011)
- examples of need for the proposed facility include a benefit provided if the proposed action is granted or descriptions of the detriment that will be experienced without approval of the proposed action; LBP-11-26, 74 NRC 499 (2011)

- filing of new contentions based on the SER and Staff NEPA documents is expressly contemplated by the Model Milestones; LBP-11-22, 74 NRC 259 (2011)
- for operating license renewal, if NRC Staff has not previously considered severe accident mitigation alternatives for applicant's plant in an EIS or related supplement or in an environmental assessment, applicant's environmental report must contain a consideration of alternatives to mitigate severe accidents; LBP-11-18, 74 NRC 29 (2011); LBP-11-21, 74 NRC 115 (2011)
- merely offering general statements about possible effects and some risk does not constitute a hard look at environmental impacts absent a justification regarding why more definitive information could not be provided; LBP-11-38, 74 NRC 817 (2011)
- NEPA does not mandate substantive results but rather imposes procedural restraints on agencies, requiring them to take a hard look at the environmental impacts of a proposed action and reasonable alternatives to that action; LBP-11-38, 74 NRC 817 (2011)
- NEPA imposes a procedural requirement on an agency's decisionmaking process by mandating that an agency consider the environmental impacts of a proposed action and inform the public that it has taken those impacts into account in making its decision; LBP-11-17, 74 NRC 11 (2011)
- NEPA should be construed in the light of reason if it is not to demand virtually infinite study and resources; LBP-11-38, 74 NRC 817 (2011)
- NEPA's hard look at environmental impacts is tempered by a rule of reason; LBP-11-38, 74 NRC 817 (2011)
- NEPA's procedural obligation is carried out through an agency's issuance of an EIS documenting the agency's hard look at potential environmental impacts of the proposed action and reasonable alternatives thereto; LBP-11-39, 74 NRC 862 (2011)
- NRC has established small, moderate, and large levels of impacts; LBP-11-26, 74 NRC 499 (2011)
- NRC must rigorously explore and objectively analyze environmental impacts, so that merely offering general statements about possible effects and some risk does not constitute a hard look absent a justification regarding why more definitive information could not be provided; LBP-11-26, 74 NRC 499 (2011)
- NRC Staff assesses air quality impacts as a matter of course, categorizing them as small, medium, or large; LBP-11-26, 74 NRC 499 (2011)
- NRC Staff must consult with and obtain the comments of any federal agency that has jurisdiction by law or special expertise with respect to any environmental impact involved; LBP-11-26, 74 NRC 499 (2011)
- NRC Staff, pursuant to its obligation to prepare an adequate EIS, is empowered to issue requests for additional information relevant to an applicant's environmental report; LBP-11-33, 74 NRC 675 (2011)
- NRC's review of a COL application is the type of proposed action obliging Staff to prepare an EIS or a supplement thereto; LBP-11-39, 74 NRC 862 (2011)
- parties may seek leave of the board to file new contentions that challenge the sufficiency of Staff's NEPA documents where information on which new contentions are based was not previously available and is materially different than information previously available and has been submitted in a timely fashion based on the availability of the subsequent information; LBP-11-39, 74 NRC 862 (2011)
- reasonable alternatives under NEPA are limited to those alternatives that will bring about the ends of the proposed action; LBP-11-21, 74 NRC 115 (2011)
- reasonably foreseeable environmental impacts that have catastrophic consequences, even if their probability of occurrence is low, must be considered in the EIS; LBP-11-23, 74 NRC 287 (2011)
- regardless of their classification as direct, indirect, or cumulative, impacts that are reasonably foreseeable are to be assessed in an EIS; LBP-11-26, 74 NRC 499 (2011)
- severe accident mitigation alternatives review identifies and assesses possible plant changes such as improvements in hardware, training, or procedures that could cost-effectively mitigate the environmental impacts that would otherwise flow from a potential severe accident; LBP-11-17, 74 NRC 11 (2011)
- Staff guidance documents set forth information that should be provided in the environmental report and the EIS regarding a radiological monitoring program and monitoring program acceptance criteria; LBP-11-26, 74 NRC 499 (2011)
- taking a hard look at environmental impacts fosters both informed decisionmaking and informed public participation, and thus ensures that NRC does not act on incomplete information, only to regret its decision after it is too late to correct it; LBP-11-26, 74 NRC 499 (2011)

- taking a hard look at environmental impacts fosters informed decisionmaking and public participation and thus ensures that the agency does not act upon incomplete information, only to regret its decision after it is too late to correct it; LBP-11-38, 74 NRC 817 (2011)
- the EIS's hard look must examine reasonably foreseeable environmental impacts emanating from the proposed action; LBP-11-39, 74 NRC 862 (2011)
- the Model Milestones permit the filing of proposed late-filed contentions on the Safety Evaluation Report and necessary National Environmental Policy Act documents within 30 days of issuance of those documents; LBP-11-22, 74 NRC 259 (2011)
- the only role for a court is to ensure that the agency has taken a hard look at environmental consequences; LBP-11-17, 74 NRC 11 (2011)
- the purpose of applicant's environmental report is to assist NRC in preparing the agency's own environmental analysis; LBP-11-28, 74 NRC 604 (2011)
- there is no NEPA requirement to use the best scientific methodology; LBP-11-38, 74 NRC 817 (2011)
- timely new contentions challenging the sufficiency of Staff's NEPA documents may be filed where data or conclusions in those documents differ significantly from data or conclusions in previous versions of those documents or in applicant's environmental report; LBP-11-39, 74 NRC 862 (2011)
- under NEPA, NRC must assess the environmental impacts of a proposed facility, including those impacts associated with greenhouse gas emissions by the proposed facility; LBP-11-26, 74 NRC 499 (2011)
- until the safety evaluation report and Staff NEPA documents have been issued, a licensing board is generally prohibited from holding the hearing on the license application; LBP-11-22, 74 NRC 259 (2011)
- without substantive, comparative environmental impact information regarding other possible courses of action, the ability of an EIS to inform agency deliberation and facilitate public involvement would be greatly degraded; LBP-11-23, 74 NRC 287 (2011)
- See also Draft Environmental Impact Statement; Final Environmental Impact Statement; Generic Environmental Impact Statement; Supplemental Environmental Impact Statement

ENVIRONMENTAL ISSUES

- although all environmental contentions may, in a general sense, ultimately challenge NRC's compliance with NEPA, NRC regulations expressly permit the lodging of contentions against applicant's environmental report well before release of NRC's NEPA documents; LBP-11-38, 74 NRC 817 (2011)
- at the outset of proceedings, NEPA contentions are to be based on the applicant's environmental report; LBP-11-32, 74 NRC 654 (2011)
- Category 1 issues are not subject to challenge in a relicensing proceeding, absent a waiver, because they involve environmental effects that are essentially similar for all plants and need not be assessed repeatedly on a site-specific basis; LBP-11-21, 74 NRC 115 (2011)
- completion of NRC Staff's final environmental review document always must precede the conduct of hearings on environmental issues; LBP-11-30, 74 NRC 627 (2011)
- environmental implications of new and significant information must be considered under NEPA before NRC may grant renewed operating licenses; LBP-11-32, 74 NRC 654 (2011)
- for NEPA contentions, the burden of proof shifts to NRC Staff, because NRC, not applicant, bears the ultimate burden of complying with NEPA; LBP-11-38, 74 NRC 817 (2011)
- if new information becomes available that, e.g., an endangered species has been living on the site or that the facility has been leaking tritium into the groundwater, then a new contention alleging that the environmental report as originally filed did not comply with Part 51 may be filed; LBP-11-32, 74 NRC 654 (2011)
- new contentions on the safety and environmental implications of the NRC Task Force Report on the Fukushima Dai-ichi accident are premature and must be denied on that basis without regard to any other considerations; LBP-11-27, 74 NRC 591 (2011)
- petitioner may amend its contentions or file new contentions if there are data or conclusions in the NRC draft or final environmental impact statement or any supplements thereto, that differ significantly from the data or conclusions in applicant's documents; LBP-11-32, 74 NRC 654 (2011); LBP-11-33, 74 NRC 675 (2011)

ENVIRONMENTAL JUSTICE

petitioner's attempt to tie NEPA environmental justice claim to Fukushima Task Force report is an improper effort to interpose concerns that could have been raised at the outset of the proceeding; LBP-11-37, 74 NRC 774 (2011)

ENVIRONMENTAL PROTECTION AGENCY

- EPA also has granted authority to some states to implement, maintain, and enforce their own EPA-compliant air quality programs through State Ambient Air Quality Standards; LBP-11-26, 74 NRC 499 (2011)
- in parallel with NRC Staff's role under NEPA to assess environmental impacts, EPA possesses authority under the Clean Air Act to set numerical standards for air pollutants from emission sources; LBP-11-26, 74 NRC 499 (2011)
- surface roughness, albedo, and Bowen ratio inputs to the AERMOD model are discussed; LBP-11-26, 74 NRC 499 (2011)
- the AERMOD model for demonstrating compliance with EPA regulations and for state air quality protection planning is discussed; LBP-11-26, 74 NRC 499 (2011)

ENVIRONMENTAL QUALIFICATION OF ELECTRICAL EQUIPMENT

- equipment important to safety located in an environment that would at no time be significantly more severe than the environment that would occur during normal plant operation are not included within the scope of 10 C.F.R. 50.49(c); LBP-11-20, 74 NRC 65 (2011)
- lack of clarity about which electrical cables might be subject to any saltwater environment, however high or low the concentration, and about the effects of and efforts to address this, is a level of concern sufficient to warrant further inquiry and exploration; LBP-11-20, 74 NRC 65 (2011)
- licensees are required to establish a program for qualifying certain defined electric equipment; LBP-11-20, 74 NRC 65 (2011)
- safety-related electrical equipment that must be environmentally qualified is described; LBP-11-20, 74 NRC 65 (2011)

ENVIRONMENTAL REPORT

- a license renewal ER is not required to include discussion of need for power; LBP-11-21, 74 NRC 115 (2011)
- absent voluntary action by applicant to amend its ER, intervenor wishing to raise new or revised post-ER environmental concerns must await issuance of Staff's draft environmental impact statement; LBP-11-37, 74 NRC 774 (2011)
- alleged defects in applicant's ER may be mooted by the content of NRC's environmental impact statement or supplemental environmental impact statement; LBP-11-28, 74 NRC 604 (2011)
- although all environmental contentions may, in a general sense, ultimately challenge the NRC's compliance with NEPA, NRC regulations expressly permit the lodging of contentions against applicant's ER well before release of NRC's NEPA documents; LBP-11-38, 74 NRC 817 (2011)
- an ER is required for a combined license application; CLI-11-5, 74 NRC 141 (2011)
- applicant and Staff treatment of need for the construction and operation of uranium enrichment facilities should explain why the proposed action is needed, describe the underlying need for the proposed action, but should not be written merely as a justification of the proposed action or to alter the choice of alternatives; LBP-11-26, 74 NRC 499 (2011)
- applicant is not barred from voluntarily supplementing its ER; LBP-11-32, 74 NRC 654 (2011)
- applicant is not required to update or otherwise supplement an ER subsequent to the time that the Staff finds that report acceptable for review as part of a license application; LBP-11-37, 74 NRC 774 (2011)
- applicant may bear the burden of proof on contentions asserting deficiencies in its ER and where the applicant becomes a proponent of a particular challenged position set forth in the environmental impact statement; LBP-11-38, 74 NRC 817 (2011)
- applicant may update an ER if relevant new and significant information becomes available but is under no regulatory or statutory obligation to do so; LBP-11-33, 74 NRC 675 (2011); LBP-11-34, 74 NRC 685 (2011)
- applicant must update its license renewal application annually to reflect changes in its current licensing basis, but such updating does not explicitly extend to the ER; LBP-11-32, 74 NRC 654 (2011)
- applicant's ER must contain analyses of the environmental impacts of the proposed action for those matters identified as Category 2 license renewal issues in Appendix B; LBP-11-21, 74 NRC 115 (2011)

- applicant's ER must include new information when a prior license has been issued for the facility, and the ER in question is associated with a subsequent license for the same facility; LBP-11-32, 74 NRC 654 (2011)
- applicant's ER must provide sufficient information about alternatives to enable NRC Staff to prepare an environmental impact statement in compliance with NEPA; LBP-11-21, 74 NRC 115 (2011)
- as a practical matter, Staff relies heavily upon applicant's environmental report in preparing its environmental impact statement; LBP-11-38, 74 NRC 817 (2011)
- at the outset of proceedings, NEPA contentions are to be based on applicant's ER; LBP-11-32, 74 NRC 654 (2011)
- because Category 1 issues in 10 C.F.R. Part 51, Subpart A, Appendix B already have been reviewed on a generic basis, applicant's ER need not provide a site-specific analysis of these issues; CLI-11-11, 74 NRC 427 (2011); LBP-11-21, 74 NRC 115 (2011)
- examples of need for the proposed facility include a benefit provided if the proposed action is granted or descriptions of the detriment that will be experienced without approval of the proposed action; LBP-11-26, 74 NRC 499 (2011)
- for operating license renewal, if NRC Staff has not previously considered severe accident mitigation alternatives for applicant's plant in an environmental impact statement or related supplement or in an environmental assessment, applicant's ER must contain a consideration of SAMAs; LBP-11-17, 74 NRC 11 (2011); LBP-11-18, 74 NRC 29 (2011); LBP-11-21, 74 NRC 115 (2011)
- if new information becomes available that, e.g., an endangered species has been living on the site or that the facility has been leaking tritium into the groundwater, then a new contention alleging that the environmental report as originally filed did not comply with Part 51 may be filed; LBP-11-32, 74 NRC 654 (2011)
- information provided to NRC by an applicant must be complete and accurate in all material respects; LBP-11-32, 74 NRC 654 (2011)
- license amendment applicants must include in their environmental report any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware; LBP-11-29, 74 NRC 612 (2011)
- license renewal applicants must provide a plant-specific analysis of issues designated as Category 2; CLI-11-11, 74 NRC 427 (2011)
- license renewal applicants need not provide a site-specific analysis of the environmental impacts of spent fuel storage in their environmental report; CLI-11-11, 74 NRC 427 (2011)
- licensing board refers ruling that applicant has no legal duty to supplement an originally compliant environmental report to incorporate new and significant information that arises after the ER was duly submitted; LBP-11-32, 74 NRC 654 (2011)
- nothing in NEPA, which applies to agencies of the federal government, can be read to require an applicant to update its environmental report; LBP-11-34, 74 NRC 685 (2011)
- NRC Staff is empowered to issue requests for additional information relevant to an applicant's environmental report; LBP-11-34, 74 NRC 685 (2011)
- NRC Staff is not barred from filing a request for additional information asking the applicant to supplement its ER; LBP-11-32, 74 NRC 654 (2011)
- NRC Staff, pursuant to its obligation to prepare an adequate EIS, is empowered to issue requests for additional information relevant to an applicant's ER; LBP-11-33, 74 NRC 675 (2011)
- Part 51, not NEPA, is the source of the legal requirements applicable to applicant's ER; LBP-11-32, 74 NRC 654 (2011)
- petitioner's assertion that applicant's ER must be supplemented to take account of allegedly new and significant information is, as a procedural matter, unfounded and must be rejected; LBP-11-33, 74 NRC 675 (2011)
- severe accident mitigation alternatives review identifies and assesses possible plant changes such as improvements in hardware, training, or procedures that could cost-effectively mitigate the environmental impacts that would otherwise flow from a potential severe accident; LBP-11-17, 74 NRC 11 (2011)
- Staff guidance documents set forth information that should be provided in the ER and the environmental impact statement regarding a radiological monitoring program and monitoring program acceptance criteria; LBP-11-26, 74 NRC 499 (2011)

- Staff's ability to satisfy its NEPA obligations will be undermined if applicant either fails to include seismic information in its SAMA analysis, or, in omitting the information, fails to explain its absence and justify that the overall costs of obtaining it are exorbitant; CLI-11-11, 74 NRC 427 (2011)
- the current licensing basis of an operating license shall continue during the license renewal period, but these conditions may be supplemented or amended as necessary to protect the environment during the term of the renewed license and will be derived from information contained in the supplement to the environmental report, as analyzed and evaluated in the NRC record of decision; LBP-11-17, 74 NRC 11 (2011)
- the phrase "new" in 10 C.F.R. 51.53(c)(3)(iv) requires that the ER include environmental information that is new as compared to the original ER for the same facility and new as of the time of submission of the required ER, but does not impose a continuing duty to supplement an ER which was compliant when submitted; LBP-11-32, 74 NRC 654 (2011)
- the purpose of applicant's ER is to assist NRC in preparing the agency's own environmental analysis; LBP-11-28, 74 NRC 604 (2011)

ENVIRONMENTAL REVIEW

- although sufficiency of the application and NRC Staff's environmental review of that application are proper targets of contentions, sufficiency of NRC Staff's safety review of the application is not a proper target of contentions; LBP-11-29, 74 NRC 612 (2011)
- boards are to make independent environmental judgments with respect to certain NEPA findings, though even then they need not rethink or redo every aspect of NRC Staff's environmental findings or undertake their own fact-finding activities; LBP-11-26, 74 NRC 499 (2011)
- completion of NRC Staff's final environmental review document always must precede the conduct of hearings on environmental issues; LBP-11-30, 74 NRC 627 (2011)
- ensuring continued availability of diverse, reliable sources of domestic enrichment services to provide low-enriched uranium for domestic power reactors supports a finding of need for the facility; LBP-11-26, 74 NRC 499 (2011)
- environmental impacts of license renewal are classified as either Category 1, which are generically addressed by the NRC's generic environmental impact statement for license renewal, or Category 2, which are analyzed on a site-specific basis; LBP-11-17, 74 NRC 11 (2011)
- evidence of significant actual utility commitments provides a compelling showing in support of the need for uranium enrichment facility; LBP-11-26, 74 NRC 499 (2011)
- extreme delay in the completion of Staff's environmental review, and thus the equal delay in hearing intervenors' claim of injury, raises issues of compliance with section 189a of the Atomic Energy Act; LBP-11-30, 74 NRC 627 (2011)
- for the mandatory uncontested proceeding on a uranium enrichment facility license, a licensing board is to conduct a simple sufficiency review rather than a de novo review on both safety and environmental issues; LBP-11-26, 74 NRC 499 (2011)
- once NRC completes its environmental review, its record of decision must state whether NRC has taken all practicable measures within its jurisdiction to avoid or minimize environmental harm from the alternative selected, and if not, to explain why those measures were not adopted, and summarize any license conditions and monitoring programs adopted in connection with mitigation measures; LBP-11-17, 74 NRC 11 (2011)
- the aging-based safety review set out in Part 54 is analytically separate from Part 51's environmental inquiry and does not in any sense restrict NEPA; LBP-11-17, 74 NRC 11 (2011)
- the NEPA review in license renewal proceedings is not limited to aging management-related issues; LBP-11-17, 74 NRC 11 (2011)
- to evaluate an operating license renewal application, NRC reviews the management of aging effects and time-limited aging analysis of particular safety-related functions of the plant's systems, structures, and components pursuant to 10 C.F.R. Part 54 and the environmental impacts and alternatives to the proposed action in accordance with Part 51; LBP-11-17, 74 NRC 11 (2011)

ERROR

a board erred in admitting a contention pertaining to a plant's safety culture; CLI-11-11, 74 NRC 427 (2011)

EVACUATION PLANS

if petitioner is concerned about the sufficiency of the ongoing oversight of a nuclear power plant and its current evacuation plan, it has the option of requesting a modification, suspension, or revocation of its operating license; LBP-11-29, 74 NRC 612 (2011)

EVIDENCE

support for a motion to reopen must be relevant, material, and reliable; LBP-11-23, 74 NRC 287 (2011) EXEMPTIONS

in denying an exemption request, Staff is required to inform applicant of the deadline for seeking a hearing; LBP-11-19, 74 NRC 61 (2011)

request for an exemption that would enable licensee to provide decommissioning funding on a forward-looking, incremental basis, at a rate proportional to the then-current decontamination and decommissioning liability is granted; CLI-11-4, 74 NRC 1 (2011)

EXHIBITS

boards accord each exhibit weight to the extent it is relevant, material, and reliable; LBP-11-18, 74 NRC 29 (2011)

FAIRNESS

- a state's regulations are not inherently unfair because they may be designed to effectuate a state-desired regulatory outcome; CLI-11-12, 74 NRC 460 (2011)
- filings not otherwise authorized by NRC rules are allowed only where necessity or fairness dictates; CLI-11-14, 74 NRC 801 (2011)
- when establishing a schedule, boards are to consider NRC's interest in providing a fair and expeditious resolution of the issues sought to be admitted for adjudication in the proceeding, along with other factors; LBP-11-22, 74 NRC 259 (2011)

FAULTS

to evaluate the impact of a fault on current operations, a probabilistic risk assessment rather than a deterministic analysis is the accepted and standard practice in SAMA analyses; CLI-11-11, 74 NRC 427 (2011)

FILINGS

parties are expected to adhere to page-limit requirements, or timely seek leave for an enlargement of the page limitation; CLI-11-14, 74 NRC 801 (2011)

FINAL ENVIRONMENTAL IMPACT STATEMENT

- NRC Staff must supplement the FEIS if there are substantial changes in the proposed action that are relevant to environmental concerns or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; LBP-11-32, 74 NRC 654 (2011); LBP-11-33, 74 NRC 675 (2011)
- petitioner may amend its contentions or file new contentions if there are data or conclusions in the NRC DEIS or FEIS or any supplements thereto, that differ significantly from the data or conclusions in applicant's documents; LBP-11-33, 74 NRC 675 (2011)
- the adjudicatory record, board decision, and any Commission appellate decisions become, in effect, part of the FEIS: CLI-11-6, 74 NRC 203 (2011)
- the Council on Environmental Quality has recognized that information may be unavoidably incomplete or unavailable, and that under those circumstances, an FEIS can overcome this deficiency if it states that fact, explains how the missing information is relevant, sets forth the existing information, and evaluates the environmental impacts to the best of the agency's ability; CLI-11-11, 74 NRC 427 (2011)
- until NRC Staff issues its draft or final EIS, it cannot plausibly be argued that the document is inadequate or otherwise fails to satisfy NEPA; LBP-11-33, 74 NRC 675 (2011)

FINAL SAFETY ANALYSIS REPORT

- intervenors' speculation that further review of certain issues might change some conclusions in the FSAR does not justify restarting the hearing process; LBP-11-20, 74 NRC 65 (2011)
- it is permissible for the FSAR to give applicant several options for controlling and limiting radioactive effluents and radiation exposures, provided that each option is described with a level of information sufficient to enable the Commission to reach a final conclusion; LBP-11-31, 74 NRC 643 (2011)
- the current licensing basis includes plant-specific design-basis information as documented in the most recent FSAR; LBP-11-21, 74 NRC 115 (2011)

FINAL SAFETY EVALUATION REPORT

- speculation that further review of certain issues might change some conclusions in the FSER does not justify restarting the hearing process; LBP-11-23, 74 NRC 287 (2011); LBP-11-35, 74 NRC 701 (2011) FINALITY
 - rationale for NRC's policy of generally disfavoring the filing of new contentions at the eleventh hour of an adjudication is based on the doctrine of finality, which states that at some point, an adjudicatory proceeding must come to an end; LBP-11-20, 74 NRC 65 (2011)
- there simply would be no end to NRC licensing proceedings if petitioners could ignore timeliness requirements and add new contentions at their convenience based on information that could have formed the basis for a timely contention at the outset of the proceeding; LBP-11-20, 74 NRC 65 (2011) FINANCIAL ASSURANCE.
 - an acceptable trustee includes an appropriate state or federal government agency or an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency; CLI-11-4, 74 NRC 1 (2011)
 - applicant's commitment to provide a letter of credit issued by a financial institution whose operations are regulated and examined by a federal or state agency is sufficient to satisfy decommissioning funding assurance requirements; CLI-11-4, 74 NRC 1 (2011); LBP-11-26, 74 NRC 499 (2011)
 - because it has chosen a surety method, licensee must ensure that the letter of credit is payable to a trust established for decommissioning costs; CLI-11-4, 74 NRC 1 (2011)
 - certification of financial assurance may state that the appropriate assurance will be obtained after the application has been approved and the license issued but before the receipt of licensed material; CLI-11-4, 74 NRC 1 (2011)
 - certifications, which are used by applicants seeking to possess smaller quantities of material, are governed by 10 C.F.R. 70.25(b)(2); CLI-11-4, 74 NRC 1 (2011)
 - deferral of execution of the financial instruments until after the license has issued is not allowed for a uranium enrichment facility; CLI-11-4, 74 NRC 1 (2011)
 - depending on the quantity of material, Part 70 license applicants must submit either a decommissioning funding plan or a certification of financial assurance; CLI-11-4, 74 NRC 1 (2011)
 - each decommissioning funding plan must include a signed original of the instrument obtained to provide financial assurance for decommissioning at the time the plan is submitted; CLI-11-4, 74 NRC 1 (2011) federal financial regulatory agencies regularly examine banks within their jurisdiction, generally at 12- or 18-month intervals; CLI-11-4, 74 NRC 1 (2011)
 - financial tests for parent company guarantees and self-guarantees require that an independent certified public accountant review the data used in the financial test and require that the licensee inform NRC within 90 days of any matters coming to the auditor's attention which cause the auditor to believe that the data specified in the financial test should be adjusted and that the company no longer passes the test; CLI-11-4, 74 NRC 1 (2011)
 - licensees may use a site-specific methodology to determine the decommissioning funding needed as long as the amount is greater than the decommissioning cost estimate derived from formulas in 10 C.F.R. 50.75(c): DD-11-7. 74 NRC 787 (2011)
 - NRC Staff authorization permitting applicant to defer execution of any final letters of credit for decommissioning financial assurance until after a license is issued but before receipt of licensed material might be problematic; LBP-11-26, 74 NRC 499 (2011)
 - possession limits associated with a certification of financial assurance are set forth in 10 C.F.R. 70.25(d); CLI-11-4, 74 NRC 1 (2011)
 - power reactor licensees must report decommissioning funding assurance information to NRC at least once every 2 years; DD-11-7, 74 NRC 787 (2011)
 - request for hearing on Staff denial of permission to use an alternative method for demonstrating decommissioning funding assurance is granted; LBP-11-19, 74 NRC 61 (2011)
 - requirements for decommissioning are structured according to the quantity of material that will be authorized for possession and use; CLI-11-4, 74 NRC 1 (2011)
 - Staff's deference to the expertise of other federal and state agencies to set and monitor the financial soundness of institutions issuing letters of credit is reasonable; CLI-11-4, 74 NRC 1 (2011)
 - the source of funds for operating and maintenance expenses would be unaffected by a transaction for decommissioning funding; CLI-11-4, 74 NRC 1 (2011)

FINDINGS OF FACT

in making its combined license findings, the Commission will treat as resolved those matters resolved in the issuance of a design certification rule: LBP-11-38, 74 NRC 817 (2011)

FIRES

- applying principles of statutory interpretation, the board declined to insert addition requirements into the regulations 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; CLI-11-9, 74 NRC 233 (2011)
- COL applications must include a description and plans for implementation of the guidance and strategies required by section 50.54(hh)(2) for severe accident mitigation; CLI-11-9, 74 NRC 233 (2011)
- licensees must develop and implement guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities in case of loss of large areas of the plant due to explosions or fire; CLI-11-5, 74 NRC 141 (2011)

FOREIGN OWNERSHIP

- all prospective co-licensees are subject to the limitations on foreign ownership, control, or domination; LBP-11-25, 74 NRC 380 (2011)
- an entity is under foreign ownership, control, or domination whenever a foreign interest has the power, direct or indirect, whether or not exercised, to direct or decide matters affecting the management or operations of the applicant; LBP-11-25, 74 NRC 380 (2011)
- even substantial foreign funding or involvement where a foreign entity contributes 50% or more of the costs of constructing a reactor or participates in the project review and is consulted on policy and cost issues does not require a finding of foreign control, where safeguards ensure U.S. national defense and security; LBP-11-25, 74 NRC 380 (2011)
- foreign control must be interpreted in light of all the information that bears on who in the corporate structure exercises control over what issues and what rights may be associated with certain types of shares; LBP-11-25, 74 NRC 380 (2011)
- no license may be issued to an alien or any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government; LBP-11-25, 74 NRC 380 (2011)
- there is no specific ownership percentage above which it would conclusively find that an applicant is per se controlled by foreign interests; LBP-11-25, 74 NRC 380 (2011)
- to issue a combined license or entertain an application for a COL, the Commission cannot know or have reason to believe applicant is controlled by an alien, a foreign corporation, or a foreign government; LBP-11-25, 74 NRC 380 (2011)

FUKUSHIMA ACCIDENT

- although the Task Force Report on the Fukushima accident did not justify initiating a generic NEPA review, the Commission acknowledged that new and significant information may come to light that must be considered in individual reactor licensing proceedings; LBP-11-32, 74 NRC 654 (2011)
- any changes adopted as a result of the Fukushima accident or the Task Force Report can and will be implemented through the normal regulatory process; LBP-11-28, 74 NRC 604 (2011); LBP-11-32, 74 NRC 654 (2011)
- because the full implications of the Fukushima events for U.S. facilities are unknown, any generic NEPA duty does not accrue; LBP-11-27, 74 NRC 591 (2011)
- boards are encouraged to seek guidance from the Commission with regard to new contentions based on the accident; LBP-11-32, 74 NRC 654 (2011)
- claims for relief from Fukushima-related events are premature; LBP-11-27, 74 NRC 591 (2011); LBP-11-28, 74 NRC 604 (2011); LBP-11-33, 74 NRC 675 (2011); LBP-11-34, 74 NRC 685 (2011); LBP-11-36, 74 NRC 768 (2011); LBP-11-37, 74 NRC 774 (2011); LBP-11-39, 74 NRC 862 (2011)
- Commission responses to requests for suspension of reactor licensing reviews and associated adjudications in the wake of the Three Mile Island accident and 9/11 terrorist attacks are discussed; LBP-11-37, 74 NRC 774 (2011)
- contention is denied for failure of its proponent to contact the other parties to resolve the issue presented by the contention prior to its submission; LBP-11-37, 74 NRC 774 (2011)
- contention is denied for failure to reference any specific portion of the application at issue; LBP-11-37, 74 NRC 774 (2011)

- contention is denied for failure to show the contention is within the scope of the proceeding or is material to the findings NRC must make to support the requested licensing action; LBP-11-37, 74 NRC 774 (2011)
- for pending license renewal applications, where the period of extended operation will not begin for at least a year, there is no imminent threat to public health and safety that requires suspension of licensing proceedings or decisions; LBP-11-35, 74 NRC 701 (2011)
- for suspension of licensing proceedings, petitioners must show that continuation of proceedings, pending consideration of a rulemaking petition, would jeopardize the public health and safety, prove an obstacle to fair and efficient decisionmaking, or prevent appropriate implementation of any pertinent rule or policy changes that might emerge from NRC's continued evaluation of the impacts of the Fukushima accident; LBP-11-33, 74 NRC 675 (2011)
- Fukushima-related contention based on a Staff Requirements Memorandum are inadmissible because the SRM does not define or impose any new requirements arising from the Fukushima accident and thus fails to establish a genuine dispute on a material issue of law or fact; LBP-11-37, 74 NRC 774 (2011)
- however "significance" is defined, the accident and its aftermath have (as any such severe accident would do) clearly painted a seriously different picture of the environmental landscape; LBP-11-23, 74 NRC 287 (2011)
- if recommendations of the NRC's Near-Term Task Force review of the accident constitute relevant new and significant information, then the draft supplemental environmental impact statement must address them: LBP-11-28, 74 NRC 604 (2011)
- in the future the Commission might provide relevant guidance regarding the proper time frame for adjudicating Fukushima-related contentions; LBP-11-39, 74 NRC 862 (2011)
- intervenor may propose new contentions based on the Fukushima accident, the SER, the new SEIS, or other sources of new and materially different information, provided that it does so promptly after the new information becomes available and that it successfully fulfills the general contention admissibility requirements; LBP-11-22, 74 NRC 259 (2011)
- issuance of a Staff Requirements Memorandum directing Staff to implement "without delay" the recommendations of the Fukushima Task Force does not render contentions admissible; LBP-11-36, 74 NRC 768 (2011)
- motion to admit a new contention arguing that applicant's environmental report fails to satisfy NEPA because it does not address findings and recommendations raised by Task Force Report on the Fukushima Dai-ichi accident is denied as premature and insufficiently focused on the license renewal application; LBP-11-28, 74 NRC 604 (2011)
- moving forward with decisions and proceedings will have no effect on NRC's ability to implement necessary rule or policy changes that might come out of its review of the accident; LBP-11-32, 74 NRC 654 (2011); LBP-11-35, 74 NRC 701 (2011)
- new information from studies of the Fukushima event as to potential consequences of a severe accident at a U.S. nuclear power plant is irrelevant to any uncertainty that might exist regarding which agency has authority over cleanup after a severe accident; LBP-11-20, 74 NRC 65 (2011)
- new information requiring NRC Staff to prepare supplemental environmental review documents must present a seriously different picture of the environmental impact of the proposed project from what was previously envisioned; LBP-11-27, 74 NRC 591 (2011)
- NRC continues to consider the nuclear events in Japan, and the agency is in the process of implementing and prioritizing actions to be taken in response to the accident; CLI-11-14, 74 NRC 801 (2011)
- NRC need not conduct a separate generic NEPA analysis regarding whether the Fukushima events constitute new and significant information under NEPA that must be analyzed as a part of the environmental review for new reactor and license renewal decisions; LBP-11-32, 74 NRC 654 (2011)
- NRC regulations and case law already provide clear and uniform standards to determine the timeliness of motions to add new contentions on the Fukushima accident; LBP-11-32, 74 NRC 654 (2011)
- NRC understanding of the details of the failure modes at the Fukushima Dai-ichi site continues to evolve and NRC continues to learn more about the extent of the damage at the site; LBP-11-28, 74 NRC 604 (2011)
- NRC's ongoing regulatory and oversight processes provide reasonable assurance that each facility complies with its current licensing basis, which can be adjusted by future Commission order or by

- modification to the facility's operating license outside the renewal proceeding; CLI-11-5, 74 NRC 141 (2011); LBP-11-35, 74 NRC 701 (2011)
- petitioner fails to specifically explain why a materially different result would have been likely had information currently available from the Fukushima accident been considered ab initio in the severe accident mitigation alternatives analysis or why that information presents a significant safety or environmental issue; LBP-11-35, 74 NRC 701 (2011)
- petitioner's attempt to tie NEPA environmental justice claim to Fukushima Task Force report is an improper effort to interpose concerns that could have been raised at the outset of the proceeding; LBP-11-37, 74 NRC 774 (2011)
- petitioner's request to hold the license renewal proceeding in abeyance until the Commission resolves petitioner's request to suspend the proceeding pending evaluation of the Fukushima accident is denied because the Commission has denied the suspension request; LBP-11-35, 74 NRC 701 (2011)
- petitions for suspension of proceeding and rescission of regulations that make generic conclusions about environmental impacts of severe reactor and spent fuel pool accidents and that preclude consideration of those issues in individual licensing proceedings are denied; LBP-11-39, 74 NRC 862 (2011)
- requests to suspend ongoing adjudicatory and licensing activities pending full consideration of the safety and environmental implications of the Fukushima accident are denied; LBP-11-34, 74 NRC 685 (2011)
- spent fuel storage pool matters will be addressed, if studies of implications from Fukushima warrant, through more generic regulatory reform; LBP-11-35, 74 NRC 701 (2011)
- suspension of reactor licensing proceedings in light of the events at Fukushima is denied; LBP-11-33, 74 NRC 675 (2011)
- the accident does not provide a seriously different picture of the environmental impact of a proposed uranium enrichment facility from what was previously envisioned; LBP-11-26, 74 NRC 499 (2011)
- the board does not consider intervenor's petition, which requests rulemaking and suspension of the proceeding, because the discussion in the petition's body specifically directs those requests to the Commission, which has already responded to these requests; LBP-11-34, 74 NRC 685 (2011)
- the Commission declined to suspend adjudications or any final licensing decisions because of the accident, finding no imminent risk to public health and safety or to common defense and security; CLI-11-8, 74 NRC 214 (2011); CLI-11-10, 74 NRC 251 (2011)
- the full implications of the Fukushima accident for U.S. facilities are unknown, and thus any generic NEPA duty, if one is appropriate at all, does not accrue now; LBP-11-33, 74 NRC 675 (2011)
- the proper mechanism for raising Fukushima-related, application-specific concerns in ongoing combined license cases is to file a new contention, consistent with the applicable procedural rules; CLI-11-5, 74 NRC 141 (2011)
- to the extent NRC's review of the Fukushima accident leads to new rules applicable to any pending application, the Commission has sufficient authority and time to apply them to any new license that may be issued; CLI-11-5, 74 NRC 141 (2011)
- unsupported speculation that fresh analysis might lead NRC to require additional mitigation measures simply does not raise a significant safety issue or an exceptionally grave issue; LBP-11-23, 74 NRC 287 (2011)
- until NRC defines and imposes on licensees new requirements arising from the Fukushima events, such requirements are highly speculative; LBP-11-33, 74 NRC 675 (2011)
- GENERIC ENVIRONMENTAL IMPACT STATEMENT
 - applicants should rely on the GEIS for terrorism-related issues in a license renewal application;
 - as an alternative ground for excluding a NEPA terrorism contention, NRC Staff's determination in the GEIS that the environmental impacts of a terrorist attack were bounded by those resulting from internally initiated events is sufficient to address the environmental impacts of terrorism; CLI-11-11, 74 NRC 427 (2011)
 - environmental impacts of license renewal are classified as either Category 1, which are generically addressed by the NRC's GEIS for license renewal, or Category 2, which are analyzed on a site-specific basis; LBP-11-17, 74 NRC 11 (2011)
 - NRC need not conduct a separate generic NEPA analysis regarding whether the Fukushima events constitute new and significant information under NEPA that must be analyzed as a part of the environmental review for new reactor and license renewal decisions; LBP-11-32, 74 NRC 654 (2011)

- to the extent that petitioner challenges the GEIS, its remedy is a petition for rulemaking or a petition for a waiver of the rules based on circumstances; CLI-11-11, 74 NRC 427 (2011)
 GENERIC ISSUES
 - a severe accident mitigation alternative need not be implemented during a particular plant's license renewal review if the Commission is concurrently resolving the safety improvement achieved by that SAMA through a generic process attached to the agency's review of all plants' current licensing bases; LBP-11-17, 74 NRC 11 (2011)
 - admission of contentions that NRC may ultimately deal with generically through notice-and-comment rulemaking is precluded; LBP-11-32, 74 NRC 654 (2011)
 - because Category 1 issues already have been reviewed on a generic basis, applicant's environmental report need not provide a site-specific analysis of these issues; CLI-11-11, 74 NRC 427 (2011)
 - because the full implications of the Fukushima events for U.S. facilities are unknown, any generic NEPA duty does not accrue; LBP-11-27, 74 NRC 591 (2011)
 - generic analysis remains appropriate for spent fuel pool accidents in license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)
- NRC has discretion to resolve issues generically by rulemaking; CLI-11-11, 74 NRC 427 (2011)
- GREENHOUSE GAS EMISSIONS because federal agencies typically describe their consideration of the energy requirements of a proposed
 - because federal agencies typically describe their consideration of the energy requirements of a proposed action, in the context of that analysis agencies should evaluate GHG emissions; LBP-11-26, 74 NRC 499 (2011)
 - for power reactors, NRC Staff review should encompass emissions from the uranium fuel cycle as well as from construction and operation of the facility to be licensed; LBP-11-26, 74 NRC 499 (2011)
- in assessing GHG impacts, NRC must devote its resources to taking a hard look at the issue; LBP-11-26, 74 NRC 499 (2011)
- under NEPA, NRC must assess the environmental impacts of a proposed facility, including those impacts associated with GHG emissions by the proposed facility; LBP-11-26, 74 NRC 499 (2011)

HEALTH AND SAFETY

- for pending license renewal applications, where the period of extended operation will not begin for at least a year, there is no imminent threat to public health and safety that requires suspension of licensing proceedings or decisions; LBP-11-35, 74 NRC 701 (2011)

 HEARING REQUESTS
 - a hearing request or petition to intervene must set forth with particularity the contentions sought to be raised by satisfying the six criteria; LBP-11-21, 74 NRC 115 (2011)
 - a notice failing to contain a specific time limit for administrative review, as required by federal regulations, does not trigger a time bar; LBP-11-19, 74 NRC 61 (2011)
 - for a request for hearing and petition to intervene to be granted, petitioner must establish that it has standing and propose at least one admissible contention; LBP-11-21, 74 NRC 115 (2011)
 - if the 20-day deadline for requesting a hearing in 10 C.F.R. 2.103(b) applies, NRC Staff's failure to comply with its own responsibilities under that provision bars Staff from invoking it; LBP-11-19, 74 NRC 61 (2011)
 - regarding amendment of a license, NRC must grant a hearing upon the request of any person whose interest may be affected by the proceeding and admit any such person as a party; LBP-11-29, 74 NRC 612 (2011)
 - request for hearing on Staff denial of permission to use an alternative method for demonstrating decommissioning funding assurance is granted; LBP-11-19, 74 NRC 61 (2011)
 - section 2.311(d)(1) provides for appeals as of right on the question of whether a request for hearing should have been wholly denied; CLI-11-11, 74 NRC 427 (2011)
 - the time for applicant to request a hearing should be tolled until notice is issued if NRC Staff fails to provide the notice and hearing opportunity mandated by 10 C.F.R. 2.103(b); LBP-11-19, 74 NRC 61 (2011)
 - to show standing, petitioner must state its name, address, and telephone number, nature of its right under the applicable statutes to be made a party, nature and extent of property, financial, or other interest in the proceeding, and possible effect of any decision or order that may be issued on its interest; LBP-11-29, 74 NRC 612 (2011)

where applicant has raised sufficient question as to the appropriate deadline, the board may conclude that it would be unfair to penalize applicant on account of what might be ambiguity in NRC's own regulations; LBP-11-19, 74 NRC 61 (2011)

HEARING RIGHTS

- a party that has successfully intervened in a licensing proceeding may propose new contentions for litigation until the license is issued; LBP-11-22, 74 NRC 259 (2011)
- although the Commission retains broad authority to define standards and thresholds for determining when new information raises a material issue of a plant's conformity with the Atomic Energy Act, if such information is presented, it must provide a hearing upon request; LBP-11-22, 74 NRC 259 (2011)
- Atomic Energy Act § 189a has been interpreted to require that the hearing must encompass all material factors bearing on the licensing decision raised by the requester; LBP-11-22, 74 NRC 259 (2011)
- Congress assumed that individuals establishing a right to be heard in opposition to a license application would be heard with reasonable expedition; LBP-11-30, 74 NRC 627 (2011)
- extreme delay in the completion of the Staff's environmental review, and thus the equal delay in hearing intervenors' claim of injury, raises issues of compliance with section 189a of the Atomic Energy Act; LBP-11-30, 74 NRC 627 (2011)
- if NRC Staff finds that an application does not comply with regulatory requirements, it must inform applicant in writing of the nature of any deficiencies or the reason for the proposed denial and the deadline for seeking a hearing; LBP-11-19, 74 NRC 61 (2011)
- in denying an exemption request, Staff is required to inform applicant of the deadline for seeking a hearing; LBP-11-19, 74 NRC 61 (2011)
- NRC preserves the right to a hearing when an application is amended by allowing new or amended contentions to be filed in response to material new information; LBP-11-22, 74 NRC 259 (2011)
- the Commission shall grant a hearing to, and admit as a party to, any licensing proceeding any person whose interest may be affected by the proceeding; LBP-11-22, 74 NRC 259 (2011)

 See also Deferral of Hearing

HIGH-LEVEL WASTE REPOSITORY PROCEEDING

- given the posture of the case, the Commission declines to decide a petition for review but will allow petitioner to file a motion to reinstate its petition should the proceeding be reactivated at a future time; CLI-11-15, 74 NRC 815 (2011)
- in light of current fiscal constraints, the board suspends the proceeding; LBP-11-24, 74 NRC 368 (2011) the Commission exercises its inherent supervisory authority to direct the board to complete all necessary and appropriate case management activities, including disposal of all matters currently pending before it and comprehensively documenting the full history of the adjudicatory proceeding; CLI-11-7, 74 NRC 212 (2011)
- the procedural rule governing appeals in a 10 C.F.R. Part 2, Subpart J proceeding provides for review only in the limited circumstances prescribed in the rule; CLI-11-13, 74 NRC 635 (2011)

HISTORIC SITES

historical/cultural resources are considered eligible for listing on the National Register of Historic Places if they meet one or more of four criteria; LBP-11-26, 74 NRC 499 (2011)

HYDROGEN CONTROL

suppositions/speculation regarding effectiveness of hydrogen control mechanisms are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)

IMMEDIATE EFFECTIVENESS

the Commission temporarily suspended the immediate effectiveness rule following the Three Mile Island accident; CLI-11-5, 74 NRC 141 (2011)

INCORPORATION BY REFERENCE

- although the entire record is considered on appeal, including pleadings that appellants ask to be adopted by reference, the Commission's decision responds to the arguments made explicitly in the appellate brief; CLI-11-8, 74 NRC 214 (2011)
- an issue on appeal is not properly briefed by incorporating by reference papers filed with the licensing board; CLI-11-8, 74 NRC 214 (2011)
- requirements of section XI of the ASME Boiler and Pressure Vessel Code on inservice inspections are incorporated by reference in 10 C.F.R. 50.55a(b) and 50.55a(g)(4); CLI-11-8, 74 NRC 214 (2011)

INDEPENDENT SPENT FUEL STORAGE INSTALLATION PROCEEDINGS

the board applied the late-filing standards to a post-9/11 contention related to the risk of a terrorist attack on the ISFSI and found the contention timely but denied admission of both the safety and environmental aspects of the contention; CLI-11-5, 74 NRC 141 (2011)

INITIAL DECISIONS

denial of summary disposition does not constitute a full or partial initial decision warranting immediate Commission review; CLI-11-10, 74 NRC 251 (2011)

petitions for review are allowed after a full or partial initial decision, both of which are considered final decisions; CLI-11-10, 74 NRC 251 (2011); CLI-11-14, 74 NRC 801 (2011)

See also Partial Initial Decisions

INJURY IN FACT

extreme delay in the completion of Staff's environmental review, and thus the equal delay in hearing intervenors' claim of injury, raises issues of compliance with section 189a of the Atomic Energy Act; LBP-11-30, 74 NRC 627 (2011)

INSPECTION

requirements of section XI of the ASME Boiler and Pressure Vessel Code on inservice inspections are incorporated by reference in 10 C.F.R. 50.55a(b), 50.55a(g)(4); CLI-11-8, 74 NRC 214 (2011)

such reports could be seen as objective evidence that applicant may not adequately manage aging in the future; CLI-11-11, 74 NRC 427 (2011)

INTERVENORS

a party that has successfully intervened in a licensing proceeding may propose new contentions for litigation until the license is issued; LBP-11-22, 74 NRC 259 (2011)

INTERVENTION

a hearing request and party status as an intervenor may only be granted to a petitioner if it demonstrates standing and proffers at least one admissible contention; LBP-11-22, 74 NRC 259 (2011); LBP-11-29, 74 NRC 612 (2011)

INTERVENTION PETITIONS

- a hearing request or petition to intervene must set forth with particularity the contentions sought to be raised by satisfying six criteria; LBP-11-21, 74 NRC 115 (2011)
- a reply must be filed within 7 days after the filing of answers to an intervention petition; LBP-11-21, 74 NRC 115 (2011)
- although a board may view petitioner's supporting information in a light favorable to the petitioner, NRC contention admissibility rules require petitioner (not the board) to supply all elements for a valid intervention petition; LBP-11-29, 74 NRC 612 (2011)
- for a request for hearing and petition to intervene to be granted, petitioner must establish that it has standing and propose at least one admissible contention; LBP-11-21, 74 NRC 115 (2011)
- intervention petitions must be filed within 60 days based on the documents then in existence, meaning that the petition must be based on the documents submitted with the application; LBP-11-22, 74 NRC 259 (2011)

petition is denied for failure to proffer an admissible contention; LBP-11-21, 74 NRC 115 (2011)

INTERVENTION RULINGS

- a board erred in admitting a contention pertaining to a plant's safety culture; CLI-11-11, 74 NRC 427 (2011)
- at the contention admissibility stage, it is simply not appropriate for boards to decide what additional information, if any, is necessary to cure a claimed deficiency in a license application; CLI-11-11, 74 NRC 427 (2011)
- the Commission will defer to a board's rulings on contention admissibility absent an error of law or abuse of discretion; CLI-11-11, 74 NRC 427 (2011)

INTERVENTION, DISCRETIONARY

if petitioner fails to show standing pursuant to section 2.309(d), a board may grant discretionary standing when at least one requestor/petitioner has established standing and at least one admissible contention has been admitted so that a hearing will be held; LBP-11-29, 74 NRC 612 (2011)

IRREPARABLE INJURY

denial of summary disposition neither threatens NRC Staff with immediate and serious irreparable impact that could not be alleviated through a petition for review of the presiding officer's final decision nor affects the basic structure of the proceeding in a pervasive or unusual manner; CLI-11-10, 74 NRC 251 (2011)

labor and expense of pursuing litigation that petitioner sought to curtail do not constitute irreparable harm; CLI-11-10, 74 NRC 251 (2011)

LICENSE AMENDMENTS

amendment requests do not require an updated or separate emergency plan unless such a plan would be germane to the type of amendment request under review or is part of a licensee's periodic update of emergency plans; LBP-11-29, 74 NRC 612 (2011)

LICENSE APPLICATIONS

intervention petitions must be filed within 60 days based on the documents then in existence, meaning that the petition must be based on the documents submitted with the application; LBP-11-22, 74 NRC 259 (2011)

NRC preserves the right to a hearing when an application is amended by allowing new or amended contentions to be filed in response to material new information; LBP-11-22, 74 NRC 259 (2011)

See also Contested License Applications; Materials License Amendment Applications; Uncontested License Applications

LICENSE CONDITIONS

current reactor licensees comply with the requirements of section 50.54(hh)(2) through conditions on their operating licenses; LBP-11-21, 74 NRC 115 (2011)

licensee may take reasonable action that departs from a license condition or a technical specification in an emergency when the action is immediately needed to protect the public health and safety and no action consistent with license conditions and technical specifications that can provide adequate or equivalent protection is immediately apparent; DD-11-6, 74 NRC 420 (2011)

NRC has the authority to ensure that certified designs and combined licenses include appropriate Commission-directed changes before operation; CLI-11-10, 74 NRC 251 (2011)

NRC Staff has authority to require implementation of non-aging-management severe accident mitigation alternatives through its current licensing basis backfit review under Part 50 or through setting conditions of the license renewal; LBP-11-17, 74 NRC 11 (2011)

NRC's ongoing regulatory and oversight processes provide reasonable assurance that each facility complies with its current licensing basis, which can be adjusted by future Commission order or by modification to the facility's operating license outside the renewal proceeding; CLI-11-11, 74 NRC 427 (2011); LBP-11-35, 74 NRC 701 (2011)

the current licensing basis of an operating license shall continue during the license renewal period, but these conditions may be supplemented or amended as necessary to protect the environment during the term of the renewed license and will be derived from information contained in the supplement to the environmental report, as analyzed and evaluated in the NRC record of decision; LBP-11-17, 74 NRC 11 (2011)

LICENSE EXPIRATION

a power reactor licensee may preserve its license by filing a renewal application at least 5 years before its license is set to expire, affording NRC Staff ample time to complete the required environmental and safety reviews; LBP-11-30, 74 NRC 627 (2011)

when licensee has made timely and sufficient application for a renewal, a license with reference to an activity of a continuing nature does not expire until the application has been finally determined by the agency; LBP-11-30, 74 NRC 627 (2011)

LICENSE RENEWAL APPLICATIONS

applicant must update its LRA annually to reflect changes in its current licensing basis, but such updating does not explicitly extend to the environmental report; LBP-11-32, 74 NRC 654 (2011)

when licensee has made timely and sufficient application for a renewal, a license with reference to an activity of a continuing nature does not expire until the application has been finally determined by the agency; LBP-11-30, 74 NRC 627 (2011)

LICENSE RENEWAL PROCEEDINGS

challenges to the design of the nuclear power plant are outside the scope of a license renewal proceeding; LBP-11-23, 74 NRC 287 (2011)

See also Operating License Renewal; Operating License Renewal Proceedings

LICENSEE CHARACTER

absent documentary support, NRC has declined to assume that licensees will contravene its regulations; CLI-11-9, 74 NRC 233 (2011)

See also Management CHARACTER AND COMPETENCE

LICENSEE EVENT REPORTS

relief valve failure and inoperability found during the refueling outage, which potentially affected the ability of the SRVs to satisfy design actuation requirements, meets the requirements for an LER; DD-11-6, 74 NRC 420 (2011)

the current licensing basis includes licensee's commitments remaining in effect that were made in docketed licensing correspondence such as licensee responses to NRC bulletins, generic letters, and enforcement actions, as well as licensee commitments documented in NRC safety evaluations or licensee event reports; LBP-11-21, 74 NRC 115 (2011)

LICENSEES

protecting against the threat of air attacks is not within licensees' responsibilities because a private security force cannot reasonably be expected to defend against such attacks and adequate protection is ensured through the actions of other federal agencies with defense capabilities and air-safety expertise; CLI-11-4, 74 NRC 1 (2011)

LICENSING BOARD ORDERS

a board order is appealable when it disposes of a major segment of the case or terminates a party's right to participate; CLI-11-10, 74 NRC 251 (2011)

LICENSING BOARDS, AUTHORITY

a board's authority is not confined to a specific set of previously admitted contentions, but rather is sufficient to permit it to keep adjudication open to take account of the dynamic nature of the licensing process; LBP-11-22, 74 NRC 259 (2011)

although a board may view petitioner's supporting information in a light favorable to the petitioner, it cannot do so by ignoring NRC contention admissibility rules, which require petitioner (not the board) to supply all of the required elements for a valid intervention petition; LBP-11-20, 74 NRC 65 (2011)

boards (as opposed to the Commission) are not empowered to grant a request to suspend a licensing proceeding pending disposition of a rulemaking petition; LBP-11-33, 74 NRC 675 (2011)

boards are authorized to refer a ruling to the Commission if the board determines that the decision or ruling involves a novel issue that merits Commission review at the earliest opportunity; LBP-11-32, 74 NRC 654 (2011)

boards are to make independent environmental judgments with respect to certain NEPA findings, though even then they need not rethink or redo every aspect of the NRC Staff's environmental findings or undertake their own fact-finding activities; LBP-11-26, 74 NRC 499 (2011)

boards cannot reconstruct intervenor's pleadings to find that they might be interpreted to satisfy the requirements for reopening a record where the intervenor itself has explicitly argued it need not; LBP-11-20, 74 NRC 65 (2011)

boards may not raise issues sua sponte when the sole intervenor has withdrawn from the proceeding; LBP-11-22, 74 NRC 259 (2011)

boards may take official notice of any fact of which a court of the United States may take judicial notice or of any technical or scientific fact within the knowledge of the Commission as an expert body; LBP-11-20, 74 NRC 65 (2011)

boards must exercise all the powers necessary to control the prehearing and hearing process, to avoid delay, and to maintain order; LBP-11-22, 74 NRC 259 (2011)

contention pleading rules are designed to ensure that only well-defined issues are admitted for hearing and a board should not add material not raised by a petitioner in order to render a contention admissible; CLI-11-11, 74 NRC 427 (2011)

for the mandatory uncontested proceeding on a uranium enrichment facility license, a licensing board is to conduct a simple sufficiency review rather than a de novo review on both safety and environmental issues; LBP-11-26, 74 NRC 499 (2011)

- hearing notices are the means by which the Commission identifies the subject matters of the hearings and delegates to the boards the authority to conduct proceedings; LBP-11-22, 74 NRC 259 (2011)
- in a mandatory hearing, a licensing board must narrow its inquiry to those topics or sections in Staff documents that it deems most important and should concentrate on portions of the documents that do not on their face adequately explain the logic, underlying facts, and applicable regulations and guidance; LBP-11-26, 74 NRC 499 (2011)
- licensing boards lack authority to direct the NRC Staff's nonadjudicatory actions; CLI-11-14, 74 NRC 801 (2011); LBP-11-30, 74 NRC 627 (2011)
- licensing boards lack authority to direct the Secretary's administrative activities regarding the handling of documents; CLI-11-13, 74 NRC 635 (2011)
- licensing boards may certify novel legal or policy questions to the Commission; CLI-11-5, 74 NRC 141
- NRC Staff's underlying technical and factual findings are not open to board reconsideration unless, after a review of the record, the board finds the NRC Staff review inadequate or its findings insufficient; LBP-11-26, 74 NRC 499 (2011)
- the Commission generally defers to boards on case management issues; CLI-11-13, 74 NRC 635 (2011)
- the Commission, but not a licensing board, has the power to address a protracted delay in the proceeding and to direct appropriate remedial measures; LBP-11-30, 74 NRC 627 (2011)

LICENSING BOARDS, JURISDICTION

- a newly constituted board applied the reopening standard to new contentions filed after the prior proceeding was terminated for want of pending or admitted contentions; LBP-11-22, 74 NRC 259 (2011)
- applying the rule of statutory construction that the mention of one thing implies the exclusion of another, the fact that the regulation sets forth three specific circumstances in which a board's jurisdiction ends implies that jurisdiction does not end in other circumstances not listed; LBP-11-22, 74 NRC 259 (2011) boards may exercise only the jurisdiction conferred upon them by the Commission; LBP-11-22, 74 NRC
- hearing notices are the means by which the Commission identifies the subject matter of the hearings and delegates to the boards the authority to conduct proceedings; LBP-11-22, 74 NRC 259 (2011)
- intervenor's failure to address the reopening standards in 10 C.F.R. 2.326 creates a yawning deficiency in its submissions because the evidentiary record has been closed and the board's jurisdiction in the proceeding does not extend beyond the narrow scope of the remand; LBP-11-20, 74 NRC 65 (2011)
- where an amended version of a dismissed contention is pending before the board, the board retains jurisdiction to decide whether to admit the proposed contention; LBP-11-22, 74 NRC 259 (2011)
- where the hearing notice does not restrict the hearing to any particular set of issues, the hearing should be understood as encompassing all issues raised by a party to the licensing proceeding that may properly be litigated under Atomic Energy Act §189a; LBP-11-22, 74 NRC 259 (2011)

LICENSING SUPPORT NETWORK

the licensing board directed parties defending depositions to make efforts to identify and obtain Licensing Support Network documents that must be indexed for the benefit of other parties and to circulate those indexes as soon as practicable; CLI-11-13, 74 NRC 635 (2011)

LICENSING, PERFORMANCE-BASED

past or current performance could inform the review of a license renewal application; CLI-11-11, 74 NRC 427 (2011)

LIMITED APPEARANCE STATEMENTS

boards may entertain oral and written limited appearance statements from members of the public in connection with a mandatory uncontested proceeding; LBP-11-26, 74 NRC 499 (2011)

LOSS OF LARGE AREAS

- combined license applications must include a description and plans for implementation of the guidance and strategies required by section 50.54(hh)(2) for severe accident mitigation; CLI-11-9, 74 NRC 233 (2011)
- contentions that challenge applicant's compliance with the LOLA requirements of 10 C.F.R. 50.54(hh)(2) are not admissible because they are not within the scope of a license renewal proceeding; LBP-11-21, 74 NRC 115 (2011)

- licensees must develop and implement guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities in case of loss of large areas of the plant due to explosions or fire; CLI-11-5, 74 NRC 141 (2011)
- section 52.80(d) mandates compliance with the agency's LOLA requirements in 10 C.F.R. 50.54(hh)(2), but does not apply to a license renewal proceeding; LBP-11-21, 74 NRC 115 (2011)

MANAGEMENT CHARACTER AND COMPETENCE

- a narrow and specific contention that alleges facts, with supporting documentation, of a longstanding and continuing pattern of noncompliance or management difficulties that are reasonably linked to whether licensee will actually be able to adequately manage aging in accordance with the current licensing basis during the period of extended operation can be an admissible contention; CLI-11-11, 74 NRC 427 (2011)
- admission of a management integrity contention relied on references to a serious incident involving shutdown of the reactor, management responsible for the incident remaining in place, and a purported climate of reprisals for bringing forward safety issues, and reference to at least one expert witness in support of the contention; CLI-11-11, 74 NRC 427 (2011)
- conceptual issues such as operational history, quality assurance, quality control, management competence, and human factors are excluded from license renewal review in favor of a safety-related review focusing on maintaining particular functions of certain physical systems, structures, and components; CLI-11-11, 74 NRC 427 (2011)
- for management integrity and character to be a viable contention, there must be a direct and obvious relationship between these issues and the challenged licensing action; CLI-11-8, 74 NRC 214 (2011)
- inspection reports could be seen as objective evidence that applicant may not adequately manage aging in the future; CLI-11-11, 74 NRC 427 (2011)
- this issue is beyond the scope of a license renewal proceeding; LBP-11-21, 74 NRC 115 (2011)
- to the extent petitioner believes there are existing management competence questions that merit immediate action, then its remedy is to direct the Staff's attention to those matters by filing a request for action in accordance with 10 C.F.R. 2.206; CLI-11-11, 74 NRC 427 (2011)

See also Licensee Character

MANDATORY HEARINGS

- boards are to make independent environmental judgments with respect to certain NEPA findings, though even then they need not rethink or redo every aspect of the NRC Staff's environmental findings or undertake their own fact-finding activities; LBP-11-26, 74 NRC 499 (2011)
- boards may entertain oral and written limited appearance statements from members of the public in connection with a mandatory uncontested proceeding; LBP-11-26, 74 NRC 499 (2011)
- Commission discussion regarding alternative site review supplements the environmental impact statement; LBP-11-26, 74 NRC 499 (2011)
- for the mandatory uncontested proceeding on a uranium enrichment facility license, a licensing board is to conduct a simple sufficiency review rather than a de novo review on both safety and environmental issues; LBP-11-26, 74 NRC 499 (2011)
- licensing boards must narrow their inquiry to those topics or sections in Staff documents that they deem most important and should concentrate on portions of the documents that do not on their face adequately explain the logic, underlying facts, and applicable regulations and guidance; LBP-11-26, 74 NRC 499 (2011)
- NRC needs to conduct only a single licensing action and adjudicatory proceeding to authorize construction and operation and a mandatory hearing regarding the application and the Staff's associated safety and environmental reviews, despite the absence of a petitioner challenging applicant's request; LBP-11-26, 74 NRC 499 (2011)
- NRC Staff's underlying technical and factual findings are not open to board reconsideration unless, after a review of the record, the board finds the NRC Staff review inadequate or its findings insufficient; LBP-11-26, 74 NRC 499 (2011)

MATERIAL CONTROL AND ACCOUNTING

licensees must establish and maintain systems to protect against acts of radiological sabotage and to prevent the theft or diversion of special nuclear material; CLI-11-4, 74 NRC 1 (2011)

MATERIAL INFORMATION

- applicants shall notify NRC of information identified by the applicant as having, for the regulated activity, a significant implication for public health and safety or common defense and security; LBP-11-32, 74 NRC 654 (2011)
- information provided to NRC by an applicant must be complete and accurate in all material respects; LBP-11-32, 74 NRC 654 (2011)

MATERIALITY

- a material issue is one where resolution of the dispute would make a difference in the outcome of the licensing proceeding; LBP-11-23, 74 NRC 287 (2011)
- a SAMA contention's admissibility is based on whether it purports to show that an additional SAMA should have been identified as potentially cost-beneficial; CLI-11-11, 74 NRC 427 (2011)
- boards accord each exhibit weight to the extent it is relevant, material, and reliable; LBP-11-18, 74 NRC 29 (2011)
- where the hearing notice does not restrict the hearing to any particular set of issues, the hearing should be understood as encompassing all issues raised by a party to the licensing proceeding that may properly be litigated under Atomic Energy Act §189a; LBP-11-22, 74 NRC 259 (2011)

MATERIALS LICENSE AMENDMENT APPLICATIONS

- if NRC Staff finds that an application does not comply with regulatory requirements, it must inform applicant in writing of the nature of any deficiencies or the reason for the proposed denial and the deadline for seeking a hearing; LBP-11-19, 74 NRC 61 (2011)
- if the 20-day deadline for requesting a hearing in 10 C.F.R. 2.103(b) applies, NRC Staff's failure to comply with its own responsibilities under that provision bars Staff from invoking it; LBP-11-19, 74 NRC 61 (2011)
- request for hearing on Staff denial of permission to use an alternative method for demonstrating decommissioning funding assurance is granted; LBP-11-19, 74 NRC 61 (2011)

MATERIALS LICENSE AMENDMENT PROCEEDINGS

completion of NRC Staff's final environmental review document always must precede the conduct of hearings on environmental issues; LBP-11-30, 74 NRC 627 (2011)

MATERIALS LICENSE APPLICATIONS

Part 70 applicants are required to establish a radiological monitoring program to monitor and report the release of radiological gaseous and liquid effluents to the environment; LBP-11-26, 74 NRC 499 (2011) MATERIALS LICENSES

- for a proposed nuclear materials-related activity, commencement of construction relative to that activity prior to a favorable Staff conclusion regarding the NEPA cost-benefit balance is grounds for denial of the authorization to conduct that activity; LBP-11-26, 74 NRC 499 (2011)
- preconstruction activities that are allowed under Part 50 are also allowed for materials licenses; LBP-11-26, 74 NRC 499 (2011)

METEOROLOGICAL FACTORS

- accounting for the meteorological patterns, atmospheric transport modeling, and data issues raised by intervenor cannot credibly alter which severe accident mitigation alternatives are potentially cost-beneficial to implement; LBP-11-18, 74 NRC 29 (2011)
- sea-breeze effect and hot-spot effect must cause the expected average offsite damages to increase by at least a factor of 2 for the next most costly severe accident mitigation alternative to be cost-effective; LBP-11-18, 74 NRC 29 (2011)

MONITORING

as a matter of law and logic, if applicant's enhanced monitoring program is inadequate, then applicant's unenhanced monitoring program was a fortiori inadequate, and intervenor had a regulatory obligation to challenge it in its original petition to intervene; LBP-11-20, 74 NRC 65 (2011)

MOOTNESS

- alleged defects in applicant's environmental report may be mooted by the content of NRC's environmental impact statement or supplemental environmental impact statement; LBP-11-28, 74 NRC 604 (2011)
- contention dismissal based on mootness is a jurisdictional ruling, not a decision on the merits of the claim; LBP-11-22, 74 NRC 259 (2011)

MOTIONS

- although NRC rules require that motions be addressed to the presiding officer when a proceeding is pending, suspension motions are best addressed to the Commission; CLI-11-5, 74 NRC 141 (2011) failure to read NRC regulations carefully does not constitute good cause for accepting late-filed motions; LBP-11-34, 74 NRC 685 (2011)
- parties' other professional obligations do not relieve them of their obligations to meet regulatory deadlines; LBP-11-34, 74 NRC 685 (2011)

MOTIONS TO REOPEN

- a heavier burden applies to motions to reopen than to proponents of contentions in ongoing proceedings; CLI-11-5, 74 NRC 141 (2011)
- a motion relating to a contention not previously in controversy among the parties must also satisfy the requirements for nontimely contentions in section 2.309(c); CLI-11-8, 74 NRC 214 (2011)
- a motion to file new or amended contentions must address the motion to reopen standards after an intervention petition has been denied; LBP-11-20, 74 NRC 65 (2011)
- a motion to reopen relating to a new contention must also satisfy the requirements for nontimely contentions in section 2.309(c); LBP-11-20, 74 NRC 65 (2011); LBP-11-23, 74 NRC 287 (2011)
- a party may move to reopen the case to allow it to litigate a new version of a previously rejected contention, even if the licensing board has closed the evidentiary record and the Commission has issued its final decision authorizing the Staff to issue the license for the proposed facility; LBP-11-22, 74 NRC 259 (2011)
- a request for hearing regarding a newly proffered contention cannot be admitted unless it satisfies the stringent standards for reopening the record; LBP-11-20, 74 NRC 65 (2011)
- absence of a competent affidavit deprives the board of the ability or even the opportunity to substantively consider whether a materially different result would be obtained as is required by the regulatory reopening standards; LBP-11-23, 74 NRC 287 (2011)
- affidavits setting forth the factual and/or technical bases for the claim that the reopening criteria have been met must address each of the criteria separately, with a specific explanation of why it has been met; LBP-11-20, 74 NRC 65 (2011)
- affidavits shall set forth such facts as would be admissible in evidence and shall show affirmatively that the affiant is competent to testify to the matters stated therein; LBP-11-23, 74 NRC 287 (2011)
- all of the criteria of 10 C.F.R. 2.326(a) must be satisfied; CLI-11-8, 74 NRC 214 (2011)
- an expert's affidavit supporting a motion to reopen must supply the factual and legal foundation for assertions that the reopening criteria are satisfied; LBP-11-20, 74 NRC 65 (2011)
- any contention, regardless of when it is filed, must meet the requirements of 10 C.F.R. 2.309(f)(1)(i)-(vi); LBP-11-20, 74 NRC 65 (2011)
- arguments that more conservative severe accident mitigation alternatives analysis needs to be performed, using 95th percentile computations, and not using a discount factor to evaluate the time effects of cleanup costs are policy matters that are solely within Commission jurisdiction and represent inadmissible challenges to binding Commission rulings; LBP-11-20, 74 NRC 65 (2011)
- bare assertions and speculation do not supply the requisite support to satisfy the standards for reopening a record; CLI-11-8, 74 NRC 214 (2011); LBP-11-23, 74 NRC 287 (2011; LBP-11-35, 74 NRC 701 (2011)
- boards cannot reconstruct intervenor's pleadings to find that they might be interpreted to satisfy the requirements for reopening a record where the intervenor itself has explicitly argued it need not; LBP-11-20, 74 NRC 65 (2011)
- boards will not hunt for information that the agency's procedural rules require be explicitly identified and fully explained; CLI-11-8, 74 NRC 214 (2011)
- contention regarding limitations and phenomena that were widely known, and should have been known to intervenor, at the outset of the proceeding, and thus could have been raised long ago, is untimely; LBP-11-23, 74 NRC 287 (2011)
- during pendency of remand, intervenors are free to submit a motion to reopen the record pursuant to 10 C.F.R. 2.326, should they seek to address any genuinely new issues related to the license renewal application that previously could not have been raised; LBP-11-20, 74 NRC 65 (2011)
- evidence put forth to support a motion to reopen must be relevant, material, and reliable; LBP-11-23, 74 NRC 287 (2011)

- for a motion to be timely presented, movant must show that the issue sought to be raised could not have been raised earlier; LBP-11-20, 74 NRC 65 (2011)
- in affidavits accompanying motions to reopen, each of the criteria must be separately addressed, with a specific explanation of why it has been met; CLI-11-8, 74 NRC 214 (2011); LBP-11-23, 74 NRC 287 (2011); LBP-11-35, 74 NRC 701 (2011)
- in weighing the timeliness factors for motions to reopen, greatest weight is accorded to good cause for failure to file on time; CLI-11-8, 74 NRC 214 (2011)
- intervenors' speculation that further review of certain issues might change some conclusions in the final safety evaluation report does not justify restarting the hearing process; LBP-11-23, 74 NRC 287 (2011)
- intervenor's vague claim that it will rely on testimony from an expert witness and government documents does not provide the requisite concise statement of facts or expert support; LBP-11-23, 74 NRC 287 (2011)
- like issues related to standing and contention admissibility, the question whether a pleading satisfies the requirements of section 2.326 and therefore justifies reopening a closed proceeding is a threshold issue; CLI-11-8, 74 NRC 214 (2011)
- motions must be accompanied by affidavits that set forth the factual and/or technical bases for the movant's claim that the criteria of 10 C.F.R. 2.326(a) have been satisfied; CLI-11-8, 74 NRC 214 (2011); LBP-11-20, 74 NRC 65 (2011); LBP-11-23, 74 NRC 287 (2011); LBP-11-35, 74 NRC 701 (2011)
- motions must be timely, address a significant safety or environmental issue, and demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially; LBP-11-20, 74 NRC 65 (2011); LBP-11-35, 74 NRC 701 (2011)
- NRC's demanding regulatory requirements for reopening the record regarding contentions submitted after the record has closed must be satisfied; LBP-11-20, 74 NRC 65 (2011)
- petitioner must act reasonably and promptly after learning of the new information on which its motion to reopen is based; LBP-11-23, 74 NRC 287 (2011)
- petitioner proffers no new information on station blackout or mitigation measures, and the events therefore cannot form the basis for an assertion of timeliness of a motion to reopen; LBP-11-35, 74 NRC 701
- petitioner's assertion that recriticality is demonstrated by the relative quantities of radionuclides released is not self-evident and is clearly of the class of statements that must be supported by expert opinion; LBP-11-23, 74 NRC 287 (2011)
- post-9/11 motion to reopen satisfied rules for reopening the record and for late-filed contentions, but contention involving a license amendment request for reconfiguring a spent fuel pool was inadmissible; CLI-11-5, 74 NRC 141 (2011)
- proponents of contentions must challenge aspects of license applications with specificity, backed up with substantive technical support, mere conclusions or speculation being insufficient, but an even heavier burden applies to motions to reopen; LBP-11-35, 74 NRC 701 (2011)
- rationale for NRC's policy of generally disfavoring the filing of new contentions at the eleventh hour of an adjudication is based on the doctrine of finality, which states that at some point, an adjudicatory proceeding must come to an end; LBP-11-20, 74 NRC 65 (2011)
- rehearings are not matters of right, but are pleas to discretion; LBP-11-20, 74 NRC 65 (2011)
- section 2.326(a)(3) expressly refers to a motion to reopen a closed record to consider additional evidence and newly proffered evidence; LBP-11-22, 74 NRC 259 (2011)
- speculation that further review of certain issues might change some conclusions in the final safety evaluation report does not justify restarting the hearing process; LBP-11-23, 74 NRC 287 (2011)
- supporting affidavits must be given by competent individuals with knowledge of the facts alleged, or by experts in the disciplines appropriate to the issues raised; CLI-11-8, 74 NRC 214 (2011); LBP-11-35, 74 NRC 701 (2011)
- the ability of a totally unfunded group to provide testimony from experts is not taken into account in ruling on motions to reopen; LBP-11-20, 74 NRC 65 (2011)
- the presiding officer has discretion to consider an exceptionally grave issue even if untimely presented; LBP-11-20, 74 NRC 65 (2011)
- the standard for a motion to reopen is measured using the Commission's test of whether it has been shown that a motion for summary disposition could be defeated; LBP-11-23, 74 NRC 287 (2011)

- the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention; CLI-11-8, 74 NRC 214 (2011); LBP-11-20, 74 NRC 65 (2011); LBP-11-35, 74 NRC 701 (2011)
- the standard for determining whether a materially different result would be obtained is measured using the Commission's test of whether it has been shown that a motion for summary disposition could be defeated; CLI-11-8, 74 NRC 214 (2011); LBP-11-20, 74 NRC 65 (2011); LBP-11-23, 74 NRC 287 (2011)
- the standard for when an issue is "significant" in the context of reopening a closed record is the same as the standard for when supplementation of an environmental impact statement is required, i.e., the new and significant information must paint a seriously different picture of the environmental landscape; LBP-11-23, 74 NRC 287 (2011)
- unsupported speculation that fresh analysis might lead NRC to require additional mitigation measures simply does not raise a significant safety issue or an exceptionally grave issue; LBP-11-23, 74 NRC 287 (2011)
- when a motion to reopen is untimely, the section 2.326(a)(1) "exceptionally grave" test supplants the section 2.326(a)(2) "significant safety or environmental issue" test; CLI-11-8, 74 NRC 214 (2011)
- where a motion to reopen relates to a contention not previously in controversy, the motion must demonstrate that the balance of the nontimely filing factors in section 2.309(c) favors granting the motion to reopen; LBP-11-20, 74 NRC 65 (2011); LBP-11-23, 74 NRC 287 (2011); LBP-11-35, 74 NRC 701 (2011)
- whether a proposed alternative method for estimating a macroscopic frequency of occurrence of a severe offsite radiological release should have been used in the severe accident mitigation alternatives analysis could have been raised when the original license renewal application was submitted and thus is not timely; LBP-11-35, 74 NRC 701 (2011)

See also Reopening a Record

MUNITIONS

- possession of depleted uranium at multiple installations without an NRC license and performance of decommissioning at a military installation without proper NRC authorization is a violation of 10 C.F.R. 40.3: DD-11-5, 74 NRC 399 (2011)
- request for enforcement action against U.S. Army for post-license-expiration possession and release into the environment of depleted uranium from spent spotting rounds is granted in part and denied in part; DD-11-5, 74 NRC 399 (2011)

NATIONAL ENVIRONMENTAL POLICY ACT

- a factor bolstering the need for a uranium enrichment facility is the recognized margin level that exists in the existing enrichment market to offset potential supply problems as well as maintain a level of reasonable market competition; LBP-11-26, 74 NRC 499 (2011)
- a procedural requirement is imposed on an agency's decisionmaking process by mandating that an agency consider the environmental impacts of a proposed action and inform the public that it has taken those impacts into account in making its decision; LBP-11-17, 74 NRC 11 (2011)
- agencies must prepare an environmental impact statement before approving any major federal action that will significantly affect the quality of the human environment; LBP-11-38, 74 NRC 817 (2011)
- agencies need only address reasonably foreseeable impacts, not those that are remote and speculative or inconsequentially small; LBP-11-38, 74 NRC 817 (2011)
- agencies should consider both the context and intensity of environmental impacts; LBP-11-26, 74 NRC 499 (2011)
- agency decisions regarding the need to supplement an environmental impact statement based on new and significant information are subject to the rule of reason; LBP-11-26, 74 NRC 499 (2011)
- an accident sequence with a probability conservatively estimated at 2.0×10^{-7} per reactor year is remote and speculative for the purposes of NEPA; LBP-11-38, 74 NRC 817 (2011)
- applicant and Staff treatment of need for the construction and operation of uranium enrichment facilities should explain why the proposed action is needed, describe the underlying need for the proposed action, but should not be written merely as a justification of the proposed action or to alter the choice of alternatives; LBP-11-26, 74 NRC 499 (2011)
- as a tool for assessing the significance of potential impacts, NRC regulations establish a standard scheme; LBP-11-26, 74 NRC 499 (2011)

- as part of its NEPA analysis, NRC must provide information that addresses the purpose and need for the proposed action; LBP-11-26, 74 NRC 499 (2011)
- because NEPA is premised on a rule of reason, NRC need only consider reasonable alternatives to a proposed action; LBP-11-26, 74 NRC 499 (2011)
- because NRC has established a requirement to provide information to be used by NRC Staff in fulfillment of its obligation under NEPA, suitability of applicant's severe accident mitigation alternatives analysis must be judged by the requirements of NEPA; LBP-11-18, 74 NRC 29 (2011)
- because severe accident mitigation alternatives analysis is site-specific, NEPA demands no fully developed plan or detailed examination of specific measures that will be used to mitigate adverse environmental effects; LBP-11-18, 74 NRC 29 (2011); LBP-11-23, 74 NRC 287 (2011)
- because the full implications of the Fukushima events for U.S. facilities are unknown, any generic NEPA duty does not accrue; LBP-11-27, 74 NRC 591 (2011)
- boards are to make independent environmental judgments with respect to certain NEPA findings, though even then they need not rethink or redo every aspect of the NRC Staff's environmental findings or undertake their own fact-finding activities; LBP-11-26, 74 NRC 499 (2011)
- consideration of alternatives is the heart of the environmental impact statement; LBP-11-35, 74 NRC 701 (2011)
- cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time; LBP-11-26, 74 NRC 499 (2011)
- direct impacts are those caused by the action that is the subject of the environmental impact statement, and occurring at the same time and place as that action, while indirect impacts are caused by the action at a later time or more distant place, yet are still reasonably foreseeable; LBP-11-26, 74 NRC 499 (2011)
- ensuring continued availability of diverse, reliable sources of domestic enrichment services to provide low-enriched uranium for domestic power reactors supports a finding of need for the facility; LBP-11-26, 74 NRC 499 (2011)
- environmental impact statements are not intended to be research documents, reflecting the frontiers of scientific methodology, studies, and data; LBP-11-38, 74 NRC 817 (2011)
- environmental impact statements are subject to a rule of reason that grants the agency a degree of deference exempting it from examining impacts that it in good faith deems to be remote and speculative or inconsequentially small; LBP-11-39, 74 NRC 862 (2011)
- environmental impacts of license renewal are classified as either Category 1, which are generically addressed by NRC's generic environmental impact statement for license renewal, or Category 2, which are analyzed on a site-specific basis; LBP-11-17, 74 NRC 11 (2011)
- environmental implications of new and significant information must be considered under NEPA before NRC may grant renewed operating licenses; LBP-11-32, 74 NRC 654 (2011)
- evidence of significant actual utility commitments provides a compelling showing in support of the need for uranium enrichment facility; LBP-11-26, 74 NRC 499 (2011)
- examples of need for the proposed facility include a benefit provided if the proposed action is granted or descriptions of the detriment that will be experienced without approval of the proposed action; LBP-11-26, 74 NRC 499 (2011)
- for a proposed nuclear materials-related activity, commencement of construction relative to that activity prior to a favorable Staff conclusion regarding the NEPA cost-benefit balance is grounds for denial of the authorization to conduct that activity; LBP-11-26, 74 NRC 499 (2011)
- for NEPA contentions, the burden of proof shifts to NRC Staff, because NRC, not applicant, bears the ultimate burden of complying with NEPA; LBP-11-38, 74 NRC 817 (2011)
- in assessing greenhouse gas impacts, NRC must devote its resources to taking a hard look at the issue; LBP-11-26, 74 NRC 499 (2011)
- in parallel with NRC Staff's role under NEPA to assess environmental impacts, the Environmental Protection Agency possesses authority under the Clean Air Act to set numerical standards for air pollutants from emission sources; LBP-11-26, 74 NRC 499 (2011)
- irrespective of the cause of the impact or the appropriate level of administrative scrutiny, for the purpose of NEPA evaluation, NRC regulations categorize impacts as direct, indirect, and cumulative; LBP-11-26, 74 NRC 499 (2011)

- merely offering general statements about possible effects and some risk does not constitute a hard look at environmental impacts absent a justification regarding why more definitive information could not be provided; LBP-11-38, 74 NRC 817 (2011)
- NEPA applies to agencies of the federal government, not to private parties such as applicants for NRC licenses; LBP-11-32, 74 NRC 654 (2011)
- NEPA does not mandate how an agency must fulfill its obligations; LBP-11-23, 74 NRC 287 (2011)
- NEPA does not mandate substantive results but rather imposes procedural restraints on agencies, requiring them to take a hard look at the environmental impacts of a proposed action and reasonable alternatives to that action; LBP-11-38, 74 NRC 817 (2011)
- NEPA does not require a worst-case analysis; LBP-11-38, 74 NRC 817 (2011)
- NEPA does not require NRC to consider the environmental consequences of hypothetical terrorist attacks on NRC-licensed facilities; CLI-11-11, 74 NRC 427 (2011)
- NEPA has a dual purpose of ensuring that federal officials fully take into account the environmental consequences of a federal action before reaching major decisions and informing the public, Congress, and other agencies of those consequences; LBP-11-35, 74 NRC 701 (2011)
- NEPA is a procedural statute and although it requires a hard look at mitigation measures, it does not, in and of itself, provide the statutory basis for their implementation; CLI-11-14, 74 NRC 801 (2011); LBP-11-39, 74 NRC 862 (2011)
- NEPA only mandates an examination of reasonably foreseeable environmental impacts of the proposed project; LBP-11-33, 74 NRC 675 (2011)
- NEPA should be construed in the light of reason if it is not to demand virtually infinite study and resources; LBP-11-38, 74 NRC 817 (2011)
- NEPA's hard look at environmental impacts is tempered by a rule of reason; LBP-11-38, 74 NRC 817 (2011)
- NEPA's procedural obligation is carried out through an agency's issuance of an environmental impact statement documenting the agency's hard look at potential environmental impacts of the proposed action and reasonable alternatives thereto; LBP-11-39, 74 NRC 862 (2011)
- nothing in NEPA, which applies to agencies of the federal government, can be read to require an applicant to update its environmental report; LBP-11-34, 74 NRC 685 (2011)
- NRC cannot delegate its NEPA responsibilities to a private party; LBP-11-32, 74 NRC 654 (2011)
- NRC has established small, moderate, and large levels of impacts; LBP-11-26, 74 NRC 499 (2011)
- NRC may decline to examine remote and speculative risks or events with inconsequentially small probabilities; LBP-11-26, 74 NRC 499 (2011)
- NRC must assess the environmental impacts of a proposed facility, including those impacts associated with greenhouse gas emissions by the proposed facility; LBP-11-26, 74 NRC 499 (2011)
- NRC must rigorously explore and objectively analyze environmental impacts, so that merely offering general statements about possible effects and some risk does not constitute a hard look absent a justification regarding why more definitive information could not be provided; LBP-11-26, 74 NRC 499 (2011)
- NRC need not conduct a separate generic NEPA analysis regarding whether the Fukushima events constitute new and significant information under NEPA that must be analyzed as a part of the environmental review for new reactor and license renewal decisions; LBP-11-32, 74 NRC 654 (2011)
- NRC Staff must consult with and obtain the comments of any federal agency that has jurisdiction by law or special expertise with respect to any environmental impact involved; LBP-11-26, 74 NRC 499 (2011)
- NRC Staff must include new and significant information in a supplemental draft environmental impact statement; LBP-11-34, 74 NRC 685 (2011)
- NRC Staff's obligations under Part 51 and NEPA are not limited to only those severe accident mitigation alternatives that address aging management; LBP-11-17, 74 NRC 11 (2011)
- NRC, as an independent regulatory agency, is not bound by those portions of Council on Environmental Quality NEPA regulations that have a substantive impact on the way in which the Commission performs its regulatory functions; LBP-11-35, 74 NRC 701 (2011)
- once NRC completes its environmental review, its record of decision must state whether NRC has taken all practicable measures within its jurisdiction to avoid or minimize environmental harm from the alternative selected, and if not, to explain why those measures were not adopted, and summarize any

- license conditions and monitoring programs adopted in connection with mitigation measures; LBP-11-17, 74 NRC 11 (2011)
- particular decisions that an agency must reach are not mandated, but rather only the process the agency must follow while reaching decisions; LBP-11-17, 74 NRC 11 (2011)
- previously recognized availability policy for domestic enrichment services supports a NEPA finding of a need for the construction and operation of uranium enrichment facilities; LBP-11-26, 74 NRC 499 (2011)
- reasonable alternatives under NEPA are limited to those alternatives that will bring about the ends of the proposed action; LBP-11-21, 74 NRC 115 (2011)
- regardless of their classification as direct, indirect, or cumulative, impacts that are reasonably foreseeable are to be assessed in an environmental impact statement; LBP-11-26, 74 NRC 499 (2011)
- severe accident mitigation alternatives analysis is neither a worst-case nor a best-case impacts analysis, and the agency's obligations under NEPA are tempered by a practical rule of reason; LBP-11-18, 74 NRC 29 (2011)
- taking a hard look at environmental impacts fosters informed decisionmaking and public participation and thus ensures that the agency does not act upon incomplete information, only to regret its decision after it is too late to correct it; LBP-11-38, 74 NRC 817 (2011)
- the "rule of reason" is a judicial device to ensure that common sense and reason are not lost in the rubric of regulation; LBP-11-26, 74 NRC 499 (2011)
- the aging-based safety review set out in Part 54 is analytically separate from Part 51's environmental inquiry and does not in any sense restrict NEPA; LBP-11-17, 74 NRC 11 (2011)
- the environmental impact statement's hard look must examine reasonably foreseeable environmental impacts emanating from the proposed action; LBP-11-39, 74 NRC 862 (2011)
- the full implications of the Fukushima accident for U.S. facilities are unknown, and thus any generic NEPA duty, if one is appropriate at all, does not accrue now; LBP-11-33, 74 NRC 675 (2011)
- the NEPA review in license renewal proceedings is not limited to aging management-related issues; LBP-11-17, 74 NRC 11 (2011)
- the purpose of NEPA is to help public officials make decisions that are based on understanding of environmental consequences, and take decisions that protect, restore, and enhance the environment; LBP-11-23, 74 NRC 287 (2011)
- the rule of reason is inherent in NEPA and its implementing regulations; LBP-11-38, 74 NRC 817 (2011) there is no NEPA requirement to use the best scientific methodology; LBP-11-38, 74 NRC 817 (2011)
- to evaluate an operating license renewal application, NRC reviews the management of aging effects and time-limited aging analysis of particular safety-related functions of the plant's systems, structures, and components pursuant to 10 C.F.R. Part 54 and the environmental impacts and alternatives to the proposed action in accordance with Part 51; LBP-11-17, 74 NRC 11 (2011)
- until NRC defines and imposes on licensees new requirements arising from the Fukushima events, such requirements are highly speculative; LBP-11-33, 74 NRC 675 (2011)
- within the geographic boundary of the Ninth Circuit, NRC may not exclude NEPA terrorism contentions categorically; CLI-11-11, 74 NRC 427 (2011)

NATIONAL HISTORIC PRESERVATION ACT

all adverse effects to any NRHP-eligible historic or cultural resource must be considered during any federal undertaking; LBP-11-26, 74 NRC 499 (2011)

NATIVE AMERICAN

- areas of potential effect of a federal undertaking must be designated, and the lead federal agency must consult with the state historic preservation office regarding the presence and protection of historic and cultural resources in the designated area, as well as any federally recognized Native American groups with an ancestral interest in the property, to determine if resources important to the tribe are present; LBP-11-26, 74 NRC 499 (2011)
- the federal government bears a trust responsibility to Native American tribes, and the NRC, as a federal agency, owes a fiduciary duty to tribes and their members; LBP-11-30, 74 NRC 627 (2011) NEED FOR POWER
 - a license renewal environmental report is not required to include discussion of need for power; LBP-11-21, 74 NRC 115 (2011)

NOTICE OF HEARING

- although NRC regulations mandate that a petition contain the name, address, and telephone number of petitioner, the Commission's hearing notice advises prospective petitioners not to include personal privacy information, such as home addresses or home phone numbers, in their filings; LBP-11-21, 74 NRC 115 (2011)
- hearing notices are the means by which the Commission identifies the subject matter of the hearings and delegates to the boards the authority to conduct proceedings; LBP-11-22, 74 NRC 259 (2011)
- where the hearing notice does not restrict the hearing to any particular set of issues, the hearing should be understood as encompassing all issues raised by a party to the licensing proceeding that may properly be litigated under Atomic Energy Act §189a; LBP-11-22, 74 NRC 259 (2011)

NOTIFICATION

licensee must notify NRC as soon as practical, and in all cases within 1 hour of the occurrence, of any deviation from a plant's technical specifications; DD-11-6, 74 NRC 420 (2011)

NRC GUIDANCE DOCUMENTS

- acceptable methods for designing a radiological monitoring program and submitting required semiannual reports specifying principal radionuclide releases to unrestricted areas for the purpose of estimating maximum potential annual public doses from such releases are outlined; LBP-11-26, 74 NRC 499 (2011)
- although NRC guidance documents are not legally binding, and compliance with them is not required, they describe an acceptable approach to compliance with NRC rules; CLI-11-4, 74 NRC 1 (2011)
- information that should be provided in the environmental report and the environmental impact statement regarding a radiological monitoring program and monitoring program acceptance criteria is set forth; LBP-11-26, 74 NRC 499 (2011)

NRC POLICY

- Criterion 25 of NRC's agreement state policy statement does not relate to substantive standards or the regulatory outcome of a pending license application, even where a license application has been pending at the NRC for an extended period; CLI-11-12, 74 NRC 460 (2011)
- for suspension of licensing proceedings, petitioners must show that continuation of proceedings, pending consideration of a rulemaking petition, would jeopardize the public health and safety, prove an obstacle to fair and efficient decisionmaking, or prevent appropriate implementation of any pertinent rule or policy changes that might emerge; LBP-11-34, 74 NRC 685 (2011)
- piecemeal appeals during ongoing licensing board proceedings are generally disfavored; CLI-11-6, 74 NRC 203 (2011)
- rationale for NRC's policy of generally disfavoring the filing of new contentions at the eleventh hour of an adjudication is based on the doctrine of finality, which states that at some point, an adjudicatory proceeding must come to an end; LBP-11-20, 74 NRC 65 (2011)
- the purpose of Criterion 25 of NRC's agreement state policy statement is to ensure that licensing records are transferred to and received by the new agreement state in an orderly manner that ensures that no pending licensing actions will be significantly delayed or that no records will be lost or misplaced as a result of the transition of authority; CLI-11-12, 74 NRC 460 (2011)

NRC STAFF

- because it relates to Staff's position on the reviewability of the Board's decision, Staff's statement regarding its inclination not to revise the final supplemental environmental impact statement is presented for the first time in Staff's answer; CLI-11-14, 74 NRC 801 (2011)
- for NEPA contentions, the burden of proof shifts to NRC Staff, because NRC, not applicant, bears the ultimate burden of complying with NEPA; LBP-11-38, 74 NRC 817 (2011)
- in denying an exemption request, Staff is required to inform applicant of the deadline for seeking a hearing; LBP-11-19, 74 NRC 61 (2011)

NRC STAFF REVIEW

- a federal agency would be acting arbitrarily and capriciously if it did not look at relevant data and sufficiently explain a rational nexus between the facts found in its review and the choice it makes as a result of that review; LBP-11-17, 74 NRC 11 (2011)
- although sufficiency of the application and NRC Staff's environmental review of that application are proper targets of contentions, sufficiency of NRC Staff's safety review of the application is not; LBP-11-29, 74 NRC 612 (2011)

- as part of its NEPA analysis, NRC must provide information that addresses the purpose and need for the proposed action; LBP-11-26, 74 NRC 499 (2011)
- because NEPA is premised on a rule of reason, NRC need only consider reasonable alternatives to a proposed action; LBP-11-26, 74 NRC 499 (2011)
- completion of NRC Staff's final environmental review document always must precede the conduct of hearings on environmental issues; LBP-11-30, 74 NRC 627 (2011)
- for power reactors, NRC Staff review should encompass emissions from the uranium fuel cycle as well as from construction and operation of the facility to be licensed; LBP-11-26, 74 NRC 499 (2011)
- if NRC Staff has not previously considered severe accident mitigation alternatives for the applicant's plant in an environmental impact statement or related supplement or in an environmental assessment, a consideration of SAMAs must be provided in license renewal applicant's environmental report; LBP-11-21, 74 NRC 115 (2011)
- in a mandatory hearing, a licensing board must narrow its inquiry to those topics or sections in Staff documents that it deems most important and should concentrate on portions of the documents that do not on their face adequately explain the logic, underlying facts, and applicable regulations and guidance; LBP-11-26, 74 NRC 499 (2011)
- licensing boards are not empowered to superintend, to any extent, the conduct of Staff technical reviews; CLI-11-14, 74 NRC 801 (2011); LBP-11-30, 74 NRC 627 (2011)
- NRC may decline to examine remote and speculative risks or events with inconsequentially small probabilities; LBP-11-26, 74 NRC 499 (2011)
- NRC must rigorously explore and objectively analyze environmental impacts, so that merely offering general statements about possible effects and some risk does not constitute a hard look absent a justification regarding why more definitive information could not be provided; LBP-11-26, 74 NRC 499 (2011)
- NRC reserves the right to review, as necessary, the rate of accumulation of decommissioning funds and to take additional actions, as appropriate on a case-by-case basis, to ensure an adequate accumulation of decommissioning funds; DD-11-7, 74 NRC 787 (2011)
- NRC Staff must include new and significant information in the supplemental draft environmental impact statement; LBP-11-34, 74 NRC 685 (2011)
- NRC's review of a COL application is the type of proposed action obliging the Staff to prepare an environmental impact statement or a supplement thereto; LBP-11-39, 74 NRC 862 (2011)
- obligations under Part 51 and NEPA are not limited to only those severe accident mitigation alternatives that address aging management; LBP-11-17, 74 NRC 11 (2011)
- once NRC completes its environmental review, its record of decision must state whether NRC has taken all practicable measures within its jurisdiction to avoid or minimize environmental harm from the alternative selected, and if not, to explain why those measures were not adopted, and summarize any license conditions and monitoring programs adopted in connection with mitigation measures; LBP-11-17, 74 NRC 11 (2011)
- Staff is empowered to issue requests for additional information relevant to an applicant's environmental report; LBP-11-32, 74 NRC 654 (2011); LBP-11-33, 74 NRC 675 (2011); LBP-11-34, 74 NRC 685 (2011)
- Staff's underlying technical and factual findings are not open to board reconsideration unless, after a review of the record, the board finds the NRC Staff review inadequate or its findings insufficient; LBP-11-26, 74 NRC 499 (2011)
- sufficiency of the NRC's hard look at the benefits of severe accident mitigation alternatives in comparison to their costs is subject to litigation in a license renewal proceeding; LBP-11-17, 74 NRC 11 (2011)
- taking a hard look at environmental impacts fosters both informed decisionmaking and informed public participation, and thus ensures that NRC does not act on incomplete information, only to regret its decision after it is too late to correct it; LBP-11-26, 74 NRC 499 (2011)
- the aging-based safety review set out in Part 54 is analytically separate from Part 51's environmental inquiry and does not in any sense restrict NEPA; LBP-11-17, 74 NRC 11 (2011)
- to evaluate an operating license renewal application, NRC reviews the management of aging effects and time-limited aging analysis of particular safety-related functions of the plant's systems, structures, and components pursuant to 10 C.F.R. Part 54 and the environmental impacts and alternatives to the proposed action in accordance with Part 51; LBP-11-17, 74 NRC 11 (2011)

NUCLEAR REGULATORY COMMISSION, AUTHORITY

- although the Commission retains broad authority to define standards and thresholds for determining when new information raises a material issue of a plant's conformity with the Atomic Energy Act, if such information is presented, it must provide a hearing upon request; LBP-11-22, 74 NRC 259 (2011)
- in parallel with NRC Staff's role under NEPA to assess environmental impacts, the Environmental Protection Agency possesses authority under the Clean Air Act to set numerical standards for air pollutants from emission sources; LBP-11-26, 74 NRC 499 (2011)
- NRC addresses agreement-state performance concerns through its Integrated Materials Performance Evaluation Program process or through an independent agreement-state performance concern evaluation, depending on the performance concern raised; CLI-11-12, 74 NRC 460 (2011)
- NRC cannot delegate its NEPA responsibilities to a private party; LBP-11-32, 74 NRC 654 (2011)
- NRC defers to other agencies with greater expertise on an issue; CLI-11-4, 74 NRC 1 (2011)
- NRC has clear statutory authority to regulate the construction and operation of a uranium enrichment facility; LBP-11-26, 74 NRC 499 (2011)
- NRC has discretion to resolve issues generically by rulemaking; CLI-11-11, 74 NRC 427 (2011)
- NRC has the authority to ensure that certified designs and combined licenses include appropriate Commission-directed changes before operation; CLI-11-8, 74 NRC 214 (2011); CLI-11-10, 74 NRC 251 (2011)
- NRC is bound by the unambiguous language of its own regulations; LBP-11-22, 74 NRC 259 (2011)
- NRC may enter into agreements with the governor of any state providing for transfer of regulatory authority to the state over specified categories of nuclear material; CLI-11-12, 74 NRC 460 (2011)
- NRC may impose reasonable requirements on new contentions when those requirements are related to legitimate agency goals such as avoiding needless duplication and delay; LBP-11-22, 74 NRC 259 (2011)
- NRC may not, over the objections of a state desiring jurisdiction and for reasons other than health and safety or compatibility, retain regulatory authority over pending applications involving a nuclear materials category otherwise transferred to a state; CLI-11-12, 74 NRC 460 (2011)
- NRC reserves the right to review, as necessary, the rate of accumulation of decommissioning funds and to take additional actions, as appropriate on a case-by-case basis, to ensure an adequate accumulation of decommissioning funds; DD-11-7, 74 NRC 787 (2011)
- NRC retains power under AEA § 274j to revoke agreements with states and to restore NRC regulatory authority; CLI-11-12, 74 NRC 460 (2011)
- NRC Staff has authority to require implementation of non-aging-management severe accident mitigation alternatives through its current licensing basis backfit review under Part 50 or through setting conditions of the license renewal; LBP-11-17, 74 NRC 11 (2011)
- NRC, as an independent regulatory agency, is not bound by those portions of Council on Environmental Quality NEPA regulations that have a substantive impact on the way in which the Commission performs its regulatory functions; LBP-11-35, 74 NRC 701 (2011)
- NRC's ongoing regulatory and oversight processes provide reasonable assurance that each facility complies with its current licensing basis, which can be adjusted by future Commission order or by modification to the facility's operating license outside the renewal proceeding; CLI-11-5, 74 NRC 141 (2011)
- parties should not seek interlocutory review by invoking the grounds under which the Commission might exercise its supervisory authority; CLI-11-14, 74 NRC 801 (2011)
- the Atomic Energy Act does not grant NRC the discretion to eliminate from the hearing, material issues in its licensing decision; LBP-11-22, 74 NRC 259 (2011)
- the Commission exercises its inherent supervisory authority to direct the board to complete all necessary and appropriate case management activities, including disposal of all matters currently pending before it and comprehensively documenting the full history of the adjudicatory proceeding; CLI-11-7, 74 NRC 212 (2011)
- the Commission may consider requests to suspend or hold proceedings in abeyance pursuant to its inherent supervisory authority over agency proceedings; CLI-11-5, 74 NRC 141 (2011)
- the Commission may consider the rulemaking request of a nonparty as an exercise of its inherent supervisory powers over proceedings; CLI-11-5, 74 NRC 141 (2011)

- the Commission may direct further proceedings as it considers appropriate to aid its determination; CLI-11-11, 74 NRC 427 (2011)
- the Commission temporarily suspended the immediate effectiveness rule following the Three Mile Island accident; CLI-11-5, 74 NRC 141 (2011)
- to the extent NRC's review of the Fukushima accident leads to new rules applicable to any pending application, the Commission has sufficient authority and time to apply them to any new license that may be issued; CLI-11-5, 74 NRC 141 (2011)
- with respect to new reactor licenses, the Commission has authority to ensure that certified designs and combined licenses include appropriate Commission-directed changes before operation; CLI-11-6, 74 NRC 203 (2011)

OFFICIAL NOTICE

- boards may take official notice of any fact of which a court of the United States may take judicial notice or of any technical or scientific fact within the knowledge of the Commission as an expert body; LBP-11-20, 74 NRC 65 (2011)
- judicial notice may be taken of any fact not subject to reasonable dispute in that it is either generally known within the territorial jurisdiction of the trial court or capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned; LBP-11-20, 74 NRC 65 (2011) OPERATING LICENSE AMENDMENT APPLICATIONS
- applicants must include in their environmental report any new and significant information regarding the environmental impacts of license renewal of which applicant is aware; LBP-11-29, 74 NRC 612 (2011) OPERATING LICENSE AMENDMENT PROCEEDINGS
 - petitioners may not claim standing simply upon a residence or visits near the plant, unless the proposed action quite obviously entails an increased potential for offsite consequences; LBP-11-29, 74 NRC 612 (2011)
 - portion of a contention asserting that applicant failed to consider the results of a particular study in its SAMA analysis is admissible; CLI-11-11, 74 NRC 427 (2011)

OPERATING LICENSE AMENDMENTS

NRC must grant a hearing upon the request of any person whose interest may be affected by the proceeding and admit any such person as a party to such proceeding; LBP-11-29, 74 NRC 612 (2011) section 51.53(c)(3)(iv) does not apply to license amendment applicants requesting a power uprate; LBP-11-29, 74 NRC 612 (2011)

OPERATING LICENSE PROCEEDINGS

in an uncontested proceeding, the Commission would informally review the Staff recommendations, and the license would issue only after Commission action; CLI-11-5, 74 NRC 141 (2011)

OPERATING LICENSE RENEWAL

- a commitment to implement an aging management plan that NRC finds is consistent with the GALL Report constitutes one acceptable method for compliance, but does not insulate such an approach from challenge by an intervenor, and is not binding on a licensing board in an adjudication; LBP-11-20, 74 NRC 65 (2011)
- a license renewal environmental report is not required to include discussion of need for power; LBP-11-21, 74 NRC 115 (2011)
- a power reactor licensee may preserve its license by filing a renewal application at least 5 years before its license is set to expire, affording the Staff ample time to complete the required environmental and safety reviews; LBP-11-30, 74 NRC 627 (2011)
- a severe accident mitigation alternative need not be implemented during a particular plant's license renewal review if the Commission is concurrently resolving the safety improvement achieved by that SAMA through a generic process attached to the agency's review of all plants' current licensing bases; LBP-11-17, 74 NRC 11 (2011)
- applicant is compelled to implement safety-related severe accident mitigation alternatives that deal with aging management; LBP-11-17, 74 NRC 11 (2011)
- applicant's environmental report must contain a consideration of alternatives for reducing adverse impacts for all Category 2 license renewal issues in Appendix B; LBP-11-21, 74 NRC 115 (2011)
- applicants must demonstrate how their programs will be effective in managing the effects of aging during the proposed period of extended operation, at a detailed component and structure level, rather than at a more generalized 'system level; LBP-11-21, 74 NRC 115 (2011)

- applicants should rely on the generic environmental impact statement for terrorism-related issues in a license renewal application; CLI-11-11, 74 NRC 427 (2011)
- backfitting includes the modification of or addition to systems, structures, components, or designs of a facility; LBP-11-17, 74 NRC 11 (2011)
- because SAMA analysis is site-specific, NEPA demands no fully developed plan or detailed examination of specific measures that will be used to mitigate adverse environmental effects; LBP-11-18, 74 NRC 29 (2011)
- challenges to section 50.54(hh)(2) are neither germane to age-related degradation nor unique to the license renewal period; LBP-11-21, 74 NRC 115 (2011)
- environmental impacts of license renewal are classified as either Category 1, which are generically addressed by the NRC's generic environmental impact statement for license renewal, or Category 2, which are analyzed on a site-specific basis; LBP-11-17, 74 NRC 11 (2011)
- environmental implications of new and significant information must be considered under NEPA before NRC may grant renewed operating licenses; LBP-11-32, 74 NRC 654 (2011)
- for a license renewal to be issued, the Commission must determine that the applicable requirements of 10 C.F.R. Part 51, Subpart A have been satisfied; LBP-11-18, 74 NRC 29 (2011)
- if NRC Staff has not already considered site-specific severe accident mitigation alternatives for a facility, they must be considered as part of applicant's environmental report and ultimately as part of NRC Staff's supplemental environmental impact statement; LBP-11-17, 74 NRC 11 (2011); LBP-11-18, 74 NRC 29 (2011); LBP-11-21, 74 NRC 115 (2011)
- license renewal applicants must provide a plant-specific analysis of issues designated as Category 2; CLI-11-11, 74 NRC 427 (2011)
- license renewal applicants need not provide a site-specific analysis of the environmental impacts of spent fuel storage in their environmental report; CLI-11-11, 74 NRC 427 (2011)
- licensees are required to establish a program for qualifying certain defined electrical equipment; LBP-11-20, 74 NRC 65 (2011)
- many safety questions that relate to plant aging become important during the extended renewal term since the design of some components may have been based upon a service lifetime of only 40 years; LBP-11-21, 74 NRC 115 (2011)
- nonpower reactors, including research and test reactors, differ as a class from nuclear power plants and are not covered by 10 C.F.R. Part 54; CLI-11-11, 74 NRC 427 (2011)
- NRC explicitly requires an emergency plan for initial reactor operating licenses but does not require them for license renewal; LBP-11-29, 74 NRC 612 (2011)
- NRC's license renewal process concerns a particularized and limited inquiry into the potential impacts of an additional 20 years of nuclear power plant operation, not day-to-day operational issues; LBP-11-21, 74 NRC 115 (2011)
- NRC's ongoing regulatory and oversight processes provide reasonable assurance that each facility complies with its current licensing basis, which can be adjusted by future Commission order or by modification to the facility's operating license outside the renewal proceeding; CLI-11-5, 74 NRC 141 (2011)
- once NRC completes its environmental review, its record of decision must state whether NRC has taken all practicable measures within its jurisdiction to avoid or minimize environmental harm from the alternative selected, and if not, to explain why those measures were not adopted, and summarize any license conditions and monitoring programs adopted in connection with mitigation measures; LBP-11-17, 74 NRC 11 (2011)
- operating license renewal applicants must make a detailed assessment, conducted on passive, safety-related physical systems, structures, and components of the plant; LBP-11-21, 74 NRC 115 (2011)
- operating license renewal applicants must reassess time-limited aging analyses made during the original license term and based upon the length of the original license term; LBP-11-21, 74 NRC 115 (2011)
- Part 54 governs issuance of renewed operating licenses and renewed combined licenses for nuclear power plants licensed pursuant to sections 103 or 104b of the Atomic Energy Act and Title II of the Energy Reorganization Act; CLI-11-11, 74 NRC 427 (2011)
- past or current performance could inform the review of a license renewal application; CLI-11-11, 74 NRC 427 (2011)

- safety review is limited to the matters specified in 10 C.F.R. Part 54, which focus on the management of aging for certain systems, structures, and components, and the review of time-limited aging analyses; LBP-11-21, 74 NRC 115 (2011)
- severe accident mitigation alternatives analysis is neither a worst-case nor a best-case impacts analysis, and the agency's obligations under NEPA are tempered by a practical rule of reason; LBP-11-18, 74 NRC 29 (2011)
- severe accident mitigation alternatives review identifies and assesses possible plant changes such as improvements in hardware, training, or procedures that could cost-effectively mitigate the environmental impacts that would otherwise flow from a potential severe accident; LBP-11-17, 74 NRC 11 (2011)
- site-specific consideration of severe accident mitigation alternatives is required at the time of license renewal unless a previous consideration of such alternatives regarding plant operation has been included in a final environmental impact statement, final environmental assessment, or a related supplement; CLI-11-5, 74 NRC 141 (2011)
- Staff's ability to satisfy its NEPA obligations will be undermined if applicant either fails to include seismic information in its SAMA analysis, or, in omitting the information, fails to explain its absence and justify that the overall costs of obtaining it are exorbitant; CLI-11-11, 74 NRC 427 (2011)
- the "reasonable assurance" standard for aging management programs does not require a 95% confidence level of compliance; LBP-11-18, 74 NRC 29 (2011)
- the aging-based safety review set out in Part 54 is analytically separate from Part 51's environmental inquiry and does not in any sense restrict NEPA; LBP-11-17, 74 NRC 11 (2011)
- the current licensing basis of an operating license shall continue during the license renewal period, but these conditions may be supplemented or amended as necessary to protect the environment during the term of the renewed license and will be derived from information contained in the supplement to the environmental report, as analyzed and evaluated in the NRC record of decision; LBP-11-17, 74 NRC 11 (2011)
- the environmental report for this stage need not contain environmental analysis of Category 1 issues identified in Appendix B to Subpart A of 10 C.F.R. Part 51; LBP-11-21, 74 NRC 115 (2011)
- the NEPA review in license renewal proceedings is not limited to aging management-related issues; LBP-11-17. 74 NRC 11 (2011)
- to evaluate an operating license renewal application, the NRC reviews the management of aging effects and time-limited aging analysis of particular safety-related functions of the plant's systems, structures, and components pursuant to 10 C.F.R. Part 54 and the environmental impacts and alternatives to the proposed action in accordance with Part 51; LBP-11-17, 74 NRC 11 (2011)

OPERATING LICENSE RENEWAL PROCEEDINGS

- a board erred in admitting a contention pertaining to a plant's safety culture; CLI-11-11, 74 NRC 427 (2011)
- a narrow and specific contention that alleges facts, with supporting documentation, of a longstanding and continuing pattern of noncompliance or management difficulties that are reasonably linked to whether licensee will actually be able to adequately manage aging in accordance with the current licensing basis during the period of extended operation can be an admissible contention; CLI-11-11, 74 NRC 427 (2011)
- absent demonstration that petitioner's alleged special circumstances are unique to the facility rather than common to a large class of facilities, the request for waiver of regulations excluding spent fuel pool issues from license renewal proceedings is denied; LBP-11-35, 74 NRC 701 (2011)
- admission of a management integrity contention relied on references to a serious incident involving shutdown of the reactor, management responsible for the incident remaining in place, and a purported climate of reprisals for bringing forward safety issues, and reference to at least one expert witness in support of the contention; CLI-11-11, 74 NRC 427 (2011)
- an operating license may be renewed if NRC finds, among other things, that actions have been identified and have been or will be taken to manage the effects of aging during the period of extended operation on the functionality of certain identified structures and components; CLI-11-11, 74 NRC 427 (2011)
- assertions of a need to implement filtered vented containment are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)

- Category 1 issues are not subject to challenge in a relicensing proceeding, absent a waiver, because they involve environmental effects that are essentially similar for all plants and need not be assessed repeatedly on a site-specific basis; LBP-11-21, 74 NRC 115 (2011)
- challenges to extensive damage mitigation guidelines are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)
- challenges to NRC's assumptions about operators' capability to mitigate an accident are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)
- challenges to NRC's previous rejection of the petitioner's concerns regarding environmental impacts of high-density pool storage of spent fuel are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)
- conceptual issues such as operational history, quality assurance, quality control, management competence, and human factors are excluded from license renewal review in favor of a safety-related review focusing on maintaining particular functions of certain physical systems, structures, and components; CLI-11-11, 74 NRC 427 (2011)
- contentions that challenge applicant's compliance with the loss-of-large-areas requirements of 10 C.F.R. 50.54(hh)(2) are not admissible because they are not within the scope of a license renewal proceeding; LBP-11-21, 74 NRC 115 (2011)
- during pendency of remand, intervenors are free to submit a motion to reopen the record pursuant to 10 C.F.R. 2.326 should they seek to address any genuinely new issues related to the license renewal application that previously could not have been raised; LBP-11-20, 74 NRC 65 (2011)
- emergency planning is neither germane to age-related degradation nor unique to the period covered by a license renewal application; LBP-11-35, 74 NRC 701 (2011)
- entertaining contentions in a license renewal proceeding that challenge the current licensing basis would be both unnecessary and wasteful given ongoing agency oversight, review, and enforcement; LBP-11-21, 74 NRC 115 (2011)
- for pending license renewal applications, where the period of extended operation will not begin for at least a year, there is no imminent threat to public health and safety that requires suspension of licensing proceedings or decisions; LBP-11-35, 74 NRC 701 (2011)
- generic analysis remains appropriate for spent fuel pool accidents in license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)
- inspection reports could be seen as objective evidence that applicant may not adequately manage aging in the future; CLI-11-11, 74 NRC 427 (2011)
- license renewal review is a limited one, focused on aging management issues; CLI-11-5, 74 NRC 141 (2011)
- license renewal should not include a new, broad-scoped inquiry into compliance that is separate from and parallel to ongoing compliance oversight activity; CLI-11-11, 74 NRC 427 (2011)
- litigability of the adequacy of applicant's efforts to address current operational issues is excluded from a license renewal proceeding; CLI-11-11, 74 NRC 427 (2011)
- motion to admit a new contention arguing that applicant's environmental report fails to satisfy NEPA because it does not address findings and recommendations raised by Task Force Report on the Fukushima Dai-ichi accident is denied as premature and insufficiently focused on the application; LBP-11-28, 74 NRC 604 (2011)
- NEPA imposes a procedural requirement on an agency's decisionmaking process by mandating that an agency consider the environmental impacts of a proposed action and inform the public that it has taken those impacts into account in making its decision; LBP-11-17, 74 NRC 11 (2011)
- NRC shall require backfitting of a facility only when it determines that there is a substantial increase in the overall protection of the public health and safety or the common defense and security and that the costs of implementation are justified in view of this increased protection; LBP-11-17, 74 NRC 11 (2011)
- NRC Staff has authority to require implementation of non-aging-management severe accident mitigation alternatives through its current licensing basis backfit review under Part 50 or through setting conditions of the license renewal; LBP-11-17, 74 NRC 11 (2011)
- petitioner is presumed to have standing to intervene without the need to specifically plead injury, causation, and redressability if petitioner lives within 50 miles of the nuclear power facility; LBP-11-21, 74 NRC 115 (2011)

- petitioner's request to hold the proceeding in abeyance until the Commission resolves petitioner's request to suspend the proceeding pending evaluation of the Fukushima accident is denied; LBP-11-35, 74 NRC 701 (2011)
- relevant issues for an additional 20 years of reactor plant operation differ from those when a reactor plant is first built and licensed; LBP-11-21, 74 NRC 115 (2011)
- safety culture, operational history, quality assurance, quality control, management competence, human factors, and emergency planning issues are beyond the scope of a license renewal proceeding; LBP-11-21, 74 NRC 115 (2011)
- section 52.80(d) mandates compliance with the agency's loss-of-large-areas requirements in 10 C.F.R. 50.54(hh)(2), but does not apply to a license renewal proceeding; LBP-11-21, 74 NRC 115 (2011)
- sufficiency of the NRC's hard look at the benefits of severe accident mitigation alternatives in comparison to their costs is subject to litigation; LBP-11-17, 74 NRC 11 (2011)
- suppositions/speculation regarding effectiveness of hydrogen control mechanisms are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)
- the only role for a court is to ensure that the agency has taken a hard look at environmental consequences; LBP-11-17, 74 NRC 11 (2011)
- to waive generic assessment in NRC regulations to permit adjudication of issues involving the environmental impact of spent fuel pool accidents in a license renewal proceeding, the Commission must conclude that the rule's strict application would not serve the purpose for which it was adopted; CLI-11-11, 74 NRC 427 (2011)

OPERATING LICENSES

- current reactor licensees comply with the requirements of section 50.54(hh)(2) through conditions on their operating licenses; LBP-11-21, 74 NRC 115 (2011)
- section 50.54(hh)(2) applies to both current reactor licensees under Part 50 and new applicants for licenses under Part 52; LBP-11-21, 74 NRC 115 (2011)

ORAL ARGUMENT

- a court cannot defer to interpretive proposals offered by counsel at oral argument and affirm on the basis of that reading when the statute does not plainly compel the reading being proposed; CLI-11-12, 74 NRC 460 (2011)
- appellants seeking oral argument must show how oral argument will assist the Commission in reaching a decision; CLI-11-8, 74 NRC 214 (2011)
- in its discretion, the Commission may allow oral argument upon the request of a party made in a petition for review, brief on review, or upon its own initiative; CLI-11-8, 74 NRC 214 (2011)
- service of a filing is not complete until accompanied by a certificate of service and a request for oral argument; LBP-11-21, 74 NRC 115 (2011)
- where the Commission has a thorough written record containing adequate information on which to base a decision, there is no need for oral argument; CLI-11-8, 74 NRC 214 (2011)

ORDERS

See Licensing Board Orders

PARTIAL INITIAL DECISIONS

- a PID is one rendered following an evidentiary hearing on one or more contentions, but which does not dispose of the entire matter; CLI-11-6, 74 NRC 203 (2011); CLI-11-10, 74 NRC 251 (2011)
- parties may file a petition for review of licensing board full or partial initial decisions, both of which are considered to be final; CLI-11-14, 74 NRC 801 (2011)
- the basis for allowing immediate appellate review of partial initial decisions rests on prior appeal board decisions permitting review of a licensing board ruling that disposes of a major segment of the case or terminates a party's right to participate; CLI-11-14, 74 NRC 801 (2011)

PERFORMANCE ASSESSMENT

NRC addresses agreement-state performance concerns through its Integrated Materials Performance
Evaluation Program process or through an independent agreement-state performance concern evaluation,
depending on the performance concern raised; CLI-11-12, 74 NRC 460 (2011)
PLEADINGS

in NRC proceedings, pro se litigants are generally not held to the same high standards of pleading and practice as parties with counsel; LBP-11-20, 74 NRC 65 (2011); LBP-11-23, 74 NRC 287 (2011)

it is not up to boards to search through pleadings or other materials to uncover arguments and support never advanced by intervenors; LBP-11-34, 74 NRC 685 (2011)

POLICY STATEMENTS

Criterion 25 of NRC's agreement state policy statement does not relate to substantive standards or the regulatory outcome of a pending license application, even where a license application has been pending at the NRC for an extended period; CLI-11-12, 74 NRC 460 (2011)

the purpose of Criterion 25 of NRC's agreement state policy statement is to ensure that licensing records are transferred to and received by the new agreement state in an orderly manner that ensures that no pending licensing actions will be significantly delayed or that no records will be lost or misplaced as a result of the transition of authority; CLI-11-12, 74 NRC 460 (2011)

See also NRC Policy

POWER UPRATE

extended power uprate proceedings necessarily trigger application of the 50-mile proximity presumption given that such license applications entail an obvious increase in the potential for offsite consequences; LBP-11-29, 74 NRC 612 (2011)

other than hypothesizing that there will be a failure of the nuclear reactor vessel because of increased stress brought by the proposed license amendment request, the contention does not provide sufficient information to show that a genuine dispute exists; LBP-11-29, 74 NRC 612 (2011)

section 51.53(c)(3)(iv) does not apply to license amendment applicants requesting a power uprate; LBP-11-29, 74 NRC 612 (2011)

PRECEDENTIAL EFFECT

although the Atomic Safety and Licensing Appeal Panel is no longer in existence, the decisions of its appeals boards continue to be binding to the degree they concern a regulation or regulatory matter that has not been revised or otherwise materially altered; LBP-11-34, 74 NRC 685 (2011)

PRECONSTRUCTION ACTIVITIES

activities that are allowed under Part 50 are also allowed for materials licenses; LBP-11-26, 74 NRC 499 (2011)

fugitive dust generation is discussed; LBP-11-26, 74 NRC 499 (2011)

there is no agency requirement that applicant submit a redress plan relative to preconstruction activities or, absent state or local requirements, take any remediation action regarding preconstruction activities if it decides not to complete the project or is denied agency authorization to construct and operate the facility; LBP-11-26, 74 NRC 499 (2011)

PRESIDING OFFICER, AUTHORITY

exceptionally grave issues may be considered in the discretion of the presiding officer even if untimely presented; LBP-11-20, 74 NRC 65 (2011); LBP-11-35, 74 NRC 701 (2011)

presiding officers have the duty to conduct a fair and impartial hearing according to law, to take appropriate action to control the prehearing and hearing process, to avoid delay and to maintain order, and have all the powers necessary to those ends; LBP-11-22, 74 NRC 259 (2011)

PRESIDING OFFICER, JURISDICTION

three occasions that could trigger termination of the presiding officer's jurisdiction are delineated in 10 C.F.R. 2.318(a); LBP-11-22, 74 NRC 259 (2011)

PRESUMPTION OF REGULARITY

Staff's deference to the expertise of other federal and state agencies to set and monitor the financial soundness of institutions issuing letters of credit is reasonable; CLI-11-4, 74 NRC 1 (2011)

the presumption attaches to the actions of government agencies; CLI-11-4, 74 NRC 1 (2011)

PRIMA FACIE SHOWING

if on the basis of the petition, affidavit, and any response provided for in 2.758(b), the presiding officer determines that a prima facie showing has been made, the presiding officer shall, before ruling thereon, certify the matter directly to the Commission; CLI-11-11, 74 NRC 427 (2011)

presiding officers must dismiss any petition for waiver that does not make a prima facie showing of special circumstances with respect to the subject matter of the particular proceeding; LBP-11-35, 74 NRC 701 (2011)

PRO SE LITIGANTS

in NRC proceedings, pro se litigants are generally not held to the same high standards of pleading and practice as parties with counsel; LBP-11-20, 74 NRC 65 (2011); LBP-11-23, 74 NRC 287 (2011)

PROBABILISTIC RISK ASSESSMENT

- an accident sequence with a probability conservatively estimated at 2.0×10^{-7} per reactor year is remote and speculative for the purposes of NEPA; LBP-11-38, 74 NRC 817 (2011)
- applications for certified reactor designs include a probabilistic risk assessment for severe accidents; LBP-11-38, 74 NRC 817 (2011)
- to evaluate the impact of a fault on current operations, a probabilistic risk assessment rather than a deterministic analysis is the accepted and standard practice in SAMA analyses; CLI-11-11, 74 NRC 427 (2011)

PROXIMITY PRESUMPTION

- extended power uprate proceedings necessarily trigger application of the 50-mile proximity presumption given that such license applications entail an obvious increase in the potential for offsite consequences; LBP-11-29, 74 NRC 612 (2011)
- in license amendment proceedings, petitioners may not claim standing simply upon a residence or visits near the plant, unless the proposed action quite obviously entails an increased potential for offsite consequences; LBP-11-29, 74 NRC 612 (2011)
- in most licensing proceedings, petitioners are presumed to have standing if they live or have frequent contacts within 50 miles of the facility that is the subject of the proceeding; LBP-11-29, 74 NRC 612 (2011)
- in reactor license renewal proceedings, petitioner is presumed to have standing to intervene without the need to specifically plead injury, causation, and redressability if petitioner lives within 50 miles of the nuclear power facility; LBP-11-21, 74 NRC 115 (2011)

PUBLIC COMMENTS

boards may entertain oral and written limited appearance statements from members of the public in connection with a mandatory uncontested proceeding; LBP-11-26, 74 NRC 499 (2011)

QUALIFICATIONS

- based on his education and experience, intervenors' witness was found qualified to testify but not specifically on issues related to nuclear engineering, such as events at the Fukushima Dai-ichi plant, core damage frequency calculations, and effectiveness of SAMDAs; LBP-11-38, 74 NRC 817 (2011)
- expert witnesses must have the requisite education, training, skill, or experience in operation of a nuclear power plant or in probabilistic risk assessment to support a contention; LBP-11-35, 74 NRC 701 (2011) QUALITY ASSURANCE
 - conceptual issues such as operational history, quality assurance, quality control, management competence, and human factors are excluded from license renewal review in favor of a safety-related review focusing on maintaining particular functions of certain physical systems, structures, and components; CLI-11-11, 74 NRC 427 (2011)
- this issue is beyond the scope of a license renewal proceeding; LBP-11-21, 74 NRC 115 (2011)

QUALITY ASSURANCE PROGRAMS

to demonstrate a significant safety issue, petitioners must establish either that uncorrected errors endanger safe plant operation, or that there has been a breakdown of the quality assurance program sufficient to raise legitimate doubt as to the plant's capability of being operated safely; LBP-11-35, 74 NRC 701 (2011)

RADIATION CONTROL PROGRAM

combined license applications must provide a level of information on plans to manage and store low-level radioactive waste onsite sufficient to enable the Commission to conclude that the application will comply with 10 C.F.R. Part 20; CLI-11-10, 74 NRC 251 (2011)

RADIATION PROTECTION STANDARDS

- public doses for all Part 20 radiation protection programs must be as low as reasonably achievable and a basic radiation protection public dose standard of 100 mrem per year is required; CLI-11-12, 74 NRC 460 (2011)
- the ALARA principle as used in NRC regulations does not mean as low as achievable as a comparison between achievable doses, but rather as low as reasonably achievable below the dose limits; CLI-11-12, 74 NRC 460 (2011)

RADIOACTIVE EFFLUENTS

it is permissible for the final safety analysis report to give applicant several options for controlling and limiting radioactive effluents and radiation exposures, provided that each option is described with a

- level of information sufficient to enable the Commission to reach a final conclusion; LBP-11-31, 74 NRC 643 (2011)
- minimum detectable concentrations for gaseous effluent and evaporator condensate must be 5% or less of the concentrations listed in Part 20, App. B. tbl. 2: LBP-11-26, 74 NRC 499 (2011)
- Part 70 applicants are required to establish a radiological monitoring program to monitor and report the release of radiological gaseous and liquid effluents to the environment; LBP-11-26, 74 NRC 499 (2011)

RADIOACTIVE RELEASES

Staff guidance documents outline acceptable methods for designing a radiological monitoring program and submitting required semiannual reports specifying principal radionuclide releases to unrestricted areas for the purpose of estimating maximum potential annual public doses from such releases; LBP-11-26, 74 NRC 499 (2011)

RADIOACTIVE WASTE DISPOSAL

motion for summary disposition is granted because there is no genuine issue or dispute as to any material fact and applicant's low-level radioactive waste plan satisfies the requirements of 10 C.F.R. 52.79(a); LBP-11-31, 74 NRC 643 (2011)

RADIOACTIVE WASTE MANAGEMENT

postponing choice between several options for radioactive waste management, each of which is concretely stated and compliant with 10 C.F.R. 52.79(a), does not violate the regulation; LBP-11-31, 74 NRC 643 (2011)

RADIOACTIVE WASTE STORAGE

combined license applications must provide a level of information on plans to manage and store low-level radioactive waste onsite sufficient to enable the Commission to conclude that the application will comply with 10 C.F.R. Part 20; CLI-11-10, 74 NRC 251 (2011)

RADIOACTIVE WASTE, LOW-LEVEL

- combined license applications must provide a level of information on plans to manage and store LLRW onsite sufficient to enable the Commission to conclude that the application will comply with 10 C.F.R. Part 20; CLI-11-10, 74 NRC 251 (2011)
- motion for summary disposition is granted because there is no genuine issue or dispute as to any material fact and applicant's low-level radioactive waste plan satisfies the requirements of 10 C.F.R. 52.79(a); LBP-11-31, 74 NRC 643 (2011)

RADIOLOGICAL EXPOSURE

- ALARA is defined as every reasonable effort to maintain exposures to radiation as far below the dose limits in Part 20 as is practical consistent with the purpose for which the licensed activity is undertaken; CLI-11-12, 74 NRC 460 (2011)
- if institutional controls fail and engineered barriers have degraded over a period of time, the dose to a member of the public will not exceed 100 mrem per year, or 500 mrem per year under certain circumstances, and is as low as reasonably achievable; CLI-11-12, 74 NRC 460 (2011)
- it is permissible for the final safety analysis report to give applicant several options for controlling and limiting radioactive effluents and radiation exposures, provided that each option is described with a level of information sufficient to enable the Commission to reach a final conclusion; LBP-11-31, 74 NRC 643 (2011)
- limit for individual members of the public from a licensed activity is a total effective dose equivalent of 100 millirem per year; CLI-11-12, 74 NRC 460 (2011)
- small doses of radiation below dose limits, while safe and acceptable, may have some associated risk and should be reduced below limits when reasonable; CLI-11-12, 74 NRC 460 (2011)

RADIOLOGICAL MONITORING

- applicant's measurements and monitoring program is subject to scrutiny; LBP-11-26, 74 NRC 499 (2011) Part 70 applicants are required to establish a radiological monitoring program to monitor and report the release of radiological gaseous and liquid effluents to the environment; LBP-11-26, 74 NRC 499 (2011)
- Staff guidance documents outline acceptable methods for designing a radiological monitoring program and submitting required semiannual reports specifying principal radionuclide releases to unrestricted areas for the purpose of estimating maximum potential annual public doses from such releases; LBP-11-26, 74 NRC 499 (2011)

Staff guidance documents set forth information that should be provided in the environmental report and the environmental impact statement regarding a radiological monitoring program and monitoring program acceptance criteria; LBP-11-26, 74 NRC 499 (2011)

REACTOR DESIGN

challenging features of the AP1000 standard design is a matter for a design certification rulemaking, not a combined license proceeding; CLI-11-8, 74 NRC 214 (2011)

REACTOR VESSEL

other than hypothesizing that there will be a failure of the nuclear reactor vessel because of increased stress brought by the proposed license amendment request, the contention does not provide sufficient information to show that a genuine dispute exists; LBP-11-29, 74 NRC 612 (2011)

REACTORS

production and utilization facilities include nuclear power reactors; LBP-11-25, 74 NRC 380 (2011)

REASONABLE ASSURANCE

the standard for aging management programs does not require a 95% confidence level of compliance; LBP-11-18, 74 NRC 29 (2011)

RECORD

"closed record" refers to a record developed at an evidentiary hearing; LBP-11-22, 74 NRC 259 (2011) in a proceeding to be conducted under Subpart L, the evidentiary record is opened upon the filing of the first initial written statements of position and written testimony with supporting affidavits on the admitted contentions; LBP-11-22, 74 NRC 259 (2011)

RECORD OF DECISION

once NRC completes its environmental review, its ROD must state whether NRC has taken all practicable measures within its jurisdiction to avoid or minimize environmental harm from the alternative selected, and if not, to explain why those measures were not adopted, and summarize any license conditions and monitoring programs adopted in connection with mitigation measures; LBP-11-17, 74 NRC 11 (2011)

the adjudicatory record, board decision, and any Commission appellate decisions become, in effect, part of the final environmental impact statement; CLI-11-6, 74 NRC 203 (2011)

the current licensing basis of an operating license shall continue during the license renewal period, but these conditions may be supplemented or amended as necessary to protect the environment during the term of the renewed license and will be derived from information contained in the supplement to the environmental report, as analyzed and evaluated in the ROD; LBP-11-17, 74 NRC 11 (2011)

RECORDKEEPING

licensing boards lack authority to direct the Secretary's administrative activities regarding the handling of documents; CLI-11-13, 74 NRC 635 (2011)

the Department of Energy has independent records retention obligations regarding creation, management, and disposal of records; CLI-11-13, 74 NRC 635 (2011)

REDRESSABILITY

once parties demonstrate standing, they will then be free to assert any contention, which, if proven, will afford them the relief they seek; LBP-11-21, 74 NRC 115 (2011)

REFERRAL OF RULING

boards are authorized to refer a ruling to the Commission if the board determines that the decision or ruling involves a novel issue that merits Commission review at the earliest opportunity; CLI-11-11, 74 NRC 427 (2011); LBP-11-32, 74 NRC 654 (2011)

licensing board refers ruling that applicant has no legal duty to supplement an originally compliant environmental report to incorporate new and significant information that arises after the ER was duly submitted; LBP-11-32, 74 NRC 654 (2011)

REGULATIONS

absent a waiver, contentions challenging applicable statutory requirements or NRC regulations are not admissible; LBP-11-21, 74 NRC 115 (2011)

an exception to the general rule that NRC regulations are not subject to challenge in adjudicatory proceedings is provided; CLI-11-11, 74 NRC 427 (2011)

apparent gaps in 10 C.F.R. 50.54(hh)(2) are outlined; LBP-11-21, 74 NRC 115 (2011)

intervenors may not impose an additional requirement that is not present in a regulation; CLI-11-9, 74 NRC 233 (2011)

- nonpower reactors, including research and test reactors, differ as a class from nuclear power plants and are not covered by 10 C.F.R. Part 54; CLI-11-11, 74 NRC 427 (2011)
- NRC is bound by the unambiguous language of its own regulations; LBP-11-22, 74 NRC 259 (2011) NRC looks to Council on Environmental Quality regulations for guidance, but is not bound by them; CLI-11-11, 74 NRC 427 (2011)
- Part 51, not NEPA, is the source of the legal requirements applicable to the applicant's environmental report; LBP-11-32, 74 NRC 654 (2011)
- Part 54 governs issuance of renewed operating licenses and renewed combined licenses for nuclear power plants licensed pursuant to sections 103 or 104b of the Atomic Energy Act and Title II of the Energy Reorganization Act; CLI-11-11, 74 NRC 427 (2011)
- Part 70 establishes the basic regulatory framework that governs the licensing of a uranium enrichment facility; LBP-11-26, 74 NRC 499 (2011)
- parties with new and significant information that could undermine the rationale for a Commission regulation must seek a rulemaking instead of challenging the regulation in a particular proceeding unless the information uniquely applies to a given adjudication; LBP-11-35, 74 NRC 701 (2011)
- Parts 19, 20, 21, 25, 30, 40, 71, 73, 74, 95, 140, 170, 171, and the agency's NEPA regulations in Part 51 of 10 C.F.R. are applicable to licensing a uranium enrichment facility; LBP-11-26, 74 NRC 499 (2011)
- petitioners may not raise in adjudicatory proceedings contentions attacking the agency's rules and regulations or contentions that are the subject of ongoing rulemakings; LBP-11-29, 74 NRC 612 (2011) where NRC intends to mandate that an originally compliant environmental document be supplemented, it does so explicitly; LBP-11-32, 74 NRC 654 (2011)
- See also Amendment of Regulations; Rules of Practice

REGULATIONS, INTERPRETATION

- challenges to section 50.54(hh)(2) are neither germane to age-related degradation nor unique to the license renewal period; LBP-11-21, 74 NRC 115 (2011)
- comparison of the levels of protection afforded by the unrestricted and restricted decommissioning options is neither explicitly nor implicitly required; CLI-11-12, 74 NRC 460 (2011)
- contradictory provisions of subsections (a) and (b) of 10 C.F.R. 2.710 are discussed; LBP-11-23, 74 NRC 287 (2011)
- environmental qualification of electric equipment important to safety located in an environment that would at no time be significantly more severe than the environment that would occur during normal plant operation is not included within the scope of 10 C.F.R. 50.49(c); LBP-11-20, 74 NRC 65 (2011)
- requirements of section XI of the ASME Boiler and Pressure Vessel Code on inservice inspections are incorporated by reference in 10 C.F.R. 50.55a(b) and 50.55a(g)(4); CLI-11-8, 74 NRC 214 (2011) section 50.54(hh)(2) applies to both current reactor licensees under Part 50 and new applicants for licenses under Part 52; LBP-11-21, 74 NRC 115 (2011)
- section 51.53(c)(3)(iv) does not apply to license amendment applicants requesting a power uprate; LBP-11-29, 74 NRC 612 (2011)
- section 52.80(d) mandates compliance with the agency's loss-of-large-areas requirements in 10 C.F.R. 50.54(hh)(2), but does not apply to a license renewal proceeding; LBP-11-21, 74 NRC 115 (2011)
- the ALARA requirement in section 20.1101(b) applies to the dose criteria for license termination; CLI-11-12, 74 NRC 460 (2011)
- the phrase "new" in 10 C.F.R. 51.53(c)(3)(iv) requires that the environmental report include environmental information that is new as compared to the original ER for the same facility and new as of the time of submission of the required ER, but does not impose a continuing duty to supplement an ER that was compliant when submitted; LBP-11-32, 74 NRC 654 (2011)
- the term "petition" in section 2.335 refers to the waiver petition, not a petition to intervene; CLI-11-11, 74 NRC 427 (2011)
- the "uniqueness" factor of the rule waiver test is interpreted; LBP-11-35, 74 NRC 701 (2011)
- use of "and" in the list of requirements for rule waiver means that all four factors must be met; CLI-11-11, 74 NRC 427 (2011)
- where applicant has raised sufficient question as to the appropriate deadline, the board may conclude that it would be unfair to penalize applicant on account of what might be ambiguity in NRC's own regulations; LBP-11-19, 74 NRC 61 (2011)

REGULATORY OVERSIGHT PROCESS

federal financial regulatory agencies regularly examine banks within their jurisdiction, generally at 12- or 18-month intervals; CLI-11-4, 74 NRC 1 (2011)

RELEVANCE

new information from studies of the Fukushima event as to potential consequences of a severe accident at a U.S. nuclear power plant is irrelevant to any uncertainty that might exist regarding which agency has authority over cleanup after a severe accident; LBP-11-20, 74 NRC 65 (2011)

REMAND

- a proceeding will remain open during the pendency of a remand; LBP-11-23, 74 NRC 287 (2011) agencies can reach exactly the same result on a remanded issue as long as they rely on the correct view of a law that they previously misinterpreted, or as long as they explain themselves better or develop better evidence for their position; CLI-11-12, 74 NRC 460 (2011)
- during pendency of remand, intervenors are free to submit a motion to reopen the record pursuant to 10 C.F.R. 2.326, should they seek to address any genuinely new issues related to the license renewal application that previously could not have been raised; LBP-11-20, 74 NRC 65 (2011)
- intervenor's failure to address the reopening standards in 10 C.F.R. 2.326 creates a yawning deficiency in its submissions because the evidentiary record has been closed and the board's jurisdiction in the proceeding does not extend beyond the narrow scope of the remand; LBP-11-20, 74 NRC 65 (2011)

REOPENING A RECORD

- a newly constituted board applied the reopening standard to new contentions filed after the prior proceeding was terminated for want of pending or admitted contentions; LBP-11-22, 74 NRC 259 (2011)
- an enhancement to a program does not constitute new information sufficient to support a new contention; LBP-11-20, 74 NRC 65 (2011)
- as a matter of law and logic, if applicant's enhanced monitoring program is inadequate, then applicant's unenhanced monitoring program was a fortiori inadequate, and intervenor had a regulatory obligation to challenge it in its original petition to intervene; LBP-11-20, 74 NRC 65 (2011)
- contention that indicates neither positive nor negative impact from proposed severe accident mitigation alternative implementation does not paint the required seriously different picture of the environmental landscape to reopen the record; LBP-11-35, 74 NRC 701 (2011)
- for new contentions to be admitted after the record has closed, petitioner must satisfy the Commission's demanding regulatory requirements for reopening the record; LBP-11-23, 74 NRC 287 (2011)
- intervenor's failure to address the reopening standards in 10 C.F.R. 2.326 creates a yawning deficiency in its submissions because the evidentiary record has been closed and the board's jurisdiction in the proceeding does not extend beyond the narrow scope of the remand; LBP-11-20, 74 NRC 65 (2011)
- intervenors' speculation that further review of certain issues might change some conclusions in the final safety evaluation report does not justify restarting the hearing process; LBP-11-20, 74 NRC 65 (2011); LBP-11-35, 74 NRC 701 (2011)
- new contentions filed after the record has closed must satisfy the timeliness requirement of either 10 C.F.R. 2.309(f)(2) or 2.309(c), and the admissibility requirements of section 2.309(f)(1); LBP-11-22, 74 NRC 259 (2011)
- parties seeking to reopen a closed record to introduce a new issue must back their claim with enough evidence to withstand summary disposition when measured against their opponent's contravening evidence: LBP-11-35, 74 NRC 701 (2011)
- proponents of motions to reopen the record bear a heavy burden because it is an extraordinary action; LBP-11-22, 74 NRC 259 (2011)

See also Motions to Reopen

- severe accident mitigation alternatives analysis is a cost-benefit analysis, not a direct safety analysis, and thus does not raise any exceptionally grave issue; LBP-11-23, 74 NRC 287 (2011)
- should requirements for reopening the record be satisfied, the requirements for untimely contentions must also be satisfied, as well as the contention admissibility criteria of section 2.309(f)(1); LBP-11-35, 74 NRC 701 (2011)
- showing merely that changes to the severe accident mitigation alternatives analysis results are possible or likely or probable is not enough to reopen an record; LBP-11-35, 74 NRC 701 (2011)

- showing necessary to demonstrate that a materially different result in the outcome of the severe accident mitigation alternatives analysis would be or would have been likely had the newly proffered evidence been considered initially is discussed; LBP-11-35, 74 NRC 701 (2011)
- standards for reopening apply not only when a party is seeking to introduce new evidence on a previously admitted contention after the evidentiary record is closed, but also when a party is seeking to introduce a new contention after the record is closed; LBP-11-23, 74 NRC 287 (2011)
- the burden of satisfying the reopening requirements is a heavy one, and proponents of a reopening motion bear the burden of meeting all of the requirements; LBP-11-20, 74 NRC 65 (2011)
- the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention; LBP-11-22, 74 NRC 259 (2011)
- where initial decisions have been issued, the record should not be reopened to take evidence on some accident-related issue unless the party seeking reopening shows that there is significant new evidence, not included in the record, that materially affects the decision; CLI-11-5, 74 NRC 141 (2011)
 REPLY BRIEFS
 - a reply must be filed within 7 days after the filing of answers to an intervention petition; LBP-11-21, 74 NRC 115 (2011)
 - because it relates to Staff's position on the reviewability of the Board's decision, Staff's statement regarding its inclination not to revise the final supplemental environmental impact statement is presented for the first time in Staff's answer; CLI-11-14, 74 NRC 801 (2011)
 - briefs are limited to the scope of the arguments set forth in the original motion or petition; LBP-11-34, 74 NRC 685 (2011)
 - briefs cannot be used to present entirely new facts or arguments in an attempt to reinvigorate thinly supported contentions; LBP-11-34, 74 NRC 685 (2011)
 - briefs may not contain new information that was not raised in either the petition or answers, but may provide arguments that respond to the petition or answers, whether they are offered in rebuttal or in support; CLI-11-14, 74 NRC 801 (2011)
 - briefs must focus narrowly on the legal or factual arguments first presented in the original motion or petition or raised in the answers to it; LBP-11-34, 74 NRC 685 (2011)
 - failure to read NRC regulations carefully does not constitute good cause for late-filed motions; LBP-11-34, 74 NRC 685 (2011)
 - if a contention as originally pleaded did not satisfy 10 C.F.R. 2.309(f)(1), a reply cannot remediate the deficiency by introducing, for the first time, references to a genuine dispute with the license application at issue; LBP-11-34, 74 NRC 685 (2011)
- parties do not have an automatic right to respond to reply briefs; LBP-11-34, 74 NRC 685 (2011) petitioner may correct or supplement its showing on standing; LBP-11-21, 74 NRC 115 (2011)

REPLY TO ANSWER TO MOTION

- filings not otherwise authorized by NRC rules are allowed only where necessity or fairness dictates; CLI-11-14, 74 NRC 801 (2011)
- parties do not have an automatic right to respond to reply briefs; LBP-11-34, 74 NRC 685 (2011) parties may choose whether to submit a petition for review, an answer in support of the petition, or neither; CLI-11-14, 74 NRC 801 (2011)
- petitioning parties may reply separately to each answer, especially considering that the answers may present different views or arguments; CLI-11-14, 74 NRC 801 (2011)

REPORTING REQUIREMENTS

- applicants shall notify NRC of information identified by the applicant as having, for the regulated activity, a significant implication for public health and safety or common defense and security; LBP-11-32, 74 NRC 654 (2011)
- contracts that licensee is relying on for decommissioning funding must be reported to NRC; DD-11-7, 74 NRC 787 (2011)
- evidence that relief valve failure and inoperability may have existed for a period of time greater than allowed by technical specifications is a reportable event; DD-11-6, 74 NRC 420 (2011)
- licensee must notify NRC as soon as practical and in all cases within 1 hour of the occurrence, of any deviation from a plant's technical specification; DD-11-6, 74 NRC 420 (2011)
- Part 70 applicants are required to establish a radiological monitoring program to monitor and report the release of radiological gaseous and liquid effluents to the environment; LBP-11-26, 74 NRC 499 (2011)

- power reactor licensees must report decommissioning funding assurance information to NRC at least once every 2 years; DD-11-7, 74 NRC 787 (2011)
- relief valve failure and inoperability found during the refueling outage, which potentially affected the ability of the SRVs to satisfy design actuation requirements, meets the requirements for a licensee event report; DD-11-6, 74 NRC 420 (2011)
- Staff guidance documents outline acceptable methods for designing a radiological monitoring program and submitting required semiannual reports specifying principal radionuclide releases to unrestricted areas for the purpose of estimating maximum potential annual public doses from such releases; LBP-11-26, 74 NRC 499 (2011)

REOUEST FOR ACTION

- for contentions that fall within the facility's current licensing basis, petitioner may seek action on its concerns by either filing a petition for rulemaking under 10 C.F.R. 2.802 or submitting an enforcement petition under 10 C.F.R. 2.206; LBP-11-21, 74 NRC 115 (2011)
- Fukushima-related petitions for suspension of proceeding and rescission of regulations that make generic conclusions about environmental impacts of severe reactor and spent fuel pool accidents and that preclude consideration of those issues in individual licensing proceedings are denied; LBP-11-39, 74 NRC 862 (2011)
- if petitioner is concerned about the sufficiency of the ongoing oversight of a nuclear power plant and its current evacuation plan, it has the option of requesting a modification, suspension, or revocation of its operating license; LBP-11-29, 74 NRC 612 (2011)
- to the extent petitioner believes there are existing management competence questions that merit immediate action, then its remedy is to direct the Staff's attention to those matters by filing a request for action under 10 C.F.R. 2.206; CLI-11-11, 74 NRC 427 (2011)

REQUEST FOR ADDITIONAL INFORMATION

NRC Staff is empowered to issue requests for additional information relevant to an applicant's environmental report; LBP-11-32, 74 NRC 654 (2011); LBP-11-33, 74 NRC 675 (2011; LBP-11-34, 74 NRC 685 (2011)

RESEARCH REACTORS

- admission of a management integrity contention relied on references to a serious incident involving shutdown of the reactor, management responsible for the incident remaining in place, and a purported climate of reprisals for bringing forward safety issues, and reference to at least one expert witness in support of the contention: CLI-11-11, 74 NRC 427 (2011)
- nonpower reactors, including research and test reactors, differ as a class from nuclear power plants and are not covered by 10 C.F.R. Part 54; CLI-11-11, 74 NRC 427 (2011)

RESTRICTED RELEASE

- a benefit-cost analysis is used to determine initial eligibility for restricted release; CLI-11-12, 74 NRC 460 (2011)
- agreement state license termination regulations are not less protective than or incompatible with NRC's in making the terms of restricted release considerably more difficult than those for unrestricted release; CLI-11-12, 74 NRC 460 (2011)
- NRC regulations neither explicitly nor implicitly require a comparison of the levels of protection afforded by the unrestricted and restricted decommissioning options; CLI-11-12, 74 NRC 460 (2011)
- terminating a license for restricted use relies on legally enforceable institutional controls to achieve the 25-mrem dose limit; CLI-11-12, 74 NRC 460 (2011)
- the ALARA principle has been incorporated into the restricted-use portion of the license termination rule to screen out sites that should be removing contamination to achieve unrestricted use; CLI-11-12, 74 NRC 460 (2011)
- the ALARA principle, either as a general regulatory principle or as used in NRC's license termination rule, does not incorporate or call for any comparative analysis of doses from restricted and unrestricted release; CLI-11-12, 74 NRC 460 (2011)
- unrestricted release and restricted release are both available as independent regulatory options that would provide adequate protection to the public health and safety if the applicable dose and other criteria are met: CLI-11-12, 74 NRC 460 (2011)

REVIEW

See Appellate Review; Environmental Review; NRC Staff Review; Standard of Review

REVIEW, DISCRETIONARY

- appellate review of interlocutory licensing board orders is disfavored and will be undertaken as a discretionary matter only in extraordinary circumstances; CLI-11-10. 74 NRC 251 (2011)
- the Commission will grant a petition for review at its discretion, giving due weight to the existence of a substantial question with respect to one or more of the considerations of 10 C.F.R. 2.341(b)(4)(i)-(v); CLI-11-9, 74 NRC 233 (2011)

REVIEW, INTERLOCUTORY

- disfavor of piecemeal appeals leads the Commission to grant interlocutory review only upon a showing of extraordinary circumstances; CLI-11-14, 74 NRC 801 (2011)
- grant of summary disposition where other contentions are pending is not a final decision, and is appealable only upon a showing that the standards for interlocutory review have been met; CLI-11-14, 74 NRC 801 (2011)
- parties seeking interlocutory review must show that the issue to be reviewed threatens the party adversely affected by it with immediate and serious irreparable impact which, as a practical matter, could not be alleviated through a petition for review of the presiding officer's final decision or affects the basic structure of the proceeding in a pervasive or unusual manner; CLI-11-14, 74 NRC 801 (2011)
- parties should not seek interlocutory review by invoking the grounds under which the Commission might exercise its supervisory authority; CLI-11-14, 74 NRC 801 (2011)

REVIEW, SUA SPONTE

the Commission disfavors requests to invoke its inherent supervisory authority over adjudications; CLI-11-13, 74 NRC 635 (2011)

RICKS

small doses of radiation below dose limits, while safe and acceptable, may have some associated risk and should be reduced below limits when reasonable; CLI-11-12, 74 NRC 460 (2011)

RULE OF REASON

- agencies need only address reasonably foreseeable impacts, not those that are remote and speculative or inconsequentially small; LBP-11-33, 74 NRC 675 (2011); LBP-11-38, 74 NRC 817 (2011); LBP-11-39, 74 NRC 862 (2011)
- agency decisions regarding the need to supplement an environmental impact statement based on new and significant information are subject to the rule of reason; LBP-11-26, 74 NRC 499 (2011)
- because NEPA is premised on a rule of reason, NRC need only consider reasonable alternatives to a proposed action; LBP-11-26, 74 NRC 499 (2011)
- NEPA does not require a worst-case analysis; LBP-11-38, 74 NRC 817 (2011)
- NEPA should be construed in the light of reason if it is not to demand virtually infinite study and resources; LBP-11-38, 74 NRC 817 (2011)
- NEPA's hard look at environmental impacts is tempered by a rule of reason; LBP-11-38, 74 NRC 817 (2011)
- severe accident mitigation alternatives analysis is neither a worst-case nor a best-case impacts analysis, and the agency's obligations under NEPA are tempered by a practical rule of reason; LBP-11-18, 74 NRC 29 (2011)
- there is no NEPA requirement to use the best scientific methodology; LBP-11-38, 74 NRC 817 (2011) RULEMAKING
 - admission of contentions that NRC may ultimately deal with generically through notice-and-comment rulemaking is precluded; LBP-11-32, 74 NRC 654 (2011)
 - any changes in NRC rules post-9/11 that might bear on license renewal reviews could be addressed via late-filed contentions; CLI-11-5, 74 NRC 141 (2011)
 - for contentions that fall within the facility's current licensing basis, petitioner may seek action on its concerns by either filing a petition for rulemaking under 10 C.F.R. 2.802 or submitting an enforcement petition under 10 C.F.R. 2.206; LBP-11-21, 74 NRC 115 (2011)
 - for suspension of licensing proceedings, petitioners must show that continuation of proceedings, pending consideration of a rulemaking petition, would jeopardize the public health and safety, prove an obstacle to fair and efficient decisionmaking, or prevent appropriate implementation of any pertinent rule or policy changes that might emerge from NRC's continued evaluation of the impacts of the Fukushima accident; LBP-11-33, 74 NRC 675 (2011); LBP-11-34, 74 NRC 685 (2011)

- licensing boards (as opposed to the Commission) are not empowered to grant a request to suspend a licensing proceeding pending disposition of a rulemaking petition; LBP-11-33, 74 NRC 675 (2011) NRC has discretion to resolve issues generically by rulemaking: CLI-11-11, 74 NRC 427 (2011)
- NRC has discretion to resolve issues generically by rulemaking; CLI-11-11, 74 NRC 427 (2011) parties with new and significant information that could undermine the rationale for a Commission
- regulation must seek a rulemaking instead of challenging the regulation in a particular proceeding unless the information uniquely applies to a given adjudication; LBP-11-35, 74 NRC 701 (2011)
- petitioner may request that the Commission suspend all or any part of any licensing proceeding to which petitioner is a party, pending disposition of the petition for rulemaking; CLI-11-5, 74 NRC 141 (2011)
- spent fuel storage pool matters will be addressed, if studies of implications from Fukushima warrant, through more generic regulatory reform; LBP-11-35, 74 NRC 701 (2011)
- the board does not consider intervenor's petition, which requests rulemaking and suspension of the proceeding, because the discussion in the petition's body specifically directs those requests to the Commission which has already responded to these requests; LBP-11-34, 74 NRC 685 (2011)
- the Commission may consider the rulemaking request of a nonparty as an exercise of its inherent supervisory powers over proceedings; CLI-11-5, 74 NRC 141 (2011)
- to the extent that petitioner challenges the generic environmental impact statement, its remedy is a petition for rulemaking or a petition for a waiver of the rules based on circumstances; CLI-11-11, 74 NRC 427 (2011)

RULES OF PRACTICE

- a board order is appealable when it disposes of a major segment of the case or terminates a party's right to participate; CLI-11-10, 74 NRC 251 (2011)
- a hearing request or petition to intervene must set forth with particularity the contentions sought to be raised by satisfying the six criteria; LBP-11-21, 74 NRC 115 (2011)
- a motion for summary disposition may be granted in a proceeding governed by Subpart G if filings in the proceeding, depositions, answers to interrogatories, and admissions on file, together with statements of the parties and affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law; LBP-11-17, 74 NRC 11 (2011)
- a motion to file new or amended contentions must address the motion to reopen standards after an intervention petition has been denied; LBP-11-20, 74 NRC 65 (2011)
- a motion to reopen a closed record must be timely, address a significant safety or environmental issue, and demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially; LBP-11-20, 74 NRC 65 (2011)
- a motion to reopen must be accompanied by affidavits that set forth the factual and/or technical bases for the claim that the reopening criteria have been met; LBP-11-20, 74 NRC 65 (2011)
- a motion to reopen that relates to a contention not previously in controversy among the parties must also satisfy the requirements for nontimely contentions in section 2.309(c); CLI-11-8, 74 NRC 214 (2011); LBP-11-23, 74 NRC 287 (2011)
- a party may move to reopen the case to allow it to litigate a new version of a previously rejected contention, even if the licensing board has closed the evidentiary record and the Commission had issued its final decision authorizing the Staff to issue the license for the proposed facility; LBP-11-22, 74 NRC 259 (2011)
- a proper showing of standing includes the name, address, and telephone number of petitioner, nature of petitioner's right under a relevant statute to be made a party, nature and extent of the petitioner's property, financial, or other interest in the proceeding, and possible effect of any decision or order that might be issued on petitioner's interest; LBP-11-21, 74 NRC 115 (2011)
- a reply must be filed within 7 days after the filing of answers to an intervention petition; LBP-11-21, 74 NRC 115 (2011)
- a request for hearing or petition for leave to intervene must explain proposed contentions with particularity; CLI-11-8, 74 NRC 214 (2011)
- a request for hearing regarding a newly proffered contention cannot be admitted unless it satisfies the stringent standards for reopening the record; LBP-11-20, 74 NRC 65 (2011)
- absent a waiver or exception from the presiding officer, no NRC rule or regulation, or provision thereof, concerning licensing of production and utilization facilities is subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding; LBP-11-21, 74 NRC 115 (2011); LBP-11-35, 74 NRC 701 (2011)

- absent error of law or abuse of discretion, the Commission defers to licensing board rulings on contention admissibility; CLI-11-9, 74 NRC 233 (2011)
- affidavits setting forth the factual and/or technical bases for the claim that the reopening criteria have been met must address each of the criteria separately, with a specific explanation of why it has been met; LBP-11-20, 74 NRC 65 (2011)
- all contentions must satisfy the six criteria specified in 10 C.F.R. 2.309(f)(1)(i)-(vi); LBP-11-32, 74 NRC 654 (2011); LBP-11-39, 74 NRC 862 (2011)
- although NRC regulations mandate that a petition contain the name, address, and telephone number of petitioner, the Commission's hearing notice advises prospective petitioners not to include personal privacy information, such as home addresses or home phone numbers, in their filings; LBP-11-21, 74 NRC 115 (2011)
- although the entire record is considered on appeal, including pleadings that appellants ask to be adopted by reference, the Commission's decision responds to the arguments made explicitly in the appellate brief; CLI-11-8, 74 NRC 214 (2011)
- an expert's affidavit supporting a motion to reopen must supply the factual and legal foundation for assertions that the reopening criteria are satisfied; LBP-11-20, 74 NRC 65 (2011)
- an organization seeking to intervene in its own right must allege that the challenged action will cause a cognizable injury to its interests or to the interests of its members; LBP-11-21, 74 NRC 115 (2011)
- any contention, regardless of when it is filed, must meet the requirements of 10 C.F.R. 2.309(f)(1)(i)-(vi); LBP-11-20, 74 NRC 65 (2011)
- appellants must clearly identify the errors in the decision below and ensure that their brief contains sufficient information and cogent argument to alert the other parties and the Commission to the precise nature of and support for their claims; CLI-11-8, 74 NRC 214 (2011)
- appellate review of interlocutory licensing board orders is disfavored, and will be undertaken as a discretionary matter only in extraordinary circumstances; CLI-11-10, 74 NRC 251 (2011)
- at the contention admissibility stage, a board evaluates whether a petitioner has provided sufficient support to justify admitting the contention for further litigation; CLI-11-8, 74 NRC 214 (2011)
- at the contention admissibility stage, petitioners need not marshal their evidence as though preparing for an evidentiary hearing; LBP-11-21, 74 NRC 115 (2011)
- at the contention admissibility stage, the burden is on intervenors to demonstrate a deficiency in the application; CLI-11-9, 74 NRC 233 (2011)
- at the contention pleading stage, parties must come forward with sufficiently detailed grievances to allow a board to conclude that genuine disputes exist justifying a commitment of adjudicatory resources; LBP-11-21, 74 NRC 115 (2011)
- automatic stay provisions were removed in 2007; CLI-11-5, 74 NRC 141 (2011)
- bare assertions and speculation are insufficient to support the heavy burden placed on the proponent of a motion to reopen to demonstrate that the motion should be granted; CLI-11-8, 74 NRC 214 (2011)
- bare assertions are insufficient to support a contention; CLI-11-11, 74 NRC 427 (2011)
- bare assertions in a contention run afoul of NRC's intention to focus the hearing process and provide notice to the other parties; LBP-11-21, 74 NRC 115 (2011)
- boards cannot reconstruct intervenor's pleadings to find that they might be interpreted to satisfy the requirements for reopening a record where the intervenor itself has explicitly argued it need not; LBP-11-20, 74 NRC 65 (2011)
- boards do not adjudicate disputed facts at the contention admission stage; LBP-11-21, 74 NRC 115 (2011)
- boards may take official notice of any fact of which a court of the United States may take judicial notice or of any technical or scientific fact within the knowledge of the Commission as an expert body; LBP-11-20, 74 NRC 65 (2011)
- boards should refer rulings that raise novel or legal policy issues that would benefit from Commission review; CLI-11-11, 74 NRC 427 (2011)
- boards will not hunt for information that the agency's procedural rules require be explicitly identified and fully explained; CLI-11-8, 74 NRC 214 (2011)
- briefs on appeal are limited to 30 pages, absent Commission order directing otherwise; CLI-11-8, 74 NRC 214 (2011)

- briefs on appeal must conform to the requirements stated in 10 C.F.R. 2.341(c)(2); CLI-11-8, 74 NRC 214 (2011)
- by filing proposed new or amended contention within the time specified in the initial scheduling order, petitioner satisfies timeliness requirements but would still have to satisfy the other requirements of section 2.309(f)(2) or section 2.309(c), as well as the contention admissibility requirements of 10 C.F.R. 2.309(f)(1); LBP-11-22, 74 NRC 259 (2011)
- conclusory statement that appellants proved their position is not sufficient to show clear error or abuse of discretion on the part of the board; CLI-11-8, 74 NRC 214 (2011)
- contention admissibility requirements are strict by design to help assure that the NRC hearing process will be appropriately focused upon disputes that can be resolved in the adjudication; LBP-11-29, 74 NRC 612 (2011)
- contention admissibility standards are deliberately strict, and any contention that does not satisfy NRC requirements will be rejected; CLI-11-8, 74 NRC 214 (2011)
- contention fails to satisfy the good cause requirements of 10 C.F.R. 2.309(c)(i) because its foundational argument does not rest upon new and materially different information and could and should have been filed at the outset of the proceeding; LBP-11-35, 74 NRC 701 (2011)
- contention is inadmissible for failure to show that a genuine dispute exists with applicant on a material issue of law or fact; LBP-11-33, 74 NRC 675 (2011)
- contention pleading rules are designed to ensure that only well-defined issues are admitted for hearing and a board should not add material not raised by a petitioner in order to render a contention admissible; CLI-11-11, 74 NRC 427 (2011)
- contentions must be based on documents or other information available at the time the petition is to be filed, such as the application, supporting safety analysis report, environmental report or other supporting document filed by an applicant or licensee, or otherwise available to a petitioner; LBP-11-29, 74 NRC 612 (2011)
- contentions must be raised with sufficient detail to put the parties on notice of the issues to be litigated; CLI-11-11, 74 NRC 427 (2011)
- contentions that amount to an attack on applicable statutory requirements or represent a challenge to the basic structure of the Commission's regulatory process must be rejected; LBP-11-29, 74 NRC 612
- contentions that challenge applicant's compliance with the loss-of-large-areas requirements of 10 C.F.R. 50.54(hh)(2) are not admissible because they are not within the scope of a license renewal proceeding; LBP-11-21, 74 NRC 115 (2011)
- contentions that neither explain how the application is inadequate nor identify which sections of the application are inadequate are inadmissible; LBP-11-21, 74 NRC 115 (2011)
- contradictory provisions of subsections (a) and (b) of 10 C.F.R. 2.710 are discussed; LBP-11-23, 74 NRC 287 (2011)
- disfavor of piecemeal appeals leads the Commission to grant interlocutory review only upon a showing of extraordinary circumstances; CLI-11-14, 74 NRC 801 (2011)
- each of the criteria for a motion to reopen must be separately addressed in an affidavit, with a specific explanation of why it has been met; CLI-11-8, 74 NRC 214 (2011); LBP-11-35, 74 NRC 701 (2011)
- each organization member seeking representation must qualify for standing in his or her own right, the interests that the representative organization seeks to protect must be germane to its own purpose, and neither the asserted claim nor the requested relief must require an individual member to participate in the organization's legal action; LBP-11-29, 74 NRC 612 (2011)
- evaluation of a contention at the contention admissibility stage should not be confused with evaluation at the merits stage; CLI-11-8, 74 NRC 214 (2011)
- even when a proposed new contention is not found timely, it may be admitted if it meets a balancing of the eight nontimely filing factors; LBP-11-39, 74 NRC 862 (2011)
- failure of petitioner to cite even a single specific deficiency in the application precludes satisfaction of the specificity requirement of 10 C.F.R. 2.309(f)(1)(vi); LBP-11-29, 74 NRC 612 (2011)
- failure to comply with any of the contention pleading requirements precludes admission of a contention; LBP-11-21, 74 NRC 115 (2011)
- filing of new contentions based on the SER and Staff NEPA documents is expressly contemplated by the Model Milestones; LBP-11-22, 74 NRC 259 (2011)

- filings not otherwise authorized by NRC rules are allowed only where necessity or fairness dictates; CLI-11-14, 74 NRC 801 (2011)
- for a request for hearing and petition to intervene to be granted, petitioner must establish that it has standing and propose at least one admissible contention; LBP-11-21, 74 NRC 115 (2011)
- standing and propose at least one admissible contention; LBP-11-21, /4 NRC 115 (2011) for a rule waiver request to be granted, all four factors must be met; LBP-11-35, 74 NRC 701 (2011)
- for new contentions to be admitted after the record has closed, petitioner must satisfy the Commission's demanding regulatory requirements for reopening the record; LBP-11-23, 74 NRC 287 (2011)
- good cause for failure to file on time is the most important late-filing factor; LBP-11-23, 74 NRC 287 (2011); LBP-11-32, 74 NRC 654 (2011)
- grant of summary disposition where other contentions are pending is not a final decision, and is appealable only upon a showing that the standards for interlocutory review have been met; CLI-11-14, 74 NRC 801 (2011)
- if a contention is based upon new information, it must meet the standards of 10 C.F.R. 2.309(f)(2); LBP-11-35, 74 NRC 701 (2011)
- if a proposed new contention is not timely under section 2.309(f)(2), then the proponent must address the eight criteria of 10 C.F.R. 2.309(c)(1); LBP-11-32, 74 NRC 654 (2011)
- if good cause for late filing is not shown, boards may still permit the filing, but petitioner or intervenor must make a strong showing on the other factors; LBP-11-32, 74 NRC 654 (2011)
- if intervenors file a new or amended contention, with supporting materials, within 60 days after pertinent information first becomes available, then the contention will be deemed timely filed and intervenors will be absolved of their obligation to satisfy the late-filing requirements of 10 C.F.R. 2.309(c) or the requirements for reopening the record; LBP-11-22, 74 NRC 259 (2011)
- if petitioner fails to show standing pursuant to section 2.309(d), a board may grant discretionary standing when at least one requestor/petitioner has established standing and at least one admissible contention has been admitted so that a hearing will be held; LBP-11-29, 74 NRC 612 (2011)
- if reasonable minds could differ as to the import of the evidence, summary disposition is not appropriate; LBP-11-20, 74 NRC 65 (2011)
- if reopening standards are inapplicable, or if reopening criteria have been satisfied, a new contention must also meet the standards for contention admissibility; LBP-11-35, 74 NRC 701 (2011)
- in a proceeding governed by Subpart L, the board is to apply the standards of Subpart G when ruling on motions for summary disposition; LBP-11-17, 74 NRC 11 (2011)
- in affidavits accompanying motions to reopen, each of the criteria must be separately addressed, with a specific explanation of why it has been met; LBP-11-23, 74 NRC 287 (2011)
- in an ongoing proceeding in which a hearing petition has been granted and there are contentions pending for merits resolution, intervenors must satisfy two sets of requirements to gain the admission of a new contention; LBP-11-37, 74 NRC 774 (2011)
- in its discretion, the Commission may allow oral argument upon the request of a party made in a petition for review or brief on review, or upon its own initiative; CLI-11-8, 74 NRC 214 (2011)
- in reactor license renewal proceedings, petitioner is presumed to have standing to intervene without the need to specifically plead injury, causation, and redressability if petitioner lives within 50 miles of the nuclear power facility; LBP-11-21, 74 NRC 115 (2011)
- in the absence of clear error or abuse of discretion, the Commission defers to boards' rulings on threshold issues; CLI-11-8, 74 NRC 214 (2011)
- in weighing the timeliness factors for motions to reopen, greatest weight is accorded to good cause for failure to file on time; CLI-11-8, 74 NRC 214 (2011)
- interlocutory review of board rulings is permitted when petitioner demonstrates either that the ruling threatens the petitioner with immediate and irreparable harm or the ruling has a pervasive and unusual effect on the structure of the proceeding; CLI-11-6, 74 NRC 203 (2011)
- intervenor is not free to change the focus of its admitted contention, at will, as the litigation progresses; LBP-11-38, 74 NRC 817 (2011)
- intervenor may propose new contentions based on the Fukushima accident, the SER, the new SEIS, or other sources of new and materially different information, provided that it does so promptly after the new information becomes available and that it successfully fulfills the general contention admissibility requirements; LBP-11-22, 74 NRC 259 (2011)

- intervenor's failure to address the reopening standards in 10 C.F.R. 2.326 creates a yawning deficiency in its submissions because the evidentiary record has been closed and the board's jurisdiction in the proceeding does not extend beyond the narrow scope of the remand; LBP-11-20, 74 NRC 65 (2011) intervenors may not impose an additional requirement that is not present in a regulation; CLI-11-9, 74 NRC 233 (2011)
- intervenors must assert a sufficiently specific challenge that demonstrates that further inquiry is warranted; CLI-11-9, 74 NRC 233 (2011)
- intervenors' speculation that further review of certain issues might change some conclusions in the final safety evaluation report does not justify restarting the hearing process; LBP-11-23, 74 NRC 287 (2011) intervention petition is denied for failure to proffer an admissible contention; LBP-11-21, 74 NRC 115 (2011)
- intervention petitioner bears the burden of providing facts sufficient to establish its standing; LBP-11-21, 74 NRC 115 (2011)
- it is intervention petitioner's responsibility to put others on notice as to the issues it seeks to litigate; CLI-11-11, 74 NRC 427 (2011)
- judicial concepts of standing are generally followed in NRC proceedings; LBP-11-21, 74 NRC 115 (2011) judicial concepts of standing require that petitioner establish that it has suffered a distinct and palpable harm that constitutes injury-in-fact within the zone of interests arguably protected by the governing statute and that the injury can fairly be traced to the challenged action and is likely to be redressed by a favorable decision; LBP-11-21, 74 NRC 115 (2011)
- like issues related to standing and contention admissibility, the question whether a pleading satisfies the requirements of section 2.326 and therefore justifies reopening a closed proceeding is a threshold issue; CLI-11-8, 74 NRC 214 (2011)
- mere notice pleading is insufficient for contention admission; LBP-11-21, 74 NRC 115 (2011)
- motions seeking admission of new or amended contentions must be filed within 30 days of the date the information that forms the basis for the contention becomes available; CLI-11-8, 74 NRC 214 (2011)
- motions to admit new contentions must be rejected if they do not include a certification by movant's attorney or representative that movant has made a sincere effort to contact other parties and resolve the issues raised in the motion, and that movant's efforts have been unsuccessful; LBP-11-34, 74 NRC 685 (2011)
- motions to reopen must be accompanied by affidavits that set forth the factual and/or technical bases for the movant's claim that the criteria of 10 C.F.R. 2.326(a) have been satisfied; CLI-11-8, 74 NRC 214 (2011); LBP-11-23, 74 NRC 287 (2011); LBP-11-35, 74 NRC 701 (2011)
- motions to reopen must be timely, must address a significant safety or environmental issue, and must demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially; LBP-11-35, 74 NRC 701 (2011)
- motions to reopen will not be granted unless all of the criteria of 10 C.F.R. 2.326(a) are satisfied; CLI-11-8, 74 NRC 214 (2011)
- new contention is inadmissible because it neither points to nor references any specific portion of the application that is disputed; LBP-11-35, 74 NRC 701 (2011)
- new contentions are deemed timely if filed within 30 days of the date when the new and material information on which they are based first became available; LBP-11-39, 74 NRC 862 (2011)
- new contentions filed after the record has closed must satisfy the timeliness requirement of either 10 C.F.R. 2.309(f)(2) or 2.309(c), and the admissibility requirements of section 2.309(f)(1); LBP-11-22, 74 NRC 259 (2011); LBP-11-34, 74 NRC 685 (2011); LBP-11-39, 74 NRC 862 (2011)
- no rule or regulation of the Commission, or any provision thereof, concerning the licensing of production and utilization facilities, source material, special nuclear material, or byproduct material is subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding; CLI-11-8, 74 NRC 214 (2011)
- NRC follows contemporaneous judicial concepts of standing, which call for showing of a concrete and particularized injury that is fairly traceable to the challenged action and is likely to be redressed by a favorable decision, where the injury is to an interest arguably within the zone of interests protected by the governing statute; LBP-11-29, 74 NRC 612 (2011)
- NRC has endorsed a four-pronged test for grant of a rule waiver; LBP-11-35, 74 NRC 701 (2011)

- NRC's demanding regulatory requirements for reopening the record regarding contentions submitted after the record has closed must be satisfied; LBP-11-20, 74 NRC 65 (2011)
- once parties demonstrate standing, they will then be free to assert any contention, which, if proven, will afford them the relief they seek; LBP-11-21, 74 NRC 115 (2011)
- organizations may claim standing on their own behalf; LBP-11-29, 74 NRC 612 (2011)
- page limit for appellate briefs excludes tables of contents and citations, appropriate exhibits, and statutory or regulatory extracts; CLI-11-8, 74 NRC 214 (2011)
- parties are expected to adhere to page-limit requirements, or timely seek leave for an enlargement of the page limit; CLI-11-14, 74 NRC 801 (2011)
- parties do not have an automatic right to respond to reply briefs; LBP-11-34, 74 NRC 685 (2011)
- parties may choose whether to submit a petition for review, an answer in support of the petition, or neither: CLI-11-14, 74 NRC 801 (2011)
- parties may file a petition for review of licensing board full or partial initial decisions, both of which are considered to be final; CLI-11-14, 74 NRC 801 (2011)
- parties seeking interlocutory review must show that the issue to be reviewed threatens the party adversely affected by it with immediate and serious irreparable impact which, as a practical matter, could not be alleviated through a petition for review of the presiding officer's final decision or affects the basic structure of the proceeding in a pervasive or unusual manner; CLI-11-14, 74 NRC 801 (2011)
- petitioner cannot rest its contentions on bare assertions and speculation; LBP-11-21, 74 NRC 115 (2011) petitioner does not have to prove its contentions at the admissibility stage; LBP-11-21, 74 NRC 115 (2011)
- petitioner may correct or supplement its showing on standing; LBP-11-21, 74 NRC 115 (2011)
- petitioners may not raise in adjudicatory proceedings contentions attacking the agency's rules and regulations or contentions that are the subject of ongoing rulemakings; LBP-11-29, 74 NRC 612 (2011)
- petitioning parties may reply separately to each answer, especially considering that the answers may present different views or arguments; CLI-11-14, 74 NRC 801 (2011)
- petitions for review are allowed after a full or partial initial decision, both of which are considered final decisions; CLI-11-10, 74 NRC 251 (2011)
- pro se litigants are generally not held to the same high standards of pleading and practice as parties with counsel; LBP-11-20, 74 NRC 65 (2011)
- reopening the record is an extraordinary action and proponents bear a heavy burden; LBP-11-22, 74 NRC 259 (2011)
- reply briefs may not contain new information that was not raised in either the petition or answers, but may provide arguments that respond to the petition or answers, whether they are offered in rebuttal or in support; CLI-11-14, 74 NRC 801 (2011)
- requiring petitioners to proffer additional and conclusive support for the effect of their proposed contention would improperly require boards to adjudicate the merits of contentions before admitting them; LBP-11-21, 74 NRC 115 (2011)
- review of a board's certified question that raises a significant and novel issue whose early resolution will materially advance the orderly disposition of the proceeding is granted; CLI-11-4, 74 NRC 1 (2011)
- rules on contention admissibility are strict by design; LBP-11-21, 74 NRC 115 (2011); LBP-11-22, 74 NRC 259 (2011)
- section 2.309(c)(vii) weighs heavily against admission of a contention because the addition of a hearing on its subject matter will unduly broaden the issues and materially delay the proceeding; LBP-11-35, 74 NRC 701 (2011)
- section 2.311(d)(1) provides for appeals as of right on the question of whether a request for hearing should have been wholly denied; CLI-11-11, 74 NRC 427 (2011)
- section 2.326(a)(3) expressly refers to a motion to reopen a closed record to consider additional evidence and newly proffered evidence; LBP-11-22, 74 NRC 259 (2011)
- service of a filing is not complete until accompanied by a certificate of service and a request for oral argument; LBP-11-21, 74 NRC 115 (2011)
- should requirements for reopening the record be satisfied, the requirements for untimely contentions must also be satisfied, as well as the contention admissibility criteria of section 2.309(f)(1); LBP-11-35, 74 NRC 701 (2011)
- standards for admission of new contentions are reviewed; LBP-11-25, 74 NRC 380 (2011)

- standards for reopening apply not only when a party is seeking to introduce new evidence on a previously admitted contention after the evidentiary record is closed, but also when a party is seeking to introduce a new contention after the record is closed; LBP-11-23, 74 NRC 287 (2011)
- summary disposition of a contention is appropriate when there no longer exists any genuine dispute over a material fact and the moving party is entitled to judgment as a matter of law; LBP-11-17, 74 NRC 11 (2011)
- support required for a contention necessarily will depend on the issue sought to be litigated; CLI-11-11, 74 NRC 427 (2011)
- terminating an adjudication has significant implications for the rights of intervenors under Atomic Energy Act § 189a; LBP-11-22, 74 NRC 259 (2011)
- the basis for allowing immediate appellate review of partial initial decisions rests on prior appeal board decisions permitting review of a licensing board ruling that disposes of a major segment of the case or terminates a party's right to participate; CLI-11-14, 74 NRC 801 (2011)
- the Commission will grant a petition for review at its discretion, giving due weight to the existence of a substantial question with respect to one or more of the considerations of 10 C.F.R. 2.341(b)(4)(i)-(v); CLI-11-9, 74 NRC 233 (2011)
- the Model Milestones permit the filing of proposed late-filed contentions on the Safety Evaluation Report and necessary National Environmental Policy Act documents within 30 days of the issuance of those documents; LBP-11-22, 74 NRC 259 (2011)
- the presiding officer has discretion to consider an exceptionally grave issue even if untimely presented; LBP-11-20, 74 NRC 65 (2011)
- the scope of a contention is limited to the issues of law and fact pleaded with particularity and any factual and legal material in support thereof; LBP-11-38, 74 NRC 817 (2011)
- the sole ground for waiver of or exception to NRC regulations is that special circumstances with respect to the subject matter of the particular proceeding are such that the application for the rule or regulation would not serve the purposes for which it was adopted; LBP-11-35, 74 NRC 701 (2011)
- the sole provision of NRC's procedural rules explicitly authorizing stay applications is available only to parties to adjudicatory proceedings seeking stays of decisions or actions of a presiding officer pending the filing and resolution of a petition for review; CLI-11-5, 74 NRC 141 (2011)
- the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention; CLI-11-8, 74 NRC 214 (2011); LBP-11-20, 74 NRC 65 (2011); LBP-11-22, 74 NRC 259 (2011)
- the standard for deciding motions for summary disposition in Subpart L proceedings is found in section 2.710; LBP-11-31, 74 NRC 643 (2011)
- the standard for determining whether a party has met the "materially different result" requirements of 10 C.F.R. 2.326(a)(3) is whether the party can defeat a motion for summary disposition; LBP-11-23, 74 NRC 287 (2011)
- the standard for when an issue is "significant" in the context of reopening a closed record is the same as the standard for when supplementation of an environmental impact statement is required, i.e., the new and significant information must paint a seriously different picture of the environmental landscape; LBP-11-23, 74 NRC 287 (2011)
- the term "petition" in section 2.335 refers to the waiver petition, not a petition to intervene; CLI-11-11, 74 NRC 427 (2011)
- the test for the "materially different result" requirement of section 2.326(a)(3) is whether it has been shown that a motion for summary disposition could be defeated; LBP-11-20, 74 NRC 65 (2011)
- those providing affidavits must be competent individuals or appropriately qualified experts; CLI-11-8, 74 NRC 214 (2011)
- timely new contentions may be filed with leave of the presiding officer if information on which they are based was not previously available and is materially different than information previously available and they have been submitted in a timely fashion based on the availability of the subsequent information; LBP-11-25, 74 NRC 380 (2011)
- timely new or amended contentions may be admitted if it meets three pleading requirements; LBP-11-32, 74 NRC 654 (2011)
- to be admissible, contentions must include specific grievances beyond mere notice pleading; LBP-11-29, 74 NRC 612 (2011)

- to be admissible, each contention must satisfy six pleading requirements; LBP-11-29, 74 NRC 612 (2011) to demonstrate representational standing, an organization must show that at least one of its members would be affected by the agency's approval of the requested license, identify such members, and establish (preferably through an affidavit) that such members have authorized it to act as their representative and to request a hearing on their behalf; LBP-11-29, 74 NRC 612 (2011)
- to justify granting a motion to reopen, the moving papers must be strong enough, in the light of any opposing filings, to avoid summary disposition; CLI-11-8, 74 NRC 214 (2011)
- to proffer an admissible contention, interveners must demonstrate a genuine dispute suitable for evidentiary hearing; LBP-11-28, 74 NRC 604 (2011)
- to show a genuine dispute with 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; CLI-11-9, 74 NRC 233 (2011)
- to show standing, a hearing request must state petitioner's name, address, and telephone number, nature of its right under the applicable statutes to be made a party, nature and extent of property, financial, or other interest in the proceeding, and possible effect of any decision or order that may be issued on its interest: LBP-11-29. 74 NRC 612 (2011)
- when a motion to reopen is untimely, the section 2.326(a)(1) "exceptionally grave" test supplants the section 2.326(a)(2) "significant safety or environmental issue" test; CLI-11-8, 74 NRC 214 (2011)
- when seeking to intervene in a representational capacity, an organization must identify at least one member who is affected by the licensing action and who qualifies for standing in his or her own right, and show that the member has authorized the organization to intervene on his or her behalf; LBP-11-21, 74 NRC 115 (2011)
- where a motion to reopen relates to a contention not previously in controversy, the motion must demonstrate that the balance of the nontimely filing factors of 10 C.F.R. 2.309(c) favors granting the motion to reopen; LBP-11-23, 74 NRC 287 (2011); LBP-11-35, 74 NRC 701 (2011)
- where initial decisions have been issued, the record should not be reopened to take evidence on some accident-related issue unless the party seeking reopening shows that there is significant new evidence, not included in the record, that materially affects the decision; CLI-11-5, 74 NRC 141 (2011)
- where the time for filing contentions had expired in a given case, no new TMI-related contentions would be accepted absent a showing of good cause and a balancing of the late-filing factors; CLI-11-5, 74 NRC 141 (2011)

RULES OF PROCEDURE

the procedural rule governing appeals in a 10 C.F.R. Part 2, Subpart J proceeding provides for review only in the limited circumstances prescribed in the rule; CLI-11-13, 74 NRC 635 (2011)

licensees must establish and maintain systems to protect against acts of radiological sabotage and to prevent the theft or diversion of special nuclear material; CLI-11-4, 74 NRC 1 (2011)

SAFETY ANALYSIS REPORT

See Final Safety Analysis Report

SAFETY CULTURE

a board erred in admitting a contention pertaining to a plant's safety culture; CLI-11-11, 74 NRC 427 (2011)

this issue is beyond the scope of a license renewal proceeding; LBP-11-21, 74 NRC 115 (2011) SAFETY EVALUATION REPORT

filing of new contentions based on the SER and Staff NEPA documents is expressly contemplated by the Model Milestones; LBP-11-22, 74 NRC 259 (2011)

good cause for a late-filed contention based on information in the SER did not add a last piece of information, but merely compiled and organized preexisting information; CLI-11-8, 74 NRC 214 (2011)

intervenor may propose new contentions based on the Fukushima accident, the SER, the new SEIS, or other sources of new and materially different information, provided that it does so promptly after the new information becomes available and that it successfully fulfills the general contention admissibility requirements; LBP-11-22, 74 NRC 259 (2011)

intervention petitioners may not challenge the adequacy of the safety evaluation report, but may file contentions challenging the combined license application based on new information in the SER; LBP-11-22, 74 NRC 259 (2011)

- the Model Milestones permit intervenors' proposed late-filed contentions on the SER and necessary NEPA documents to be filed within 30 days of the issuance of those documents; LBP-11-22, 74 NRC 259
- until the SER and Staff NEPA documents have been issued, a licensing board is generally prohibited from holding the hearing on the license application; LBP-11-22, 74 NRC 259 (2011)

 See Final Safety Evaluation Report

SAFETY ISSUES

- new contentions on the safety and environmental implications of the NRC Task Force Report on the Fukushima Dai-ichi accident are premature and must be denied on that basis without regard to any other considerations; LBP-11-27, 74 NRC 591 (2011)
- to demonstrate a significant safety issue, petitioners must establish either that uncorrected errors endanger safe plant operation, or that there has been a breakdown of the quality assurance program sufficient to raise legitimate doubt as to the plant's capability of being operated safely; LBP-11-35, 74 NRC 701 (2011)

SAFETY RELIEF VALVES

- evidence that relief valve failure and inoperability may have existed for a period of time greater than allowed by technical specifications is a reportable event; DD-11-6, 74 NRC 420 (2011)
- request for cold shutdown because of inoperability of main steam safety relief valves is denied but petitioner's concerns about the SRVs have been resolved; DD-11-6, 74 NRC 420 (2011)
- valve failure and inoperability found during the refueling outage, which potentially affected the ability of the SRVs to satisfy design actuation requirements, meets the requirements for a licensee event report; DD-11-6, 74 NRC 420 (2011)

SAFETY REVIEW

- although sufficiency of the application and NRC Staff's environmental review of that application are proper targets of contentions, sufficiency of NRC Staff's safety review of the application is not; LBP-11-29, 74 NRC 612 (2011)
- conceptual issues such as operational history, quality assurance, quality control, management competence, and human factors are excluded from license renewal review in favor of a safety-related review focusing on maintaining particular functions of certain physical systems, structures, and components; CLI-11-11, 74 NRC 427 (2011)
- for the mandatory uncontested proceeding on a uranium enrichment facility license, a licensing board is to conduct a simple sufficiency review rather than a de novo review on both safety and environmental issues; LBP-11-26, 74 NRC 499 (2011)
- license renewal safety review is limited to the matters specified in 10 C.F.R. Part 54, which focus on the management of aging for certain systems, structures, and components, and the review of time-limited aging analyses; LBP-11-21, 74 NRC 115 (2011)
- many safety questions that relate to plant aging become important during the extended renewal term since the design of some components may have been based upon a service lifetime of only 40 years; LBP-11-21, 74 NRC 115 (2011)
- operating license renewal applicants must make a detailed assessment, conducted on passive, safety-related physical systems, structures, and components of the plant; LBP-11-21, 74 NRC 115 (2011)
- the aging-based safety review set out in Part 54 is analytically separate from Part 51's environmental inquiry and does not in any sense restrict NEPA; LBP-11-17, 74 NRC 11 (2011)
- to evaluate an operating license renewal application, the NRC reviews the management of aging effects and time-limited aging analysis of particular safety-related functions of the plant's systems, structures, and components pursuant to 10 C.F.R. Part 54 and the environmental impacts and alternatives to the proposed action in accordance with Part 51; LBP-11-17, 74 NRC 11 (2011)

SAFETY-RELATED

electric equipment that must be environmentally qualified is described; LBP-11-20, 74 NRC 65 (2011) systems, structures, and components relied upon to remain functional during and following design-basis events to ensure specific functions are safety-related; LBP-11-20, 74 NRC 65 (2011)

SCHEDULE, BRIEFING

boards must use the applicable Model Milestones in 10 C.F.R. Part 2, Appendix B as a starting point for the schedule, but the board shall make appropriate modifications based upon the circumstances of each case; LBP-11-22, 74 NRC 259 (2011)

shortly after a hearing request has been granted, the board must set a schedule to govern the proceeding; LBP-11-22, 74 NRC 259 (2011)

SCHEDULING

boards should develop schedules that will provide a fair and expeditious procedure for resolving new or amended contentions that might be proposed during the course of the proceeding, not just those already admitted; LBP-11-22, 74 NRC 259 (2011)

when establishing a schedule, boards are to consider NRC's interest in providing a fair and expeditious resolution of the issues sought to be admitted for adjudication in the proceeding, along with other factors; LBP-11-22, 74 NRC 259 (2011)

SECURITY PROGRAM

licensees must establish and maintain systems to protect against acts of radiological sabotage and to prevent the theft or diversion of special nuclear material; CLI-11-4, 74 NRC 1 (2011)

NRC's program addresses not only current operations, but also extends into the license renewal term; CLI-11-11, 74 NRC 427 (2011)

protecting against the threat of air attacks is not within licensees' responsibilities because a private security force cannot reasonably be expected to defend against such attacks and adequate protection is ensured through the actions of other federal agencies with defense capabilities and air-safety expertise; CLI-11-4, 74 NRC 1 (2011)

SEISMIC ANALYSIS

Staff's ability to satisfy its NEPA obligations will be undermined if applicant either fails to include seismic information in its SAMA analysis, or, in omitting the information, fails to explain its absence and justify that the overall costs of obtaining it are exorbitant; CLI-11-11, 74 NRC 427 (2011)

to evaluate the impact of a fault on current operations, a probabilistic risk assessment rather than a deterministic analysis is the accepted and standard practice in SAMA analyses; CLI-11-11, 74 NRC 427 (2011)

SERVICE OF DOCUMENTS

service of a filing is not complete until accompanied by a certificate of service and a request for oral argument; LBP-11-21, 74 NRC 115 (2011)

SETTLEMENT AGREEMENTS

if the parties settle their dispute after a hearing, the board should dismiss the adjudication; LBP-11-22, 74 NRC 259 (2011)

SEVERE ACCIDENT MITIGATION ALTERNATIVES

a license renewal applicant is compelled to implement safety-related SAMAs that deal with aging management; LBP-11-17, 74 NRC 11 (2011)

a SAMA need not be implemented during a particular plant's license renewal review if the Commission is concurrently resolving the safety improvement achieved by that SAMA through a generic process attached to the agency's review of all plants' current licensing bases; LBP-11-17, 74 NRC 11 (2011)

COL applications must include a description and plans for implementation of the guidance and strategies required by section 50.54(hh)(2) for severe accident mitigation; CLI-11-9, 74 NRC 233 (2011)

contention that indicates neither positive nor negative impact from proposed severe accident mitigation alternative implementation does not paint the required seriously different picture of the environmental landscape to reopen the record; LBP-11-35, 74 NRC 701 (2011)

design or procedural modifications that could mitigate the consequences of a severe accident are known as severe accident mitigation alternatives; LBP-11-38, 74 NRC 817 (2011)

however "significance" is defined, the Fukushima accident and its aftermath have (as any such severe accident would do) clearly painted a seriously different picture of the environmental landscape; LBP-11-23, 74 NRC 287 (2011)

if the cost of implementing a particular SAMA is greater than its estimated benefit, the SAMA is not considered cost-beneficial to implement; LBP-11-33, 74 NRC 675 (2011)

materiality of a SAMA contention is based on whether it purports to show that an additional SAMA should have been identified as potentially cost-beneficial; CLI-11-11, 74 NRC 427 (2011)

NEPA is a procedural statute and although it requires a hard look at mitigation measures, it does not, in and of itself, provide the statutory basis for their implementation; CLI-11-14, 74 NRC 801 (2011)

NRC shall require backfitting of a facility only when it determines that there is a substantial increase in the overall protection of the public health and safety or the common defense and security and that the

- costs of implementation are justified in view of this increased protection; LBP-11-17, 74 NRC 11 (2011)
- NRC Staff has authority to require implementation of non-aging-management SAMAs through its current licensing basis backfit review under Part 50 or through setting conditions of the license renewal; LBP-11-17, 74 NRC 11 (2011)
- petitioner must approximate the relative cost and benefit of a challenged SAMA or provide at least some ballpark consequence and implementation costs should the SAMA be performed; CLI-11-11, 74 NRC 427 (2011)
- SAMAs are safety enhancements such as a new hardware item or procedure intended to reduce the risk of severe accidents; LBP-11-33, 74 NRC 675 (2011)
- SAMAs are somewhat broader than severe accident mitigation design alternatives, which focus on design changes and do not consider procedural modifications; LBP-11-38, 74 NRC 817 (2011)
- unsupported speculation that fresh analysis might lead NRC to require additional mitigation measures simply does not raise a significant safety issue or an exceptionally grave issue; LBP-11-23, 74 NRC 287 (2011)

SEVERE ACCIDENT MITIGATION ALTERNATIVES ANALYSIS

- accounting for the meteorological patterns, atmospheric transport modeling, and data issues raised by intervenor cannot credibly alter which severe accident mitigation alternatives are potentially cost-beneficial to implement; LBP-11-18, 74 NRC 29 (2011)
- admission of a contention that might require further explanation of SAMA cost-benefit analysis did not have a pervasive and unusual effect on the litigation; CLI-11-6, 74 NRC 203 (2011)
- arguments that more conservative SAMA analysis needs to be performed, using 95th percentile computations, and not using a discount factor to evaluate the time effects of cleanup costs are policy matters that are solely within Commission jurisdiction and represent inadmissible challenges to binding Commission rulings; LBP-11-20, 74 NRC 65 (2011)
- because NRC has established a requirement to provide information to be used by NRC staff in fulfillment of its obligation under the National Environmental Policy Act, suitability of applicant's SAMA analysis must be judged by the requirements of NEPA; LBP-11-18, 74 NRC 29 (2011)
- challenges to extensive damage mitigation guidelines are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)
- challenges to NRC's assumptions about operators' capability to mitigate an accident are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)
- challenges to NRC's excessive secrecy regarding accident mitigation measures are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)
- for an admissible contention, petitioners do not have to prove outright that a SAMA analysis is deficient; CLI-11-11, 74 NRC 427 (2011)
- if NRC Staff has not already considered site-specific SAMAs for a facility, they must be considered as part of applicant's environmental report and ultimately as part of NRC Staff's supplemental environmental impact statement in a power reactor license renewal proceeding; LBP-11-17, 74 NRC 11 (2011); LBP-11-18, 74 NRC 29 (2011); LBP-11-21, 74 NRC 115 (2011)
- license renewal applicant's environmental report must contain a consideration of alternatives for reducing adverse impacts for all Category 2 license renewal issues in Appendix B; LBP-11-21, 74 NRC 115 (2011)
- NEPA demands no fully developed plan or detailed examination of specific measures that will be employed to mitigate adverse environmental effects; LBP-11-18, 74 NRC 29 (2011); LBP-11-23, 74 NRC 287 (2011)
- new information from studies of the Fukushima event as to potential consequences of a severe accident at a U.S. nuclear power plant is irrelevant to any uncertainty that might exist regarding which agency has authority over cleanup after a severe accident; LBP-11-20, 74 NRC 65 (2011)
- NRC Staff's obligations under Part 51 and NEPA are not limited to only those SAMAs that address aging management; LBP-11-17, 74 NRC 11 (2011)
- petitioner fails to specifically explain why a materially different result would have been likely had information currently available from the Fukushima accident been considered ab initio in the severe accident mitigation alternatives analysis or why that information presents a significant safety or environmental issue; LBP-11-35, 74 NRC 701 (2011)

- portion of a contention asserting that applicant failed to consider the results of a particular study in its SAMA analysis is admissible; CLI-11-11, 74 NRC 427 (2011)
- possible plant changes such as improvements in hardware, training, or procedures that could cost-effectively mitigate the environmental impacts that would otherwise flow from a potential severe accident are reviewed; LBP-11-17, 74 NRC 11 (2011)
- SAMA analysis is a cost-benefit analysis, not a direct safety analysis, and thus does not raise any exceptionally grave issue; LBP-11-23, 74 NRC 287 (2011)
- SAMA analysis is neither a worst-case nor a best-case impacts analysis, and the agency's obligations under NEPA are tempered by a practical rule of reason; LBP-11-18, 74 NRC 29 (2011)
- sea-breeze effect and the hot-spot effect must cause the expected average offsite damages to increase by at least a factor of 2 for the next most costly SAMA to be cost-effective; LBP-11-18, 74 NRC 29 (2011)
- showing merely that changes to the SAMA analysis results are possible or likely or probable is not enough to reopen an record; LBP-11-35, 74 NRC 701 (2011)
- showing necessary to demonstrate that a materially different result in the outcome of the SAMA analysis would be or would have been likely had the newly proffered evidence been considered initially is discussed; LBP-11-35, 74 NRC 701 (2011)
- site-specific consideration of severe accident mitigation alternatives is required at the time of license renewal unless a previous consideration of such alternatives regarding plant operation has been included in a final environmental impact statement, final environmental assessment, or a related supplement; CLI-11-5, 74 NRC 141 (2011)
- Staff's ability to satisfy its NEPA obligations will be undermined if applicant either fails to include seismic information in its SAMA analysis, or, in omitting the information, fails to explain its absence and justify that the overall costs of obtaining it are exorbitant; CLI-11-11, 74 NRC 427 (2011)
- sufficiency of the NRC's hard look at the benefits of SAMAs in comparison to their costs is subject to litigation in a license renewal proceeding; LBP-11-17, 74 NRC 11 (2011)
- the final supplemental environmental impact statement must demonstrate that the NRC Staff has received sufficient information to take a hard look at severe accident mitigation alternatives; LBP-11-17, 74 NRC 11 (2011)
- the goal of a SAMA analysis is to identify potential changes to a nuclear power plant or its operations that might reduce the risk or likelihood or impact, or both, of a severe reactor accident for which the benefit of implementing the changes outweighs the cost of the implementation; LBP-11-18, 74 NRC 29 (2011)
- the required level of demonstration by petitioners of cost-effectiveness of other severe accident mitigation alternatives is case and issue specific; LBP-11-35, 74 NRC 701 (2011)
- to evaluate the impact of a fault on current operations, a probabilistic risk assessment rather than a deterministic analysis is the accepted and standard practice in SAMA analyses; CLI-11-11, 74 NRC 427 (2011)
- use of mean consequences in SAMA analysis is consistent with NRC policy and precedent, whereas the 95th percentile approach is akin to a worst-case scenario analysis, which is not required by NRC; LBP-11-18, 74 NRC 29 (2011)
- whether a proposed alternative method for estimating a macroscopic frequency of occurrence of a severe offsite radiological release should have been used in the SAMA analysis could have been raised when the original license renewal application was submitted and thus is not timely; LBP-11-35, 74 NRC 701 (2011)
- SEVERE ACCIDENT MITIGATION DESIGN ALTERNATIVES
 - severe accident mitigation alternatives are somewhat broader than SAMDAs, which focus on design changes and do not consider procedural modifications; LBP-11-38, 74 NRC 817 (2011)
- SEVERE ACCIDENT MITIGATION DESIGN ALTERNATIVES ANALYSIS
 - adequacy of a SAMDA analysis is judged not by whether plainly better assumptions or methodologies could have been used or the analysis refined further but whether it looks genuinely plausible that inclusion of an additional factor or use of other assumptions or models may change the cost-benefit conclusions for the SAMDA analysis; LBP-11-38, 74 NRC 817 (2011)
 - issues surrounding SAMDAs that have been resolved by regulation may not be challenged in a combined license adjudication; CLI-11-6, 74 NRC 203 (2011)

SAMDA analyses examine whether implementing a SAMDA would decrease the probability-weighted consequences of severe accidents; LBP-11-38, 74 NRC 817 (2011)

scaling SAMDA implementation costs (inflation rate, regional cost-of-living adjustment, risk reduction factor) and implementation benefits (discount rate, power pricing data, power market effects, consumer impacts, power price spikes, loss of grid) is discussed; LBP-11-38, 74 NRC 817 (2011)

SHUTDOWN

request for cold shutdown because of inoperability of main steam safety relief valves is denied but petitioner's concern about the SRVs have been resolved; DD-11-6, 74 NRC 420 (2011)

SITE REMEDIATION

there is no agency requirement that applicant submit a redress plan relative to preconstruction activities or, absent state or local requirements, take any remediation action regarding preconstruction activities if it decides not to complete the project or is denied agency authorization to construct and operate the facility; LBP-11-26, 74 NRC 499 (2011)

SITE SELECTION

seismic avoidance areas are discussed; LBP-11-26, 74 NRC 499 (2011)

winter weather- and earthquake-related criteria are discussed; LBP-11-26, 74 NRC 499 (2011)

SPECIAL NUCLEAR MATERIALS

certifications of financial assurance, which are used by applicants seeking to possess smaller quantities of material, are governed by 10 C.F.R. 70.25(b)(2); CLI-11-4, 74 NRC 1 (2011)

depending on the quantity of material, Part 70 license applicants must submit either a decommissioning funding plan or a certification of financial assurance; CLI-11-4, 74 NRC 1 (2011)

possession limits associated with a certification of financial assurance are set forth in 10 C.F.R. 70.25(d); CLI-11-4, 74 NRC 1 (2011)

SPENT FUEL POOLS

absent demonstration that petitioner's alleged special circumstances are unique to the facility rather than common to a large class of facilities, the request for waiver of regulations excluding spent fuel pool issues from license renewal proceedings is denied; LBP-11-35, 74 NRC 701 (2011)

Fukushima-related petitions for suspension of proceeding and rescission of regulations that make generic conclusions about environmental impacts of severe reactor and spent fuel pool accidents and that preclude consideration of those issues in individual licensing proceedings are denied; LBP-11-39, 74 NRC 862 (2011)

generic analysis remains appropriate for spent fuel pool accidents in license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)

post-9/11 motion to reopen satisfied rules for reopening the record and for late-filed contentions, but contention involving a license amendment request for reconfiguring a spent fuel pool was inadmissible; CLI-11-5, 74 NRC 141 (2011)

to waive the generic assessment in NRC regulations to permit adjudication of issues involving the environmental impact of spent fuel pool accidents in a license renewal proceeding, the Commission must conclude that the rule's strict application would not serve the purpose for which it was adopted; CLI-11-11, 74 NRC 427 (2011)

SPENT FUEL STORAGE

challenges to NRC's previous rejection of petitioner's concerns regarding environmental impacts of high-density pool storage of spent fuel are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)

license renewal applicants need not provide a site-specific analysis of the environmental impacts of spent fuel storage in their environmental report; CLI-11-11, 74 NRC 427 (2011)

spent fuel storage pool matters will be addressed, if studies of implications from Fukushima warrant, through more generic regulatory reform; LBP-11-35, 74 NRC 701 (2011)

STAFF REQUIREMENTS MEMORANDUM

Fukushima-related contention based on an SRM are inadmissible because the SRM does not define or impose any new requirements arising from the Fukushima accident and thus fails to establish a genuine dispute on a material issue of law or fact; LBP-11-37, 74 NRC 774 (2011)

STANDARD OF PROOF

applicant in a licensing proceeding must meet its burden of proof by a preponderance of the evidence; LBP-11-38, 74 NRC 817 (2011)

STANDARD OF REVIEW

- a federal agency would be acting arbitrarily and capriciously if it did not look at relevant data and sufficiently explain a rational nexus between the facts found in its review and the choice it makes as a result of that review; LBP-11-17, 74 NRC 11 (2011)
- absent error of law or abuse of discretion, the Commission defers to licensing board rulings on contention admissibility; CLI-11-9, 74 NRC 233 (2011)
- although the entire record is considered on appeal, including pleadings that appellants ask to be adopted by reference, the Commission's decision responds to the arguments made explicitly in the appellate brief; CLI-11-8, 74 NRC 214 (2011)
- boards are to make independent environmental judgments with respect to certain NEPA findings, though even then they need not rethink or redo every aspect of the NRC Staff's environmental findings or undertake their own fact-finding activities; LBP-11-26, 74 NRC 499 (2011)
- disfavor of piecemeal appeals leads the Commission to grant interlocutory review only upon a showing of extraordinary circumstances; CLI-11-14, 74 NRC 801 (2011)
- expansion of issues for litigation that results from a board action does not have a pervasive and unusual effect on the litigation; CLI-11-10. 74 NRC 251 (2011)
- for the mandatory uncontested proceeding on a uranium enrichment facility license, a licensing board is to conduct a simple sufficiency review rather than a de novo review on both safety and environmental issues; LBP-11-26, 74 NRC 499 (2011)
- in a mandatory hearing, a licensing board must narrow its inquiry to those topics or sections in Staff documents that it deems most important and should concentrate on portions of the documents that do not on their face adequately explain the logic, underlying facts, and applicable regulations and guidance; LBP-11-26, 74 NRC 499 (2011)
- in an uncontested operating license proceeding, the Commission would informally review the Staff recommendations, and the license would issue only after Commission action; CLI-11-5, 74 NRC 141 (2011)
- in the absence of clear error or abuse of discretion, the Commission defers to its boards' rulings on threshold issues; CLI-11-8, 74 NRC 214 (2011)
- NRC Staff's underlying technical and factual findings are not open to board reconsideration unless, after a review of the record, the board finds the NRC Staff review inadequate or its findings insufficient; LBP-11-26, 74 NRC 499 (2011)
- parties seeking interlocutory review must show that the issue to be reviewed threatens the party adversely affected by it with immediate and serious irreparable impact which, as a practical matter, could not be alleviated through a petition for review of the presiding officer's final decision or affects the basic structure of the proceeding in a pervasive or unusual manner; CLI-11-14, 74 NRC 801 (2011)
- review of a board's certified question that raises a significant and novel issue whose early resolution will materially advance the orderly disposition of the proceeding is granted; CLI-11-4, 74 NRC 1 (2011)
- the Commission will defer to a board's rulings on contention admissibility absent an error of law or abuse of discretion; CLI-11-11, 74 NRC 427 (2011)
- the Commission will grant a petition for review at its discretion, giving due weight to the existence of a substantial question with respect to one or more of the considerations of 10 C.F.R. 2.341(b)(4)(i)-(v); CLI-11-9, 74 NRC 233 (2011)

STANDING TO INTERVENE

- a proper showing of standing includes the name, address, and telephone number of petitioner, nature of petitioner's right under a relevant statute to be made a party, nature and extent of petitioner's property, financial, or other interest in the proceeding, and possible effect of any decision or order that might be issued on petitioner's interest; LBP-11-21, 74 NRC 115 (2011)
- although NRC regulations mandate that a petition contain the name, address, and telephone number of petitioner, the Commission's hearing notice advises prospective petitioners not to include personal privacy information, such as home addresses or home phone numbers, in their filings; LBP-11-21, 74 NRC 115 (2011)
- extended power uprate proceedings necessarily trigger application of the 50-mile proximity presumption given that such license applications entail an obvious increase in the potential for offsite consequences; LBP-11-29, 74 NRC 612 (2011)

- for a request for hearing and petition to intervene to be granted, petitioner must establish that it has standing and propose at least one admissible contention; LBP-11-21, 74 NRC 115 (2011)
- hearing requests must state petitioner's name, address, and telephone number, nature of its right under the applicable statutes to be made a party, nature and extent of property, financial, or other interest in the proceeding, and possible effect of any decision or order that may be issued on its interest; LBP-11-29, 74 NRC 612 (2011)
- if petitioner fails to show standing pursuant to section 2.309(d), a board may grant discretionary standing when at least one requestor/petitioner has established standing and at least one admissible contention has been admitted so that a hearing will be held; LBP-11-29, 74 NRC 612 (2011)
- in license amendment proceedings, petitioners may not claim standing simply upon a residence or visits near the plant, unless the proposed action quite obviously entails an increased potential for offsite consequences; LBP-11-29, 74 NRC 612 (2011)
- in reactor license renewal proceedings, petitioner is presumed to have standing without the need to specifically plead injury, causation, and redressability if petitioner lives within 50 miles of the nuclear power facility; LBP-11-21, 74 NRC 115 (2011); LBP-11-29, 74 NRC 612 (2011)
- judicial concepts of standing are generally followed in NRC proceedings; LBP-11-21, 74 NRC 115 (2011); LBP-11-29, 74 NRC 612 (2011)
- judicial concepts of standing require that petitioner establish that it has suffered a distinct and palpable harm that constitutes injury-in-fact within the zone of interests arguably protected by the governing statute and that the injury can fairly be traced to the challenged action and is likely to be redressed by a favorable decision; LBP-11-21, 74 NRC 115 (2011); LBP-11-29, 74 NRC 612 (2011)
- once parties demonstrate standing, they will then be free to assert any contention, which, if proven, will afford them the relief they seek; LBP-11-21, 74 NRC 115 (2011); LBP-11-29, 74 NRC 612 (2011) petitioner bears the burden of providing facts sufficient to establish its standing; LBP-11-21, 74 NRC 115 (2011)
- petitioner may correct or supplement its showing on standing; LBP-11-21, 74 NRC 115 (2011) petitioner seeking a hearing must demonstrate standing and proffer at least one admissible contention; LBP-11-29, 74 NRC 612 (2011)

STANDING TO INTERVENE, ORGANIZATIONAL

an organization seeking to intervene in its own right must allege that the challenged action will cause a cognizable injury to its interests or to the interests of its members; LBP-11-21, 74 NRC 115 (2011) organizations may claim standing on their own behalf; LBP-11-29, 74 NRC 612 (2011)

STANDING TO INTERVENE, REPRESENTATIONAL

- an organization must identify at least one member who is affected by the licensing action and who qualifies for standing in his or her own right and show that the member has authorized the organization to intervene on his or her behalf: LBP-11-21, 74 NRC 115 (2011): LBP-11-29, 74 NRC 612 (2011)
- each organization member seeking representation must qualify for standing in his or her own right, the interests that the representative organization seeks to protect must be germane to its own purpose, and neither the asserted claim nor the requested relief must require an individual member to participate in the organization's legal action; LBP-11-29, 74 NRC 612 (2011)

STATE REGULATORY REQUIREMENTS

- a state's regulations are not inherently unfair because they may be designed to effectuate a state-desired regulatory outcome; CLI-11-12, 74 NRC 460 (2011)
- EPA also has granted authority to some states to implement, maintain, and enforce their own EPA-compliant air quality programs through State Ambient Air Quality Standards; LBP-11-26, 74 NRC 499 (2011)

STATION BLACKOUT

petitioner proffers no new information on station blackout or mitigation measures, and the events therefore cannot form the basis for an assertion of timeliness of a motion to reopen; LBP-11-35, 74 NRC 701 (2011)

STATUTES

contentions that amount to an attack on applicable statutory requirements or represent a challenge to the basic structure of the Commission's regulatory process must be rejected; LBP-11-29, 74 NRC 612 (2011)

relevant zone of interests in NRC proceedings are articulated in the Atomic Energy Act and the National Environmental Policy Act; LBP-11-29, 74 NRC 612 (2011)

STATUTORY CONSTRUCTION

- a court cannot defer to interpretive proposals offered by counsel at oral argument and affirm on the basis of that reading when the statute does not plainly compel the reading being proposed; CLI-11-12, 74 NRC 460 (2011)
- agencies can reach exactly the same result on a remanded issue as long as they rely on the correct view of a law that they previously misinterpreted, or as long as they explain themselves better or develop better evidence for their position; CLI-11-12, 74 NRC 460 (2011)
- applying the rule that the mention of one thing implies the exclusion of another, the fact that the regulation sets forth three specific circumstances in which a board's jurisdiction ends implies that jurisdiction does not end in other circumstances not listed; LBP-11-22, 74 NRC 259 (2011)
- Atomic Energy Act § 189a has been interpreted to require that the hearing must encompass all material factors bearing on the licensing decision raised by the requester; LBP-11-22, 74 NRC 259 (2011)
- Atomic Energy Act § 274d is construed as providing specific conditions under which NRC shall exercise the general legal authority granted to it under AEA § 274b; CLI-11-12, 74 NRC 460 (2011)
- "shall" is a term of legal significance in that it is mandatory or imperative, not merely precatory; CLI-11-12, 74 NRC 460 (2011)
- the mandatory language used in Atomic Energy Act § 274d is construed as requiring NRC to enter into an agreement for state regulation of the particular categories of nuclear materials that a state certifies it both desires to regulate and has established a program for, provided NRC finds the state's program to be adequate and compatible; CLI-11-12, 74 NRC 460 (2011)

STAY

- the Commission may consider requests to suspend or hold proceedings in abeyance pursuant to its inherent supervisory authority over agency proceedings; CLI-11-5, 74 NRC 141 (2011)
- the sole provision of NRC's procedural rules explicitly authorizing stay applications is available only to parties to adjudicatory proceedings seeking stays of decisions or actions of a presiding officer pending the filing and resolution of a petition for review; CLI-11-5, 74 NRC 141 (2011)

STAY OF EFFECTIVENESS

the automatic stay provisions were removed in 2007; CLI-11-5, 74 NRC 141 (2011)

SUA SPONTE ISSUES

licensing boards may not raise issues sua sponte when the sole intervenor has withdrawn from the proceeding; LBP-11-22, 74 NRC 259 (2011)

SUBPART G PROCEDURES

in a proceeding governed by Subpart L, the board is to apply the standards of Subpart G when ruling on motions for summary disposition; LBP-11-17, 74 NRC 11 (2011)

SUBPART L PROCEEDINGS

- the board is to apply the standards of Subpart G when ruling on motions for summary disposition; LBP-11-17, 74 NRC 11 (2011); LBP-11-31, 74 NRC 643 (2011)
- the evidentiary record is opened upon the filing of the first initial written statements of position and written testimony with supporting affidavits on the admitted contentions; LBP-11-22, 74 NRC 259 (2011)
- the standard for deciding motions for summary disposition closely parallels the standard used by the federal courts in deciding motions for summary judgment; LBP-11-31, 74 NRC 643 (2011)

SUMMARY DISPOSITION

- all facts are to be construed in the light most favorable to the nonmoving party; LBP-11-31, 74 NRC 643 (2011)
- denial of summary disposition does not constitute a full or partial initial decision warranting immediate Commission review; CLI-11-10, 74 NRC 251 (2011)
- denial of summary disposition neither threatens NRC Staff with immediate and serious irreparable impact that could not be alleviated through a petition for review of the presiding officer's final decision nor affects the basic structure of the proceeding in a pervasive or unusual manner; CLI-11-10, 74 NRC 251 (2011)
- grant of summary disposition on a particular contention is an interlocutory ruling appealable at the end of the case; CLI-11-6, 74 NRC 203 (2011)

- grant of summary disposition where other contentions are pending is not a final decision, and is appealable only upon a showing that the standards for interlocutory review have been met; CLI-11-14, 74 NRC 801 (2011)
- if reasonable minds could differ as to the import of the evidence, summary disposition is not appropriate; LBP-11-20, 74 NRC 65 (2011)
- in a proceeding governed by Subpart L, the board is to apply the standards of Subpart G when ruling on motions for summary disposition; LBP-11-17, 74 NRC 11 (2011)
- motion for summary disposition is granted because there is no genuine issue or dispute as to any material fact and applicant's low-level radioactive waste plan satisfies the requirements of 10 C.F.R. 52.79(a); LBP-11-31, 74 NRC 643 (2011)
- motions may be granted in a proceeding governed by Subpart G if filings in the proceeding, depositions, answers to interrogatories, and admissions on file, together with statements of the parties and affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law; LBP-11-17, 74 NRC 11 (2011)
- motions will be granted if there is no genuine issue as to any material fact and the moving party is entitled to a decision as a matter of law; LBP-11-31, 74 NRC 643 (2011)
- the board's denial of a summary disposition motion did not constitute a de facto partial initial decision or a final decision on the merits ripe for Commission review; CLI-11-6, 74 NRC 203 (2011)
- the correct inquiry with regard to the first criterion for summary disposition is whether there are material factual issues that properly can be resolved only by a finder of fact because they may reasonably be resolved in favor of either party; LBP-11-31, 74 NRC 643 (2011)
- the standard for a motion to reopen is measured using the Commission's test of whether it has been shown that a motion for summary disposition could be defeated; CLI-11-8, 74 NRC 214 (2011); LBP-11-23, 74 NRC 287 (2011); LBP-11-35, 74 NRC 701 (2011)
- the standard for deciding motions for summary disposition in Subpart L proceedings closely parallels the standard used by the federal courts in deciding motions for summary judgment; LBP-11-31, 74 NRC 643 (2011)
- the standard for deciding motions for summary disposition in Subpart L proceedings is found in section 2.710; LBP-11-31, 74 NRC 643 (2011)
- the test for the "materially different result" requirement of section 2.326(a)(3) is whether it has been shown that a motion for summary disposition could be defeated; LBP-11-20, 74 NRC 65 (2011)
- when there no longer exists any genuine dispute over a material fact and the moving party is entitled to judgment as a matter of law, summary disposition of a contention is appropriate; LBP-11-17, 74 NRC 11 (2011)

SUMMARY JUDGMENT

the standard for deciding motions for summary disposition in Subpart L proceedings closely parallels the standard used by the federal courts in deciding motions for summary judgment; LBP-11-31, 74 NRC 643 (2011)

SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

- a requirement to supplement environmental analysis every time any new information, such as recommended but not yet adopted regulatory reform, comes to light would render agency decisionmaking intractable, always awaiting updated information only to find the new information outdated by the time a decision is made; LBP-11-28, 74 NRC 604 (2011)
- agency decisions regarding the need to supplement an EIS based on new and significant information are subject to the rule of reason; LBP-11-26, 74 NRC 499 (2011)
- alleged defects in applicant's environmental report may be mooted by the content of NRC's EIS or SEIS; LBP-11-28, 74 NRC 604 (2011)
- an EIS must be supplemented when there is new and significant information that will paint a seriously different picture of the environmental landscape; LBP-11-35, 74 NRC 701 (2011)
- before taking a proposed action, Staff must issue an SEIS if there are substantial changes in the proposed action that are relevant to environmental concerns or there are new and significant circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; LBP-11-39, 74 NRC 862 (2011)

- if NRC Staff has not already considered site-specific severe accident mitigation alternatives for a facility, they must be considered as part of applicant's environmental report and ultimately as part of NRC Staff's SEIS in a power reactor license renewal proceeding; LBP-11-17, 74 NRC 11 (2011)
- if recommendations of the NRC's Near-Term Task Force review of the Fukushima Dai-ichi accident constitute relevant new and significant information, then the draft SEIS must address them; LBP-11-28, 74 NRC 604 (2011)
- in mandatory hearings, Commission discussion regarding alternative site review supplements the environmental impact statement; LBP-11-26, 74 NRC 499 (2011)
- intervenor may propose new contentions based on the Fukushima accident, the SER, the new SEIS, or other sources of new and materially different information, provided that it does so promptly after the new information becomes available and that it successfully fulfills the general contention admissibility requirements; LBP-11-22, 74 NRC 259 (2011)
- new information requiring NRC Staff to prepare supplemental environmental review documents, must present a seriously different picture of the environmental impact of the proposed project from what was previously envisioned; LBP-11-27, 74 NRC 591 (2011); LBP-11-28, 74 NRC 604 (2011)
- NRC Staff has the option of preparing a supplement to a draft or final EIS when, in its opinion, preparation of a supplement will further the purposes of NEPA; CLI-11-5, 74 NRC 141 (2011)
- NRC Staff must include new and significant information in the supplemental DEIS; LBP-11-34, 74 NRC 685 (2011)
- NRC Staff must supplement the DEIS if there are substantial changes in the proposed action that are relevant to environmental concerns or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; LBP-11-33, 74 NRC 675 (2011)
- only where new information presents a seriously different picture of the environmental impact of the proposed project from what was previously envisioned is supplementation of an environmental impact statement required; CLI-11-5, 74 NRC 141 (2011); LBP-11-28, 74 NRC 604 (2011); LBP-11-32, 74 NRC 654 (2011); LBP-11-39, 74 NRC 862 (2011)
- petitioners may amend their contentions or file new contentions if the supplemental DEIS differs significantly from the data or conclusions in applicant's documents; LBP-11-34, 74 NRC 685 (2011)
- the final SEIS must demonstrate that NRC Staff has received sufficient information to take a hard look at severe accident mitigation alternatives; LBP-11-17, 74 NRC 11 (2011)
- where an SEIS is being prepared, intervenor may submit proposed new contentions based on new information, including new information in the SER and Staff NEPA documents; LBP-11-22, 74 NRC 259 (2011)
- where NRC intends to mandate that an originally compliant environmental document be supplemented, it does so explicitly; LBP-11-32, 74 NRC 654 (2011)

SUSPENSION OF PROCEEDING

- a rulemaking petitioner may request the Commission to suspend all or any part of any licensing proceeding to which the petitioner is a party pending disposition of the petition for rulemaking; CLI-11-5, 74 NRC 141 (2011)
- although NRC rules require that motions be addressed to the presiding officer when a proceeding is pending, suspension motions are best addressed to the Commission; CLI-11-5, 74 NRC 141 (2011)
- Commission responses to requests for suspension of reactor licensing reviews and associated adjudications in the wake of the Three Mile Island accident and 9/11 terrorist attacks are discussed; LBP-11-37, 74 NRC 774 (2011)
- for pending license renewal applications, where the period of extended operation will not begin for at least a year, there is no imminent threat to public health and safety that requires suspension of licensing proceedings or decisions; LBP-11-35, 74 NRC 701 (2011)
- for post-disaster suspension of proceedings, the Commission considers whether moving forward will jeopardize the public health and safety, continuing the review process will prove an obstacle to fair and efficient decisionmaking, and going forward will prevent appropriate implementation of any pertinent rule or policy changes that might emerge from its ongoing evaluation; CLI-11-5, 74 NRC 141 (2011); LBP-11-33, 74 NRC 675 (2011): LBP-11-34, 74 NRC 685 (2011)

- in light of current fiscal constraints, the board suspends the proceeding on the Department of Energy's application for authorization to construct a national high-level nuclear waste repository; LBP-11-24, 74 NRC 368 (2011)
- licensing boards (as opposed to the Commission) are not empowered to grant a request to suspend a licensing proceeding pending disposition of a rulemaking petition; LBP-11-33, 74 NRC 675 (2011)
- moving forward with decisions and proceedings will have no effect on NRC's ability to implement necessary rule or policy changes that might come out of its review of the Fukushima accident; LBP-11-35, 74 NRC 701 (2011)
- NRC considers suspension to be a drastic action that is not warranted absent immediate threats to public health and safety or other compelling reason; CLI-11-5, 74 NRC 141 (2011)
- petition for suspension of proceeding following 9/11 attack was denied because even if the licensing, construction, and shipping processes went forward as planned, no radiological materials would be present onsite for at least 2 years, so there was no immediate threat to public safety; CLI-11-5, 74 NRC 141 (2011)
- post-9/11 suspension was neither necessary nor appropriate where shipments of spent fuel to the facility were at least 2 years down the road; CLI-11-5, 74 NRC 141 (2011)
- requests to suspend ongoing adjudicatory and licensing activities pending full consideration of the safety and environmental implications of the Fukushima accident are denied; CLI-11-8, 74 NRC 214 (2011); CLI-11-10, 74 NRC 251 (2011); LBP-11-33, 74 NRC 675 (2011); LBP-11-34, 74 NRC 685 (2011); LBP-11-35, 74 NRC 701 (2011)
- the board does not consider intervenor's petition, which requests rulemaking and suspension of the proceeding, because the discussion in the petition's body specifically directs those requests to the Commission, which has already responded to the requests; LBP-11-34, 74 NRC 685 (2011)
- the Commission may consider requests to suspend or hold proceedings in abeyance pursuant to its inherent supervisory authority over agency proceedings; CLI-11-5, 74 NRC 141 (2011)
- the sole provision of NRC's procedural rules explicitly authorizing stay applications is available only to parties to adjudicatory proceedings seeking stays of decisions or actions of a presiding officer pending the filing and resolution of a petition for review; CLI-11-5, 74 NRC 141 (2011)

TECHNICAL SPECIFICATIONS

- licensee may take reasonable action that departs from a license condition or a technical specification in an emergency when the action is immediately needed to protect the public health and safety and no action consistent with license conditions and technical specifications that can provide adequate or equivalent protection is immediately apparent; DD-11-6, 74 NRC 420 (2011)
- licensee must notify NRC as soon as practical and in all cases within 1 hour of the occurrence, of any deviation from a plant's technical specification; DD-11-6, 74 NRC 420 (2011)

TERMINATION OF LICENSE

- agreement state license termination regulations are not less protective than or incompatible with NRC's in making the terms of restricted release considerably more difficult than those for unrestricted release; CLI-11-12, 74 NRC 460 (2011)
- dose limit for license termination is a constraint within the public dose limit of 25 mrem per year to members of the public; CLI-11-12, 74 NRC 460 (2011)
- NRC explicitly expressed a preference for unrestricted release in adopting its license termination rule; CLI-11-12, 74 NRC 460 (2011)
- terminating a license for restricted use relies on legally enforceable institutional controls to achieve the 25-mrem dose limit: CLI-11-12, 74 NRC 460 (2011)
- terminating a license for unrestricted use allows no dependence on governmental monitoring of engineered barriers and land-use restrictions to achieve a maximum dose of 25 mrem per year to a member of the public; CLI-11-12, 74 NRC 460 (2011)
- the ALARA principle has been incorporated into the restricted-use portion of the license termination rule to screen out sites that should be removing contamination to achieve unrestricted use; CLI-11-12, 74 NRC 460 (2011)
- the ALARA principle, either as a general regulatory principle or as used in NRC's license termination rule, does not incorporate or call for any comparative analysis of doses from restricted and unrestricted release; CLI-11-12, 74 NRC 460 (2011)

- the ALARA requirement in section 20.1101(b) applies to the dose criteria for license termination; CLI-11-12, 74 NRC 460 (2011)
- unrestricted release and restricted release are both available as independent regulatory options that would provide adequate protection to the public health and safety if the applicable dose and other criteria are met; CLI-11-12, 74 NRC 460 (2011)

TERMINATION OF PROCEEDING

- a licensing board's dismissal of all pending contentions on mootness grounds due to new information ordinarily would terminate the proceeding, but new contentions could be filed on new information before termination; LBP-11-22, 74 NRC 259 (2011)
- a licensing board's termination of the contested portion of a proceeding after granting summary disposition on the only pending contentions was not compelled by either precedent or regulation; LBP-11-22, 74 NRC 259 (2011)
- adjudicatory proceedings terminate if intervenor either settles or abandons all of its contentions; LBP-11-22, 74 NRC 259 (2011)
- boards may continue the adjudicatory proceeding until the deadlines for filing proposed new contentions have expired and the board has resolved all admitted and proposed contentions filed within the deadlines; LBP-11-22, 74 NRC 259 (2011)
- terminating an adjudication has significant implications for the rights of intervenors under Atomic Energy Act § 189a; LBP-11-22, 74 NRC 259 (2011)
- with the board's termination of the proceeding, the board's interlocutory rulings on contention admissibility became ripe for appeal; CLI-11-9, 74 NRC 233 (2011)

TERRORISM

- any changes in NRC rules post-9/11 that might bear on license renewal reviews could be addressed via late-filed contentions; CLI-11-5, 74 NRC 141 (2011)
- applicants should rely on the generic environmental impact statement for terrorism-related issues in a license renewal application; CLI-11-11, 74 NRC 427 (2011)
- as an alternative ground for excluding a NEPA terrorism contention, NRC Staff's determination in the generic environmental impact statement that the environmental impacts of a terrorist attack were bounded by those resulting from internally initiated events is sufficient to address the environmental impacts of terrorism; CLI-11-11, 74 NRC 427 (2011)
- based on his education and experience, intervenors' witness was found qualified to testify but not specifically on issues related to nuclear engineering, such as events at the Fukushima Dai-ichi plant, core damage frequency calculations, and effectiveness of SAMDAs; LBP-11-38, 74 NRC 817 (2011)
- Commission responses to requests for suspension of reactor licensing reviews and associated adjudications in the wake of the Three Mile Island accident and 9/11 terrorist attacks are discussed; LBP-11-37, 74 NRC 774 (2011)
- NEPA does not require NRC to consider the environmental consequences of hypothetical terrorist attacks on NRC-licensed facilities; CLI-11-11, 74 NRC 427 (2011)
- petition for suspension of proceeding following 9/11 attack was denied because even if the licensing, construction, and shipping processes went forward as planned, no radiological materials would be present onsite for at least 2 years, so there was no immediate threat to public safety; CLI-11-5, 74 NRC 141 (2011)
- post-9/11 abeyance of a proceeding was denied where the proceeding was at an early stage, there was no risk of immediate threat to public health and safety, there were non-terrorism-related contentions to be considered, and the only harm to petitioner would be inevitable litigation costs; CLI-11-5, 74 NRC 141 (2011)
- post-9/11 suspension was neither necessary nor appropriate where shipments of spent fuel to the facility were at least 2 years down the road; CLI-11-5, 74 NRC 141 (2011)
- protecting against the threat of air attacks is not within licensees' responsibilities because a private security force cannot reasonably be expected to defend against such attacks and adequate protection is ensured through the actions of other federal agencies with defense capabilities and air-safety expertise; CLI-11-4, 74 NRC 1 (2011)
- the board applied the late-filing standards to a post-9/11 contention related to the risk of a terrorist attack on the ISFSI and found the contention timely but denied admission of both the safety and environmental aspects; CLI-11-5, 74 NRC 141 (2011)

within the geographic boundary of the Ninth Circuit, NRC may not exclude NEPA terrorism contentions categorically; CLI-11-11, 74 NRC 427 (2011)

THREE MILE ISLAND ACCIDENT

- Commission responses to requests for suspension of reactor licensing reviews and associated adjudications in the wake of the TMI accident and 9/11 terrorist attacks are discussed; LBP-11-37, 74 NRC 774 (2011)
- the Commission temporarily suspended the immediate effectiveness rule following the TMI accident;
- where the time for filing contentions had expired in a given case, no new TMI-related contentions would be accepted absent a showing of good cause and a balancing of the late-filing factors; CLI-11-5, 74 NRC 141 (2011)

TIME LIMITED AGING ANALYSES

- operating license renewal applicants must reassess time-limited aging analyses made during the original license term and based upon the length of the original license term; LBP-11-21, 74 NRC 115 (2011)
- to evaluate an operating license renewal application, the NRC reviews the management of aging effects and time-limited aging analysis of particular safety-related functions of the plant's systems, structures, and components pursuant to 10 C.F.R. Part 54 and the environmental impacts and alternatives to the proposed action in accordance with Part 51; LBP-11-17, 74 NRC 11 (2011)

TOTAL EFFECTIVE DOSE EQUIVALENT

dose limit for individual members of the public from a licensed activity is 100 millirem per year; CLI-11-12, 74 NRC 460 (2011)

TRANSPORTATION OF SPENT FUEL

post-9/11 suspension was neither necessary nor appropriate where shipments of spent fuel to the facility were at least 2 years down the road; CLI-11-5, 74 NRC 141 (2011)

UNCONTESTED LICENSE APPLICATIONS

- boards are to make independent environmental judgments with respect to certain NEPA findings, though even then they need not rethink or redo every aspect of the NRC Staff's environmental findings or undertake their own fact-finding activities; LBP-11-26, 74 NRC 499 (2011)
- boards may entertain oral and written limited appearance statements from members of the public in connection with a mandatory uncontested proceeding; LBP-11-26, 74 NRC 499 (2011)
- for the mandatory uncontested proceeding on a uranium enrichment facility license, a licensing board is to conduct a simple sufficiency review rather than a de novo review on both safety and environmental issues; LBP-11-26, 74 NRC 499 (2011)
- in a mandatory hearing, a licensing board must narrow its inquiry to those topics or sections in Staff documents that it deems most important and should concentrate on portions of the documents that do not on their face adequately explain the logic, underlying facts, and applicable regulations and guidance; LBP-11-26, 74 NRC 499 (2011)
- in an operating license proceeding, the Commission would informally review the Staff recommendations, and the license would issue only after Commission action; CLI-11-5, 74 NRC 141 (2011)
- NRC needs to conduct only a single licensing action and adjudicatory proceeding to authorize construction and operation and a mandatory hearing regarding the application and the Staff's associated safety and environmental reviews, despite the absence of a petitioner challenging applicant's request; LBP-11-26, 74 NRC 499 (2011)
- NRC Staff's underlying technical and factual findings are not open to board reconsideration unless, after a review of the record, the board finds the NRC Staff review inadequate or its findings insufficient; LBP-11-26, 74 NRC 499 (2011)

UNRESTRICTED RELEASE

- agreement state license termination regulations are not less protective than or incompatible with NRC's in making the terms of restricted release considerably more difficult than those for unrestricted release; CLI-11-12, 74 NRC 460 (2011)
- NRC explicitly expressed a preference for unrestricted release in adopting its license termination rule; CLI-11-12, 74 NRC 460 (2011)
- NRC regulations neither explicitly nor implicitly require a comparison of the levels of protection afforded by the unrestricted and restricted decommissioning options; CLI-11-12, 74 NRC 460 (2011)

- terminating a license for unrestricted use allows no dependence on governmental monitoring of engineered barriers and land-use restrictions to achieve a maximum dose of 25 mrem per year to a member of the public; CLI-11-12, 74 NRC 460 (2011)
- the ALARA principle has been incorporated into the restricted-use portion of the license termination rule to screen out sites that should be removing contamination to achieve unrestricted use; CLI-11-12, 74 NRC 460 (2011)
- the ALARA principle, either as a general regulatory principle or as used in NRC's license termination rule, does not incorporate or call for any comparative analysis of doses from restricted and unrestricted release; CLI-11-12, 74 NRC 460 (2011)
- unrestricted release and restricted release are both available as independent regulatory options that would provide adequate protection to the public health and safety if the applicable dose and other criteria are met; CLI-11-12, 74 NRC 460 (2011)

URANIUM ENRICHMENT FACILITIES

- a factor bolstering the need for a uranium enrichment facility is the recognized margin level that exists in the existing enrichment market to offset potential supply problems as well as maintain a level of reasonable market competition; LBP-11-26, 74 NRC 499 (2011)
- applicant and Staff treatment of need for the construction and operation of uranium enrichment facilities should explain why the proposed action is needed, describe the underlying need for the proposed action, but should not be written merely as a justification of the proposed action or to alter the choice of alternatives; LBP-11-26, 74 NRC 499 (2011)
- applicant seeking a specific license for a uranium enrichment facility is required to submit a decommissioning funding plan consistent with 10 C.F.R. 70.25(e); CLI-11-4, 74 NRC 1 (2011)
- applicant's commitment to use a letter of credit issued by a financial institution whose operations are regulated and examined by a federal or state agency complies with the regulatory requirements for decommissioning financial assurance; LBP-11-26, 74 NRC 499 (2011)
- applicant's radiological measurements and monitoring program is subject to scrutiny; LBP-11-26, 74 NRC 499 (2011)
- as part of its NEPA analysis, NRC must provide information that addresses the purpose and need for the proposed action; LBP-11-26, 74 NRC 499 (2011)
- deferral of execution of the financial instruments for decommissioning funding until after the license has issued is not allowed; CLI-11-4, 74 NRC 1 (2011)
- each decommissioning funding plan must include a signed original of the instrument obtained to provide financial assurance for decommissioning at the time the plan is submitted; CLI-11-4, 74 NRC 1 (2011)
- ensuring continued availability of diverse, reliable sources of domestic enrichment services to provide low-enriched uranium for domestic power reactors supports a finding of need for the facility; LBP-11-26, 74 NRC 499 (2011)
- evidence of significant actual utility commitments provides a compelling showing in support of the need for uranium enrichment facility; LBP-11-26, 74 NRC 499 (2011)
- examples of need for the proposed facility include a benefit provided if the proposed action is granted or descriptions of the detriment that will be experienced without approval of the proposed action; LBP-11-26, 74 NRC 499 (2011)
- for a proposed nuclear materials-related activity, commencement of construction relative to that activity prior to a favorable Staff conclusion regarding the NEPA cost-benefit balance is grounds for denial of the authorization to conduct that activity; LBP-11-26, 74 NRC 499 (2011)
- fugitive dust generation from preconstruction activities is discussed; LBP-11-26, 74 NRC 499 (2011)
- in mandatory hearings, Commission discussion regarding alternative site review supplements the environmental impact statement; LBP-11-26, 74 NRC 499 (2011)
- minimum detectable concentrations for gaseous effluent and evaporator condensate must be 5% or less of the concentrations listed in Part 20, App. B, tbl. 2; LBP-11-26, 74 NRC 499 (2011)
- NRC has clear statutory authority to regulate the construction and operation of a uranium enrichment facility; LBP-11-26, 74 NRC 499 (2011)
- NRC Staff authorization permitting applicant to defer execution of any final letters of credit for decommissioning financial assurance until after a license is issued but before receipt of licensed material might be problematic; LBP-11-26, 74 NRC 499 (2011)

Part 70 applicants are required to establish a radiological monitoring program to monitor and report the release of radiological gaseous and liquid effluents to the environment; LBP-11-26, 74 NRC 499 (2011)

Part 70 establishes the basic regulatory framework that governs the licensing of an enrichment facility; LBP-11-26, 74 NRC 499 (2011)

previously recognized availability policy for domestic enrichment services supports a NEPA finding of a need for the construction and operation of uranium enrichment facilities; LBP-11-26, 74 NRC 499 (2011)

seismic avoidance areas are discussed; LBP-11-26, 74 NRC 499 (2011)

the construction inspection program is discussed; LBP-11-26, 74 NRC 499 (2011)

the Environmental Protection Agency possesses authority to set numerical standards for air pollutants from emission sources; LBP-11-26, 74 NRC 499 (2011)

the Fukushima accident does not provide a seriously different picture of the environmental impact of a proposed uranium enrichment facility from what was previously envisioned; LBP-11-26, 74 NRC 499 (2011)

there is no agency requirement that applicant submit a redress plan relative to preconstruction activities or, absent state or local requirements, take any remediation action regarding preconstruction activities if it decides not to complete the project or is denied agency authorization to construct and operate the facility; LBP-11-26, 74 NRC 499 (2011)

visual impact of operation of a facility on the quality of recreational experience is discussed; LBP-11-26, 74 NRC 499 (2011)

winter weather- and earthquake-related site selection criteria are discussed; LBP-11-26, 74 NRC 499 (2011)

URANIUM ENRICHMENT FACILITY PROCEEDINGS

boards are to make independent environmental judgments with respect to certain NEPA findings, though even then they need not rethink or redo every aspect of the NRC Staff's environmental findings or undertake their own fact-finding activities; LBP-11-26, 74 NRC 499 (2011)

for the mandatory uncontested proceeding on a uranium enrichment facility license, a licensing board is to conduct a simple sufficiency review rather than a de novo review on both safety and environmental issues; LBP-11-26, 74 NRC 499 (2011)

in a mandatory hearing, a licensing board must narrow its inquiry to those topics or sections in Staff documents that it deems most important and should concentrate on portions of the documents that do not on their face adequately explain the logic, underlying facts, and applicable regulations and guidance; LBP-11-26, 74 NRC 499 (2011)

NRC needs to conduct only a single licensing action and adjudicatory proceeding to authorize construction and operation and a mandatory hearing regarding the application and the Staff's associated safety and environmental reviews, despite the absence of a petitioner challenging applicant's request; LBP-11-26, 74 NRC 499 (2011)

NRC Staff's underlying technical and factual findings are not open to board reconsideration unless, after a review of the record, the board finds the NRC Staff review inadequate or its findings insufficient; LBP-11-26, 74 NRC 499 (2011)

URANIUM FUEL CYCLE

for power reactors, NRC Staff review should encompass emissions from the uranium fuel cycle as well as from construction and operation of the facility to be licensed; LBP-11-26, 74 NRC 499 (2011)

VALVES

See Safety Relief Valves

VENTING

assertions of a need to implement filtered vented containment are outside the scope of license renewal proceedings; LBP-11-35, 74 NRC 701 (2011)

VIOLATIONS

possession of depleted uranium at multiple installations without an NRC license and performance of decommissioning at a military installation without proper NRC authorization is a violation of 10 C.F.R. 40.3; DD-11-5, 74 NRC 399 (2011)

WAIVER OF RULE

- absent a waiver or exception from the presiding officer, no NRC rule or regulation, or provision thereof, concerning licensing of production and utilization facilities is subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding; LBP-11-35, 74 NRC 701 (2011)
- absent a waiver, contentions challenging applicable statutory requirements or NRC regulations are not admissible; LBP-11-21, 74 NRC 115 (2011)
- absent demonstration that petitioner's alleged special circumstances are unique to the facility rather than common to a large class of facilities, the request for waiver of regulations excluding spent fuel pool issues from license renewal proceedings is denied; LBP-11-35, 74 NRC 701 (2011)
- board admitted a contention on a conditional basis, pending Commission ruling on merits of petition for waiver of NRC regulations; CLI-11-11, 74 NRC 427 (2011)
- NRC has endorsed a four-pronged test for grant of a rule waiver, all factors of which must be met; LBP-11-35, 74 NRC 701 (2011)
- parties to adjudicatory proceedings may petition for a waiver of a specified Commission rule or regulation or any provision thereof; CLI-11-11, 74 NRC 427 (2011)
- presiding officers must dismiss any petition for waiver that does not make a prima facie showing of special circumstances with respect to the subject matter of the particular proceeding; LBP-11-35, 74 NRC 701 (2011)
- the sole ground for petition of waiver or exception is that special circumstances with respect to the subject matter of the particular proceeding are such that the application of the rule or regulation or a provision of it would not serve the purposes for which it] was adopted; CLI-11-11, 74 NRC 427 (2011); LBP-11-35, 74 NRC 701 (2011)
- the "uniqueness" factor of the rule waiver test is discussed; LBP-11-35, 74 NRC 701 (2011)
- to meet the waiver standard, the party seeking a waiver must attach an affidavit that, among other things, states with particularity the special circumstances claimed to justify the waiver or exception requested; CLI-11-11, 74 NRC 427 (2011)
- to the extent that petitioner challenges the generic environmental impact statement, its remedy is a petition for rulemaking or a petition for a waiver of the rules based on circumstances; CLI-11-11, 74 NRC 427 (2011)
- to waive the generic assessment in NRC regulations to permit adjudication of issues involving the environmental impact of spent fuel pool accidents in a license renewal proceeding, the Commission must conclude that the rule's strict application would not serve the purpose for which it was adopted; CLI-11-11, 74 NRC 427 (2011)
- use of "and" in the list of requirements for rule waiver means that all four factors must be met; CLI-11-11, 74 NRC 427 (2011)

WITHDRAWAL

licensing boards may not raise issues sua sponte when the sole intervenor has withdrawn from the proceeding; LBP-11-22, 74 NRC 259 (2011)

WITNESSES, EXPERT

- based on his education and experience, intervenors' witness was found qualified to testify but not specifically on issues related to nuclear engineering, such as events at the Fukushima Dai-ichi plant, core damage frequency calculations, and effectiveness of SAMDAs; LBP-11-38, 74 NRC 817 (2011)
- experts must have the requisite education, training, skill, or experience in operation of a nuclear power plant or in probabilistic risk assessment to support a contention; LBP-11-35, 74 NRC 701 (2011)
- petitioner's assertion that recriticality is demonstrated by the relative quantities of radionuclides released is not self-evident and is clearly of the class of statements that must be supported by expert opinion; LBP-11-23, 74 NRC 287 (2011)
- speculation by an expert cannot form the basis for admission of a contention on the basis of the matter being exceptionally grave; LBP-11-20, 74 NRC 65 (2011)
- supporting affidavits must be given by competent individuals with knowledge of the facts alleged, or by experts in the disciplines appropriate to the issues raised; LBP-11-35, 74 NRC 701 (2011)
- the ability of a totally unfunded group to provide testimony from experts is not taken into account in ruling on motions to reopen; LBP-11-20, 74 NRC 65 (2011)

ZONE OF INTERESTS

statutes articulating the relevant zone of interests in NRC proceedings are the Atomic Energy Act and the National Environmental Policy Act; LBP-11-29, 74 NRC 612 (2011)

- BELL BEND NUCLEAR POWER PLANT; Docket No. 52-039
 - COMBINED LICENSE; October 18, 2011; MEMORANDUM AND ORDER (Denying Motions to Reopen Closed Proceedings and Intervention Petition/Hearing Request as Premature); LBP-11-27, 74 NRC 591 (2011)
- REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)
- BELLEFONTE NUCLEAR POWER PLANT, Units 3 and 4; Docket Nos. 52-014, 52-015
 - COMBINED LICENSE; November 30, 2011; MEMORANDUM AND ORDER (Ruling on Request to Admit New Contention); LBP-11-37, 74 NRC 774 (2011)
- REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)
- CALLAWAY PLANT, Unit 2; Docket No. 52-037
 - REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)
- CALVERT CLIFFS NUCLEAR POWER PLANT, Unit 3; Docket No. 52-016
 - REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141
- COLUMBIA GENERATING STATION; Docket No. 50-397
 - LICENSE RENEWAL; October 18, 2011; MEMORANDUM AND ORDER (Denying Motions to Reopen Closed Proceedings and Intervention Petition/Hearing Request as Premature); LBP-11-27, 74 NRC 591 (2011)
 - LICENSE RENEWAL; November 30, 2011; MEMORANDUM AND ORDER (Denying Motions to Reinstate Contention); LBP-11-36, 74 NRC 768 (2011)
 - REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)
- COMANCHE PEAK NUCLEAR POWER PLANT, Units 3 and 4; Docket Nos. 52-034, 52-035
 - COMBINED LICENSE; September 27, 2011 (Re-served October 4, 2011); MEMORANDUM AND ORDER; CLI-11-9, 74 NRC 233 (2011)
 - COMBINED LICENSE; October 18, 2011; MEMORANDUM AND ORDER (Denying Motions to Reopen Closed Proceedings and Intervention Petition/Hearing Request as Premature); LBP-11-27, 74 NRC 591 (2011)
 - COMBINED LICENSE; November 30, 2011; MEMORANDUM AND ORDER (Denying Motions to Reinstate Contention); LBP-11-36, 74 NRC 768 (2011)
- REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)
- DAVIS-BESSE NUCLEAR POWER STATION, Unit 1; Docket No. 50-346
 - LICENSE RENEWAL; November 23, 2011; MEMORANDUM AND ORDER (Denying Motion to Admit New Contention); LBP-11-34, 74 NRC 685 (2011)
 - REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)
- DIABLO CANYON NUCLEAR POWER PLANT, Units 1 and 2; Docket Nos. 50-275, 50-323
 - LICENSE RENEWAL; October 12, 2011; MEMORANDUM AND ORDER; CLI-11-11, 74 NRC 427 (2011)

- LICENSE RENEWAL; November 18, 2011; MEMORANDUM, ORDER, AND REFERRAL (Denying Motion to Admit New Contention and Referring Ruling to Commission); LBP-11-32, 74 NRC 654 (2011)
- REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)
- EAGLE ROCK ENRICHMENT FACILITY; Docket No. 70-7015
 - $MATERIALS\ LICENSE;\ July\ 12,\ 2011;\ MEMORANDUM\ AND\ ORDER;\ CLI-11-4,\ 74\ NRC\ 1\ (2011)$
 - MATERIALS LICENSE; October 7, 2011; SECOND AND FINAL PARTIAL INITIAL DECISION
 - (Uncontested/Mandatory Hearing on Environmental Matters); LBP-11-26, 74 NRC 499 (2011)
- FERMI NUCLEAR POWER PLANT, Unit 3; Docket No. 52-033
 - REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)
- HIGH-LEVEL WASTE REPOSITORY; Docket No. 63-001-HLW
 - CONSTRUCTION AUTHORIZATION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-7, 74 NRC 212 (2011)
 - CONSTRUCTION AUTHORIZATION; September 30, 2011; MEMORANDUM AND ORDER (Suspending Adjudicatory Proceeding); LBP-11-24, 74 NRC 368 (2011)
 - CONSTRUCTION AUTHORIZATION; November 29, 2011; MEMORANDUM AND ORDER; CLI-11-13, 74 NRC 635 (2011)
 - CONSTRUCTION AUTHORIZATION; December 22, 2011; MEMORANDUM AND ORDER; CLI-11-15, 74 NRC 815 (2011)
- IN SITU LEACH FACILITY, Crawford, Nebraska; Docket No. 40-8943
 - LICENSE RENEWAL; October 31, 2011; MEMORANDUM (Bringing Matter of Concern to Commission's Attention): LBP-11-30, 74 NRC 627 (2011)
- INDIAN POINT, Units 2 and 3; Docket Nos. 50-247, 50-286
 - LICENSE RENEWAL; July 14, 2011; MEMORANDUM AND ORDER (Ruling on Motion and Cross-Motions for Summary Disposition of NYS-35/36); LBP-11-17, 74 NRC 11 (2011)
 - LICENSE RENEWAL; December 22, 2011; MEMORANDUM AND ORDER; CLI-11-14, 74 NRC 801 (2011)
- REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)
- LEVY COUNTY NUCLEAR POWER PLANT, Units 1 and 2; Docket Nos. 52-029, 52-030
 - COMBINED LICENSE; September 27, 2011; MEMORANDUM AND ORDER; CLI-11-10, 74 NRC 251 (2011)
 - COMBINED LICENSE; November 4, 2011; MEMORANDUM AND ORDER (Granting Motion for Summary Disposition of Contention 8A); LBP-11-31, 74 NRC 643 (2011)
 - REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)
- METROPOLIS WORKS URANIUM CONVERSION FACILITY; Docket No. 40-3392-MLA
 - MATERIALS LICENSE AMENDMENT; July 27, 2011; MEMORANDUM AND ORDER (Granting Request for Hearing); LBP-11-19, 74 NRC 61 (2011)
- NORTH ANNA POWER STATION, Unit 3; Docket No. 52-017
 - COMBINED LICENSE; September 1, 2011; MEMORANDUM AND ORDER (Denying Dominion's Motion for Clarification of LBP-11-10); LBP-11-22, 74 NRC 259 (2011)
 - REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141
- PILGRIM NUCLEAR POWER STATION; Docket No. 50-293
 - LICENSE RENEWAL; July 19, 2011; PARTIAL INITIAL DECISION (Rejecting, Upon Remand, Pilgrim Watch's Challenge to Meteorological Modeling in SAMA Analysis in Entergy's License Renewal Application); LBP-11-18, 74 NRC 29 (2011)
 - LICENSE RENEWAL; August 11, 2011; MEMORANDUM AND ORDER (Denying Pilgrim Watch's Requests for Hearing on Certain New Contentions); LBP-11-20, 74 NRC 65 (2011)
 - LICENSE RENEWAL; September 8, 2011 (Corrected and Reissued December 13, 2011);
 - MEMORANDUM AND ORDER (Corrected Version of September 8, 2011 Memorandum and Order

- Denying Pilgrim Watch's Requests for Hearing on New Contentions Relating to Fukushima Accident); LBP-11-23, 74 NRC 287 (2011)
- LICENSE RENEWAL; November 28, 2011; MEMORANDUM AND ORDER (Denying Commonwealth of Massachusetts' Request for Stay, Motion for Waiver, and Request for Hearing on a New Contention Relating to Fukushima Accident); LBP-11-35, 74 NRC 701 (2011)
- REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)
- RIVER BEND STATION, Unit 1; Docket No. 50-458
 - REQUEST FOR ACTION; November 8, 2011; FINAL DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206; DD-11-7, 74 NRC 787 (2011)
- SEABROOK STATION, Unit 1; Docket No. 50-443
 - LICENSE RENEWAL; October 19, 2011; MEMORANDUM AND ORDER (Denying Motions to Admit New Contention); LBP-11-28, 74 NRC 604 (2011)
- REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)
- SHEARON HARRIS NUCLEAR POWER PLANT, Units 2 and 3; Docket Nos. 52-022, 52-023
- REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)
- SOUTH TEXAS PROJECT, Units 1 and 2; Docket Nos. 50-498-LR, 50-499-LR
 - LICENSE RENEWAL; August 26, 2011; MEMORANDUM AND ORDER (Ruling on Petition for Leave to Intervene and Request for Hearing); LBP-11-21, 74
- SOUTH TEXAS PROJECT, Units 3 and 4; Docket Nos. 52-012, 52-013
 - COMBINED LICENSE; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-6, 74 NRC 203 (2011)
 - COMBINED LICENSE; September 30, 2011; MEMORANDUM AND ORDER (Ruling on Admissibility of Intervenors' New Foreign Control Contention); LBP-11-25, 74 NRC 380 (2011)
 - COMBINED LICENSE; December 29, 2011; FIRST PARTIAL INITIAL DECISION (Ruling on Contention CL-2); LBP-11-38, 74 NRC 817 (2011)
 - COMBINED LICENSE; December 29, 2011; MEMORANDUM AND ORDER (Ruling on Admissibility of Intervenors' New Contention Regarding Fukushima Task Force Report); LBP-11-39, 74 NRC 862 (2011)
 - REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)
- ST. LUCIE NUCLEAR POWER PLANT, Unit 1; Docket No. 50-335
 - LICENSE AMENDMENT; October 19, 2011; MEMORANDUM AND ORDER (Denying Petition for Leave to Intervene and Request for Hearing); LBP-11-29, 74 NRC 612 (2011)
- TURKEY POINT NUCLEAR GENERATING PLANT, Units 6 and 7; Docket Nos. 52-040, 52-041
 - COMBINED LICENSE; November 21, 2011; MEMORANDUM AND ORDER (Denying Request to Suspend Licensing Proceeding, Granting Motion to Supplement, and Denying Admission of Proposed New Fukushima Contention); LBP-11-33, 74 NRC 675 (2011)
- REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011) NRC 115 (2011)
- VERMONT YANKEE NUCLEAR POWER STATION; Docket No. 50-271
 - REQUEST FOR ACTION; September 9, 2011; DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206; DD-11-6, 74 NRC 420 (2011)
 - REQUEST FOR ACTION; November 8, 2011; FINAL DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206; DD-11-7, 74 NRC 787 (2011)
- VIRGIL C. SUMMER NUCLEAR STATION, Units 1 and 2; Docket Nos. 52-027, 52-028
 - REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)
- VOGTLE ELECTRIC GENERATING PLANT, Units 3 and 4; Docket Nos. 52-025, 52-026
 - COMBINED LICENSE; September 27, 2011; MEMORANDUM AND ORDER; CLI-11-8, 74 NRC 214 (2011)

- COMBINED LICENSE; October 18, 2011; MEMORANDUM AND ORDER (Denying Motions to Reopen Closed Proceedings and Intervention Petition/Hearing Request as Premature); LBP-11-27, 74 NRC 591 (2011)
- COMBINED LICENSE; November 30, 2011; MEMORANDUM AND ORDER (Denying Motions to Reinstate Contention); LBP-11-36, 74 NRC 768 (2011)
- REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)
- WATTS BAR NUCLEAR PLANT, Unit 2; Docket No. 50-391
- REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)
- WILLIAM STATES LEE III NUCLEAR STATION, Units 1 and 2; Docket Nos. 52-018, 52-019
 - COMBINED LICENSE; October 18, 2011; MEMORANDUM AND ORDER (Denying Motions to Reopen Closed Proceedings and Intervention Petition/Hearing Request as Premature); LBP-11-27, 74 NRC 591 (2011)
 - COMBINED LICENSE; November 30, 2011; MEMORANDUM AND ORDER (Denying Motions to Reinstate Contention); LBP-11-36, 74 NRC 768 (2011)
 - REQUEST FOR ACTION; September 9, 2011; MEMORANDUM AND ORDER; CLI-11-5, 74 NRC 141 (2011)