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April 1, 2011 – June 30, 2011

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PREFACE

This is Book II of the seventy-third volume of issuances (391–727) of the Nuclear Regulatory Commission and its Atomic Safety and Licensing Boards, Administrative Law Judges, and Office Directors. It covers the period from April 1, 2011, to June 30, 2011. Book I covers the period from January 1, 2011 to March 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.

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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).

The Commission also may appoint Administrative Law Judges pursuant to the Administrative Procedure Act, who preside over proceedings as directed by the Commission.

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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

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Michael C. Farrar, Chairman
Nicholas G. Trikouros
Lawrence G. McDade

In the Matter of **Docket No. 70-3098-MLA**
(ASLBP No. 07-856-02-MLA-BD01)

SHAW AREVA MOX SERVICES
(Mixed Oxide Fuel Fabrication Facility) **April 1, 2011**

RULES OF PRACTICE: NEW CONTENTIONS

Contentions based on new information in a document that was not previously available and that is materially different from a document that was previously available are not untimely simply for not being included in an intervenor's initial hearing request filed at the outset of a proceeding.

RULES OF PRACTICE: NEW CONTENTIONS

An applicant's change of legal position, its claims that such change in legal position no longer entails a need for an exemption from the regulations, and its identification of new means/systems to satisfy the regulations are all types of materially different new information that can enable a contention to satisfy the timely new or amended contention requirements of 10 C.F.R. § 2.309(f)(2)(i)-(ii).

RULES OF PRACTICE: NEW CONTENTIONS

Intervenors' challenges to an enhanced version of an application alone are

insufficient to vitiate the Intervenors' obligation to file any challenges to the original version of that application at the outset of the proceeding. Where, however, an applicant deletes a material portion of its application and replaces it with a changed explanation of legal compliance, that replacement is materially different information that was previously unavailable and thus can satisfy the requirements of 10 C.F.R. § 2.309(f)(2)(i)-(ii).

***PRO SE* LITIGANTS**

The Commission's directive to treat *pro se* litigants more leniently than litigants with counsel allows a board to take into account complex procedural hurdles presented to intervenors and to structure its rulings accordingly.

RULES OF PRACTICE: NONTIMELY FILINGS (GOOD CAUSE)

Understandable misapprehension of the start of the filing period for contentions, leading to inadvertent late filing of new contentions, establishes good cause to excuse missing the filing deadline pursuant to 10 C.F.R. § 2.309(c)(1).

RULES OF PRACTICE: NONTIMELY FILINGS (GOOD CAUSE)

Considering that the filing deadline for new contentions is triggered only when a defined set of somewhat imprecise circumstances exists under 10 C.F.R. § 2.309(f)(2), the exact time at which those circumstances come into being is not always entirely clear. The trigger date for this filing period can be especially unclear where both public and nonpublic documents associated with a proceeding are produced and where an applicant's stated compliance with NRC regulations shifts over time. This is sufficient good cause for Intervenors' uncertainty, over a 10-day period, regarding the start of a rolling deadline for submitting new contentions.

RULES OF PRACTICE: NONTIMELY FILINGS (GOOD CAUSE)

Commission precedent allows the finding that a petitioner, who had constructive and actual notice of a filing deadline, lacks good cause for filing its intervention petition 7 days late. But the existence of inherent uncertainty in the trigger date for a rolling deadline can preclude a finding of constructive and/or actual notice of the filing deadline, and thus can leave room for a finding of good cause for the late filing.

SENSITIVE UNCLASSIFIED NONSAFEGUARDS INFORMATION (SUNSI): INTERPRETATION

Lack of clarity in the terms and application of the agency's newly established sensitive unclassified nonsafeguards information (SUNSI) policy contributed to Intervenors' misapprehension that they were required to demonstrate a "need for the information" in order to request SUNSI documents, and thus makes excusable their belated awareness of the information in those documents.

RULES OF PRACTICE: NONTIMELY FILINGS (REPRESENTATION BY OTHER MEANS AND REPRESENTATION BY OTHER PARTIES)

Where Intervenors are the only parties admitted, they satisfy the criteria, contained in 10 C.F.R. § 2.309(c)(1)(v) and (vi), related to showing that their interests are not adequately represented by other means or by other parties. Especially after the NRC Staff has already issued requests for information and its safety evaluation report, there is no other means to represent Intervenors' interests.

RULES OF PRACTICE: NONTIMELY FILINGS (DELAY OF THE PROCEEDING)

Looking to 10 C.F.R. § 2.309(c)(vii), where the public interest has been served by an applicant taking almost 4 years to submit the entirety of its application and associated documents and changing its position on the underlying justification for an aspect of its license, and the NRC Staff has taken over 2 1/2 years to address a problem with an applicant's noncompliance with NRC regulations through requests for additional information, Intervenors' pursuit of newly filed contentions on those subjects cannot be said to be the cause of untoward delay in the proceeding.

RULES OF PRACTICE: NONTIMELY FILINGS (DELAY OF THE PROCEEDING)

The public interest can well be served by revisions to an application that ends up "getting it right" and by the Staff's expected thorough analysis of such revisions. Those necessary processes, invoked by the Applicants or at their behest, can be quite time-consuming. By the same token, an inquiry launched by the Intervenors after a 10-day delay does not unduly prolong the proceeding.

RULES OF PRACTICE: NONTIMELY FILINGS (BROADENING THE ISSUES OR DELAY OF THE PROCEEDING)

Litigation of substantively admissible contentions addressing important security issues that are of the highest safety order deserve to be heard and thus will not inappropriately broaden the issues in the proceeding, especially in light of the varied approaches that have been presented to justify an applicant's proposal and the applicant's previous admission that it failed to satisfy the relevant security regulations.

MEMORANDUM AND ORDER
(Admitting New Contentions 9, 10, and 11)

This proceeding arises out of the application of Shaw AREVA MOX Services (Applicant) for a license to possess and to use byproduct material, source material, and special nuclear material (SNM) at its proposed mixed oxide fuel fabrication facility at the Savannah River Site, which is overseen by the Department of Energy and is located near Aiken, South Carolina.[1] Before the Board is the motion of Nuclear Watch South, Blue Ridge Environmental Defense League, and Nuclear Information and Resource Service (collectively, Intervenors) to admit three new contentions, Contentions 9, 10, and 11, challenging the adequacy of Applicant's April 2010 revision to its Fundamental Nuclear Material Control Plan (2010 FNMCP).[2]

In these contentions, the full text of which appears in a nonpublic Appendix which we are issuing separately from this decision,[3] Intervenors allege that the 2010 FNMCP fails to comply with the NRC's material control and accounting

[1] Mixed Oxide Fuel Fabrication Facility License Application (Sept. 27, 2006) (ADAMS Accession No. ML062750195); *see also* Letter from David Stinson, President and COO, Duke Cogema Stone & Webster, to U.S. Nuclear Regulatory Commission, Duke Cogema Stone & Webster Mixed Oxide Fuel Fabrication Facility Submittal of License Application (Sept. 27, 2006) (ADAMS Accession No. ML062750194) [hereinafter Sept. 27, 2006 Application Letter]; 10 C.F.R. § 70.22(b) (requiring an application to contain a full description of the applicant's program for control and accounting of special nuclear material to show how it will comply with the 10 C.F.R. Part 74 requirements). The Applicant subsequently submitted a revision to its application. *See* Mixed Oxide Fuel Fabrication Facility License Application (Nov. 17, 2006) (ADAMS Accession No. ML070160311).

[2] Petitioners' Motion for Admission of Contentions 9, 10, and 11 Regarding Shaw MOX Areva Services' Revised Fundamental Nuclear Material Control Plan (July 26, 2010) [hereinafter Motion].

[3] Because the new contentions necessarily involve sensitive unclassified nonsafeguards information (SUNSI), and consistent with our commitment to limit, to the extent practicable, direct reference to protected information in our rulings, the full text of the contentions must be withheld from the public. *See* Licensing Board Order (Granting Joint Motion Regarding SUNSI Disclosure Procedures and Requesting Appointment of SUNSI Expert) (Dec. 21, 2010) at 2 (unpublished).

(MC&A) regulations contained in 10 C.F.R. Part 74. These regulations set monitoring frequency and alarm resolution requirements that are designed to detect abrupt losses (e.g., theft), and to enable verification of the presence and integrity of plutonium and other SNM.[4]

Both the Applicant and the NRC Staff concede that these new contentions meet the Agency's substantive pleading requirements,[5] but they oppose admission of the contentions as untimely submitted.[6] Applicant asserts that Intervenors filed these contentions over 3 years late,[7] while the NRC Staff's view is that Intervenors filed them only 10 days late.[8]

For the reasons explained below, a Majority of the Board (Judges Farrar and Trikouros) grants Intervenors' motion, finding that nontimeliness concerns do not bar admission of the proffered contentions. Specifically, contrary to the view of the Applicant (and of our dissenting colleague Judge McDade[9]), we conclude that the 2010 FNMCP is materially different from the plan that accompanied Applicant's original submission in 2006, and that Intervenors' new contentions could not have been based on that earlier plan. As to the Staff's argument, we conclude that, while Intervenors may have made a 10-day miscalculation of the date that triggered the filing deadline, they have demonstrated good cause for taking that approach, and a balance of the other relevant factors also favors admission of their contentions.

I. BACKGROUND

On November 17, 2006, Applicant submitted its application for possession and use of byproduct, source, and special nuclear material at the proposed facility,[10] thereby commencing the second step in the facility licensing process.[11] The first step, taken in 2001, involved submission by the Applicant (formerly Duke

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[4] *See* Motion at 1-2; 10 C.F.R. Parts 70 and 74.

[5] Tr. at 722.

[6] Shaw Areva MOX Services LLC's Answer to Intervenors' Motion for Admission of Contentions 9, 10, and 11 (Aug. 23, 2010) at 2 [hereinafter Applicant Answer]; NRC Staff Response to Petitioners' Motion for Admission of Contentions 9, 10, and 11 Regarding Shaw Areva MOX Services' Revised Fundamental Nuclear Material Control Plan (Aug. 23, 2010) at 1, 8 [hereinafter Staff Answer].

[7] Applicant Answer at 15.

[8] Staff Answer at 8, 10.

[9] *See* Dissenting Opinion of Judge Lawrence G. McDade (April 1, 2011) [hereinafter Dissent].

[10] Notice of License Application for Possession and Use of Byproduct, Source, and Special Nuclear Materials for the Mixed Oxide Fuel Fabrication Facility, Aiken, SC, and Opportunity to Request a Hearing, 72 Fed. Reg. 12,204, 12,204 (Mar. 15, 2007).

[11] *See* LBP-07-14, 66 NRC 169, 175 (2007).

Cogema Stone and Webster[12]) of a construction authorization request (CAR) for the proposed facility.[13] In March of 2005, the NRC authorized construction of the facility.[14]

Some of the Intervenors and their representatives in the instant proceeding also participated in the prior CAR proceeding.[15] One of the contentions submitted therein claimed that the CAR omitted necessary design information regarding the proposed facility's MC&A monitoring system, and that instead it "merely stated the Applicant's commitment to submit the MC&A and physical protection system plans" later, i.e., "with the anticipated filing of its possession and use license application."[16] The Licensing Board presiding over that proceeding then dismissed the contention for mootness upon Applicant's submission of CAR revisions, which contained supplemental MC&A design information supporting later development of an FNMCP that presumably would meet the MC&A regulations.[17]

When Applicant submitted its current application — in effect a very early request for an operating license — on November 17, 2006, construction of the proposed facility had not yet begun.[18] As it turned out, that construction, albeit authorized in March 2005, did not commence until August of 2007. It is scheduled for completion in 2014.[19]

Applicant included with its 2006 license application a plan (the 2006 FNMCP), which addressed MC&A design information, a subject that is a central focus of the proposed new contentions.[20] The 2006 FNMCP was withheld from public disclosure as "sensitive unclassified non-safeguards information" (SUNSI).[21]

On March 15, 2007, the NRC published a notice of opportunity to request

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[12] *Id.* at 176 n.5; 72 Fed. Reg. at 12,204.

[13] *See* Notice of Acceptance for Docketing of the Application, and Notice of Opportunity for a Hearing, on an Application for Authority to Construct a Mixed Oxide Fuel Fabrication Facility, 66 Fed. Reg. 19,994, 19,995 (Apr. 18, 2001).

[14] 72 Fed. Reg. at 12,204; *see* Duke Cogema Stone & Webster, Docket No. 70-3098, Mixed Oxide Fuel Fabrication Facility Construction Authorization, Construction Authorization No. CAMOX-001 (Mar. 30, 2005) (ADAMS Accession No. ML050660392) [hereinafter Construction Authorization].

[15] LBP-07-14, 66 NRC at 175.

[16] *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-04-9, 59 NRC 286, 291-92 (2004); *see also Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 410 (2001); LBP-07-14, 66 NRC at 177.

[17] LBP-04-9, 59 NRC at 293; *see also* Intervenors' Reply to Shaw MOX Areva Services' and NRC Staff's Responses to Contentions 9, 10 and 11 Regarding Revised Fundamental Nuclear Material Control Plan (Aug. 30, 2010) at 6 n.3 [hereinafter Reply].

[18] *See* LBP-08-11, 67 NRC 460, 468 (2008).

[19] *See id.*

[20] *See* Sept. 27, 2006 Application Letter at 1.

[21] *See id.*

a hearing regarding the application.[22] Shortly thereafter, Intervenors obtained a copy of the application itself.[23] The Intervenors maintain that they took guidance from, and relied upon, a ruling in the CAR proceeding that the FNMCP would be developed in accordance with agency regulations. As a result, Intervenors did not make a special SUNSI request for a copy of the underlying nonpublic 2006 FNMCP.[24] At the time, the Intervenors had not retained counsel; rather, they functioned *pro se* in preparing their intervention petition,[25] not retaining counsel to represent them until mid-February, 2008.[26]

On May 14, 2007, Intervenors timely filed their petition for intervention and request for hearing on the application, in which they submitted several contentions, none of which dealt with the subject of the now-proffered contentions.[27] In a decision issued on October 31, 2007, we found that Intervenors had standing to participate in this proceeding as parties and admitted two of their contentions, Contentions 3 and 4, for hearing.[28] Later, the Board dismissed Contention 3 as well as a new Contention 6; recast Contention 4; and imposed conditions regarding submission of new or amended contentions addressing issues raised in original Contention 7.[29]

At that early stage, the Board set forth a filing ground-rule for future contentions, establishing that the Board would consider new or amended contentions to be timely under 10 C.F.R. § 2.309(f)(2) if filed within 60 days of any "triggering event."[30] We established 60 days, as opposed to the typical 30 days, for the express purpose of providing a reasonable and practical time frame for the Intervenors to research and to analyze new developments in this complex and evolving proceeding.[31] On February 4, 2009, the Commission affirmed the Board's rule that new

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[22] 72 Fed. Reg. at 12,204, 12,206. The notice of opportunity for hearing referenced a cover letter associated with the application that listed the 2006 FNMCP as a supporting, but not publicly available, document associated with the application. *See* 72 Fed. Reg. at 12,206; Sept. 27, 2006 Application Letter at 1.

[23] Motion at 5; *see* LBP-07-14, 66 NRC at 174-75.

[24] *See* Motion at 5; Reply at 6.

[25] *See* Petition for Intervention and Request for Hearing, Attachment, Certificate of Service (May 14, 2007).

[26] *See* Letter from Diane Curran, to Licensing Board, Filing in MOX Plutonium Fuel Fabrication Facility Licensing Proceeding, Docket No. 70-3098 (Feb. 12, 2008), Enclosure 1, Notice of Appearance by Diane Curran and Notice of Withdrawal of Appearances by Glenn Carrol, Louis A. Zeller, and Mary Olson (Feb. 11, 2008).

[27] *See* LBP-07-14, 66 NRC at 174-75.

[28] *See id.* at 190, 214.

[29] *See* LBP-08-11, 67 NRC at 464.

[30] *Id.* at 493.

[31] *Id.* at 493-94.

contentions would be deemed timely under section 2.309(f)(2) if filed within 60 days after pertinent information first becomes available.[32]

The question before us involves compliance with that time period insofar as new Contentions 9, 10, and 11 are concerned. For that purpose, and within the framework of the broader legal standards that apply to such a situation (*see* Part II, Legal Standards), the relevant facts are as follows:

On February 26, 2009, the NRC Staff sent the Applicant a Request for Additional Information (RAI).[33] In the RAI, the NRC Staff requested a revision of the 2006 FNMCP that would sufficiently meet the regulatory requirements of 10 C.F.R. Part 74.[34] Applicant responded to the RAI by stating that it planned to request an exemption from certain Part 74 requirements.[35]

On December 17, 2009, Applicant submitted its request to exempt the facility from certain of the agency's 10 C.F.R. Part 74 MC&A regulations.[36] Applicant stated that the exemptions were necessary, *because it could not meet certain specific requirements set forth in 10 C.F.R. Part 74.*[37]

On March 22, 2010, Intervenors filed a motion to admit a new contention, Contention 8, challenging Applicant's exemption request.[38] The proffered contention was supported by a declaration from Dr. Edwin S. Lyman.[39]

The NRC Staff opposed admission of Contention 8, claiming that it failed to satisfy the requirements for a new or amended contention under 10 C.F.R. § 2.309(f)(2) and the nontimely filing requirements of 10 C.F.R. § 2.309(c).[40]

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[32] CLI-09-2, 69 NRC 55, 58 (2009).

[33] *See* Enclosure 1 re: RAI-OUO, Fundamental Nuclear Material Control Plan MOX Fuel Fabrication Facility Application Dated September 27, 2006 (Feb. 26, 2009) (ADAMS Accession No. ML090160570).

[34] *Id.* at 13-18.

[35] Draft MC&A Responses, MC&A Plan, Exemption Request (Oct. 7, 2009) Enclosure at 1-5 RAI Response Summary Chart at 21, 26 (ADAMS Accession No. ML092870426); Shaw AREVA MOX Services, LLC — Responses to Requests for Additional Information re the Review of Fundamental Nuclear Control Plan & Instrumentation & Control Security Aspects for License Application Request (Oct. 17, 2009) Enclosure 1 at unnumbered pp. 12, 17 (ADAMS Accession No. ML093570532).

[36] *See* Request for Exemption from Aspects of Process and Item Monitoring (Dec. 17, 2009) (ADAMS Accession No. ML093561015).

[37] *Id.* at 6, Enclosed Exemption Request at 3 ("MOX Services cannot satisfy these [requirements].") [the nature of these requirements is SUNSI protected: we direct the parties' and the Commission's attention to the specific nature of those requirements as reflected in the cited documents].

[38] Petitioners' Motion for Admission of Contention 8 Regarding Shaw MOX Areva Services' Request for Exemption from Material Control and Accounting Requirements (Mar. 22, 2010).

[39] *See id.,* Exh. 1, Declaration of Dr. Edwin S. Lyman Regarding Shaw AREVA MOX Services' Application for an Exemption from NRC Material Control and Accounting Regulations (Mar. 22, 2010).

[40] NRC Staff Response to Petitioners' Motion for Admission of Late-Filed Contention 8 (Apr. 16, 2010) at 1.

Specifically, the NRC Staff stated that both the information upon which the Intervenors based Contention 8 and the information related to the Applicant's inability to satisfy 10 C.F.R. Part 74 requirements was contained in the 2006 FNMCP and had been available since March 15, 2007 — the date of publication in the *Federal Register* of the notice of availability of the 2006 application and opportunity to request a hearing.[41] While the NRC Staff asserted that the contention was late,[42] Applicant opposed admission of Contention 8 as both: (1) not ripe, on the theory that an exemption request cannot be challenged until the NRC Staff grants it;[43] and (2) moot, because the Applicant intended to withdraw the exemption request.[44]

On May 17, 2010, Applicant indeed withdrew its request for an exemption.[45] On that same date, Applicant presented a revised Fundamental Nuclear Material Control Plan (2010 FNMCP); this was served on the Intervenors in accordance with the December 31, 2008, Protective Order, governing the exchange of nonpublic information, that we issued after granting Intervenors' intervention petition.[46] On May 24, 2010, in recognition of the Applicant's action, Intervenors withdrew Contention 8 and notified the Board of their plans to gather pertinent information to determine whether to submit new contentions.[47] On July 26, 2010, Intervenors submitted the instant motion, proffering new Contentions 9, 10, and 11, along with a supporting declaration from Dr. Lyman, which supersedes Contention 8 and its associated declaration of Dr. Lyman.[48]

On August 23, 2010, both the NRC Staff and Applicant submitted their answers opposing the contentions, but only on timeliness grounds, not on substantive

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[41] *See id.* at 7-14; 72 Fed. Reg. at 12,204.

[42] *See* NRC Staff Response to Petitioners' Motion for Admission of Late-Filed Contention 8 (Apr. 16, 2010) at 7.

[43] These diverging positions of the Staff and the Applicant recall the Board Chairman's concurrence in LBP-08-11, 67 NRC at 497, 503-04, where he discussed a "prematurity/belatedness dilemma" concerning the impact of the inconsistency between alternative arguments of the Applicant and the NRC Staff that a proffered contention is filed on the one hand too early and on the other hand too late. *Id.* at 504-05.

[44] Answer of Shaw AREVA MOX Services, LLC Opposing Intervenors' Motion for Admission of Contention 8 (Apr. 19, 2010) at 2.

[45] Certificate of Service (May 17, 2010) (ADAMS Accession No. ML1014503590) (providing notice of withdrawal of request for exemption from aspects of process and item monitoring, and service of the 2010 FNMCP).

[46] *Id.; see also* LBP-07-14, 66 NRC at 175, 214; Licensing Board Order (Adopting Protective Order (Dec. 31, 2008) (unpublished).

[47] Intervenors' Response to Shaw AREVA MOX Services' Withdrawal of Exemption Application and Withdrawal of Contention 8 (May 24, 2010) at 1-2.

[48] *See* Motion; Declaration of Dr. Edwin S. Lyman in Support of Intervenors' Contentions 9, 10, and 11 (July 26, 2010) [hereinafter Lyman Declaration].

ones.[49] Specifically, as noted at the outset (p. 395, above), Applicant claims that Intervenors filed these contentions over 3 years late, while the NRC Staff argues that Intervenors filed them 10 days late.[50] Intervenors submitted their reply on August 30, 2010.[51]

We held oral argument on October 26, 2010.[52] During the oral argument, we provided an opportunity for the parties to submit supplemental briefing addressing the timeliness of Contentions 9, 10, and 11, and the differences between the original 2006 FNMCP and the revised 2010 FNMCP.[53] Intervenors submitted their supplemental brief on November 15, and Applicant submitted its response brief on December 3.[54]

II. LEGAL STANDARDS

Three regulations address the admissibility of additional contentions once an adjudicatory proceeding has been initiated. These are: 10 C.F.R. § 2.309(f)(1), which establishes the basic admissibility criteria that all contentions must satisfy[55] (but which is not at issue here among the parties, *see* pp. 395 and 399-400); 10 C.F.R. § 2.309(f)(2), which deals with the factors that govern the admission of *timely* new or amended contentions; and 10 C.F.R. § 2.309(c), which deals with the admission of *nontimely* contentions.

Under 10 C.F.R. § 2.309(f)(2), a petitioner or intervenor may file timely new or amended contentions, with leave of the Board, if the following requirements are met:

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[49] *See* Tr. at 722; Applicant Answer at 2; Staff Answer at 8.

[50] *See* Applicant Answer at 15; Staff Answer at 8, 10.

[51] *See* Reply.

[52] Tr. at 704-838.

[53] *Id.* at 828-34.

[54] Intervenors' Supplemental Brief Regarding Timeliness and Justification for Late Filing of Contentions 9, 10, and 11 (Nov. 15, 2010) [hereinafter Supplemental Brief]; Shaw Areva MOX Services' Brief in Response to Intervenors' November 15, 2010 Supplemental Brief (Dec. 3, 2010).

[55] To be admissible, a contention must: (1) provide a specific statement of law or facts in dispute; (2) explain the basis for the contention; (3) show that the contention is within the scope of the proceeding; (4) demonstrate that the issue raised is material to the findings that the NRC must make to support the action involved in the proceeding; (5) state the facts or expert opinion which support the contention; and (6) show that a genuine dispute exists on a material issue of law or fact by referring to specific portions of the application that the petitioner disputes or, if the application is alleged to be deficient, by identifying such deficiencies and the supporting reasons for this allegation. 10 C.F.R. § 2.309(f)(1); *see Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 124 (2009).

(i) The information upon which the amended or new contention is based was not previously available;

(ii) The information upon which the amended or new contention is based is materially different than information previously available; and

(iii) The amended or new contention has been submitted in a *timely* fashion based on the availability of the subsequent information.

10 C.F.R. § 2.309(f)(2)(i)-(iii) (emphasis added). The Commission summarized the application of section 2.309(f)(2) in this proceeding to be:

> that if, within 60 days after the pertinent information that would support the framing of [a new contention] first becomes available, Intervenors submit a particularized and otherwise admissible contention regarding the construction of the MOX facility, then the contention will be deemed timely without the need to satisfy the balancing test for late-filing requirements of 10 C.F.R. § 2.309(c) or our regulatory requirements in 10 C.F.R. § 2.326 for reopening the record if otherwise applicable.[56]

If a proposed new contention which is filed after the initial filing period set forth in the hearing notice[57] is *not* timely under 10 C.F.R. § 2.309(f)(2)(iii), then the proponent of the contention must address the eight criteria, set out in 10 C.F.R. § 2.309(c)(1), that govern "nontimely filings," and show that a balance of these factors weighs in favor of admitting that contention.[58] The first of the eight criteria — "good cause" for failure to file on time — is the most important factor in the 10 C.F.R. § 2.309(c) analysis.[59] If good cause is not shown, the Board may still permit the late filing, but the petitioner or intervenor must make a strong showing on the other factors.[60]

III. POSITIONS OF THE PARTIES

A. Overview

In response to Intervenors' motion to admit Contentions 9, 10, and 11, the

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[56] CLI-09-2, 69 NRC 55, 59 (2009) (affirming on this ground, LBP-08-11, 67 NRC at 494-95).

[57] *See* 72 Fed. Reg. at 12,204.

[58] 10 C.F.R. § 2.309(c).

[59] *See Crow Butte Resources, Inc.* (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 549 n.61 (2009); *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 261 (2009).

[60] *See Tennessee Valley Authority* (Watts Bar Nuclear Plant, Unit 2), CLI-10-12, 71 NRC 319, 323 (2010) (citing *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 564 (2005)); *Pacific Gas and Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-1, 67 NRC 1, 5-8 (2008).

Applicant and the NRC Staff both concede that these contentions meet the substantive requirements for admission under 10 C.F.R. § 2.309(f)(1), but both contest their admission on the basis of untimeliness. Their respective positions on this point are, however, vastly different.

Applicant argues that Intervenors should have submitted Contentions 9, 10, and 11 more than 3 years earlier, subsequent to the availability of the application in 2007.[61] The NRC Staff sees the delay as far more benign, asserting that Intervenors were entitled to file new contentions 60 days after the issuance of the 2010 FNMCP but that they submitted these contentions 70 days thereafter, i.e., 10 days too late.[62]

In their reply, Intervenors largely agreed with the Staff (assuming that their May 17, 2010 receipt of the 2010 FNMCP initiated the 60-day time period), but urged that they had initially regarded the trigger for the 60-day period not as that date but rather 10 days later, when they received related, nonpublic documents (the 2006 FNMCP and 2009 RAI and responses thereto).[63] By focusing on the later trigger date, they missed — by 10 days — the 60-day filing deadline as calculated from the earlier trigger date. Intervenors maintain that this was an understandable error and translates into good cause for miscalculating the start of the deadline period, and that, on balance, the remaining factors of 10 C.F.R. § 2.309(c)(1) otherwise also weigh in favor of granting their motion to admit these contentions.[64]

B. Details

More specifically, Applicant contends that the 2010 FNMCP merely "highlights information previously contained in the original 2006 FNMCP" associated with the 2006 submission of the application, and that the information contained in the 2010 FNMCP is therefore not new information.[65] Applicant cites the notice of docketing of the application in the *Federal Register* published on March 15, 2007, which references the 2006 FNMCP as a nonpublic document.[66] According to Applicant, the deadline for Intervenors to file Contentions 9, 10, and 11 lapsed over 3 years before they were filed, and Intervenors have not shown that good cause, or a balance of the 10 C.F.R. § 2.309(c)(1) factors, exists to justify their admission now.[67]

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[61] Applicant Answer at 2.
[62] Staff Answer at 8.
[63] Reply at 3.
[64] *Id.*
[65] Applicant Answer at 14.
[66] *See* 72 Fed. Reg. at 12,204.
[67] *Id.*

Applicant further contends that the protected status of the 2006 FNMCP document (as "SUNSI") does not give Intervenors good cause for nontimely filing of Contentions 9, 10, and 11. According to Applicant, Intervenors had an "ironclad" obligation to request the SUNSI documents that form the basis of the instant contentions at the outset of this proceeding in 2007 in order to challenge the adequacy of the FNMCP.[68]

On the other hand, the NRC Staff agrees with Intervenors that Contentions 9, 10, and 11 are not 3 years late, but rather that the contentions are "grounded" in the 2010 FNMCP, not the 2006 FNMCP.[69] The NRC Staff concedes that all three new contentions would have been timely had Intervenors filed them 10 days prior to the date of their actual submission on July 26, 2010 — 60 days after receiving notice of the nonpublic 2010 FNMCP.[70]

The NRC Staff argues that Intervenors were not justified in taking an additional 10 days at that point to obtain the 2006 FNMCP and other SUNSI documents (i.e., the 2009 RAI and RAI responses), because those documents were previously accessible to Intervenors.[71] The NRC Staff rejects Intervenors' argument that it was reasonable and consistent with Commission policy — limiting public access to SUNSI — for Intervenors to avoid requesting the 2006 FNMCP or any other information classified as SUNSI until it became clear that it was necessary in order to resolve their concerns.[72] Staff states that there is no such requirement underlying the protective order in this proceeding.[73]

Accordingly, the NRC Staff insists that Intervenors have not shown good cause for filing Contentions 9, 10, and 11 ten days beyond the 60-day deadline initiated upon their receipt of the nonpublic 2010 FNMCP. In support of its argument, the NRC Staff cites *North Atlantic Energy Service Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201 (1999), where the Commission found a petitioner lacked good cause for a hearing request filed 7 days after the filing deadline when the argument relied on a "misimpression" of due dates.[74]

In their Reply, Intervenors argue that the May 2010 revised FNMCP is materially different from the 2006 FNMCP in that the 2010 version purports to

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[68] *Id.* at 17.

[69] Staff Answer at 8.

[70] *Id.; see* LBP-08-11, 67 NRC at 495.

[71] *See* Staff Answer at 8.

[72] *See id.* at 11.

[73] Staff Answer at 8-9 ("Hearing petitioners have an 'ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to enable the petitioner to uncover any information that could serve as the foundation for a specific contention.'") (citing *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 386 (2002)); *MOX Services,* CLI-09-2, 69 NRC at 65 n.47.

[74] *Seabrook Station,* CLI-99-6, 49 NRC at 223.

satisfy the NRC's MC&A regulations in 10 C.F.R. Part 74, whereas Applicant stated in the 2006 version that it did not satisfy those regulations.[75] Therefore, Intervenors argue that they could not have proffered an admissible contention 3 years ago, as Applicant claims, because "the 2006 FNMCP contained no assertion of regulatory compliance that Intervenors could have disputed."[76]

Intervenors acknowledged in their reply that, by submitting Contentions 9, 10, and 11 on July 26, 2010, they filed 10 days after July 16, which is the 60th day after they received a copy of the nonpublic 2010 FNMCP on May 17, 2010.[77] Accordingly, Intervenors withdrew their earlier claim that Contentions 9, 10, and 11 were timely under 10 C.F.R. § 2.309(f)(2) and the 60-day filing requirement established in LBP-08-11.[78]

Intervenors nonetheless argue that they had good cause for believing they could take an additional 10 days (before the 60 days began to run) to obtain additional nonpublic SUNSI documents (namely, the RAI, RAI responses, and the 2006 FNMCP) in the preparation and submission of Contentions 9, 10, and 11.[79] Intervenors' view is that the nonpublic (SUNSI) 2006 FNMCP, the NRC Staff RAI, and Applicant's RAI responses were "available" only in the sense that Intervenors were entitled to request access to them earlier in this proceeding.[80] Intervenors point to the CAR proceeding as providing "assurances" that the design of the facility would comply with the NRC's MC&A requirements in 10 C.F.R. Part 74, and thus argue that they did not earlier request access to the 2006 FNMCP for this reason.[81]

As Intervenors see it, the Applicant's December 17, 2009, exemption request, in opposition to which they promptly filed a contention, was the first indication that Applicant did not comply with those regulations and that the April 2010 FNMCP revision constituted "the first document issued in this proceeding in which [Applicant] claims to comply with those regulations."[82] Intervenors assert that Applicant's 2010 FNMCP in fact does not comply with the agency's Part 74 MC&A requirements, and that the 2006 FNMCP, the RAI, and the RAI responses provide the necessary support for their claims in Contentions 9, 10, and 11. For these reasons, Intervenors argue that they have good cause for thinking the filing period started on May 27, 2010, not May 17, to enable their receipt of the

[75] Reply at 2.
[76] *Id.* at 4.
[77] *Id.* at 3, 7.
[78] *Id.* at 3.
[79] *Id.*
[80] *Id.* at 7.
[81] *Id.*
[82] *Id.* at 7, 9.

additional nonpublic documents critical to preparation and submission of their challenges to the 2010 FNMCP in Contentions 9, 10, and 11.[83]

Although recognizing their "ironclad obligation" to obtain *publicly available* documents in ordinary circumstances,[84] Intervenors argue that no Commission precedent applies this rule to *SUNSI-designated* documents.[85] They argue that "[s]uch a rule would be inconsistent with NRC procedures for access to SUNSI information in licensing proceedings, which require a demonstration of 'need for the information.'"[86]

During the oral argument, Intervenors also noted Dr. Lyman's prior difficulty in obtaining access to design-related documents containing safeguards information in another proceeding.[87] According to Intervenors, in that other proceeding, despite Dr. Lyman's valid security clearance and a board ruling determining his "need to know," the NRC Staff appealed the board ruling. The Commission reversed, finding that Dr. Lyman did not have a "need to know" the information.[88] With this in mind, Intervenors anticipated a strict application of the more uncertain "need to access" standard for SUNSI access, and waited to request necessary FNMCP documentation until they believed they could meet this standard in terms of needing that documentation to challenge the positions of the Applicant that they opposed.[89]

Furthermore, Intervenors argue that because they were able to submit Contention 8, which challenges Applicant's December 17, 2009, exemption request, without the need for access to the 2006 FNMCP, they had no reason to request that document at that time.[90] Intervenors maintain that they needed the 2006 FNMCP, the RAI, and the RAI responses to enable them to evaluate more fully the 2010 FNMCP, and that it was therefore reasonable for Intervenors to think the filing period would be built on the additional 10 days it took them to obtain those documents.[91]

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[83] *Id.* at 7-8.

[84] *Id.* at 8 (citing *McGuire/Catawba,* CLI-02-28, 56 NRC at 386).

[85] *Id.; see also* Supplemental Brief at 3 (distinguishing *USEC Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 460 (2006) upon which the Dissent at p. 416 relies).

[86] Reply at 8 (citing Procedures to Allow Potential Intervenors to Gain Access to Relevant Records That Contain Sensitive Unclassified Non-Safeguards Information or Safeguards Information (Feb. 29, 2008) (ADAMS Accession No. ML080380626)).

[87] Tr. at 726-28; *see Duke Energy Corp.* (Catawba Nuclear Station, Units 1 and 2), CLI-04-6, 59 NRC 62, 67 (2004) (reversing a board determination of expert's "need to know" with regard to a document withheld as safeguards information).

[88] Tr. at 726-28.

[89] *See* Reply at 8-9.

[90] Reply at 9.

[91] *Id.*

Intervenors argue that the remaining factors in 10 C.F.R. § 2.309(c)(1) also weigh in their favor and justify admission of Contentions 9, 10, and 11.[92] In that regard, Intervenors argue that by establishing standing in this proceeding, they already have demonstrated their property, financial, health, and safety interests in relation to operation of the facility.[93] They argue that they contribute to the record of this proceeding by providing, through their expert, Dr. Lyman, a high level of technical detail and analysis of the application.[94]

Finally, Intervenors argue that any delay resulting from their 10-day miscalculation of the filing deadline is very minor when compared to the amount of time Applicant has taken, since the inception of this second proceeding in 2006, to attempt to comply with the NRC's MC&A regulations governing monitoring and accounting for plutonium in Applicant's possession.[95] Intervenors note that the NRC Staff itself failed even to raise the problem of this noncompliance until issuing its RAI to Applicant in early 2009, and that the Staff continued, during the debate over this matter, to postpone evaluation of MC&A issues until it issued the final safety evaluation report (FSER) for this facility.[96]

Intervenors point to additional delay Applicant caused by submitting its request for exemption from these regulations — and then withdrawing it after Intervenors challenged it. Intervenors lastly emphasize that, notwithstanding the additional 10 days they took to submit their new contentions, they promptly raised the issues in those contentions as they arose, and that any real delay in this proceeding has been caused not by their submitting slightly late contentions but "by [Applicant's] tardiness in acknowledging a very serious design defect and the NRC Staff's slowness to recognize it . . . ."[97]

IV. ANALYSIS AND RULING

A. Analysis of Admissibility Under 10 C.F.R. § 2.309(f)(1)

Both Applicant and Staff make the concession that Contentions 9, 10, and 11

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[92] Motion at 18; Reply at 10-11.

[93] *Id.* at 10; Motion at 18; *see* 10 C.F.R. § 2.309(a), (d).

[94] Reply at 10.

[95] *Id.* at 11.

[96] *Id.* (citing Draft Safety Evaluation Report for the License Application to Possess and Use Radioactive Material at the Mixed Oxide Fuel Fabrication Facility in Aiken, SC (July 2010) at 9); *see also* Letter from Kimberly A. Sexton, Counsel for the NRC Staff, to Michael C. Farrar, Licensing Board Chair (Dec. 21, 2010) (ADAMS Accession No. ML103560306) (informing the Board that the nonpublic FSER for the MOX Fuel Fabrication Facility had been issued).

[97] Reply at 11.

meet the substantive pleading requirements set out under 10 C.F.R. § 2.309(f)(1).[98] We find their unusual concession to be well founded, for our own independent examination leads us to conclude that these contentions readily satisfy each of the six contention admissibility standards (listed in note 55, above), and thus are substantively admissible. With respect to those standards, *see also* our discussion below (p. 412) agreeing with the Dissent's suggestion that the nature of the issues underlying the contentions is so serious as to have warranted review on our own motion if not otherwise considered.

B. Analysis of Timeliness Under 10 C.F.R. § 2.309(c)

1. Applicant's Argument

Contrary to the Applicant's claim, we agree with the NRC Staff that the new contentions are based on new information in the 2010 FNMCP that was not previously available, and that the new 2010 FNMCP is materially different than the 2006 FNMCP. Therefore, the Intervenors were not required to have filed the contentions at the outset of the proceeding 3 years ago.

The 2010 FNMCP is materially different from the 2006 FNMCP because in the 2010 FNMCP, the Applicant changed its legal position and for the first time claimed that its plan complies with the Commission's MC&A regulations. In contrast, in the 2006 FNMCP, the Applicant admitted that it could not satisfy the regulations,[99] a position with which the Intervenors agreed. With no challenge to the application in that regard, Intervenors assert that they could not have proffered a contention that, for example, demonstrated a genuine dispute with the applicant on a material issue of law or fact. It was thus reasonable for them to take the approach that such a contention would likely have not been admissible under the requirements of 10 C.F.R. § 2.309(f)(1)(vi).[100]

Additionally, in our view, the 2010 FNMCP is also materially different from the 2006 plan insofar as the Applicant now identifies additional means/systems to satisfy Subpart E of 10 C.F.R. Part 74. Although the 2006 FNMCP mentions these means/systems, the Applicant did not take credit for them to comply with the Commission's MC&A regulations. The Applicant's reliance on these

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[98] The NRC Staff conceded explicitly in its brief that Contentions 9, 10, and 11 satisfy those substantive pleading requirements. NRC Staff Response at 1. Applicant conceded the same at oral argument. Tr. at 722.

[99] We note the unusual circumstance of Applicant submitting an application in which it concedes it cannot comply with the applicable regulations. At oral argument, the NRC Staff explained that it viewed Applicant's concession as implicitly stating that it would need an exemption from compliance with the regulations. Tr. at 761.

[100] *See, e.g., Department of Energy* (High-Level Waste Repository), LBP-10-11, 71 NRC 609, 640-41 (2010).

means/systems to satisfy Subpart E of 10 C.F.R. Part 74 is new, materially different information. And Intervenors' new contentions, which challenge the adequacy of the Applicant's reliance on these means/systems to satisfy Subpart E, could not have been based upon the 2006 FNMCP. The factual predicate for the contentions was simply not available at the outset of the proceeding. Accordingly, the new contentions are not 3 years late.

Our dissenting colleague reaches a contrary result.[101] He reasons that because "the 2010 FNMCP adds to the 2006 FNMCP without taking anything away from it" (i.e., nothing was deleted), then if Intervenors can now challenge the 2010 plan, they could also at the outset of the proceeding have challenged the 2006 plan as failing to satisfy Subpart E.[102] For its support, the Dissent relies on another licensing board's reasoning that "as a matter of law and logic," if Intervenors challenge the adequacy of an enhanced program, the prior unenhanced program was also inadequate and should have been challenged at the outset of the proceeding.[103]

We are in general agreement with that maxim, but believe it does not fit the circumstances before us. Here, the Applicant did delete a material portion of the 2006 FNMCP, namely, its admission that the plan could not satisfy the regulations. We view that change in legal position to be new information upon which Intervenors appropriately based new contentions that they were not required to bring when the Applicant conceded its noncompliance, a position with which the Intervenors had no dispute.

In drawing this conclusion, we have been mindful that at the outset of this phase of the proceeding, Intervenors lacked counsel and thus appeared *pro se.* Since then, Intervenors have retained experienced counsel — but the Applicant's arguments, and our colleague's Dissent, involve events transpiring at the outset when the Intervenors were *pro se.* In reaching our conclusion that there were plausible reasons to support their inaction at that time, we have been guided by the Commission's direction that we treat "*pro se* litigants more leniently than litigants with counsel,"[104] which allows us to acknowledge the complex procedural hurdles presented to the *pro se* Intervenors when this proceeding commenced, and to structure our ruling accordingly.

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[101] *See* Dissent at p. 416.

[102] *Id.* at p. 417.

[103] *Id.* at p. 417.

[104] *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), CLI-10-17, 72 NRC 1, 45 n.246 (2010) (citing *U.S. Enrichment Corp.* (Paducah, Kentucky Gaseous Diffusion Plant), CLI-01-23, 54 NRC 267, 272 (2001)).

2. Staff's Argument

Having rejected the notion that the contentions are governed by what occurred 3 years ago, we turn to the present. Here, we are also not persuaded by the Staff's claim that we should reject the Intervenors' new contentions because they were filed 10 days late.

Despite their plausible arguments that Contentions 9, 10, and 11 were timely under 10 C.F.R. § 2.309(f)(2) and the 60-day filing period for new contentions in this proceeding, Intervenors concede in their reply, albeit perhaps unnecessarily, that Contentions 9, 10, and 11 "are not presumptively timely under § 2.309(f)(2)."[105] In that regard, Intervenors maintain that the contentions should nonetheless be admitted because they have demonstrated good cause for the miscalculation that led to the 10-day delay in submitting these contentions and that the balance of the section 2.309(c) factors favors admitting the contentions.[106]

We agree that Intervenors have provided a reasonable and understandable explanation for misapprehending the start of the filing period for these contentions. Under 10 C.F.R. § 2.309(c), this establishes good cause for believing that they were meeting the filing deadline when they were instead missing it by the correlative 10-day period. This good cause is the primary factor for determining whether to excuse the untimeliness.

Considering that the 60-day filing deadline is triggered only when a defined set of somewhat imprecise circumstances exists under 10 C.F.R. § 2.309(f)(2), the exact time at which those circumstances come into being is not always entirely clear. The trigger date for this filing period can be especially unclear here, considering the multitude of documents, both public and nonpublic, associated with this proceeding generally and with the issue of Applicant's compliance with the agency's MC&A requirements. Recognizing the uncertainty inherent in determining the starting point of this 60-day deadline, and the import of the additional nonpublic SUNSI documents Intervenors had yet to receive after their receipt of the 2010 FNMCP, we find that Intervenors have shown good cause for being somewhat uncertain, but by only 10 days, regarding the start of the rolling deadline period as it pertained to the submission of Contentions 9, 10, and 11.[107]

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[105] Reply at 3.

[106] *Id.*

[107] Contrary to the NRC Staff's argument, we consider the Commission's decision in *Seabrook Station,* CLI-99-6, 49 NRC 201 (1999) to be inapposite. In *Seabrook,* the Commission found that a petitioner who had both constructive and actual notice of the filing deadline lacked good cause for filing its intervention petition 7 days late. *Id.* at 223. Here, there was inherent uncertainty in the trigger date for the rolling deadline, and this provides the Intervenors' good cause that was missing in *Seabrook.* As Chairman Jaczko recognized in this proceeding, given "the unique circumstances of this case, the appropriate timing for filing contentions will continue to be a challenge." CLI-09-2, 69 NRC at 67 (Commissioner Jaczko, concurring).

The NRC Staff maintains that we should not excuse Intervenors' 10-day delayed filing, arguing that the protected nature of the additional SUNSI documents is not relevant to demonstrating good cause. The Staff contends that there is no merit in Intervenors' claim that "'it was reasonable and consistent with Commission policy of limiting public access to SUNSI for them to avoid requesting the FNMCP or any other information classified as SUNSI until it became clear that it was necessary in order to resolve their concerns.'"[108]

While we agree that the Staff's position is now consistent with the Commission's recent clarification regarding its SUNSI policy,[109] we acknowledge that Intervenors earlier foresaw difficulties regarding access to SUNSI in this proceeding. Lack of clarity in the terms and application of the agency's newly established SUNSI policy contributed to Intervenors' misapprehension that they were required to demonstrate a "need for the information" in order to request SUNSI documents. Applicant submitted its application in 2006, *prior to* the Commission's 2008 promulgation of 10 C.F.R. §§ 2.307(c) and 2.311, governing access to SUNSI.[110]

Moreover, only recently did the Commission explain that those rules governing access to SUNSI apply only to *potential* parties, whereas *party* access to SUNSI is governed by protective orders and nondisclosure agreements.[111] The Commission also noted the difficulty in surmounting regulatory hurdles that complicate access to SUNSI, and admonished the NRC Staff in the *South Texas* proceeding for having imposed a stricter-than-necessary standard of "need" for access to SUNSI.[112] In addition, Intervenors' expert in this proceeding, Dr. Lyman, experienced significant impediments to access to nonpublic information in another proceeding in 2004, in which the Commission denied him access to a safeguards-protected design-related document on the basis of his lacking a "need to know."[113]

A combination of these factors may have caused confusion on the issue of access to protected information, and led Intervenors to believe, incorrectly but understandably, that the NRC Staff and the Commission might limit their access to SUNSI in this adjudicatory proceeding. It makes sense that Intervenors would have hoped to avoid, if possible, the need to undergo what was then a seemingly convoluted process for accessing SUNSI materials.[114]

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[108] Staff Answer at 11 (quoting Motion at 17).

[109] *See South Texas Project Nuclear Operating Co.* (South Texas Project, Units 3 and 4), CLI-10-24, 72 NRC 451, 453-55 (2010).

[110] *See id.*

[111] *Id.* at 454-55.

[112] *See id.* at 465-68.

[113] *See Catawba,* CLI-04-6, 59 NRC at 67-69.

[114] Tr. at 726-28.

In addition to our finding that Intervenors had good cause for submitting their contentions under a 10-day miscalculation of the filing deadline, we also conclude that the remaining factors of 10 C.F.R. § 2.309(c)(1) strongly weigh in favor of admission of the pending contentions:

Factors (ii) through (iv) focus on the status of the requestor/petitioner seeking admission to a proceeding, which parallel the requirements of standing (e.g., demonstration of the nature of the requestor/petitioner's affected interests), rather than on new contentions submitted by already-admitted parties.[115] Thus, our earlier admission of Intervenors as parties to this proceeding carries forward with it the conclusion that Intervenors have interests in this proceeding and could be affected by the proceeding, as per 10 C.F.R. § 2.309(c)(1)(ii), (iii), and (iv), respectively.[116]

Similarly, in the posture of this proceeding, Intervenors — the only parties admitted — satisfy 10 C.F.R. § 2.309(c)(1)(v) and (vi) related to showing that their interests are not adequately represented by other means or by other parties.[117] In this regard, the Applicant and Staff suggest (*see* Tr. at 815), as they often do, that the Intervenors' interests can be represented by other means, namely by the NRC Staff through its ordinary review efforts outside of the adjudication. Even if that argument has force in other contexts, it does not carry the day here. In the first place, the NRC Staff has already done, via the RAI and the FSER, a specific and thorough review of the matters underlying the new contentions and has concluded, in effect, that the Intervenors' contentions lack substantive merit. So any Staff avenue of "other means" relief is essentially foreclosed here. And, in any event, the balance of all the other factors weighs so heavily in the Intervenors' favor that this "other means" factor, even if given some weight against the Intervenors, could not possibly tip the overall balance against them.

Looking to factor (vii), we find that Intervenors' participation addressing the issues in Contentions 9, 10, and 11 will not cause untoward delay in this proceeding. Applicant has taken substantial amounts of time in submitting the entirety of its application and associated documents (spanning from November 2006 to April 2010), and first requested exemption from the MC&A regulations, only to later withdraw that request after Intervenors promptly filed a contention challenging the exemption request. The NRC Staff likewise took a number of years to raise the problem of Applicant's noncompliance with the MC&A requirements, taking until early 2009 to issue the relevant RAI.

Noting the existence of that delay is not intended as criticism, for we are mindful that the public interest can well be served by revisions to an application

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[115] 10 C.F.R. § 2.309(c)(1).

[116] LBP-08-11, 67 NRC at 468.

[117] *See id.*

that end up "getting it right" and by the Staff's expected thorough analysis of such revisions.[118] Those necessary processes, invoked by the Applicants or at its behest, can be quite time-consuming. In comparison, the mere 10-day delay caused here by the Intervenors' miscalculation is minuscule.

Furthermore, Contentions 9, 10, and 11 address an important security issue regarding Part 74's strict requirements for the proposed facility — which the Applicant previously admitted it failed to satisfy.[119] We thus find that litigation of these substantively admissible contentions addressing this important security issue will not inappropriately broaden the issues — these are issues of the highest safety order that deserve to be heard, especially in light of the varied approaches that have been presented to justify the Applicant's proposal.

We believe this so strongly that had we found that timeliness concerns *do* bar admission of these contentions, we would have joined the Dissent's suggestion that the matter deserves *sua sponte* review under 10 C.F.R. § 2.340(a) and referred the matter to the Commission on that basis. In that regard, we agree in its entirety with the Dissent's explanation that the new contentions raise significant public safety and national security issues.[120]

Finally, in addressing factor (viii), regarding the ability of Intervenors to contribute to the development of a sound record, we note Intervenors' consistently diligent participation in this proceeding. Intervenors have made sincere efforts to submit well-thought-out contentions throughout this proceeding and its predecessor, the earlier CAR proceeding begun in 2001.[121] Intervenors now raise important security issues regarding plutonium monitoring, following on their presenting at an earlier stage another serious legitimate issue for litigation.[122] And

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[118] *See* LBP-08-11, 67 NRC at 507 (Judge Farrar concurring) (citing *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-05-29, 62 NRC 635, 710 n.12 & accompanying text (2005)) ("[I]f the Staff detects deficiencies in an application before or after a notice of hearing opportunity is issued, the applicant will freely be given (outside the adjudicatory process) ample opportunity to amend it. This is as it should be, for it serves the public interest in safety for a facility *application* to be as good as it can be. But it can also serve the public interest in safety, one would think, for a facility *opposition* to be as good as it can be.").

[119] *See* Letter from David Stinson, MOX, to NRC, sent by e-mail from David Tiktinsky to Tom Pham et al. (Oct. 7, 2009) (ADAMS Accession No. ML092870426); Shaw AREVA MOX Services, LLC — Responses to Requests for Additional Information re the Review of Fundamental Nuclear Control Plan & Instrumentation & Control Security Aspects for License Application Request (Oct. 17, 2009) (ADAMS Accession No. ML093570532); *see also Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-00-27, 52 NRC 216, 223 (2000) (citing *South Carolina Electric and Gas Co.* (Virgil C. Summer Nuclear Station, Unit 1), ALAB-642, 13 NRC 881, 887 n.5 (1981)).

[120] *See* Dissent Section 2; and Part V below.

[121] Tr. at 726-28.

[122] LBP-07-14, 66 NRC at 190, 206; LBP-08-11, 67 NRC at 464.

the Intervenors have put forward in support of those contentions the views of an experienced expert, Dr. Edwin Lyman.[123]

In summary, we conclude that Intervenors had good cause for the 10-day miscalculation of the starting of the filing period for Contentions 9, 10, and 11. The trigger date for the issues Intervenors raise in these contentions was uncertain, given the unsettled nature of the start of the 60-day filing period. Intervenors thus did not ignore a deadline — at worst, they merely miscalculated the start of a filing period, in good faith. They had a rationally based belief that they needed, and were entitled, to take the additional time to obtain other relevant SUNSI documents which were necessary to the preparation of the contentions, including the RAI, RAI responses, and the 2006 FNMCP. Intervenors made an understandable assumption that the deadline for timely filing of the instant new contentions would be 60 days after receiving all of those documents.[124]

In comparison to the extremely large expanses of time otherwise consumed in this unique proceeding, it is reasonable to excuse Intervenors' 10-day miscalculation of the deadline for filing the instant motion. This minor delay stemmed from a reasonable misunderstanding. We therefore conclude that Intervenors have demonstrated good cause for filing of new Contentions 9, 10, and 11 under a 10-day misapprehension of the trigger date of the filing period for these contentions, and that a balance of the 10 C.F.R. § 2.309(c)(1) factors favors admission of these contentions.

V. THE DISSENT'S APPROACH

Ordinarily, our analysis would have concluded with the foregoing. But in Section 2 of his Dissent, our colleague suggests that the substantive matters involved here would warrant the Board's *sua sponte* review were the Intervenors' contentions barred, as he says they are, by untimeliness.

We have already indicated above (p. 412) our informal agreement with that suggestion, and pause here only to say it formally: the Board Majority agrees, for the reasons well-stated in Section 2 of the Dissent, that — were the holding to be that the pending contentions are barred by untimeliness — the matter should be referred to the Commission in order to request its authorization for the Board, on

[123] Dr. Lyman's extensive curriculum vita is attached to his July 26, 2010 declaration, and the Commission has recognized his expert qualifications in other NRC proceedings. *See* Lyman Declaration at 1 & attach.; *Duke Energy Corp.* (Catawba Nuclear Station, Units 1 and 2), CLI-04-21, 60 NRC 21, 27-28 (2004) (affirming *Duke Energy Corp.* (Catawba Nuclear Station, Units 1 and 2), LBP-04-13, 60 NRC 33, 36-37 (2004). More recently, Dr. Lyman has been called to testify as an expert before the Department of Energy's Blue Ribbon Commission on America's Nuclear Future. Tr. at 804-05.

[124] Tr. at 748.

its own motion, to examine and decide the serious safety or common defense and security matters underlying those contentions.[125]

VI. CONCLUSION AND ORDER

For the reasons set forth above, the Board finds that Contentions 9, 10, and 11 satisfy the substantive admissibility requirements of 10 C.F.R. § 2.309(f)(1). As to their timeliness, we find that the Intervenors have shown good cause for a 10-day miscalculation of the filing period trigger date, and on balance, that the factors in 10 C.F.R. § 2.309(c)(1) weigh in favor of admission of these contentions. We therefore ADMIT Contentions 9, 10, and 11.

Because a separate, previously admitted contention is currently pending before us, NRC regulations and Commission precedent do not allow for an appeal as of right of this decision; any such appeal must await the issuance of a full or partial decision, pursuant to 10 C.F.R. § 2.341(b). Any petition for discretionary interlocutory review pursuant to 10 C.F.R. § 2.341(f)(2) must be filed within 15 days of service of this Memorandum and Order.

[125] We recognize that the applicable regulation appears to allow this approach only for matters "*not* put into controversy by the parties." 10 C.F.R. § 2.340(a) (emphasis added). But as the Dissent correctly points out (see note 11 and accompanying text), binding agency precedent in the form of an Appeal Board decision allows this approach also to be used for matters that *were* initially raised by a party, where that party later withdrew. *See South Texas,* ALAB-799, 21 NRC at 382, 384-85. By parity of reasoning, this approach should also be allowable for matters that a party *tried* to raise, if it turns out that it failed to do so properly.

It is so ORDERED.

FOR THE ATOMIC SAFETY
AND LICENSING BOARD[126]

Michael C. Farrar, Chairman
ADMINISTRATIVE JUDGE

Nicholas G. Trikouros
ADMINISTRATIVE JUDGE

Rockville, Maryland
April 1, 2011

Copies of this Order were sent this date by e-mail to counsel for (1) Applicant Shaw AREVA MOX Services, (2) the NRC Staff, and (3) Intervenors Blue Ridge Environmental Defense League (BREDL), Nuclear Watch South (NWS), and the Nuclear Information and Resource Service (NIRS).

[126] Judge McDade does not subscribe to the above opinion. His dissenting views are set forth on the following pages.

Dissenting Opinion of Judge Lawrence G. McDade

1. The Newly Proffered Contentions Were Not Timely Filed

It is my judgment that Contentions 9, 10, and 11, which challenge the adequacy of the Applicant's Fundamental Nuclear Material Control Plan (FNMCP), were not timely filed. Accordingly, I cannot concur with the Majority's decision to admit these contentions.

As noted in the Board's decision, the 2006 FNMCP which addresses the MC&A design information was included in the pending application that was submitted on November 17, 2006.[1] Thereafter on March 15, 2007, the NRC published a notice of opportunity to request a hearing[2] and, in response, the Intervenors requested, and received, a copy of the application which listed the FNMCP in the index, but withheld the substance of the plan as confidential proprietary information.[3] In the section entitled "safeguards and security," the application made clear that the Applicant "submitted under separate cover the Fundamental Nuclear Material Control Plan for the MOX Fuel Fabrication Facility."[4]

The Intervenors should have, but did not, request access to the FNMPC at that time even though the Commission had recently reiterated its directive that petitioners have an affirmative obligation to request confidential and proprietary information, that had not been made publicly available, in order to support a proposed contention.[5] However, instead of requesting the FNMCP, which is central to the safety of this facility, the Intervenors proceeded to submit a petition for intervention and request for hearing which proffered several contentions, none of which addressed the adequacy of the MC&A design.[6]

Since the application was submitted in 2007, no material portion of the FNMCP has been deleted. Rather, after a dialogue with the NRC Staff regarding the adequacy of the plan, which is fully outlined above by the Board,[7] the Applicant submitted a revised FNMCP (2010 FNMCP) on May 17, 2010,[8] in

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[1] *See* Majority Opinion at p. 396

[2] 72 Fed. Reg. 12,204, 12,206 (Mar. 15, 2007).

[3] *See* Mixed Oxide Fuel Fabrication Facility License Application (Sept. 27, 2006) (ADAMS Accession No. ML062750195).

[4] *Id.* at 13-1.

[5] *USEC Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 460 (2006); *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 123 n.71 (2006).

[6] *See* Petition for Intervention and Request for Hearing (May 14, 2007).

[7] Majority Opinion at p. 398.

[8] *See* Revised Fundamental Nuclear Material Control Plan (May 17, 2010) (ADAMS Accession No. ML101450359) (certifying that copies of the 2010 FNMCP were served on the parties on May 17, 2010).

which it proposed to rely on additional means/systems in conjunction with existing portions of its FNMCP, in order to comply with Subpart E of 10 C.F.R. Part 74.

In short, the 2010 FNMCP adds to the 2006 FNMCP without taking anything away from it. Accordingly, if the 2010 plan fails to satisfy Subpart E, the 2006 plan also failed to satisfy Subpart E and was subject to challenge by the Intervenors at the outset of the proceeding. As the board in *Oyster Creek* clearly articulated: "as a matter of law and logic if — as [Intervenors] allege — [Applicant's] *enhanced* program is inadequate, then [Applicant's] *unenhanced* program . . . was *a fortiori* inadequate, and [Intervenor] had a regulatory obligation to challenge it in their original Petition To Intervene."[9]

The Commission has long directed putative intervenors "to raise issues as early as possible."[10] Had the Intervenors challenged the adequacy of the FNMCP in May of 2007, the Applicant and the NRC Staff would have been put on notice of the alleged deficiencies when the proposed facility existed only on paper instead of well after construction was under way and changes to the design may well be extremely expensive, or even impossible. I believe that it is to avoid such situations that the Commission requires intervenors to raise issues as early as possible.

The FNMCP is central to the safety of this facility. I see no valid excuse for the Intervenors' failure to request and evaluate the FNMCP prior to the submission of their intervention petition in 2007. Having decided in 2007 not to review the FNMCP as a prerequisite to a possible challenge to its adequacy, but instead to rely on the NRC Staff, based on its independent review, not to approve the application unless it complied with its regulations, in my judgment, it is now too late for Intervenors to revisit that decision as a matter of right.

2. The Serious Underlying Issues Deserve Board Scrutiny

Notwithstanding my conclusion that timeliness concerns bar the admissibility of the new contentions proffered by Intervenors as a matter of right, I believe that the matters sought to be raised by the newly proffered contentions involve issues of the highest safety significance that should be explored before this Board — accordingly, had my colleagues ruled differently on the timeliness issue, I would have urged that these issues be examined pursuant to the procedures set out at 10

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[9] *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), LBP-06-22, 64 NRC 229, 246 (2006) (emphasis in original), *aff'd, AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 274 (2009); *cf. International Uranium (USA) Corp.* (White Mesa Uranium Mill), CLI-01-21, 54 NRC 247, 251 (2001).

[10] *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1050 (1983).

C.F.R. § 2.340(a), which allow the Board limited authority to consider matters in addition to those properly put into controversy by the parties.

Pursuant to Section 2.340(a) the Board may consider

> any matter . . . but only to the extent that the [Board] determines that a serious safety, environmental, or common defense and security matter exists, and the Commission approves of an examination of and decision on the matter upon its referral by the [Board].

I believe that this safety valve applies equally well to matters that the parties tried but failed to "put into controversy"[11] as well as to ones that a Board uncovers entirely on its own — for one of the purposes of the regulation is to insure that serious matters not escape scrutiny in a hearing if the Board and the Commission believe that the public interest would benefit from such scrutiny.

Board review of matters *sua sponte* has a long history at this agency. During the 1970s, the governing regulation was section 2.760a, which was amended in 1975 (*see* 40 Fed. Reg. 2973, 2974 (Jan. 17, 1975)) to indicate that *sua sponte* review — framed along the lines of the current regulation as involving the existence of "a serious safety, environmental, or common defense and security matter" — was to be conducted "only in extraordinary circumstances" and that such authority was "to be used sparingly."[12] Thereafter, the rule went through a number of iterations, but the Board's authority to seek to trigger review in extraordinary circumstances remained and was put to good use.[13]

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[11] *Houston Lighting & Power Co.* (South Texas Project, Units 1 and 2), ALAB-799, 21 NRC 360, 382, 384-85 (1985) (remanding to the Board for further consideration of whether issues *originally raised by a later-withdrawing party* presented serious safety or environmental questions that warrant Board examination pursuant to its *sua sponte* authority).

[12] 40 Fed. Reg. at 2974. The amendment to the regulation was designed to reflect the Commission's holding in *Consolidated Edison Co. of New York* (Indian Point, Unit 3), CLI-74-28, 8 AEC 7, 8-9 (1974) (interpreting the 1972 restructuring of the Rules of Practice and opining that "[t]o tie a Board's hands, when it sees an issue that needs to be explored, would be utterly inconsistent with its stature and responsibility" of "these expert tribunals" and that simply referring such a matter to the Staff for resolution "would [not] be an adequate solution").

[13] *See, e.g., Tennessee Valley Authority* (Hartsville Nuclear Plant, Units 1A, 2A, 1B, and 2B), LBP-76-44, 4 NRC 637, 648-49 (1976) (ordering that a reactor turbine building not be constructed until resolution of safety issues — regarding seismic qualification of a reactor building and systems and components contained therein — that the licensing board raised); *Duquesne Light Co.* (Beaver Valley Power Station, Unit 1), ALAB-408, 5 NRC 1383, 1385 (1977) (affirming a decision of the licensing board in which that board predominantly "dealt with safety questions [which] had been raised by the Board itself, exercising its prerogative under 10 C.F.R. § 2.760a to examine any safety matter which, though uncontested, is sufficiently serious in the Board's mind to warrant inquiry"); *see also Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-422, 6 NRC 33, 111 (1977) (Farrar, dissenting) (urging, *inter alia,* that the licensing board's grant of a

(Continued)

The newly proffered contentions in this proceeding challenge the Applicant's ability to track the nuclear material entrusted to it. This is no small matter, as evidenced both by the nature and quantities of such material that will be on hand and by the rigorous regulatory requirements that govern this facility.

Moreover, the Applicant has known from the outset that it would be required, under subsection (a) of 10 C.F.R. § 74.51, entitled "Nuclear material control and accounting for strategic special nuclear material" (SSNM), to "establish, implement, and maintain a Commission-approved material control and accounting (MC&A) system that will achieve the following objectives:"

> (1) Prompt investigation of anomalies potentially indicative of SSNM losses;
> (2) Timely detection of the possible abrupt loss of five or more formula kilograms of SSNM from an individual unit process;
> (3) Rapid determination of whether an actual loss of five or more formula kilograms occurred;
> (4) Ongoing confirmation of the presence of SSNM in assigned locations; and
> (5) Timely generation of information to aid in the recovery of SSNM in the event of an actual loss.[14]

To these ends and those set out in subsection (b), the Applicant was required to submit an FNMCP that describes how the MC&A system will satisfy the regulatory requirements.[15]

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construction permit should be reversed on the basis that applicants had not shown sufficiently the financial qualifications necessary to carry out construction safely and that "[t]he Board below should have made inquiry into [a financial qualifications question], on a *sua sponte* basis if not sufficiently well prompted by one of the parties").

Apparently these Board *sua sponte* actions were viewed with some favor, because in 1979 the Commission amended section 2.760(a) to delete the "extraordinary circumstances" and "sparing use" limitations. Soon thereafter, however, the Commission directed, by way of an adjudicatory decision reinforcing an earlier policy directive, that rulings seeking to invoke *sua sponte* review be transmitted to the Commission for approval. *See Texas Utilities Generating Co.* (Comanche Peak Steam Electric Station, Units 1 and 2), CLI-81-24, 14 NRC 614 (1981). This practice, whereby a board was not to proceed with *sua sponte* issues absent the Commission's approval, was stressed in the Commission's 1998 *Statement of Policy on Conduct of Adjudicatory Proceedings,* CLI-98-12, 48 NRC 18, 22-23 (1998) (63 Fed. Reg. 41,872, 41,874 (Aug. 5, 1998)) and later codified in the 2004 revision of 10 C.F.R. Part 2. That revision enacted a replacement for section 2.760a in the form of section 2.340(a), specifically limiting *sua sponte* review to situations wherein "the Commission approves such examination and decision upon referral of the question" by the Board. (The current version of that section, adopted in 2007 as part of a larger initiative (72 Fed. Reg. 49,352, 49,414, 49,475 (Aug. 28, 2007)), has syntax that differs only slightly, i.e., it conditions *sua sponte* review (in operating license proceedings for production or utilization facilities) upon "the Commission approv[ing] of an examination of and decision on the matter upon its referral" by the Board.)

[14] 10 C.F.R. § 74.51(a).

[15] *Id.* § 74.51(c).

The safety significance of this matter is of paramount importance. The ability to detect the loss of plutonium in a timely manner (10 C.F.R. § 74.55(b)) and the ability to resolve within approved time periods the nature and cause of any MC&A alarm signaling the possible loss or theft of SSNM (10 C.F.R. § 74.57(b)), to allow for an effective response, are crucial security requirements.

In considering amendments to the agency's MC&A regulations, the Commission discussed that its primary goals for the new detection section were:

> (1) Prompt investigation of anomalies potentially indicative of SSNM to discover material losses so that response actions may be taken before losses accumulate to strategic quantities;
>
> (2) to perform this discovery function in a way that permits (a) localization of losses in time and space, (b) traceability of a loss to a small number of people potentially involved and (c) securing evidence of the cause of the loss; and
>
> (3) in the event that the discovery is not made before 5 formula kilograms [FKG] have been lost, to discover the loss in a timely enough fashion to permit loss assessment and search and recovery operations.[16]

Accordingly, deterring and detecting the loss or diversion of SSNM has been at the forefront of the licensing process for this facility since the beginning of the process.

In the construction authorization request (CAR) proceeding, the Staff indicated in the final safety evaluation report (FSER) that "[t]he applicant committed to an item monitoring program, which establishes item identification and the basis for verifying the presence and integrity of licensed nuclear materials."[17] As indicated in the Majority opinion, the previous proceeding ended essentially with the promise that the Applicant would design and construct the facility and implement the program with these crucial requirements in mind. It is far from clear that that promise was fulfilled, and this is the matter that requires attention from the Board.

As alleged by the Intervenors in their newly proffered contentions, the ability of the Applicant to satisfy the requirements of the regulations is problematic given its 2006 submission in relation to the requirements of 10 C.F.R. § 74.55. The Intervenors have noted that when this submission was questioned by the NRC Staff in a February 26, 2009, set of RAIs, the Applicant responded (on October 7, 2009) that it would seek an exemption request and, according to the Intervenors, by filing that exemption request (which was later withdrawn), the

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[16] 46 Fed. Reg. 45,144, 45,145 (Sept. 10, 1981).

[17] U.S. Nuclear Regulatory Commission Office of Nuclear Material Safety and Safeguards, Final Safety Evaluation Report of the Construction Authorization Request for the Mixed Oxide Fuel Fabrication Facility at the Savannah River Site, South Carolina, Docket No. 70-3098, Duke Cogema Stone & Webster, NUREG-1821, at 13-1 (Mar. 2005) (ADAMS Accession No. ML0509604470).

Applicant conceded that it did not meet the regulatory requirements given the design of the facility.

The reasons given for requesting an exemption from the regulations[18] may be indicative of a potential flaw in the MOX fuel fabrication facility with respect to its ability to meet the regulatory criteria — because the FSER at the CAR stage indicated that the Staff believed that the facility would be capable of meeting the MC&A regulatory requirements regarding the timely detection of loss or theft of SSNM *by design.*[19]

To be sure, the Applicant has now proposed alternative arrangements that on their face appear to take a different approach. It may well turn out that the Applicant's proposal will accomplish all the objectives that the regulations demand in some different fashion (whether such an approach can be sanctioned without an exemption may be a lingering question).

But that is not obvious, notwithstanding the Staff's finding in the current proceeding's FSER regarding the adequacy of the revised 2010 FNMCP. This Board warned earlier in this proceeding about the dangers of regulatory shortcuts,[20] and this matter of preventing loss or diversion of SSNM is one in which patchwork solutions must be closely scrutinized. As the Commission emphasized long ago, it is not enough — in an agency which values the hearing process and has preserved the opportunity for Boards to look at matters on their own motion — just to "refer the matter to the staff for resolution."[21]

In short, the question of a serious safety inadequacy in the MOX fuel fabrication facility remains. And any question regarding the ability to meet these requirements can have serious consequences with respect to the possibility of loss or diversion of nuclear materials from the MOX facility.

The Applicant may well be able to answer these questions and put all safety and security concerns to rest. It has not yet had the opportunity in this adjudication to do so. In exercising that opportunity, it may well have the support of the Staff, whose current FSER finds that "the applicant's program is capable of providing timely plant wide detection of the loss of items and verifying the presence and

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[18] *See* Request for Exemption from Aspects of Process and Item Monitoring (Dec. 17, 2009) at 3 (ADAMS Accession No. ML093561015).

[19] Petitioners' Motion for Admission of Contentions 9, 10, and 11 Regarding Shaw MOX Areva Services' Revised Fundamental Nuclear Material Control Plan (July 26, 2010), attach., Declaration of Dr. Edwin S. Lyman in Support of Intervenors' Contentions 9, 10, and 11 at 6-7 (July 26, 2010) [hereinafter Lyman Declaration].

[20] *See* LBP-08-11, 67 NRC 460, 498-99 (2008) (Judge Farrar, concurring).

[21] *Indian Point,* CLI-74-28, 8 AEC at 8.

integrity of nuclear material items at a required frequency."[22] The Staff also found that the Applicant provided an "adequate item monitoring program with real-time status of nuclear materials, a system of item identification and classification, tamper-safing procedures, material accessibility, item accounting and control procedures, item measurements, sample items, and item verification tests, as required in 10 CFR 74.55, 'Item Monitoring.'"[23]

Be that as it may, the Staff's Standard Review Plan for the Review of an Application for a Mixed Oxide (MOX) Fuel Fabrication Facility (NUREG-1718) requires that the applicant's design basis for MC&A will lead to an FNMCP that will meet or exceed the regulatory criteria in section 13.2.4 of the Standard Review Plan, which includes both the item monitoring and alarm response requirements in 10 C.F.R. §§ 74.55 and 74.57, respectively.[24] In turn, section 74.57(b) requires that "Licensees shall resolve the nature and cause of any MC&A alarm within approved time periods." The 2010 FNMCP indicates that the alarm resolution procedures of sections 3.1.1.4 and 3.1.4.1 of this Plan will normally be completed within an appropriate period.[25] The Intervenors, however, have raised a question as to whether the facility will have the ability to meet the alarm resolution response time estimates provided in the 2010 FNMCP.[26]

As noted above, earlier versions of the *sua sponte* rule required that it be sparingly used and only in extraordinary circumstances. Those requirements are met here. Board use of this authority has certainly been sparing — as best I can determine, no Board has attempted to invoke *sua sponte* review in the past 20 years. And the circumstances here are certainly extraordinary — this is an extraordinary facility with an extraordinary mission, and the application process has led to serious questions about whether, and how, the Applicant will meet the Agency's regulatory requirements governing the issues that the Intervenors raised in their recently proffered contentions.

For all these reasons, I believe that it would be prudent for the Board to look into these matters whether or not they were timely raised by the Intervenors.

My colleagues in the Majority share my view of the significance of the issues

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[22] Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Final Safety Evaluation Report for the License Application to Possess and Use Radioactive Material at the Mixed Oxide Fuel Fabrication Facility in Aiken, SC, at 13-6 (Dec. 2010) (ADAMS Accession No. ML103430615).

[23] *Id.*

[24] U.S. Nuclear Regulatory Commission, Office of Nuclear Materials and Safeguards, Standard Review Plan for the Review of an Application for a Mixed Oxide (MOX) Fuel Fabrication Facility, NUREG-1718, at 13.2-12 (Aug. 2000) (ADAMS Accession No. ML0037415810).

[25] *See* 2010 FNMCP at 152.

[26] *See* Lyman Declaration ¶ 50.

(*see* Part V, above) and would have followed this same course had they found the new contentions barred by untimeliness. In effect then, a unanimous Board would join in urging the Commission to insure that these issues be examined regardless of whether they were raised timely or not.

Lawrence G. McDade
ADMINISTRATIVE JUDGE

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) **April 6, 2011**

NEPA: AGENCY/NRC RESPONSIBILITIES; ENVIRONMENTAL IMPACT STATEMENT; PROCEDURES

EARLY SITE PERMITS: REQUIREMENTS

To issue the Early Site Permit (ESP), the NRC must comply with the National Environmental Policy Act (NEPA). That statute requires that an Environmental Impact Statement (EIS) include a detailed statement by the responsible agency official on, among other things, (i) "the environmental impact of the proposed action," (ii) "any unavoidable adverse environmental effects which cannot be avoided should the proposal be implemented," and (iii) "alternatives to the proposed action." The agency responsible for preparing the EIS must define the scope of the issues it will address.

NEPA: SCOPE OF REVIEW; ENVIRONMENTAL IMPACT STATEMENT (CONNECTED ACTIONS); CEQ REGULATIONS

COMBINED LICENSE APPLICATIONS: RELATIONSHIP TO EARLY SITE PERMIT ENVIRONMENTAL REVIEW

Section 1502.4 of 40 C.F.R. directs that "[a]gencies shall use the criteria for scope (40 C.F.R. § 1508.25) to determine which proposal(s) shall be the subject of a particular statement. Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement." Section 1508.25 directs that, in defining the scope of the EIS, all "connected actions" must be analyzed in one statement. Separate actions may be considered "connected" if, among other things, they "[a]re interdependent parts of a larger action and depend on the larger action for their justification." An ESP authorizes the use of a specific site for the construction and operation of a new nuclear power plant, with the actual construction and operation authorized by a subsequently issued COL. Although a licensee that has obtained an ESP is not required to apply for a COL or to actually construct and operate a nuclear power plant at the authorized site, it is difficult to see any reason to obtain an ESP other than as an initial step toward those actions. The ESP and the COL are therefore "in effect, a single course of action" and "interdependent parts of a larger action [that] depend on the larger action for their justification." Thus, the issuance of an ESP and the subsequent authorization of construction and operation of a new nuclear power plant qualify as "connected actions" under section 1508.25, and should be evaluated in one EIS.

RULES OF PRACTICE: CONTENTIONS (NEW AND AMENDED); CONTENTIONS (LATE-FILED)

New and amended contentions submitted after an intervenor's initial hearing request are evaluated under 10 C.F.R. § 2.309(f)(2) for timeliness and, if found timely, their general admissibility is analyzed pursuant to 10 C.F.R. § 2.309(f)(1).

RULES OF PRACTICE: CONTENTIONS (NONTIMELY FILED)

If a contention is not timely filed, it must meet the eight-factor test under section 2.309(c)(1) to be deemed admissible as a nontimely contention. The Commission has considered the "good cause" factor to be the most important of those eight.

COMBINED LICENSE APPLICATIONS: REFERENCE TO PENDING DESIGN CERTIFICATION APPLICATION

NRC regulations permit a COL applicant to make a reference to a docketed-but-not-yet-certified design "at its own risk." As the *Summer* licensing board noted: "along the way, and certainly once a final design is certified, each COLA applicant will have to determine whether it will adopt *in toto* the certified design, or whether it will take exemptions thereto and/or departures therefrom. An applicant will also have to demonstrate that the site-specific parameters are bounded by the parameters developed for the certified design." *South Carolina Electric & Gas Co.* (Virgil C. Summer Nuclear Station, Units 2 and 3), LBP-09-2, 69 NRC 87, 100 (2009), *aff'd in part and rev'd and remanded on other grounds,* CLI-10-1, 71 NRC 1 (2010) (footnotes and internal citations omitted).

COMBINED LICENSE APPLICATIONS: REFERENCE TO PENDING DESIGN CERTIFICATION APPLICATIONS; STANDARD FOR EXEMPTIONS FROM REGULATIONS AND STANDARD DESIGN CERTIFICATIONS

Under NRC regulations, a COL applicant incorporating a certified design may include in its COLA a "request . . . for an exemption from any part of a referenced design certification rule," which may be granted as long as the NRC "determines that the exemption complies with any exemption provisions of the referenced design certification rule, or with [10 C.F.R.] § 52.63 if there are no applicable exemption provisions in the referenced design certification rule." In turn, section 52.63(b)(1) conditions grants of exemptions from referenced design certification rules on the Commission's finding that the request complies with section 52.7 and that the "special circumstances" provided for in section 52.7 "outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption." For COL applicants, section 52.7 itself cross-references the standards of section 50.12 for granting exemptions to NRC regulations.

COMBINED LICENSE APPLICATIONS: DESIGN BASES

SEISMIC & GEOLOGIC CRITERIA: GROUND MOTION; PLANT DESIGN (STANDARD FOR DETERMINING ADEQUACY); SAFE SHUTDOWN EARTHQUAKE

SITE SUITABILITY: EVALUATION

NRC regulations require that, for an ESP or COL site and associated design bases to be deemed geologically and seismically suitable, "[t]he geological, seismological, and engineering characteristics of a site and its environs must be

investigated in sufficient scope and detail to permit an adequate evaluation of the proposed site, to provide sufficient information to support evaluations performed to arrive at estimates of the Safe Shutdown Earthquake [SSE] Ground Motion, and to permit adequate engineering solutions to actual or potential geologic and seismic effects at the proposed site." Appendix S of 10 C.F.R. Part 50 defines SSE as "the vibratory ground motion for which certain structures, systems, and components must be designed to remain functional."

MEMORANDUM AND ORDER
(Declining to Admit New Contentions 12 and 13)

On October 2, 2010, the Blue Ridge Environmental Defense League (BREDL) filed two new contentions presently before the Board, which BREDL maintains are based on new information in the June 29, 2010 revision to the Combined License Application (COLA) of Applicant, Virginia Electric and Power Company d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative (Dominion or Applicant).[1] Both Dominion and the NRC Staff oppose admission of the two new contentions. Although BREDL numbered the new contentions as "Contention One" and "Contention Two," we will refer to them as Contentions 12 and 13 to avoid confusion with BREDL's Contentions 1 and 2 that were filed with its original hearing request.

For the reasons explained below, we do not admit either of BREDL's new contentions.

Background

The Board, in its August 15, 2008 Ruling on Petitioner's Standing and Contention Admissibility, described the relevant background of this Combined License (COL) proceeding and the prior Early Site Permit (ESP) proceeding for proposed new units at the North Anna site.[2] To summarize, on September 25, 2003, Dominion filed an Application with the NRC for an ESP pursuant to 10 C.F.R. § 52.24. In its ESP Application, Dominion sought the NRC's approval to locate additional nuclear power reactors, which would generate up to a total of 9000 megawatts thermal (MWt), at a site within the North Anna Power Station near the shore of Lake Anna in Louisa County, Virginia.[3] We provide a detailed

[1] Intervenor's New Contentions (Oct. 2, 2010) [hereinafter New Contentions].

[2] *See* LBP-08-15, 68 NRC 294, 299-302 (2008).

[3] *Id.* at 299-300.

review of relevant parts of the ESP proceeding in connection with our analysis of Contention 12 *infra.* On November 27, 2007, the NRC approved Dominion's ESP Application pursuant to 10 C.F.R. § 2.340(f).[4]

On November 26, 2007, Dominion filed its COLA for North Anna Unit 3 pursuant to Subpart C of 10 C.F.R. Part 52.[5] Dominion's COLA for Unit 3 incorporated the Economic Simplified Boiling Water Reactor (ESBWR) design, as permitted by NRC regulations.[6] On March 10, 2008, the NRC published a Notice of Hearing and Opportunity to Petition for Leave to Intervene on the COLA.[7] On May 9, 2008, BREDL submitted a Petition to Intervene and Request for Hearing, which included eight contentions.[8] Dominion and the NRC Staff each filed Answers opposing the Petition,[9] and BREDL replied.[10] The Board issued a Memorandum and Order on August 15, 2008, in which it found that BREDL had standing, admitted BREDL's Contention 1 in part, determined that BREDL's remaining contentions were inadmissible, admitted BREDL as a party, and granted BREDL's request for a hearing.[11]

On June 1, 2010, the NRC Staff informed the parties that Dominion intended to revise its COLA to incorporate a different nuclear reactor design, the U.S. Advanced Pressurized Water Reactor (US-APWR), instead of the ESBWR.[12] On June 29, 2010, Dominion confirmed the NRC Staff's letter by filing a notice of its revision to its COLA to incorporate the US-APWR design.[13]

BREDL filed a new contention, Contention 11, which challenged the legality of Dominion's June 2010 COLA Revision.[14] Dominion and the NRC Staff each

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[4] Notice of Issuance of Early Site Permit for Dominion Nuclear North Anna, LLC Located 40 Miles North-Northwest of the City of Richmond, VA, 72 Fed. Reg. 68,202 (Dec. 4, 2007).

[5] LBP-08-15, 68 NRC at 302.

[6] *Id.; see* 10 C.F.R. § 52.73.

[7] 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).

[8] Petition for Intervention and Request for Hearing by the Blue Ridge Environmental Defense League (May 9, 2008) at 5-30.

[9] Dominion's Answer Opposing Petition for Intervention and Request for Hearing by the Blue Ridge Environmental Defense League (June 3, 2008); NRC Staff Answer to "Petition for Intervention and Request for Hearing by the Blue Ridge Environmental Defense League" (June 3, 2008).

[10] Reply of the Blue Ridge Environmental Defense League to Dominion Virginia Power and NRC Staff Answers to Our Petition for Intervention and Request for Hearing (June 11, 2008).

[11] LBP-08-15, 68 NRC at 338.

[12] Letter from Robert M. Weisman, Counsel for the NRC Staff, to Atomic Safety and Licensing Board (June 1, 2010) at 1.

[13] Letter from David R. Lewis, Counsel for Dominion, to Atomic Safety and Licensing Board (June 29, 2010) at 1.

[14] Intervenor's New Contention Eleven (June 17, 2010).

filed responses opposing admission of Contention 11.[15] In addition to opposing the new contention, both the Applicant and the NRC Staff suggested that the Board issue an order establishing a schedule for the filing of any new contentions based on the Revised COLA.[16] The Board issued such an order on August 11, 2010, directing "that BREDL shall file any new contentions based on new information in Dominion's June 29, 2010 revision to its COLA on or before October 4, 2010."[17]

In a subsequent Memorandum and Order, the Board declined to admit Contention 11, finding nothing in the NRC regulations that would prohibit an applicant from amending its COLA to incorporate a different reactor design.[18]

BREDL's two new proposed Contentions 12 and 13 were timely filed on October 2, 2010.[19] Dominion and the NRC Staff filed Answers opposing the new contentions on October 28, 2010.[20] BREDL replied to those Answers on November 4, 2010.[21]

Analysis

I. CONTENTION 12

A. Summary of the Contention and Responses

Contention 12 is captioned, "The Environmental Review is Insufficient."[22]

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[15] Dominion's Opposition to BREDL's New Contention 11 (July 12, 2010) [hereinafter Dominion Answer to New Contention Eleven]; NRC Staff Answer to the Blue Ridge Environmental Defense League's New Contention Eleven (July 2, 2010) [hereinafter NRC Staff Answer to New Contention Eleven].

[16] The NRC Staff pointed out that "[n]either the Board's Scheduling Order dated September 10, 2008, nor the model milestones referenced therein, provide a time for filing late-filed or new or amended contentions with respect to a revision to the Application," and thus recommended we fix a timetable for filing proposed contentions arising out of Dominion's COLA Revision. NRC Staff Answer to New Contention Eleven at 5. Dominion agreed with the NRC Staff's suggestion. Dominion Answer to New Contention Eleven at 4 n.4.

[17] Licensing Board Order (Setting Deadline for Filing New Contentions Based on New Information in the Applicant's June 29, 2010 Revision to the License Application) (Aug. 11, 2010) at 7 (unpublished) [hereinafter Scheduling Order].

[18] LBP-10-17, 72 NRC 501, 510 (2010).

[19] *See* New Contentions at 1.

[20] Dominion's Opposition to BREDL's New Contentions (Oct. 28, 2010) [hereinafter Dominion Ans.]; NRC Staff Answer to "Intervenor's New Contentions" Filed by the Blue Ridge Environmental Defense League (Oct. 28, 2010) [hereinafter NRC Staff Ans.].

[21] Intervenor's Reply to Dominion and NRC Staff Answers (Nov. 4, 2010) [hereinafter BREDL Reply].

[22] New Contentions at 2.

BREDL then defines the "Specific statement of law or fact to be raised or controverted" as follows:

> Consumptive water use intended by the North Anna Unit 3 project requires significant additional environmental review. The National Environmental Policy Act requires NRC to evaluate a range of reasonable alternatives and their impacts. 10 CFR § 51.45.[23]

In further explaining the contention, BREDL states that, because the US-APWR has a lower thermodynamic efficiency than the ESBWR, it "will require an inordinately large draw of water from Lake Anna in order to cool the reactor."[24] BREDL states that "Unit 3 will withdraw up to 22,000 gallons of water per minute from Lake Anna to replace water lost from the operation of the cooling tower" and that therefore the new reactor "would withdraw over 11 billion gallons of water from Lake Anna annually."[25] Additionally, BREDL represents that "during each minute of operation the proposed Unit 3 power plant will release 5,500 gallons of cooling tower blowdown water into Lake Anna."[26] This means that "3 billion gallons of heated and chemically contaminated water . . . will be dumped into Lake Anna each year."[27] "Water returned to the lake as blowdown would have approximately four times higher concentrations of pollutants and minerals than the water which was withdrawn," BREDL avers, "including biocides and algaecides used within the cooling towers to prevent them from becoming clogged with mold and mildew."[28] According to BREDL, "blowdown water would be approximately 20 degrees hotter than" the water in Lake Anna.[29] Moreover, because 11 billion gallons of lake water will be withdrawn but only 3 billion gallons will be returned, the lake will suffer a net loss of 8 billion gallons of water each year.[30] BREDL claims these negative impacts to the lake will exacerbate those of the two nuclear reactors already operating on Lake Anna (North Anna Units 1 and 2), which also use Lake Anna as a heat sink and cooling facility and have already extensively warmed the lake.[31]

BREDL argues that substituting the US-APWR for the ESBWR will increase

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[23] *Id.* at 2-3.

[24] *Id.* at 4.

[25] *Id.* (citing North Anna Unit 3 Combined License Application, Part 3: Applicant's Environmental Report–Combined License Stage, Rev. 3 (June 2010), tbl. 3.0-2 [hereinafter ER Rev. 3]).

[26] *Id.* (citing ER Rev. 3 tbl. 3.0-2).

[27] *Id.* at 4-5.

[28] *Id.* at 5.

[29] *Id.*

[30] *Id.* at 4. Most of the water loss will be from evaporation in the closed-cycle cooling towers.

[31] *Id.* at 4.

harmful impacts to Lake Anna. Therefore, the NRC must conduct further environmental analysis to comply with the National Environmental Policy Act (NEPA). BREDL maintains that the NRC should evaluate the alternative of using "an air condenser rather than the typical water tube condenser design."[32] In an air-cooled condenser, BREDL emphasizes, steam from "the turbine passes directly to a dry cooling tower."[33] The dry cooling tower would not consume lake water and no blowdown would be discharged to the lake. BREDL reasons that using an air condenser would therefore diminish contamination and enhance water quality.[34] According to BREDL, "air-cooled condensers offer significant environmental benefits with inconsequential costs associated with such a modification. A further environmental review is necessary to meet the requirements of NEPA and to protect public health and environmental quality."[35]

The NRC Staff and Dominion disagree. The NRC Staff argues that "insofar as proposed New Contention [12] requests consideration of a dry cooling design alternative for cooling North Anna Unit 3, that matter must be considered resolved [in the ESP proceeding] pursuant to 10 C.F.R. § 52.39."[36] The NRC Staff recognizes that a matter resolved in an ESP proceeding may be revisited when new and significant information is presented, but it maintains that

> the Intervenor does not attempt to compare the environmental impacts of its suggested alternative to those of the dry cooling tower alternative evaluated in the ESP FEIS to show that new and significant information supports admission of proposed New Contention [12] . . . , as required by 10 C.F.R. §§ 52.39(c)(v) and 51.107(b)(3).[37]

Finally, according to the NRC Staff, "the Intervenor's complaint about the composition and temperature of the blowdown is impermissibly late, as these matters were described in the original version of the Application and do not arise from the revision to the Application, as required by the Board's August 2010 Scheduling Order."[38]

Similarly, Dominion argues that the issues Intervenor raises in Contention 12, including consumptive water use and cooling tower alternatives, were resolved in the ESP proceeding, and BREDL has not identified any new information

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[32] *Id.* at 3.
[33] *Id.* at 5.
[34] *Id.* at 5-6.
[35] *Id.* at 6.
[36] NRC Staff Ans. at 11-12.
[37] *Id.* at 12, 14.
[38] *Id.* at 12.

concerning those issues in Dominion's Revised COLA. According to Dominion, those issues are therefore outside the permissible scope of this proceeding.[39]

B. Board Ruling

Contention 12 alleges that Dominion's switch to the US-APWR design will harm Lake Anna in three ways — thermal discharges, consumptive water use, and the discharge of pollutants in the blowdown — and that these impacts justify reconsidering the dry cooling tower alternative for Unit 3.[40] In the ESP proceeding, however, the ESP Board and the NRC Staff evaluated and resolved the impact of thermal discharges and consumptive water use on Lake Anna and the question whether Unit 3 should use the dry cooling tower alternative to mitigate any such impacts.[41] BREDL has not identified anything in Dominion's switch to a different reactor design that would justify revisiting the issue now.

We further conclude that BREDL fails to justify reopening the dry cooling tower alternative issue based on the discharge of chemicals such as copper and tributyltin (TBT) in the blowdown from Unit 3. Although the question of the impact of those chemicals upon water quality was not resolved in the ESP proceeding, information concerning this matter was disclosed in Dominion's original COLA, filed in 2007,[42] and later evaluated by the NRC Staff in its February 2010 Supplemental Environmental Impact Statement for the COLA.[43] The relevant information did not change materially as a result of the switch from ESBWR to US-APWR,[44] and BREDL has not provided any other justification for its delay in raising this issue. BREDL's attempt to raise the blowdown chemicals issue for the first time in October 2010 thus comes too late and without adequate justification under 10 C.F.R. § 2.309(c)(1) or (f)(2). We therefore will not admit any aspect of Contention 12.

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[39] Dominion Ans. at 9.

[40] *See* New Contentions at 3-6.

[41] *See Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), LBP-07-9, 65 NRC 539, 565-67, 605, 612-13, *permit issuance authorized,* CLI-07-27, 66 NRC 215 (2007).

[42] *See* North Anna 3 Combined License Application, Part 3: Applicants' Environmental Report — Combined License Stage, Rev. 0 (Nov. 2007) at 3-55 to 3-57 [hereinafter ER Rev. 0].

[43] *See* U.S. Nuclear Regulatory Commission, Office of New Reactors, Supplemental Environmental Impact Statement for the Combined License (COL) for North Anna Power Station Unit 3, NUREG-1917 (Feb. 2010) at 5-6 [hereinafter COL EIS]. We observe that the NRC Staff has issued a notice in the *Federal Register* announcing its intent to issue another Supplemental Environmental Impact Statement for Dominion's North Anna Unit 3 COLA. *See* Virginia Electric and Power Company D/B/A/ Dominion Virginia Power and Old Dominion Electric Cooperative, North Anna Power Station Combined License Application; Notice of Intent to Prepare a Supplemental Environmental Impact Statement and Conduct Scoping Process, 76 Fed. Reg. 6638, 6638 (Feb. 7, 2011).

[44] *Compare* ER Rev. 0 at 3-56 to 3-57 *with* ER Rev. 3 at 3-67 to 3-68.

1. The Test for Determining Whether an Issue Was Resolved in the ESP Proceeding

In our ruling on BREDL's hearing request, we interpreted the limitation in 10 C.F.R. § 52.39(a)(2) that prohibits a board from revisiting issues "resolved" in an ESP proceeding. As we explained,[45] if a matter is resolved in a proceeding on an ESP application, then it is considered resolved in a subsequent COL proceeding when the COLA references the ESP, subject to certain exceptions.[46] We noted that the regulation does not expressly define the conditions under which an issue is "resolved" during an ESP proceeding. We determined, after considering the background of the regulation and its purpose, that a contention should be deemed resolved during the ESP proceeding:

> if (1) the subject of the contention was actually litigated and decided during the ESP proceeding; or (2) the subject of the contention, although not actually litigated, was decided by the Staff, was necessary for the Staff to resolve in the ESP proceeding, and was within the scope of that proceeding as defined in the *Federal Register* notice of opportunity for a hearing. We must treat any contention resolved during the ESP proceeding as resolved in this COL proceeding unless one of the exceptions listed in section 52.39 applies.[47]

As noted, Contention 12 asks that the NRC evaluate whether Unit 3 should use a dry cooling system to reduce thermal discharges, consumptive water use, and the release of blowdown pollutants. We must decide whether those issues were resolved in the ESP proceeding, either through litigation or by the NRC Staff, and, if they were, whether any exception applies that would allow us to revisit any of those issues at the COL stage. This requires that we review the relevant history of the ESP proceeding in some detail.

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[45] LBP-08-15, 68 NRC at 304-05 & n.45.

[46] *See* 10 C.F.R. § 52.39(a)(2). The exceptions are in section 52.39(b), (c), and (d).

[47] LBP-08-15, 68 NRC at 311. Relitigation of an issue previously decided by a licensing board or the Commission may also be barred by the doctrine of collateral estoppel. *See Toledo Edison Co.* (Davis-Besse Nuclear Power Station, Units 1, 2, and 3), ALAB-378, 5 NRC 557, 561 (1977) (noting that "collateral estoppel . . . . doctrine precludes the relitigation of issues of law or fact which have been finally adjudicated by a tribunal of competent jurisdiction in a proceeding involving the same parties or their privies" and that "a judicial decision is entitled to precisely the same collateral estoppel effect in a later administrative proceeding as it would be accorded in a subsequent judicial proceeding"). We need not address the application of that doctrine to Contention 12, however, because we are able to decide the issue on the basis of section 52.39(a)(2).

2. The ESP Proceeding

Dominion filed its ESP Application on September 25, 2003.[48] Dominion did not select a specific plant design for the proposed new reactors at the North Anna site, Units 3 and 4. Therefore, the Final Environmental Impact Statement (FEIS) for the ESP was based upon "a plant parameter envelope (PPE), which is a set of values of plant design parameters that an ESP applicant expects will bound the design characteristics of the reactor or reactors that might be built at a selected site."[49] The FEIS used the PPE to evaluate the environmental impacts of both reactor construction and reactor operation.[50]

In the ESP Application, Dominion proposed to use a once-through cooling system for Unit 3. In such a system, which is the type currently used for North Anna Power Station (NAPS) Units 1 and 2, water is withdrawn from Lake Anna, circulated through the condensers, and returned to the lake after cooling in the Waste Heat Treatment Facility. Because water taken from the lake is used once for cooling and then discharged, rather than recirculated as in a closed-cycle system, a larger volume of water is discharged than with a closed-cycle cooling system.[51] On the other hand, Unit 4, as described in the ESP Application, would use a closed-cycle system with cooling towers for plant cooling and heat dissipation.[52] The ESP Application included an Environmental Report (ER) that addressed, among other things, the impact of the operation of proposed Units 3 and 4 on Lake Anna.[53]

On November 25, 2003, the NRC published a Notice of Hearing and Opportunity to Petition for Leave to Intervene for the Applicant's ESP Application.[54] BREDL, the Nuclear Information and Resource Service, and Public Citizen (collectively, ESP Intervenors) filed a request for hearing and petition to intervene.[55] The ESP Board concluded that the ESP Intervenors had standing and admitted,

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[48] Dominion Nuclear North Anna, LLC; Notice of Receipt and Availability of Application for Early Site Permit for the North Anna ESP Site, 68 Fed. Reg. 59,643, 59,643-44 (Oct. 16, 2003).

[49] U.S. Nuclear Regulatory Commission, Office of New Reactors, Environmental Impact Statement for an Early Site Permit (ESP) at the North Anna ESP Site: Final Report, Main Report (Dec. 2006) at xxiii-xxiv, 1-8 to 1-9 [hereinafter ESP FEIS].

[50] *See id.* at 4-1 to 4-51, 5-1 to 5-70. The ESP FEIS, Appendix I, tbl. I-2 lists the PPE values used by the Staff in its evaluation.

[51] *See id.* at 3-9 to 3-10, 5-9, 5-19, 8-2 to 8-5.

[52] *See id.* at 3-9 to 3-10, 8-2.

[53] *See id.* at 1-1, 5-1.

[54] Dominion Nuclear North Anna, LLC; Notice of Hearing and Opportunity to Petition for Leave to Intervene; Early Site Permit for the North Anna ESP Site, 68 Fed. Reg. 67,489, 67,489 (Dec. 2, 2003).

[55] *See Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), LBP-04-18, 60 NRC 253, 258 (2004).

in part, two of their proposed contentions.[56] The first of the partially admitted contentions, identified as EC 3.3.2, alleged that

> [t]he ER does not adequately address the adverse impact of operating one or two additional reactors on fish and other aquatic life health in Lake Anna and the North Anna River. In particular, the ER does not adequately consider the four primary impacts of the proposed reactors to the fish and other aquatic life at Lake Anna and downstream: increased water temperature, impingement, entrainment, and downstream flow rates. In addition, the ER does not address conflicts between Dominion's proposals for water use and the requirements of the Clean Water Act ("CWA") and its implementing regulations. Finally, the ER does not address the cumulative impacts of proposed Units 3 and 4 on the already-stressed aquatic systems in Lake Anna and the North Anna River.[57]

The ESP Board admitted the contention, but limited to the claim that

> [t]he ER does not adequately address the adverse impact of operating one or two additional reactors on the striped bass in Lake Anna and the North Anna River. In particular, the ER does not adequately consider the impacts of the proposed reactors on the striped bass at Lake Anna and downstream arising from increased water temperature.[58]

The second of the admitted contentions, EC 3.3.4, alleged that "[t]he ER fails to satisfy 10 C.F.R. § 51.45(b)(3) because it fails to consider alternatives to the use of Lake Anna water for cooling Units 3 and 4, as well as the no-action alternative."[59] According to the ESP Petition,

> Alternate technologies to avoid in-stream treatment have not been adequately described in the ER. For example, the ER does not evaluate any alternatives for Unit 3 other than a once-through cooling system. Additionally, in accordance with NEPA, the no-action alternative of no additional in-stream treatment and no expansion of NAPS must be considered.[60]

The ESP Board admitted this contention, but limited it to the "allegation that

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[56] *Id.* at 267-72, 276.

[57] *Id.* at 270-71 (footnotes omitted).

[58] *Id.* at 276.

[59] *Id.* at 272.

[60] Contentions of Blue Ridge Environmental Defense League, Nuclear Information and Resource Service, and Public Citizen Regarding Early Site Permit Application for Site of North Anna Nuclear Power Plant (May 3, 2004) at 44 (ADAMS Accession No. ML041320393).

the ER fails to examine the no-action alternative with respect to the effects of proposed unit 3 on Lake Anna."[61]

Contention EC 3.3.4 was subsequently settled.[62] This left only Contention EC 3.3.2 for the ESP Board to decide. On April 22, 2005, the Applicant moved for summary disposition of Contention EC 3.3.2, and on June 16, 2005, the ESP Board granted the motion for summary disposition in part, and denied it in part.[63] On January 13, 2006, Dominion submitted a supplement to its ESP Application, proposing to change the Unit 3 cooling system from a once-through system to a closed-cycle system using a combined wet/dry cooling tower.[64] The Applicant subsequently revised its ESP Application and ER and filed a second motion for summary disposition, arguing that EC 3.3.2 should be dismissed because, given its switch to a closed-cycle cooling system for Unit 3 (the wet/dry cooling tower), there would be only a negligible thermal discharge to Lake Anna.[65] The ESP Board granted the Applicant's second motion for summary disposition, concluding that

> given the unanimous agreement that Dominion's amended license application eliminates virtually all of the discharge of warmed water into Lake Anna and the North [Anna] River, there remains no genuine dispute on any issue of material fact in this case, and Dominion is entitled to summary disposition as a matter of law.[66]

Thereafter, the "ESP adjudication became an uncontested proceeding subject to the mandatory hearing requirements of Atomic Energy Act (AEA) § 189a(1)(A) and 10 C.F.R. § 52.21."[67]

In December 2006, the NRC Staff published the FEIS for the North Anna ESP site.[68] The ESP FEIS evaluated, among other things, "the water-related impacts on Lake Anna and the Waste Heat Treatment Facility (WHTF) from the closed-cycle, combination wet and dry cooling system proposed for Unit 3."[69] This evaluation

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[61] *North Anna ESP,* LBP-04-18, 60 NRC at 272.

[62] The ESP Board issued an order approving the settlement and dismissing Contention EC 3.3.4 on January 6, 2005. *See* North Anna ESP Licensing Board Order (Approving Settlement and Dismissal of EC 3.3.4) (Jan. 6, 2005) (unpublished) (ADAMS Accession No. ML0501040358).

[63] *See* North Anna ESP Licensing Board Memorandum and Order (Granting in Part and Denying in Part Summary Disposition on Contention EC 3.3.2 — Impacts on Striped Bass in Lake Anna) (June 16, 2005) (unpublished) (ADAMS Accession No. ML051670565).

[64] *See North Anna ESP,* LBP-07-9, 65 NRC at 552 n.9.

[65] *Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), LBP-06-24, 64 NRC 360, 362 (2006).

[66] *Id.* at 364 (citations omitted).

[67] *North Anna ESP,* LBP-07-9, 65 NRC at 552.

[68] *See* ESP FEIS at iii.

[69] *Id.* at 5-4.

included impacts on hydrology, water use, and water quality.[70] In section 8.2 of the ESP FEIS, the Staff evaluated cooling system design alternatives, including once-through cooling, wet towers, and dry cooling, and compared the effects of those alternatives to the impacts of the combination wet and dry cooling system proposed for Unit 3.[71]

The Staff acknowledged that

> [t]he use of a dry cooling design versus the proposed combination wet and dry cooling system design for Unit 3 would largely eliminate the impacts on aquatic biota in Lake Anna and the North Anna River downstream. The lake would not be heated by rejected heat from Unit 3, and there would be no additional consumptive water use.[72]

The Staff also found, however, that a dry cooling system would have some disadvantages.[73] Because of these concerns and its finding that "Lake Anna could support Unit 3 using a combination wet and dry cooling system," the Staff concluded that "a combination wet and dry cooling system would be preferable to a dry cooling system for Unit 3."[74]

At the mandatory hearing, the ESP Board was charged with reviewing, among other things, the agency's compliance with NEPA.[75] To that end, the ESP Board reviewed the NRC Staff's analysis of surface water impacts from the operation of two new reactors at the ESP site, including effects upon the water level in Lake Anna, and potential mitigation measures for those impacts.[76] The ESP Board explained that "[t]his topic is primarily environmental, focusing on the proposed project's environmental impacts and the consideration of reasonable alternatives and mitigation measures as required by NEPA."[77] It noted that a closed-cycle combination wet and dry cooling tower system would be used for Unit 3, and

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[70] *Id.* at 5-4 to 5-13.

[71] *Id.* at 8-2 to 8-5.

[72] *Id.* at 8-4.

[73] *Id.* at 8-4 to 8-5 ("[D]ry cooling systems are more expensive to build and are not as efficient as wet cooling systems. To achieve the necessary cooling, dry systems move a large amount of air through a heat exchanger, and the fans that force the air through the heat exchanger use a significant amount of power. . . . The power needed to operate a dry tower for Unit 3 would be about 150 MW(e). This power demand reduces the net power output of the plant. . . . This, in turn, would increase the environmental impacts of fuel use and spent fuel transport and storage. The fans and the large volume of air required for cooling also result in elevated noise levels. The dry cooling tower would also occupy more land than a once-through or wet tower cooling system.").

[74] *Id.* at 8-5.

[75] *See North Anna ESP,* LBP-07-9, 65 NRC at 555.

[76] *Id.* at 564-69.

[77] *Id.* at 564.

that during periods when Lake Anna is below 250 feet mean sea level (MSL) for a period of 7 or more days, "'Unit 3 would be cooled with a closed-cycle, combination wet and dry cooling tower system to limit the consumptive water use.'"[78] Evidence before the ESP Board detailed the effect upon Lake Anna and downstream rivers of the consumptive water use caused by the existing NAPS Units 1 and 2 and proposed Unit 3.[79]

The ESP Board also reviewed the NRC Staff's analysis of "system design alternatives, alternative sites, and other alternatives and possible mitigation measures."[80] The Board stated that "[t]his is an issue under NEPA and relevant to several of the six fundamental issues that the Board must decide in an uncontested ESP proceeding."[81] The ESP Board noted that "[w]ith regard to system design alternatives, section 8 [of the FEIS] discusses three options for Unit 3 — once-through cooling, wet cooling, and dry cooling."[82] In addition to reviewing the FEIS, the Board heard testimony concerning system design alternatives, which included testimony concerning the benefit of the dry cooling alternative. For example, "Mr. Vail, testifying for the Staff, stated that the increase of the low water levels in Lake Anna and low discharges from the North Anna Dam would be eliminated entirely if the NRC were to require dry cooling for Unit 3, as it proposes to do for Unit 4."[83]

After summarizing the evidence, the ESP Board concluded that the FEIS adequately evaluated the water-related impacts of the construction and operation of Units 3 and 4.[84] A majority of the ESP Board also concluded that the ESP FEIS was sufficient to satisfy the requirements of NEPA § 102(2)(A), (C), and (E),[85] and the agency's NEPA regulations in 10 C.F.R. Part 51.[86] Among the

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[78] *Id.* at 565 (quoting ESP FEIS at 3-9).

[79] *Id.* at 566-68. For example,

> Mr. Jeffrey Ward of the Staff testified that, during nondrought years, the addition of Unit 3 would essentially (a) double the amount of time that the water level in Lake Anna would drop to 248 feet MSL or below, and (b) double the amount of time discharges from the North Anna Dam would be at the low, 20-cfs [cubic feet/second] level. . . . With Units 1 and 2 as a baseline, the Staff estimates that the lake level for nondrought years would be at 248 feet MSL or lower for 6% of the year. . . . But the addition of Unit 3 would essentially double this figure to 11% of the year. . . . During drought years, the impacts on the lake level and downstream flow would be greater.

Id. at 566-67 (citations omitted).

[80] *Id.* at 587.

[81] *Id.*

[82] *Id.*

[83] *Id.* at 567.

[84] *Id.* at 605.

[85] These sections are codified at 42 U.S.C. § 4332(2)(A), (C), and (E).

[86] *North Anna ESP,* LBP-07-9, 65 NRC at 602-14.

issues the ESP Board considered was whether the FEIS adequately evaluated system design alternatives through its review of the "three main system design alternatives for the cooling water system for Unit 3: once-through cooling system, wet cooling, and dry cooling."[87] The majority concluded that "[a]ll reasonable alternatives, [including] system design alternatives, have been identified, considered, and evaluated," and that the agency had fulfilled its obligation under NEPA § 102(2)(C)(iii) to provide a "detailed statement" of "the alternatives to the proposed action."[88]

On November 20, 2007, after reviewing the ESP Board's Initial Decision, the Commission approved the issuance of an ESP for the North Anna site.[89]

3. Issues Resolved in the ESP Proceeding

Having reviewed the ESP proceeding, we conclude that it resolved two of BREDL's three arguments for preferring that Unit 3 have a dry cooling tower: to reduce or eliminate thermal discharges and consumptive water use.

The thermal discharge issue was resolved through litigation. At the conclusion of the contested proceeding, the ESP Board granted summary disposition as to Contention EC 3.3.2 because all parties — including BREDL — acknowledged that Dominion's decision to use a wet/dry cooling tower eliminated virtually all discharges of heated water to Lake Anna and the North Anna River.[90] Given this conclusion, there remained no basis to prefer a dry cooling tower to eliminate thermal discharges.

In the ESP FEIS, the NRC Staff comprehensively evaluated the question whether the dry cooling tower alternative should be required for Unit 3 to reduce water-related impacts to Lake Anna and the North Anna River. After evaluating the merits of several cooling system alternatives, including dry cooling, the Staff found the wet/dry cooling tower alternative preferable.[91] Thus, the Staff evaluated the alternative of using a dry cooling tower to reduce consumptive water use and

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[87] *Id.* at 612-13.

[88] *Id.* at 613. Judge Karlin dissented on two NEPA alternatives issues, opining that the ESP FEIS failed to comply with NEPA in its treatment of alternative sites and its refusal to consider alternatives imposing water conservation measures on Units 1 and 2. He did not dissent, however, on the question whether the ESP FEIS adequately evaluated system design alternatives for the cooling water system for Unit 3. *See id.* at 631-39 (Karlin, J., dissenting).

[89] *North Anna ESP,* CLI-07-27, 66 NRC at 219-20. As to the disagreement between the majority and the dissent described *supra* at note 88, the Commission concluded that "[t]he Staff in its FEIS failed to include a sufficiently detailed description of the Staff's alternative site review at the candidate site level," but that "the Staff's underlying review *was* sufficiently detailed to qualify as 'reasonable' and a 'hard look' under NEPA." *Id.* at 233.

[90] *North Anna ESP,* 64 NRC at 364-65.

[91] ESP FEIS at 8-2 to 8-5.

any remaining thermal discharge to the lake, and reached a conclusion on that issue.

Because this issue was resolved by the NRC Staff in the ESP FEIS rather than through litigation, the test we adopted in our ruling on BREDL's hearing request requires that we decide whether the Staff was required to resolve the issue in the ESP proceeding, and whether the issue was within the scope of that proceeding as defined in the *Federal Register* Notice of Hearing on the ESP.[92]

To issue the ESP, the NRC must comply with NEPA.[93] That statute requires that an EIS include a detailed statement by the responsible agency official on, among other things, (i) "the environmental impact of the proposed action," (ii) "any unavoidable adverse environmental effects which cannot be avoided should the proposal be implemented," and (iii) "alternatives to the proposed action."[94] The agency responsible for preparing the EIS must define the scope of the issues it will address.[95] When the ESP FEIS was published in December 2006, the NRC regulation governing the scope of the EIS stated that the provisions of 40 C.F.R. § 1502.4, a regulation issued by the Council on Environmental Quality (CEQ), should be used for that purpose.[96] Section 1502.4 in turn directs that

> Agencies shall use the criteria for scope (§ 1508.25) to determine which proposal(s) shall be the subject of a particular statement. Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement.[97]

Section 1508.25 directs that, in defining the scope of the EIS, all "connected actions" must be analyzed in one statement.[98] Separate actions may be considered

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[92] *See* LBP-08-15, 68 NRC at 311.

[93] *See, e.g.,* 10 C.F.R. § 52.18 ("[T]he Commission shall prepare an environmental impact statement during review of the [ESP] application, in accordance with the applicable provisions of 10 CFR part 51."); *id.* § 51.10(a) ("The regulations in this subpart implement section 102(2) of NEPA in a manner which is consistent with the NRC's domestic licensing and related regulatory authority under the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and the Uranium Mill Tailings Radiation Control Act of 1978, and which reflects the Commission's announced policy to take account of the regulations of the Council on Environmental Quality published November 29, 1978 (43 FR 55978-56007) voluntarily, subject to certain conditions."); *id.* § 51.20(b)(1) ("The following types of actions require an environmental impact statement or a supplement to an environmental impact statement: (1) Issuance of a limited work authorization or a permit to construct a nuclear power reactor, testing facility, or fuel reprocessing plant under part 50 of this chapter, or issuance of an early site permit under part 52 of this chapter.").

[94] 42 U.S.C. § 4332(2)(C)(i)-(iii).

[95] *See* 40 C.F.R. § 1501.7.

[96] 10 C.F.R. § 51.29(a)(1).

[97] 40 C.F.R. § 1502.4(a).

[98] *Id.* § 1508.25(a)(1).

"connected" if, among other things, they "[a]re interdependent parts of a larger action and depend on the larger action for their justification."[99] An ESP authorizes the use of a specific site for the construction and operation of a new nuclear power plant, with the actual construction and operation authorized by a subsequently issued COL.[100] Although a licensee that has obtained an ESP is not required to apply for a COL or to actually construct and operate a nuclear power plant at the authorized site, it is difficult to see any reason to obtain an ESP other than as an initial step toward those actions. The ESP and the COL are therefore "in effect, a single course of action" and "interdependent parts of a larger action [that] depend on the larger action for their justification." Thus, the issuance of an ESP and the subsequent authorization of construction and operation of a new nuclear power plant qualify as "connected actions" under section 1508.25, and should be evaluated in one EIS. Therefore, in order to comply with NRC and CEQ regulations governing the preparation of the FEIS for the ESP, the Staff was required to evaluate the environmental consequences of constructing and operating Units 3 and 4 at the North Anna site and alternatives for mitigating those consequences.

Finally, as we explained in our ruling on BREDL's hearing request, "[t]he 'Notice of Hearing and Opportunity to Petition for Leave to Intervene' for the ESP proceeding made clear that petitioners could challenge the adequacy of the NRC's NEPA compliance."[101] Thus, although BREDL did not challenge the Staff's resolution of the cooling system alternatives issue in the ESP FEIS, it could have done so because the issue was within the scope of the ESP proceeding as defined in the *Federal Register* Notice of Hearing and Opportunity to Petition for Leave to Intervene.

We conclude, therefore, that the Staff's resolution of the cooling system alternatives issue in the FEIS was sufficient to resolve the issue within the meaning of 10 C.F.R. § 52.39(a)(2). As the Commission stated in approving the ESP, "in the environmental context, the contents of the FEIS bounds the reach of both issue preclusion and Staff inquiry into new and significant information in a future . . . COL proceeding referencing an ESP granted for the North Anna ESP site."[102]

The resolution of the thermal discharge and consumptive water use issues in the ESP proceeding is confirmed by the ESP Board's Initial Decision in the mandatory hearing portion of the ESP proceeding. The ESP Board evaluated the effect upon Lake Anna and downstream rivers of the consumptive water

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[99] *Id.* § 1508.25(a)(1)(iii). *See, e.g., South Carolina v. O'Leary,* 64 F.3d 892, 899 (4th Cir. 1995); *Town of Huntington v. Marsh,* 859 F.2d 1134, 1142 (2d Cir. 1988).

[100] *See* 10 C.F.R. §§ 52.1(a), 52.12.

[101] LBP-08-15, 68 NRC at 324 & n.152 (referencing 68 Fed. Reg. at 67,489).

[102] *North Anna ESP,* CLI-07-27, 66 NRC at 259.

use and other water-related impacts caused by the existing NAPS Units 1 and 2 and proposed Unit 3.[103] That Board also reviewed the Staff's consideration of alternatives to reduce those impacts to Lake Anna and downstream rivers, including the dry cooling tower alternative that BREDL advocates.[104] The ESP Board concluded that the Staff's evaluation of environmental consequences and alternatives complied with NEPA,[105] and the Commission in substance affirmed that determination when it issued the ESP.[106]

4. Exceptions to the Rule Against Reopening Issues Resolved in the ESP Proceeding

Having concluded that the ESP proceeding resolved two of BREDL's three justifications for reexamining the dry cooling tower alternative, we must decide whether any exception would allow either of those issues to be raised anew in this proceeding. Given BREDL's arguments in support of Contention 12, which focus on the change in reactor design, the exceptions potentially relevant here provide:

> In any proceeding for the issuance of a . . . combined license referencing an early site permit, contentions on the following matters may be litigated in the same manner as other issues material to the proceeding:
>
> (i) The nuclear power reactor proposed to be built does not fit within one or more of the site characteristics or design parameters included in the early site permit;
>
> . . . .
>
> (v) Any significant environmental issue that was not resolved in the early site permit proceeding, or any issue involving the impacts of construction and operation of the facility that was resolved in the early site permit proceeding for which significant new information has been identified.[107]

BREDL argues that Dominion's substitution of the US-APWR reactor design for the ESBWR justifies reopening the dry cooling tower issue. BREDL's expert, Mr. Gundersen, describes various characteristics of Unit 3 after the change in reactor design. For example, Mr. Gundersen states that, as a result of the change in reactor design, "the electrical output and waste heat were increased."[108] He

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[103] *North Anna ESP,* LBP-07-9, 65 NRC at 566.

[104] *See id.* at 566-69, 612-13.

[105] *Id.* at 605-06, 613, 616, 629.

[106] *See North Anna ESP,* CLI-07-27, 66 NRC at 219-20.

[107] 10 C.F.R. § 52.39(c)(1).

[108] New Contentions, Exh. 1, Declaration of Arnold Gundersen Supporting Blue Ridge Environmental Defense League's Contention Regarding Consumptive Water Use at Dominion Power's Newly Proposed North Anna Unit 3 Pressurized Water Reactor ¶ 16.2 (July 23, 2010) [hereinafter Gundersen Decl.].

further notes that, "Unit 3 will withdraw up to 22,000 gallons of water per minute from Lake Anna 'to replace water lost from the operation of the tower.'"[109] He also states that "each minute the proposed Unit 3 power plant will release 5,500 gallons of water into Lake Anna as . . . cooling tower blowdown."[110] But neither BREDL nor Mr. Gundersen compares these or other Unit 3 design values to the corresponding PPE values that served as the basis of the ESP FEIS and were included in the ESP. As long as the design values for Unit 3 continue to fall within the PPE, the exception in section 52.39(c)(1)(i) fails to provide a basis for reopening issues resolved in the ESP proceeding even though the reactor design has changed.

We have not identified any Unit 3 design value noted by Mr. Gundersen that falls outside the corresponding PPE value.[111] For example, Mr. Gundersen states that Unit 3 will generate more waste heat as a result of the change in reactor design.[112] However, the Unit 3 design characteristic value for the condenser/heat exchanger duty, defined as "the waste heat rejected from the main condenser and the auxiliary heat exchangers during normal plant operation at full station load,"[113] is identical to the corresponding ESP plant parameter (maximum heat load of 1.03×10^{10} Btu/hr).[114] Thus, even if Unit 3 would generate more waste heat as a result of the change in reactor design, the waste heat that would be generated after the change falls within the PPE that served as the basis of the environmental analysis in the ESP FEIS. The ESP FEIS therefore evaluates the environmental impact of a reactor that will generate the same amount of waste heat as Unit 3 using the US-APWR design, even though Dominion had not yet selected that design when the ESP FEIS was prepared.[115]

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[109] *Id.* ¶ 19.4 (quoting ER Rev. 3, tbl. 3.0-2).

[110] *Id.* ¶ 20 (quoting ER Rev. 3, tbl. 3.0-2).

[111] Arguably, we were not obligated to undertake this analysis on our own given BREDL's failure to directly address the issue, but we have done so to ensure the correctness of our ruling. We based our analysis on Table 3.0-2 of Dominion's ER for its Revised COLA (ER Rev. 3), which includes a side-by-side comparison of the ESP Plant Parameters, as set forth in ESP Table D-1, and the design characteristic values of Unit 3 after Dominion adopted the US-APWR reactor design. *See* ER Rev. 3, tbl. 3.0-2. The ESP Plant Parameters in ESP Table D-1 are the same as those in the ESP FEIS. *Compare* ESP FEIS, app. I, tbl. I-2 *with* Dominion Nuclear North Anna, LLC, North Anna ESP Site, Docket No. 52-008, Early Site Permit, app. D, tbl. D-1 (Nov. 27, 2007) (ADAMS Accession No. ML073180440).

[112] *See* Gundersen Decl. ¶ 16.2.

[113] ER Rev. 3 at 3-20, tbl. 3.0-2.

[114] *Compare id. with* ESP FEIS at I-5, tbl. I-2.

[115] On March 25, 2011, BREDL filed a document entitled "Intervenor's Response to Board Questions." *See* Intervenor's Response to Board Questions (Mar. 25, 2011) [hereinafter Intervenor's Response to Board Questions]. Dominion filed a Motion to Strike this filing on April 1. Dominion's *(Continued)*

Mr. Gundersen also refers to the Make-Up Flow Rate for Unit 3 (22,268 gallons per minute (gpm) maximum when the wet/dry cooling tower system is operated in the Energy Conservation mode).[116] This is defined as "[t]he expected rate of removal of water from Lake Anna to replace water losses from the closed-cycle cooling system."[117] Again, the ESP Plant Parameter is identical to the design characteristic value for Unit 3.[118] Likewise, the Blowdown Flow Rate for Unit 3 (5565 gpm maximum when operating in the Energy Conservation mode), also cited by Mr. Gundersen, is identical to the ESP Plant Parameter.[119]

The exception in section 52.39(c)(1)(v) also does not apply here. The ESP FEIS examined the impact of Unit 3 upon Lake Anna and downstream rivers based on design parameters that bracket North Anna Unit 3's current design and concluded that the dry cooling tower alternative should not be required to reduce or to eliminate thermal discharges or consumptive water use.[120] The change in reactor design is not significant new information because the ESP FEIS was based on the PPE rather than any specific reactor design. And neither BREDL nor Mr. Gundersen points to any other new information that has come to light since the ESP FEIS was issued that calls into question its conclusions concerning thermal discharges, consumptive water use, or the use of the dry cooling tower alternative to reduce those effects.

We therefore conclude that neither of the relevant exceptions in section

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Motion to Strike Unauthorized Filing (Apr. 1, 2011). We agree with Dominion that BREDL's filing is unauthorized and accordingly is not properly before the Board. Although the Board did propound questions to the parties before the March 3, 2011 oral argument on BREDL's proposed new contentions, it should have been clear from the Board's Order that we intended the questions to be addressed during the argument, not in a written filing submitted more than 3 weeks later. *See* Licensing Board Order (Providing Instructions and Questions for March 3, 2011 Oral Argument) (Feb. 23, 2011) (unpublished).

In any event, even if we were to consider BREDL's unauthorized filing as it relates to Contention 12, it would not change our ruling. BREDL claims that "[t]he ESP plant parameter envelope does not encompass the COL design for the PWR proposed by [Dominion]." Intervenor's Response to Board Questions at 1. BREDL refers to the rating of Unit 3 in megawatts thermal (MWt) and megawatts electric (MWe), implying that the change in reactor design resulted in an increase in these ratings. *Id.* at 1-2. However, the relevant PPE value for determining the waste heat discharged to the receiving waters is that discussed in the text above, which bounds the current reactor design. In addition, the 4500-MWt power rating assumed in the ESP PPE bounds the 4451 MWt rating of the US-APWR. *See* ER Rev. 3 at 3-37, tbl. 3.0-2; ESP FEIS at I-10, tbl. I-2. The rating of the US-APWR in MWe is immaterial because the electrical rating of a unit was not specified as a PPE value. *See* ER Rev. 3, tbl. 3.0-2.

[116] Gundersen Decl. ¶ 19.4.

[117] ER Rev. 3 at 3-21, tbl. 3.0-2.

[118] *Compare id. with* ESP FEIS at I-5, tbl. I-2.

[119] *Compare id.* at 3-23, tbl. 3.0-2 *with* ESP FEIS at I-6, tbl. I-2 *and* Gundersen Decl. at para. 20.

[120] *See* ESP FEIS at 8-5.

52.39(c)(1) applies here. Accordingly, section 52.39(a)(2) precludes us from considering Contention 12 insofar as it asks that a dry cooling system be reconsidered for Unit 3 to reduce thermal discharges and consumptive water use.

5. The Blowdown Pollutants Issue

The final aspect of Contention 12 focuses upon the water quality effects of pollutants in the blowdown from Unit 3, primarily copper and TBT. BREDL argues that the dry cooling tower alternative should be adopted to eliminate discharges of those pollutants.[121] BREDL's allegations concerning blowdown pollutants, however, are not based on new information in the June 2010 COLA Revision, as required by our August 2010 Order. We must therefore reject that issue as an underlying argument for Contention 12.

Unlike the other issues raised by Contention 12, the issue of the impact of blowdown pollutants from Unit 3 upon water quality was not resolved in the ESP proceeding. The ESP FEIS states that, although Dominion provided the chemical composition of Unit 3 blowdown in its PPE, the future COL applicant would need to provide additional information on chemical effluents in its COL Application, and that the issue of the impact of those effluents upon water quality remains unresolved.[122]

As we have mentioned before, new and amended contentions submitted after an intervenor's initial hearing request are evaluated under 10 C.F.R. § 2.309(f)(2) for timeliness and, if found timely, their general admissibility is analyzed pursuant to 10 C.F.R. § 2.309(f)(1).[123] A new or amended contention may be filed after initial docketing "with leave of the presiding officer upon a showing that —

> (i) The information upon which the amended or new contention is based was not previously available;
>
> (ii) The information upon which the amended or new contention is based is materially different than information previously available; and
>
> (iii) The amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information.[124]

In our August 2010 Scheduling Order, we stated that, for timeliness purposes, we would consider Dominion's Revised COLA to have become publicly available on August 3, 2010, and instructed that "any new contention based on *new information*

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[121] *See* New Contentions at 3-6.

[122] ESP FEIS at 5-13.

[123] *See* LBP-09-27, 70 NRC 992, 998-99 (2009).

[124] 10 C.F.R. § 2.309(f)(2)(i)-(iii).

in the revised COLA be filed" on or before October 4, 2010.[125] Thus, the filing of a new contention based on new information in the June 2010 COLA Revision would be "submitted in a timely fashion" under section 2.309(f)(2)(iii) if filed by October 4, 2010.

If a contention is not timely filed, it must meet the eight-factor test under section 2.309(c)(1) to be deemed admissible as a nontimely contention.[126] The Commission has considered the "good cause" factor to be the most important of those eight.[127]

Dominion and the NRC Staff argue that BREDL's allegations concerning blowdown pollutants are neither timely nor admissible.[128] Concerning timeliness, the Staff correctly points out that the ER originally submitted with Dominion's COLA in November 2007 (ER Rev. 0) disclosed projected maximum and average concentrations of copper and TBT in the WHTF, to which blowdown from the Unit 3 wet/dry cooling tower would be discharged.[129] The November 2007 ER also disclosed reported concentrations of copper and TBT in Lake Anna, which receives water discharged from the WHTF.[130] The ER for the June 2010 COLA Revision (ER Rev. 3) contained the same information, including projected concentrations for copper and TBT in the WHTF and reported concentrations of those chemicals in the lake, which does not differ materially from that information appearing in ER Rev. 0.[131] In addition, the Staff evaluated the same chemicals

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[125] Scheduling Order at 3, 6-7 (emphasis added).

[126] 10 C.F.R. § 2.309(c)(1). Those factors are:

> (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.

[127] *See AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 261 (2009).

[128] Dominion Ans. at 21-22, 24-25; NRC Staff Ans. at 16-17.

[129] *See* NRC Staff Ans. at 16; ER Rev. 0 at 3-56, 3-57, tbl. 3.6-1.

[130] *See* ER Rev. 0 at 3-56 to 3-57.

[131] *Compare id. with* ER Rev. 3 at 3-68, tbl. 3.6-1.

and their environmental impacts in its "Supplemental Environmental Impact Statement for the Combined License (COL) for North Anna Power Station Unit 3," issued in February 2010.[132]

BREDL's expert, Mr. Gundersen, also mentions "biocides and algaecides," as well as concentration of "contaminants and minerals that already exist[ ] in the lake."[133] These blowdown constituents are also discussed in the ER filed with the original version of Dominion's COL Application.[134] There is no material change in the discussion of the same subjects in the ER for the June 2010 COLA Revision.[135] Moreover, the Staff evaluated blowdown constituents in the February 2010 COL Supplemental EIS.[136]

Our Scheduling Order did not authorize the filing of any contention merely *related* to the June 2010 COLA Revision; rather, it only permitted new contentions based on new information in the Revision. The information upon which Contention 12 is based was not new when it appeared in the June 2010 Revised COLA. We conclude, therefore, that the time to file a contention concerning copper, TBT, or other blowdown pollutants mentioned in Contention 12 was in response to the original COLA or, at the latest, the COL EIS, not the June 2010 COLA Revision. Nevertheless, BREDL did not raise its concerns with any of the blowdown pollutants until October 2010, when it filed Contention 12. Under section 2.309(f)(2)(iii), this was impermissibly late.[137] And BREDL has not attempted to argue that it has good cause under 10 C.F.R. § 2.309(c)(1) for its nontimely raised contention.

We therefore conclude that the allegations concerning blowdown pollutants are untimely raised pursuant to 10 C.F.R. § 2.309(f)(2) and 2.309(c)(1), and are therefore inadmissible. This makes it unnecessary to consider the arguments concerning the admissibility of those allegations under section 2.309(f)(1).

6. Conclusion

We do not admit Contention 12 because two of its three asserted grounds for revisiting the dry cooling tower alternative were resolved in the ESP proceeding, and the third is untimely.

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[132] COL EIS at 5-6.

[133] Gundersen Decl. at paras. 39, 40.

[134] ER Rev. 0 at 3-55 to 3-57.

[135] *See* ER Rev. 3 at 3-66 to 3-68.

[136] COL EIS at 5-6.

[137] *See* Scheduling Order at 7.

II. CONTENTION 13

Contention 13, labeled "Unit 3 Seismic Spectra Exceedance," argues that in contravention of 10 C.F.R. §§ 52.7, 52.93, and 100.23, "Dominion has improperly requested a site-specific exemption from the Design Control Document Tier 1 for proposed North Anna Unit 3."[138] We conclude that Contention 13 is timely pursuant to 10 C.F.R. § 2.309(f)(2) but inadmissible pursuant to 10 C.F.R. § 2.309(f)(1).

A. Timeliness

Our timeliness inquiry for Contention 13 turns on whether the information upon which Contention 13 is based is indeed new information.

BREDL combines its explanation of the timeliness for Contention 13 with its general timeliness arguments for Contention 12. BREDL first claims that Contention 13 is based on Dominion's substitution of the US-APWR for the ES-BWR.[139] BREDL then states that "the information upon which the new contention is based is materially different than information previously available" and that "this contention has been submitted in a timely fashion; *i.e.,* on or before October 4, 2010."[140]

BREDL specifically states that Contention 13 arises out of an "improperly requested . . . site-specific exemption from the Design Control Document Tier 1 for proposed North Anna Unit 3" in Revision 3 to Dominion's COLA.[141] We regard this exemption request at the center of the contention as previously unavailable because it appeared for the first time in Revision 3 of Dominion's COLA.[142] Moreover, we view the exemption request to be "materially different" from prior versions of Dominion's COLA, given that this exemption request departs from the DCD of the pending US-APWR design certification application, which Dominion has not relied on before Revision 3 of its COLA.[143] Finally, we find that because Contention 13 was filed prior to the deadline of October 4, 2010, that we imposed for filing new contentions based on the June 2010 COLA Revision,[144] it is timely filed pursuant to 10 C.F.R. § 2.309(f)(2).

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[138] New Contentions at 6-7.
[139] New Contentions at 11.
[140] *Id.*
[141] *Id.* at 6.
[142] *See* 10 C.F.R. § 2.309(f)(2)(i).
[143] *See id.* § 2.309(f)(2)(ii).
[144] *See id.* § 2.309(f)(2)(iii).

B. Admissibility of Contention 13 Under Section 2.309(f)(1)

We next review the admissibility of proposed Contention 13 under 10 C.F.R. § 2.309(f)(1). In our ruling on BREDL's Petition to Intervene, we outlined the factors governing contention admissibility, and need not repeat them in full here.[145]

BREDL insists in Contention 13 that "Dominion has improperly requested a site-specific exemption from the Design Control Document [DCD] Tier 1 for proposed North Anna Unit 3," ostensibly in violation of sections 52.7, 52.93, and 100.23.[146] Specifically, BREDL posits that Dominion has acknowledged "that the proposed Unit 3 cannot not [sic] meet the standards for safe shutdown during an earthquake," thereby "reduc[ing] safety and increas[ing] risk to public health."[147] According to BREDL, that acknowledgment was made when Dominion, in its Departures Report to Revision 3 of its COLA, stated "'[t]he site-specific SSE [safe shutdown earthquake] peak ground acceleration (PGA) is greater than the value of 0.3g, as defined in DCD Tier 1, Table 2.1-1.'"[148] Moreover, BREDL posits that the geology of the North Anna site renders it "unsuitable" for construction of nuclear power reactors because of false statements made to the NRC in the 1970s by Virginia Electric and Power Company (VEPCO), Dominion's corporate parent, regarding the North Anna site's seismic characteristics and because of a variance from the ESP Dominion requested in the first version of its COLA that referenced the earlier ESBWR design.[149]

Dominion opposes admission of Contention 13, portraying it as an attack on NRC regulations that permit Dominion to seek the exemption, outside the scope of this proceeding, unsupported, vague, and lacking a genuine dispute of material fact or law.[150] The NRC Staff also opposes admission of Contention 13 on the grounds that it is immaterial to the NRC's licensing decision in this proceeding, lacks adequate support, and does not raise a genuine dispute of material fact or law with the COLA.[151]

This is not the first instance in this proceeding in which BREDL has raised a contention related to the seismic fault in proximity to the North Anna site. In analyzing proposed Contention 2 in our Memorandum and Order granting BREDL's hearing request, we held that section 52.39(a)(2) barred BREDL's

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[145] *See* LBP-08-15, 68 NRC at 311-12.

[146] New Contentions at 6-7.

[147] *Id.* at 7-9.

[148] *Id.* at 7 (quoting North Anna 3 Combined License Application, Part 7: Departures Report, Rev. 3 (June 2010) at 2-1 [hereinafter Departures Report]).

[149] *Id.* at 9-10.

[150] Dominion Ans. at 27-42.

[151] NRC Staff Ans. at 18-23.

contention regarding the seismicity of the North Anna site, which had been extensively evaluated in the ESP proceeding. Likewise, we deemed irrelevant to this proceeding BREDL's reference to the misconduct of VEPCO regarding disclosure of seismic faults at the North Anna site in the 1970s, especially given the attention devoted to seismicity in the NRC Staff's review of Dominion's ESP Application. Therefore, we concluded that the issue of seismic site suitability had been resolved in the ESP proceeding and that Contention 2 did not raise any admissible challenge to that aspect of Dominion's COLA.[152] To the extent these previously resolved matters comprise BREDL's argument in Contention 13, we decline to revisit them.[153] However, given that we deem Contention 13's challenge to the Tier 1 exemption sought by Dominion to be based on "new information," its admissibility must be addressed for the first time.

The US-APWR design certification application referenced by Dominion's Revised COLA is docketed but not yet certified, and NRC regulations permit a COL applicant, such as Dominion, to make this reference to a docketed-but-not-yet-certified design "at its own risk."[154] As the *Summer* licensing board noted:

> along the way, and certainly once a final design is certified, each COLA applicant will have to determine whether it will adopt *in toto* the certified design, or whether it will take exemptions thereto and/or departures therefrom. An applicant will also have to demonstrate that the site-specific parameters are bounded by the parameters developed for the certified design.[155]

Under NRC regulations, a COL applicant incorporating a certified design may include in its COLA a "request . . . for an exemption from any part of a referenced design certification rule," which may be granted as long as the NRC "determines that the exemption complies with any exemption provisions of the referenced design certification rule, or with [10 C.F.R.] § 52.63 if there are no

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[152] LBP-08-15, 68 NRC at 326-28.

[153] At oral argument, counsel for BREDL argued that the existence of a dissenting opinion in the ESP Board's Initial Decision indicates an absence of resolution of an item in the ESP proceeding. *See* Tr. at 130-31; *see also* BREDL Reply at 6. However, the fact that there was a dissenting opinion in an ESP proceeding does not render the disposition of that licensing board's decision "unresolved." Moreover, the dissenting opinion to which BREDL refers did not even mention the suitability of the North Anna site for *seismic* reasons and thus could not have given rise to BREDL's perceived lack of a resolution on this seismic matter among the ESP Board, especially given that the ESP Board majority was affirmed by the Commission. *See North Anna ESP,* CLI-07-27, 66 NRC at 219-20; *North Anna ESP,* LBP-07-9, 65 NRC at 631-39 (Karlin, J., dissenting).

[154] 10 C.F.R. § 52.55(c).

[155] *South Carolina Electric & Gas Co.* (Virgil C. Summer Nuclear Station, Units 2 and 3), LBP-09-2, 69 NRC 87, 100 (2009), *aff'd in part and rev'd and remanded on other grounds,* CLI-10-1, 71 NRC 1 (2010) (footnotes and internal citations omitted).

applicable exemption provisions in the referenced design certification rule."[156] In turn, section 52.63(b)(1) conditions grants of exemptions from referenced design certification rules on the Commission's finding that the request complies with section 52.7 and that the "special circumstances" provided for in section 52.7 "outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption."[157] For COL applicants, section 52.7 itself cross-references the standards of section 50.12 for granting exemptions to NRC regulations.[158]

Dominion's exemption request from the US-APWR DCD claims that North Anna Unit 3's site-specific seismic spectra would exceed the pending certified seismic design response spectra (CSDRS) of the US-APWR DCD. Accordingly, Dominion states that "[t]he site-specific SSE peak ground acceleration (PGA) is greater than the value of 0.3g, as defined in DCD Tier 1, Table 2.1-1. As a result a request for exemption from DCD Tier 1 in the above-referenced table and figures is required."[159]

NRC regulations require that, for an ESP or COL site and associated design bases to be deemed geologically and seismically suitable,

> The geological, seismological, and engineering characteristics of a site and its

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[156] 10 C.F.R. § 52.93(a)(1).

[157] *Id.* § 52.63(b)(1). Section 52.63(b)(1) also explicitly subjects exemption requests to the same level of litigation as other issues that could be admissibly raised in a COL proceeding. *Id.*

[158] *Id.* § 52.7. Section 50.12 only allows the grant of an exemption from a regulation when the request is "[a]uthorized by law, will not present an undue risk to the public health and safety, and [is] consistent with the common defense and security," and if:

> (i) Application of the regulation in the particular circumstances conflicts with other rules or requirements of the Commission; or
>
> (ii) Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule; or
>
> (iii) Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated; or
>
> (iv) The exemption would result in benefit to the public health and safety that compensates for any decrease in safety that may result from the grant of the exemption; or
>
> (v) The exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation; or
>
> (vi) There is present any other material circumstance not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If such condition is relied on exclusively for satisfying paragraph (a)(2) of this section, the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.

Id. § 50.12(a)(1), (2)(i)-(vi).

[159] Departures Report at 2-1.

> environs must be investigated in sufficient scope and detail to permit an adequate evaluation of the proposed site, to provide sufficient information to support evaluations performed to arrive at estimates of the Safe Shutdown Earthquake Ground Motion, and to permit adequate engineering solutions to actual or potential geologic and seismic effects at the proposed site.[160]

Appendix S of 10 C.F.R. Part 50 defines SSE as "the vibratory ground motion for which certain structures, systems, and components must be designed to remain functional."[161] Dominion's Departures Report maintains that analyses of the requested exemption from SSE standards in the US-APWR DCD, which are cross-referenced to Revision 3 of its Final Safety Analysis Report (FSAR), will comply with 10 C.F.R. Part 50, Appendix S, and thus demonstrate that "the granting of this exemption will not result in a significant decrease in the level of safety otherwise provided by the design."[162]

Whether the SSE exceedance in Dominion's exemption request does in fact comply with 10 C.F.R. Part 50, Appendix S and 10 C.F.R. § 100.23 is a question currently before the NRC Staff and is thus material to the NRC's licensing decision in this proceeding under 10 C.F.R. § 2.309(f)(1)(iv). Moreover, that exemption request could be subject to litigation in this COL proceeding, and thus is within the scope of the proceeding pursuant to 10 C.F.R. § 2.309(f)(1)(iii).[163]

However, while BREDL says that the request is "improper," it does not say what is improper about that request or under which section of 10 C.F.R. Part 52 or subsection of 10 C.F.R. § 50.12(a)(2) that request is inappropriate.[164] This vague accusation does not rise to the level of an admissible genuine dispute of material fact or law under section 2.309(f)(1)(vi). Dominion's exemption request states that analyses in Appendix 3NN of its FSAR "demonstrate that the standard plant seismic design of structural members envelopes the site-specific seismic responses for the affected plant structures,"[165] and BREDL does not say

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[160] *See* 10 C.F.R. § 100.23(c); *see also id.* § 100.23(d) (stating the factors used for such a geological and seismological evaluation); *North Anna ESP,* LBP-07-9, 65 NRC at 595-98 (summarizing the seismic site evaluation in the ESP proceeding).

[161] 10 C.F.R. Part 50, App. S, § III.

[162] Departures Report at 2-1 to 2-2.

[163] *See* 10 C.F.R. § 52.63(b)(1).

[164] *See* New Contentions at 6-10.

[165] *See* Departures Report at 2-1 (referencing North Anna Unit 3 Combined License Application, Part 2: Final Safety Analysis Report, Rev. 3 (June 2010) at app. 3NN). Counsel for Dominion alluded to this at oral argument:

> [I]t doesn't mean that we are taking exemption from any of the NRC safety standards. It just means we are taking exemption from a postulated assumption that the standardized plant

(Continued)

what is wrong with those site-specific analyses or how "a modification of the power plant systems to accommodate site conditions" is inadequate for seeking an exemption.[166]

Therefore, we find Contention 13 inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi) for failing to raise a genuine dispute of material fact or law with Dominion's COLA. Moreover, beyond its critiques of Dominion's parent company in the 1970s and Dominion's past request for a variance from the ESP in the earlier version of Dominion's COLA, BREDL does not allege any facts or provide expert opinions to support its position on this contention.[167] Accordingly, we find Contention 13 inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(v) and (vi).

Conclusion

For the foregoing reasons, BREDL's request for admission of Contentions 12 and 13 is denied. Any new contentions based on new information, including but not limited to contentions based on new information in the Staff's Safety Evaluation Report or Supplemental EIS, neither of which has yet been issued, shall be filed within the time period specified in the Board's Scheduling Orders of September 10, 2008, and March 22, 2010. Because there are currently no pending contentions in this proceeding, the mandatory disclosure obligations under 10 C.F.R. § 2.336(a) remain suspended until further order of the Board.

> was done, that was based on, and doing further analysis to show that the plant, in fact, is fully capable . . . of satisfying the actual safe shutdown earthquake. We explained this in the departures report. In the departures report we explained we did this further analysis. It is called a soil structure analysis. And it actually determines what are, you know, given the safe shutdown earthquake, what are the actual loads on the foundations in this [sic] structure members. You then compare that to what were the loads that were posited in the DCD. What we showed is when you do that analysis, the actual loads, from the actual safe shutdown earthquake, are below the loads that were posited for the structural members and foundations of the standard plant. And, as a result, that standard plant is suitable.

Tr. at 149-50.

[166] *See* New Contentions at 8-9.

[167] *See id.* at 6-10.

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
April 6, 2011

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

G. Paul Bollwerk, III, Chairman
Dr. Kaye D. Lathrop
Dr. Craig M. White

In the Matter of **Docket No. 70-7015-ML**
(ASLBP No. 10-899-02-ML-BD01)

AREVA ENRICHMENT SERVICES, LLC
(Eagle Rock Enrichment Facility) **April 8, 2011**

In this 10 C.F.R. Part 70 proceeding regarding the application of AREVA Enrichment Services, LLC (AES), for authorization to possess and use source, byproduct, and special nuclear material to enrich natural uranium by the gas centrifuge process at its planned Bonneville County, Idaho Eagle Rock Enrichment Facility (EREF), the Licensing Board provides its findings and conclusions concerning uncontested Atomic Energy Act (AEA)/safety-related matters, concluding that (1) the AES application contains sufficient information to support license issuance; and (2) the NRC Staff's review of the application has been adequate to support license issuance, subject to a license condition regarding the qualifications of the facility's nuclear criticality safety (NCS) manager and an unresolved decommissioning funding financial assurance issue that awaits Commission consideration of a pending Board-certified question.

MANDATORY HEARING: URANIUM ENRICHMENT FACILITY

RULES OF PRACTICE: SCOPE AND TYPE OF PROCEEDING (MANDATORY HEARING)

Because the Commission received no petitions to intervene in response to a

notice of hearing and opportunity to intervene, no contested hearing was convened. Nonetheless, if an applicant seeks authorization to construct and operate a uranium enrichment facility, a mandatory/uncontested hearing must still be held. AEA § 193(b)(1) provides that "[t]he Commission *shall* conduct a single adjudicatory hearing on the record with regard to the licensing of the construction and operation of a uranium enrichment facility." 42 U.S.C. § 2243(b)(1) (emphasis added).

ATOMIC ENERGY ACT: SECTIONS 189a, 193, AND 274c(1)

MANDATORY HEARING: ORIGIN OF REQUIREMENT (URANIUM ENRICHMENT FACILITY)

AEA § 274c(1), 42 U.S.C. § 2021(c)(1), gives the NRC a clear statutory mandate to regulate the construction and operation of a uranium enrichment facility. *See* 74 Fed. Reg. 38,052, 38,057 (July 30, 2009) (CLI-09-15, 70 NRC 1, 17 (2009)). Further, AEA §§ 53 and 63, 42 U.S.C. §§ 2073, 2093, which concern special nuclear material and byproduct material, provide the general statutory basis under which the NRC has adopted the variety of regulations that govern a proposed enrichment facility's construction and operation. Finally, AEA §§ 189a and 193, *id.* §§ 2239a, 2243, provide the statutory footing for the procedural precepts that apply to a uranium enrichment facility licensing action, including the need for (1) the NRC to conduct only a single licensing action and adjudicatory proceeding to authorize the construction and operation of a uranium enrichment facility; and (2) a mandatory hearing regarding the application and the Staff's associated safety and environmental reviews, even in the absence of a petitioner seeking to interpose a challenge to the applicant's request for such a single license.

REGULATIONS: URANIUM ENRICHMENT FACILITY LICENSING

Part 70 of Title 10 of the *Code of Federal Regulations* establishes the basic regulatory framework that governs the licensing of an entity to construct and operate an enrichment facility. Nonetheless, a number of other rules and regulations in 10 C.F.R. Chapter I, including Parts 19, 20, 21, 25, 30, 40, 51, 71, 73, 74, 95, 140, 170, 171, are applicable to licensing a facility to receive, possess, use, transfer, deliver, and process byproduct, source, and special nuclear material in the quantities necessary to conduct the activities contemplated at a uranium enrichment facility. *See* 74 Fed. Reg. at 38,057 (CLI-09-15, 70 NRC at 17).

LICENSING BOARD(S): SCOPE OF REVIEW (MANDATORY HEARING REVIEW OF STAFF FINDINGS)

MANDATORY HEARING: SCOPE OF REVIEW (LICENSING BOARD REVIEW OF STAFF FINDINGS)

RULES OF PRACTICE: SCOPE AND TYPE OF PROCEEDING (LICENSING BOARD MANDATORY HEARING REVIEW OF STAFF FINDINGS)

A significant body of case law exists indicating what a licensing board's responsibilities are, and are not, in the context of licensing a proposed uranium enrichment facility. Essentially a licensing board is to "conduct a simple 'sufficiency' review" rather than a de novo review on both AEA and National Environmental Policy Act (NEPA) issues. *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5, 39 (2005). Thus, boards "should decide simply whether the safety and environmental record is 'sufficient' to support license issuance. In other words, the boards should inquire whether the NRC Staff performed an adequate review and made findings with reasonable support in logic and fact." *Id.* There is, however, a caveat in that boards are instructed 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." *Id.* at 44; *see also Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), LBP-07-9, 65 NRC 539, 559-60, *permit issuance authorized,* CLI-07-27, 66 NRC 215 (2007). The board's role thus is to "carefully probe [Staff] findings by asking appropriate questions and by requiring supplemental information when necessary," but "the 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." *Clinton ESP,* CLI-05-17, 62 NRC at 39-40.

LICENSING BOARD(S): RESPONSIBILITIES (MANDATORY HEARING ENVIRONMENTAL FINDINGS)

MANDATORY HEARING: MATTERS FOR CONSIDERATION (MANDATORY HEARING ENVIRONMENTAL FINDINGS)

RULES OF PRACTICE: SCOPE AND TYPE OF PROCEEDING (MANDATORY HEARING ENVIRONMENTAL FINDINGS)

The NEPA findings associated with a mandatory hearing require the licensing board independently to (1) determine whether the requirements of section 102(2)(A), (C), and (E) of NEPA and Subpart A of 10 C.F.R. Part 51 have been

complied with in the proceeding; (2) consider the final balance among conflicting factors contained in the record of the proceeding with a view to determining the appropriate action to be taken; and (3) determine, after weighing the environmental, economic, technical, and other benefits against the environmental and other costs, and considering reasonable alternatives, whether a license should be issued, denied, or appropriately conditioned to protect environmental values. *See* Licensing Board Initial Scheduling Order attach. A, at 9 (May 19, 2010) (unpublished) [hereinafter Initial Scheduling Order]. In addition, relative to NEPA, the licensing board is to determine whether the review conducted by the Staff pursuant to 10 C.F.R. Part 51 has been adequate. *See id.*

LICENSING BOARD(S): SCOPE OF REVIEW (MANDATORY HEARING REVIEW OF STAFF FINDINGS)

MANDATORY HEARING: SCOPE OF REVIEW (LICENSING BOARD REVIEW OF STAFF FINDINGS)

RULES OF PRACTICE: SCOPE AND TYPE OF PROCEEDING (LICENSING BOARD MANDATORY HEARING REVIEW OF STAFF FINDINGS)

In a mandatory hearing for the licensing of a uranium enrichment facility, 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." *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-06-20, 64 NRC 15, 21-22 (2006).

LICENSING BOARD(S): RESPONSIBILITIES (MANDATORY HEARING SAFETY AND ENVIRONMENTAL FINDINGS)

MANDATORY HEARING: MATTERS FOR CONSIDERATION (URANIUM ENRICHMENT FACILITY)

In a mandatory hearing for the licensing of a uranium enrichment facility, relative to AEA-related safety items (as opposed to NEPA-related environmental issues), a licensing board must consider whether the application satisfies the standards set forth in the Commission's notice of hearing and the applicable standards of 10 C.F.R. Parts 30 (regarding byproduct material), 40 (regarding source material), and 70 (regarding special nuclear material) as they apply to the construction and operation of a uranium enrichment facility. *See* 74 Fed. Reg. at 38,053-54 (CLI-09-15, 70 NRC at 7). More specifically, the Commission has directed that if the proceeding is not a contested proceeding, i.e., the proceeding

is an uncontested/mandatory hearing rather than one in which a petitioner seeks to challenge the application in accord with the procedures specified in 10 C.F.R. Part 2, Subpart C, then in connection with AEA-related safety matters a licensing board is to determine whether (1) the application and record of the proceeding contain sufficient information; and (2) whether the NRC Staff's review of the application has been adequate to support findings to be made by the Office of Nuclear Materials Safety and Safeguards (NMSS) Director with respect to whether the AES application meets the applicable standards of Parts 30, 40, and 70. *See id.; see also* Initial Scheduling Order attach. A, at 9.

REGULATIONS: INTERPRETATION (10 C.F.R. § 70.62(c))

URANIUM ENRICHMENT FACILITY: SAFETY REVIEW (SITE-SPECIFIC PROCESS-RELATED HAZARDS)

Under 10 C.F.R. § 70.62, each applicant for a Part 70 license is required to establish and maintain a safety program, which includes performing an integrated safety analysis (ISA). *See* 10 C.F.R. § 70.62(c). Among other things, the ISA must consider potential accident sequences caused either by deviations in the processes that will be conducted at the proposed facility or by credible external events, including natural phenomena. *See id.* § 70.62(c)(1)(iv).

REGULATORY GUIDANCE: INTERPRETATION AND APPLICATION (SITE-SPECIFIC PROCESS-RELATED HAZARDS)

URANIUM ENRICHMENT FACILITY: SAFETY REVIEW (SITE-SPECIFIC PROCESS-RELATED HAZARDS)

To perform an appropriate ISA, the Staff's NUREG-1520 standard review plan (SRP) guidance for fuel cycle facilities indicates that the applicant should identify the process designs, accident sequences, and items relied upon for safety (IROFS) that are associated with the facility. *See* NMSS, NRC, [SRP] for the Review of a License Application for a Fuel Cycle Facility, NUREG-1520, at 3-9 (rev. 1 May 2010)) [hereinafter Revised Staff Fuel Cycle SRP]; *see also* NMSS, NRC, [SRP] for the Review of a License Application for a Fuel Cycle Facility, NUREG-1520, at 3-8 to -9 (Mar. 2002) [hereinafter Staff Fuel Cycle SRP]. In that regard, the process designs should be described in a level of detail that is sufficient to allow a Staff reviewer to understand the theory of operation for the process. Similarly, the IROFS should be described in sufficient detail to allow a Staff reviewer to understand the IROFS's functions in relation to the performance standards in section 70.61, which specifies limitations on the levels of risk for credible high-

and intermediate-consequence accidents and nuclear criticality accidents. *See* Revised Staff Fuel Cycle SRP at 3-9 to -10.

REGULATIONS: INTERPRETATION (10 C.F.R. § 70.65(b))

URANIUM ENRICHMENT FACILITY: SAFETY REVIEW (SITE-SPECIFIC PROCESS-RELATED HAZARDS)

Along with the requirement to perform an ISA is the requirement to provide the Staff with an ISA summary (ISAS). *See* 10 C.F.R. § 70.65(b). The ISAS is to contain descriptions of (1) site and facility characteristics that could affect safety and potential accidents and their consequences; (2) processes, hazards, and accident sequences, which includes a description of every process analyzed in the ISA, the hazards for each process, and the accident sequences associated with such hazards having unmitigated consequences that exceed the section 70.61 performance requirements; (3) the methods and team used by the applicant to perform the ISA; and (4) IROFS and the IROFS management measures used to ensure that IROFS are available and reliable to perform their functions when needed. *See id.; see also* Revised Staff Fuel Cycle SRP at 3-8.

ATOMIC ENERGY ACT: SECTIONS 53, 57, 63, AND 69

URANIUM ENRICHMENT FACILITY: SAFETY REVIEW (FOREIGN OWNERSHIP AND CONTROL)

The AEA and agency regulations govern the extent to which a foreign entity may own or control an NRC-licensed activity. The form of that regulatory oversight depends on the type of license sought. Because applications for uranium enrichment facilities are governed by AEA §§ 53 and 63, 42 U.S.C. §§ 2073, 2093, foreign ownership and control issues are evaluated under AEA §§ 57 and 69, *id.* §§ 2077, 2099, rather than AEA §§ 103, 104, or 193(f), *id.* §§ 2133, 2134, 2243(f). *See* 74 Fed. Reg. at 38,058 (CLI-09-15, 70 NRC at 19). The principal difference between those two respective sets of provisions (i.e., AEA §§ 57 and 69 v. AEA §§ 103, 104, and 193(f)) is that while both prohibit the Commission from granting a license that would be "inimical to the common defense and security or the health and safety of the public," only under the latter would the Commission be prohibited from granting a license "if the Commission knows or has reason to believe [the applicant] is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government." *Compare* 42 U.S.C. § 2099 *with id.* § 2133(d). Therefore, in a proceeding for the licensing of a uranium enrichment facility the agency may deny the applicant a license based on foreign ownership, control, or domination concerns to the extent it concludes granting such a license

would be inimical to the common defense and security or the health and safety of the public. *See Crowe Butte Resources, Inc.* (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 571 (2009) (materials license regulations contain no express prohibition on foreign ownership, but require Staff to make a finding that license issuance will not be inimical to the common defense and security or the health and safety of the public).

REGULATIONS: INTERPRETATION (10 C.F.R. §§ 40.32 AND 70.31)

The Commission implemented AEA §§ 57 and 69 in 10 C.F.R. § 70.31(d) and 10 C.F.R. § 40.32(d), respectively. *See* 74 Fed. Reg. at 38,058 (CLI-09-15, 70 NRC at 19). In both regulatory sections, the pertinent language tracks the statutory language identically, i.e., "inimical to the common defense and security or the health and safety of the public."

REGULATIONS: INTERPRETATION (10 C.F.R. §§ 40.38(a), 50.38, AND 70.40)

The Commission implemented AEA §§ 103, 104, and 193(f) in various regulations, including 10 C.F.R. § 40.38(a) (relating to the United States Enrichment Corporation (USEC)), 10 C.F.R. § 50.38 (concerning nuclear power reactors), and 10 C.F.R. § 70.40 (also relating to USEC), in which the pertinent language again tracks the statutory language identically. While sections 40.38(a) and 70.40 do apply to enrichment facility licensee USEC, their application is limited to USEC alone, so that they have no relevance to any other enrichment facility applicant.

REGULATORY GUIDANCE: INTERPRETATION AND APPLICATION (FOREIGN OWNERSHIP AND CONTROL)

For power reactors, in implementing these regulations the agency developed a Commission-approved SRP to assist in evaluating applications for reactor licenses or applications for the transfer of such licenses. *See* Final [SRP] on Foreign Ownership, Control, or Domination, 64 Fed. Reg. 52,355, 52,355 (Sept. 28, 1999). The SRP indicates that after conducting a threshold review, as supplemented by additional information, if the Staff concludes that "the applicant may be considered to be foreign owned, controlled, or dominated, or that additional action would be necessary to negate the foreign ownership, control, or domination," the applicant "shall be promptly advised and requested to submit a negation action plan." *Id.* at 52,359. The purpose of the negation action plan would be to implement measures that effectively negate or deny foreign control or domination. *See id.*

URANIUM ENRICHMENT FACILITY: SAFETY REVIEW (FOREIGN OWNERSHIP AND CONTROL)

Relative to the issue of foreign ownership or control, the NRC also imposes restrictions on the physical security and control of information at licensed facilities to safeguard restricted data and national security information. *See* 10 C.F.R. Part 95. Under 10 C.F.R. § 70.22(m), the application for a uranium enrichment facility is required to contain a description of the security program to protect against unauthorized disclosure of classified matter in accord with Part 95. And under Part 95, the applicant would be required, among other things, to complete the NRC facility security clearance process, which entails an NRC-approved classified matter plan, onsite inspections, and the granting of individual NRC personnel security clearances. A facility security clearance also requires a determination that granting the clearance "would not be inconsistent with the national interest, including a finding that the facility is not under foreign ownership, control, or influence to such a degree that a determination could not be made." 10 C.F.R. § 95.17(d)(1). Thus, for a uranium enrichment facility, foreign ownership or control is evaluated in the context of the facility security clearance process as well.

URANIUM ENRICHMENT FACILITY: SAFETY REVIEW (FOREIGN OWNERSHIP AND CONTROL)

Consistent with the Commission's direction that foreign ownership and control concerns about a uranium enrichment facility application should be evaluated pursuant to AEA §§ 57 and 69, the pertinent analysis becomes whether granting a license to the facility would be "inimical to the common defense and security or the health and safety of the public." 74 Fed. Reg. at 38,058 (CLI-09-15, 70 NRC at 19). At the same time, Commission regulations require a uranium enrichment facility applicant to obtain a facility security clearance, which would include a determination that granting the clearance "would not be inconsistent with the national interest, including a finding that the facility is not under foreign ownership, control, or influence to such a degree that a determination could not be made." 10 C.F.R. § 95.17. Thus, for a uranium enrichment facility, foreign ownership and control also are evaluated by way of the facility clearance process.

MANDATORY HEARING: MATTERS TO BE CONSIDERED (LICENSE CONDITIONS AND EXEMPTIONS)

As was noted in the Commission's recent staff requirements memorandum regarding the procedures the Commission will employ in conducting the mandatory hearings associated with the 10 C.F.R. Part 52 combined license proceedings for

new reactors, a principal focus of the Commission will be upon "non-routine matters." Memorandum from Annette L. Vietti-Cook, NRC Secretary, to Stephen G. Burns, NRC General Counsel, and Brooke Poole, Director, NRC Office of Commission Appellate Adjudication at unnumbered p. 2 (Dec. 23, 2010) (ADAMS Accession No. ML103570203). Almost by definition, license conditions imposed on an applicant as a result of the Staff's review process and applicant-requested exemptions from agency regulatory requirements that are granted by the Staff have a strong potential to fall into such a "non-routine matter" category. Indeed, these items have been the subject of scrutiny in a variety of other mandatory hearing contexts. *See, e.g., Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-09-19, 70 NRC 433 (2009), *Commission review declined,* Memorandum from Annette L. Vietti-Cook, NRC Secretary, to Board and Parties (Jan. 4, 2010) (ADAMS Accession No. ML100040233); *USEC Inc.* (American Centrifuge Plant), LBP-07-6, 65 NRC 429 (2007), *Commission review declined,* Letter from Annette L. Vietti-Cook, NRC Secretary, to Geoffrey Sea (June 11, 2007) (ADAMS Accession No. ML071620395).

URANIUM ENRICHMENT FACILITY: SAFETY REVIEW (LICENSE CONDITIONS)

Under Parts 70, 40, and 30, which provide the regulatory basis for the licensing of the different types of nuclear materials utilized in the operation of the EREF, the agency is permitted in issuing a license to impose such additional conditions, requirements, and limitations as may have been necessary to effectuate the purposes of the AEA and the agency's regulations. *See* 10 C.F.R. §§ 30.34(e), 40.41(e), 70.31(a), (b)(2). Regarding the Staff's evaluation findings concerning a particular application, in its fuel cycle facility SRP guidance the Staff notes that it may

> recommend license conditions to address any issues that were not previously resolved by an applicant's commitments. Such conditions are discussed with an applicant before issuing the license (or license amendment) and become commitments to performance in addition to those commitments that the applicant presented in the application.

Revised Staff Fuel Cycle SRP at 7.

URANIUM ENRICHMENT FACILITY: SAFETY REVIEW (LICENSE EXEMPTIONS)

Additionally, Parts 30, 40, and 70 provide for exemptions to their requirements, with each containing a provision stating that the agency may grant exemptions to

the requirements imposed by that part if the agency determines such an exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest. *See* 10 C.F.R. §§ 30.11(a), 40.14(a), 70.17(a). According to the Staff's SRP guidance for fuel cycle facilities, an applicant seeking an exemption should "clearly describe[ ] any exemptions or authorizations of an unusual nature and adequately justif[y] them for the NRC's consideration." Revised Staff Fuel Cycle SRP at 1-7.

NUCLEAR REGULATORY COMMISSION: CHOICE OF RULEMAKING OR ADJUDICATION

Several of the license conditions imposed on an applicant appear to be in the nature of standard directives that could be incorporated into the rules that govern Part 70 applicants and licensees. Nonetheless, given that the choice between rulemaking and adjudication (i.e., issuing orders or other license revisions) is within the agency's discretion, *see Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-01-12, 53 NRC 459, 474 (2001), this ultimately is a matter of efficiency for the Staff to determine.

URANIUM ENRICHMENT FACILITY: SAFETY REVIEW (COMMITMENT FOLLOWUP AND TRACKING)

Under sections 40.41(g) and 70.32(k) of the NRC's regulations, a uranium enrichment facility cannot be operated until the agency verifies through inspection that the facility has been constructed in accordance with the license. As a consequence, an inspection manual chapter (IMC) is developed for the facility that defines the construction inspection program (CIP) intended to (1) provide reasonable assurance that the design, construction, and implementation of IROFS will protect against natural phenomena and the consequences of potential accidents; (2) verify the quality assurance program was adequately implemented during construction; and (3) verify that the construction of the IROFS was completed in accordance with the documents comprising the license application, including the applicant's safety analysis report (SAR) and the ISAS, and the Staff's safety evaluation report (SER). The CIP applies to all construction activities, including design, procurement, fabrication, construction, and preoperational testing activities. *See* NMSS, NRC, NRC IMC 2696, LES Gas Centrifuge Facility Construction and Pre-operational Readiness Review Inspection Programs (Oct. 19, 2006).

URANIUM ENRICHMENT FACILITY: SAFETY REVIEW (COMMITMENT FOLLOWUP AND TRACKING)

An applicant's commitment as part of the license review process to undertake certain actions to satisfy the Staff's technical or other safety-related concerns, and a license condition imposed by the Staff to require that an applicant take certain actions deemed necessary to protect the public health and safety, are important aspects of the licensing process. Both are intended to address matters that fall outside the specific coverage of the requirements of Parts 30, 40, and 70 that implement the AEA mandate to protect the public health and safety. As a consequence, ensuring that each commitment or condition is tracked by the Staff and is the subject of appropriate followup to assure the applicant does what it committed or is required to do is a hallmark of an effective regulatory process.

TECHNICAL ISSUES DISCUSSED

The following technical issues are discussed: Availability of IROFS Boundary Information for Preoperational Inspections; Axial Volcanic Zone; Construction Inspection Program; Decommissioning/Decontamination (Financial Assurance); Emergency Response Preparedness Training Frequency; Financial Qualifications (Construction Funding Availability); Fire Protection Measures; Foreign Ownership and Control; IROFS Commercial Grade Component Designation; IROFS Relating to Human Factors Engineering; IROFS Relating to Digital Instrumentation and Controls; Information Security; Loss of Offsite Power; Nuclear Criticality Safety Manager Qualifications; Nuclear Liability Insurance; Preconstruction Activities; Preconstruction Radiation Survey; Probabilistic Seismic Hazard Assessment; Probabilistic Volcanic Hazard Analysis; Site-Specific Process-Related Hazards (Uranium Enrichment Facility); Source Material Control and Accounting Program Changes; Volcanic Hazards; Wildfires.

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ACRONYMS AND ABBREVIATIONS

ACP	American Centrifuge Plant
AEA	Atomic Energy Act of 1954
AES or AES LLC	AREVA Enrichment Services, LLC
ALARA	as low as reasonably achievable
AVZ	axial volcanic zone
B.A.	Bachelor of Arts
B.S. or B.Sc.	Bachelor of Science
CCI	Center for Construction Inspection
CEO	chief executive officer
CIP	construction inspection program
CMP	classified matter plan
CV	Curriculum Vitae
DU	depleted uranium
ER	environmental report
EREF	Eagle Rock Enrichment Facility
EIS	environmental impact statement
EP	emergency plan
ESRP	Eastern Snake River Plain
ETC	Enrichment Technology Company
FCSS	Division of Fuel Cycle Safety and Safeguards
FFLD	Fuel Facility Licensing Directorate
FNMCP	fundamental nuclear material control plan
FOCI	foreign ownership, control, or influence
FOIA	Freedom of Information Act

GE	General Electric
GEH	GE-Hitachi
HAZOP	Hazard and Operability Analysis
I&C	instrumentation and controls
IMC	inspection manual chapter
INL	Idaho National Laboratory
IROFS	items relied upon for safety
ISA	integrated safety analysis
ISAS	integrated safety analysis summary
LES	Louisiana Energy Services
MC&A	material control and accounting
MOX	Mixed Oxide
M.P.P.	Master of Public Policy
M.S.	Master of Science
Mw	momentum magnitude
NCS	nuclear criticality safety
NEF	National Enrichment Facility
NEPA	National Environmental Policy Act
NMSS	Office of Nuclear Materials Safety and Safeguards
NRC	Nuclear Regulatory Commission
ORR	operational readiness review
OUO	Official Use Only
PID	partial initial decision
PSHA	probabilistic seismic hazard assessment
PSP	physical security plan
PVHA	probabilistic volcanic hazard analysis
QA	quality assurance
RAIs	requests for additional information
RD	restricted data
RES	Office of Nuclear Regulatory Research
SAR	safety analysis report
SBM	separations building modules
SER	safety evaluation report
SPPP	standard practice and procedures plan
SPQ	Statement of Professional Qualifications
SRP	standard review plan
SUNSI	Sensitive Unclassified Non-Safeguards Information

SWU	separative work units
U	uranium
UF_6	uranium hexafluoride
UPS	uninterruptible power supplies
USEC	United States Enrichment Corporation
YAEC	Yankee Atomic Electric Company

FIRST PARTIAL INITIAL DECISION
(Uncontested/Mandatory Hearing on Safety Matters)

I. INTRODUCTION

1.1 Pursuant to the Commission's July 23, 2009 hearing notice, *see* 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 Safeguards Information for Contention Preparation; In the Matter of AREVA Enrichment Services, LLC (Eagle Rock Enrichment Facility), 74 Fed. Reg. 38,052 (July 30, 2009) (CLI-09-15, 70 NRC 1 (2009)), on January 25, 2011, this Licensing Board conducted an evidentiary hearing in Rockville, Maryland. That hearing was held in accordance with the requirements of the Atomic Energy Act of 1954 (AEA), 42 U.S.C. §§ 2011-2297, and 10 C.F.R. Part 70, which mandate that a hearing is required regarding the pending application of AREVA Enrichment Services, LLC (AES or AES LLC), for a license to possess and use source, byproduct, and special nuclear material to enrich natural uranium at a proposed facility, designated as the Eagle Rock Enrichment Facility (EREF), to be constructed and operated in Bonneville County, Idaho.

1.2 This partial initial decision (PID) provides the Board's findings and conclusions regarding the uncontested matters associated with this proceeding that arise under the provisions of the AEA, i.e., those matters relating to the public health and safety and the common defense and security (as opposed to environmental matters arising under the provisions of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§ 4321-4370). This includes the results of the Board's review of the relevant portions of the record of this proceeding, its inquiries of AES and the Nuclear Regulatory Commission (NRC) Staff regarding several issues, and the information provided during the subject matter presentations at the January 2011 mandatory hearing evidentiary session. Accordingly, with the exception of the unresolved decommissioning funding financial assurance issue that is pending Commission consideration of a Board-certified question, *see*

infra p. 474, in this decision we address the AEA/safety-related matters associated with the uncontested portion of this proceeding and determine that (1) the AES application, including its safety analysis report (SAR) and the associated integrated safety analysis summary (ISAS), emergency plan (EP), physical security plan (PSP), fundamental nuclear material control plan (FNMCP), and standard practice and procedures plan (SPPP), along with the record of this proceeding, contain sufficient information to support license issuance; (2) the Staff's review of the application, as embodied in its safety evaluation report (SER), has been adequate to support the findings to be made by the Director of the Office of Nuclear Materials Safety and Safeguards (NMSS), with respect to whether the AES application meets the applicable standards of Parts 30, 40, and 70; and (3) based on our conclusions regarding (a) the sufficiency of the AES application and record of the proceeding, and (b) the adequacy of the Staff's review of the AES application, the issuance of a permit for construction and operation of the EREF, as modified by the license condition regarding the educational and experience qualifications of the facility's nuclear criticality safety (NCS) manager set forth in section IV.B.1.b(iii), below, will not be inimical to the common defense and security or the health and safety of the public.

II. PROCEDURAL BACKGROUND

2.1 On December 30, 2008, AES[1] filed an application, with a supporting SAR and environmental report (ER), requesting a license to possess and use source, byproduct, and special nuclear material and to enrich natural uranium to a

[1] AES is a Delaware limited liability corporation and a wholly owned subsidiary of AREVA NC Inc., which in turn is a wholly owned subsidiary of AREVA NC SA, a part of AREVA SA, a corporation formed under the laws of France. The principal owners of AREVA SA include the Commissariat a l'Energie Atomique (French Atomic Energy Commission) and the French State. *See* Exh. NRC000032, at 1-7 (NMSS, NRC, [SER] for the [EREF] in Bonneville County, Idaho, NUREG-1951 (Sept. 2010)) [hereinafter SER].

In connection with the exhibit citation that is included in the paragraph above, as admitted into the record of this proceeding at the January 25, 2011 evidentiary hearing and reflected in the agency's ADAMS-associated electronic hearing docket, the official exhibit number for each evidentiary item contains a three-alpha character party identifier (i.e., AES, NRC); followed by six alpha and/or numeric characters designed to reflect its number and whether it was revised subsequent to its original submission as a prefiled exhibit (e.g., evidentiary exhibit AESR20031 admitted at the January 25 hearing is the second revised version of prefiled exhibit AES000031); followed by a two-character alpha or numeric identifier that will be employed in this case to indicate that the exhibit was utilized in the mandatory/uncontested portion of this proceeding (i.e., MA); followed by the designation BD01, which indicates that this Licensing Board (i.e., BD01) was involved in its identification and/or admission. Accordingly, the official designation for the Staff's SER referenced above is NRC000032-MA-BD01. For the sake of simplicity, however, we will refer to all exhibits admitted in the uncontested portion of this proceeding by their initial nine-character designation only.

maximum of 5% uranium (U)-235 by the gas centrifuge process at the proposed EREF. *See* SER at xv. On April 23, 2009, AES filed a revised license application that, among other things, would expand the capacity of the facility from 3.3 million separative work units (SWU) per year to 6.6 million SWU per year. *See id.* This was followed a little over a year later by a second application revision, which incorporated a variety of changes that reflected AES responses to Staff requests for additional information (RAIs), as well as correspondence and telephone conversations with the Staff in the course of the Staff's application review.[2] *See* Letter from James A. Kay, AES Licensing Manager, to NRC Document Control Desk at 1 (Apr. 30, 2010) (ADAMS Accession No. ML101320514). In each instance, portions of the application contained information that AES marked as not being subject to public disclosure. *See id.* at 1-2.

2.2 On July 23, 2009, the Commission issued a notice of hearing and opportunity to intervene regarding AES's application for a license to construct and operate a gas centrifuge enrichment facility. *See* 74 Fed. Reg. at 38,052-53 (CLI-09-15, 70 NRC at 4). With respect to the mandatory, uncontested portion of the proceeding, wherein only AES and the NRC Staff would be parties, the Commission gave notice that a hearing would be held according to the rules of practice in 10 C.F.R. Part 2, Subparts A, C, G, and, to the extent that classified information became involved, Subpart I. *See id.* at 38,054 (CLI-09-15, 70 NRC at 7) (citing 10 C.F.R. § 70.23a; AEA § 193, 42 U.S.C. § 2243). And with respect to a possible contested portion of the proceeding, wherein interested individuals or entities could be parties, the Commission gave notice that any person wishing to participate as a party in the proceeding must file a petition for leave to intervene by September 28, 2009. *See id.* (CLI-09-15, 70 NRC at 8). Additionally, the Commission gave notice that by that same date, a State, county, municipality,

[2] In conducting its licensing review, after assessing the application the Staff prepares an SER and makes findings regarding whether, in accord with the AEA, the applicant's proposed equipment, facilities, and procedures will adequately protect public health and safety. *See* SER at xv. In addition, pursuant to NEPA and the Commission's implementing regulations in 10 C.F.R. Part 51, the Staff completes an environmental evaluation and prepares an environmental impact statement (EIS) as a prerequisite to issuance of any license. *See id.* at xvii. With respect to its NEPA obligations, on May 4, 2009, the Staff published notice of its intent to prepare an EIS regarding the construction, operation, and decommissioning of the EREF, which included a request for public comments on the appropriate scope of the issues to be considered in the EIS. *See* Notice of Intent and Opportunity to Provide Written Comments, [AES] Eagle Rock Enrichment, Idaho Falls, ID, 74 Fed. Reg. 20,508, 20,508 (May 4, 2009). This was followed by the July 14, 2010 issuance of the Staff's draft EIS. *See* Notice of Availability of Draft [EIS] and Public Meeting for the [AES] Proposed Eagle Rock Uranium Enrichment Facility, 75 Fed. Reg. 42,466 (July 21, 2010). Thereafter, on February 10, 2011, the Staff issued its final EIS, *see* Notice of Availability of Final [EIS] for the [AES] Proposed [EREF] in Bonneville County, ID, 76 Fed. Reg. 9054 (Feb. 16, 2011), which is scheduled to be the subject of a separate mandatory hearing evidentiary session during the summer of 2011. *See* Licensing Board Memorandum and Order (Updated General Schedule) (Mar. 30, 2011) at 2 (unpublished).

federally recognized Indian Tribe, or agencies thereof, could participate as (1) a party by submitting an intervention petition to the Commission in accordance with 10 C.F.R. § 2.309(d)(2); or (2) a nonparty interested government entity pursuant to section 2.315(c).[3] *See id.* at 38,055 (CLI-09-15, 70 NRC at 9).

2.3 Because the Commission received no petitions to intervene in response to the July 23, 2009 notice, no contested hearing was convened. Nonetheless, because AES has sought authorization to construct and operate a uranium enrichment facility, in accord with the Commission's hearing notice, a mandatory/uncontested hearing must still be held.[4] Accordingly, in response to a March 17, 2010 memorandum from the Commission's Secretary, *see* Memorandum from Annette L. Vietti-Cook, NRC Secretary, to E. Roy Hawkens, Chief Administrative Judge (Mar. 17, 2010), on March 26, 2010, the Chief Administrative Judge established a Licensing Board to preside over the mandatory hearing portion of the AES EREF licensing proceeding,[5] *see* [AES]; Establishment of Atomic Safety and Licensing Board, 75 Fed. Reg. 16,869, 16,869 (Apr. 2, 2010).

2.4 In a subsequent series of orders, the Board established a schedule for the prescribed mandatory/uncontested hearing.[6] In establishing a schedule, given

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[3] Although ultimately no governmental entity filed a petition to intervene or to participate as an interested governmental entity in the contested portion of this proceeding, in October 2010 the Board provided those entities a further opportunity to participate in the uncontested portion of this proceeding. The Board issued a notice declaring interested governmental entities could take part in the safety/AEA-related portion of the mandatory hearing by filing a statement of any issues or questions about which they wished the Board to give particular attention, which could be accompanied by any supporting documentation that the governmental entity saw fit to provide. *See* Atomic Safety and Licensing Board; Notice of Opportunity to Participate in Uncontested/Mandatory Hearing (Procedures for Participation by Interested Governmental Entities Regarding Safety Portion of Enrichment Facility Licensing Proceeding), 75 Fed. Reg. 63,213, 63,213 (Oct. 14, 2010). The notice also indicated that, after reviewing any submitted material, the Board might request that one or more particular governmental entities send representatives to the hearing to participate as the Board deemed appropriate, including answering Board questions and/or making a statement for the purpose of assisting the Board's exploration of one or more of the issues raised by the governmental entity in the prehearing filings. *See id.* There were, however, no filings by State, local, or Native American tribal governments in response to this Board notice.

[4] AEA § 193(b)(1) provides that "[t]he Commission *shall* conduct a single adjudicatory hearing on the record with regard to the licensing of the construction and operation of a uranium enrichment facility." 42 U.S.C. § 2243(b)(1) (emphasis added).

[5] The originally designated Board subsequently was reconstituted to substitute Administrative Judge Bollwerk for Administrative Judge Karlin as the Board Chair. *See* Areva Enrichment Services, LLC (Eagle Rock Enrichment Facility); Notice of Atomic Safety and Licensing Board Reconstitution, 75 Fed. Reg. 52,996 (Aug. 30, 2010).

[6] *See* Licensing Board Order (Scheduling Initial Scheduling Conference) (Apr. 12, 2010) (unpublished); Licensing Board Initial Scheduling Order (May 19, 2010) (unpublished) [hereinafter Initial Scheduling Order]; Licensing Board Order (Clarifying Initial Scheduling Order) (June 4, 2010) *(Continued)*

the estimated seven-month delay between publication of the SER and final EIS along with the Commission's goal that the Board issue its final initial decision within twenty-eight and one-half months of July 30, 2009, i.e., by November 15, 2011, the Board concluded that to expedite resolution of the uncontested portion of the proceeding, the mandatory hearing should be bifurcated between safety and environmental matters. *See* Initial Scheduling Order at 3-4. Accordingly, the Board initially scheduled evidentiary hearings for safety-related and environmentally related matters based on the publication of the SER in August 2010 and the final EIS in February 2011, respectively. *See id.*

2.5 Albeit slightly delayed, on September 30, 2010, the NRC Staff issued its SER analyzing the AEA-associated safety-related aspects of AES's license application. *See* Notice of Availability of [SER]; [AES], [EREF], Bonneville County, ID; NUREG-1951, 75 Fed. Reg. 62,895 (Oct. 13, 2010). Based on the SER and AES's SAR, beginning in late October 2010, the Board issued a series of memoranda and orders posing questions to both AES and the Staff, some of which were based on information in the SER and the SAR that was not publicly available, as well as outlining presentation topics for the safety-related portion of the mandatory hearing.[7] AES and/or the Staff filed written responses to the Board's questions, some of which were submitted via the protective order file component of the agency's E-Filing system because they contained information claimed to

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(unpublished); Licensing Board Order (Setting Aside Hold-Dates for Mandatory Hearings) (June 30, 2010) (unpublished); Licensing Board Memorandum and Order (Status of Dates for Mandatory Hearing Sessions; Staff Status Updates) (Sept. 9, 2010) (unpublished); Licensing Board Memorandum and Order (Initial General Schedule; Revision to Uncontested/Mandatory Hearing Procedures; Inviting Written Limited Appearance Statements and Participation by Interested Governmental Entities) (Oct. 7, 2010) (unpublished) [hereinafter Initial General Schedule]; Licensing Board Memorandum and Order (Providing Presentation Topics and Administrative Directives Associated with Mandatory Hearing on Safety Matters) (Dec. 17, 2010) (unpublished) [hereinafter Board Presentation Topics Order].

[7] *See* Licensing Board Memorandum and Order (Initial Publicly-Available Board Questions Regarding Safety-Related Matters and Associated Administrative Directives) (Oct. 29, 2010) (unpublished) [hereinafter Board Initial Publicly-Available Safety Questions]; Licensing Board Memorandum and Order (Initial Nonpublicly-Available Board Questions Regarding Safety-Related Matters and Associated Administrative Directives) (Oct. 29, 2010) (unpublished) [hereinfter Board Initial Nonpublicly-Available Safety Questions]; Licensing Board Memorandum and Order (Additional Publicly-Available Board Questions Regarding Safety-Related Matters) (Dec. 3, 2010) (unpublished) [hereinafter Board Additional Publicly-Available Safety Questions]; Licensing Board Memorandum and Order (Additional Nonpublicly-Available Board Question Regarding Safety-Related Matters) (Dec. 3, 2010) (unpublished) [hereinafter Board Additional Nonpublicly-Available Safety Question]; Board Presentation Topics Order; Licensing Board Memorandum and Order (Additional Publicly-Available Question Regarding Safety Matters and Identification of "Available" AES Witnesses) (Jan. 21, 2011) (unpublished).

be privileged or otherwise protected from public disclosure, on November 19 and December 13, 2010, and January 14 and February 1, 2011.[8]

2.6 In accord with the Board's October 7, 2010 initial general schedule order, its December 17, 2010 issuance providing administrative directives for the safety portion of the mandatory hearing, and its December 17 hearing notice, *see* Notice of Hearing (Notice of Evidentiary Hearing and Opportunity to View Hearing via Webstreaming; Opportunity to Submit Written Limited Appearance Statements), 76 Fed. Reg. 387 (Jan. 4, 2011), the Board held an evidentiary hearing on uncontested safety topics on January 25, 2011, at the Licensing Board Panel's hearing room in Rockville, Maryland. At the hearing, witnesses for AES and the Staff provided presentations on the following topics:

1. Site-Specific Process-Related Hazards
2. Foreign Ownership and Control
3. License Conditions and Exemptions
4. Commitment Followup and Tracking

2.7 Presentation materials, in the form of slide presentations and supporting documents, were provided to the Board beforehand and admitted as exhibits during the proceeding. *See* Board Presentation Topics Order at 9. The Board asked questions of the parties' witnesses during the presentations and afforded the witnesses of each party the opportunity to comment upon the responses of the other party's witnesses. *See id.* at 8.

2.8 Following the January 25 evidentiary hearing, in a February 11, 2011 memorandum and order, the Board adopted certain corrections to the hearing transcript. *See* Licensing Board Memorandum and Order (Transcript Corrections and Final Transcript Version) (Feb. 11, 2011) (unpublished). In a subsequent order, the Board admitted into the evidentiary record the AES and Staff responses to

[8] *See* Exh. AES000001 (AES Responses to Public Safety Questions) [hereinafter AES Response to Initial Publicly-Available Safety Questions]; AES000018 (AES Responses to Non-Public Safety Questions); Exh. NRC000001 (NRC Staff Responses to Licensing Board's Initial Publicly-Available Questions Regarding Safety Matters) [hereinafter Staff Response to Initial Publicly-Available Safety Questions]; Exh. NRC000020 (NRC Staff Responses to the Licensing Board's Initial Nonpublicly-Available Questions Regarding Safety Matters) [hereinafter Staff Response to Initial Nonpublicly-Available Safety Questions]; Exh. AES000024 (AES Responses to Supplemental Public Safety Questions) [hereinafter AES Response to Additional Publicly-Available Safety Questions]; Exh. AES000029 (AES Responses to Supplemental Non-Public Safety Questions; Exh. NRC000023 (NRC Staff Responses to Licensing Board's Supplemental Publicly-Available Questions Regarding Safety Matters); Exh. NRC000027 (NRC Staff Responses to Licensing Board's Additional Questions on Financial Assurance); Exh. AES000063 (AES Responses to Third Supplemental Public Safety Questions); Exh. NRC000125 (NRC Staff Responses to Licensing Board's Second Set of Supplemental Questions on Financial Assurance).

supplemental questions regarding decommissioning financial assurance matters, and associated supporting documents, and closed the record of the AEA-related safety portion of this mandatory hearing proceeding, except as (1) it concerns decommissioning financial assurance matters; or (2) there is a need to adduce further safety information because of information that may come to light relative to the NEPA-related environmental portion of the hearing. *See* Licensing Board Memorandum and Order (Admitting Evidentiary Materials and Partially Closing Safety-Related Record) (Feb. 18, 2011) at 2 (unpublished). Regarding financial assurance matters, on that same date the Board certified a question to the Commission, an item that is still pending with the Commission as of the issuance of this PID. *See* Licensing Board Memorandum (Certifying Question to the Commission Regarding Decommissioning Financial Assurance) (Feb. 18, 2011) (unpublished). Pursuant to the Board's October 7, 2010 memorandum and order, *see* Initial General Schedule app. A, at 2, AES and the Staff filed proposed findings of fact and conclusions of law regarding the mandatory portion of this proceeding on February 25, 2011, *see* Applicant's Proposed Findings of Fact and Conclusions of Law Concerning Uncontested Safety Issues (Feb. 25, 2011); NRC Staff's Proposed Findings of Fact and Conclusions of Law Concerning Mandatory Hearing on Safety Matters (Feb. 25, 2011) [hereinafter Staff Proposed Safety Findings].

III. APPLICABLE LEGAL STANDARDS

A. General Legal Standards

3.1 As the Commission also noted in its July 2009 hearing notice, AEA § 274c(1), 42 U.S.C. § 2021(c)(1), gives the agency a clear statutory mandate to regulate the construction and operation of a uranium enrichment facility like the EREF. *See* 74 Fed. Reg. at 38,057 (CLI-09-15, 70 NRC at 17). Further, AEA §§ 53 and 63, 42 U.S.C. §§ 2073, 2093, which concern special nuclear material and byproduct material, provide the general statutory basis under which the agency has adopted the variety of regulations that would govern the proposed EREF's construction and operation. Finally, AEA §§ 189a and 193, *id.* §§ 2239a, 2243, provide the statutory footing for the procedural precepts that apply to the uranium enrichment facility licensing action now before the Board, including the need for (1) the agency to conduct only a single licensing action and adjudicatory proceeding to authorize the construction and operation of the EREF; and (2) a mandatory hearing regarding the AES application and the Staff's associated safety and environmental reviews, despite the absence of a petitioner seeking to interpose a challenge to the AES request for such a single license for the EREF.

3.2 Part 70 of Title 10 of the *Code of Federal Regulations* establishes the basic regulatory framework that governs the licensing of an entity such as AES

to construct and operate an enrichment facility. Nonetheless, as the Commission also pointed out in its hearing notice, a number of other rules and regulations in 10 C.F.R. Chapter I, including Parts 19, 20, 21, 25, 30, 40, 51, 71, 73, 74, 95, 140, 170, 171, are applicable to licensing a facility to receive, possess, use, transfer, deliver, and process byproduct, source, and special nuclear material in the quantities necessary to conduct the activities contemplated at the EREF. *See* 74 Fed. Reg. at 38,057 (CLI-09-15, 70 NRC at 17).

B. Scope of Licensing Board Review

3.3 As the Commission pointed out in its hearing notice for this proceeding, the agency has been involved in previous proceedings regarding the licensing of proposed uranium enrichment facility sites in Homer, Louisiana (Claiborne Enrichment Center), Eunice, New Mexico (National Enrichment Facility (NEF)), and Piketon, Ohio (American Centrifuge Plant (ACP)). *See* 74 Fed. Reg. at 38,057 (CLI-09-15, 70 NRC at 17). Moreover, in the NEF and ACP proceedings, licensing boards conducted mandatory hearings like that now being conducted by this Board. *See Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-06-17, 63 NRC 747 (2006), *Commission review declined,* Memorandum from Annette L. Vietti-Cook, NRC Secretary, to Board and Parties (Sept. 20, 2006) (ADAMS Accession No. ML062630201); *USEC Inc.* (American Centrifuge Plant), LBP-07-6, 65 NRC 429 (2007), *Commission review declined,* Letter from Annette L. Vietti-Cook, NRC Secretary, to Geoffrey Sea (June 11, 2007) (ADAMS Accession No. ML071620395). Additionally, mandatory hearings have been conducted by licensing boards in four 10 C.F.R. Part 52 early site permit proceedings.[9] As a result, a significant body of case law exists indicating what a licensing board's responsibilities are, and are not, in this context.

3.4 Essentially, a licensing board is to "conduct a simple 'sufficiency' review" rather than a de novo review on both AEA and NEPA issues. *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5, 39 (2005). Thus, boards "should decide simply whether the safety and environmental record is 'sufficient' to support license issuance. In other words, the boards should inquire whether the NRC Staff performed an adequate review and

[9] *See Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-09-19, 70 NRC 433 (2009), *Commission review declined,* Memorandum from Annette L. Vietti-Cook, NRC Secretary, to Board and Parties (Jan. 4, 2010) (ADAMS Accession No. ML100040233); *Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), LBP-07-9, 65 NRC 539, *permit issuance authorized,* CLI-07-27, 66 NRC 215 (2007); *System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), LBP-07-1, 65 NRC 27, *permit issuance authorized,* CLI-07-14, 65 NRC 216 (2007); *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), LBP-06-28, 64 NRC 460 (2006), *permit issuance authorized,* CLI-07-12, 65 NRC 203 (2007).

made findings with reasonable support in logic and fact." *Id.* There is, however, a caveat in that boards are instructed to make independent environmental judgments with respect to certain NEPA findings,[10] 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." *Id.* at 44; *see also North Anna ESP,* LBP-07-9, 65 NRC at 559-60. The board's role thus is to "carefully probe [Staff] findings by asking appropriate questions and by requiring supplemental information when necessary," but "the 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." *Clinton ESP,* CLI-05-17, 62 NRC at 39-40.

3.5 Additionally, 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." *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-06-20, 64 NRC 15, 21-22 (2006).

C. Required Board Safety Findings

3.6 In the initial July 2009 hearing notice for this proceeding, the Commission outlined the legal and factual safety matters the presiding officer would be responsible for considering in conducting the adjudicatory proceeding relating to the AES application to construct and operate the EREF. Relative to AEA-related safety items (as opposed to NEPA-related environmental issues), these include whether the application satisfies the standards set forth in that notice and the applicable standards of 10 C.F.R. Parts 30 (regarding byproduct material), 40 (regarding source material), and 70 (regarding special nuclear material) as they apply to the construction and operation of a uranium enrichment facility. *See* 74 Fed. Reg. at 38,053-54 (CLI-09-15, 70 NRC at 7). More specifically, the Commission directed that if the proceeding is not a contested proceeding, i.e., the proceeding is an uncontested/mandatory hearing rather than one in which a

[10] As was noted in the Board's initial scheduling order, these findings require the Board independently to (1) determine whether the requirements of section 102(2)(A), (C), and (E) of NEPA and Subpart A of 10 C.F.R. Part 51 have been complied with in the proceeding; (2) consider the final balance among conflicting factors contained in the record of the proceeding with a view to determining the appropriate action to be taken; and (3) determine, after weighing the environmental, economic, technical, and other benefits against the environmental and other costs, and considering reasonable alternatives, whether a license should be issued, denied, or appropriately conditioned to protect environmental values. *See* Initial Scheduling Order attach. A, at 9. In addition, relative to NEPA, the Board is to determine whether the review conducted by the Staff pursuant to 10 C.F.R. Part 51 has been adequate. *See id.*

petitioner seeks to challenge the AES application in accord with the procedures specified in 10 C.F.R. Part 2, Subpart C, then in connection with AEA-related safety matters the licensing board is to determine whether (1) the application and record of the proceeding contain sufficient information; and (2) whether the NRC Staff's review of the application has been adequate to support findings to be made by the NMSS Director with respect to whether the AES application meets the applicable standards of Parts 30, 40, and 70. *See id.; see also* Initial Scheduling Order attach. A, at 9.

3.7 Against the backdrop of these governing statutory and regulatory standards, and with the Commission's directives regarding the Board's responsibility to make safety-related findings in mind, we turn our consideration to the issues identified by the Board and the information provided by the parties.

IV. FACTUAL FINDINGS AND LEGAL CONCLUSIONS

A. Evidentiary Hearing Issues

4.1 In setting forth the Board's determinations relative to the mandatory hearing portion of this Part 70 licensing proceeding, we begin with the subject matter of the various presentations that were made by AES and the Staff in response to the Board's requests for additional information on those four particular items.

1. Site-Specific Process-Related Hazards

a. Introduction

4.2 The genesis of this presentation topic was the Staff's response to the Board's initial publicly available safety question 6(a) regarding the circumstances under which new restricted data (RD) might be generated relative to the EREF. In its answer, the Staff indicated:

> New RD could be created if the European centrifuge machines perform differently in the U.S. For example, it is believed that the climate in New Mexico [where the Louisiana Energy Services (LES) NEF is located] may have an impact on the centrifuge machines such that their performance (i.e., speed/frequency, temperatures, pressures, efficiency, power consumption, etc.) may be outside of the historical ranges of the machines in Europe. Similar or other locality-specific factors may impact the performance of the centrifuge machines in Idaho. . . . Any performance data found outside of the historical ranges would be considered new RD.

Staff Response to Initial Publicly-Available Safety Questions at 13-14. This

reply engendered another publicly available Board safety question, number 28, in which the Board inquired of the parties:

> taking a broader view, please list the locality-specific factors that could adversely affect safety at the proposed EREF, but are generally not considered to be potential threats to safety in Europe. Also, please briefly discuss the process used to identify locality-specific potential safety hazards to the proposed EREF and to assure that all factors were identified.

Board Additional Publicly-Available Safety Questions at 3-4. This resulted in the following response from applicant AES:

> For process-related hazards, the principal locality-related differences between the Idaho site and those in Europe are elevation and climatology (as was similarly true for LES). In light of these differences, [items relied upon for safety (IROFS)]-related Instrumentation and Control [(I&C)] systems will need to have setpoints that accommodate the lower atmospheric pressure at elevation (approximate elevation 1,585 [meters] (5,200 [feet]) in Idaho versus elevations near sea level in Europe). Ventilation performance and trip levels, as well as pressures for system purging, will also need to account for the elevation differences. IROFS setpoint control is described in Section 3.8 of the [ISAS] (Exh. AES000040).

AES Response to Additional Publicly-Available Safety Questions at 6. Thereafter, in specifying the presentation topics for the evidentiary hearing on AES-related safety matters, the Board indicated that, in light of this applicant response, on the subject of "Site-Specific Process-Related Hazards" the parties should prepare a presentation that:

> discusses (a) the methodology used to identify any potential site-specific process-related hazards at the EREF relative to centrifuges at European sites or the LES site; (b) the potential site-specific process-related hazards, and the underlying site differences that could create those hazards, that were identified for the EREF relative to the European or LES centrifuges; and (c) why those potential process-related hazards were determined not to be safety-significant, including an explanation of how the systems at the proposed EREF will accommodate the site-specific differences that were identified as creating the potential hazards.

Board Presentation Topics Order at 2.

b. Witnesses and Evidence Presented

4.3 AES, which was the sole presenter for this topic, provided three witnesses to discuss how it identified and analyzed site-specific process-related hazards as-

sociated with the EREF. These witnesses provided oral testimony, in conjunction with their prefiled slide presentation that was admitted as an exhibit, at the evidentiary hearing. *See* Tr. at 166-77; Exh. AES000061 (AES Presentation on Topic 1: Site-Specific Process-Related Hazards) [hereinafter AES Site-Specific Process-Related Hazards Presentation]. Additionally, the Staff provided testimony from two witnesses.[11]

(i) AEA WITNESSES

4.4 George A. Harper received a Bachelor of Science (B.S. or B.Sc.) degree and a Master of Science (M.S.) degree in Civil Engineering from the University of Massachusetts. *See* Exh. AES000011, at 2 (Resume of George A. Harper, P.E). He is currently the AES Vice President, Engineering and Licensing. *See id.* at 3. Before he joined AES in 2009, he was with AREVA NP Inc./Duke Engineering and Services for more than 11 years during which he served in a number of different positions in which he performed and managed various safety evaluations and analyses in support of nuclear plant engineering, environmental, licensing, design, and operations. *See id.* at 3-4. He also served as a principal engineer for Yankee Atomic Electric Company (YAEC) for nearly 15 years and as an engineer with Dubois and King, Inc. *See id.* at 4-5.

4.5 Christopher A. Andrews received a B.Sc. degree in Physics from the University of London. *See* Exh. AES000022, at 1 (Curriculum Vitae (CV) of Christopher Arthur Andrews). Since 1993, he has served as the Design, Safety, and Licensing Manager/Engineering Manager for Enrichment Technology (UK) Limited, during which he has been involved in developing the key features of the design and safety analyses for the gas centrifuge enrichment plant at Tricastin, France, as well as the LES NEF facility in Eunice, New Mexico, and the proposed EREF in Idaho. *See id.* at 2. Prior to that, he worked for URENCO, Fluor Daniel, Inc., British Nuclear Fuels Limited, Uranit Gmbh, and Centec Gmbh. *See id.* at 1-2.

4.6 Scott M. Tyler received a B.S. degree in Fire Protection and Safety Engineering Technology from Oklahoma State University. *See* Exh. AES000016, at 1 (Resume of Scott M. Tyler). Since 1995, he has served as an Advisory Engineer in fire, safety, and risk services for AREVA NP, Inc. *See id.* During the decade before that, he was an engineer with AcuTech Consulting, Inc., and ABB Impell Corp., providing project management and technical leadership on various process safety/risk management programs. *See id.* at 1-2.

[11] Although the Staff seated three witnesses in connection with this topic, only two testified at the hearing on this topic.

4.7 Ms. Breeda Reilly has a Bachelor of Engineering degree in Chemical Engineering from Cooper Union and a Master of Public Policy (M.P.P.) degree in Environmental Policy from the University of Maryland. *See* Exh. NRC000015, at 1 (M. Breeda Reilly Statement of Professional Qualifications (SPQ)). Having joined the NRC in 2005 as a chemical safety reviewer, she currently works in Advanced Fuel Cycle, Enrichment, and Uranium Conversion Branch, Fuel Facility Licensing Directorate (FFLD), Division of Fuel Cycle Safety and Safeguards (FCSS), NMSS, where she serves as the Senior Project Manager responsible for the EREF licensing review. *See id.* During the decade prior to joining NRC, she worked as a chemical engineer for the U.S. Environmental Protection Agency and the National Security Agency on projects involving chemical accident prevention and the assessment of potential occupational exposures and environmental releases from commercial chemical processes. *See id.*

4.8 Rex G. Westcott has a B.S. degree in Physics and an M.S. degree in Engineering Science from Clarkson College as well as a B.S. degree in Fire Protection Engineering from the University of Maryland. *See* Exh. NRC000019, at 1 (Rex G. Wescott SPQ). Since joining the NRC in 1978, he has served in various positions as a hydrologist and later as fire protection engineer, currently serving as Senior Fire Protection Engineer, Uranium Enrichment Branch/FFLD/NMSS. *See id.* at 1-2. Prior to joining the NRC, Mr. Wescott worked as a hydrologist with Ebasco Services and Woodward-Clyde Consultants performing engineering evaluations for commercial nuclear power facilities, hydroelectric projects, and other groundwater contamination remediation projects. *See id.* at 2.

4.9 Based on the respective qualifications and experience of the proffered witnesses, the Board finds each of these AES and Staff witnesses qualified to testify regarding the site-specific process-related hazards associated with the EREF.

c. Regulations and Guidance Relating to Site-Specific Process-Related Hazards

4.10 Under 10 C.F.R. § 70.62, each applicant for a Part 70 license is required to establish and maintain a safety program, which includes performing an integrated safety analysis (ISA). *See* 10 C.F.R. § 70.62(c). Among other things, the ISA must consider potential accident sequences caused either by deviations in the processes that will be conducted at the proposed facility or by credible external events, including natural phenomena. *See id.* § 70.62(c)(1)(iv).

4.11 To perform an appropriate ISA, the Staff's NUREG-1520 standard review plan (SRP) guidance for fuel cycle facilities indicates that the applicant should identify the process designs, accident sequences, and IROFS that are

associated with the facility. *See* Exh. NRC000070, at 3-9 (NMSS, NRC, [SRP] for the Review of a License Application for a Fuel Cycle Facility, NUREG-1520 (rev. 1 May 2010)) [hereinafter Revised Staff Fuel Cycle SRP]; *see also* Exh. NRC000031, at 3-8 to -9 (NMSS, NRC, [SRP] for the Review of a License Application for a Fuel Cycle Facility, NUREG-1520 (Mar. 2002)) [hereinafter Staff Fuel Cycle SRP].[12] In that regard, the process designs should be described in a level of detail that is sufficient to allow a Staff reviewer to understand the theory of operation for the process. Similarly, the IROFS should be described in sufficient detail to allow a Staff reviewer to understand the IROFS's functions in relation to the performance standards in section 70.61, which specifies limitations on the levels of risk for credible high- and intermediate-consequence accidents and nuclear criticality accidents. *See* Revised Staff Fuel Cycle SRP at 3-9 to -10.

4.12 Along with the requirement to perform an ISA is the requirement to provide the Staff with an ISAS. *See* 10 C.F.R. § 70.65(b). The ISAS is to contain descriptions of (1) site and facility characteristics that could affect safety and potential accidents and their consequences; (2) processes, hazards, and accident sequences, which includes a description of every process analyzed in the ISA, the hazards for each process, and the accident sequences associated with such hazards having unmitigated consequences that exceed the section 70.61 performance requirements; (3) the methods and team used by the applicant to perform the ISA; and (4) IROFS and the IROFS management measures used to ensure that IROFS are available and reliable to perform their functions when needed. *See id.; see also* Revised Staff Fuel Cycle SRP at 3-8. Further, because fuel cycle facilities are in substantial part chemical processing plants, in its ISA guidance document, NUREG-1513, the Staff recommends the use of a number of chemical hazard assessment methodologies, including the Hazard and Operability Analysis (HAZOP) method for analyzing the potential hazards associated with the uranium hexafluoride (UF_6) process systems at the EREF. *See* SER at 3-7; *see also* Exh. NRC000087, at 8-10 (NMSS, NRC, [ISA] Guidance Document, NUREG-1513 (May 2001)).

[12] As is reflected in its SER, the Staff's review of the AES application was based on the March 2002 version of the Staff's fuel cycle facility SRP rather than the May 2010 SRP revision that was adopted just before the SER for the EREF was issued by the Staff. *See* SER at 1-38. In response to a Board question about any differences between the two documents as they related to its EREF review, the Staff indicated that in general the changes consisted of editorial and formatting changes, reference updates, and expanded technical rationales concerning the acceptance criteria that had no impact upon the Staff's review of the AES application. *See* Staff Response to Initial Publicly-Available Safety Questions at 26-27. As a consequence, particularly when referring to the standards employed by the Staff in reviewing the AES ISAS and the associated IROFS, we will reference the updated discussion in SRP revision 1.

d. Evidentiary Findings

4.13 To identify site-specific process-related hazards, in developing its required ISA AES used the Staff's NUREG-1520 guidance to produce two discrete sets of EREF hazards. One was the process-related hazards that might come from process components. The other was Idaho-specific external events that could impact the facility. Further, in developing the process-related hazards, AES personnel used the HAZOP methodology endorsed in NUREG-1513, in particular the HAZOP methodology developed by Enrichment Technology Company (ETC). The ETC HAZOPs were only the starting point, however, as they were modified using EREF design documents to define each of the "nodes" or segments of the EREF systems subject to an ISA review so as to develop fully an EREF HAZOPs analysis. Part of this process also included developing supplemental process deviation initiator or site-specific external event "guidewords" to reflect EREF-specific initiators or external events, which were then applied to each EREF system node to identify potential hazards and accident sequences caused by process deviations or credible external events. *See* Tr. at 167-68 (Tyler Test.); AES Site-Specific Process-Related Hazards Presentation at 4, 6; SER at 3-7, 5-14.

4.14 In performing this analysis, AES did not explicitly compare either the EREF process-related hazards or Idaho external events with those events/hazards that might be applicable to any other European or American centrifuges, such as the facilities operated by URENCO or LES. According to AES, this was neither necessary under the Staff's NUREG-1520 guidance nor practical given it would involve getting access to other competitors' proprietary information. Instead, the standalone analysis for the EREF was informed by the experience of the AES ISA team members who performed the analysis, which included individuals representing the centrifuge vendor who have participated in process-related hazards analyses for other sites, including those in Europe and North America. *See* Tr. at 169-70 (Tyler Test.); AES Site-Specific Process-Related Hazards Presentation at 7.

4.15 As set forth in section 3.1 of the AES ISAS, *see* Exh. AES000040 tbl. 3.1-1, at 1 ([EREF ISAS] ch. 3 (rev. 2 Apr. 30, 2010)),[13] the list of process deviation initiators includes items such as more heat/less heat, more pressure/less pressure, and high flow/low flow. In considering these process deviation initiators as part of the HAZOP process, the ISA team was to identify all the potential initiators that could cause the particular condition to occur and then seek to identify safeguards and associated mitigations to address these initiators. Analyzing these factors, the AES ISA team did not identify any process-related hazards unique

[13] We note that although this document was submitted for the record as a nonpublic document, the information cited was discussed during the January 2011 public evidentiary hearing without objection from the parties.

to Idaho as compared to any other existing centrifuge site, given that centrifuges are subatmospheric closed systems that only require venting or purging at certain connection points and so generally are not sensitive to locality-related differences. AES did indicate, however, that to the degree facility equipment, such as an autoclave, is operationally sensitive to atmospheric pressure, although these equipment sensitivities were determined to have no safety significance, instrument set points will be adjusted to account for pressure differences arising from the higher site elevation in Idaho as compared to other sites. *See* Tr. at 169, 173-75 (Tyler Test.), 176 (Andrews Test.); AES Site-Specific Process-Related Hazards Presentation at 7, 9.

4.16 Relative to external events, the ISA Idaho-specific external event guidewords used to assess hazards included volcano, seismic, fire, tornado, transportation accident, snow, and ice. To determine the relevance of these in the context of the EREF, the ISA team reviewed publicly available information from sources, including the LES application, which resulted in some external events being added for analysis, such as volcanism, and others being eliminated, such as natural gas pipelines. Thereafter, for those external events that were deemed applicable, the ISA team drew on other studies, reports, and expert analyses by consultants, such as that performed by AES consultant Dr. William R. Hackett regarding volcanism, *see* section IV.B.1.b(i), *infra,* to assess the safety significance of those potential hazards and the need for system or facility accommodations and protective measures to address those hazards and their potential consequences. *See* Tr. at 171-72 (Harper Test.); AES Site-Specific Process-Related Hazards Presentation at 7, 9.

4.17 The Staff concluded that the AES process as outlined above and reflected in the SER satisfies the applicable regulations and NUREG-1520 guidance. The Staff also indicated that its own review of the AES ISA was informed by its recent review of the LES facility, which utilizes similar enrichment technology, and other enrichment plants, taking into account problems and issues that arose relative to those facilities. *See* Tr. at 170 (Reilly Test.), 170-71 (Wescott Test.).

e. Board Conclusions Regarding Site-Specific Process-Related Hazards

4.18 A comparison between either the EREF process-related hazards or Idaho external events and those events/hazards that might be applicable to any other European or American centrifuges, such as the facilities operated by URENCO or LES, seems capable of providing useful information. Nonetheless, in the circumstances here we do not consider the AES-admitted lack of any explicit comparison of that kind to be a licensing impediment for the EREF. Based upon the evidentiary record, in particular the use by AES of ISA team members who had participated in process-related hazards analyses for other similar sites, including those in Europe and North America, the Board concludes that the

AES ISA methodology was appropriate for analyzing both EREF process-related hazards and Idaho external events that could impact the facility and that the record provided a reasonable basis for the Staff to conclude that this process met the applicable regulatory requirements in section 70.65(b) to perform an appropriate ISA and provide an adequate ISAS.

2. Foreign Ownership and Control

a. Introduction

4.19 Recognizing that the AEA contains restrictions on the foreign ownership and operation of the nuclear facilities in the United States and that various parent companies of AES are foreign corporate entities, in its SER the Staff nonetheless declared that placing foreign ownership, control, or influence (FOCI) mitigation measures on AES "would provide no additional benefit to the National Security of the United States." SER at 1-8. As a basis for this conclusion, the Staff suggested that the same reasoning that supported waiving FOCI mitigation for the grant of a facility security clearance to URENCO (a United Kingdom conglomerate) for the NEF should also apply to AES (a subsidiary of a French conglomerate) for the EREF. *See id.* at 1-7 to -8. According to the Staff, both AES and LES would use the same ETC-supplied classified technology. For AES's EREF, just as for URENCO's NEF, "[t]he information and technology that [would] be classified as [RD] in the United States are already owned and controlled by the European Governments and the foreign-controlled companies associated with URENCO and AREVA." *Id.* at 1-8. That is, the information and technology in question would be classified under United States law only because it would be introduced into the United States, not because of its potential for generating new RD. Moreover, the Staff declared, little if any new RD is likely to be created as a result of the EREF. *See id.* Nevertheless, the Staff also noted, protocols to be established pursuant to a pending Pentapartite Agreement (between the United States and four European Governments) will be instituted to prevent new RD from being disseminated to European nationals. *See id.*

4.20 The Staff further claimed in its SER that AES's classified matter plan (CMP) for the protection of classified matter at the proposed EREF facility will satisfy 10 C.F.R. Part 95 when implemented. *See id.* at 1-8, 1-16 to -17. Even so, the Staff found it to be prudent to impose two classified matter-related license conditions, discussed in more detail in section IV.A.3.d, *infra.* Relative to the first of these, as the Staff notes in the SER, prior to receipt of classified matter AES must receive authorization from the NRC to implement its CMP. CMP implementation, however, is contingent upon an NRC inspection and finding that AES's classified matter program at EREF is in accord with the CMP. To effectuate this process, the Staff imposed a license condition to ensure that the clearances

under 10 C.F.R. Part 95 are obtained before classified matter is processed, stored, reproduced, transmitted, handled, or accessed. *See id.* at 1-17. Additionally, because AES has not yet designated the areas on the EREF site where the use and handling of classified information will occur, the Staff imposed another license condition to ensure that areas used for handling classified information are properly protected by requiring AES to first notify the NRC and confer about additional security measures, prior to designating the classified information handling areas. *See id.*

4.21 Citing these provisions of the SER, in question 6(a) of its first set of public safety questions the Board asked AES and the Staff under what circumstances could new RD be created and what would that information concern. *See* Board Initial Publicly-Available Safety Questions attach. A, at 3. The Staff responded that new RD could be created if the centrifuges were to perform differently in the United States than in Europe. According to the Staff, centrifuge performance would be compared to historical data produced in Europe and any performance data found outside of the historical ranges would be considered new RD. *See* Staff Response to Initial Publicly-Available Safety Questions at 13-14.

4.22 Referencing this portion of the SER, in its initial safety questions the Board also asked whether ratification/implementation of the Pentapartite Agreement is a prerequisite to the issuance of the AES license and if ratification/implementation would result in additional safety-related licensing submissions by AES and/or safety-related licensing review analyses by the Staff. *See* Board Initial Publicly-Available Safety Questions attach. A, at 3. The Staff responded that although the Pentapartite Agreement would not be a prerequisite to the issuance of the AES license, it would be a prerequisite to the Staff issuing a facility clearance under 10 C.F.R. § 95.15. Moreover, the Staff observed, without the agreement there would be no mechanism to allow AES to receive the classified centrifuges for installation in its proposed EREF. *See* Staff Response to Initial Publicly-Available Safety Questions at 14.

4.23 With these responses in mind, as well as the Staff's finding that no FOCI mitigation measures are necessary despite the fact that AES is part of the French public industrial conglomerate AREVA SA, the Board requested that the parties make a mandatory hearing evidentiary presentation on the topic of foreign ownership and control. Specifically, the Board directed the parties to prepare presentations addressing two issues:

> a. The statutory and regulatory framework regarding foreign ownership and control of uranium enrichment facilities such as the EREF, including a description of how that regulatory scheme compares to that applicable to power reactor facilities constructed and operated under 10 C.F.R. Parts 50, 52.
>
> b. The potential effects foreign ownership could have on the ability of an

> entity like AES to meet its safety, environmental, financial, and security responsibilities and how the management and financial structure of AES relative to AREVA SA provides AES with appropriate management and financial independence, including a discussion addressing the following questions:
>
> i. Can financial difficulties of the parent corporation result in truncation or termination of the EREF project or, conversely, if AES cannot otherwise obtain necessary funding, will the parent corporation supply such capital?
>
> ii. How does AES management and AES financial and operational structure differ from that of a typical United States corporate subsidiary of a foreign company in an instance when there are no statutory or regulatory controls on foreign ownership such as exist under the AEA and NRC regulations?

Board Presentation Topics Order at 3.

b. Witnesses and Evidence Presented

4.24 Both the Staff and AES made presentations on foreign ownership and control, with the Staff acting as the lead, solo presenter on the topic 2a presentation concerning the statutory and regulatory basis for any foreign ownership and control restrictions, and AES acting as the lead, solo presenter for the topic 2b presentation regarding AES's management and financial independence. The Staff and AES provided testimony by two witnesses and a single witness, respectively, regarding these presentation topics in conjunction with the parties' prefiled slide presentations, which were admitted as exhibits at the evidentiary hearing. *See* Tr. at 182-90, 202-03 (Staff), 190-201, 202-03 (AES); Exh. NRCR00101 (NRC Staff Presentation Topic 2a Foreign Ownership and Control) [hereinafter Staff Presentation on Foreign Ownership and Control]; Exh. AESR00062 (AES Presentation Topic #2b Foreign Ownership and Control) [hereinafter AES Presentation on Foreign Ownership and Control]. The Staff also relied upon the Commission-adopted SRP on foreign ownership, control, or domination, which was admitted as an exhibit. *See* Exh. NRC000103 (Final [SRP] on Foreign Ownership, Control, or Domination, 64 Fed. Reg. 52,355 (Sept. 28, 1999)) [hereinafter Foreign Ownership SRP].

4.25 After the Staff and AES presentations, the Board asked additional questions regarding how the EREF corporate structure compares to the corporate structure of LES, the NEF licensee that also has a foreign corporate parent, URENCO. Answers to these supplemental questions were provided by two additional Staff witnesses. *See* Tr. at 203-09.

(i) STAFF WITNESSES

4.26 Ms. Reilly's background and qualifications are discussed at section IV.A.1.b(ii), *supra.*[14]

4.27 Anneliese Simmons received a Bachelor of Arts (B.A.) degree in Political Science and French from the University of Kansas and an M.P.P. degree from the University of Maryland. She is currently a Financial Analyst in the NRC Office of Nuclear Reactor Regulation, Division of Policy and Rulemaking. Ms. Simmons has over 18 years of professional experience at various federal agencies and nonprofit organizations, with a focus on financial policy. *See* Exh. NRC000102, at 1 (Anneliese Simmons SPQ).

4.28 Timothy C. Johnson received a B.S. degree in Mechanical Engineering from Worcester Polytechnic Institute and an M.S. degree in Nuclear Engineering from the Ohio State University. He is currently a Senior Project Manager and Senior Mechanical Systems Engineer in NMSS/FCSS. He also serves as the Licensing Project Manager for the General Electric-Hitachi Global Laser Enrichment uranium enrichment plant with responsibility for coordinating the licensing review of the facility. Previously, from 2000 to 2009 he served as the Project Manager of the LES uranium enrichment plant from the project's inception, through licensing, and into initial plant construction. *See* Exh. NRC000110, at 1 (Timothy C. Johnson SPQ).

4.29 Tyrone Daniel Naquin received a B.S. degree in Biology from Southwestern Oklahoma State University and an M.S. degree in Health Physics from Texas A&M University. Mr. Naquin has 27 years' experience as a health physicist, having worked first for the Department of the Navy, then as an Air Force contractor, and finally since 2008 for the NRC. He currently serves as the project manager for the LES NEF in Eunice, New Mexico. *See* Exh. NRC000111, at 1 (Tyrone D. Naquin SPQ).

(ii) AES WITNESSES

4.30 Sam Shakir is the AES president and chief executive officer (CEO). Mr. Shakir received a Bachelor's degree in Engineering from Concordia University in Montreal and a Master's of Business Administration degree from the University of California at Berkeley. Before assuming his current position, Mr. Shakir held various positions at AREVA, including vice president of sales and strategy for spent fuel management. *See* Exh. AES000013 (Resume for Sam Shakir).

4.31 Based on the respective qualifications and experience of the proffered

[14] Although the Staff proffered three witnesses in connection with its initial presentation on topic 2a, only Ms. Reilly and Ms. Simmons testified at the hearing on this topic.

witnesses, the Board finds each of these Staff and AES witnesses qualified to testify regarding foreign ownership and control.

c. Regulations and Guidance Relating to Foreign Ownership and Control

4.32 The AEA and agency regulations govern the extent to which a foreign entity may own or control an NRC-licensed activity. The form of that regulatory oversight depends on the type of license sought.

4.33 In its hearing opportunity notice regarding AES's application, the Commission directed that because the AES application for a uranium enrichment facility was governed by AEA §§ 53 and 63, 42 U.S.C. §§ 2073, 2093, foreign ownership and control issues would be evaluated under AEA §§ 57 and 69, *id.* §§ 2077, 2099,[15] rather than AEA §§ 103, 104, or 193(f), *id.* §§ 2133, 2134, 2243(f).[16] *See* 74 Fed. Reg. at 38,058 (CLI-09-15, 70 NRC at 19). The principal difference between those two respective sets of provisions (i.e., AEA §§ 57 and 69 v. AEA §§ 103, 104, and 193(f)) is that while both prohibit the Commission from granting a license that would be "inimical to the common defense and security or the health and safety of the public," only under the latter would the Commission be prohibited from granting a license "if the Commission knows or has reason to believe [the applicant] is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government." *Compare* 42 U.S.C. § 2099 *with id.* § 2133(d). Therefore, in this proceeding the agency may deny AES a license based on foreign ownership, control, or domination concerns to the extent it concludes granting such a license would be inimical to the common defense and security or the health and safety of the public. *See Crowe Butte Resources, Inc.* (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 571 (2009) (materials license regulations contain no express prohibition on foreign ownership, but require Staff to make a finding that license issuance will not be inimical to the common defense and security or the health and safety of the public).

4.34 For power reactors, in implementing these regulations the agency developed a Commission-approved SRP to assist in evaluating applications for reactor

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[15] The Commission implemented these AEA sections in 10 C.F.R. § 70.31(d) and 10 C.F.R. § 40.32(d), respectively. *See* 74 Fed. Reg. at 38,058 (CLI-09-15, 70 NRC at 19). In both regulatory sections, the pertinent language tracks the statutory language identically, i.e., "inimical to the common defense and security or the health and safety of the public."

[16] The Commission implemented these AEA sections in various regulations, including 10 C.F.R. § 40.38(a) (relating to the United States Enrichment Corporation (USEC)), 10 C.F.R. § 50.38 (concerning nuclear power reactors), and 10 C.F.R. § 70.40 (also relating to USEC), in which the pertinent language again tracks the statutory language identically. We note that while sections 40.38(a) and 70.40 do apply to enrichment facility licensee USEC, their application is limited to USEC alone, so that they have no relevance to AES or any other enrichment facility applicant.

licenses or applications for the transfer of such licenses. *See* Foreign Ownership SRP, 64 Fed. Reg. at 52,355. The SPR indicates that after conducting a threshold review, as supplemented by additional information, if the Staff concludes that "the applicant may be considered to be foreign owned, controlled, or dominated, or that additional action would be necessary to negate the foreign ownership, control, or domination," the applicant "shall be promptly advised and requested to submit a negation action plan." *Id.* at 52,359. The purpose of the negation action plan would be to implement measures that effectively negate or deny foreign control or domination. *See id.* at 52,359.

4.35 Relative to the issue of foreign ownership or control, the NRC also imposes restrictions on the physical security and control of information at licensed facilities to safeguard RD and national security information. *See* 10 C.F.R. Part 95. Under 10 C.F.R. § 70.22(m), the application for a uranium enrichment facility is required to contain a description of the security program to protect against unauthorized disclosure of classified matter in accord with Part 95. And under Part 95, AES would be required, among other things, to complete the NRC facility security clearance process, which entails an NRC-approved CMP, onsite inspections, and the granting of individual NRC personnel security clearances. A facility security clearance also requires a determination that granting the clearance "would not be inconsistent with the national interest, including a finding that the facility is not under foreign ownership, control, or influence to such a degree that a determination could not be made." 10 C.F.R. § 95.17(d)(1). Thus, for a uranium enrichment facility, foreign ownership or control is evaluated in the context of the facility security clearance process as well.

d. Evidentiary Findings

4.36 During its mandatory hearing presentation, the Staff provided information regarding its legal interpretation of the statutory and regulatory framework that governs foreign ownership, control, or domination for uranium enrichment facilities such as the EREF. The Staff also provided its views on the differences between the legal regime governing uranium enrichment facilities, licensed under Part 70, and that for power reactors, licensed under Parts 50 and 52. Thereafter, AES made a presentation on the safety, environmental, security, management, and financial implications of AES being owned by a foreign parent corporation and AES's ability to meet its regulatory obligations, in particular its ability to make independent determinations about safety matters.

(i) STAFF PRESENTATION ON FOREIGN OWNERSHIP AND CONTROL

4.37 In its July 2009 notice regarding the AES application, the Commission directed the Staff to evaluate issues of foreign involvement pursuant to AEA §§ 57

and 69,[17] which the Staff asserted requires, among other things, an affirmative finding by the agency that issuance of a license for the EREF "cannot be inimical to the common defense and security." Tr. at 183 (Reilly Test.); Staff Presentation on Foreign Ownership and Control at 3-4.

4.38 In contrast, according to the Staff, foreign involvement regarding power reactors is evaluated pursuant to AEA § 103.[18] *See* Tr. at 183 (Reilly Test.); Staff Presentation on Foreign Ownership and Control at 7. This section, the Staff declared, precludes granting a license to an entity "'owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government.'" Staff Presentation on Foreign Ownership and Control at 5 (quoting AEA § 103, 42 U.S.C. § 2133). As a result, the Staff maintained, foreign ownership and control regulations are more restrictive under Parts 50 and 52 for power reactors than under Part 70 for uranium enrichment facilities. *See* Tr. at 183-84 (Simmons Test.).

4.39 To assist in evaluating the issue of foreign ownership or control of power reactor applicants and licensees, the Staff indicated it utilizes the Commission-adopted SRP on foreign ownership and control, which prohibits full or total ownership, control, or domination by a foreign entity. The Staff declared, however, that the SRP sets no other thresholds. In other words, the Staff declared, some lesser degree of foreign ownership or control may be permissible, provided the foreign involvement can be mitigated by a negation action plan. As described by the Staff, typical measures in a negation action plan include requiring senior managers to be United States citizens, establishing board of directors voting requirements that exclude foreign directors, and forming a nuclear advisory committee with only United States directors maintaining oversight of safety and security. *See* Tr. at 184-85 (Simmons Test.); Staff Presentation on Foreign Ownership and Control at 7-8.

4.40 According to the Staff, Part 95 of Title 10 of the *Code of Federal Regulations* also contains requirements that are relevant in assessing the foreign ownership or control concerns associated with the AES application because AES parent companies are foreign-owned. As described by the Staff, Part 95 addresses the protection of information, such as through a facility security clearance, and is applicable to the AES application through 10 C.F.R. § 70.22(m). In particular, the Staff declared, section 95.17 requires a determination that granting a facility clearance is not inconsistent with the national interest, including a finding that the facility is not under foreign ownership, control, or influence. Thus, the Staff indicated that foreign ownership or control evaluations for an enrichment facility

[17] These AEA provisions are, according to the Staff, implemented by 10 C.F.R. §§ 40.32(d), 70.22(a)(1), 70.31(d), 70.40. *See* Staff Presentation on Foreign Ownership and Control at 9.

[18] These AEA provisions, according to the Staff, are implemented by 10 C.F.R. §§ 50.33, 50.38, 50.80. *See* Staff Presentation on Foreign Ownership and Control at 7.

are also part of the facility clearance process. *See* Tr. at 187 (Reilly Test.); Staff Presentation on Foreign Ownership and Control at 10-11.

4.41 With respect to AES, the Staff has determined there would be no additional national security benefit to the United States if foreign ownership, control, or domination mitigation measures were placed on AES. This Staff finding is footed in its conclusion that, as with NEF licensee LES, the information and technology subject to security classification are already owned and controlled by the European governments and foreign-controlled companies associated with AES. The Staff therefore has decided that foreign ownership or control mitigation measures should be waived for AES.[19] *See* Tr. at 187-88 (Reilly Test.); Staff Presentation on Foreign Ownership and Control at 11.

4.42 Finally, with regard to LES, which now is a limited liability corporation under foreign-controlled parent URENCO, the Staff maintained that at the time of licensing LES was organized very similarly to AES in that LES had an American chief nuclear officer, as does AES, who would be responsible for making decisions regarding health, safety, and quality assurance (QA). *See* Tr. at 206-07 (Johnson Test.). Acknowledging there have been minor revisions to the LES corporate structure following licensing, the Staff nonetheless declared that its corporate structure is "all still pointing towards one guy at the top." Tr. at 207 (Naquin Test.). Moreover, according to the Staff, the issue of protecting the improper dissemination of information also was an issue in LES and was resolved based on a Staff review and determination like that being made for AES. *See* Tr. at 207-08 (Johnson Test.).

(ii) AES PRESENTATION ON FOREIGN OWNERSHIP AND CONTROL

4.43 With respect to the AES corporate structure, AES LLC is a Delaware corporation entirely owned by AREVA NC, Inc., also an American corporation. AREVA NC, Inc., in turn, is owned by AREVA NC SA, a foreign company formed under the laws of France. AREVA NC SA is part of the larger conglomerate AREVA SA, whose principal owners include the Commissariat a I'Energie Atomique (French Atomic Energy Commission) and the French State. This tiered structure of subsidiaries matches that of AREVA's existing fuel fabrication facility in Richland, Washington, which is already licensed under 10 C.F.R. Part 70. AREVA NC SA and AREVA SA also are involved in providing broad-based fuel cycle and engineering services around the world, including uranium mining, conversion, and enrichment; fuel fabrication; reactor construction and operation;

[19] As the basis for this finding in its SER, the Staff relied upon several Department of Energy documents, that, although purported to be nonpublic, *see* SER at 1-8, apparently are publicly available, *see* Letter from Carrie M. Safford, NRC Staff Counsel, to Licensing Board at 1 (Oct. 26, 2010).

and nonnuclear energy production technology such as wind and solar. *See* Tr. at 192-93 (Shakir Test.); *supra* note 1.

4.44 As AES LLC president and CEO, Mr. Shakir has sole responsibility and decision-making authority on safety, security, environmental, and financial matters. His responsibilities in this regard are dictated by federal, state, and local requirements, not by foreign ownership considerations. His role thus is similar to that of a chief nuclear officer at a nuclear power plant. And although he ultimately is answerable to AES LLC's management committee for management matters such as hiring and firing, the committee would have no influence on safety or QA during the construction, operation, or decommissioning of the EREF, an arrangement that would be unaffected by the fact AES LLC has foreign parents. *See* Tr. at 194-95 (Shakir Test.); AES Presentation on Foreign Ownership and Control at 5-6.

4.45 AES LLC also has financial independence from its parents by reason of the enrichment contracts that exist between AES LLC and its customers and under which AES LLC can collect revenue from SWU sales directly. Revenue would only flow to the parents by routine corporate finance channels, e.g., for repayment of debt or by distribution of dividends in excess of expenses. Moreover, nothing about the financial or ownership arrangements between AES LLC and its foreign parents is unique or different as compared to other NRC licensees. *See* Tr. at 195-96 (Shakir Test.); AES Presentation on Foreign Ownership and Control at 7.

4.46 With respect to AES LLC's financial qualifications, the Staff in its SER found that, subject to certain conditions, AES LLC is financially qualified to construct and operate the EREF. *See* Tr. at 198 (Shakir Test.); AES Presentation on Foreign Ownership and Control at 10 (citing SER at 1-10). Nonetheless, as with any commercial venture, AES LLC may be affected by financial difficulties associated with its corporate parents, changing market conditions, or other unforeseen conditions. NRC regulations address this inherent commercial risk by requiring that adequate financial assurance arrangements are in place properly to decommission EREF at any stage of construction or operation. Moreover, as an indicator of AES LLC's future financial viability, AES LLC today has several billion dollars worth of SWU contracts in place with various American utilities, an amount that would be sufficient to fund EREF operation for more than 5 years. *See* Tr. at 198-200 (Shakir Test.); AES Presentation on Foreign Ownership and Control at 10-12.

4.47 Finally, the management, financial, and operational structure of AES LLC do not differ from that of a typical NRC-licensed United States corporate subsidiary of a foreign company, nor would its business structure be any different even if there were no statutory or regulatory controls on foreign ownership such as exist under the AEA and NRC regulations. Nor are foreign ownership considerations a driving consideration for the AES LLC corporate structure or

governance approach. *See* Tr. at 200-01 (Shakir Test.); AES Presentation on Foreign Ownership and Control at 15.

e. Board Conclusions Regarding Foreign Ownership and Control

4.48 Based on the SER foreign ownership and control analysis and the parties' responses to prehearing written questions regarding this subject, the Board focused its review of foreign ownership and control on several aspects of this issue. Consistent with the Commission's direction that in this proceeding foreign ownership and control concerns about the AES application should be evaluated pursuant to AEA §§ 57 and 69, the pertinent analysis becomes whether granting a license to AES would be "inimical to the common defense and security or the health and safety of the public." 74 Fed. Reg. at 38,058 (CLI-09-15, 70 NRC at 19). At the same time, Commission regulations require AES to obtain a facility security clearance, which would include a determination that granting the clearance "would not be inconsistent with the national interest, including a finding that the facility is not under foreign ownership, control, or influence to such a degree that a determination could not be made." 10 C.F.R. § 95.17. Thus, for the EREF, foreign ownership and control also is evaluated by way of the facility clearance process.

4.49 With respect to the need for mitigation of foreign ownership and control, relative to the grant of a facility security clearance the Staff adequately considered the benefit of additional mitigation measures on the national security of the United States. Comparing AES's position to that of LES, the Staff concluded that because the information and technology that would be classified as RD in the United States are already owned and controlled by the European governments and the foreign-controlled companies associated with AES and LES, foreign ownership, control, or influence mitigation measures relating to security information would provide no additional benefit to the United States. We find the Staff's argument in this regard logical and agree that foreign ownership, control, or influence mitigation measures are not warranted for AES.

4.50 Additionally, relative to mitigation measures that might be necessary to address the corporate and financial structure of AES, the Board reviewed the Staff's analysis of AES management and financial independence from its various foreign parents. As he indicated in his sworn testimony, as AES president and CEO, Mr. Shakir, a naturalized American citizen, *see* SER at 1-7, has sole responsibility and decision-making authority on safety, security, environmental, and financial matters, a role similar to that of a chief nuclear officer at a nuclear power plant, which should insulate him from foreign control or domination relative to these vital operational matters.

4.51 The Board also reviewed the Staff's findings regarding AES's financial qualifications relative to potential foreign ownership and control. As Mr. Shakir

conceded, as a commercial venture, AES may face financial risk from financial difficulties with its parent corporations, changing market conditions, or other unforeseen conditions. Nevertheless, in addition to having the income from several billion dollars' worth of SWU contracts in place with various American utilities, AES would need to comply with any license conditions and NRC regulations requiring that adequate financial assurance arrangements be in place to decommission the EREF properly at any stage of construction or operation. AES thus should be able to meet all decommissioning requirements, independent of its foreign parentage, or any financial risks that might accrue therefrom.

4.52 Finally, the Board considered the differences between AES's management, financial, and operational structures and that of a typical NRC-licensed United States corporate subsidiary of a foreign company. There appears to be no real difference between the AES approach and that of other NRC licensees, regardless of whether the ultimate parent is foreign or domestic, an observation that Staff witnesses confirmed at least insofar as it applies to the corporate structures of AES and the already-licensed LES. From our review, we see no grounds for challenging Mr. Shakir's observation that foreign ownership considerations do not drive AES corporate structure for the EREF.

4.53 Based on the foregoing, the Board finds that the Staff reasonably concluded that (1) issuance of a license to AES would not be "inimical to the common defense and security or the public health and safety"; and (2) foreign ownership, control, or influence mitigation measures relative to AES's facility security clearance would provide no additional benefit to the national security of the United States so that the need for such measures can be waived.

3. License Conditions and Exemptions

a. Introduction

4.54 As was noted in the Commission's recent Staff requirements memorandum regarding the procedures the Commission will employ in conducting the mandatory hearings associated with the 10 C.F.R. Part 52 combined license proceedings for new reactors, a principal focus of the Commission will be upon "non-routine matters." Memorandum from Annette L. Vietti-Cook, NRC Secretary, to Stephen G. Burns, NRC General Counsel, and Brooke Poole, Director, NRC Office of Commission Appellate Adjudication at unnumbered p. 2 (Dec. 23, 2010) (ADAMS Accession No. ML103570203). Almost by definition, license conditions imposed on an applicant as a result of the Staff's review process and applicant-requested exemptions from agency regulatory requirements that are granted by the Staff have a strong potential to fall into such a "non-routine matter" category. Indeed, these items have been the subject of scrutiny in a variety of

other mandatory hearing contexts. *See, e.g., Vogtle ESP,* LBP-09-19, 70 NRC at 540; *American Centrifuge,* LBP-07-6, 65 NRC at 442-46.

4.55 In the Licensing Board's October 2010 initial round of questions to the parties, noting that various sections of the AES SAR stated that the provisions of "'this license application are similar to those submitted for [NRC] review in the [LES] license application for the [NEF],'" the Board asked what the Staff found to be the significant safety-associated differences between the AES and LES enrichment facility applications and to discuss how those variations resulted in differences in the Staff's analysis of those matters, including any license conditions or exemptions/variances. Board Initial Publicly-Available Safety Questions attach. A, at 1 (quoting Exh. AES000037, at 2.0-1 ([EREF SAR] (rev. 2 Apr. 30, 2010)) [hereinafter AES SAR]. In addition, the Board asked for a listing of all Staff SER-approved license conditions and exemptions. *See id.* at 7. After reviewing the Staff's November 19 questions response, which included a listing of the conditions/exemptions that are to be applicable to any EREF Part 70 license, *see* Staff Response to Initial Publicly-Available Safety Questions at 2-4, 28-36, in its December 17 order the Board requested that the parties provide a presentation at the January 2011 hearing session regarding the various license conditions/exemptions. The Board asked that the presentation outline the reasons why each of these license conditions/exemptions is needed and, if applicable, explain any differences that may exist between these license conditions/exemptions and the provisions of the current LES Part 70 NEF license and any exemptions granted relative to the LES license. *See* Board Presentation Topics Order at 3-4.

b. Witnesses and Evidence Presented

4.56 The Staff took the lead for this presentation topic, its slides for which were admitted into evidence, *see* Exh. NRCR00104 (NRC Staff Presentation Topic 3, License Conditions/Exemptions) [hereinafter Staff License Conditions/Exemptions Presentation]. In addition, the Staff presented two tables showing a comparison between the license conditions and the exemptions/special authorizations that were utilized for the LES facility and those proposed for the EREF. *See* Exh. NRC000118 (Table 1: Comparison of AES and LES Requests for Exemptions and Special Authorizations) [hereinafter AES/LES Exemptions/Authorizations Comparison]; Exh. NRC000119 (Table 2: Comparison of AES and LES License Conditions) [hereinafter AES/LES License Conditions Comparison].

(i) STAFF WITNESSES

4.57 Relative to the evidentiary presentation on this subject, *see* Tr. at 215-43, 246-47, the principal Staff witness was Breeda Reilly, whose background and

qualifications were previously outlined in section IV.A.1.b(ii), *supra.* In addition, the Staff provided two other witnesses, one who testified about an exemption granted for the procurement of safety-related equipment, and one who testified concerning the Staff's inspection process relative to a proposed license condition allowing AES to make changes to its SAR in certain instances without prior NRC notification or approval. AES also made three witnesses available to answer Board questions on this topic.

4.58 In addition to Ms. Reilly, Damaris Arroyo appeared as a Staff witness. Ms. Arroyo serves as a QA Engineer in the Mixed Oxide (MOX) and Uranium Deconversion Branch, FCSS/NMSS. Ms. Arroyo, who holds a B.S. degree in Chemical Engineering from the University of Puerto Rico–Mayaguez Campus, is responsible for reviewing the QA aspects of new license applications, license renewals, license amendments, and exemptions for material licensees. *See* Exh. NRC000106, at 1 (Damaris Arroyo SPQ).

4.59 Also appearing on behalf of the Staff was Deborah Seymour. Ms. Seymour, who has a B.S. degree in Chemical Engineering and Materials Engineering from the University of Connecticut, currently serves as the Branch Chief in Construction Projects Branch 1/Division of Construction Projects/Center for Construction Inspection (CCI)/NRC Region II, a position in which she provides direction and oversight for the construction inspection programs at fuel facilities under construction in the United States, including the LES NEF. During her 23 years with the agency, she has held a variety of other inspection-related positions, including NEF senior project inspector, resident inspector at the Sequoyah Nuclear Power Plant, and an inspector for radiological effluents and chemistry and material control and accounting at fuel facilities and reactors. *See* Exh. NRC000121, at 1 (Deborah Seymour SPQ).

(ii) AES WITNESSES

4.60 The background and qualifications for two of the AES witnesses, Scott Tyler and George Harper, were set forth previously in section IV.A.1.b(i), *supra.* The other AES witness was Jim Kay, the Licensing Manager for the AES EREF. Mr. Kay holds a B.S. degree in Mechanical Engineering from the University of Rhode Island, an M.S. degree in Nuclear Engineering from the University of Lowell, and an M.S. degree in Management from Lesley College. *See* Exh. AES000012, at 1 (Resume of James A. Kay). Prior to becoming the EREF Licensing Manager in 2009, he served for 8 years as a Licensing Engineering Supervisor/Advisory Engineer for AREVA, NP Inc., supervising engineering work on the U.S. Evolutionary Power Reactor design certification effort and managing site licensing activities at YAEC's Yankee Nuclear Power Station. Before joining AREVA, he was employed by YAEC for 25 years in several engineering positions. *See id.* at 2-3.

4.61 Based on the respective qualifications and experience of the proffered witnesses, the Board finds each of these Staff and AES witnesses qualified to testify regarding the license conditions and exemptions associated with the EREF.

c. Regulations and Guidance Relating to License Conditions and Exemptions

4.62 Under Parts 70, 40, and 30, which provide the regulatory basis for the licensing of the different types of nuclear materials utilized in the operation of the EREF, the agency is permitted in issuing a license to impose such additional conditions, requirements, and limitations as may been necessary to effectuate the purposes of the AEA and the agency's regulations. *See* 10 C.F.R. §§ 30.34(e), 40.41(e), 70.31(a), (b)(2). Regarding the Staff's evaluation findings concerning a particular application, in its fuel cycle facility SRP guidance the Staff notes that it may

> recommend license conditions to address any issues that were not previously resolved by an applicant's commitments. Such conditions are discussed with an applicant before issuing the license (or license amendment) and become commitments to performance in addition to those commitments that the applicant presented in the application.

Revised Staff Fuel Cycle SRP at 7.

4.63 Additionally, Parts 30, 40, and 70 provide for exemptions to their requirements, with each containing a provision stating that the agency may grant exemptions to the requirements imposed by that part if the agency determines such an exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest. *See* 10 C.F.R. §§ 30.11(a), 40.14(a), 70.17(a). According to the Staff's SRP guidance for fuel cycle facilities, an applicant seeking an exemption should "clearly describe[ ] any exemptions or authorizations of an unusual nature and adequately justif[y] them for the NRC's consideration." Revised Staff Fuel Cycle SRP at 1-7.

d. Evidentiary Findings

4.64 The proposed EREF license will contain sixteen license conditions. Four of these will be standard conditions that are imposed generally for a license such as AES is seeking, another ten will be specific to the EREF, one will concern an exemption, and one reflects a special authorization request. Additionally, AES has requested an exemption separate from its EREF license application. *See* Tr. at 216-17 (Reilly Test.); Staff License Conditions/Exemptions Presentation at 3. The Staff has included a discussion of the various license

conditions/exemptions/special authorizations in the relevant sections of the SER. *See id.* at 217 (Reilly Test.).

4.65 The proposed financial qualifications license condition found in SER chapter 1 was developed as a result of the Staff's evaluation of the AES estimate of the costs associated with EREF construction and operation and AES's stated commitment to provide updated cost estimates for each incremental phase prior to initiating construction. Essentially, this proposed condition requires AES to demonstrate that suitable funding for each phase of construction is available and committed before construction of that phase begins. By way of contrast, the LES license did not have a similar condition because LES made a commitment that the construction of the NEF would not begin before funding for construction of the entire facility was fully committed. *See* Tr. at 217-18, 219-20 (Reilly Test.); Staff License Conditions/Exemptions Presentation at 4; *see also* AES/LES License Conditions Comparison at 1; SER at 1-9.

4.66 The second license condition proposed by the Staff, also in SER chapter 1, concerns nuclear liability insurance. Under 10 C.F.R. § 140.13b, the holders of a Parts 40/70 uranium enrichment facility license are required to maintain adequate nuclear liability insurance, with proof of such insurance necessary prior to a license being issued. The proposed condition would mandate that AES provide proof of full liability insurance of $300 million at least 30 days prior to the date upon which it plans to obtain source or special nuclear material. The LES license also had such a condition tied to its receipt of feed material for the NEF facility, but that condition included a clause (which the AES license would not have) that permitted LES, if it proposed to provide less than $300 million of liability insurance coverage, to furnish for Staff review and approval at least 120 days prior to the planned date for obtaining feed material an evaluation supporting liability insurance coverage in an amount less than $300 million. *See* Tr. at 218-19 (Reilly Test.); Staff License Conditions/Exemptions Presentation at 5; *see also* AES/LES License Conditions Comparison at 1; SER at 1-10 to -11; Exh. NRC000060, encl. at 2 (Letter from Joseph G. Giitter, Chief, Special Projects Branch, FCSS/NMSS, to Karl Gross, Licensing Manager, LES, encl. (June 23, 2006) (NRC Materials License No. SNM-2010)) [hereinafter LES License].

4.67 A third SER chapter 1 proposed license condition concerns the possession and handling of classified matter. Although the Staff as part of its safety review has concluded that the EREF CMP, which specifies the practices for processing, handling, and accessing classified matter, meets the requirements of 10 C.F.R. Part 95, the Staff still must perform a readiness review before classified matter can actually be brought onto the EREF site. This proposed license condition, which is similar to one imposed in the LES license, is needed to ensure that the clearances required under Part 95 are obtained before classified material is processed, handled, or accessed on the EREF site. *See* Tr. at 220

(Reilly Test.); Staff License Conditions/Exemptions Presentation at 6; *see also* AES/LES License Conditions Comparison at 1; SER at 1-17; LES License at 5.

4.68 The final SER chapter 1 proposed license condition also relates to information security. As part of its CMP, AES committed to following Nuclear Energy Institute information security program guideline 08-11, which addresses the protection of classified information, equipment, and technology. This includes the area in the facility that will be routinely used for handling and disseminating classified information. Under this proposed license condition, AES is to notify the Staff before designating this area, which it has not yet done, so that the Staff can determine if additional security measures are required. The condition also indicates that if NRC does determine the need for additional security measures, an amendment request must be submitted by AES and approved prior to establishing and using the area or areas. A similar condition was imposed on the LES license, albeit after the license was issued initially. *See* Tr. at 220-21 (Reilly Test.); Staff License Conditions/Exemptions Presentation at 7; *see also* AES/LES License Conditions Comparison at 2; SER at 1-16 to -17; Exh. NRC000114, at 10 (NRC Materials License No. SNM-2010, amend. 45) [hereinafter LES Amended License].

4.69 The AES decommissioning strategy is the focus of a proposed license condition in SER chapter 10 that mandates, prior to beginning construction, AES must perform additional radiation survey activities to document the background radiation level at the EREF site in accord with NUREG-1757, appendix A, *see* Exh. NRC000117, at A-1 to -3 (2 NMSS, NRC, Consolidated Decommissioning Guidance, NUREG-1757, app. A (rev. 1 Sept. 2006)). Specifically, the proposed condition calls for dividing the site into four survey units, and taking fifteen surface soil samples per survey unit (i.e., sixty additional soil samples). The proposed condition also specifies where sample collections should be taken, including (1) the detention and retention basins; (2) the full tails, full feed, and empty cylinder storage pads north of the main facilities; (3) the technical services building, the blending, sampling, and preparation building, separations building modules (SBM), UF_6 handling areas, and full product cylinder storage pad; and (4) areas onsite, but outside those that are scheduled to be disturbed during plant construction. Although a condition like this was not part of the LES license, it is intended to ensure there is an adequate pre-facility radiation contamination baseline for use in decommissioning planning when it becomes time to return the site to unrestricted use. *See* Tr. at 222-23 (Reilly Test.); Tr. at 223-24 (Kay Test.); Staff License Conditions/Exemptions Presentation at 8; *see also* AES/LES License Conditions Comparison at 2; SER at 10-3 to -6.

4.70 AES's initial approach to providing decommissioning financial assurance was to fully fund the estimated cost of decontamination and decommissioning of the full-sized facility and the estimated cost for dispositioning the depleted uranium (DU) tanks generated during the first 3 years of operation. AES later

sought an exemption to the financial assurance requirements in sections 40.36(d) and 70.25(e) of the Commission's regulations to modify this approach to one, similar to what was used for the LES facility, that would fund incrementally the areas and buildings as they were placed into operation. As a consequence, a license condition in SER chapter 10, which is similar to the original conditions in the LES license, implements a forward-looking, incremental AES approach by establishing a schedule for the submission of the decommissioning funding plan, decommissioning cost estimates, and financial instrument updates on a periodic basis 6 months prior to the planned date for (1) the delivery of test material to the centrifuge assembly building; (2) the first delivery of natural UF_6 as feed material for the first SBM and annually thereafter; and (3) the receipt of initial feed material for each of the three subsequently planned SBMs. *See* Tr. at 224-25 (Reilly Test.); Staff License Conditions/Exemptions Presentation at 9; *see also* AES/LES License Conditions Comparison at 1; SER at 10-7 to -12; LES License at 2-3; LES Amended License at 7-8.

4.71 IROFS, the "items relied on for safety" that are a central focus of the ISA process, *see* 10 C.F.R. § 70.62(c), are the subject of three proposed license conditions. The first is intended to address an issue that arose relative to the NEF licensing process with the defined "boundaries" for IROFS. Under the risk-informed performance-based requirements of 10 C.F.R. § 70.61, applicants must ensure that each IROFS will be available and reliable to perform its function when needed in the context of the performance requirements stated in section 70.61. Further, so that the Staff may implement the related requirement of 10 C.F.R. § 70.32(k) calling for a preoperational inspection, or operational readiness review (ORR), an applicant is to provide an IROFS boundary package to verify that a facility is constructed in accord with all license requirements. *See* Revised Staff Fuel Cycle SRP at 3. This package contains the physical descriptions and parameters of structures, systems, and components that are used to meet the requirements of section 70.61, as well as the administrative procedures or worker actions that are defined as IROFS. Boundary packages also identify the specific functions to be performed by an IROFS, and any items that may affect the function of an IROFS. *See id.* at 3 n.4.

4.72 In its NEF application, LES indicated that upon completion of the final facility design, the IROFS boundaries would be defined using its internal procedures. In AES SER appendix A, the Staff added this LES commitment as a condition to the NEF license, as well as required that the IROFS boundaries be available at the ORR. *See* AES/LES License Conditions Comparison at 5. As a result of the Staff's experience with the LES IROFS information during the ORR process, which the Staff considered important input to its facility inspection process, the Staff proposes adding a condition to the EREF license that would require all IROFS information provided to the Staff also conform with the Staff's SRP guidance in appendix B to chapter 3 of NUREG-1520, *see* Revised Fuel

Cycle SRP at 3-B-1 to -13, and that such information be accessible prior to the ORR. *See* Tr. at 225-26 (Reilly Test.); Staff License Conditions/Exemptions Presentation at 10; *see also* AES/LES License Conditions Comparison at 5-6; Exh. NRC000033, at A-20 to -23 (SER app. A ISA and ISAS (Sept. 2010)); LES License at 3.

4.73 The second IROFS-related condition concerns facility operator actions. This license condition, which is similar to one included in the LES license, is intended to incorporate an AES commitment made in its SAR section 3.3.8 under which the Staff human factors guidance in NUREG-0700, *see* Office of Nuclear Regulatory Research (RES), NRC, Human-System Interface Design Review Guidelines, NUREG-0700 (rev. 2 May 2002) (ADAMS Accession Nos. ML021700337, ML021700342, ML021700371), and NUREG-0711, *see* RES, NRC, Human Factors Engineering Program Review Model, NUREG-0711 (rev. 2 Feb. 2004) (ADAMS Accession No. ML040770540), would be the benchmarks for the human factors engineering review and implementation plan for operator actions IROFS. *See* Tr. at 226-27 (Reilly Test.); Staff License Conditions/Exemptions Presentation at 11; *see also* AES/LES License Conditions Comparison at 6; Exh. NRC000079, at D-2 to -3 (SER app. D Human Factors (Sept. 2010));[20] LES License at 4.

4.74 The final IROFS-related license condition, which is found in SER appendix E, concerns the IROFS relating to electrical system and I&C. This requirement to seek further NRC review and approval is being imposed because I&C design for the EREF was not complete at the time of the Staff's review and so did not include any IROFS that might use software, firmware, microcode, programmable logic controllers, or other digital devices. If in completing its I&C design AES should choose to incorporate digital controls into the EREF design, which AES witness Mr. Harper indicated was a possibility, *see* Tr. at 229 (Harper Test.), prior NRC approval would need to be sought before implementing such devices. *See* Tr. at 227-28 (Reilly Test.); Staff License Conditions/Exemptions Presentation at 12; *see also* AES/LES License Conditions Comparison at 6; Exh. NRC000080, at E-18 to -22 (SER app. E, Electrical Power and Instrumentation and Control Systems (Sept. 2010));[21] LES License at 3-4.

4.75 A proposed license condition found in SER appendix H relates to the EREF's fundamental nuclear material control program. Under 10 C.F.R. § 70.32(c), a uranium enrichment facility license must have a condition requiring

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[20] Although this document was submitted for the record as a nonpublic document, the information cited was discussed during the January 2011 public evidentiary hearing without objection from the parties.

[21] This document also was submitted for the record as a nonpublic document, but the information cited was discussed during the January 2011 public evidentiary hearing without objection from the parties.

the licensee to (1) maintain and follow a source material control and accounting (MC&A) program; and (2) maintain records of any MC&A program changes made without Commission approval for 5 years from the date of the change. Reports to the agency regarding such unapproved changes must be filed within no more than 6 months after the change. *See* 10 C.F.R. § 70.32(c)(2). The appendix H license condition, which is similar to one in the LES license, requires that AES obtain agency approval, by way of a license amendment request, for any change that would decrease the effectiveness of its MC&A program. Additionally, the condition mandates that a record of any changes made without agency approval be maintained for 5 years and that a report containing a description of each unapproved change be sent to the agency within 6 months of the change if it pertains to uranium enriched less than 20% in the uranium-235 isotope. Moreover, if AES made such an unapproved change that AES later determined did decrease MC&A effectiveness, it would be obligated to report the matter to the NRC and take corrective action, with its misidentification report becoming an inspection/enforcement issue. *See* Tr. at 228-29 (Reilly Test.), 229 (Kay Test.); Staff License Conditions/Exemptions Presentation at 13; *see also* AES/LES License Conditions Comparison at 8; Exh. NRC000081, at H-7 to -8 (SER app. H, Material Control and Accounting (Sept. 2010));[22] LES License at 5.

4.76 Also proposed by the Staff as an EREF license condition is a so-called "tie down" condition that is placed in most fuel cycle facility licenses, including the LES license. Under that condition, AES is required to conduct authorized activities at the EREF in accordance with the statements, representations, and conditions found in the following application-related documents: SAR and ER, PSP, FNMCP, QA program description, EP, SPPP for protection of RD and other classified matter, and decommissioning funding plan. This incorporation by reference is intended to ensure that the various AES representations and commitments in these documents are legally enforceable by the agency. *See* Tr. at 229-31 (Reilly Test.); Staff License Conditions/Exemptions Presentation at 14; see also AES/LES License Conditions Comparison at 9; LES License at 1-2.

4.77 As was the case with the LES authorization, the Staff's post-construction/preoperation ORR is the subject of another of the proposed EREF license conditions. Although construction of a fuel cycle facility can begin as soon as the license authorizing the facility is granted, under 10 C.F.R. § 70.32(k), prior to facility operation, i.e., prior to the introduction of UF_6 into any EREF module, NRC must verify through inspection that the facility was constructed in accordance with the agency's regulatory requirements and the requirements of the license. To ensure this process is followed, the AES license is to include a

[22] Once again, although this document was submitted for the record as a nonpublic document, the information cited was discussed during the January 2011 public evidentiary hearing without objection from the parties.

condition that states successful completion of the ORR is a prerequisite to facility operation. Additionally, the condition provides that the licensee must give the Commission 120 days' notice that it intends to introduce UF_6 into a facility module to permit the agency sufficient time to plan and carry out the required ORR. *See* Tr. at 230-31 (Reilly Test.); Staff License Conditions/Exemptions Presentation at 15; *see also* AES/LES License Conditions Comparison at 9; LES License at 2.

4.78 Also included as a license condition is a provision that outlines the term of the proposed AES license. Agency regulations require that the applicant indicate the period of time for which the Part 70 license is requested. *See* 10 C.F.R. § 70.22(a)(3). Under an NRC policy established in 2006, the term of a fuel cycle license runs from 10 to 40 years. In this instance, because AES requested a term of 30 years, which is within this licensing range, this is the term the Staff proposes to grant in this license condition. The LES license also had a condition specifying a 30-year license term. License extensions of a similar length, i.e., 10 to 40 years, can also be sought, by way of a license renewal/amendment request, and could be granted if justified. *See* Tr. at 231-32 (Reilly Test.); Staff License Conditions/Exemptions Presentation at 17; *see also* AES/LES License Conditions Comparison at 9-10; LES License at 2.

4.79 In addition to license conditions, the Staff also proposes to grant several AES requests for an exemption from regulations that would otherwise govern the EREF. One of these concerns decommissioning financial assurance. As the Staff discussed in chapter 10 of the SER, in requesting an exemption from the decommissioning funding requirements of sections 40.36(d) and 70.25(e) of the agency's regulations, AES sought authorization to provide financial assurance on a forward-looking, incremental basis. The regulations now require that financial assurance instruments in an amount sufficient to cover the total estimated cost of decommissioning be in place at the time the facility is ready to begin operations, along with funding sufficient to disposition the full amount of DU expected to be generated during the facility's 30-year life. To avoid AES being required to fund decommissioning costs for the entire planned facility even if only a portion of the centrifuges have been installed, the Staff proposes to approve the exemption and, as was the case with the LES license, interpose a separate license condition, *see supra* p. 500, to address AES's schedule for updating the decommissioning funding plan and financial assurance instruments over time as the facility is completed. *See* Tr. at 231, 235-36 (Reilly Test.); Staff License Conditions/Exemptions Presentation at 16, 19; *see also* AES/LES License Conditions Comparison at 9; AES/LES Exemptions/Authorizations Comparison at unnumbered p. 1; AES SAR at 1.2-4 to -6; SER at 1-13 to -14; LES License at 2-3.

4.80 Separate from its license application, in a June 17, 2009 submission, AES requested an exemption from the requirements of sections 30.4, 30.33(a)(5), 40.4, 40.32(e), 70.4, and 70.23(a)(7) of the agency's rules to permit it to begin

certain preconstruction activities at the EREF site before completion of the NRC's environmental review under 10 C.F.R. Part 51. Under this exemption request, which was not made by the LES for the NEF, none of the facilities or activities covered would be a component of the AES PSP or its practice and procedures plan for the protection of classified matter, or otherwise subject to NRC review or approval, although the activities may be subject to state or local government oversight and permitting authority. Among the activities authorized are clearing the site; site grading and erosion control; excavating the site, including rock blasting and removal; installing parking areas; constructing a storm water detention pond; constructing highway access roadways and site roads; installing utilities and storage tanks; installing fences for investment protection (rather than physical security plan implementation); and installing construction buildings, offices, warehouses, and a guardhouse. As of the time of the January 2011 evidentiary hearing, AES had done some road construction, culvert work, and site clearing, with plans in spring 2011 to start blasting and site excavation. Although these preconstruction activities will be considered in the context of their environmental impacts in the Staff's final EIS, the Staff environmental assessment of the exemption request evaluated only the fact that these activities are considered to be outside NRC jurisdiction and that they will be evaluated as part of the Staff's EIS associated with licensing the EREF. *See* Tr. at 232-34 (Reilly Test.), 234-35 (Harper Test.); Staff License Conditions/Exemptions Presentation at 18; *see also* AES/LES Exemptions/Authorizations Comparison at unnumbered p. 2; Exh. NRC000082, at 1 (Letter from David H. Dorman, Director, FCSS, NMSS, to George Harper, Licensing Manager, AES (Mar. 17, 2010)).

4.81 Also the subject of a separate January 29, 2010 AES request was an exemption from the 10 C.F.R. § 21.3 definitions of "commercial grade items," "basic component," "critical characteristic," "dedication," and "dedicated entity." According to NRC witness Ms. Arroyo, the thrust of this exemption granted by the Staff on July 28, 2010, is to permit AES to have some procurement flexibility. With the exemption, AES is able to dedicate an IROFS commercial grade component itself, by verifying the quality of the component it acquired from a nondedicated vendor using AES's own QA program, rather than having to purchase the commercial grade component from a dedicated entity that has already been approved as a source of qualified commercial grade components. This is especially helpful, according to AES witness Mr. Harper, in procuring IROFS components from overseas suppliers. *See* Tr. at 238-39 (Arroyo Test.), 239 (Harper Test.); Staff License Conditions/Exemptions Presentation at 20; *see also* Exemptions/Authorizations Comparison at unnumbered p. 2; Exh. NRC000040, at 1 (Letter from James A. Kay, Licensing Manager, AES, to NRC Document Control Desk (Jan. 29, 2010)); Exh. NRC000041, at 1 (Letter from Daniel H. Dorman, Director, FCSS, NMSS, to James A. Kay, Licensing Manager, AES (July 28, 2010); LES Amended License at 8-9.

4.82 Finally, the Staff proposes to include a condition in the AES license that incorporates a special authorization sought by AES to permit it to make changes to its SAR without seeking prior NRC approval. As set out in section 11.1.4 of the AES application, this authorization would permit AES to make SAR changes without NRC approval if the changes do not decrease the effectiveness of safety commitments in the application. Any change not meeting this criterion must be submitted to the agency for approval prior to implementation. No prior approval is needed, however, for a change that AES determines does not (1) degrade the safety commitments in the license application; and (2) conflict with any specific condition in the license application. AES must document such a change, including showing a technical justification and management approval, in dedicated records that would be available for NRC inspection upon request. Additionally, within 3 months of implementing an unapproved SAR change, AES must submit a report to NRC that describes the change and provides a revised application section reflecting the change. *See* Tr. at 240 (Reilly Test.).

4.83 According to the Staff, this authorization is consistent with the approach to application changes set forth in 10 C.F.R. § 70.72 to the degree it includes criteria for judging whether NRC preimplementation approval is necessary and provides for documentation of the AES evaluation determination, recordkeeping requirements for that documentation, a timely update of the SAR provisions changed, and eventual reporting of the changes to NRC. Although LES did not request such authorization, the Staff found the AES request appropriate based on the Staff's experience in conducting the LES ORR and in administering similar authorizations at other facilities such as the Westinghouse Columbia, South Carolina fuel fabrication facility. Moreover, if AES is found to have made an inappropriate determination about the need for agency preapproval of an SAR change, the agency's inspection and enforcement program would come into play. *See* Tr. at 240-42 (Reilly Test.), 246-47 (Seymour Test.); Staff License Conditions/Exemptions Presentation at 21; *see also* Exemptions/Authorizations Comparison at unnumbered pp. 1-2; Exh. NRC000064, at 1-2 (E-mail from Jim Kay, Licensing Manager, AES, to Breeda Reilly, NRC (Aug. 20, 2010)); SER at 1-14 to -15.

e. Board Conclusions Regarding License Conditions and Exemptions

4.84 Several of the license conditions imposed on AES, including the "tie down" condition, appear to be in the nature of standard directives that could be incorporated into the rules that govern Part 70 applicants and licensees. Nonetheless, given that the choice between rulemaking and adjudication (i.e., issuing orders or other license revisions) is within the agency's discretion, *see Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-

01-12, 53 NRC 459, 474 (2001), this ultimately is a matter of efficiency for the Staff to determine.

4.85 Potentially more problematic in this regard is the exemption granted by the Staff to allow AES to begin preconstruction activities at the EREF site. Current Part 30, 40, and 70 requirements state that for a proposed nuclear materials-related activity, including uranium enrichment, "commencement of construction" relative to that activity prior to a favorable Staff conclusion regarding the NEPA cost-benefit balance associated with the proposed activity is "grounds for denial" of the authorization to conduct that activity. 10 C.F.R. §§ 30.33(a)(5) (byproduct material), 40.32(e) (source material), 70.23(a)(7) (special nuclear material). Further, existing Parts 30, 40, and 70 regulations define "commencement of construction" to include "clearing of land, excavation, or other substantial action that would adversely affect the environment of the site." *Id.* §§ 30.4, 40.4, 70.4. As is explained in the SER accompanying the Staff's March 17, 2010 letter granting the AES exemption request, *see* Exh. NRC000082 encl. 1, at 1-2 (Letter from Daniel H. Dorman, Director, FCSS, NMSS, to George Harper, Licensing Manager, AES (Mar. 17, 2010)) [hereinafter Staff Construction Exemption Approval], notwithstanding the existing regulatory language in Parts 30, 40, and 70, a recent change to the definition of "construction" in the context of power reactor licensing under 10 C.F.R. Parts 50 and 52 has established that a variety of activities considered "construction" under the definitions that still govern nuclear materials facilities, including the type of site clearing/grading and building that AES wishes to undertake prior to the completion of the Staff's environmental review of its EREF application,[23] would now be considered "preconstruction" activities that are allowed to be undertaken at reactor sites without any prior NRC authorization. What the Staff is permitting with this exemption is the extension of this reactor regime to materials facilities, including the EREF and the General Electric (GE)-Hitachi (GEH) laser enrichment facility.[24]

4.86 Two things are of note relative to this exemption. First, the Commission has published a proposed rule that would revise sections 30.33(a)(5), 40.32(e),

[23] Under 10 C.F.R. § 50.10(a)(2) activities that are no longer considered "construction" include clearing of the site, grading, installation of drainage, erosion and other environmental mitigation measures, and construction of temporary roads and borrow areas; erection of fences and other access control measures; excavation; erection of support buildings (such as construction equipment storage sheds, warehouses and shop facilities, utilities, concrete mixing plants, docking and unloading facilities; and office buildings) for use in the construction of the facility; building of service facilities such as paved roads, parking lots, railroad spurs, exterior utility and lighting systems, potable water systems, sanitary sewerage treatment facilities; and transmission lines. *See* Staff Construction Exemption Approval encl. 1, at 2.

[24] A similar request to the Staff for the GEH Global Laser Enrichment facility was approved by the Staff in May 2009. *See* Letter from Daniel H. Dorman, Director, FCSS, NMSS, to Albert E. Kennedy, Licensing Manager, GEH (May 8, 2009) (ADAMS Accession No. ML083519647).

and 70.23(a), and the definition sections associated with those provisions, to permit the type of preconstruction activities that are allowed under Part 50 and the exemption granted to AES. *See* Licenses, Certifications, and Approvals for Material Licensees, 75 Fed. Reg. 43,865, 43,872-75 (July 27, 2010). Relying on the agency's recent legal interpretation that it lacks authority under the AEA and NEPA to regulate "preconstruction" activities, *see id.* at 43,867, if adopted this proposed rule would revise the existing definition of "commencement of construction" in Parts 30, 40, and 70 to conform these provisions to the Part 50 standard. In addition, as was noted in the *Vogtle ESP* proceeding, *see Vogtle ESP,* LBP-09-19, 70 NRC at 503-04, in contrast to the regulatory scheme that permits certain "construction" activities to be undertaken at a reactor site pursuant to a limited work authorization so long as a site redress plan is submitted, *see* 10 C.F.R. § 50.10(d), (g), there is no agency requirement that an applicant submit a redress plan relative to preconstruction activities nor, 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.

4.87 To be sure, consistent with the representations made by the Staff in its exemption grant and during the evidentiary hearing, the environmental impacts of preconstruction activities have been assessed as part of the final EIS for this proceeding, *see* 1 Office of Federal and State Materials and Environmental Management Programs, NRC, [EIS] for the Proposed [EREF] in Bonneville County, Idaho, NUREG-1945, at 4-2 to -111 (Feb. 2011) (ADAMS Accession No. ML11014A005), and, as such, are subject to Board scrutiny in the context of the NEPA/environmental-related portion of this proceeding. At the same time, given that our authority is to conduct a sufficiency review of the Staff's actions, and in light of the current Commission-endorsed regulatory approach to power reactor preconstruction activities and the pending agency rulemaking to apply that approach to materials facilities like the EREF, we have no compelling basis for concluding that the grant of this conforming exemption to permit certain defined preconstruction activities at the EREF was inappropriate.

4.88 Accordingly, and as is the case with the various other license conditions, exemption requests, and the "special authorization" discussed above, on the basis of the evidentiary record before us, we conclude the Staff's action adopting this exemption is adequately supported. We note, however, that our conclusions regarding the sufficiency of the Staff's review are contingent on any final license issued to AES actually containing the conditions/exemptions/special authorizations that we have described above.

4. Commitment Followup and Tracking

a. Introduction

4.89 As the Board noted in its initial publicly available safety question 2, AES has made a number of commitments to the Staff in the course of its SAR, and the associated ISAS, regarding future actions AES will take. Likewise, AES has made a significant number of analysis assumptions about such items as future geometric arrangements, operational procedures, and in-place safety systems that cannot be verified in the near term. *See* Board Initial Publicly-Available Safety Questions attach. A, at 1. Tracking and verifying that these items, as well as the license conditions discussed in section IV.A.3, above, are being properly implemented is an important aspect of the agency's responsibility for protecting the public health and safety. To obtain a better understanding of how the Staff intended to fulfill this obligation relative to the AES application, the Board requested that as part of the January 2011 evidentiary hearing the parties outline the full scope of this commitment followup/tracking process, including the process for ensuring license conditions are satisfied. The parties' presentation also was to employ examples from the NEF commitment followup/tracking process, as appropriate, to illustrate how the parties anticipate the process will work for the EREF. The Board requested that the parties, in particular, describe:

a. Management structure and responsibilities under the process;

b. Approximate number of individuals engaged in the effort;

c. Planning for the process;

d. Requirements and training for inspectors relative to the process;

e. Estimated time schedule for completing the process, particularly as compared to the NEF process;

f. Coordination of the process with AES;

g. Methodology for compiling and updating the checklist of commitments;

h. Process for resolving disputes with AES regarding satisfactory commitment completion; and

i. Lessons learned from the process used at the NEF.

Board Presentation Topics Order at 4.

b. Witnesses and Evidence Presented

4.90 The lead party for this presentation was also the Staff, whose pre-

sentation materials were admitted into evidence. *See* Exh. NRCR00120 (Staff Presentation for Topic #4, Commitment Follow-up and Tracking) [hereinafter Staff Commitment Followup/Tracking Presentation]. Testimony on behalf of the Staff was provided by Deborah Seymour, while AES provided Jim Kay as a witness. *See* Tr. at 247-66.

(i) STAFF WITNESS

4.91 The background and qualifications for Staff witness Deborah Seymour were set forth previously in section IV.A.3.b(i), *supra.*

(ii) AES WITNESS

4.92 The background and qualifications for AES witness Jim Kay were set forth previously in section IV.A.3.b(ii), *supra.*

4.93 Based on the respective qualifications and experience of the proffered witnesses, the Board finds each of these Staff and AES witnesses qualified to testify regarding the commitment followup/tracking process associated with the EREF.

c. Regulations and Guidance Regarding Commitment Followup and Tracking

4.93 Under sections 40.41(g) and 70.32(k) of the NRC's regulations, a uranium enrichment facility cannot be operated until the agency verifies through inspection that the facility has been constructed in accordance with the license. As a consequence, an inspection manual chapter (IMC) is developed for the facility that defines the construction inspection program (CIP) intended to (1) provide reasonable assurance that the design, construction, and implementation of IROFS will protect against natural phenomena and the consequences of potential accidents; (2) verify the QA program was adequately implemented during construction; and (3) verify that the construction of the IROFS was completed in accordance with the documents comprising the license application, including the SAR and the ISAS, and the SER. The CIP applies to all construction activities, including design, procurement, fabrication, construction, and preoperational testing activities. *See* Exh. NRC000123, at 1 (NMSS, NRC, NRC IMC 2696, LES Gas Centrifuge Facility Construction and Pre-operational Readiness Review Inspection Programs (Oct. 19, 2006)).

d. Evidentiary Findings

4.94 Relative to the Staff's CIP and the associated ORR process that will

be applied to the AES facility, the CCI, which operates out of the agency's Region II office in Atlanta, Georgia, has direct responsibility for conducting those oversight activities, albeit in regular consultation with, and with assistance from, NMSS staff personnel who are responsible for the agency's AES licensing review. In implementing its CIP responsibilities relative to the EREF, CCI personnel will follow an IMC, i.e., the soon-to-be-issued IMC 2635, that is designed to provide verification of a schedule and QA program implementation for construction activities, including activities relating to IROFS construction. By way of comparison, for the LES CIP, between 2007 and 2010 the Staff employed thirty-eight inspectors who logged some 5000 hours of work, although based on its LES experience the Staff anticipates using 40% fewer inspection resources to complete the EREF CIP. *See* Tr. at 247-52 (Seymour Test.); Staff Commitment Followup/Tracking Presentation at 3-7.

4.95 One of the key steps in the planned inspection process is identifying program requirements with which the licensee must comply. This could include Part 70 requirements, or commitments made by the applicant in licensing basis documents such as the SAR or the ISAS. Further, in conducting a proper inspection, an individual inspector, in addition to being trained in accord with the standards in the more generic IMC 1252, *see* Exh. NRC000122 (NRC IMC 1252, Construction Inspector Training and Qualification Program (Dec. 7, 2009)), must ensure that he/she is familiar with the applicable requirements for the facility in his/her particular area of expertise. The identified IROFS will be a significant focus of the inspection, along with other important items that will be inspected based on sampling done in accordance with the inspection plan developed by NRC inspectors and their managers to verify implementation of the license requirements. And when the inspections are completed, the results will be documented and the findings will be tracked. *See* Tr. at 252-54 (Seymour Test.); Staff Commitment Followup/Tracking Presentation at 8-9.

4.96 In the case of the EREF, although a firm date has not been set because the license application has not been granted, the Staff anticipates that inspections could start late in 2011 or early in 2012, when enrichment facility construction could begin, and continue through to the first centrifuge cascade startup in 2014. In the end, however, the duration of the construction inspections and the ORR are determined by the licensee's construction schedule, which the Staff anticipates will be shorter than for the LES NEF given the lessons learned in the construction of that facility. Also, because construction schedules change, the Staff anticipates periodic meetings and other communications with AES to attempt to avoid inspection activities becoming critical path items that affect facility operation. *See* Tr. at 255-56 (Seymour Test.); Staff Commitment Followup/Tracking Presentation at 10-11.

4.97 In terms of compiling and tracking commitments and license conditions, any AES commitments in its SAR or other licensing documents, as well as the

license conditions imposed by the Staff, will be the subject of inspections to ensure those items are implemented. Further, as was noted earlier, *see* section IV.A.3.d, *supra,* the approximately 100 IROFS identified for the EREF will be a focus of the inspection process, along with other important items that will be scrutinized on a sampling basis, with the results of those inspections being recorded and tracked. Likewise, the Staff will record and track the results of the preoperational ORR, which is required by a Staff-imposed license condition, *see* section IV.A.3.d, *supra,* and includes safety program readiness, NCS, and radiation safety reviews. Recording and tracking is done via a series of tables listing IROFS and other requirements, such as SAR commitments and license conditions, that are created by the licensee and utilized by the Staff to ensure that all items are accounted for and their completion/closeout status is known. *See* Tr. at 257-58 (Seymour Test.); Staff Commitment Followup/Tracking Presentation at 12-14.

4.98 To address any disputes that arise over whether a commitment or license condition has been fulfilled, the initial Staff approach is to discuss the matter with the licensee to ensure that there is a full understanding of the issue. A typical licensee response to such a communication would be to place the issue into the licensee's corrective action program and move forward to rectify the matter. The issue and the inspection findings regarding the issue and its resolution also would be recorded in an NRC inspection report. In addition, that report would document any enforcement action that might be instituted if it was determined the applicant failed to meet an enforceable NRC requirement. *See* Tr. at 258 (Seymour Test.); Staff Commitment Followup/Tracking Presentation at 15.

4.99 Regarding lessons learned from the process recently used at the LES NEF to track and follow up on applicant commitments and similar items, the value of frequent communications was a lesson learned from Staff experience with the NEF, as well as with the Savannah River, South Carolina MOX fuel fabrication facility. Along this same line, as a result of its experience with the construction of these two facilities, the Staff now sees the value at fuel cycle facility sites of having a construction resident inspector who can observe ongoing construction and coordinate necessary inspection activities based on the current situation. Both the LES and MOX facilities now have onsite inspectors, the former covered by an inspector on a 2-month rotational assignment while the latter has two resident inspectors. Also important is having those inspectors onsite as soon as possible to start looking at the construction and QA programs and identifying any problems early on before discrepancies proliferate. Finally, for this process to be successful, it is important that the licensee have a finalized, or near finalized, facility design prior to the beginning of construction. A finalized design minimizes the need to commit additional Staff resources to repeat inspections because of changes in the design and in any associated commitments. *See* Tr. at 259-62 (Seymour Test.); Staff Commitment Followup/Tracking Presentation at 16. AES indicated that the

need for a finalized design has been reinforced in management meetings with the NRC, and before beginning construction the applicant is committed to an "as close to final design." Tr. at 262 (Kay Test.).

4.100 Staff experience with both the NEF and global nuclear construction generally also has highlighted the need for a robust facility QA program that is implemented by both the applicant and the facility's contractors and vendors. A "paper" program is not sufficient. Rather, the program must be one with strong implementation, a position AES endorses and has as its objective. Also identified as a lesson learned is the necessity for the applicant's construction organization to ensure identified issues are "rolled up" into one corrective action program, regardless of the number of different construction contractors and vendors that are involved. The AES approach to its corrective action program will be "very similar" to the Staff-endorsed QA program in terms of a focus on collecting corrective action and condition reports and applying the corrective action to all entities onsite. Tr. at 263-66 (Seymour Test.), 263, 265, 266 (Kay Test.).

e. Board Conclusions Regarding Commitment Followup and Tracking

4.101 An applicant's commitment as part of the license review process to undertake certain actions to satisfy the Staff's technical or other safety-related concerns, and a license condition imposed by the Staff to require that an applicant take certain actions deemed necessary to protect the public health and safety, are important aspects of the licensing process. Both are intended to address matters that fall outside the specific coverage of the requirements of Parts 30, 40, and 70 that implement the AEA mandate to protect the public health and safety. As a consequence, ensuring that each commitment or condition is tracked by the Staff and is the subject of appropriate followup to assure the applicant does what it committed or is required to do is a hallmark of an effective regulatory process. In this instance, based upon the evidentiary record before the Board, we conclude that the Staff's tracking and followup process, as implemented in the agency's inspection and enforcement programs, reasonably supports the Staff's determination regarding the ability of those programs to provide the requisite public health and safety protection under the AEA.

B. Additional Items

1. Safety Topics Raised by the Board But Not Addressed at the Evidentiary Hearing

4.102 As was noted previously, following the issuance of the Staff's SER, the Board posed questions to AES and the Staff in a number of areas, some of which involved nonpublic information. *See supra* note 7 and accompanying text.

A number of these questions related to other portions of the applicant's SAR and/or the Staff's SER that were not encompassed by the presentation topics. Below, we outline our findings relative to those matters.

a. Board Public Safety Question Topics Not Warranting Further Discussion

4.103 Among the areas that were the subject of publicly available Board questions but were not covered by evidentiary hearing presentation topics were (1) the significant safety-associated differences between the AES and LES applications and lessons learned from licensing the NEF that were used in reviewing the EREF application, *see* Board Initial Publicly-Available Safety Questions attach. A, at 1 (Public Safety Question 1); (2) adequacy of design and operating procedures to maintain product cylinder safety design limits, *see id.* at 2 (Public Safety Question 4); (3) preclusion of centrifuge array criticality via multiple procedure barriers, *see id.* (Public Safety Question 5); Board Additional Publicly-Available Safety Questions at 2 (Supplement to Public Safety Question 5); (4) creation of RD relative to AES facility and need for implementation of Pentapartite Agreement as prerequisite to AES license, *see* Board Initial Publicly-Available Safety Questions attach. A, at 3 (Public Safety Question 6); (5) insurance coverage of hazardous chemicals produced from licensed materials, *see id.* (Public Safety Question 7); Board Additional Publicly-Available Safety Questions at 3 (Supplement to Public Safety Question 7); (6) evaluation of feed material to ensure noncontamination, *see* Board Initial Publicly-Available Safety Questions attach. A, at 3 (Public Safety Question 8); Board Additional Publicly-Available Safety Questions at 3 (Supplement to Public Safety Question 8); (7) completion of site liquefaction and settlement studies as licensing prerequisites and Staff SER hydrology analysis, *see* Board Initial Publicly-Available Safety Questions attach. A, at 4 (Public Safety Questions 12 and 13); (8) independence of Quality Assurance, Environmental Health Safety and Licensing, Safety, Security and Emergency Preparedness, and Safeguards Managers and incident investigation teams, *see id.* at 5 (Public Safety Question 16); (9) independence of Radiation Protection/Chemistry Manager and precedence of authority between these managers in an accident situation, *see id.* (Public Safety Question 17); Board Additional Publicly-Available Safety Questions at 3 (Supplement to Public Safety Question 17); (10) implementation of as low as reasonably achievable (ALARA) principle, *see* Board Initial Publicly-Available Safety Questions attach. A, at 6 (Public Safety Question 18); (11) visual inspection of fuel tail cylinders, *id.* (Public Safety Question 19); (12) use of proposed Hobbs, New Mexico deconversion facility for processing DU from EREF, *see id.* (Pubic Safety Question 20); (13) staffing of NRC QA program certification audit teams, *see id.* at 7 (Public Safety Question 22); (14) AES guidance for classifying occurrences as abnormal for purpose of conducting incident investigations, *see id.* (Public Safety Question 23); (15) QA Manager's criteria

for assessing timeliness of corrective actions and ordering work stoppage, *see id.* (Public Safety Question 24); (16) differences between original NUREG-1520 and its revision 1, *see id.* (Public Safety Question 25); and (17) classification of SAR safety appendices as Official Use Only (OUO) information (Public Safety Question 27).

4.104 The Board concludes that the Staff's and the applicant's written responses to these questions, *see supra* note 8 and accompanying text, adequately addressed the Board's concerns in those areas.[25] Accordingly, we consider these AEA-related safety issues resolved for this proceeding. *See Clinton ESP,* CLI-06-20, 64 NRC at 21-22.

b. Board Public Safety Question Topics Warranting Additional Discussion

4.105 In addition to the subjects outlined in section IV.B.1.a, above, that were the subject of Board questions, there were several other areas that were the subjects of Board questions and party answers that were not covered by the evidentiary hearing presentation topics, but which merit some additional discussion. These include the potential threats to safety posed by the eruption of basaltic lavas and wildfires in the vicinity of the proposed site and the qualifications of the EREF's NCS manager.

(i) VOLCANIC HAZARDS

4.106 Because the Eastern Snake River Plain (ESRP) physiographic province on which the EREF is to be located has been volcanically active during the last 17 million years, the applicant developed a probabilistic volcanic hazard analysis (PVHA) for the proposed site. *See* SER at 1-31. The study concluded that the annual probability that a lava flow would impact a future facility is $5 \times 10E\text{-}06$, equivalent to a 200,000-year interval between lava inundations. *See id.* at 1-33. The NRC Staff reviewed the analysis and found it acceptable. *See id.* In its initial set of questions, the Board asked the parties to provide additional information to clarify and explain the methods used to derive the PVHA.[26] *See* Board Initial Publicly-Available Safety Questions attach. A, at 4 (Public Safety Question 11).

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[25] The Board also finds, based on the resumes, CVs, and SPQs admitted as part in the evidentiary record, that the various individuals proffered by AES and the Staff to answer these questions have established their qualifications to respond to the questions.

[26] In addition to its question about the substance of the AES volcanic hazards analysis, the Board asked the parties for an explanation/justification as to why the SAR and SER appendices containing, respectively, the AES ISAS and the Staff's analysis of that summary were being treated as nonpublic information as they relate to accident sequences associated with natural phenomena such as wildfires

(Continued)

4.107 The PVHA developed by AES for the EREF site is based on methods and data used for recent volcanic hazards assessments of Idaho National Laboratory (INL) facilities. *See* SER at 1-33. Parameters used for calculating the probability that a lava flow will inundate a particular site are (a) the recurrence interval for eruptions within the appropriate volcanic zone; (b) the topographic setting of the site; (c) the lengths and areas of basalt lava flows from the region of interest during the recent geologic past; and (d) the distance between the site and the potential vents of future lava flows. Because the site of the proposed EREF is located within a 579-square-mile region of volcanic vents known as the axial volcanic zone (AVZ), all the probability calculations in the applicant's PVHA use an event recurrence of $6.2 \times 10E\text{-}05$ eruptions per year (approximately one eruption every 16,000 years) that was previously estimated for this area by the INL-related studies. The probability that a future lava flow will cover the proposed site was determined by multiplying this value times the probabilities for the additional processes or conditions necessary to produce the result of interest. *See id.*; Exh. NRC000067, at D-5 to -6 ([EREF ISAS] app. D (rev. 2 Apr. 30, 2010)) [hereinafter AES PVHA];[27] Exh. AES000049, at 470 (William R. Hackett et al., Volcanic Hazards of the [INL], Southeast Idaho, in Tectonic and Magmatic Evolution of the Snake River Plain Volcanic Province: 30 Idaho Geological Surv. Bull. 461 (Bill Bonnichsen et al. eds., 2002)) [hereinafter INL Volcanic Hazards Article].

4.108 The applicant used two different approaches to calculate this proba-

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and volcanoes. *See* Board Initial Publicly-Available Safety Questions attach. A, at 7 (Public Safety Question 27). In response, the Staff indicated that in accord with NRC RIS 2005-31, "[i]nformation related to accident sequences is withheld whether the sequences are initiated by natural hazards, process hazards, or failure of controls" and, as such, the information appearing in the ISAS and the Staff's SER analysis of that summary would be deemed to contain Sensitive Unclassified Non-Safeguards Information (SUNSI) and so was properly withheld from public dissemination. *See* Staff Response to Initial Publicly-Available Board Safety Questions at 36 (citing Exh. NRC000086 (NMSS, NRC, Control of Security-Related [SUNSI] Handled by Individuals, Firms, and Entities Subject to NRC Regulation of the Use of Source, Byproduct, and Special Nuclear Material, NRC RIS 2005-31, app. 1 (Dec. 22, 2005))). To whatever degree this withholding justification survives the recently issued Executive Order regarding controlled unclassified information, *see* Exec. Order No. 13,556, 75 Fed. Reg. 68,675 (Nov. 9, 2010), and/or the recent Supreme Court decision in *Milner v. Department of the Navy,* 131 S. Ct. 1259 (2011), it still appears to be overly broad, as is evidenced by the substantial volume of material that was provided, to its credit, by AES for the public record in this proceeding in response to the Board's volcanic hazard inquiry. *See* AES Response to Initial Publicly-Available Safety Questions at unnumbered pp. 6-17. Of course, short of intervening in this proceeding and requesting the material under a protective order in order to formulate contentions or filing a Freedom of Information Act (FOIA) request, members of the public have no way of obtaining this information.

[27] In preparing this analysis regarding the PVHA, the Board has incorporated some material from the discussion in the AES PVHA that it is apparent, based on the material presented by AES in response to the Board's safety question 11, is not considered to be nonpublic information.

bility. Analysis one took into account the topographic setting and calculated the probability that an eruption would take place within the shallow basin in which the proposed EREF site is located as well as the probability that an eruption within the basin would inundate the EREF site. Analysis two did not account for topography and simply used the average size of lava flows on the INL site to calculate what percentage of the total area of the AVZ would be inundated by a future eruption at a random location. The value of 5 × 10E-06 cited by the applicant and accepted by the NRC Staff is the average of these two analyses. *See* SER at 1-33; AES PVHA at D-5 to -6.

4.109 Part (a) of the Board's public safety question 11 focused on the AES estimate for the recurrence interval of volcanic eruptions in the vicinity of the proposed site, which was calculated using data from field mapping, radiometric dating, and paleomagnetic measurements. The PVHA used a spatially and temporally homogeneous model for volcanism in the AVZ, meaning that future eruptions are equally likely to take place at any location within the volcanic zone, and the rate of volcanic activity is neither increasing nor decreasing through time. *See* INL Volcanic Hazards Article at 469, 472. The Board noted, however, that the most recent eruptions in the AVZ have been from vents located only 5 miles from the EREF site and asked why future eruptions were not more likely to occur in this area than in other parts of the AVZ. *See* Board Initial Publicly-Available Safety Questions attach. A, at 4.

4.110 AES expert consultant Dr. William R. Hackett provided a detailed answer in the AES response to this question.[28] Dr. Hackett pointed out three factors that argue against the premise that the area close to the EREF site is at greater risk for an eruption than other parts of the AVZ: (1) an analysis of the distribution of the youngest lava fields in the AVZ (<13.3 thousand years old) demonstrates that the proportion of young volcanoes to older volcanoes is no greater in the vicinity of the EREF than it is in the AVZ generally; (2) examination of the relevant geologic mapping of the area demonstrates the homogeneous spatial distribution of all volcanic vents along the length of the AVZ, indicating that the region close to the EREF site has been no more volcanically active than at any other part of the AVZ; and (3) basaltic volcanoes of the eastern SNRP are almost entirely monogenetic, meaning that they produce lavas over short periods of time

[28] Dr. Hackett, who has a B.A. in geology from Franklin and Marshall College, an M.S. in earth science from Case Western Reserve University, and a Ph.D. in geology from Victoria University, Wellington, New Zealand, has been involved in a variety of professional activities including conducting the volcanic hazard analysis for several facilities at the INL and being a member of the expert panel that developed the PVHA for the proposed high-level nuclear waste repository at Yucca Mountain, Nevada. *See* Exh. AES000010, at 1-2 (Resume of William R. Hackett). Based on his qualifications and experience, the Board finds Dr. Hackett qualified to provide expert answers regarding the volcanic hazards associated with the EREF.

and do not reawaken after long periods of dormancy. *See* AES Response to Initial Publicly-Available Safety Questions at unnumbered pp. 8-9. Given these three factors, Dr. Hackett asserted, the location of a young volcanic field near the EREF site is not a good indicator that future eruptions also will take place at this location. In addressing this question, Dr. Hackett also pointed out that although the distribution of volcanic vents along the length of the AVZ is homogeneous, there is a tendency for vents to be more abundant on the southern flank of a broad central ridge that runs along the axis of the volcanic zone. As a consequence, according to Dr. Hackett, lavas produced by future eruptions are more likely to flow southward, away from this topographic crest and from the EREF site. *See id.* at unnumbered pp. 7-9.

4.111 The Board's question 11(b) focused on the study by Champion and others that was cited and discussed in ISAS appendix D, in which a time interval for lava inundations in the southeastern part of the INL was identified that is substantially shorter than the 200,000-year interval put forth in the EREF PVHA. *See* Exh. AES000047, at 189-91 (Duane E. Champion et al., Accumulation and Subsidence of Late Pleistocene Basaltic Lava Flows of the [ESRP], Idaho, in Geology, Hydrogeology, and Environmental Remediation: [INL], [ESRP], Idaho: 353 Geological Soc'y of Am. Special Papers 175 (P.K. Link & L.L. Link eds., 2002)). The Board questioned why the two estimates AES deemed credible are so different and why the longer estimate is appropriately conservative. *See* Licensing Board Initial Publicly-Available Safety Questions attach. A, at 4.

4.112 In response to Board question 11(b), Dr. Hackett explained how the method used by the Champion study for determining the average time intervals between lava inundations differed from the one used in the INL studies relied upon in putting together the PVHA, and further maintained that the PVHA may provide a more robust assessment of the potential volcanic hazard at the EREF site. As noted above, the INL method utilized for the PVHA is based on an analysis of geologic maps showing the locations and extent of volcanic vents and lava flows and utilizes a homogeneous model for volcanism in the AVZ to estimate the probability that a future eruption will inundate the EREF site. In contrast, the Champion study was based on rock cores from about twenty boreholes in the southern part of the INL and calculated inundation recurrences by radiometrically dating selected samples in each core and dividing the total time interval represented by the core by the number of individual lava flows intersected in that borehole. Dr. Hackett also indicated that an important distinction between the Champion and PVHA methods lies in their definition of a "volcanic event." In the PVHA analysis a single volcanic event is defined as a series of related (co-magmatic) eruptions that take place over a time period of several months to several years. According to Dr. Hackett, under the Champion method, a "volcanic event" is indicated by a lava flow or group of closely related lava flows that covered a very specific site. Dr. Hackett noted, however, that multiple boreholes

and detailed measurements of core samples are not available within or near the EREF site. As a consequence, according to Dr. Hackett, the PVHA approach has an advantage over the borehole method of Champion because lava flows sampled in the INL cores present a record of eruptions from a number of source zones, whereas the PVHA focuses specifically on an extensive set of data from the AVZ, the region that is most relevant to the EREF site. *See* AES Response to Initial Publicly-Available Safety Questions at unnumbered pp. 10-13.

4.113 In its answer to Board safety questions 11(a) and (b), AES also included two additional analyses of hypothetical scenarios in which the set of parameters differed from the analyses in the docketed PVHA. Analysis three used eruption recurrence intervals and lava flow statistics from only the most recent volcanic events in the AVZ (<13.3 thousand years). This resulted in a shorter event recurrence interval of 2.3 × 10E-04 per year that, in turn, raised the probability for the inundation of a random site to 3 × 10E-05 per year, equivalent to an interval between inundations of 33,300 years. Dr. Hackett, however, emphasized that this scenario is not a credible scheme for future lava inundation because it relies on only three eruptive events rather than the entire history of events within the AVZ. *See id.* at unnumbered pp. 9-10. According to Dr. Hackett, there was no significant justification for giving greater weight to the most recent eruptions relative to all other events in the AVZ over the past 750,000 years, and he noted that if only events during the last 200,000 years are considered, event recurrence is substantially longer than the 16,000-year interval uniformly applied to the AVZ in the homogeneous temporal model used in the PVHA. *See id.* at unnumbered pp. 13-14.

4.114 In contrast, analysis four used the event recurrence interval calculated for all AVZ eruptive episodes, but increased the area covered by the resulting lava flows to that of an average-sized ESRP shield volcano, rather than using the smaller value based on lava flow statistics from the INL. The probability for inundation at a random site in the AVS in this scenario is 8.7 × 10E-06 per year (115,000-year inundation recurrence). Given that the defensible and credible scenarios calculated in the PVHA and in analysis four all result in inundation recurrences of 100,000 years or longer, Dr. Hackett asserted that an inundation recurrence of 10E-05 per year or less was appropriate, which is consistent with the PVHA result. *See id.* at unnumbered pp. 14-16.

4.115 As is reflected in the discussion above, the PVHA performed for the AES license application utilizes the considerable store of data available for the ESRP region and follows well-established PVHA development procedures. The process utilized for assessing the volcanic hazard at the EREF thus appears to be on solid footing. That being said, it also is apparent from that analysis that there is a potential volcanic hazard at that site, which raises the question whether the probability of such an event is sufficiently low to be considered "highly unlikely" as that term is used in 10 C.F.R. § 70.61, which the Staff defines as an event

having a probability of 10E-05 per event, per year, or less, *see* Revised Staff Fuel Cycle SRP at 3-31. In that regard, as was described above, lava flow hazard, which is the most likely type of volcanic hazard at the site, has a probability that falls at or below the level defined by the Staff as highly unlikely.

4.116 Additionally, we think it worth noting that this volcanic hazard differs from seismic or weather hazards. Because there is no reasonable likelihood a facility can survive being inundated by lava, such a possibility cannot be planned for in the design of the facility. On the other hand, as AES describes in its answer to Board question 11(c) regarding possible minimization preparations and procedures, since lava generally flows slowly, a facility would have a warning of from days to months and could attempt to mitigate the hazard prior to inundation by constructing diversions, evacuating personnel, and possibly removing hazardous materials, an opportunity not generally provided by earthquakes and floods. *See* AES Response to Initial Publicly-Available Safety Questions at unnumbered pp. 16-17.

4.117 Taking all this into account, the Board concludes that the written response by AES to Board questions 11(a), 11(b), and 11(c) adequately addressed our concerns in this area and we consider these issues to be resolved.[29] *See Clinton ESP,* CLI-06-20, 64 NRC at 21-22.

(ii) WILDFIRES

4.118 In its public safety question three, the Board noted that AES dismissed offsite wildland fires as a noncredible threat to the facility and, therefore, did not evaluate this item as a potential safety hazard. The Board asked the parties to cite the studies on which this assertion was based and discuss what impact an event

[29] The Board did not pose any questions to the parties regarding the matter of seismic safety, another potentially relevant geologic phenomenon relative to the EREF. Nonetheless, based on our review of the AES ISAS and the Staff's SER, we note that both emphasize that nearly all the significant historic earthquakes in the region of the proposed EREF, including the 1983 Borah Peak 6.8 momentum magnitude (Mw) earthquake and the 1959 Hebgen Lake 7.3 Mw earthquake, have been related to movement along normal faults located outside the ESRP in the surrounding Basin and Range and Yellowstone provinces, with few earthquakes having occurred within the ESRP itself. *See* SER at 1-26 to -27. Moreover, the AES probabilistic seismic hazard assessment (PSHA) for the EREF site used models for ground motion attenuation that included specific predictions for normal faults and were applicable to bedrock conditions at the site. *See id.* at 1-28. The Staff concluded that the AES PSHA provided "an adequate approach to develop seismic inputs for design and performance consideration in the application and thereby meets the regulatory requirements in 10 CFR 70.65(b)(1)." *Id.* at 1-30. We find no basis to question this conclusion. From our perspective, the AES seismic hazard analysis appears to be highly site-specific, reflecting consideration not only of the location and magnitude of historic earthquakes, but also the nature of the bedrock at the EREF and the style of faulting in the region surrounding the ESRP (i.e., normal faults associated with extensional tectonic environments), which is different from the type of faulting that occurs in a subduction environment such as produced the recent 9.0 Mw earthquake off the eastern coast of Japan.

similar to the July 2010 INL site range fire could have on the proposed EREF. *See* Board Initial Publicly-Available Safety Questions attach. A, at 2 (Public Safety Question 3).

4.119 In its response to the first part of this question, the Staff asserted an NEF analysis showed that burning diesel fuel would be incapable of rupturing UF_6 cylinders under conditions likely to exist in an accidental fire. *See* Staff Response to Initial Publicly-Available Safety Questions at 9-10. AES cited its own analysis of a similar scenario that concluded that a 30-minute fire in a pool of hydrocarbon fuel 1 meter from stored cylinders would not exceed the acceptance criteria for cylinder rupture. *See* AES Response to Initial Publicly-Available Safety Questions at unnumbered pp. 2-3. Both AES and the Staff emphasized that in light of these analyses, wildfires would not pose a credible hazard because the heat in cylinder storage areas resulting from rangeland fire would be much less than the heat produced by the burning fuel in the accident scenarios. They went on to note that cylinder storage and handling areas would be located at least 30 meters from any natural vegetation capable of supporting wildfire, further reducing the credibility of this hazard. *See* Staff Response to Initial Publicly-Available Safety Questions at 9-10; AES Response to Initial Publicly-Available Safety Questions at unnumbered pp. 3-4.

4.120 Also, in response to the portion of the Board's question referring to the July 2010 INL wildfire, AES stated that structures, systems, or components credited as IROFS would not be affected if a comparable event were to occur on the site of the proposed EREF. Although acknowledging the July 2010 wildfire caused power outages in the area, AES noted that IROFS are designed to "fail-safe" during offsite power failures.[30] AES also stated that smoke and blowing dust, which accompanied the 2010 wildfire, would not impact facility safety because exterior operations and/or building ventilation systems can be shut down without affecting IROFS. *See* AES Response to Initial Publicly-Available Safety Questions at unnumbered pp. 3-4.

[30] The AES ISA process included consideration of the consequences of incidents that might result in a loss of offsite power to the EREF. *See* AES SAR at 3.1-4. In addition to IROFS being "designed such that the safety function is maintained or the feature fails-safe," *id.* at 3.3-14, all facility critical electrical loads are fed from uninterruptible power supplies (UPS), which receive power input from two incoming power sources, four diesel-powered electric generators and stationary batteries, *see id.* at 7.3-3. Because all power inputs to the UPS are designed to transfer automatically to another source if the first source fails, AES maintains loads connected to the UPS should be unaffected by offsite power and standby generator failure. *See id.*

4.121 The Board concludes that its questions regarding the potential hazards posed by wildfire have been adequately addressed by these party responses.[31]

(iii) ADEQUACY OF QUALIFICATIONS OF NUCLEAR CRITICALITY SAFETY MANAGER

4.122 Among the public questions posed by the Board was an inquiry concerning the adequacy of the AES requirements for the position of NCS Manager. *See* Board Initial Publicly-Available Safety Questions attach. A, at 5 (Public Safety Question 15). In response to the Board's query as to why the qualifications of a B.S. degree with 4 years of nuclear experience and 1 year of direct experience in NCS administration are sufficient for the NCS Manager, applicant AES responded that

> [t]he qualifications establish the experience level necessary for managing a technical program and ensuring compliance with applicable procedures, prioritizing work assignments, assigning qualified personnel to appropriate tasks, and undertaking other management activities. The [NCS] Manager is responsible for performing oversight of the criticality safety program but would not actually perform a [NCS] evaluation or serve as the independent reviewer of such an evaluation unless the manager had completed the specific training program for a Criticality Safety Engineer (as described in the SAR Section 2.2.4.AA) (Exh. AES000037).

AES Response to Initial Publicly-Available Safety Questions at unnumbered p. 18. The Board found this response unsatisfactory because it seemed to state that the NCS manager overseeing the criticality safety program might not have either the education or training necessary to understand the basics of nuclear criticality given it is possible to attain a B.S. degree without any exposure whatsoever

[31] Relative to the general issue of fire protection, the Board notes that on January 27 and March 23, 2011, it received 10 C.F.R. § 2.315(a) limited appearance statements expressing concerns about, among other things, the adequacy of fire protection systems in AES process buildings. *See* Letter from Roger Turner to NRC at 2-3 (Jan. 27, 2011) (ADAMS Accession No. ML110310657) [hereinafter Turner Letter]; Letter from Beatrice Brailsford, Nuclear Program Director, Snake River Alliance, to NRC Office of the Secretary and Board Chair at 2 (Mar. 23, 2011) (ADAMS Accession No. ML110820826) [hereinafter Brailsford Letter]. Although section 2.315(a) imposes no duty on the Board to respond to these statements as litigable concerns, the Board nonetheless notes that while automatic fire suppression sprinkler systems are provided throughout much of the facility, moderator control restrictions prevent some areas from being covered by sprinklers. *See* SER at 7-11 to -13. For instance, the Staff's SER indicates that the separations building will have automatic sprinkler systems in the process service corridors, but not in the cascade halls. For those areas without sprinkler systems to enhance criticality safety, fire safety is addressed by the combination of fire-resistant construction materials, fire barriers, alarm systems, and control of transient combustibles. *See id.* at 7-10 to -11. We note also that the SER emphasizes that UF_6 itself is not flammable and does not disassociate to flammable constituents under the operating conditions at the facility. *See* SER at 7-14.

to the concept of nuclear criticality, the principles of neutron transport, or the numerical tools used to calculate the degree of criticality of multiple source arrays. Indeed, education in these areas is limited to schools offering nuclear engineering options, usually at the M.S. degree level or beyond. Similarly, 4 years of nuclear experience could be obtained without gaining experience in nuclear criticality determinations.

4.123 As a consequence, the Board posed an additional question. Noting that a typical individual with no more than a B.S. degree and 4 years of nuclear experience most likely has no applicable education or experience with NCS concepts or practice, thus leaving only 1 year of direct experience in NCS administration to qualify to be a candidate to manage NCS at the EREF, the Board asked why was more experience as an NCS engineer not required. In posing this question, the Board also referenced the Staff's response to this question indicating that both LES and Babcock and Wilcox (relative to its Lynchburg, Virginia nuclear fuel fabrication facility) apparently believe additional experience is necessary, and stated "[p]ut another way, how does a manager know the scope of work the [NCS] team is supposed to do, let alone know how to do it correctly, without prior experience in performing similar activities?" Board Additional Publicly-Available Safety Questions at 3 (Supplement to Public Safety Question 15) (citing Staff Response to Initial Publicly-Available Safety Questions at 23-24).

4.124 In its response to this supplemental inquiry, AES stated:

> The requirements for training and experience of the EREF [NCS] Manager are based on the recognition that this technical manager would manage the activities of qualified Criticality Safety Engineers. To manage these activities, AES does require one year direct experience in the administration of NCS evaluations and analyses. However, the [NCS] Manager would not be permitted to perform or serve as technical reviewer for a criticality safety evaluation or calculation without also completing the training and qualifications for a Criticality Safety Engineer that are described in the EREF SAR.
>
> The EREF SAR, Section 2.2.4.I, meets the requirements of NUREG 1520, "Standard Review Plan for the Review of a License Application for a Fuel Cycle Facility," Revision 0, Section 11.4.3.3, Training and Qualifications, which specifies the commitments that should be included in a license application with respect to training and qualifications of key managers in the facility staff as shown below:
>
> > The application should contain such commitments regarding personnel qualification for managers, supervisors, designers, technical staff, construction personnel, facility operators, technicians, maintenance personnel, and other staff required to meet NRC regulations:
> >
> > – Managers should have a minimum of a B.S. or B.A. or the equivalent. Each manager should have either management experience or technical experience in facilities similar to the facility identified in the application.

> The NRC Staff's response to Question 15 also tabulated the education and experience commitments associated with the [NCS] Manager made in licensing documents by a number of other comparable fuel cycle facilities. We understand that the information provided by the NRC Staff was for information only. The acceptability of commitments made in the EREF license application is based on meeting the requirements of NUREG 1520 and not on consistency with other fuel cycle facilities. Nevertheless, AES is consistent with LES in requiring one year direct experience in the administration of NCS evaluations and analyses.

AES Response to Additional Publicly-Available Safety Questions at unnumbered pages 3-4.

4.125 Neither of these AES responses allays the Board's concerns about the competency of an individual meeting the stated AES minimum job requirements to manage nuclear criticality, even at a facility like the EREF that handles relatively low-level uranium enrichments.[32] The argument made by the applicant that "the [NCS] Manager would not be permitted to perform or serve as technical reviewer for a criticality safety evaluation or calculation without also completing the training and qualifications for a Criticality Safety Engineer" neither addresses the issue of how the prospective NCS manager has gained a sufficient understanding of NCS principles and practices to manage the individuals doing such crucial work within the EREF,[33] nor accounts for the knowledge needed by an NCS manager to carry out the important QA duties associated with that position, *see* AES SAR at 11.4-43 (NCS manager must approve changes to safety procedures).[34]

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[32] To be sure, the 5% uranium enrichments created at the EREF are well below those that are generated at, for instance, the Babcock and Wilcox fuel fabrication facility in Lynchburg, Virginia. Nonetheless, the particulate nature of the material utilized at the EREF creates significant criticality challenges that must be understood and carefully considered when establishing or making changes in the procedures associated with the EREF enrichment process.

[33] One obvious way to get such "management" experience would be as a supervisor. In that regard, however, the Staff's SRP specifies that "[s]upervisors should have at least the qualifications required of personnel being supervised." Revised Staff Fuel Cycle SRP at 11-10. Thus, it appears that, consistent with NUREG-1520, to become a supervisor of NCS engineers, and thereby gain the experience to become a manager of NCS engineers, would require the qualifications of an NCS engineer.

[34] Regarding such changes, the SAR declares:

> Should a change to the facility require a [NCS] evaluation or analysis, an individual who, as a minimum, possesses the equivalent qualifications of the Criticality Safety Engineer shall perform the evaluation or analysis. In addition, this individual shall have at least two years of experience performing criticality safety analyses and implementing criticality safety programs. An independent review of the evaluation or analysis shall be performed by a qualified Criticality Safety Engineer.

AES SAR at 2.2-11. Although the SAR allows for such procedural change QA approvals to be done by the NCS Manager "or designee," *id.* at 11.4-43, in our estimation this delegation provision does not justify scaling back the qualifications of the NCS Manager position.

4.126 In the opinion of the Board, given the critical nature of the job being performed, the training and qualifications for a NCS engineer or the equivalent should be a job requirement for those managing the work of individuals having such qualifications. As a consequence, we will add the following condition to the AES license:[35]

4.127 Section 2.2.4.*l* of the AES SAR is amended to substitute the following:

> *l.* Nuclear Criticality Safety Manager
>
> The Nuclear Criticality Safety Manager shall have, as a minimum, a bachelor's degree (or equivalent) in physical science or engineering, as well as two year's experience as a nuclear criticality safety engineer at the EREF or three year's experience as a nuclear criticality safety engineer at another nuclear facility.

b. Board Nonpublic Safety Question Topic

4.128 In addition to reviewing the publicly available information regarding the application and the Staff's SER review, as is noted in section II, above, the Board received and reviewed information submitted by the applicant that was marked as OUO or classified material. Following issuance of the Staff's SER, the Board posed questions to AES and the Staff in a number of areas, some of which involved this nonpublic information. *See supra* note 7 and accompanying text. Those questions related to portions of the applicant's SAR and/or the Staff's SER that were not encompassed by the four hearing presentation topics, including (1) methods used for ensuring that significant accident sequences have been analyzed, *see* Board Initial Nonpublicly-Available Safety Questions attach. A, at 1 (Nonpublic Safety Question 1); (2) calculating average enrichment for UF_6 dump; *see id.* (Nonpublic Safety Question 2); Board Additional Nonpublicly-Available Safety Question at 3 (Supplement to Nonpublic Safety Question 2); (3) frequency of the drills and exercises conducted to demonstrate EP effectiveness, *see* Board Initial Nonpublicly-Available Safety Questions attach. A, at 1 (Nonpublic Safety Question 3); (4) 30-minute release assumption; *see id.* at 2 (Nonpublic Safety Question 4); (5) "light-work" breathing rate assumption; *see id.* (Nonpublic Safety Question 5); (6) population distribution assumption, *see id.* (Nonpublic

[35] Although, as AES observed, its proposed NCS manager minimum qualifications are the same as those that apply for the LES facility, we do not consider that conclusive relative to the EREF given, as the Staff notes in its answer to public safety question 15, *see* Staff Response to Initial Publicly-Available Safety Questions at 23 n.*, the duties associated with the LES position are not necessarily the same. Nonetheless, the Staff may wish to consider the degree to which the qualifications of the NEF NCS manager should now be at the same level as the EREF criticality manager as set forth in the Board-imposed EREF license condition.

Safety Question 6); and (7) consequences of uranium accumulation in degreaser water collection tank, *see id.* (Nonpublic Safety Question 7).

4.129 In Appendix A to this decision,[36] the Board provides its findings relative to those matters, concluding that the staff's and applicant's written responses to the questions, *see supra* note 8 and accompanying text, adequately addressed the Board's concerns in those areas. Accordingly, we consider these AEA-related safety issues resolved for this proceeding. *See Clinton ESP,* CLI-06-20, 64 NRC at 21-22.

2. Safety Matters Not Raised by the Board

4.130 Finally, there are portions of the Staff's SER, such as that dealing with AES's QA program, about which the Board did not make a specific inquiry in this proceeding.[37] We found those portions to be sufficient on their face and therefore did not pursue them further.[38] *See Clinton ESP,* CLI-06-20, 64 NRC at 21-22. We

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[36] Because of the purported nonpublic nature of the information upon which it was based, Appendix A to this decision is only being served upon AES and the Staff, as the parties to this proceeding, via the protective order file component of the agency's E-Filing System, as well as being placed in the nonpublic portion of the official docket of this proceeding. We are, however, requesting that AES and the Staff review the appendix within 7 days of the date of issuance of this decision and provide the Board with a joint report that (1) indicates whether all, or any portion, of the appendix can be publicly released; and (2) in the event portions of the appendix can be made publicly available, indicate what redactions are appropriate. *See South Texas Project Nuclear Operating Co.* (South Texas Project, Units 3 and 4), CLI-10-24, 72 NRC 451, 468 n.99 (2010). Following receipt of that report, the Board will determine what, if any, portions of the appendix can be publicly released and will make appropriate disclosure arrangements.

[Editor's Note: By joint filing dated April 15, 2011, AES and the Staff advised the Licensing Board that, although the information in Appendix A to the Board's April 8 issuance was based on information that is not publicly available, Appendix A itself does not contain information that needs to be treated as nonpublic. As a result, the parties indicated that no redactions are necessary and Appendix A can be made publicly available in its entirety. *See* Joint Report on Public Disclosure of Appendix A to LBP-11-11 (Aug. 15, 2011) at 2. *See* Appendix A following this decision.]

[37] In this regard, we note that in its proposed findings of fact relative to the safety portion of this uncontested hearing, the Staff provided an outline of the significant technical findings and conclusions reached in each of its SER chapters, detailing the myriad safety determinations that support the Staff's finding that construction and operation of the proposed NEF is consistent with protection of the public health and safety and the environment. *See* Staff Proposed Safety Findings at 8-63 (publicly available version).

[38] The limited appearance letters to the Board also raised concerns about whether the SAR and SER (1) reflected an adequately independent analysis of the EREF, given the number of instances in which they purportedly place undue reliance on the LES SAR; and (2) provided a sufficient discussion regarding corrosion impacts to the EREF, take-off systems, and containers. *See* Turner Letter at 1-3; Brailsford Letter at 2. Regarding the former point, to the degree it relates to safety concerns (as

(Continued)

consider the issues addressed in those portions of the SER to be resolved in favor of issuance of the requested Part 70 license.

V. CONCLUSION

5.1 In accordance with the Commission's directives, *see Clinton ESP,* CLI-05-17, 62 NRC at 34, 39; *Clinton ESP,* CLI-06-20, 64 NRC at 21-22, the Board conducted an independent sufficiency review of the Staff findings, and probed those Staff findings by focusing in detail on the AEA/safety-related issues addressed by AES and the Staff in their licensing submissions. In this regard, as was noted in section IV, *supra,* with the exception of the matters of (1) decommissioning financial assurance, aspects of which are currently before the Commission relative to a Board-certified question, *see* section II, *supra*; and (2) the qualifications of the EREF NCS manager, which is the subject of a Board-imposed license condition, *see* section IV.B.1.b(iii), *supra,* relative to those matters that were the subject of a series of Board public or nonpublic questions prior to the hearing, but for which the Board did not request a presentation from either the Staff or AES, *see* section IV.B.1.a, *supra,* the Board was satisfied with the answers provided. *See Clinton ESP,* CLI-06-20, 64 NRC at 21-22. Similarly, with respect to each of the topics that were the subject of party presentations at the January 2011 evidentiary hearing (and which were described in detail in section IV.A, above), the Board concludes that the Staff review was sufficient and reasonably supported in logic and fact, with the caveat that this conclusion relative to the license conditions/exemptions/special authorization discussed in section IV.B.3, above, is contingent upon these conditions/exemptions/special authorization actually being incorporated into the AES license. Finally, the Board was satisfied with the Staff review of topics in its SER that were not the subject of either Board questions or presentations.

5.2 In accordance with the Commission's notice of hearing for this proceeding, see 74 Fed. Reg. at 38,054 (CLI-09-15, 70 NRC at 7), having reviewed the basis for the Staff's AEA/safety-related conclusions, the Board concludes that, subject to an appropriate resolution of the matter of decommissioning financial assurance, aspects of which are currently before the Commission relative to a Board-certified question, and the imposition of the license condition set forth

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opposed to environmental matters, which will be the subject of another portion of this proceeding), while AES and the Staff clearly have taken into account the NEF in analyzing potential EREF safety hazards, we do not find any evidence that there has been mere "copying" without an independent examination of the issues involved. And relative to the latter assertion, as the Staff's SER notes, there is an analysis of hydrogen fluoride corrosion impacts in the AES application. *See* SER at 6-7 to -8. So too, there was an analysis of hydrogen combustion/control issues for the facility generally. *See id.* at 7-15 to -16.

in section IV.B.1.b(iii), above, regarding the qualifications of the EREF NCS manager, (1) the application and record of the proceeding contain sufficient information regarding AEA/safety-related matters to support license issuance; and (2) the Staff's review of the application has been adequate to support the findings to be made by the NMSS Director with respect to the applicable standards in 10 C.F.R. Parts 30, 40, and 70.[39] As a consequence, the Board further concludes that, on the basis of the foregoing factors, the issuance of a license that permits the construction and operation of the proposed EREF will not be inimical to the common defense and security or to the health and safety of the public.

6.1 For the foregoing reasons, it is this 8th day of April 2011, ORDERED that:

A. Any 10 C.F.R. Part 70 license that may ultimately be issued to AES for the construction and operation of the proposed EREF shall contain the condition regarding the qualifications of the NCS manager set forth in section IV.B.1.b(iii), above.

B. Within seven (7) days of the date of issuance of this decision, AES and the Staff shall provide the Board with a joint report that (1) indicates whether all, or any portion, of Appendix A to this decision can be publicly released; and (2) provides a redacted version of the appendix in the event any portion can be made publicly available. *See supra* note 36.

C. Pursuant to 10 C.F.R. § 2.341(a), this PID will constitute a final decision of the Commission forty (40) days from the date of issuance, i.e., on *Wednesday, May 18, 2011,* unless a petition for review is filed in accordance with 10 C.F.R. § 2.341(b), or the Commission directs otherwise. Any party wishing to file a petition for review on the grounds specified in section 2.341(b)(4) must do so within fifteen (15) days after service of this PID. The filing of a petition for review is mandatory for a party to have exhausted its administrative remedies before seeking judicial review. Within ten (10) days after service of a petition for review, any other party to the proceeding may file an answer supporting or opposing Commission review. Any petition

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[39] Issuance of a 10 C.F.R. Part 70 license authorizing the construction and operation of the proposed EREF also must abide the conclusion of the Board's review of NEPA/environmental-related matters associated with the AES application and the Staff's February 2011 FEIS.

for review and any answer shall conform to the requirements of 10 C.F.R. § 2.341(b)(2)-(3).

THE ATOMIC SAFETY AND
LICENSING BOARD

G. Paul Bollwerk, III, Chairman
ADMINISTRATIVE JUDGE

Kaye D. Lathrop
ADMINISTRATIVE JUDGE

Craig M. White
ADMINISTRATIVE JUDGE

Rockville, Maryland
April 8, 2011

APPENDIX A

7.1 In addition to reviewing the publicly available information regarding the application and the Staff's SER review, as is noted in section IV, above, the Board reviewed information submitted by the applicant and the Staff that was marked as OUO or classified. Then, following issuance of the Staff's SER, the Board posed questions to AES and the Staff in a number of areas, some of which involved this nonpublic information. *See supra* note 7 and accompanying text. Those questions related to portions of the applicant's SAR and/or the Staff's SER not encompassed by the hearing presentation topics. Below, we outline our findings and conclusions relative to those matters.

A. Board Nonpublic Safety Question Topics Not Warranting Further Discussion

7.2 Among the nonpublic question areas not covered by the presentation topics were (1) methods used to ensure that significant accident sequences have been analyzed, *see* Board Initial Nonpublicly-Available Safety Questions attach. A, at 1 (Nonpublic Safety Question 1); (2) calculating average enrichment for UF_6 dump; *see id.* (Nonpublic Safety Question 2); Board Additional Nonpublicly-Available Safety Questions at 3 (Supplement to Nonpublic Safety Question 2); (3) 30-minute release assumption; *see* Board Initial Nonpublicly-Available Safety Questions at 2 (Nonpublic Safety Question 4); (4) "light-work" breathing rate assumption; *see id.* (Nonpublic Safety Question 5); (5) population distribution assumption, *see id.* (Nonpublic Safety Question 6); and (6) consequences of uranium accumulation in degreaser water collection tank, *see id.* (Nonpublic Safety Question 7).

7.3 The Board finds that the Staff's and the applicant's written responses to these nonpublic questions, *see supra* note 8 and accompanying text, adequately addressed the Board's concerns in those areas. Accordingly, we consider these AEA-related safety issues resolved for this proceeding. *See Clinton ESP,* CLI-06-20, 64 NRC at 21-22.

B. Board Nonpublic Safety Question Topic Warranting Further Discussion

7.4 In addition to the subjects outlined in section IV.B.1.a, above, that were the subject of Board questions, there was one other area that was the subject of Board questions and party answers that was not covered by the presentation topics but which merits some additional discussion. This item concerns the frequency of the drills and exercises conducted to demonstrate effectiveness of the AES EP.

7.5 In its nonpublic question 3 regarding the AES EP, noting the EP requirement that drills and exercises must be conducted to ensure that all major elements of the EP and preparedness program are demonstrated at least once in each 6-year period, the Board asked whether this exercise frequency was adequate to maintain personnel knowledge and skill to implement emergency responsibilities given the SER statement that the EP provides adequate provisions for drills and biennial exercises. The Staff answered:

> The applicant's [EP] contains provisions to conduct a biennial exercise as required by 10 CFR § 70[.22](i)(3)(xii) with the additional provision to ensure that all of the major elements are demonstrated at least once in a six-year period. Current guidance and regulations for Part 70 licensees do not provide any specific time requirements for demonstration of the major elements. The applicant's approach for the demonstration of the major elements is consistent with the regulations and guidance for nuclear power reactors (i.e., NUREG-0654 and Appendix E to 10 CFR Part 50.)

Staff Response to Initial Nonpublicly-Available Safety Questions at 3.

7.6 Drills and exercises are essential to demonstrating the effectiveness of any plan that involves the time-critical coordinated response of groups of individuals to situations, particularly emergency situations. Putting aside the perplexing absence of any specification in the Part 70 regulations of a particular time within which the major EP elements should be demonstrated, it is not apparent why the specific time period required should not be determined by reference to the industry or facility turnover rate applicable to the employees involved in EP implementation. As perhaps an extreme example, if the average EP employee turnover rate at a facility is 2 years and if the major EP element demonstration requirement is 6 years, it seems quite possible that some number of the current EP personnel at the facility would not have participated in a major element drill or exercise (and might not for several more years, depending on the timing of the major element drill/exercise).

7.7 Be that as it may, the Board finds that the Staff's written response to this nonpublic question, as discussed above, is adequate and we consider this AEA-related safety issue resolved for this proceeding. *See Clinton ESP,* CLI-06-20, 64 NRC at 21-22.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Thomas S. Moore, Chairman
Dr. Paul Abramson
Dr. Anthony J. Baratta

In the Matter of **Docket No. 30-36974-ML**
(ASLBP No. 06-843-01-ML)
(Material License Application)

PA'INA HAWAII, LLC **April 22, 2011**

The Licensing Board grants the NRC Staff's unopposed motion to terminate the proceeding.

MEMORANDUM AND ORDER
(Terminating Proceeding)

In its Initial Decision, this Board returned to the NRC Staff its Environmental Assessment (EA), finding that it failed to provide any analysis of the alternative technology of electron-beam irradiation, alternative sites for the irradiator, and the environmental impacts that might occur from transport accidents of cobalt-60 sources.[1] Upon the Staff's and the Applicant's petition for review, the Commission, in CLI-10-18, affirmed the Board's ruling that the Staff's EA failed to analyze the electron-beam irradiator alternative and alternative irradiator sites, ad-

[1] *See* Initial Decision (Ruling on Concerned Citizens of Honolulu Amended Environmental Contentions #3, #4, and #5) at 51-52, 100, 104, 108-09 (Aug. 27, 2009) (unpublished) [hereinafter Initial Decision].

mitted the Intervenor's pending new amended transportation accident contention, and remanded the proceeding to the Board.[2]

Eight days after the Commission's remand, on July 16, 2010, the Board established a schedule for the remainder of the proceeding keyed to the Staff's publication of a supplement to the EA.[3] The Staff issued the draft supplemental EA in December 2010,[4] followed by a Board-ordered and Commission-affirmed thirty (30)-day public comment period.[5] On March 1, 2011, the Staff issued the final supplemental EA, which *inter alia,* had the practical effect of mooting all outstanding contentions.[6] On March 31, 2011, the Intervenor notified the Board that it did not intend to file any new or amended contentions regarding the final supplemental EA.[7]

The Staff has now moved to terminate the proceeding.[8] In its motion, the Staff states that the Applicant supports the motion and the Intervenor "agrees there are no remaining issues for the Board to resolve."[9] The Staff's motion is *granted* and the proceeding is *terminated.*

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[2] CLI-10-18, 72 NRC 56, 96 (2010). The history of this proceeding is recited in the Board's Initial Decision, *see* Initial Decision at 2-9. *See also* CLI-10-18, 72 NRC at 62-68.

[3] *See* Licensing Board Order (Requesting Scheduling Information) (July 16, 2010) (unpublished).

[4] *See* Notice of Availability of Draft Supplement to the Environmental Assessment for the Proposed Pa'ina Hawaii, LLC Irradiator in Honolulu, HI, 75 Fed. Reg. 75,704 (Dec. 6, 2010).

[5] *See* Office of Federal and State Materials and Environmental Management Programs, Division of Waste Management and Environmental Protection, Final Supplement to the Environmental Assessment Related to the Proposed Pa'ina Hawaii, LLC Underwater Irradiator in Honolulu, Hawaii (Mar. 2011) at 48 (ADAMS Accession No. ML110390325) [hereinafter Final Supplemental EA]; *see also* CLI-10-18, 72 NRC at 62.

[6] *See* Letter from Michael J. Clark, Counsel for NRC Staff, to Administrative Judges (Mar. 1, 2011) (serving the Board and the parties with the final supplement to the EA); Final Supplemental EA.

[7] *See* Intervenor Concerned Citizens of Honolulu's Statement Re: New or Amended Contentions (Mar. 31, 2011).

[8] *See* Motion to Terminate Proceeding (Apr. 11, 2011).

[9] *See id.* at 2.

It is so ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD*

Thomas S. Moore, Chairman
ADMINISTRATIVE JUDGE

Paul Abramson
ADMINISTRATIVE JUDGE

Anthony J. Baratta
ADMINISTRATIVE JUDGE

Rockville, Maryland
April 22, 2011

*Copies of this order were sent this date by Internet e-mail transmission to counsel for (1) Applicant Pa'ina Hawaii, LLC; (2) Intervenor Concerned Citizens of Honolulu; and (3) the NRC Staff.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

William J. Froehlich, Chairman
Nicholas G. Trikouros
Dr. William E. Kastenberg

In the Matter of **Docket No. 50-346-LR**
(ASLBP No. 11-907-01-LR-BD01)

FIRSTENERGY NUCLEAR OPERATING COMPANY
(Davis-Besse Nuclear Power Station, Unit 1)

April 26, 2011

This 10 C.F.R. Part 54 proceeding concerns the application of FirstEnergy Nuclear Operating Company to renew the operating license for Davis-Besse Nuclear Power Station, Unit 1, located on the southwestern shore of Lake Erie in Ottawa County in northwestern Ohio. Four organizations petitioned to intervene and requested a hearing: Beyond Nuclear, Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, and the Green Party of Ohio. Having determined that each of the petitioning organizations demonstrated standing and they collectively proffered at least one contention that is admissible, in whole or in part, under 10 C.F.R. § 2.309(f)(1), the Board grants the petition and admits the Petitioners as a party.

RULES OF PRACTICE: REQUIREMENTS FOR INTERVENTION

Any person or organization seeking to intervene as a party in an NRC adjudicatory proceeding addressing a proposed licensing action must: (1) establish standing; and (2) proffer at least one admissible contention. 10 C.F.R. § 2.309(a).

RULES OF PRACTICE: NONTIMELY SUBMISSION (GOOD CAUSE FOR DELAY)

While the petition itself — complete with active embedded links to most of the exhibits — the standing declarations, and eight exhibits were submitted before the deadline, nearly seventy more exhibits were filed overnight and into the next day. Because the *pro se* first-time filer experienced problems with the E-Filing system, the Board concludes the Petitioners' efforts demonstrate the requisite good cause for acceptance of the nontimely exhibits for consideration with the timely filed petition.

RULES OF PRACTICE: STANDING TO INTERVENE (REPRESENTATIONAL STANDING)

When an organization seeks to intervene in a representative capacity on behalf of its members' interests, it must: (1) show that the interests it seeks to protect are germane to its own purpose; (2) identify, by name and address, *Power Authority of the State of New York* (James A. FitzPatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-00-22, 52 NRC 266, 293 (2000), at least one member who qualifies for standing in his or her own right; and (3) show that it is authorized by that member to request a hearing on his or her behalf. *Consumers Energy Co.* (Palisades Nuclear Plant), CLI-07-18, 65 NRC 399, 409 (2007).

RULES OF PRACTICE: STANDING AS OF RIGHT (INJURY IN FACT AND ZONE OF INTERESTS)

The NRC generally applies traditional judicial standing concepts, which require a showing that the individual has suffered or might suffer a concrete and particularized injury that is (1) fairly traceable to the challenged action; (2) likely redressible by a favorable decision, *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995) (citing *Lujan v. Defenders of Wildlife,* 504 U.S. 555, 560-61 (1992)); and (3) arguably within the zone of interests protected by the governing statutes, *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 6 (1996) (citing *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 92 (1993)), *e.g.,* the Atomic Energy Act (AEA), 42 U.S.C. §§ 2011-2297, and the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321-4347.

RULES OF PRACTICE: STANDING TO INTERVENE (PROXIMITY)

In reactor license renewal cases, petitioners are entitled to invoke the proximity presumption, which excuses the need to show an injury "if a petitioner (or a

representative of a petitioner organization) resides within *approximately* 50 miles of the facility in question" or "has frequent contacts with" this geographic zone of potential harm. *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915-16 (2009) (emphasis added). This presumption's rationale is that "persons living within the *roughly* 50-mile radius of the facility 'face a realistic threat of harm' if a release from the facility of radioactive material were to occur." *Id.* at 917 (quoting *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-09-4, 69 NRC 170, 183 (2009)) (emphasis added).

RULES OF PRACTICE: REPRESENTATION (NONATTORNEY REPRESENTATIVE)

A "duly authorized member or officer" may represent his or her "partnership, corporation, or unincorporated association" even if he or she is not an attorney at law, but the representative's notice of appearance must state "the basis of his or her authority to act on behalf of the party." 10 C.F.R. § 2.314(b).

RULES OF PRACTICE: REPRESENTATION

Although a member should have demonstrated that his organization authorized him to represent it *pro se,* subsequent notice of appearance by an attorney cured any possible deficiency in representation.

RULES OF PRACTICE: REPRESENTATION

An individual may not intervene in his or her own right while simultaneously being represented by another petitioner in the same proceeding. *Powertech (USA), Inc.* (Dewey-Burdock In Situ Uranium Recovery Facility), LBP-10-16, 72 NRC 361, 390 (2010).

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY)

An admissible contention must: (i) provide a specific statement of the issue of law or fact to be raised; (ii) provide a brief explanation of the basis for the contention; (iii) demonstrate that the issue raised is within the proceeding's scope; (iv) demonstrate that the issue raised 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, including references to specific sources and documents, that support the petitioner's position and upon which the petitioner intends to rely at hearing; and (vi) show that a genuine dispute exists on

a material issue of law or fact by referring to specific portions of the application that the petitioner disputes or, if the application is alleged to be deficient, by identifying such deficiencies and the supporting reasons for this allegation. 10 C.F.R. § 2.309(f)(1)(i)-(vi).

NEPA: CONSIDERATION OF ALTERNATIVES

To be evaluated in depth as a reasonable alternative to license renewal, an alternative must be available now or in the near future and in any event no later than the expiration date of the current license.

RULES OF PRACTICE: CONTENTIONS (CHALLENGES TO COMMISSION REGULATIONS)

Any argument about the need for power from the nuclear power plant during the license renewal period is outside the scope of the license renewal proceeding and inadmissible under 10 C.F.R. § 2.309(f)(1)(iii) because it challenges 10 C.F.R. § 51.53(c)(2), which states that a license renewal ER "is not required to include discussion of need for power."

NEPA: CONSIDERATION OF ALTERNATIVES

Having claimed that interconnectedness and energy storage allow wind and solar power to provide baseload power and having proffered expert support and specific references to support this claim, petitioners have pled an admissible contention concerning reasonable alternatives to the relicensing application.

RULES OF PRACTICE: CONTENTIONS (CHALLENGES TO COMMISSION REGULATIONS)

Challenge to the agency regulation codifying the Commission's determination that, for any license renewal of a nuclear power plant, the probability-weighted consequences of a severe accident are small, 10 C.F.R. Part 51, Subpart A, App. B, tbl. B-1, is outside the scope of the license renewal proceeding.

NEPA: ENVIRONMENTAL REPORT (SPENT FUEL POOL)

Because Petitioners have not obtained a waiver or exception to the regulations that, for all plants, onsite dry or pool storage can "safely accommodate" spent fuel accumulated from a 20-year license extension with "small environmental effects," 10 C.F.R. Part 51, Subpart A, App. B, tbl. B-1, and "additional plant-

specific mitigation measures are likely not to be sufficiently beneficial to warrant implementation," *see id.* tbl. B-1 n.2, their challenge is outside the scope of the license renewal proceeding.

NEPA: ENVIRONMENTAL REPORT (SABOTAGE)

Intentional malevolent acts, such as sabotage and terrorism, are not material to the SAMA findings the NRC must make in deciding whether to extend a commercial power reactor license.

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY)

Because the petitioners do not explain how the cost of a severe accident could have been underestimated due to the MACCS2 code's conservative assumption that decontaminating farmlands by fire hosing and plowing would not reduce ingestion doses, their criticism of these decontamination methods does not dispute the application.

NEPA: SEVERE ACCIDENT MITIGATION ALTERNATIVES (SAMAS)

For SAMA contentions, the materiality standard requires only that petitioners "provide sufficient information to show that, if their proposed refinements were incorporated, it is 'genuinely plausible' that cost-benefit conclusions might change." *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), LBP-11-2, 73 NRC 28, 62 (2011)).

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MEMORANDUM AND ORDER
(Ruling on Petition to Intervene and Request for Hearing)

Before this Atomic Safety and Licensing Board (Board) is a petition to intervene and a request for a hearing (Petition) filed jointly by four organizations: Beyond Nuclear, Citizens Environment Alliance of Southwestern Ontario (CEA), Don't Waste Michigan, and the Green Party of Ohio (collectively, Joint Petitioners).[1] The Joint Petitioners challenge the application (Application) filed by FirstEnergy Nuclear Operating Company (FirstEnergy) to extend its operating

[1] Beyond Nuclear, Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, and the Green Party of Ohio Request for Public Hearing and Petition for Leave to Intervene (Dec. 27, 2010) [hereinafter Petition].

license for the Davis-Besse Nuclear Power Station, Unit 1 (Davis-Besse) for an additional 20 years from the current expiration date of April 22, 2017, to April 22, 2037, pursuant to Part 54 of Title 10 of the *Code of Federal Regulations.*[2] Davis-Besse is located on the southwestern shore of Lake Erie in Ottawa County in northwestern Ohio, approximately 20 miles east of Toledo.[3]

The Joint Petitioners have proffered four contentions. FirstEnergy and the NRC Staff contend that CEA does not have standing and that each proffered contention is inadmissible on one or more grounds. FirstEnergy also argues the Petition should be rejected because it is untimely and that CEA has not demonstrated that it authorized any officer or member to represent it in this proceeding.

The Board grants the intervention petition because the Joint Petitioners have demonstrated standing and have collectively proffered at least one contention that is admissible, in whole or in part, pursuant to 10 C.F.R. § 2.309(f)(1). In accordance with 10 C.F.R. § 2.309(a), we therefore grant the request for public hearing and admit each petitioner as a party to this proceeding. As limited by the Board, the admitted contentions will be heard under the procedures set forth is 10 C.F.R. Part 2, Subpart L.

I. PROCEDURAL BACKGROUND

FirstEnergy[4] filed the Application to renew its operating license for Davis-Besse[5] on August 27, 2010.[6] A notice published in the *Federal Register* on October 25, 2010, stated that the NRC Staff would review the Application and that persons whose interests might be affected by the proposed license renewal

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[2] License Renewal Application; Davis-Besse Nuclear Power Station 1.0-1, 1.1-1 (Aug. 2010) (ADAMS Accession Nos. ML102450567, ML102450563) [hereinafter Application]. The application also seeks renewal of the associated source material, special nuclear material, and byproduct material licenses under 10 C.F.R. Parts 30, 40, and 70. *Id.* at 1.0-1.

[3] *Id.* at 1.2-1.

[4] FirstEnergy applied on its own behalf and as agent for FirstEnergy Nuclear Generation Corp., the owner and licensee. *Id.* at 1.1-1.

[5] Davis-Besse has a pressurized water reactor nuclear steam supply system furnished by the Babcock & Wilcox Company. *Id.* at 1.2-1. The licensed core power level is 2817 megawatts-thermal (MWt). *Id.* Davis-Besse's gross electrical output is 908 megawatts-electric (MWe). *Id.*

[6] Notice of Acceptance for Docketing of the Application, Notice of Opportunity for Hearing for Facility Operating License No. NPF-003 for an Additional 20-Year Period; First[E]nergy Nuclear Operating Company, Davis-Besse Nuclear Power Station, Unit 1, 75 Fed. Reg. 65,528, 65,528-29 (Oct. 25, 2010) [hereinafter Hearing Notice]. Notice of receipt of FirstEnergy's license renewal application was published in the *Federal Register* on September 20, 2010. FirstEnergy Nuclear Operating Company; Notice of Receipt and Availability of Application for Renewal of Davis[-]Besse Nuclear Power Station, Unit 1, Facility Operating License No. NPF-003 for an Additional 20-Year Period, 75 Fed. Reg. 57,299 (Sept. 20, 2010).

would have until December 27, 2010, to petition to intervene in the proceeding and to request a hearing.[7] The Joint Petitioners filed the Petition and several exhibits on December 27.[8] Between midnight and 3:10 a.m. on December 28, the Joint Petitioners filed nearly seventy more exhibits one at a time.[9] They filed two final exhibits at 12:15 p.m. on December 28.[10] Joint Petitioners filed "an Errata to correct errors" in the Petition on January 5, 2011.[11]

The Petition's first three contentions allege that the Application's environmental report (ER) does not adequately analyze, as reasonable baseload power alternatives, allegedly environmentally superior systems of renewable energy[12] — respectively, wind power,[13] solar power,[14] and a combination of wind and solar power[15] — with compressed air storage.[16] The Petition's fourth contention concerns the ER's severe accident mitigation alternatives (SAMA) analysis.[17]

FirstEnergy and the NRC Staff filed answers on January 21, 2011.[18] Both argue that petitioner CEA lacks standing and that every proffered contention is inadmissible.[19] FirstEnergy further argues that the entire petition should be dismissed as untimely and that CEA has not shown that it authorized anyone to represent it.[20]

Joint Petitioners filed a combined reply on January 28.[21] FirstEnergy moved to strike portions of this reply on February 7, arguing that it impermissibly expanded

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[7] Hearing Notice, 75 Fed. Reg. at 65,529.

[8] Petition; Declarations in Support of Standing from Beyond Nuclear, Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan and Green Party of Ohio, and Individual Organization Members (Dec. 27, 2010) [hereinafter Standing Decls.]; Exhibits in support of the Petition to Intervene in the License Renewal proceeding for Davis[-]Besse [hereinafter Petition Attachments].

[9] Declaration and *Curriculum Vitae* of Alvin Compaan, Intervenors' Expert Witness on Contention #2 (signed Dec. 27, 2010, submitted Dec. 28, 2010) [hereinafter Compaan Decl.]; Petition Attachments.

[10] Petition Attachments.

[11] Errata (Jan. 5, 2011).

[12] Petition at 15-17, 27-28, 71, 82-83.

[13] *Id.* at 10.

[14] *Id.* at 68-69.

[15] *Id.* at 93.

[16] *Id.* at 28, 71.

[17] *Id.* at 100.

[18] FirstEnergy's Answer Opposing Request for Public Hearing and Petition for Leave to Intervene (Jan. 21, 2011) [hereinafter FirstEnergy Answer]; NRC Staff's Answer to Joint Petitioners' Request for a Hearing and Petition for Leave to Intervene (Jan. 21, 2011) [hereinafter NRC Staff Answer].

[19] FirstEnergy Answer at 2-3; NRC Staff Answer at 2, 6-7. FirstEnergy argued in its answer that petitioner Don't Waste Michigan also lacks standing, *id.* at 2-3, but withdrew this challenge during oral argument. Tr. at 38-39.

[20] FirstEnergy Answer at 2.

[21] Joint Intervenors' Combined Reply in Support of Petition for Leave to Intervene (Jan. 28, 2011).

the scope of the original Petition without satisfying the standards governing new or amended contentions.[22] Joint Petitioners filed an errata to their reply on February 10[23] and an opposition to the motion to strike on February 17.[24] On February 18 this Board granted FirstEnergy's motion to strike and ordered Joint Petitioners to refile a revised reply with the disputed portions deleted, the errata incorporated, and the pages numbered.[25] Joint Petitioners filed a revised reply on February 23[26] and a final revised reply on February 24.[27]

This Board heard oral argument on the Petition in Port Clinton, Ohio, on March 1, 2011.[28] On the eve of oral argument, Joint Petitioners submitted a notice seeking to bring to the Board's attention a recently published Licensing Board order.[29]

II. ANALYSIS OF TIMELINESS, STANDING, AND REPRESENTATION

Any person or organization seeking to intervene as a party in an NRC adjudicatory proceeding addressing a proposed licensing action must: (1) establish standing; and (2) proffer at least one admissible contention.[30] In addition, an officer, member, or attorney representing an organization in such a proceeding must file a written notice of appearance stating, among other things, his or her basis for

[22] FirstEnergy's Motion to Strike Portions of Petitioners' Combined Reply (Feb. 7, 2011) at 1 (citing 10 C.F.R. § 2.309(c), (f)(2)).

[23] Errata (Feb. 10, 2011).

[24] Joint Intervenors' Combined Reply in Opposition to FENOC's "Motion to Strike" (Feb. 17, 2011).

[25] Licensing Board Order (Granting Motion to Strike and Requiring Re-filing of Reply) (Feb. 18, 2011) at 4 (unpublished).

[26] Joint Intervenors' Combined Reply in Support of Petition for Leave to Intervene (*Corrected Version*) (Feb. 23, 2011).

[27] Joint Intervenors' Combined Reply in Support of Petition for Leave to Intervene (*2nd, Final Corrected Version*) (Feb. 24, 2011) [hereinafter Reply]. Beyond Nuclear's representative explained at oral argument that he filed the February 24 reply because he had inadvertently retained, in the February 23 reply, material the Board had struck. Tr. at 35-37.

[28] Tr. at 1-239.

[29] Joint Intervenors' Notice of Additional Authority (Feb. 28, 2011) (attaching *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), LBP-11-2 (slip op.) [73 NRC 28] (2011)). In response to FirstEnergy's objection at oral argument that Joint Petitioners inappropriately included five pages of supplemental legal argument in the notice, Tr. at 229-30, this Board stated that it is aware of the order, that the order is not binding on this Board, that it will use the order to the extent it is helpful, and that it will disregard the supplemental legal argument that came with the filing. *Id.* at 230-31.

[30] 10 C.F.R. § 2.309(a).

representing the organization.[31] Before analyzing standing, representation, and contention admissibility, we first address the timeliness of the Petition.

A. Timeliness

FirstEnergy argues the Petition "is untimely and should be rejected" because Joint Petitioners filed "67 exhibits and an expert affidavit" after the deadline for submitting an intervention petition challenging the Davis-Besse renewal application, which was 11:59 p.m. Eastern Time on December 27, 2010.[32] FirstEnergy reasons that because "an electronic filing is only complete 'when the filer performs the last act that it must perform to transmit a document, *in its entirety,*'" the entire Petition is untimely.[33] At oral argument FirstEnergy stated the filing deadline is akin to a statute of limitations.[34]

Joint Petitioners assert that this was the "first adjudicatory filing situation" for the "inexperienced, *pro se* coordinator"[35] who was the "Joint Petitioners' point person" when the Petition was filed.[36] Joint Petitioners argue that, because they were proceeding *pro se* at that time, they should be "shown greater leeway on the question of whether they have demonstrated good cause for lateness than petitioners represented by counsel."[37] The Commission has directed that *pro se* litigants generally be extended some latitude, although they are still expected to comply with procedural rules.[38]

While the petition itself was timely filed, we must balance the eight factors set forth in 10 C.F.R. § 2.309(c)(1) to determine whether we can consider Joint Petitioners' late-filed exhibits. Good cause for the failure to file on time is the most important factor.[39]

In their reply, Joint Petitioners assert they have "'good cause' to have their Pe-

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[31] *Id.* § 2.314(b).

[32] FirstEnergy Answer at 2 (citing Hearing Notice, 75 Fed. Reg. 65,528; 10 C.F.R. § 2.306(c)).

[33] *Id.* (quoting 10 C.F.R. § 2.302(d)(1)) (emphasis added in FirstEnergy Answer).

[34] Tr. at 35.

[35] Reply at 5.

[36] Reply, Attach., Declaration of Kevin Kamps, Beyond Nuclear ¶ 1 (Jan. 28, 2011) [hereinafter Kamps Decl.].

[37] *Id.* at 4-5 (citing *Maine Yankee Atomic Power Co.* (Maine Yankee Atomic Power Station), LBP-03-23, 58 NRC 372, 378 (2003)). Joint Petitioners also argue FirstEnergy "can make no credible showing of prejudice." *Id.* at 5. We do not consider whether FirstEnergy was prejudiced by the late filing because prejudice is not a factor in the balancing test for nontimely filings. 10 C.F.R. § 2.309(c)(1).

[38] *South Carolina Electric & Gas Co.* (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 6 (2010) (citations omitted).

[39] *Crow Butte Resources, Inc.* (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 549 n.61 (2009) (referring to 10 C.F.R. § 2.309(c)(1)(i)).

tition deemed timely,"[40] explaining that they "experienced major difficulties with NRC's Electronic Information Exchange system on the night of . . . December 27, 2010."[41] Allegedly, when it "quickly became apparent that the EIE system was not working properly" for the point person, a second representative "rac[ed] to the Beyond Nuclear office" after 11:00 p.m. — on a day his organization observes as a holiday — to "successful[ly] fil[e] several key documents ahead of midnight" and to submit "73 items in all, one at a time."[42] Two additional documents were filed after 4 hours of assistance from the agency's E-Filing Help Desk once it opened for the day.[43]

The NRC Staff does not challenge the timeliness of the Petition.[44] They suggested at oral argument, however, that "it would have been helpful" if the parties had not had to wait until the reply to know about the difficulties the Joint Petitioners experienced with the E-Filing system.[45]

In this case, the Petition — complete with active embedded links to most of the exhibits — the standing declarations, and eight exhibits were submitted before the deadline.[46] The balance of the exhibits was filed overnight and into the next day.[47] All parties to an adjudicatory proceeding have an obligation to prepare and to file their pleadings and submissions in a timely manner and in accordance with the regulations. The Board believes that — for lengthy documents with multiple attachments — this means beginning the filing process sufficiently in advance of the deadline so that if unforeseen problems arise, the document and all referenced exhibits and attachments can still be filed in their entirety prior to the deadline.[48] If a petitioner encounters problems with a particular document or with the agency's E-Filing system so that the document cannot be filed before the deadline, it is incumbent upon that petitioner to explain the circumstances surrounding the problem as soon as possible to the Board and the parties, by promptly filing a motion seeking leave from the Board to accept the document out of time. In this situation, it appears the Joint Petitioners began the filing process approximately 1 hour before the deadline.[49] Given the problems they encountered and the size of the filing, 1 hour was not sufficient time to complete the filing.

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[40] Reply at 4.

[41] *Id.* at 2.

[42] *Id.* at 2-4; *accord* Kamps Decl. ¶¶ 4-7.

[43] Kamps Decl. ¶ 11; *accord* Reply at 4.

[44] Tr. at 33.

[45] *Id.*

[46] Petition; Standing Decls.; Petition Attachments; *accord* Reply at 3.

[47] Compaan Decl.; Petition Attachments.

[48] Section 2.302(d)(1) provides that a filing by electronic transmission is complete only when "the filer performs the last act that it must perform to transmit a document, in its entirety."

[49] Kamps Decl. ¶ 4.

However, the Joint Petitioners were able timely to file the Petition in its entirety and some of the exhibits. Most of the exhibits were filed after the deadline, and for those exhibits the Petitioners should have filed a motion seeking leave to have them accepted out of time. Given the Joint Petitioners' inexperienced *pro se* coordinator (and first-time filer) and the apparent problems with the E-Filing system, we conclude that Joint Petitioners' efforts, as outlined in their reply pleading, demonstrate the required good cause for us to accept their untimely submissions. We therefore accept the nontimely exhibits for further consideration with the timely filed Petition. In the future Joint Petitioners are strongly advised to prepare their pleadings well in advance of any deadlines, and if any portion of a filing is untimely tendered, it must be accompanied by a motion pursuant to 10 C.F.R. §§ 2.309(c)(1) and 2.323.

B. Standing

Joint Petitioners assert each has standing to intervene as the representative of its members living in geographic proximity to the Davis-Besse facility.[50] When an organization seeks to intervene in a representative capacity it must: (1) show that the interests it seeks to protect are germane to its own purpose; (2) identify, by name and address,[51] at least one member who qualifies for standing in his or her own right; and (3) show that it is authorized by that member to request a hearing on his or her behalf.[52]

In determining whether an individual member of an organization qualifies for standing in his or her own right, the NRC generally applies traditional judicial standing concepts,[53] which require a showing that the individual has suffered or might suffer a concrete and particularized injury that is: (1) fairly traceable to

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[50] Petition at 4-6.

[51] *Power Authority of the State of New York* (James A. FitzPatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-00-22, 52 NRC 266, 293 (2000).

[52] *Consumers Energy Co.* (Palisades Nuclear Plant), CLI-07-18, 65 NRC 399, 409 (2007) (citations omitted); *cf. Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc.,* 528 U.S. 167, 181 (2000) ("An association has standing to bring suit on behalf of its members when its members would otherwise have standing to sue in their own right, the interests at stake are germane to the organization's purpose, and neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit." (citing *Hunt v. Washington State Apple Advertising Commission,* 432 U.S. 333, 343 (1977))).

[53] *Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant), CLI-06-6, 63 NRC 161, 163 (2006) (citing *U.S. Department of Energy* (Plutonium Export License), CLI-04-17, 59 NRC 357, 363 (2004); *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), CLI-92-2, 35 NRC 47, 56 (1992)).

the challenged action; (2) likely redressible by a favorable decision;[54] and (3) arguably within the zone of interests protected by the governing statutes[55] — *e.g.,* the Atomic Energy Act of 1954 (AEA)[56] and the National Environmental Policy Act of 1969 (NEPA).[57] These standing requirements are codified in 10 C.F.R. § 2.309(d)(1)(ii)-(iv).

In reactor license renewal cases, however, petitioners are entitled to invoke what has come to be known as the proximity presumption. This presumption of standing excuses petitioners from the need to show an injury. The Commission has applied this geographic proximity presumption as follows:

> In practice, we have found standing based on this "proximity presumption" if a petitioner (or a representative of a petitioner organization) resides within *approximately* 50 miles of the facility in question.[58]

The proximity presumption also applies if a petitioner "has frequent contacts with" this geographic zone of potential harm.[59] This presumption's rationale is that "persons living within the *roughly* 50-mile radius of the facility 'face a realistic threat of harm' if a release from the facility of radioactive material were to occur."[60]

The Joint Petitioners have each articulated how the interests it seeks to protect are germane to its own purpose. Beyond Nuclear's name implies that the organization is concerned about nuclear issues. It claims to have "over 6,000 members of whom a number reside, work and recreate" near the Davis-Besse Nuclear Power Station.[61] CEA asserts that it "favor[s] the increased deployment of environmentally benign energy sources."[62] Don't Waste Michigan asserts its articles of incorporation state its "dedicat[ion] to educating the public about the dangers nuclear contamination poses to human health and the environment."[63]

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[54] *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995) (citing *Lujan v. Defenders of Wildlife,* 504 U.S. 555, 560-61 (1992)).

[55] *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 6 (1996) (citing *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 92 (1993)).

[56] 42 U.S.C. §§ 2011-2297.

[57] *Id.* §§ 4321-4346.

[58] *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915-16 (2009) (emphasis added).

[59] *Id.* at 915.

[60] *Id.* at 917 (quoting *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-09-4, 69 NRC 170, 183 (2009)) (emphasis added).

[61] Petition at 4.

[62] *Id.* at 4.

[63] Reply at 8.

The Green Party of Ohio asserts that it is concerned with the issue of alternative energy.[64]

Each of the Joint Petitioners also identifies at least one member qualified for standing in his or her own right based on the proximity presumption, and each of these members authorizes the respective organization to represent his or her interests. Beyond Nuclear relies on the declaration of member Phyllis Oster, who provides a home address that is less than 40 miles from the power station and states her interests will not be adequately represented unless Beyond Nuclear participates in this proceeding, impliedly authorizing the organization to represent her interests.[65] CEA provides declarations from two members, Derek and Richard Coronado (the Coronados), who state that their home is within a 50-mile radius of the Davis-Besse plant and designate CEA to represent their interests.[66] Don't Waste Michigan relies on the declaration of member Michael J. Keegan, who provides a home address that is less than 25 miles from the power station and designates Don't Waste Michigan to represent his interests.[67] The Green Party of Ohio provides declarations from three members, Anita Rios, Joseph R. DeMare, and Sean Nestor, who each provide a home address within 25 miles of the power station and designate the Green Party of Ohio to represent their interests.[68] FirstEnergy and the NRC Staff contest the standing of only Derek and Richard Coronado and their organization, CEA.[69]

FirstEnergy contends that CEA "cannot rely on the proximity presumption to establish standing" because "the Coronados appear to live slightly more than 50 miles from Davis-Besse."[70] The NRC Staff agree that CEA has not shown standing because the Coronados do not qualify for the proximity presumption and CEA has not otherwise alleged and demonstrated an appropriate injury.[71] The NRC Staff calculates that the Coronado's residence is "approximately 300 feet" outside the 50-mile radius of Davis-Besse,[72] measuring from the center line of the reactor to the nearest corner of the Coronado's property,[73] and FirstEnergy calculates the

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[64] Petition at 6.

[65] *See* Declaration of Phyllis Oster (Dec. 24, 2010).

[66] Declaration of Derek Coronado (Dec. 26, 2010) [hereinafter D. Coronado Decl.]; Declaration of Richard Coronado (Dec. 26, 2010) [hereinafter R. Coronado Decl.].

[67] *See* Declaration of Michael J. Keegan (Dec. 27, 2010).

[68] *See* Declaration of Anita Rios (Dec. 26, 2010); Declaration of Joseph R. DeMare (Dec. 14, 2010); Declaration of Sean Nestor (Dec. 26, 2010).

[69] FirstEnergy Answer at 8-9; NRC Staff Answer at 6-7.

[70] FirstEnergy Answer at 9.

[71] NRC Staff Answer at 6-7.

[72] *Id.* at 6.

[73] Tr. at 40-42.

deficit as 0.024 miles.[74] FirstEnergy's calculations place the Coronado residence 127 feet beyond a 50-mile radius from the center line of the reactor.

The Joint Petitioners respond that the Coronados "are within 49.751 miles of the containment building at Davis-Besse" when they "are at work or meeting" in the CEA office.[75] The Petition identifies the Coronados as CEA's coordinators and provides the address of the CEA office.[76] If Joint Petitioners' calculation is converted from miles to feet, CEA's office is 1314.7 feet within the 50-mile radius.

Following the Commission's example, we "construe the petition in favor of the petitioner" in determining whether a petitioner has demonstrated standing.[77] As previously mentioned, a petitioner may avail himself or herself of the proximity presumption if he or she lives within approximately 50 miles of the facility or otherwise has frequent contacts within this area.[78] We are satisfied that the filed pleadings and the oral argument indicate that the Coronados' residence is approximately 50 miles from Davis-Besse and their work address is less than 50 miles from Davis-Besse. Further, common sense would dictate that the Coronados would have frequent contacts within the 50-mile radius of the plant because of where they live and where they work. Accordingly, the Coronados qualify for the proximity presumption and CEA may assert representational standing on their behalf.[79]

C. Representation by Member, Officer, or Attorney

FirstEnergy also challenges CEA's participation on the ground that Joint Petitioners fail to include documentation showing that CEA has authorized Derek Coronado or any other officer or member of the organization to represent it.[80] Section 2.314(b) provides that a "duly authorized member or officer" may represent his or her "partnership, corporation, or unincorporated association" even if he or she is not an attorney at law, but the representative's notice of appearance must state "the basis of his or her authority to act on behalf of the party." An organization's standing can be demonstrated through the interests of its members, but if a member acts or speaks on behalf of the organization, "that member must

[74] *See* FirstEnergy Answer at 9 n.31.

[75] Reply at 7; *accord* Tr. at 45-46.

[76] Petition at 5.

[77] *Georgia Tech,* CLI-95-12, 42 NRC at 115.

[78] *Calvert Cliffs,* CLI-09-20, 70 NRC at 915-16.

[79] We note that the arguments of both the NRC Staff and FirstEnergy in this regard are approximately 1000 feet past the point from which frivolous arguments are measured.

[80] FirstEnergy Answer at 8.

also demonstrate authorization by that organization to represent it."[81] Accordingly, although the Coronados' declarations show they authorize CEA to represent their interests,[82] to act as CEA's representatives they would also have to demonstrate that the organization in turn has authorized them to represent it.

On February 22, 2011, Terry J. Lodge filed a notice of appearance.[83] The notice of appearance indicates Mr. Lodge is a member of the bar of the Supreme Court of Ohio and further indicates that he is attorney of record in this matter for CEA, Don't Waste Michigan, and the Green Party of Ohio.[84] His notice of appearance also includes his state bar number.[85] The notice of appearance and the fact that CEA is now represented by an attorney cures any possible deficiency in representation which may have existed when the Petition was filed by its *pro se* representative.[86] We are "lenient in permitting *pro se* petitioners the opportunity to cure procedural defects in petitions to intervene regarding standing."[87] And although an allegation that a purported representative is acting without his or her organization's authorization — i.e., is acting *ultra vires* — is distinct from a challenge to the organization's standing,[88] a petitioner may cure such a defect in representation as well.[89]

In summary, Beyond Nuclear, CEA, Don't Waste Michigan, and the Green Party of Ohio all have shown that the interests they seek to protect are germane

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[81] *See Detroit Edison Co.* (Enrico Fermi Atomic Power Plant, Unit 2), LBP-78-37, 8 NRC 575, 583 (1978) (citing *Tennessee Valley Authority* (Watts Bar Nuclear Plant, Units 1 and 2), ALAB-413, 5 NRC 1418, 1421 (1977)).

[82] D. Coronado Decl.; R. Coronado Decl.

[83] Notice of Appearance of Counsel for Citizens Environmental Alliance of Southwestern Ontario, Don't Waste Michigan, and Green Party of Ohio (Feb. 22, 2011).

[84] *Id.*

[85] *Id.*

[86] An attorney who purports to represent a client without authorization is subject to disciplinary proceedings by the state bar association. *See* Ohio Rules of Prof'l Conduct R. 3.3(a)(1) (2007) (prohibiting lawyer from knowingly making a false statement of law or fact to a tribunal); *Office of Disciplinary Counsel v. Bursey,* 919 N.E.2d 198, 204-06 (Ohio 2009) (disbarring permanently an attorney whose violations of the Rules of Professional Conduct included negotiating a settlement for a client that had never given him settlement authority, forging client's name on settlement check, and depositing it into attorney's bank account).

[87] *PPL Bell Bend LLC* (Bell Bend Nuclear Power Plant), LBP-09-18, 70 NRC 385, 396 (2009) (citing *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), LBP-91-7, 33 NRC 179, 195 (1991)); *see, e.g., Virgil C. Summer Nuclear Station,* CLI-10-1, 71 NRC at 6-7 (allowing petitioner to clarify standing declarations by submitting revised declarations with reply).

[88] *See Houston Lighting and Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-535, 9 NRC 377, 395-96 (1979) (distinguishing the authority of an officer or attorney to sign a petition from an authorization "addressed to the organization's standing to intervene" (emphasis omitted)).

[89] *See id.* (stating how petitioner could have appropriately responded to "an intimation of *ultra vires* conduct" had the argument been raised).

to their organizational purposes. Their individual declarants all have established standing to intervene in their own right and have authorized their respective organizations to represent their interests. Accordingly, each organization has demonstrated representational standing.[90] And Attorney Lodge's notice of appearance cures the absence of a declaration or affidavit showing that CEA authorized any member or officer to represent it.

III. ANALYSIS OF CONTENTION ADMISSIBILITY

As previously noted, to participate as a party, a petitioner must not only establish standing, but must also proffer at least one admissible contention that meets the requirements of 10 C.F.R. § 2.309(f)(1). An admissible contention must: (i) provide a specific statement of the issue of law or fact to be raised; (ii) provide a brief explanation of the basis for the contention; (iii) demonstrate that the issue raised is within the proceeding's scope; (iv) demonstrate that the issue raised 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, including references to specific sources and documents, that support the petitioner's position and upon which the petitioner intends to rely at hearing; and (vi) show that a genuine dispute exists on a material issue of law or fact by referring to specific portions of the application that the petitioner disputes or, if the application is alleged to be deficient, by identifying such deficiencies and the supporting reasons for this allegation.[91]

In explaining these requirements, the Commission has said the agency "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."[92] Alternatives for reducing adverse environmental impacts, including impacts of severe accidents,[93] are among the limited issues within the scope of a license renewal proceeding.[94] A challenge to a Commission rule or regulation, however, is outside the scope of an adjudicatory hearing unless the petitioner first obtains a waiver.[95]

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[90] We deny Ms. Rios, Mr. DeMare, and Mr. Nestor's requests in the alternative for individual standing, Tr. at 37; Petition at 6, because the Green Party of Ohio has demonstrated representational standing. Tr. at 37. An individual may not intervene in his or her own right while simultaneously being represented by another petitioner in the same proceeding. *Powertech (USA), Inc.* (Dewey-Burdock In Situ Uranium Recovery Facility), LBP-10-16, 72 NRC 361, 390 (2010).

[91] 10 C.F.R. § 2.309(f)(1)(i)-(vi).

[92] Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

[93] 10 C.F.R. § 51.53(c)(3)(ii)(L).

[94] 42 U.S.C. § 4332(2)(C)(iii); 10 C.F.R. §§ 54.29(b), 51.53(c)(2), 51.53(c)(3)(iii).

[95] 10 C.F.R. § 2.335(a).

For example, the Commission has codified generic determinations for certain environmental issues, identified as Category 1 issues, for license renewal proceedings.[96] Category 1 issues are not subject to challenge in a relicensing proceeding because they "involve environmental effects that are essentially similar for all plants [and] need not be assessed repeatedly on a site-specific basis."[97] Pursuant to 10 C.F.R. § 2.335, Category 1 issues cannot be addressed in a license renewal proceeding absent a waiver. Issues that require site-specific analysis, on the other hand, are identified as Category 2 issues.[98] Category 2 issues must be reviewed on a site-specific basis because they have not been determined to be "essentially similar" for all plants;[99] accordingly, challenges relating to these issues are properly part of a license renewal proceeding.

Although "[m]ere 'notice pleading' is insufficient" in NRC proceedings,[100] a petitioner does not have to prove its contentions at the admissibility stage,[101] and we do not adjudicate disputed facts at this juncture.[102] The factual support required is "'a minimal showing that material facts are in dispute.'"[103] All that is needed at this juncture is "alleged facts" and the factual support "need not be in affidavit or formal evidentiary form and need not be of the quality necessary to withstand a summary disposition motion."[104]

A. Contentions One, Two, and Three

Although styled as separate contentions, Contentions One, Two, and Three allege that FirstEnergy should have considered renewable energy sources in a more comprehensive manner in its ER. Contention One, simply titled Wind Power, states the "Environmental Report fails to adequately evaluate the full potential for renewable energy sources, such as wind power, to offset the loss of energy production from Davis-Besse."[105] Likewise, Contention Two, entitled

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[96] 10 C.F.R. Part 51, Subpart A, App. B n.2.

[97] *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 11 (2001).

[98] 10 C.F.R. Part 51, Subpart A, App. B n.2.

[99] *Id.*

[100] *Fansteel, Inc.* (Muskogee, Oklahoma, Site), CLI-03-13, 58 NRC 195, 203 (2003).

[101] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 139 (2004).

[102] *Mississippi Power and Light Co.* (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-130, 6 AEC 423, 426 (1973).

[103] *Gulf States Utilities Co.* (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 51 (1994) (quoting Rules of Practice for Domestic Licensing Proceedings — Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989) [hereinafter Procedural Changes]).

[104] Procedural Changes, 54 Fed. Reg. at 33,171.

[105] Petition at 10.

Solar Power, alleges the "Environmental Report fails to adequately evaluate the full potential for renewable energy sources, such as solar electric power or photovoltaics (hereinafter 'solar power'), to offset the loss of energy production from Davis-Besse."[106] In Contention Three, Joint Petitioners state "NEPA further requires in the consideration of alternatives to the license extension for Davis-Besse a combination of commercial wind-generated baseload power, combined with commercial solar photovoltaic-generated baseload power."[107]

The essence of Contentions One, Two, and Three is that FirstEnergy should have evaluated wind power, solar photovoltaic power, or a combination of both, bolstered by energy storage, in a more comprehensive manner in its ER as an alternative to the renewal of Davis-Besse's operating license.[108]

1. Legal Standards for Alternatives Analysis in an ER

The Commission's regulations require an applicant seeking a license renewal to file an ER that includes an alternatives analysis that "considers and balances . . . the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects."[109] An ER's adequacy is examined under the auspices of NEPA because the ER is the foundation upon which NRC's environmental impact statement (EIS) is prepared.[110] Therefore, an applicant's alternatives analysis must be "sufficiently complete to aid the Commission in developing and exploring, pursuant to section 102(2)(E) of NEPA, 'appropriate alternatives'" to the proposed action.[111] Generally, NEPA requires that an environmental review provide a sufficient discussion of alternatives to "'enable the decisionmaker to take a "hard look" at environmental factors, and to make a reasoned decision.'"[112]

An applicant's alternatives analysis need not discuss every conceivable alternative to the proposed action. Rather, NEPA requires only consideration of

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[106] *Id.* at 68-69.

[107] *Id.* at 93.

[108] *Id.* at 10-11, 28, 68-69, 71, 93.

[109] 10 C.F.R. § 51.45(c).

[110] *See Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-2, 71 NRC 27, 34 (2010) (stating that to facilitate the NRC's compliance with NEPA, the agency requires an applicant to submit "a complete environmental report with its application, which is essentially the applicant's proposal for the draft environmental impact statement" and that "contentions that seek compliance with NEPA must be based on that environmental report" (internal citations omitted)).

[111] 10 C.F.R. § 51.45(b)(3) (referring to 42 U.S.C. § 4332(2)(E)).

[112] *Tongass Conservation Society v. Cheney,* 924 F.2d 1137, 1140 (D.C. Cir. 1991) (quoting *Natural Resources Defense Council, Inc. v. Hodel,* 865 F.2d 288, 294 (D.C. Cir. 1988)).

"feasible, nonspeculative, and reasonable alternatives."[113] In defining the scope of alternatives that applicants must consider, the Commission has indicated that an ER need only consider the range of alternatives that are capable of achieving the goals of the proposed action.[114] The NRC generally defers to an applicant's stated purpose "so long as that purpose is not so narrow as to eliminate alternatives."[115] Generation of baseload power is an acceptable purpose for a licensing action and has been determined to be broad enough "to permit consideration of a host of energy generating alternatives."[116] Here, the goal of the proposed license renewal is to deliver "approximately 910 MWe" of baseload power,[117] beginning on April 22, 2017, and available for a period of 20 years.

2. Treatment of Wind and Solar Alternatives in the ER

FirstEnergy's ER devotes only four paragraphs to wind power, three paragraphs to solar power, and two paragraphs to a mix of renewable energy with natural gas generation, among other things, as alternatives to the Davis-Besse license renewal.[118] The ER concludes, however, that none of these alternatives is reasonable.[119]

According to the ER, wind power cannot "serve as a large base-load generator" because it has a "high degree of intermittency" and "relatively low" average annual capacity and because "current energy storage technologies are too expensive."[120] The ER's conclusion that wind power is not a reasonable alternative also rests in

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[113] *Entergy Nuclear Operations, Inc.* (Indian Point, Units 2 and 3), LBP-08-13, 68 NRC 43, 95 (2008) (citing *Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant), LBP-05-31, 62 NRC 735, 753 (2005)); *accord City of Carmel-by-the-Sea v. Department of Transportation,* 123 F.3d 1142, 1155 (9th Cir. 1997); *Shoreham,* CLI-91-2, 33 NRC at 71.

[114] *See Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 55 (2001) ("Agencies need only discuss those alternatives that are reasonable and 'will bring about the ends' of the proposed action." (quoting *Citizens Against Burlington, Inc. v. Busey,* 938 F.2d 190, 195 (D.C. Cir. 1991))).

[115] *South Carolina Electric & Gas Co.* (Virgil C. Summer Nuclear Station, Units 2 and 3), LBP-09-2, 69 NRC 87, 110 (2009).

[116] *Environmental Law & Policy Center v. NRC,* 470 F.3d 676, 684 (7th Cir. 2006).

[117] Appendix E; Applicant's Environmental Report; Operating License Renewal Stage; Davis-Besse Nuclear Power Station at 7.2-7 (Aug. 2010) [hereinafter ER].

[118] *Id.* at 7.2-9 to 7.2-10, 7.2-12 to 7.2-13.

[119] *Id.* at 7.2-12.

[120] *Id.* at 7.2-9 (citing Division of Regulatory Applications, Office of Reactor Regulatory Research, Generic Environmental Impact Statement for License Renewal of Nuclear Plants, NUREG-1437, Vol. 1, § 8.3.1 (1996) [hereinafter GEIS, NUREG-1437, Vol. 1]; Office of Nuclear Reactor Regulation, Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants: Regarding Beaver Valley Power Station, Units 1 and 2, NUREG-1437, Supp. 36, § 8.2.5.2 (May 2009)).

part on the "large land requirements and associated aesthetic impacts" of wind power.[121]

Similarly, the ER concludes solar power is not a reasonable alternative because: (1) it would require energy storage or supplemental energy sources because it is intermittent; (2) many solar technologies are "still in the demonstration phase of development" and are not "competitive with fossil or nuclear-based technologies . . . due to high costs"; and (3) it would require a large area of land — nearly 13,000 acres — to replace Davis-Besse's generating capacity.[122]

Finally, the ER concludes that "[w]hen considered in various combinations . . . , these same renewable . . . energy resources still fail to be reasonable alternatives to renewal of Davis-Besse's operating license."[123] Putting forward a mix of 25% renewable energy and 75% natural gas generation as an example, the ER reasons that: (1) the "fluctuation of wind and solar resources" would cause "increased uncertainty in energy output"; (2) the land-use environmental impact of siting the resources would "likely exceed" the environmental impacts of Davis-Besse's continued operation; and (3) the natural gas plant's air quality impacts would "greatly exceed" continued operation's environmental impacts.[124]

3. Analysis of Joint Petitioners' Contentions

Contention One states the ER "fails to adequately evaluate the full potential for renewable energy sources, such as wind power."[125] Contention Two is iden-

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[121] *Id.*

[122] *Id.* at 7.2-9 to 7.2-10 (citing GEIS, NUREG-1437, Vol. 1, §§ 8.3.2, 8.3.3).

[123] *Id.* at 7.2-12.

[124] *Id.* at 7.2-12 to 7.2-13.

[125] Petition at 10. The full contention reads:

> Contention One: Wind Power. The FirstEnergy Nuclear Operating Company (hereinafter, FENOC) Environmental Report fails to adequately evaluate the full potential for renewable energy sources, such as wind power, to offset the loss of energy production from Davis-Besse, and to make the requested license renewal action from 2017 to 2037 unnecessary. In violation of the requirements of 10 C.F.R. § 51.53(c)(3)(iii) and of the GEIS § 8.1, the FENOC Environmental Report (§ 7.2) treats all of the alternatives to license renewal except for natural gas and coal plants as unreasonable and does not provide a substantial analysis of the potential for significant alternatives, such as wind power, in the Region of Interest for the requested relicensing period of 2017 to 2037. The scope of the SEIS is improperly narrow, and the issue of the need for Davis-Besse as a means of satisfying demand forecasts for the relicensing period must be revisited due to dramatically-changing circumstances in the regional energy mix that are currently underway already during this decade of Davis-Besse's remaining operating license (2010 to 2017), and can especially be expected to accelerate and materialize over two decades to come covering FENOC's requested license extension period (2017 to 2037).

Id. at 10-11.

tical to Contention One except that it substitutes solar power for wind power.[126] Contention Three alleges: "NEPA further requires in the consideration of alternatives to the license extension for Davis-Besse a combination of commercial wind-generated baseload power, combined with commercial solar photovoltaic-generated baseload power."[127] In the introduction to the third contention the Joint Petitioners seek to "incorporate as though rewritten fully herein the facts, arguments, legal points and authorities and rationales contained in Contentions 1 and 2 of this Petition."[128]

The NRC Staff and FirstEnergy argue that all three contentions are inadmissible. They assert that the Joint Petitioners do not demonstrate the existence of a material factual dispute with the ER as required by 10 C.F.R. § 2.309(f)(1)(vi).[129] The NRC Staff argues that Joint Petitioners do not succeed at demonstrating that solar power can replace the 910 MWe of baseload power that Davis-Besse pro-

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[126] *Id.* at 68. The full contention reads:

> Contention Two: Solar Electric (Photovoltaic) Power. The FirstEnergy Nuclear Operating Company (hereinafter, FENOC) Environmental Report fails to adequately evaluate the full potential for renewable energy sources, such as solar electric power or photovoltaics (hereinafter "solar power"), to offset the loss of energy production from Davis-Besse, and to make the requested license renewal action from 2017 to 2037 unnecessary. In violation of the requirements of 10 C.F.R. § 51.53(c)(3)(iii) and of the GEIS § 8.1, the FENOC Environmental Report (§ 7.2) treats all of the alternatives to license renewal except for natural gas and coal plants as unreasonable and does not provide a substantial analysis of the potential for significant alternatives, such as solar power, in the Region of Interest for the requested relicensing period of 2017 to 2037. The scope of the Supplemental Environment Impact Statement (SEIS) is improperly narrow, and the issue of the need for Davis-Besse as a means of satisfying demand forecasts for the relicensing period must be revisited due to dramatically-changing circumstances in the regional energy mix that are currently underway already during this decade of Davis-Besse's remaining operating license (2010 to 2017), and can especially be expected to accelerate and materialize over two decades to come covering FENOC's requested license extension period (2017 to 2037).

Id. at 68-69.

[127] The full contention reads:

> Contention Three: Solar and Wind in Combination. The Relicensing GEIS Is Stale, Dated and NEPA Non-Compliant; Commercial Wind And Solar Photovoltaic Baseload Power Should Be Considered Under NEPA as a Single, Combined-Source Alternative. ¶ 158. NEPA further requires in the consideration of alternatives to the license extension for Davis-Besse a combination of commercial wind-generated baseload power, combined with commercial solar photovoltaic-generated baseload power. Petitioners incorporate as though rewritten fully herein the facts, arguments, legal points and authorities and rationales contained in Contentions 1 and 2 of this Petition.

Id. at 93.

[128] Petition at 93. Following Joint Petitioners' lead, FirstEnergy incorporates by reference its responses to Contentions One and Two in its answer to Contention Three. FirstEnergy Answer at 64.

[129] NRC Staff Answer at 20; FirstEnergy Answer at 33-34, 43, 45, 54, 59, 63-64, 65.

vides.[130] NRC Staff also argues that Joint Petitioners have not "provided sufficient information to support their assertions that offshore and onshore wind energy can replace Davis-Besse's baseload power generation."[131] Likewise FirstEnergy posits that Petitioners have not provided sufficient alleged facts or expert opinion to support their contentions.[132]

We will analyze Contentions One, Two, and Three as if they were a single contention that challenges the sufficiency of the ER's analysis of renewable energy sources, specifically wind, solar, or a combination of wind and solar, as a reasonable alternative to the renewal of Davis-Besse's operating license.[133] As we review these three contentions, we will first eliminate those portions of the contention that are clearly extraneous to this proceeding, i.e. are outside the scope of this proceeding, are not material to this proceeding, or fail to raise a genuine dispute with the ER.[134]

4. Issues That Are Out of Scope, Not Material, or Not Supported

To the extent that Contentions One[135] and Two[136] refer to events that would "materialize over two decades to come . . . (2017 to 2037),"[137] we find any reference to events that will occur during that period of time not to be material to this proceeding and thus inadmissible. As conceded by Joint Petitioners,[138] any reasonable alternative to be evaluated in depth must be an alternative that is available now or in the near future and in any event no later than April 22, 2017, the expiration date of the current license. The Joint Petitioners raise a second extraneous issue in their assertion that "[t]he scope of the SEIS [sic] is improperly narrow, and the issue of the need for Davis-Besse as a means of satisfying demand forecasts for the relicensing period must be revisited due to dramatically changing circumstances in the regional energy mix."[139] The Joint Petitioners' argument about the need for power from Davis-Besse during the

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[130] NRC Staff Answer at 26.

[131] *Id.* at 27.

[132] FirstEnergy Answer at 47-48, 61-62.

[133] *Crow Butte,* CLI-09-12, 69 NRC at 552 (stating boards may reformulate contentions "'to consolidate issues for a more efficient proceeding.'" (quoting *Shaw AREVA MOX Services, LLC* (Mixed Oxide Fuel Fabrication Facility), LBP-08-11, 67 NRC 460, 482 (2008))).

[134] Authority for narrowing the scope of a contention is found in 10 C.F.R. § 2.319(e) which authorizes the presiding officer to "[r]estrict irrelevant, immaterial, unreliable, duplicative or cumulative evidence and/or arguments."

[135] Petition at 10-11.

[136] *Id.* at 69.

[137] *Id.* at 11, 69.

[138] Tr. at 69.

[139] Petition at 10; *accord id.* at 69.

license renewal period is outside the scope of this proceeding and inadmissible under 10 C.F.R. § 2.309(f)(1)(iii) because it challenges 10 C.F.R. § 51.53(c)(2), which states that a license renewal ER "is not required to include discussion of need for power." 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. Joint Petitioners have neither sought nor received a waiver of section 51.53(c)(2).

A third extraneous issue the Joint Petitioners raise is the role the Generic Environmental Impact Statement for License Renewal of Nuclear Plants (GEIS)[140] should play in defining the range of alternatives to be considered in the ER. To the extent they urge that the "1996 Generic EIS' parameters must be deemed legally void under NEPA[ ]," [141] the Joint Petitioners raise an issue that is both outside the scope of the proceeding and not material to any findings the NRC must make to support the requested action. Similarly, the Joint Petitioners' allegation, in the introduction to Contention Three, that the relicensing GEIS is "stale, dated and NEPA non-compliant"[142] is inadmissible because it raises issues that are beyond the scope of this proceeding and are not material, and therefore violates 10 C.F.R. §§ 2.309(f)(1)(iii) and (iv).

5. Admissible Contention as Narrowed by the Board

The elimination of these extraneous issues reveals the admissible core of Contentions One, Two, and Three. This core is the Joint Petitioners' challenge to the ER's failure to consider in a comprehensive manner combinations of wind and/or solar photovoltaic energy sources as an alternative to the Davis-Besse relicensing. Joint Petitioners charge that the ER contains a "vague and superficial"[143] discussion of wind, solar, and other renewable energy alternatives,[144] and contend this discussion is inadequate.[145] Joint Petitioners allege that FirstEnergy "has not undertaken the requisite 'hard look' at commercial wind energy or solar as alternatives."[146] The Joint Petitioners controvert the ER's conclusion that wind, solar, or a combination of wind and solar cannot meet the baseload output of the Davis-Besse plant by 2017.

Section 2.309(f)(1)(i) requires a proposed contention to provide a specific statement of the issue of law or fact to be raised or controverted. Joint Petitioners

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[140] GEIS, NUREG-1437, Vol. 1.

[141] Petition at 95.

[142] *Id.* at 93 (capitalization altered).

[143] *Id.* at 19.

[144] *Id.* at 20-22, 36-38, 69-70.

[145] *Id.* at 19, 73.

[146] *Id.* at 98.

provide a specific statement for Contention One as follows: "The FirstEnergy . . . Environmental Report fails to adequately evaluate the full potential for renewable energy sources, such as wind power, to offset the loss of energy production from Davis-Besse, and to make the requested license renewal action from 2017 to 2037 unnecessary."[147] Joint Petitioners provide a specific statement for Contention Two that is identical except for the substitution of the words "solar electric power or photovoltaics (hereinafter 'solar power')" for "wind power."[148] For Contention Three, Joint Petitioners' specific statement is that "NEPA further requires in the consideration of alternatives to the license extension for Davis-Besse a combination of commercial wind-generated baseload power, combined with commercial solar photovoltaic-generated baseload power."[149]

Section 2.309(f)(1)(ii) requires a brief explanation of the basis for the contention. Although Joint Petitioners are not particularly brief in their explanation, the basis of Contentions One, Two, and Three is that wind energy, solar photovoltaic energy, and a combination of both fulfills all of the criteria of a reasonable alternative.[150] Joint Petitioners assert that these energy sources would have "significantly less adverse human environmental impacts" because "energy alternatives like wind . . . and solar . . . are abundantly available and do not have a carbon producing fuel cycle such as is the case with uranium."[151] Joint Petitioners deny that "wind power involves negative 'aesthetic' and 'visual' impacts."[152] Joint Petitioners deny also that "storage remains a cost prohibitive impediment to wind power's widespread and large-scale development,"[153] thereby disputing the ER's conclusion that "current energy storage technologies are too expensive for wind power to serve as a large base-load generator."[154] Joint Petitioners assert that "interconnectedness of renewable energy generation" is another "solution to baseload and intermittency issues."[155]

Sections 2.309(f)(1)(iii) and 2.309(f)(1)(iv) require that the issue be within the scope of the proceeding and material to the findings that the NRC must make to support the action that is involved in the proceeding. The submission of an ER is the first instance where petitioners can challenge the environmental analysis put forward by an applicant. The ER and its conclusions provide the foundation for the EIS that the agency staff is tasked with preparing. A concern that the

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[147] *Id.* at 10.
[148] *Id.* at 68-69.
[149] *Id.* at 93.
[150] *Id.* at 97.
[151] *Id.* at 15-16.
[152] *Id.* at 27 (emphasis omitted).
[153] *Id.* at 28.
[154] ER at 7.2-9.
[155] Petition at 41.

ER's analysis pays short shrift to the possible role of wind and solar photovoltaic energy as reasonable alternatives to relicensing is within the scope of a relicensing proceeding and is material to the findings that the NRC must make under NEPA.

Section 2.309(f)(1)(v) requires a concise statement of alleged facts or expert opinions that support the petitioner's position on the issue and upon which the petitioner intends to rely at the hearing. Although not particularly concise, the Joint Petitioners allege many facts and proffer expert support. They refer to materials that allegedly show that compressed air storage would "work for wind power, and at a very large scale"[156] and has "enabled wind power to surmount intermittency challenges, so much so that NREL [National Renewable Energy Laboratory] now recognizes the existence of 'baseload wind.'"[157] Joint Petitioners also include the declaration of Dr. Alvin Compaan, who proffers paragraphs 123 through 151 of Contention Two as his expert opinion.[158] Dr. Compaan, a professor of physics at the University of Toledo,[159] notes that "[s]olar power has a CO_2 footprint that is much smaller than the full fuel chain of nuclear."[160] According to Dr. Compaan, "[e]conomical sources of energy storage and back-up power are available to provide good base-load power, in conjunction with solar."[161] Dr. Compaan further concludes that "wide-scale installation of solar power combined with a storage facility . . . is a very viable alternative" to the requested Davis-Besse license extension.[162] Joint Petitioners also allege that FirstEnergy recently purchased a compressed-air storage project, the Norton Energy Storage Project.[163]

In addition, Joint Petitioners have tendered numerous exhibits that contain studies and reports that they allege show that within the foreseeable future, wind power, solar power, and a combination of wind and solar could be reasonable alternatives to the renewal of Davis-Besse. They argue that these renewable energy sources should have been evaluated in greater detail in the ER. For example, Joint Petitioners cite the following:

(i) A June 2010 NREL technical report that shows the offshore wind

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[156] *Id.* at 28 (citing *id.,* Attach. 48, Ken Zweibel et al., *By 2050 Solar Power Could End U.S. Dependence on Foreign Oil and Slash Greenhouse Gas Emissions,* Sci. Am. 64 (Jan. 2008)).

[157] *Id.* (citing *id.,* Attach. 11, Arjun Makhijani, *Carbon-Free and Nuclear-Free: A Roadmap for U.S. Energy Policies* (Aug. 2007)). NREL, a national laboratory of the United States Department of Energy, is "the nation's primary laboratory for renewable energy and energy efficiency research and development." NREL, Overview, http://www.nrel.gov/overview/ (last visited Apr. 22, 2011).

[158] Compaan Decl. at 1-2.

[159] *Id.* at 1.

[160] Petition at 71 (sponsored by Compaan Decl. at 1-2).

[161] *Id.* (sponsored by Compaan Decl. at 1-2).

[162] *Id.* (sponsored by Compaan Decl. at 1-2).

[163] *Id.* at 28-29 (quoting *id.,* Attach. 49, Press Release from FirstEnergy Corp., *FirstEnergy Acquires Rights to Norton Energy Storage Project* (Nov. 23, 2009)).

potential for the United States.[164] Joint Petitioners allege this study shows that, within FirstEnergy's region of interest, "there is a total resource of 155.5 gigawatts (GW) of offshore and deepwater wind alone (within 50 nautical miles)."[165]

(ii) A January 2010 NREL study, from which the Joint Petitioners quote:

> "Greatly expanded use of wind energy has been proposed to reduce dependence on fossil and nuclear fuels for electricity generation. The large-scale deployment of wind energy is ultimately limited by its intermittent output and the remote location of high-value wind resources, particularly in the United States. Wind energy systems that combine wind turbine generation with energy storage and long-distance transmission may overcome these obstacles and provide a source of power that is functionally equivalent to a conventional baseload electric power plant. A 'baseload wind' system can produce a stable, reliable output that can replace a conventional fossil or nuclear baseload plant, instead of merely supplementing its output. This type of system could provide a large fraction of a region's electricity demand, far beyond the 10-20% often suggested as an economic upper limit for conventional wind generation deployed without storage."[166]

(iii) A 2007 Stanford University study entitled "Supplying Baseload Power and Reducing Transmission Requirements by Interconnected Wind Farms."[167] The Joint Petitioners quote from this study as follows:

> "A solution to improve wind power reliability is interconnected wind power. In other words, by linking multiple wind farms together it is possible to improve substantially the overall performance of the interconnected system (i.e., array) when compared with that of any individual wind farm."[168]

The Joint Petitioners quote as the study's conclusion: "'Contrary to common knowledge, an average of 33% and a maximum of 47% of yearly averaged wind power from interconnected farms can be used as reliable, baseload electric power.'"[169]

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[164] *Id.* at 51-52 (citing *id.,* Attach. 33, Marc Schwartz et al., *Assessment of Offshore Wind Energy Resources for the United States* (June 2010)).

[165] *Id.* at 52 (citing Schwartz et al., *supra* note 164, at 3 tbl.1).

[166] *Id.* at 38-39 (quoting *id.,* Attach. 20, National Renewable Energy Laboratory, United States Department of Energy, *Creating Baseload Wind Power Systems* (Oct. 3, 2006)).

[167] *Id.* at 40 (citing *id.,* Attach. 21, Cristina L. Archer & Mark Z. Jacobson, *Supplying Baseload Power and Reducing Transmission Requirements by Interconnecting Wind Farms,* 46 J. Appl. Meteorol. & Climatol. 1701 (Feb. 2007)).

[168] *Id.* (quoting Archer et al., *supra* note 167, at 1702).

[169] *Id.* (quoting Archer et al., *supra* note 167, at 1716).

(iv) A press release announcing FirstEnergy's acquisition of rights to the Norton Energy Storage Project in Ohio.[170] Joint Petitioners contend that "wide-scale installation of solar power combined with a storage facility such as the Norton Project, already acquired by First Energy, is a very viable alternative to the license extension for 20 more years of operation of the Davis-Besse nuclear facility."[171] The Joint Petitioners quote the press release's statement that the former limestone mine "'is ideal for energy storage technology.'"[172] Anthony J. Alexander, president and chief executive officer of FirstEnergy, is quoted in the press release as stating:

> "The compressed-air technology envisioned at this site would essentially operate like a large battery, storing energy at night for use during the day when it is needed . . . . Because many renewable energy sources — such as wind — are intermittent, they don't always produce power when electricity demand is high. The energy storage aspects of this project would provide a way to harness renewable energy to be used when customers need it, making this project a key component to our region's overall renewable energy strategy."[173]

(v) Lastly, a study prepared for the Department of Energy Office of Energy Efficiency and Renewable Energy, Wind and Water Power Program.[174] Joint Petitioners quote this study as stating that:

> "[O]ffshore wind resource data for the Great Lakes, U.S. coastal waters, and Outer Continental Shelf [including off of New Jersey's coast] up to 50 nautical miles from shore indicate that for annual average wind speeds above 8.0 m/s, the total gross resource of the United States is 2,957 GW or approximately three times the generating capacity of the current U.S. electric grid. . . . The scale of this theoretical capacity implies that under reasonable economic scenarios, offshore wind can contribute to the nation's energy mix to significant levels."[175]

This study refers to land-based and shallow water offshore wind platforms as "Commercially Proven Technologies."[176]

Although many of the Joint Petitioners' exhibits do not specifically address

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[170] *Id.* at 29, 88 (citing *id.,* Attach. 54, *FirstEnergy Acquires Rights to Norton Energy Storage Project,* Nov. 23, 2009 [hereinafter *FirstEnergy Acquires Rights to Norton*]).

[171] *Id.* at 89.

[172] *Id.* at 88 (quoting *FirstEnergy Acquires Rights to Norton, supra* note 170, at 1).

[173] *FirstEnergy Acquires Rights to Norton, supra* note 170, at 1.

[174] Petition at 59 (citing *id.,* Attach. 42, Jacques Beaudry-Losique et al., *Creating an Offshore Wind Industry in the United States: A Strategic Work Plan for the United States Department of Energy, Fiscal Years 2011-2015* (Sept. 2, 2010) (predecisional draft)).

[175] *Id.* at 59-60 (quoting Beaudry-Losique et al., *supra* note 174, at 3 (emphasis by Joint Petitioners omitted)).

[176] Beaudry-Losique et al., *supra* note 174, at 21.

FirstEnergy's region of interest, we find that they have provided the required "alleged facts" and "minimal" factual support for admitting a challenge which questions the sufficiency of the ER's examination of wind power, solar photovoltaic power, and a combination of both as alternatives to relicensing Davis-Besse.

Section 2.309(f)(1)(vi) requires a showing that a genuine dispute exists with the applicant on a material issue of law or fact. FirstEnergy and the NRC Staff argue that Joint Petitioners do not show a genuine dispute under 10 C.F.R. § 2.309(f)(1)(vi) because an energy source must be single and discrete to be a reasonable alternative, and interconnected wind farms, renewable energy with storage, and a combination of wind and solar power are not single and discrete.[177] The Applicant and NRC Staff cite the GEIS[178] for the proposition that "a reasonable alternative energy source must . . . be a single, discrete electric generation source."[179]

During oral argument the NRC Staff conceded that this portion of the GEIS has not been converted into a regulation and is therefore not binding on the Board.[180] Indeed, the NRC Staff stated recent NRC environmental impact documents review wind and solar in combination with fossil fuel as a reasonable alternative.[181] The Supreme Court has recognized that the concept of "alternatives" evolves, and agencies must explore alternatives as they become better known and understood.[182] The GEIS is not binding law and its statements concerning the practicality of multiple alternative sources have not been revised in 15 years. The NRC is in the process of amending its environmental protection regulations by updating its 1996 findings on the environmental impacts related to the renewal of a nuclear power plant's operating license.[183] We are not persuaded that, as a matter of law, a distributed combination of wind farms, solar arrays, and compressed air energy storage (CAES) could not constitute a reasonable alternative.

In addition, the NRC Staff argues that Joint Petitioners have not shown "a genuine dispute with the ER's conclusion that solar power and wind power cannot replace Davis-Besse as a source of 910 MWe of baseload power by the

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[177] FirstEnergy Answer at 27.

[178] GEIS, NUREG-1437, Vol. 1, § 8.1.

[179] FirstEnergy Answer at 54; *accord* NRC Staff Answer at 43.

[180] Tr. at 50-52.

[181] *See* Tr. at 113-14. The NRC Staff considered "a combination of alternatives that includes natural gas combined-cycle generation, energy conservation/energy efficiency, and wind power" for several recent license applications. *See, e.g.,* Office of Nuclear Reactor Regulation, Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants: Regarding Hope Creek Generating Station and Salem Nuclear Generating Station, Units 1 and 2, NUREG-1437, Supp. 45, at iii (Mar. 2011).

[182] *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.,* 435 U.S. 519, 553 (1978).

[183] 74 Fed. Reg. 38,117 (July 31, 2009).

commencement of the relicensing period, 2017."[184] Making the same argument, FirstEnergy contends that Joint Petitioners do not show a genuine dispute because they "have not shown that baseload wind and solar power is technically feasible or commercially viable now or in the immediate future."[185] A baseload power source, as the NRC Staff explains, "runs continuously to produce electricity at an essentially constant rate in order to satisfy all or part of the minimum, or base, system load."[186] Baseload generation is different than peaking power, which provides supplemental power during hours of the day when demand is highest.[187] However, Joint Petitioners dispute the ER by claiming that interconnectedness and energy storage allow wind and solar power to provide baseload power and proffer expert support and specific references to support this claim, as discussed above. Joint Petitioners have submitted numerous exhibits and a declaration that purport to demonstrate that within the foreseeable future, an environmentally superior alternative of wind, solar, or wind and solar baseload power may be technically feasible and commercially viable. We need not address the merits issue here. Further, as stated in *Carolina Environmental Study Group v. United States,*[188] there exists an obligation to consider alternatives "as they exist and are likely to exist."[189]

FirstEnergy and the NRC Staff's remaining arguments against admissibility of Contentions One, Two, and Three are not persuasive. First, the NRC Staff interprets Contention Three to contend that FirstEnergy omitted any discussion of a combination of wind and solar power and argue the contention is not admissible "because the information Joint Petitioners allege as omitted is in fact included in the Application."[190] However, it appears to this Board that Joint Petitioners' contention posits that FirstEnergy should have identified a combination of wind and solar power as a reasonable alternative and analyzed it as such.[191] Accordingly, we do not agree that Contention Three should be viewed as a contention of omission.

Second, in challenging admissibility, the Applicant and the NRC Staff conflate

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[184] NRC Staff Answer at 16 (internal footnote omitted).

[185] FirstEnergy Answer at 4.

[186] NRC Staff Answer at 16 n.26 (citing U.S. Energy Information Administration, Overview — Generating Capability/Capacity, http://www.eia.doe.gov/cneaf/electricity/page/prim2/chapter2.html (last visited Apr. 22, 2011)).

[187] *United States v. Cinergy Corp.,* 623 F.3d 455, 459-60 (7th Cir. 2010) (quoting *Babcock & Wilcox Co. v. United Technologies Corp.,* 435 F. Supp. 1249, 1256 (N.D. Ohio 1977)).

[188] 510 F.2d 796 (D.C. Cir. 1975).

[189] *Id.* at 801.

[190] NRC Staff Answer at 40.

[191] *See* Petition at 97 (discussing the definition of "reasonable alternative" and concluding "[c]ommercial wind and solar photovoltaic fulfill all these criteria").

the merits of the contention with the adequacy of its pleading. The Applicant states it "believes that various combinations of renewable and advanced energy resources with generation equivalent to that of Davis-Besse are not reasonable alternatives to renewal of Davis-Besse's operating license"[192] and argues that "Contention 3 provides no information to show that a combination of wind and solar power could provide baseload power of this magnitude, or that this baseload generation would be technically feasible or commercially viable."[193] But this question of whether a combination of renewable energy sources constitutes a "reasonable" alternative is the very issue on which the Joint Petitioners seek a hearing. When a contention alleges the need for further study of an alternative, from an environmental perspective, "such reasonableness determinations are the merits, and should only be decided *after* the contention is admitted."[194] To be entitled to a hearing, Joint Petitioners need not demonstrate that they will necessarily prevail, but only that there is at least some minimal factual support for their position.

It is rarely appropriate to resolve complex, fact-intensive issues on the initial pleadings.[195] Thus, many of FirstEnergy and the NRC Staff's arguments improperly address the merits of the Joint Petitioners' contention, rather than whether Joint Petitioners have provided "'a minimal showing that material facts are in dispute, thereby demonstrating that an inquiry in depth is appropriate.'"[196]

We agree with the approach recently taken by the Licensing Board in the *Seabrook* proceeding where a somewhat similar contention was admitted.[197] At this stage, it is sufficient for the Joint Petitioners to proffer some "minimal" factual support for their contention. This they have done and included both an expert's declaration and a number of alleged facts from scholarly sources.

Some of the Joint Petitioners' supporting references are said to suggest that alternative energy sources, like wind or solar, could be a viable source of baseload power in the region by 2017.[198] Whether this is so remains to be seen. In the Board's view, however, Joint Petitioners have proffered sufficient "minimal"

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[192] FirstEnergy Answer at 67 (quoting ER at 7.2-13).

[193] *Id.* at 66.

[194] *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-09-10, 70 NRC 51, 86 (2009), *rev'd in part on other grounds,* CLI-10-2, 71 NRC 27, 29 (2010).

[195] *Cf. Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 303, 305 (2010) [hereinafter *Pilgrim II*] (declining to uphold summary dismissal of contention involving "complex, fact-intensive issues" based on factors the board did not address and develop in the record).

[196] Final Rule: "Rules of Practice for Domestic Licensing Proceedings — Procedural Changes in the Hearing Process," 54 Fed. Reg. at 33,171 (quoting *Connecticut Bankers Association v. Board of Governors,* 627 F.2d 245, 251 (D.C. Cir. 1980)).

[197] *Seabrook,* LBP-11-2, 73 NRC at 47, 53.

[198] Tr. at 69-70, 75, 97, 109, 113.

evidence to warrant further inquiry as to whether such alternatives might be "likely to exist" during the relevant time period.

Although the Petition is generally unfocused and includes numerous exhibits irrelevant and immaterial to this proceeding, buried within its first 100 pages and first 171 numbered paragraphs lies a single contention concerning reasonable alternatives to the relicensing application. As stated above, a contention must satisfy each element of section 2.309(f)(1) to be admissible. We find the following contention, as narrowed by the Board,[199] meets the requirements of section 2.309(f)(1) and is therefore admissible:

> The FirstEnergy Nuclear Operating Company's Environmental Report fails to adequately evaluate the full potential for renewable energy sources, specifically wind power in the form of interconnected wind farms and/or solar photovoltaic power, in combination with compressed air energy storage, to offset the loss of energy production from Davis-Besse, and to make the requested license renewal action unnecessary. The FENOC Environmental Report (§ 7.2) treats all of the alternatives to license renewal except for natural gas and coal plants as unreasonable and does not provide a substantial analysis of the potential for significant alternatives in the Region of Interest.

B. Contention Four

Joint Petitioners' fourth contention concerns FirstEnergy's analysis of severe accident mitigation alternatives or "SAMAs."[200] SAMA analyses identify and assess possible plant changes — such as hardware modifications and improved training or procedures — that could cost-effectively reduce the radiological risk from a severe accident.[201] Cost-effective SAMA candidates are identified by comparing the annualized cost of the mitigation measure with the benefit as

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[199] Having eliminated extraneous issues, we consolidate and rephrase Contentions One, Two, and Three to clarify their scope. *See, e.g., Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-07-3, 65 NRC 237, 255 (2007) ("[E]xercising our authority under 10 C.F.R. §§ 2.316, 2.319, 2.329, we have acted to further define the Joint Petitioners[']admitted contentions when redrafting would clarify the scope of the contentions."); *cf. Pennsylvania Power & Light Co.* (Susquehanna Steam Electric Station, Units 1 and 2), LBP-79-6, 9 NRC 291, 295-96 (1979) (holding that although a Licensing Board "is not required to recast contentions to make them acceptable," it is "also not precluded from doing so").

[200] Petition at 100.

[201] *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) [hereinafter *McGuire/Catawba*]; *accord* Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, 61 Fed. Reg. 28,467, 28,481 (June 5, 1996).

determined by the averted cost of severe accidents (consequences), as weighted by the probability of the accidents' occurrence.[202]

The regulation codifying the Commission's determination that the probability-weighted consequences of a severe accident (risk) are small in the context of a license renewal proceeding[203] cannot be challenged in this proceeding.[204] Although a petitioner cannot challenge that regulation, a petitioner may argue that potential reduction in the probability-weighted consequences of severe accidents is not small when compared to the cost of mitigation measures. The Commission's regulations permit rather than foreclose challenges to SAMA analyses.[205]

A SAMA analysis fulfills the requirement under NRC's NEPA-implementing regulation, 10 C.F.R. Part 51, to provide "a consideration of alternatives to mitigate severe accidents,"[206] and therefore is governed by NEPA's "rule of reason."[207] NEPA requires a "reasonably complete discussion of possible mitigation measures."[208] The "ultimate concern" in a SAMA contention "is whether any additional SAMA should have been identified as potentially cost-beneficial, not whether further analysis may refine the details in the SAMA NEPA analysis."[209] Accordingly, a SAMA contention is admissible only if "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."[210]

Joint Petitioners allege in Contention Four that:

> The Environmental Report (ER) is Inadequate Because It Underestimates the True Cost of a Severe Accident at Davis-Besse in Violation of 10 C.F.R. § 51.53(C)(3)(ii)(L) and Further Analysis by the Applicant, [FirstEnergy], Is Called For.[211]

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[202] *McGuire/Catawba,* CLI-02-17, 56 NRC at 4.

[203] 10 C.F.R. Part 51, Subpart A, App. B, tbl. B-1 ("The probability weighted consequences of atmospheric releases, fallout onto open bodies of water, releases to ground water, and societal and economic impacts from severe accidents are small for all plants.").

[204] *See* 10 C.F.R. § 2.335(a) (providing that absent a waiver, no rule or regulation of the Commission is subject to challenge in an adjudicatory proceeding).

[205] *Id.* ("[A]lternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives." (citing 10 C.F.R. § 51.53(c)(3)(ii)(L))).

[206] 10 C.F.R. § 51.53(c)(3)(ii)(L).

[207] *McGuire/Catawba,* CLI-02-17, 56 NRC at 7.

[208] *Robertson v. Methow Valley Citizens Council,* 490 U.S. 332, 352 (1989).

[209] *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-09-11, 69 NRC 529, 533 (2009) [hereinafter *Pilgrim I*].

[210] *Pilgrim II,* CLI-10-11, 71 NRC at 317.

[211] Petition at 100.

Joint Petitioners specify several factors, assumptions, and models[212] that allegedly have, "individually and together with one or more of the others, improperly minimized costs likely to result in a severe accident."[213] Joint Petitioners contend that FirstEnergy's ER underestimates the cost of a severe accident and "incorrectly discounts possible mitigation alternatives" and that, as a result, "a potentially cost effective mitigation alternative might not be considered that could prevent or reduce the impacts of that accident."[214]

The NRC Staff argues that Joint Petitioners have not shown that the factors, assumptions, and models identified in Contention Four are material.[215] In addition, the NRC Staff challenges some subparts of the contention as outside the scope of the proceeding[216] and some as inadequately supported by alleged facts or expert opinion.[217] The NRC Staff concludes that, for these reasons, Contention Four should not be admitted.[218]

Similarly, FirstEnergy argues that Contention Four "lacks adequate support in the form of alleged facts or expert opinion" and raises issues outside the scope of this proceeding.[219] FirstEnergy argues also that Joint Petitioners do not attempt to meet the materiality standard and that they ignore applicable precedent and

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[212] Joint Petitioners express Contention Four's bases as follows:

> a. [FirstEnergy]'s use of probabilistic modeling underestimated the deaths, injuries, and economic impact likely from a severe accident by multiplying consequence values, irrespective of their amount, with very low probability numbers, the consequence figures appeared minimal.
>
> b. Minimization of the potential amount of radioactive material released in a severe accident.
>
> c. Use of an outdated and inaccurate proxy, the MACCS2 computer program, to perform its SAMA analysis.
>
> d. Use of an inappropriate air dispersion model, the straight-line Gaussian plume, and meteorological data inputs that did not accurately predict the geographic dispersion and deposition of radionuclides at Davis-Besse's Great Lake shoreline location.
>
> e. Use of inputs that minimized and inaccurately reflected the economic consequences of a severe accident, including decontamination costs, cleanup costs and health costs, and that either minimized or ignored a host of other costs.
>
> f. Use of inappropriate statistical analysis of the data — specifically the Applicant chose to follow NRC practice, not NRC regulation, regarding SAMA analyses by using mean consequence values instead of, for example, 95 percentile values.

Id. at 104.

[213] *Id.* at 103.

[214] *Id.*

[215] NRC Staff Answer at 49.

[216] *Id.* at 51.

[217] *E.g., id.* at 58.

[218] *See id.* at 2.

[219] FirstEnergy Answer at 80.

pertinent factual information in the ER.[220] FirstEnergy concludes that "whether its subparts are viewed independently or cumulatively in combination with other subparts, Contention 4 should be rejected in its entirety for failing to meet the requirements of 10 C.F.R. § 2.309(f)(1)(iii)-(vi)."[221]

In the analysis that follows, the Board will identify issues that: (1) are outside the scope of this license renewal proceeding; (2) are not material; (3) are unsupported by alleged fact or expert support; or (4) fail to refer to the Application to show a genuine dispute. These issues will not be considered further in this proceeding. By eliminating these extraneous issues, we will have narrowed Contention Four down to its admissible core.[222]

1. Issues That Are Out of Scope (Small Impact of Severe Accidents; Spent Fuel Pool)

FirstEnergy and the NRC Staff argue that several of the issues Joint Petitioners attempt to raise in Contention Four are outside the scope of license renewal proceedings.[223] We agree, at least as to Joint Petitioners' challenges to (1) the Commission's determination that severe accident impacts are small[224] and (2) the Commission's exclusion of the irradiated nuclear fuel pool risk.[225]

First, as FirstEnergy and the NRC Staff have argued,[226] Joint Petitioners' claim that "the 'societal and economic impacts from severe accidents' are unlikely to be small for all plants and simply appear so by the use of methods that minimized consequences as set forth in this Motion"[227] is outside the scope of this proceeding because it directly challenges a Commission regulation. The statement challenges the agency regulation codifying the Commission's determination that, for any license renewal of a nuclear power plant, the probability-weighted consequences of a severe accident are small.[228] Unless a party first successfully petitions for a waiver or exception, it may not challenge Commission rules or regulations in an adjudicatory hearing.[229] Joint Petitioners have not petitioned for a waiver or

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[220] *Id.* at 82-83.

[221] *Id.* at 70-71.

[222] *Crow Butte,* CLI-09-12, 69 NRC at 552 ("Our boards may reformulate contentions to 'eliminate extraneous issues or to consolidate issues for a more efficient proceeding.'" (quoting *Shaw AREVA,* LBP-08-11, 67 NRC at 482)).

[223] FirstEnergy Answer at 80; NRC Staff Answer at 51.

[224] FirstEnergy Answer at 87-88; NRC Staff Answer at 57-58; *see* Petition at 105.

[225] FirstEnergy Answer at 92-95; NRC Staff Answer at 51-55; *see* Petition at 108-12.

[226] FirstEnergy Answer at 87-88; NRC Staff Answer at 57-58.

[227] Petition at 105.

[228] 10 C.F.R. Part 51, Subpart A, App. B, tbl. B-1.

[229] *Id.* § 2.335.

exception to the small risk determination. Accordingly, the argument that severe accident risk is not small is in contravention of 10 C.F.R. § 2.309(f)(1)(iii) and so is outside the scope of this proceeding.

In addition, FirstEnergy interprets Joint Petitioners' assertion that FirstEnergy's "use of probabilistic modeling underestimated the true consequences of a severe accident"[230] as an argument that SAMAs "must ignore risk and focus only on accident consequences."[231] FirstEnergy asserts that such an argument "should be dismissed in its entirety"[232] as an impermissible challenge to NRC regulations outside the scope of an adjudicatory proceeding.[233] The NRC Staff similarly argues "Joint Petitioners' challenge to [FirstEnergy's] probabilistic approach in computing SAMAs is . . . outside the scope of the proceeding."[234] In their final revised reply, Joint Petitioners clarify that they are "not 'enemies' of probability determinations"[235] and "agree that probability must be taken into consideration."[236] As clarified in the final revised reply, Joint Petitioners' argument is that FirstEnergy "has consistently underestimated risk in its SAMA calculations by inappropriately and improperly underestimating probability values" through "flawed models and methodologies."[237] As a consequence, we do not need to decide whether it would be out of scope to challenge the weighting of severe accident consequences by the probability of their occurrence in SAMA analyses, because Joint Petitioners have clarified that they are not arguing against probabilistic modeling in this proceeding.

Second, FirstEnergy and the NRC Staff argue Joint Petitioners have raised an out-of-scope issue[238] by arguing that the risk of "a severe accident in the irradiated nuclear fuel pool" should have been considered in the SAMA analysis.[239] FirstEnergy contends this issue "improperly challenges the Commission's generic determination in Part 51 that the impacts of on-site spent fuel storage are 'small.'"[240] The NRC Staff agrees that "this portion of Joint Petitioners' argument is inadmissible because it is . . . a direct attack on the Commission's regulations."[241]

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[230] Petition at 104.
[231] FirstEnergy Answer at 84-85.
[232] *Id.* at 86.
[233] *Id.* at 85 (citing 10 C.F.R. § 2.335).
[234] NRC Staff Answer at 83.
[235] Reply at 45.
[236] *Id.* at 46.
[237] *Id.* at 45.
[238] FirstEnergy Answer at 92-93; NRC Staff Answer at 51-55.
[239] Petition at 108.
[240] FirstEnergy Answer at 92.
[241] NRC Staff Answer at 52.

The germane Commission regulation states that, for all plants, onsite dry or pool storage can "safely accommodate" spent fuel accumulated from a 20-year license extension with "small environmental effects," and categorizes onsite spent fuel as a Category 1 issue.[242] For Category 1 issues, mitigation of adverse impacts has already been generically analyzed and it has already been determined "that additional plant-specific mitigation measures are likely not to be sufficiently beneficial to warrant implementation."[243] Since Joint Petitioners have not obtained a waiver or exception to this regulation, their challenge to this rule is outside the scope of this license renewal proceeding.[244] Accordingly, spent fuel pool risk is extraneous to Joint Petitioners' SAMA contention.[245]

Because spent fuel pool risk is outside the scope of SAMA analyses, we do not reach Joint Petitioners' argument that Davis-Besse's irradiated fuel storage pools contain a larger inventory of radioactive materials than its reactor core.[246] For the same reason, we need not address Joint Petitioners' interpretation of sections 5 and 6 of the GEIS as including the irradiated nuclear fuel pool in SAMA analyses,[247] except to note that the Commission has rejected this very argument.[248]

2. Issues That Are Not Material (Sabotage Risk; Quality Assurance)

FirstEnergy and the NRC Staff also assert that some issues raised in Contention Four are not material to the findings NRC must make to support the requested license renewal. We agree, at least as to the treatment of the risk of sabotage and the quality assurance standards applied to the MACCS2 code. In Section III.B.5, below, we address — with reference to the potentially admissible core of this SAMA contention — FirstEnergy and the NRC Staff's arguments that the entire

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[242] 10 C.F.R. Part 51, Subpart A, App. B, tbl. B-1.

[243] *Id.* tbl. B-1 n.2.

[244] *See* 10 C.F.R. § 2.335; *see also Turkey Point,* CLI-01-17, 54 NRC at 23 (holding "Part 51's license renewal provisions cover environmental issues relating to onsite spent fuel storage generically" and "[a]ll such issues, including accident risk, fall outside the scope of license renewal proceedings.").

[245] *See Pilgrim II,* CLI-10-11, 71 NRC at 312 (stating that claim that "SAMA analysis is deficient for failing to address potential spent fuel pool accidents" falls "beyond the scope of NRC SAMA analysis and impermissibly challenges [Commission] regulations").

[246] Petition at 112.

[247] *Id.* (referring to GEIS, NUREG-1437, Vol. 1, §§ 5, 6).

[248] *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 474 (2010) [hereinafter *Pilgrim III*] (clarifying that "[c]hapter six clearly is not limited to discussing only 'normal operations,' but also discusses potential accidents and other nonroutine events," and that "[t]he Category 1 finding for onsite spent fuel storage (and chapter six of the GEIS upon which the finding is based) is not limited to routine or 'normal operations'" (citing GEIS, NUREG-1437, Vol. 1, at 6-19, 6-21, 6-28, 6-31, 6-34)).

contention is inadmissible for lack of a showing that the refinements in question might make an additional SAMA candidate cost-effective.

First, the Applicant argues that Joint Petitioners' "claims regarding the need to address intentional acts in a SAMA analysis . . . do not raise a material issue,"[249] and the NRC Staff agrees.[250] Joint Petitioners charge FirstEnergy with failing "to model intentional acts in its analysis of external events"[251] and state that "intentional acts represent a class of accidents that should not be considered using probabilistic modeling."[252] However, as the Commission recently reiterated, "NEPA 'imposes no legal duty on the NRC to consider intentional malevolent acts . . . in conjunction with commercial power reactor license renewal applications.'"[253] Therefore, we conclude that intentional malevolent acts, such as sabotage and terrorism, are not material to the SAMA findings the NRC must make in deciding whether to extend the Davis-Besse license, in contravention of 10 C.F.R. § 2.309(f)(1)(iv).

Second, Joint Petitioners failed to show how their claim that the MACCS2 code "is not QA'd" is material.[254] Joint Petitioners assert MACCS2 was developed using "the less rigorous QA guidelines of ANSI/ANS 10.4" instead of being "held to the QA requirements of NQA-a."[255] FirstEnergy points out that Appendix B to 10 C.F.R. Part 50 requires quality assurance, but only for safety-related functions of structures, systems, and components and not for NEPA analyses.[256] SAMA analyses are required pursuant to NEPA.[257] FirstEnergy admonishes Joint Petitioners for not explaining why a computer code used to evaluate SAMAs would need to meet quality assurance requirements.[258] We agree that Joint Petitioners have not demonstrated that the issue of whether the MACCS2 was "QA'd" is material to the findings the NRC must make under NEPA to support the requested license extension, as required by 10 C.F.R. § 2.309(f)(1)(iv).

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[249] FirstEnergy Answer at 87.

[250] NRC Staff Answer at 55-56.

[251] Petition at 108.

[252] *Id.* at 107.

[253] *Pilgrim III,* CLI-10-14, 71 NRC at 476 (quoting *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124, 129 (2007)).

[254] Petition at 115.

[255] *Id.*

[256] FirstEnergy Answer at 101.

[257] 10 C.F.R. §§ 51.1(a), 51.53(c)(3)(ii)(L).

[258] FirstEnergy Answer at 101.

3. Issues That Are Not Supported by Alleged Facts or Expert Opinion (Indoor Dose; Forest, Wetland, and Shoreline Cleanup; Stigma Costs; Economic Infrastructure Costs; Multiplier Effect; Evacuation Time Input Data; "Myriad of Other Economic Costs"; Terrain Effects on Dispersion; $2,000/Person-Rem Conversion Factor; Consequence Value Uncertainties)

FirstEnergy and the NRC Staff argue that Joint Petitioners have failed to provide alleged facts or expert opinions to support several of the claims they make in Contention Four. In one instance, FirstEnergy and the NRC Staff note that Joint Petitioners "provide no alleged facts or expert opinion to support" their claim that "if properly modeled, the indoor dose would increase by a factor" of 2 to 4.[259] In a second instance, FirstEnergy[260] and the NRC Staff[261] argue that Joint Petitioners do not provide facts or expert support for their assertion that FirstEnergy's analysis should have considered that "forests, wetlands and shorelines cannot realistically be cleaned up and decontaminated."[262] Next, the NRC Staff argues Joint Petitioners have not supported their claim that "the 'economic losses stemming from the stigma effects of a severe accident [at Davis-Besse] would be staggering.'"[263] The NRC Staff also faults Joint Petitioners for not providing facts or expert support for their claim that the ER should have discussed economic infrastructure costs and indirect economic effects ("multiplier effects").[264] FirstEnergy and the NRC Staff argue also that Joint Petitioners did not provide alleged facts or expert opinion[265] to support their argument that FirstEnergy's "evacuation time input data" were "unrealistically low and unsubstantiated" because it did not account for certain traffic, weather, and human behavior effects.[266] Finally, the NRC Staff argues[267] that Joint Petitioners do not provide any facts or expert opinion to support their claim that "a myriad of other economic costs were underestimated or totally ignored."[268] We agree that Joint Petitioners do not provide any alleged facts or expert opinion to support any of these claims, as required by 10 C.F.R § 2.309(f)(1)(v).

The NRC Staff argues also that Joint Petitioners have also failed to support their

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[259] *Id.* at 103; NRC Staff Answer at 61; *see* Petition at 116.

[260] FirstEnergy Answer at 118.

[261] NRC Staff Answer at 73.

[262] Petition at 138.

[263] NRC Staff Answer at 74 (quoting Petition at 141).

[264] *Id.* (citing Petition at 141-42).

[265] FirstEnergy Answer at 129; NRC Staff Answer at 78.

[266] Petition at 147.

[267] NRC Staff Answer at 148.

[268] Petition at 148.

claim regarding complex terrain.[269] Joint Petitioners argue that the Gaussian plume model FirstEnergy used to model atmospheric dispersion is not appropriate[270] because, among other reasons, it does not model the impact of terrain on "wind field patterns and plume dispersion."[271] The NRC Staff notes that although Joint Petitioners provide studies "that suggest a user should employ caution when relying on a Gaussian plume model in areas with complex or varied terrain," they "have not shown that Davis-Besse is surrounded by complex terrain."[272] Joint Petitioners claim the Cuyahoga River Valley is "one example of the complex topographical features in Davis-Besse's region,"[273] but do not provide any alleged facts or expert support indicating that this river valley is within the geographical area for which FirstEnergy was required to model atmospheric dispersion. We agree that the Joint Petitioners have not supported their terrain claim with alleged facts or expert opinion, as required by 10 C.F.R. § 2.309(f)(1)(v).

Joint Petitioners' challenge of the $2,000/person-rem conversion factor is inadmissible because it too lacks support. They make three arguments to establish that the $2,000/person-rem factor is "based on a deeply flawed analysis and seriously underestimates the cost of the health consequences of severe accidents."[274]

First, Joint Petitioners point out the conversion factor represents "only stochastic health effects (e.g., cancer)" and argue "it is inappropriate to use a conversion factor that does not include deterministic effects."[275] Joint Petitioners instead recommend summing the total number of early fatalities and latent cancer fatalities and multiplying by the $3 million value of a statistical life.[276] The NRC Staff argues that this argument "offers only an unsupported assertion" because Joint Petitioners "offer no estimate" of the "large number of early fatalities" they assert should be part of the analysis.[277] Joint Petitioners do provide an estimate of 1400 early fatalities and 73,000 early injuries, citing a document they refer to as "CRAC-2, Calculation of Reactor Accident Consequences, U.S. Nuclear Power Plants, Sandia National Laboratory, 1982."[278] FirstEnergy asserts, however, that it "has been unable to locate a document with this title, author, and date that is readily available in the public domain" and points out that Joint Petitioners did

[269] NRC Staff Answer at 66.

[270] Petition at 116.

[271] *Id.* at 122.

[272] NRC Staff Answer at 62.

[273] Petition at 134 (citing *id.,* Attach. 70, Website of National Park Service, U.S. Department of the Interior, Cuyahoga Valley National Park).

[274] *Id.* at 142-43.

[275] *Id.* at 144.

[276] *Id.* at 145.

[277] NRC Staff Answer at 75-76.

[278] Petition at 146.

not submit this document as an attachment to the Petition.[279] The NRC Staff assert they also "weren't able to locate it based on [Joint Petitioners'] representation of it."[280] Joint Petitioners respond that the document is "a well known report within the nuclear power establishment" and "is an NRC document,"[281] but admitted at oral argument that they "only cite it by name" and "may not have gotten the title correct."[282] We thus conclude that Joint Petitioners do not provide alleged facts or expert opinion indicating that a severe accident at Davis-Besse might have deterministic effects, such as early fatalities or early injuries, that FirstEnergy did not account for in its SAMA analysis.

Second, Joint Petitioners further contend that the $2,000/person-rem conversion factor "assumes that all exposed persons receive dose commitments below the threshold at which the dose and dose-rate reduction factor . . . should be applied."[283] However, Joint Petitioners do not support their assertions about dose and dose-rate reduction factors with any alleged facts or expert support.

Third, Joint Petitioners argue that FirstEnergy's $2000/person-rem conversion analysis "ignored a marked increase in the value of cancer mortality risk per unit of radiation at low doses (2-3 rem average)," and cite two articles in support.[284] At oral argument, Joint Petitioners explained that "the person-rem conversion factor needs to undergo reevaluation," because "at low doses of radiation, there is a supra-linear harm caused to people."[285] However, neither of the articles cited in the Petition indicates there is a supra-linear relationship between dose and risk at low doses. The first article, entitled "Risk of Cancer After Low Doses of Ionising Radiation: Retrospective Cohort Study in 15 Countries," estimates that the risk to nuclear industry workers at low doses is "higher than, but statistically compatible with, the current bases for radiation protection standards."[286] The second article, entitled "Protracted Exposure and Cancer Mortality in the Techa River Cohort," estimated "the slope of the dose response for both solid cancer and leukemia" in its subject population and concluded there was "no indication of significant

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[279] FirstEnergy Answer at 128.

[280] Tr. at 220.

[281] Reply at 72.

[282] Tr. at 217-18.

[283] Petition at 144-45.

[284] *Id.* at 146 (citing E. Cardis et al., *Risk of Cancer After Low Doses of Ionising Radiation: Retrospective Cohort Study in 15 Countries,* 331 Brit. Med. J. 77 (July 4, 2005) and L. Yu. Krestinina et al., *Protracted Radiation Exposure and Cancer Mortality in the Techa River Cohort,* 164 Radiation Res. 602 (2005)).

[285] Tr. at 209.

[286] Cardis et al., *supra* note 284, at 5.

curvature."[287] In short, the alleged facts and expert opinion the Joint Petitioners proffer do not provide support for their challenge to the $2,000/person-rem conversion factor.

Joint Petitioners' final unsupported claim is their assertion that FirstEnergy "fails to consider the uncertainties in its consequence calculation."[288] They assert that meteorological variations cause uncertainties in estimates of population dose, fatalities, and offsite economic costs[289] and criticize FirstEnergy for "inadequately dealing with" uncertainty in its ER.[290] The ER explains that no explicit uncertainty analysis was performed because "the number of conservative assumptions and inputs" in the SAMA analysis "account for any uncertainties in the calculations" and because "sensitivity cases . . . showed the robustness of the SAMA cost-benefit evaluation."[291] Hence the ER does not report any consequences at the mean or 95th percentile values, but rather presents "conservative" point values. Joint Petitioners, however, criticize FirstEnergy for "using mean consequence values instead of, for example, 95 percentile values"[292] and complain also that FirstEnergy "has unconvincingly performed suspect sensitivity analyses."[293] FirstEnergy and the NRC Staff argue that Joint Petitioners have not provided alleged facts or expert support for their claim about uncertainty.[294] We agree. Although Joint Petitioners refer to two documents indicating uncertainties can arise in probabilistic

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[287] Krestinina et al., *supra* note 284, at 608. At oral argument, the Joint Petitioners argued that the BEIR VII Report by the National Academy of Sciences shows the supra-linear dose-risk relationship is not reflected in the $2,000/person-rem conversion factor. Tr. at 209. The Joint Petitioners cited this report in the Petition, but not as support for the supra-linear relationship claim. Petition at 146-147. Instead, they cited the report to support their statement that cancer incidence and the other "potential health effects from exposure to radiation in a severe radiological event" should have been considered but were not, *id.,* confusingly contradicting their earlier statement that the $2,000/person-rem conversion accounts for stochiastic health effects. *Id.* at 144. The Joint Petitioners have never directed our attention to a specific page or section of the BEIR VII Report, which is over 400 pages long. Committee to Assess Health Risks from Exposure to Low Levels of Ionizing Radiation, National Research Council, *Health Risks from Exposure to Low Levels of Ionizing Radiation: BEIR VII Phase 2* (2006). Board members are not required to comb through the record seeking support for contentions. *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-6, 73 NRC 149, 244 n.111 (2011) (citing *SmithKline Beecham Corp. v. Apotex Corp.,* 439 F.3d 1312, 1320 (Fed. Cir. 2006)). We decline to unearth support in this report for a proposition for which it was not even cited as authority in the Petition.

[288] Petition at 148.

[289] *Id.* at 148-49.

[290] *Id.* at 149.

[291] ER at E-70.

[292] Petition at 148 (capitalization omitted).

[293] *Id.* at 149.

[294] FirstEnergy Answer at 131; NRC Staff Answer at 85-86.

risk assessment,[295] neither of these citations shows that FirstEnergy's sensitivity cases and conservative assumptions and inputs were inadequate for dealing with uncertainty.[296] Accordingly, Joint Petitioners' claim about uncertainty in the consequence calculation is not supported by alleged facts or expert opinion.

In summary, for the reasons outlined above, we conclude that Joint Petitioners have failed to provide alleged facts or expert opinion to support their claims pursuant to 10 C.F.R. § 2.309(f)(1)(v) regarding: (1) indoor dose; (2) forest, wetland, and shoreline cleanup; (3) stigma costs; (4) economic infrastructure costs; (5) multiplier effect; (6) evacuation times; (7) "myriad" other economic costs; (8) terrain effects; (9) the $2,000/person-rem conversion factor; and (10) consequence value uncertainties.

4. Issues That Do Not Dispute the Application (Fire Hosing and Plowing)

Joint Petitioners' criticism of fire hosing and plowing decontamination methods[297] do not dispute the Application's SAMA analysis. FirstEnergy points out that Joint Petitioners quote language from the MACCS2 User's Guide that states that the code is made more conservative by its assumption that farmlands are decontaminated using these methods.[298] The MACCS2 User's Guide explains that the code assumes these surface-washing methods might not move contamination out of the root zone, where radioactivity could be taken up into crops.[299] Thus, the guide concludes, the code assumes that these methods would not reduce ingestion doses although they would reduce direct exposure doses to farmers.[300] And for their part the Joint Petitioners do not explain how the MACCS2 codes assumption about fire hosing and plowing could have caused FirstEnergy to underestimate the cost of a severe accident. Accordingly, Joint Petitioners' fire hosing and plowing

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[295] Petition at 148-49 (citing Edwin S. Lyman, *A Critique of the Radiological Consequence Assessment Conducted in Support of the Indian Point Severe Accident Mitigation Alternatives Analysis* at 4 (Nov. 2007) (Accession No. ML 073410093) and quoting Kamiar Jamali, *Use of Risk Measures in Design and Licensing of Future Reactors,* 95 Reliability Eng'g & Safety Sys. at 935-36 (2010)).

[296] The Commission has suggested that a petitioner may question the "practice for SAMA analysis to utilize mean consequence values, which results in an averaging of potential consequences." *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-10-22, 72 NRC 202, 207 n.34 (2010). However, a petitioner must support such a challenge with alleged facts or expert opinion. 10 C.F.R. § 2.309(f)(1)(v).

[297] Petition at 136, 138.

[298] FirstEnergy Answer at 117-18 (citing Petition at 136 (quoting D. Chanin & M.L. Young, Code Manual for MACCS2; User's Guide, NUREG/CR-6613, Vol. 1, at 7-10 (May 1998) (ADAMS Accession No. ML063550020) [hereinafter MACCS2 User's Guide, NUREG/CR-6613, Vol. 1])).

[299] MACCS2 User's Guide, NUREG/CR-6613, Vol. 1, at 7-10.

[300] *Id.*

claims do not dispute the Application. We will not consider these claims further, because they do not satisfy 10 C.F.R. § 2.309(f)(1)(vi).

5. Admissible Contention as Narrowed by the Board

Having eliminated the extraneous issues, we look next at issues that we find ultimately provide an admissible core for Contention Four. Using the Joint Petitioners' own words whenever possible, we recast Contention Four as follows:

> "The Environmental Report (ER) is inadequate because it underestimates the true cost of a severe accident at Davis-Besse in violation of 10 C.F.R. § 51.53(C)(3)(II)(L) [sic] and Further Analysis by the Applicant, [FirstEnergy], is called for"[301] because of:
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> (1) "Minimization of the potential amount of radioactive material released in a severe accident"[302] by "using a source term . . . based on radionuclide release fractions . . . which are smaller for key radionuclides than the release fractions specified in NRC guidance";[303]
>
> (2) "Use of an inappropriate air dispersion model, the straight-line Gaussian plume,"[304] that "does not allow consideration for the fact that winds for a given time period may vary spatially, . . . ignores the presences of Great Lakes 'sea breeze' circulations which dramatically alter air flow patterns,"[305] fails to account for "hot spots of radioactivity" caused by "plumes blowing . . . offshore over Lake Erie,"[306] and is based on "meteorological inputs . . . collected from just one site — at Davis-Besse itself;"[307] and
>
> (3) Use of "inputs that minimized and inaccurately reflected the economic consequences of a severe accident,"[308] specifically particle size and clean-up costs for urban areas.

a. Source Terms

Joint Petitioners contend that using a source term generated by the Modular Accident Analysis Progression code (MAAP code) — as FirstEnergy did — "appears to lead to anomalously low consequences when compared to source

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[301] Petition at 100.
[302] *Id.* at 104.
[303] *Id.* at 108.
[304] *Id.* at 104.
[305] *Id.* at 119.
[306] *Id.* at 121.
[307] *Id.* at 125.
[308] *Id.* at 104.

terms generated by the NRC staff."[309] Joint Petitioners allege that the MAAP code generates source terms that "are consistently smaller for key radionuclides than the release fractions specified in NUREG-1465 and its recent revision for high-burnup irradiated nuclear fuel."[310]

Joint Petitioners support their source-term claim by quoting a published draft of NUREG-1150 in which the NRC observed, in the context of the Zion Nuclear Power Plant, that "comparisons made between the Source Term Code Package results and MAAP results indicated that the MAAP estimates for environmental release fractions were significantly smaller."[311] Joint Petitioners also quote a Brookhaven National Laboratory study that determined that dose results reported by the applicant for license renewal at the Catawba and McGuire Plants were "less by a factor between 3 and 4" than those calculated consistent with NUREG-1150.[312] The NRC Staff recognizes that "Joint Petitioners have provided some support for the argument that MAAP may lead to lower consequences when compared to source terms generated by NRC Staff."[313]

Nevertheless, the NRC Staff argues that "Joint Petitioners' reliance on NUREG-1465 is unavailing."[314] FirstEnergy agrees, asserting that "reference to NUREG-1465 . . . provides no factual or technical support for the contention."[315] FirstEnergy distinguishes "the *release of radionuclides into containment,*" which is addressed in NUREG-1465, from "the release of radionuclides *into the environment* during a severe accident," which SAMA analyses model.[316] This technical argument, from the Board's perspective, warrants exploration in further adjudicatory proceedings, so as to avoid addressing the merits of the contention at the contention-admissibility stage of this proceeding.

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[309] *Id.* at 114.

[310] *Id.* at 112 (referring to L. Soffer et al., Accident Source Terms for Light-Water Nuclear Power Plants, NUREG-1465 (Feb. 1995) (ADAMS Accession No. ML041040063) [hereinafter NUREG-1465]).

[311] *Id.* at 114 (quoting Office of Nuclear Regulatory Research, Draft for Comment, Reactor Risk Reference Document, NUREG-1150, Vol. 1, at 5-14 (Feb. 1987) (ADAMS Accession No. ML063540601)) [hereinafter Draft NUREG-1150] (capitalization altered by Joint Petitioners). The draft of NUREG-1150 states that the Source Term Code Package is described in NUREG-0956. Draft NUREG-1150 at ES-3 (citing M. Silverberg et al., Reassessment of the Technical Bases for Estimating Source Terms, NUREG-0956 (July 1986) (ADAMS Accession No. ML063550025)).

[312] *Id.* at 113 (quoting John R. Lehner et al., Brookhaven National Laboratory, *Benefit Cost Analysis of Enhancing Combustible Gas Control Availability at Ice Condenser and Mark III Containment Plants* at 17 (Dec. 2002) (ADAMS Accession No. ML031700011)).

[313] NRC Staff Answer at 80.

[314] *Id.*

[315] FirstEnergy Answer at 95.

[316] *Id.* (quoting NUREG-1465, at 1) (emphasis in original); *accord* NRC Staff Answer at 80 (quoting NUREG-1465, at 1).

FirstEnergy points out that the ER presents "[t]he release categories and their frequencies" in section E.3.4.5 and Table E.3-20 and chides Joint Petitioners for not challenging the SAMA analysis with "any particularity."[317] However, Joint Petitioners cite pages of the ER that state that FirstEnergy used source terms generated by the MAAP code,[318] thereby demonstrating that Joint Petitioners have a genuine dispute with the Application.

FirstEnergy and the NRC Staff also point out that the Licensing Board presiding over the *Indian Point* license renewal case rejected a similar contention,[319] and FirstEnergy notes "the widespread use and acceptance of the MAAP code in the nuclear industry."[320] Joint Petitioners respond to the first point by arguing that a decision holding that the source term issue was not part of a contention in another proceeding "has nothing to do with whether the issues that are raised by the Joint Petitioners *here* must be considered."[321] They address the second point by asserting that "[j]ust because MAAP is broadly used does not necessarily mean that it is free from the flaws . . . allege[d]."[322] The *Indian Point* decision has persuasive rather than binding authority on us, and MAAP's widespread use does not immunize it from being challenged by a properly pled contention.

FirstEnergy and the NRC Staff further contend that the source term argument,[323] indeed the entire SAMA analysis contention,[324] is inadmissible because Joint Petitioners have not shown it is material to the findings the NRC must make to support the requested license renewal. To be material, a SAMA contention must show that "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."[325]

FirstEnergy articulates a materiality standard that would require an expert affidavit and a showing that the cost-benefit conclusions for SAMA candidates *would* change. FirstEnergy asserts "a petitioner must provide adequate support to show that additional SAMA *should* have been identified as potentially cost-

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[317] FirstEnergy Answer at 97.

[318] Petition at 113 (citing ER § 4.20-1, E-17).

[319] FirstEnergy Answer at 97; NRC Staff Answer at 81.

[320] FirstEnergy Answer at 98.

[321] Reply at 32.

[322] *Id.* at 54.

[323] FirstEnergy Answer at 97 (remonstrating Joint Petitioners for having "provided no facts or expert opinion to establish that . . . the use of alternative source terms would have resulted in the identification of additional potentially cost-beneficial SAMAs for Davis-Besse"); NRC Staff Answer at 81 (". . . Joint Petitioners have not established that . . . the use of another source term would identify additional cost beneficial SAMAs." (citing *Pilgrim I,* CLI-09-11, 69 NRC at 533)).

[324] FirstEnergy Answer at 82; NRC Staff Answer at 49.

[325] *Pilgrim II,* CLI-10-11, 71 NRC at 317 (emphasis added).

beneficial."[326] At oral argument, FirstEnergy asserted the materiality standard was "whether it *would genuinely cause* a change in a SAMA, identification of a SAMA, or in the ultimate cost-benefit analysis."[327] FirstEnergy implied at oral argument that a petitioner would need an expert affidavit to meet the "genuinely plausible" standard because SAMA analyses are "very specialized, detailed, probabilistic analyses and require some familiarity with the MACCS2 code in order to understand why" revised factors, models, or assumptions "could potentially have a change without running the model."[328] We believe FirstEnergy has exaggerated the materiality standard, which requires only that petitioners "provide sufficient information to show that, if their proposed refinements were incorporated, it is 'genuinely plausible' that cost-benefit conclusions might change."[329]

Joint Petitioners have shown that a change in the SAMA candidates' cost-benefit conclusions is genuinely plausible. The Brookhaven National Laboratory study they cite shows that source term selection can change dose results by a factor of 3 to 4.[330] Although this study addressed different nuclear power plants, it indicates that source term selection can make a large difference in dose results.

b. Gaussian Plume

Joint Petitioners also contend that using the "steady-state, straight-line Gaussian plume" air dispersion model in the MACCS2 code — as FirstEnergy did — "underestimates the area likely to be affected in a severe accident and the dose likely to be received in those areas."[331] Joint Petitioners assert that using this model "is not appropriate for . . . Davis-Besse's Great Lakes shoreline location" because the model cannot model spatially and temporally varying winds and "ignores the presences of Great Lakes 'sea breeze' circulations which dramatically alter air flow patterns."[332] Another reason the model is inappropriate, Joint Petitioners assert, is that it "'should be applied with caution at distances greater than ten to fifteen miles, especially if meteorological conditions are likely to be different from those at the source of release.'"[333] Joint Petitioners further maintain that the Gaussian plume model treats plumes blowing offshore over Lake Erie as though

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[326] FirstEnergy Answer at 82 (citing *Pilgrim I,* CLI-09-11, 69 NRC at 533).

[327] Tr. at 137 (emphasis added).

[328] Tr. at 153.

[329] *Seabrook,* LBP-11-2, 73 NRC at 62.

[330] Lehner et al., *supra* note 312, at 17.

[331] Petition at 116.

[332] *Id.* at 119.

[333] *Id.* at 124 (quoting U.S. Department of Energy, MACCS2 Computer Code Application Guidance for Documented Safety Analysis 3-8 (June 2004), *available at* http://hss.energy.gov/nuclearsafety/qa/sqa/central_registry/MACCS2/Final_MACCS2_Guidance_Report_June_1_2004.pdf).

they have no impact, when in actuality "a plume over water, rather than being dispersed, will remain tightly concentrated due to the lack of turbulence . . . until winds blow it onto land."[334] According to Joint Petitioners, the behavior of plumes over water "can lead to hot spots of radioactivity in places along the . . . Great Lakes shoreline, certainly to Detroit/Windsor, Toledo, and Cleveland."[335] Finally, the Joint Petitioners contend that inputting meteorological data collected over "just three years" from "just one site" — Davis-Besse itself — "will definitely not suffice to define the Great Lakes 'sea breeze' or capture variability."[336] Joint Petitioners point out that, to make matters "worse," the third year's data were "'deemed to be not viable as MACCS2 input.'"[337]

FirstEnergy clarifies that the Gaussian plume model is "used in the ATMOS module of MACCS2"[338] and asserts that "the straight-line Gaussian ATMOS model cannot be replaced without replacing the MACCS2 code itself."[339] FirstEnergy concedes, however, that the inability to interchange ATMOS with other plume dispersion models does not immunize the Gaussian model from a properly pled contention.[340]

The NRC Staff asserts that Joint Petitioners "have not provided adequate factual support" for their assertions regarding the lake breeze effect.[341] Despite acknowledging that "Joint Petitioners have produced several studies that indicate the sea breeze effect plays an important role at New England sites,"[342] the NRC Staff questions whether these studies have any applicability to Davis-Besse's Great Lakes location.[343] Joint Petitioners tie the Atlantic coast studies to Davis-Besse's location by citing two websites.[344] First, Joint Petitioners quote a National Weather Service webpage that states: "[w]hile the sea breeze is generally associated with the ocean, they can occur along the shore of any large body of

[334] *Id.* at 121.

[335] *Id.*

[336] *Id.* at 125.

[337] *Id.* (quoting ER at E.3.4.3). Another failing of the Gaussian plume model, according to Joint Petitioners, is that it cannot model terrain effects. *Id.* at 122. As discussed above in Section III.B.3, the ability of a Gaussian plume to model terrain effects is an extraneous issue because Joint Petitioners have not provided alleged facts or expert opinion indicating that Davis-Besse is surrounded by complex terrain. We have eliminated this issue from this proceeding.

[338] FirstEnergy Answer at 106.

[339] *Id.* at 108.

[340] *Id.*

[341] NRC Staff Answer at 69.

[342] *Id.* at 70.

[343] *Id.* at 63, 70.

[344] Petition at 117-18.

water such as the Great Lakes."[345] Second, Joint Petitioners quote the website of "Weather Doctor" Keith C. Heidorn, which states: "The lake breeze is similar to the sea breeze found along sea coasts."[346] Together with the Atlantic coast studies, these websites provide the requisite minimal support that a lake breeze might be a factor near Davis-Besse.

FirstEnergy and the NRC Staff argue in addition that Joint Petitioners have not provided adequate support for their claim regarding the behavior of plumes over water.[347] The NRC Staff seems to suggest that the ER already accounts for the impact of plumes travelling across Lake Erie into Michigan and Canada, but the page of the ER the Staff cites does not address reduced turbulence over water.[348] FirstEnergy points out that Joint Petitioners cite two documents by no more than their authors' last name — Zagar et al. and Angevine et al. — and one's publication date without attaching them to the petition.[349] The Board nonetheless was able to locate full citations for these two documents in the report by Dr. Jan Beyea that Joint Petitioners also cite,[350] and located one of them in the agency's ADAMS library.[351] This article deals with transport of airborne pollutants over water,[352] and Dr. Beyea cited it to support his conclusion that radioactive releases from the Pilgrim power plant on the New England coastline that are "headed initially out to sea will remain tightly concentrated due to reduced turbulence until winds blow the puffs back over land."[353] FirstEnergy points out that Dr. Beyea's report is "second-hand" because it discusses a different reactor and that he did not perform an independent SAMA analysis.[354] Nevertheless, in the Board's estimation, Dr. Beyea's report and the article about pollutant transport provide

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[345] *Id.* (quoting National Weather Service, JetStream, Online School for Weather, The Sea Breeze, http://www.srh.weather.gov/srh/jetstream/ocean/seabreezes.htm (last visited Apr. 22, 2011)).

[346] *Id.* (quoting Keith C. Heidorn, Weather Almanac for May 2000: Great Lake Breezes, http://www.islandnet.com/~see/weather/almanac/arc2000/alm00may2.htm (last visited Apr. 22, 2011)).

[347] FirstEnergy Answer at 110; NRC Staff Answer at 69.

[348] NRC Staff Answer at 70 (citing ER at E-49).

[349] FirstEnergy Answer at 110.

[350] Petition at 122 (citing Jan Beyea, *Report to the Massachusetts Attorney General on the Potential Consequences of a Spent-Fuel-Pool Fire at the Pilgrim or Vermont Yankee Nuclear Plant* 11 (May 25, 2006) (ADAMS Accession No. ML071840568)).

[351] Wayne M. Angevine et al., *Modeling of the Coastal Boundary Layer and Pollutant Transport in New England* (Jan. 2006) (ADAMS Accession No. ML110030899). The Board points out that, if this proceeding ultimately does go to an evidentiary hearing, the record upon which it will base its decision will be limited to the testimony and documentary material admitted as evidence, which generally will require, for instance, that any technical article or other document cited in a party's prefiled testimony must be submitted for the record as an exhibit.

[352] *Id.* at 1.

[353] Beyea, *supra* note 350, at 11.

[354] FirstEnergy Answer at 111.

the requisite minimal support, together with alleged facts, that the behavior of plumes over water might be a factor near Davis-Besse.

FirstEnergy and the NRC Staff also dispute the relevance and meaning of material Joint Petitioners proffer as support. The NRC Staff argues that studies indicating that the Gaussian model might be inappropriate in the context of source permitting do not support the claim that the model would not produce adequate SAMA results at Davis-Besse.[355] Similarly, the NRC Staff argues that a study the Joint Petitioners cited in support of their terrain claim[356] establishes that "the ATMOS model is accurate at distances up to 200 miles."[357] FirstEnergy also disputes the relevance of the material Joint Petitioners proffer as support.[358] These arguments, however, address the merits of the contention, not the adequacy of the pleading, and so provide no basis for deeming this portion of the contention inadmissible.

FirstEnergy argues the merits as well in its additional assertion that "the alleged methodological shortcomings of ATMOS are as likely to result in an overly conservative result."[359] The validity of this and other merits-based arguments bear further exploration after the contention is admitted.

FirstEnergy chides Joint Petitioners for not providing factual or expert support for their assertion that "data collected at the Davis-Besse site meteorological tower would not reflect any 'sea breeze' present in the site vicinity."[360] The NRC Staff likewise criticize Joint Petitioners for not providing "any citation or expert testimony to support this claim."[361] However, Joint Petitioners have provided support indicating that a lake breeze might cause spatially varying air circulation in the area surrounding Davis-Besse, and it is self-evident that a single immobile meteorological site would be unable to measure such spatially dependent circulation. Therefore, we conclude Joint Petitioners have provided adequate support for their claim that a single meteorological site is inadequate to provide data for the complex air circulation model they assert is necessary.

FirstEnergy also faults Joint Petitioners for not citing all the discussion of

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[355] NRC Staff Answer at 62, 64.

[356] Petition at 127. A source permit is an operating permit that the Clean Air Act requires major stationary sources of air pollution to obtain. *Sierra Club v. Georgia Power Co.,* 443 F.3d 1346, 1348 (11th Cir. 2006) (citing *Legal Environmental Assistance Foundation, Inc. v. Environmental Protection Agency,* 400 F.3d 1278, 1279 (11th Cir. 2005)).

[357] NRC Staff Answer at 65 (C. R. Molenkamp et al., Lawrence Livermore National Laboratory, Comparison of Average Transport and Dispersion Among a Gaussian, a Two-Dimensional and a Three-Dimensional Model, NUREG/CR-6853 (Oct. 2004) (ADAMS Accession No. ML043240034)).

[358] FirstEnergy Answer at 106.

[359] *Id.* at 109.

[360] *Id.* at 114.

[361] NRC Staff Answer at 72.

meteorological measurements in the ER.[362] At issue is Joint Petitioners' reference to the ER's statement that data were collected for the years 2006 through 2008 and that the 2008 data were deemed not to be viable.[363] FirstEnergy criticizes Joint Petitioners for not mentioning that the ER also states that "the 2006 meteorological data were used as the base case, and the meteorological data from 2007 were used in one sensitivity case" and that "sensitivity cases . . . us[ing] data from the late-1990s . . . confirmed that the 2006 meteorological data were representative and typical of annual meteorological conditions."[364] However, this level of specificity is not required in pleading a contention to raise a genuine dispute, especially considering that the information FirstEnergy refers to is included on the very page of the ER that Joint Petitioners cite.[365]

Finally, the NRC Staff and FirstEnergy argue that Joint Petitioners have not shown their challenge to the Gaussian model is a material dispute because they have not shown that the asserted errors might have masked a cost-beneficial SAMA.[366] Because Joint Petitioners have shown that the source term alone can alter dose results by a factor of 3 to 4, the source term and Gaussian model modifications acting together have sufficient impact to potentially make another SAMA candidate cost-beneficial.

c. Particle Size and Cleanup Costs for Urban Areas

Joint Petitioners contend that FirstEnergy underestimated costs by using the MACCS2 code to calculate decontamination and cleanup costs likely to be incurred in the event of a radioactive release.[367] Joint Petitioners suggest that "[i]n place of the outdated decontamination cost figure in the MACCS2 code, the SAMA analysis for Davis-Besse should incorporate, for example, the analytical framework contained in the 1996 Sandia National Laboratories report concerning site restoration costs . . . as well as Chernobyl and RDD type devices."[368] Although Joint Petitioners fail to support many of their assertions of error relating to decontamination costs,[369] they raise two claims that we conclude satisfy 10 C.F.R. § 2.309(f)(1).

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[362] FirstEnergy Answer at 114.

[363] Petition at 125 (citing ER § E.3.4.3).

[364] FirstEnergy Answer at 114 (citing ER at E-43 to E-44).

[365] Petition at 125 (citing ER § E.3.4.3).

[366] NRC Staff Answer at 63; FirstEnergy Answer at 109.

[367] Petition at 135-36.

[368] *Id.* at 140 (citing David I. Chanin & Walter B. Murfin, *Site Restoration: Estimation of Attributable Costs from Plutonium-Dispersal Accidents* (May 1996) *available at* http://chaninconsulting.com/downloads/sand96-0957.pdf).

[369] *See* Sections III.B.3-.4, *supra.*

The first concerns particle size. Joint Petitioners point out that the MACCS2 User's Guide states that the code's economic cost model is "WASH-1400 based," and assert that relying on WASH-1400 underestimates costs because it is based on cleanup after a nuclear weapon explosion.[370] According to Joint Petitioners, reactor accidents release smaller sized particles, ranging in size from a "fraction of a micron to a couple of microns," compared to particles produced in a nuclear weapon explosion, which are "ten to hundreds of microns."[371] Joint Petitioners contend the smaller particle size makes reactor accidents more difficult to clean up.[372]

The second concerns urban areas, which Joint Petitioners contend "will be considerably more expensive and time consuming to decontaminate and clean than rural areas."[373] Joint Petitioners refer to a study they allege "provides estimates for different types of areas, from farm or range land to high density urban areas."[374]

The NRC Staff states that it "recognizes that Joint Petitioners have provided minimal support necessary for its assertion that smaller particles will create higher cleanup costs and that urban areas are more costly to clean up than rural areas."[375]

FirstEnergy, on the other hand, argues that the Commission concluded the 1996 Sandia report was "of dubious relevance" to the Pilgrim applicant's SAMA analysis.[376] Joint Petitioners respond that the *Pilgrim* decision was "dependent on exactly what the intervenor(s) there did, or did not, plead or prove."[377]

FirstEnergy also argues that Joint Petitioners do not provide information to support their assertions about particle size because the Sandia report "indicates only that certain decontamination data may not be applicable to a *plutonium dispersal* accident."[378] FirstEnergy maintains that although the Sandia report states that most prior decontamination research has limited application to plutonium-dispersal accidents, it "makes no such assertion with respect to a reactor accident."[379]

This aspect of Contention 4 is admissible. The statement FirstEnergy quotes does not show that the Sandia report lends no support to Joint Petitioners' particle size claim. While particle size might depend on whether the radioactive substance is plutonium or reactor fuel, it also might depend on whether the dispersal is

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[370] Petition at 136 (citing MACCS2 User's Guide, NUREG/CR-6613, Vol. 1, at 7-10).

[371] *Id.* at 136-37.

[372] *Id.* at 137.

[373] *Id.* at 138.

[374] *Id.* at 138-39 (citing *id.,* Reichmuth Attach., Barbara Reichmuth et al., *Economic Consequences of a Rad/Nuc Attack: Cleanup Standards Significantly Affect Costs* at 6 tbl.1, 12 (Apr. 2005)).

[375] NRC Staff Answer at 74.

[376] FirstEnergy Answer at 116.

[377] Reply at 31-32.

[378] FirstEnergy Answer at 117 (citing Chanin & Murfin, *supra* note 368, App. E, at E-1).

[379] *Id.* (citing Chanin & Murfin, *supra* note 368, App. E. at E-1).

caused by a weapon explosion or a reactor accident, which is exactly the point raised by Joint Petitioners in their contention.

Regarding urban area cleanup costs, the NRC Staff argues that Joint Petitioners have not demonstrated that their challenge to the ER's decontamination and cleanup costs is material because they "have not shown that a different cost formula . . . could result in another cost-beneficial SAMA."[380] Similarly, FirstEnergy contends that Joint Petitioners have not adequately explained the materiality of their general decontamination-cost assertions to the Davis-Besse SAMA analysis.[381] Because we have determined that Joint Petitioners have shown that it is genuinely plausible that FirstEnergy's source term calculation and use of the Gaussian plume model could have masked a cost-beneficial SAMA candidate, these two factors acting together with refinement to the decontamination cost analysis might have masked a candidate. Therefore, we conclude the SAMA contention as limited is material.

We thus determine that Contention Four is admissible, as limited by the Board, to read as follows:

> The Environmental Report (ER) is inadequate because it underestimates the true cost of a severe accident at Davis-Besse in violation of 10 C.F.R. § 51.53(C)(3)(ii)(L) and further analysis by the Applicant, FirstEnergy, is called for because of:
>
> (1) Minimization of the potential amount of radioactive material released in a severe accident by using a source term based on radionuclide release fractions which are smaller for key radionuclides than the release fractions specified in NRC guidance;
>
> (2) Use of an inappropriate air dispersion model, the straight-line Gaussian plume, that does not allow consideration for the fact that winds for a given time period may vary spatially, ignores the presences of Great Lakes "sea breeze" circulations which dramatically alter air flow patterns, fails to account for hot spots of radioactivity caused by plumes blowing offshore over Lake Erie, and is based on meteorological inputs collected from just one site — at Davis-Besse itself; and
>
> (3) Use of inputs that minimized and inaccurately reflected the economic consequences of a severe accident, specifically particle size and cleanup costs for urban areas.

[380] NRC Staff Answer at 72-73.

[381] FirstEnergy Answer at 118.

IV. SELECTION OF HEARING PROCEDURES

A. Legal Standards

As required by 10 C.F.R. § 2.310(a), upon admission of a contention in a licensing proceeding, the Board must identify the specific hearing procedures to be used to adjudicate the contention. NRC regulations provide for a number of different procedural schemes, two of which are relevant here.[382] First, there is Subpart G,[383] which is mandated for certain proceedings,[384] and establishes NRC "Rules for Formal Adjudications," in which parties are permitted to "propound interrogatories, take depositions, and cross-examine witnesses without leave of the Board."[385] The other is Subpart L[386] which provides for a more "informal" proceeding in which discovery is generally prohibited (except for (1) specified mandatory disclosures under 10 C.F.R. § 2.336; and (2) the mandatory production of the hearing file under 10 C.F.R. § 2.1203(a)).[387] When utilizing Subpart L, the Board has the primary responsibility for questioning the witnesses at any evidentiary hearing.[388]

B. Ruling on Hearing Procedures

The Board concludes that, at this juncture, the Subpart L hearing procedures will be used to adjudicate each of the contentions we have admitted. We reach this result as follows. First, we conclude that there has been no showing under 10 C.F.R. § 2.310(d) that the Subpart G procedures are mandated for any of the admitted contentions. Second, exercising our discretion under 10 C.F.R. § 2.310(a), we have seen no reason or need to apply the Subpart G procedures to either of the admitted contentions. We therefore rule that, for the time being, the procedures of Subpart L will be used for the adjudication of each of the admitted

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[382] If the hearing on a contention is "expected to take no more than two (2) days to complete," 10 C.F.R. § 2.310(h)(1), the Board can impose the Subpart N procedures for "Expedited Proceedings with Oral Hearings" specified in 10 C.F.R. § 2.1400-.1407. These procedures are highly truncated, but may prove appropriate for certain contentions at a later stage.

[383] 10 C.F.R. Part 2.

[384] *See, e.g., id.* § 2.310(d).

[385] *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-06-20, 64 NRC 131, 201 (2006).

[386] 10 C.F.R. Part 2.

[387] *Id.* § 2.1203(d).

[388] *Id.* § 2.1207(b)(6).

contentions.[389] This determination is, of course, subject to reconsideration should there be reason to do so at a later date.

V. ORDER

Based on the foregoing, it is hereby ORDERED:

A. Joint Petitioners, consisting of Beyond Nuclear, Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, and the Green Party of Ohio, having demonstrated standing and having submitted at least one admissible contention are admitted as parties in this proceeding.

B. The following contentions are admitted as limited and reworded by the Licensing Board:

Contention One:

The FirstEnergy Nuclear Operating Company's Environmental Report fails to adequately evaluate the full potential for renewable energy sources, specifically wind power in the form of interconnected wind farms and/or solar photovoltaic power, in combination with compressed air energy storage, to offset the loss of energy production from Davis-Besse, and to make the requested license renewal action unnecessary. The FENOC Environmental Report (§ 7.2) treats all of the alternatives to license renewal except for natural gas and coal plants as unreasonable and does not provide a substantial analysis of the potential for significant alternatives in the Region of Interest.

Contention Four:

The Environmental Report (ER) is inadequate because it underestimates the true cost of a severe accident at Davis-Besse in violation of 10 C.F.R. § 51.53(C)(3)(ii)(L) and further analysis by the Applicant, FirstEnergy, is called for because of:

(1) Minimization of the potential amount of radioactive material released in a severe accident by using a source term based on radionuclide release fractions which are smaller for key radionuclides than the release fractions specified in NRC guidance;

(2) Use of an inappropriate air dispersion model, the straight-line Gaussian plume, that does not allow consideration for the fact that winds for a given

[389] The selection of hearing procedures for contentions at the outset of a proceeding is not immutable because, *inter alia,* the availability of Subpart G procedures under 10 C.F.R. § 2.310(d) depends critically on whether the credibility of eyewitnesses is important in resolving a contention, and witnesses relevant to each contention are not identified, under 10 C.F.R. § 2.336(a)(1), until after contentions are admitted. *See Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-07-15, 66 NRC 261, 272 (2007); *see also* 10 C.F.R. § 2.1402(b).

time period may vary spatially, ignores the presences of Great Lakes "sea breeze" circulations which dramatically alter air flow patterns, fails to account for hot spots of radioactivity caused by plumes blowing offshore over Lake Erie, and is based on meteorological inputs collected from just one site — at Davis-Besse itself; and

(3) Use of inputs that minimized and inaccurately reflected the economic consequences of a severe accident, specifically particle size and cleanup costs for urban areas.

C. Any portions of Joint Petitioners' Contentions One, Two, Three, or Four not specifically included in Ordering Paragraph B are not admitted.

D. A Subpart L hearing is granted with respect to the above-admitted contentions.

E. The Licensing Board will hold a telephone conference with the parties in which we will discuss a schedule of further proceedings in this matter.

F. This Order is subject to appeal to the Commission in accordance with the provisions of 10 C.F.R. § 2.311. Any petitions for review meeting applicable requirements set forth in that section must be filed within ten (10) days of service of this Memorandum and Order.

THE ATOMIC SAFETY AND
LICENSING BOARD[390]

William J. Froehlich, Chairman
ADMINISTRATIVE JUDGE

Nicholas G. Trikouros
ADMINISTRATIVE JUDGE

Dr. William E. Kastenberg
ADMINISTRATIVE JUDGE

Rockville, Maryland
April 26, 2011

[390] Copies of this Memorandum and Order were sent this date by the agency's E-Filing system to the counsel/representatives for (1) the Joint Petitioners; (2) FirstEnergy; and (3) the NRC Staff.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Ronald M. Spritzer, Chairman
Michael F. Kennedy
Randall J. Charbeneau

In the Matter of **Docket No. 52-033-COL**
(ASLBP No. 09-880-05-COL-BD01)

DETROIT EDISON COMPANY
(Fermi Nuclear Power Plant,
Unit 3) **May 20, 2010**

ENVIRONMENTAL REPORT

The environmental report's ("ER's") adequacy is examined under the National Environmental Protection Act ("NEPA"), as well as under Part 51, because the ER is the basis upon which the NRC's Environmental Impact Statement ("EIS") for Fermi Unit 3 will be prepared. The ER must therefore contain a sufficient analysis of potential environmental consequences and alternatives to enable the NRC Staff to prepare an EIS that fulfills the agency's obligations under NEPA.

HEARSAY

The scientific reports on which Intervenors rely are hearsay under the rules of evidence; that is, they are out-of-court statements offered to prove the truth of the matter asserted. Fed. R. Evid. 801(c). The Board is not precluded, however, from considering these documents despite their hearsay nature. 10 C.F.R. § 2.319(d) ("In proceedings under this part, strict rules of evidence do not apply to written submissions."). Even though the Board is not precluded from considering hearsay,

under section 2.319(d) it may on motion or on its own initiative strike any portion of a written presentation that is unreliable.

NATIONAL ENVIRONMENTAL POLICY ACT

The Board recognizes that NEPA is a procedural statute. Thus, "[i]f the adverse environmental impacts of the proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs." Accordingly, NEPA does not require that Applicant or the NRC Staff eliminate adverse impacts of the proposed action. Instead, NEPA requires sufficient public disclosure of environmental consequences and a rigorous exploration of reasonable alternatives to the proposed action.

CONTENTIONS

The Commission's rule that the scope of an admitted contention is determined by "the bases set forth in support of the contention" means that a contention's scope is bounded by the "brief explanation of the basis for the contention" required by 10 C.F.R. § 2.309(f)(1)(ii). As long as the facts now relied on by Intervenors in opposition to the summary disposition motion fall within the scope of that explanation, they are properly before the Board. No more is required because a petitioner does not have to set forth all of its factual evidence at the admissibility stage.

MEMORANDUM AND ORDER
(Denying Motions for Summary Disposition of Contentions 6 and 8; Denying in Part and Granting in Part Motion to Strike)

On September 17, 2010, Detroit Edison Company ("DTE" or "Applicant") submitted a Motion for Summary Disposition of Contention 6.[1] Two months later, on November 16, 2010, DTE submitted a Motion for Summary Disposition of Contention 8.[2] On December 16, 2010, DTE filed a Motion to Strike Portions of Intervenors' Response to the Motion for Summary Disposition of Contention

[1] Applicant's Motion for Summary Disposition of Contention 6 (Sep. 17, 2010) at 1 [hereinafter C-6 Motion].

[2] Applicant's Motion for Summary Disposition of Contention 8 (Nov. 16, 2010) at 1 [hereinafter C-8 Motion].

8.[3] For the reasons discussed below, the Board denies the Motions for Summary Disposition. The Motion to Strike is granted in part and denied in part.

I. BACKGROUND

This combined license ("COL") proceeding concerns the application of DTE pursuant to 10 C.F.R. Part 52, Subpart C, to construct and operate a GE-Hitachi Economic Simplified Boiling Water Reactor ("ESBWR"), designated Unit 3, on its existing Fermi nuclear facility site near Newport City in Monroe County, Michigan. DTE originally submitted its COL application ("COLA") for Fermi Unit 3 to the NRC on September 18, 2008.[4] The Commission published a notice of hearing and opportunity to petition for leave to intervene in the *Federal Register* on January 8, 2009.[5] On March 9, 2009, the Intervenors[6] filed a timely Request for a Hearing and Petition to Intervene,[7] and on March 19, 2009, this Board was established to preside over the proceeding.[8] In its July 31, 2009 Order, the Board found that the Intervenors had standing, admitted four of their contentions, and granted their hearing request.[9]

One of the contentions admitted by the Board in its July 31, 2009 Order, Contention 6, concerns the adequacy of the analysis in the Applicant's Environmental Report ("ER")[10] regarding the potential impact of chemical and thermal discharges from the proposed Fermi Unit 3 on algal blooms in the western Lake

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[3] Applicant's Motion to Strike Portions of Intervenors' Response to Motion for Summary Disposition of Contention 8 (Dec. 16, 2010) at 1 [hereinafter Motion to Strike].

[4] *See* Notice of Hearing, and Opportunity to Petition for Leave to Intervene and Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information and Safeguards Information for Contention Preparation on a Combined License for Fermi 3, 74 Fed. Reg. 836, 836 (Jan. 8, 2009).

[5] *Id.*

[6] Intervenors include Beyond Nuclear, Citizens for Alternatives to Chemical Contamination, Citizens Environmental Alliance of Southwestern Ontario, Don't Waste Michigan, the Sierra Club (Michigan Chapter), and numerous individuals.

[7] Petition of Beyond Nuclear, et al. for Leave to Intervene in Combined Operating Proceedings and Request for Adjudication Hearing (Mar. 9, 2009); REFILED Petition of Beyond Nuclear, et al. for Leave to Intervene in Combined Operating License Proceedings and Request for Adjudication Hearing (Apr. 21, 2009) [hereinafter Petition].

[8] Establishment of Atomic Safety and Licensing Board, 74 Fed. Reg. 12,913 (Mar. 25, 2009).

[9] LBP-09-16, 70 NRC 227, 236-37 (2009), *aff'd,* CLI-09-22, 70 NRC 932, 933 (2009).

[10] Fermi 3 Combined License Application, Part 3: Environmental Report, Rev. 0 (Sept. 2008) (ADAMS Accession No. ML082730641) [hereinafter ER Rev. 0]. Contentions 6 and 8, along with all of the other contentions addressed in the Board's July 31, 2009 Order, were analyzed based on Rev. 0 of the Applicant's ER.

Erie basin and the failure of the ER to discuss potential proliferation of a newly identified species of harmful algae, the *Lyngbya wollei,* in the basin.[11]

In addition, in its July 31, 2009 Order, the Board also admitted Contention 8, which concerns the ER's alleged failure to adequately assess the Fermi Unit 3 project's impacts on the eastern fox snake, a threatened species according to the Michigan Department of Natural Resources and Environment ("MDNRE"), and to consider alternatives that would mitigate or eliminate those impacts.[12]

Applicant now seeks summary disposition with regard to Contention 6 and Contention 8.[13] Intervenors timely filed oppositions to the Applicant's summary disposition motions.[14] In addition, Applicant filed a Motion to Strike Portions of Intervenors' Response to Motion for Summary Disposition of Contention 8 ("Motion to Strike"), which Intervenors opposed.[15]

II. LEGAL STANDARD

The standard for summary disposition motions in a subpart L proceeding such as this is set forth in 10 C.F.R. § 2.1205.[16] Under that regulation, licensing boards must apply the summary disposition standard for subpart G proceedings, found in 10 C.F.R. § 2.710. According to section 2.710(d)(2), a moving party is entitled to summary disposition if the presiding officer finds that "the filings in the proceeding, . . . 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."[17]

In general, when ruling on motions for summary disposition, the Commission applies standards analogous to those used by federal courts when ruling on motions for summary judgment under Rule 56 of the Federal Rules of Civil

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[11] LBP-09-16, 70 NRC at 277-82.

[12] *Id.* at 286-92. Prior to being named "Michigan Department of Natural Resources and Environment," that organization was known simply as "Michigan Department of Natural Resources."

[13] C-6 Motion at 1; C-8 Motion at 1.

[14] *See* Intervenors' Memorandum in Opposition to DTE's 'Motion for Summary Disposition of Contention 6' (Oct. 27, 2010) at 1 [hereinafter C-6 Answer]; Intervenors' Memorandum in Opposition to DTE's 'Motion for Summary Disposition of Contention 8' (Dec. 6, 2010) at 1 [hereinafter C-8 Answer].

[15] *See* Motion to Strike; Intervenors' Memorandum in Opposition to DTE's "Motion to Strike Portions of Intervenors' Response to Motion for Summary Disposition of Contention 8" (Dec. 29, 2010).

[16] 10 C.F.R. § 2.1205.

[17] 10 C.F.R. § 2.710(d)(2).

Procedure.[18] Consistent with Rule 56, the moving party bears the initial burden of demonstrating that no genuine issue as to any material fact exists and that it is entitled to judgment as a matter of law.[19] If the moving party fails to make the requisite showing to satisfy that initial burden, then "the Board must deny the motion — even if the opposing party chooses not to respond or its response is inadequate."[20] Thus, "'no defense to an insufficient showing is required.'"[21] If the moving party meets its burden, however, the nonmoving party must "counter each adequately supported material fact with its own statement of material facts in dispute and supporting documentation" and cannot rely on "mere allegations or denials," or the facts in controversy will be deemed admitted.[22] In addition, because the initial burden rests on the moving party, a licensing board must examine the record in the light most favorable to the nonmoving party and all justifiable inferences must be drawn in favor of the nonmoving party.[23]

Summary disposition "is not a tool for trying to convince a Licensing Board to decide, on written submissions, genuine issues of material fact that warrant resolution at a hearing."[24] Summary disposition is particularly inappropriate when a licensing board is presented with conflicting expert testimony, for at that stage of a proceeding it is not the role of licensing boards to "untangle the expert affidavits and decide 'which experts are more correct.'"[25] Thus, as the Commission noted: "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].' . . . If 'reasonable minds could differ as to the import of the evidence,' summary disposition is not appropriate."[26]

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[18] *See Advanced Medical Systems, Inc.* (One Factory Row, Geneva, Ohio 44041), CLI-93-22, 38 NRC 98, 102-03 (1993).

[19] 10 C.F.R. § 2.325; *see also Poller v. Columbia Broadcasting System, Inc.,* 368 U.S. 464, 467 (1962) (summary judgment should be granted only where the truth is clear); *Advanced Med. Sys.,* CLI-93-22, 38 NRC at 102; *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-99-32, 50 NRC 155, 158 (1999).

[20] *Advanced Med. Sys.,* CLI-93-22, 38 NRC at 102.

[21] *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Units 1 and 2), ALAB-443, 6 NRC 741, 754 (1977) (internal citation omitted).

[22] 10 C.F.R. § 2.710(a); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-30, 54 NRC 231, 235 (2001).

[23] *Advanced Med. Sys.,* CLI-93-22, 38 NRC at 102.

[24] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-39, 54 NRC 497, 509 (2001) (emphasis omitted).

[25] *Id.* at 510 (quoting *Norfolk Southern Corp. v. Oberly,* 632 F. Supp. 1225, 1243 (D. Del. 1986), *aff'd on other grounds,* 822 F.2d 3888 (3d Cir. 1987)).

[26] *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 297-98 (2010) (internal citations omitted).

III. ANALYSIS

A. Motion for Summary Disposition of Contention 6

Contention 6 alleged that "[t]he COLA omits critical information disclosing environmental impacts to Lake Erie's Western Basin and Maumee River/Maumee Bay."[27] The Board narrowed Contention 6, holding that it was "admissible insofar as it challenges the adequacy of the ER's analysis of the potential contribution of chemical and thermal effluent from the proposed Fermi Unit 3 to algal production and the potential proliferation of the newly identified species of harmful algae [*Lyngbya wollei*]."[28]

1. The Parties' Positions

DTE characterizes Contention 6 as raising two issues: "(1) the lack of analysis in the ER regarding the potential for Fermi Unit 3 to increase the risk of algal blooms in the western Lake Erie basin; and (2) the failure of the ER to discuss proliferation of a newly-identified species of algae in the basin."[29] DTE asserts that it "has revised the ER so as to render both aspects of the contention moot."[30]

DTE states that it "specifically revised the ER to reflect that it will not use phosphoric acid at Fermi Unit 3 (thereby eliminating phosphorus discharges); to incorporate a discussion of the impacts of thermal and chemical discharges on algae; and to include a discussion of *Lyngbya wollei.*"[31] In response to an NRC

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[27] *See* Petition at 67.

[28] LBP-09-16, 70 NRC at 280.

[29] C-6 Motion at 3. Contention 6 and Contention 8 were analyzed and admitted by the Board in its July 31, 2009 Order based on Rev. 0 of the Applicant's ER. *See supra* note 10. Applicant then submitted summary disposition motions for Contentions 6 and 8 on September 17, 2010 and November 16, 2010, respectively. *See* C-6 Motion; C-8 Motion. These summary disposition motions were submitted based on the then current revision of the ER — ER Rev. 1 — as supplemented by the pertinent DTE RAI responses. The motions will therefore be analyzed by this Board under ER Rev. 1. *See* Fermi 3 Combined License Application, Part 3: Environmental Report, Rev. 1 (Mar. 2010) (ADAMS Accession No. ML101110551) [hereinafter ER Rev. 1]. Since Applicant submitted its summary disposition motions for Contentions 6 and 8, a new version of the ER in this proceeding has been released — ER Rev. 2. *See* Fermi 3 Combined License Application, Part 3: Environmental Report, Rev. 2 (Feb. 2011) (ADAMS Accession No. ML110600476). Given that ER Rev. 2 was not on file with the NRC when DTE submitted its two summary disposition motions or when Intervenors filed their responses to those motions, the Board will not consider ER Rev. 2 in reaching its rulings on these motions.

[30] C-6 Motion at 3.

[31] *Id.* at 4.

Staff Request for Additional Information ("RAI"),[32] Applicant acknowledges that *Lyngbya wollei* is described as a bottom mat forming species of algae that is native to the southern U.S., and that the species can respond to warm water in northern environments.[33] To help control nutrient concentrations, Applicant states that it is eliminating the use of phosphorus-containing corrosion and scale inhibitors, with replacement chemicals selected from the MDNRE website list that has been previously approved for use at other Michigan facilities.[34] Furthermore, Applicant asserts that the thermal plume for Fermi Unit 3 will be small and that the discharge pipe is located to prevent overlap with the Fermi Unit 2 thermal plume.[35] Also, DTE maintains that Fermi Unit 3 will not contribute to algal bloom production because it will have a smaller discharge than Fermi Unit 2, the thermal and chemical characteristics of the discharge from Unit 3 will be similar to the characteristics of the Unit 2 discharge, and there has been no documented algal bloom production resulting from the Unit 2 discharge.[36] Additionally, Applicant states that the Fermi Unit 3 cooling tower and closed-cycle cooling system represent the best available technology under the federal Clean Water Act, section 316(b),[37] and will reduce discharge temperature to the greatest extent possible.[38]

Intervenors assert that there are issues of material fact that have been only partially resolved and that summary disposition is unwarranted.[39] Intervenors state that Applicant has not considered pertinent scientific literature that suggests that algae *Lyngbya wollei* has been found within four lake-surface miles of the proposed Fermi Unit 3 site.[40] Further, Intervenors assert that *Lyngbya wollei* is spreading and likely to prosper in substantial volumes immediately offshore from Fermi Unit 3, and that the algae's successful colonization will probably be assisted both by the understated thermal plume and chemical effluent predicted to emanate from Fermi Unit 3 on a continuing basis throughout plant operations.[41]

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[32] Supplementary Requests for Additional Information (RAIs) for the Fermi 3 Combined License Application Environmental Review (Nov. 6, 2009) (ADAMS Accession No. ML093060299).

[33] Detroit Edison Company Response to NRC Requests for Additional Information Letter No. 2 Related to the Environmental Review, Attachment 2 (Feb. 15, 2010) at 2 (ADAMS Accession No. ML100541329) [hereinafter Contention 6 RAI Response].

[34] *Id.* at 2, 4.

[35] *Id.* at 3.

[36] *Id.* at 3, 4.

[37] 33 U.S.C. § 1326(b).

[38] Contention 6 RAI Response at 4.

[39] C-6 Answer at 1-2.

[40] *See id.* at 3.

[41] *Id.* at 3-4.

Intervenors also contend that the bacterium develops in the poorly lit lake bottom, and that turbidity will increase with Fermi Unit 3 construction and operation.[42]

2. Board Ruling

We agree with Intervenors that Contention 6 is not appropriate for summary disposition because issues of material fact remain in dispute.

Contention 6 alleges that the ER is inadequate under the National Environmental Policy Act ("NEPA")[43] and 10 C.F.R. Part 51, the NRC's regulations implementing NEPA. The ER's adequacy is examined under NEPA, as well as under Part 51, because the ER is the basis upon which the NRC's Environmental Impact Statement ("EIS") for Fermi Unit 3 will be prepared.[44] The ER must therefore contain a sufficient analysis of potential environmental consequences and alternatives to enable the NRC Staff to prepare an EIS that fulfill's the agency's obligations under NEPA.[45] As the Commission has explained, the principal goals of NEPA's EIS requirement are "to force agencies to take a 'hard look' at the environmental consequences of a proposed project, and, by making relevant analyses openly available, to permit the public a role in the agency's decision-making process."[46] Contention 6 maintains, in substance, that the ER is insufficient to enable the NRC to prepare an EIS that will perform those functions.

DTE maintains, however, that Contention 6 is based solely upon omissions from the ER, and that it has rendered the contention moot by supplying the missing information.[47] Thus, DTE contends that "the omissions averred in [Contention 6] have been cured, and there exists no genuine issue as to any material fact relevant to the contention."[48] But the contention is not as limited as DTE assumes. The Board's ruling on contention admissibility stated that Contention 6, as the Board admitted it, concerns "the *adequacy* of the ER's analysis of the potential contribution of chemical and thermal effluent from the proposed Fermi Unit 3

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[42] *Id.* at 4.

[43] 42 U.S.C. § 4321 *et seq.*

[44] *See Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-2, 71 NRC 27, 34 (2010) (describing the ER as "essentially the applicant's proposal for the draft environmental impact statement," and stating that "contentions that seek compliance with NEPA must be based on that environmental report" (internal citations omitted)). *See also* LBP-09-16, 70 NRC at 259-64.

[45] *See* 10 C.F.R. § 51.45(c).

[46] *Louisiana Energy Services., L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 87 (citing *Robertson v. Methow Valley Citizens Council,* 490 U.S. 332, 349-50 (1989); *Hughes River Watershed Conservancy v. Glickman,* 81 F.3d 437, 443 (4th Cir.1996)).

[47] C-6 Motion at 3-4 (citing *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 382-83 (2002)).

[48] *Id.* at 1.

to algal production and the potential proliferation of the newly identified species of harmful algae."[49] We must therefore determine whether, despite DTE's new information, any dispute of material fact remains concerning that issue.

The first new information DTE identifies is its commitment not to use phosphoric acid for control of corrosion and scaling at Fermi Unit 3. DTE states that it has selected replacement chemicals from a website with a list of chemicals previously used for other Michigan facilities. It asserts that because of this change "cooling water discharge will not add to the nitrogen or phosphorus concentrations in Lake Erie."[50] However, Intervenors point out that the ER acknowledges substantial amounts of calcium in Fermi Unit 3 effluent.[51] They further assert, on the basis of a scientific study cited in their Statement of Facts,[52] that calcium "boosts the growth of *Lyngbya* [*wollei*]."[53] As admitted by the Board, the contention was not limited to any specific chemical, but includes all chemical and thermal effluents from Fermi Unit 3 that may contribute to the proliferation of algae. Calcium continues to be listed in the ER as contributing to the chemical effluent from Fermi Unit 3,[54] but the ER includes no specific discussion of its potential impacts on algae growth. Therefore, Intervenors have identified an issue relevant to Contention 6 that remains in dispute.

DTE's discussion of potential impacts from chemical effluent focuses on the lack of phosphorus and nitrogen in chemical effluent, and the lack of documented algae blooms observed at Fermi Unit 2 and the Monroe Power Plant in the course of visual inspections conducted pursuant to the plant's discharge permit and as part of research conducted by DTE biologists.[55] Intervenors counter that Applicant's methods of observation have not been made a matter of record, and that *Lyngbya wollei* is a bacterium which grows on lake bottom surfaces and would likely not be visible to the naked eye during visual inspections.[56] Further, Intervenors cite a study documenting the presence of *Lyngbya wollei* at a location between

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[49] LBP-09-16, 70 NRC at 280 (emphasis added).

[50] C-6 Motion at 5.

[51] Statement of Facts Demonstrating Issues of Material Fact, in Support of Intervenors' Opposition to DTE's "Motion for Summary Disposition of Contention 6" (Oct. 27, 2010) at 2 [hereafter Intervenors' Statement of Facts]. Intervenors cite table 3.6-2, ER Rev. 1, page 3-49, which lists among "Effluent Chemical Constituents," calcium, at an average concentration of 71.9 ppm). *See id.*

[52] *Id.* at 2 (citing Jennifer Joyner et al., Growth Dynamics and Management of the Cyanobacterium, *Lyngbya wollei,* in NC and FL (Apr. 5, 2006) at 7, 9, *available at* http://www.ncsu.edu/wrri/conference/2006ac/pdf/Joyner.pdf).

[53] C-6 Answer at 4.

[54] ER Rev. 1 at tbl.3.6-2.

[55] C-6 Motion at 6-7.

[56] Intervenors' Statement of Facts at 1.

the Monroe Power Plant and Fermi Unit 3.[57] Intervenors also point to higher levels of turbidity that will be created during plant construction and operations as causing conditions favorable to *Lyngbya wollei* growth, and they maintain that those effects are not considered in the ER.[58] These unresolved factual issues also preclude us from granting summary disposition.[59]

DTE acknowledges that increases in water temperature can increase the rate of algal growth, but states that it has selected the best available technology for the cooling system of Fermi Unit 3. DTE further asserts that the thermal plume of Fermi Unit 3 is small (9 ft by 12 ft), and that it is unlikely that algal cells would remain in the plume at the higher temperatures for sufficient time to form bloom concentrations.[60] Intervenors question the estimated size of the Fermi Unit 3 thermal plume, stating that "DTE maintains that Fermi operations will cause a 9 [ft] × 12 [ft] plume while pumping tens of millions of gallons of lakewater through its cooling system at the height of summer heat."[61] Intervenors provide calculations suggesting a thermal plume magnitude of about 75 acre-feet (per day).[62] Additionally, Applicant's assertion concerning the short residence time for algae in the thermal plume appears unusual for a species that grows on the lake

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[57] *Id.* at 2 (citing Thomas B. Bridgeman & Wanda A. Penamon, *Lyngbya wollei in Western Lake Erie,*" 36 Journal of Great Lakes Research 167, 168 (2010), fig. 1).

[58] C-6 Answer at 4; Intervenors' Statement of Facts at 2.

[59] The scientific reports on which Intervenors rely (the first indicating that calcium supports the growth of *Lyngbya wollei* and the second documenting its presence between the Monroe Power Plant and Fermi Unit 3) are hearsay under the rules of evidence; that is, they are out-of-court statements offered to prove the truth of the matter asserted. Fed. R. Evid. 801(c). We are not precluded, however, from considering these documents despite their hearsay nature. 10 C.F.R. § 2.319(d) ("In proceedings under this part, strict rules of evidence do not apply to written submissions."). The Commission ruled, in upholding summary disposition in a proceeding to enforce a suspension order, that the hearsay nature of a witness's statement did not preclude the licensing board from considering it, at least in the absence of evidence questioning its reliability. *Advanced Medical Systems, Inc.* (One Factory Row, Geneva, Ohio 44041), CLI-94-6, 39 NRC 285, 306-07 (1994). The Commission cited an Appeal Board ruling in which the Board stated that, even if a witness's testimony was entirely hearsay, "evidence of that character is generally admissible in administrative proceedings." *Id.* at 306 n.31 (citing *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-355, 4 NRC 397, 412 (1976)). Even though we are not precluded from considering hearsay, under section 2.319(d) we may on motion or on our own initiative strike any portion of a written presentation that is unreliable. No party, however, has moved to strike the scientific reports cited by Intervenors, nor do we have any reason to question the reliability of those reports. We therefore have considered as support for the truth of the matters for which they are cited.

[60] C-6 Motion at 7.

[61] C-6 Answer at 4.

[62] Intervenors' Statement of Facts at 2.

bottom.[63] Here again, we have a dispute of material fact that prevents us from granting summary disposition.

When considering a motion for summary disposition, the Commission has explained that the function of the Board is not "'to weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for [hearing].'"[64] In admitting Contention 6 we determined that it raised genuine disputes of material fact with regard to the ER's compliance with NEPA and 10 C.F.R. Part 51. We find that issues of material fact remain in dispute and therefore deny DTE's Motion for Summary Disposition of Contention 6.

B. Motion for Summary Disposition of Contention 8

Contention 8, as admitted by the Board, states that:

> the ER fails to adequately assess [Fermi Unit 3]'s impacts on the eastern fox snake and to consider alternatives that would reduce or eliminate those impacts.[65]

In support of Contention 8, Intervenors proffered a letter from Lori Sargent, a Nongame Wildlife Biologist in MDNRE's Wildlife Division.[66] In this letter, Ms. Sargent identified discrepancies between MDNRE recordings and the analysis contained in the Applicant's ER concerning potential impacts to the eastern fox snake, a threatened species according to MDNRE.[67] Ms. Sargent stated that MDNRE's recorded sightings of the eastern fox snake at the Fermi Unit 3 site conflict with statements from the ER alleging that the species had not been observed on the site.[68] Not only did she take issue with that aspect of the ER, she also opined that "'going forward with the construction would not only kill snakes but destroy the habitat in which they live and possibly exterminate the species from the area. We would like to see a plan for protection of this rare species with regard to this new reactor project.'"[69] This conflicted with the statement in the

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[63] Applicant itself acknowledged that *Lyngbya wollei* is a "bottom mat forming species" in a response to an RAI. Contention 6 RAI Response at 2.

[64] *Pilgrim Nuclear Power Station,* CLI-10-11, 71 NRC at 297 (2010) (internal citation omitted).

[65] LBP-09-16, 70 NRC at 286.

[66] *Id.* at 286 n.177, 288.

[67] *See id.* at 286. Ms. Sargent's letter also identified a discrepancy within the ER itself; the ER states in one section that the eastern fox snake was sighted twice on the Fermi property in June of 2008, but then states in another section that the eastern fox snake had not been observed on the Fermi property. *Id.* at 288.

[68] Petition at 89-90 (citing Email from Lori Sargent, Nongame Wildlife Biologist, Wildlife Division, Michigan Department of Natural Resources, to U.S. NRC (Feb. 9, 2009) (ADAMS Accession No. ML090401014) [hereinafter Sargent Email]).

[69] *Id.* at 90 (quoting Sargent E-mail).

ER that any impact of the project on the snake would be small and therefore no mitigation measures were necessary.[70] The Board admitted Contention 8 because of the conflicting interpretations concerning the project's likely impact upon the eastern fox snake and the need for mitigation.

1. The Parties' Positions

Applicant's Motion for Summary Disposition of Contention 8 asserts that the contention is moot because it has "resolved the discrepancy in the ER regarding the presence of the Eastern Fox snake at the Fermi site, developed a mitigation plan for the snake, and submitted an addenda to the ER describing those plans."[71] Applicant requests summary disposition on the ground that "[t]here remains no genuine issue as to any material fact relevant to the admitted contention."[72]

With regard to the first part of Contention 8, concerning the discrepancy between the ER and the MDNRE records over the presence of eastern fox snakes at the Fermi Unit 3 site, Applicant claims that it "has provided additional information on the location of Eastern Fox snake sightings that resolves this discrepancy in the ER."[73] Specifically, Applicant provided, in response to a NRC Staff Request for Additional Information ("RAI"), a map depicting the locations on the Fermi Unit 3 site where the eastern fox snake had been observed by Applicant's employees during the period from 1990 to 2007.[74] By including the map in its response to a NRC Staff RAI, the Applicant states that it has acknowledged the presence of the eastern fox snake at the Fermi Unit 3 site, and thus has "resolve[d] the 'primary factual dispute' identified by the Licensing Board in admitting Contention 8."[75]

In response to the second part of Contention 8 concerning the lack of mitigation measures related to the eastern fox snake, Applicant "concluded that construction of Fermi Unit 3 will impact a portion of the fox snake habitat at the [Fermi Unit 3] site"[76] and then proposed two specific mitigation measures: (1) a revised site

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[70] ER Rev. 1 at 4-45.

[71] C-8 Motion at 1.

[72] *Id.* at 11.

[73] *Id.* at 5. Applicant has also updated the ER to resolve this discrepancy. *See* ER Rev. 1 at 4-45.

[74] C-8 Motion at 6 (citing Letter from Peter W. Smith, Nuclear Development — Licensing and Engineering, Detroit Edison Company, to U.S. NRC Document Control Desk, Attachment 7, Enclosure 1 (Feb. 15, 2010) (ADAMS Accession No. ML100541329) [hereinafter Eastern Fox Snake Sighting Map]). In addition, the map also identifies two additional sightings of the eastern fox snake at the proposed Fermi Unit 3 site made by Ducks Unlimited during a wetland survey in 2008. *Id.* (citing Eastern Fox Snake Sighting Map).

[75] *Id.* (internal citation omitted).

[76] *Id.* at 7.

layout that reduces potential impact to the primary eastern fox snake habitat, and (2) a draft mitigation plan, entitled "Habitat and Species Conservation Plan: Eastern Fox Snake (*Elaphe gloydi*)."[77]

The first mitigation measure put forth by DTE to address the potential impacts of construction on the eastern fox snake includes a revision to "the site layout to reduce potential wetland impacts."[78] DTE notes that "the Eastern Fox snake habitat is primarily associated with wetlands."[79] Applicant states that the new site layout reduces Fermi Unit 3's wetland impacts by approximately 120 acres, from 169 to 49 acres.[80] DTE also maintains that 39 of the 49 wetland acres impacted by construction will suffer only temporary impacts, and that those 39 acres will be restored to an equal or better ecological condition once construction of Fermi Unit 3 is complete.[81]

In addition, "to further reduce the potential impacts to Eastern Fox snakes, [Applicant] also developed a draft *Habitat and Species Conservation Plan: Eastern Fox Snake (Elaphe gloydi).*"[82] Included in the draft mitigation plan are measures that DTE claims will "enhance employee awareness of the snakes" and "reduce impacts to the snakes and their habitat from Fermi [Unit] 3 construction activities."[83] Specific mitigation measures called for in the draft mitigation plan include an employee education program describing the eastern fox snake and its habitat, prejob briefings, preconstruction surveys of developed areas, preconstruction surveys of undeveloped areas, construction mitigation, and monitoring and reporting of eastern fox snake sightings on the Fermi Unit 3 site.[84]

In response to the mitigation measures submitted by the Applicant, Intervenors assert that "the mitigation proposed by Applicant is *ad hoc* and legally insufficient under NEPA."[85] Intervenors contend that: (1) the eastern fox snake warms

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[77] *Id.* at 7-8.

[78] *Id.* at 7.

[79] *Id.* (citing Letter from Peter W. Smith, Nuclear Development — Licensing and Engineering, Detroit Edison Company, to U.S. NRC Document Control Desk, Attachment 7 (Feb. 15, 2010) at 3 (ADAMS Accession No. ML100541329)).

[80] *Id.* at 8.

[81] *Id.* The changes to the site layout also reduce impacts to undeveloped areas generally, including nonwetland areas, that were assumed to be suitable habitats for the eastern fox snake. *Id.* ("The changes to the site layout reduced impacts to undeveloped areas overall — including both wetland areas and non-wetland areas, which are assumed to be suitable fox snake habitat — by 117 acres (relative to the original proposed site layout).").

[82] *Id.* (citing Letter from Peter W. Smith, Nuclear Development — Licensing and Engineering, Detroit Edison Company, to U.S. NRC Document Control Desk, Attachment 7, Enclosure 2 (Feb. 15, 2010) (ADAMS Accession No. ML100541329) [hereinafter Draft Mitigation Plan]).

[83] *Id.*

[84] *Id.* at 8-9.

[85] C-8 Answer at 1.

itself on paved areas at the Fermi Unit 3 site, and (2) there will be serious traffic problems at many junctures during the construction of Fermi Unit 3, especially during refueling outages at Fermi Unit 2, the decommissioning and dismantling of Fermi Unit 1, and the eventual decommissioning of Fermi Unit 2.[86] Additionally, Intervenors allege that the ER is inadequate because it fails to recognize the impacts on the eastern fox snake population due to the effect of salt depositions from the cooling towers at Fermi Units 2 and 3 on local vegetation and from radiation if the snakes were to sun themselves on the Fermi Unit 2's Independent Spent Fuel Storage Facility.[87] Lastly, Intervenors point out that neither the revised wetlands site layout nor the draft mitigation plan, Habitat and Species Conservation Plan: Eastern Fox Snake (*Elaphe gloydi*), has been approved by MDNRE, the NRC Staff, or the U.S. Army Corps of Engineers.[88]

2. Board Ruling

The Board concludes that, although DTE appears to have made significant modifications to the project and provided relevant new information, disputes of material fact remain concerning the adequacy of the ER's evaluation of the impact of Fermi Unit 3 on the eastern fox snake and the status of mitigation measures to reduce those impacts. We accordingly deny summary disposition of Contention 8.

DTE contends that Contention 8 relates solely to "(1) the discrepancy in the ER regarding the presence of Eastern Fox snakes at the Fermi Unit 3 site; and (2) the failure of the ER to discuss mitigation measures related to the Eastern Fox snake."[89] DTE maintains that is it entitled to summary disposition because it has allegedly resolved both deficiencies. As with Contention 6, the Board does not construe Contention 8 as narrowly as does DTE. Although the specific deficiencies noted by DTE were among the factors that led the Board to admit Contention 8, they were not the only concerns. As we stated in admitting the contention, "[w]e construe Contention 8 as a NEPA contention alleging that *the ER fails to adequately assess the project's impacts* on the eastern fox snake and to consider alternatives that would reduce or eliminate those impacts. We find the contention as so construed to be admissible."[90] Thus, the contention was not limited to the omission and inconsistency upon which DTE focuses, but also concerned the overall adequacy of the ER's assessment of the project's impacts on the eastern fox snake and the sufficiency of its consideration of alternatives

[86] *Id.* at 1-2, 8.
[87] *Id.* at 3-4.
[88] *Id.* at 2-3.
[89] C-8 Motion at 4.
[90] LBP-09-16, 70 NRC at 286 (emphasis added).

that would reduce or eliminate impacts to the species. This concern was prompted by the conflict between the ER's claim that the project would have only a small impact on the snake and that no mitigation measures were necessary, and the opinion of the MDNRE that "'going forward with the construction would not only kill snakes but destroy the habitat in which they live and possibly exterminate the species from the area,'" and that mitigation should be considered.[91] Thus, Contention 8 concerns the overall adequacy of the ER's analysis of impacts to the eastern fox snake and alternatives,[92] not just specific omissions or discrepancies.

On the other hand, we also recognize that NEPA is a procedural statute. Thus, "[i]f the adverse environmental impacts of the proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs."[93] Accordingly, NEPA does not require that DTE or the NRC eliminate impacts to the eastern fox snake. Instead, NEPA requires sufficient public disclosure of environmental consequences and a rigorous exploration of reasonable alternatives to the proposed action.

With these considerations in mind, we turn to comparing the relevant text of the original ER and that of the revised ER to determine whether the revised ER resolves all of the issues that led us to admit Contention 8.[94] The analysis of the project's impact on the eastern fox snake is limited in both versions of the ER. The disputed text of the original ER stated:

> The eastern fox snake (a Michigan threatened species) has not been observed on the Fermi property, but the potential for its occurrence on the property does exist. The Michigan Natural Features Inventory has recorded nine occurrences for Monroe County, with the most recent report in 2007. . . . If present, the snake would most likely be found along the cattail marshes or wetland shorelines around woody debris. . . . Fermi [Unit] 3 construction activities are primarily located away from potential habitat for the eastern fox snake and the snake would be expected to move away from these activities. Therefore, the impact to this species from the project is considered SMALL, and no mitigative measures are needed.[95]

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[91] Petition at 90 (quoting Sargent E-mail).

[92] Concerning alternatives, NEPA requires more than just supplying a description of alternative proposals. It requires that federal agencies "[r]igorously explore and objectively evaluate all reasonable alternatives," and that they "[d]evote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits. . . ." 40 C.F.R. § 1502.14 (Council on Environmental Quality regulation). Thus, merely describing an alternative is insufficient to comply with NEPA. *See also* 10 C.F.R. § 51.45(b)(3), (c).

[93] *Robertson,* 490 U.S. at 350 (citing *Strycker's Bay Neighborhood Council, Inc. v. Karlen,* 444 U.S. 223, 227-28 (1980); *Kleppe v. Sierra Club,* 427 U.S. 390, 410 n.21 (1976)).

[94] As with Contention 6, we base our ruling on ER Rev. 1, the latest version that was before the agency when the Motion for Summary Disposition of Contention 8 and the Intervenor's response were filed. We therefore do not consider ER Rev. 2 in this ruling. *See supra* note 29.

[95] ER Rev. 0 at 4-45 (section 4.3.1.2.1).

The corresponding paragraph of ER Revision 1 states:

> The eastern fox snake (a Michigan threatened species) was sighted two times on the Fermi property, in June 2008. The Michigan Natural Features Inventory has recorded nine occurrences for Monroe County, with the most recent report in 2007 (Reference 4.3-5). The snake was found along the cattail marshes or wetland shorelines around woody debris. . . . Fermi [Unit] 3 construction activities are primarily located away from potential habitat for the eastern fox snake and the snake would be expected to move away from these activities. Therefore, the impact to this species from the project is considered SMALL, and no mitigative measures are needed.[96]

We agree with DTE that the revised ER cures the discrepancy between the original ER and the MDNRE records by revising section 4.3.1.2.1 to acknowledge the sightings of the eastern fox snake on the Fermi Unit 3 site. It is also true that DTE has developed a revised site layout and a draft mitigation plan for the eastern fox snake. In substance, the revised site layout and draft mitigation plan constitute alternatives to the project as originally proposed that might, if implemented, reduce impacts to the species. DTE has therefore addressed two of the issues that led the Board to admit Contention 8: it has acknowledged the presence of the species at the site and developed alternatives that appear intended to reduce impacts to the species.

We agree with Intervenors, however, that substantial conflicts relevant to compliance with NEPA and 10 C.F.R. Part 51 remain unresolved. In the revised ER, DTE continues to maintain that "the impact to [the eastern fox snake] from the [Fermi Unit 3] project is considered SMALL, and no mitigative measures are needed."[97] The revised ER, like the original ER, makes no mention of the MDNRE comments on the original ER, much less demonstrates that those concerns have been entirely resolved by DTE's draft mitigation plan, revised site layout, or other new information. In fact, the revised ER provides no information whatsoever about MDNRE's views of Applicant's draft mitigation plan or revised site layout. We thus continue to have an unresolved conflict between the opinion of MDNRE and that of DTE concerning the impact of Fermi Unit 3 construction activities on the eastern fox snake and the need for mitigation of those impacts. At the very least, we cannot say that this conflict that led us to admit Contention 8 has been fully resolved, and, as DTE has the burden to convince us that summary disposition is appropriate, its motion must fail.

Moreover, we continue to find conflicts on the same issues within DTE's own

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[96] ER Rev. 1 at 4-45 (section 4.3.1.2.1).

[97] *Id.*

documents. The revised ER continues to maintain that no mitigation is necessary,[98] which is inconsistent not only with the MDNRE's comments on the original ER but with the fact that DTE in fact developed a draft mitigation plan.[99] As DTE's motion acknowledges, it "revised the application to reduce the impacts of Fermi Unit 3 construction on snake habitat, and developed a site-specific mitigation plan to reduce impact to Eastern Fox snakes."[100] The draft mitigation plan itself clearly states that "Fermi [Unit] 3 construction activities have the potential to kill resident eastern fox snakes as well as destroy or degrade their onsite habitat."[101] Thus, the Motion for Summary Disposition of Contention 8 and the plan itself acknowledge what revised ER § 4.3.1.2.1 continues to deny — that construction activities *will* harm the species and therefore mitigation measures *are* necessary.

These disputes of material fact are sufficient to require denial of DTE's Motion for Summary Disposition of Contention 8, even without considering the facts argued by Intervenors in response. Intervenors, however, do identify one additional problem that merits discussion. They maintain that

> The density of workers is anticipated by DTE to create serious traffic management problems, which means that the chances of vehicle snake meetings, resulting in reptile fatalities, will be significantly increased. DTE explains that the traffic jams can be reduced by signal installations and signal modifications, staggering worker shifts, busing employees from off-site, minor lane additions and/or a second entrance to the site. [Intervenors' Statement of Facts], ¶ 4. While there is discussion of the possibility of reducing traffic impacts, there is no commitment by DTE to doing so. And the measures are designed to make traffic flow more efficient, not to make avoidance of road killing the eastern fox snake.[102]

It is true, as DTE responds, that "'NEPA imposes no substantive requirement that mitigation measures actually be taken.'"[103] Thus, "NEPA does not require a fully developed plan that will mitigate all environmental harm before an agency can act; NEPA requires only that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fully evaluated."[104] We

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[98] *See id.*

[99] *See* Petition at 89-90; C-8 Motion at 8-10 (citing Draft Mitigation Plan).

[100] C-8 Motion at 5; *see also id.* at 4-10.

[101] Draft Mitigation Plan at 6.

[102] C-8 Answer at 2.

[103] C-8 Motion at 9-10 (quoting *Robertson,* 490 U.S. at 353 n.16).

[104] *Laguna Greenbelt, Inc. v. U.S. Department of Transportation,* 42 F.3d 517, 528 (9th Cir. 1994) (citations omitted); *see also Robertson,* 490 U.S. at 352 ("There is a fundamental distinction . . . between a requirement that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated, on the one hand, and a substantive requirement that a complete mitigation plan be actually formulated and adopted, on the other.").

cannot agree, however, that in the revised ER "mitigation [has been] discussed in sufficient detail to ensure that environmental consequences have been fully evaluated." In fact, as just noted, the only statement in section 4.3.1.2.1 of the ER regarding mitigation of impacts to the eastern fox snake is that no mitigation is necessary. Although the draft mitigation plan is referred to as an addendum to the revised ER,[105] neither the plan nor its likely effect is discussed in the ER.[106] This leaves us uncertain as to what mitigation measures, if any, DTE will actually take for the protection of the eastern fox snake during the construction of Fermi Unit 3, whether those measures have been reviewed or approved by MDNRE, and whether they will actually help prevent harm to the species during construction.

Thus, although we agree that NEPA does not mandate implementation of a mitigation plan, the requirement that "mitigation be discussed in sufficient detail to ensure that environmental consequences have been fully evaluated" means the ER should explain, at a minimum, the mitigation measures DTE intends to take to protect the eastern fox shake, the effect DTE believes those measures will have if implemented, and the basis of that belief. Such information is essential for the NRC Staff to fulfill its NEPA obligations in the EIS, but ER Revision 1 fails to provide it.

For these reasons, we cannot conclude that ER Revision 1 includes the requisite hard look at potential construction impacts to the eastern fox snake and mitigation that might reduce those impacts. The Board accordingly finds that there is a material dispute whether ER Revision 1 satisfies the requirements of NEPA and Part 51.

C. Motion to Strike

DTE's Motion to Strike challenges a number of Intervenors' arguments as outside the scope of the admitted contention, outside the scope of a COL proceeding, or both.[107] The Motion to Strike is granted in part and denied in part.[108]

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[105] *See* C-8 Motion at 4.

[106] After extensive review, the Board is unable to find where the Applicant's draft mitigation plan has actually been incorporated into ER Rev. 1. *See Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-6, 73 NRC 149, 244 n.111 (2011) ("'Judges are not like pigs, hunting for truffles buried in briefs.'" (quoting *United States v. Dunkel,* 927 F.2d 955, 956 (7th Cir. 1991))).

[107] *See* Motion to Strike at 3-6.

[108] Another Board concluded that the proper method for raising the issue addressed in DTE's Motion to Strike is to seek leave to file a reply in support of the summary disposition motion. *Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-08-2, 67 NRC 54, 66-67 (2008). In our case, however, Intervenors have not argued that a motion to strike is an impermissible means of raising the issue of the scope of the admitted contention. We therefore will consider the merits of DTE's Motion to Strike.

DTE cites Commission precedent instructing that "'[w]here an issue arises over the scope of an admitted contention, NRC opinions have long referred back to the bases set forth in support of the contention.'"[109] As we have explained, Contention 8 was based on the risk that the construction of Fermi Unit 3 will kill snakes, destroy their habitat, and exterminate the species from the area. Thus, Contention 8 is based on potential impacts on the eastern fox snake resulting from the construction of Fermi Unit 3. To the extent Intervenors' arguments extend beyond the impacts of construction of Fermi Unit 3, they are outside the scope of Contention 8 and were not considered by the Board in ruling on DTE's Motion for Summary Disposition of Contention 8.

Of the various arguments that DTE moves to strike, we referred to only one in our ruling. That argument concerns the lack of any commitment by DTE to implement mitigation measures that might reduce the impact of vehicle traffic on the eastern fox snake.[110] According to DTE, this argument is outside the scope of the admitted contention. Insofar as it concerns the impact of traffic during construction, we disagree. The impact on the eastern fox snake from vehicles moving on and off the site during construction is one aspect of the potential harm with which Contention 8 is concerned, and thus such potential impacts fall within the scope of the contention. It is true that the Petition to Intervene did not provide a list of the specific construction activities that Intervenors (then Petitioners) or MDNRE believed might harm the snake. But there was no requirement that it do so. We understand the Commission's rule that the scope of an admitted contention is determined by "the bases set forth in support of the contention"[111] to mean that a contention's scope is bounded by the "brief explanation of the basis for the contention" required by 10 C.F.R. § 2.309(f)(1)(ii). As long as the facts now relied on by Intervenors in opposition to the summary disposition motion fall within the scope of that explanation, they are properly before the Board. No more is required because a petitioner does not have to prove its contentions at the admissibility stage.[112] The factual support required at that point is only "'a minimal showing that material facts are in dispute.'"[113] The factual support "need not be in affidavit or formal evidentiary form and need not be of the quality necessary to withstand a summary disposition motion."[114] We therefore find it sufficient that the specific

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[109] Motion to Strike at 2 (quoting *McGuire/Catawba,* CLI-02-28, 56 NRC at 379).

[110] Motion to Strike at 4 (quoting C-8 Answer at 2). The text to which DTE objects is quoted in full at page 607, *supra.*

[111] *McGuire/Catawba,* CLI-02-28, 56 NRC at 379.

[112] *Mississippi Power & Light Co.* (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-130, 6 AEC 423, 426 (1973).

[113] *Gulf States Utilities Co.* (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 51 (1994) (quoting 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989) [hereinafter Procedural Changes]).

[114] Procedural Changes at 33,171.

factual argument now advanced by Intervenors falls within the scope of their general argument concerning the impact of construction that provided the brief explanation of the basis of the contention required by section 2.309(f)(1)(ii).

On the other hand, we did not consider in our ruling denying summary disposition of Contention 8 potential impacts to the eastern fox snake that do not arise from construction activities. Thus, we did not consider Intervenors' argument that the eastern fox snake population might be harmed due to the effect on local vegetation of salt depositions from the cooling towers at Fermi Units 2 and 3, nor did we consider Internvenors' theory that snakes might be injured by radiation if they were to sun themselves on spent fuel storage casks in Fermi Unit 2's Independent Spent Fuel Storage Facility. If Intervenors intend to introduce arguments regarding impacts on the snake that do not result from the construction of Fermi Unit 3, they must either amend the existing contention or file a new one. Any new or amended contention must, of course, meet the requirements for both timeliness and admissibility.

IV. CONCLUSION

For the foregoing reasons, DTE's Motion for Summary Disposition of Contention 6 and its Motion for Summary Disposition of Contention 8 are hereby denied. The Motion to Strike is granted in part and denied in part, as explained above.

It is so ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD[115]

Ronald M. Spritzer, Chairman
ADMINISTRATIVE JUDGE

Michael F. Kennedy
ADMINISTRATIVE JUDGE

Randall J. Charbeneau
ADMINISTRATIVE JUDGE

Rockville, Maryland
May 20, 2010

[115] Copies of this Order were sent on this date by the agency's E-Filing system to the counsel/representatives for (1) Applicant Detroit Edison Company; (2) Intervenors Beyond Nuclear et al.; and (3) the NRC Staff.

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. 110-05896 (Import)**
110-05897 (Export)

ENERGYSOLUTIONS, LLC
(Radioactive Waste Import/Export Licenses)

June 6, 2011

The Commission denies Petitioners' requests for hearing, intervention, and waiver of 10 C.F.R. § 51.22(c)(15), and directs the Office of International Programs to issue import license IW029 and export license XW018 to EnergySolutions.

WAIVER OF RULE (PART 110)

A participant may petition that a Commission rule or regulation be waived with respect to the license application under consideration. 10 C.F.R. § 110.111(a).

WAIVER OF RULE (PART 110)

To waive a Part 110 rule or regulation, the petitioner must show special circumstances concerning the subject of the hearing such that application of the rule or regulation would not serve the purposes for which it was adopted. 10 C.F.R. § 110.111(b).

IMPORT LICENSES: CATEGORICAL EXCLUSION

Section 51.22(c)(15) of 10 C.F.R. provides a categorical exclusion from the National Environmental Policy Act requirement to prepare an environmental assessment or environmental impact statement for the issuance of a low-level radioactive waste import license.

ATOMIC ENERGY ACT: STANDING TO INTERVENE

Section 189a of the Atomic Energy Act of 1954, as amended (AEA) provides that the Commission shall grant a hearing to any person whose interest may be affected by a proceeding under the AEA for the granting of any license.

RULES OF PRACTICE: STANDING TO INTERVENE

To determine if a petitioner has sufficient interest in a proceeding to be entitled to intervene as a matter of right under section 189a, the Commission has long applied contemporaneous judicial concepts of standing.

RULES OF PRACTICE: STANDING TO INTERVENE

To establish standing, a petitioner must allege a concrete and particularized injury that is fairly traceable to the challenged action and likely to be redressed by a favorable decision.

RULES OF PRACTICE: STANDING TO INTERVENE (ORGANIZATIONAL)

An organization may base its standing on immediate or threatened injury to its organizational interests.

RULES OF PRACTICE: STANDING TO INTERVENE (REPRESENTATIONAL)

An organization may derive standing from a member if the organization demonstrates that the individual member has standing to participate, and has authorized the organization to represent his or her interests.

RULES OF PRACTICE: STANDING TO INTERVENE

Petitioners' generalized institutional interest in public forums and in preventing processing of foreign waste is insufficient to confer standing. Petitioners' claims

of potential injury are also so speculative, and separate from the import and export license, that they do not amount to cognizable harm for purposes of standing.

RULES OF PRACTICE: STANDING TO INTERVENE (PROXIMITY PRESUMPTION)

A presumption of standing based on geographic proximity may be applied in cases involving nonpower reactors where there is a determination that the proposed action involves a significant source of radioactivity producing an obvious potential for offsite consequences. Whether and at what distance a petitioner can be presumed to be affected must be judged on a case-by-case basis, taking into account the nature of the proposed action and the significance of the radioactive source.

RULES OF PRACTICE: STANDING TO INTERVENE

Conclusory allegations about potential radiological harm are insufficient to establish standing.

ADMINISTRATIVE PROCEDURE ACT; ATOMIC ENERGY ACT (IMPORT LICENSE PROCEEDINGS)

Even if Petitioners had shown standing, the Commission would not be required by the Administrative Procedure Act or Atomic Energy Act to grant a hearing because the issues Petitioners raised are not material to the proceeding.

NUCLEAR REGULATORY COMMISSION: DISCRETIONARY HEARING

Commission regulations, in 10 C.F.R. § 110.84(a), provide for a discretionary hearing in an export or import licensing proceeding if a hearing would be in the public interest and would assist the Commission in making the statutory determinations required by the AEA.

NUCLEAR REGULATORY COMMISSION: DISCRETIONARY HEARING

A discretionary hearing to discuss the adequacy of the information provided by the applicant in a public forum would not assist the Commission in making its determinations on the export and import license applications because the applicant provided the information required by the Commission's regulations.

NUCLEAR REGULATORY COMMISSION: DISCRETIONARY HEARING

A discretionary hearing to discuss policy issues related to the import of foreign low-level radioactive waste and domestic incineration and transportation issues is not warranted as these issues are either challenges to the Commission's regulations or are outside the scope of the proceeding.

MEMORANDUM AND ORDER

I. INTRODUCTION

The Citizens' Advisory Panel of the Oak Ridge Reservation Local Oversight Committee (CAP)[1] and the Tennessee Environmental Council (TEC), Oak Ridge Environmental Peace Alliance (OREPA), and Citizens to End Nuclear Dumping in Tennessee (ENDIT)[2] have requested hearings and leave to intervene on import/export applications of EnergySolutions.[3] OREPA/TEC/ENDIT also requests a waiver of the categorical exclusion in 10 C.F.R. § 51.22(c)(15), applicable in this proceeding.[4] For the reasons discussed below, we deny both requests for hearing and request for waiver of 10 C.F.R. § 51.22(c)(15).

II. ENERGYSOLUTIONS' IMPORT AND EXPORT APPLICATIONS

On November 3, 2010, EnergySolutions filed a license application seeking

[1] LOC Inc. Oak Ridge Reservation Local Oversight Committee, Comments and Request for Hearing on EnergySolutions Import/Export License Application, Docket No. 11005896 (Dec. 14, 2010) (ADAMS Accession No. ML103610314) (CAP Petition).

[2] Hearing Request and Petition to Intervene by Tennessee Environmental Council, Oak Ridge Environmental Peace Alliance, Citizens to End Nuclear Dumping in Tennessee (Dec. 30, 2010) (ADAMS Accession No. ML103640463) (OREPA/TEC/ENDIT Petition). The OREPA/TEC/ENDIT Petition was unnumbered. For ease of reference, we numbered the petition consecutively, with the cover page as 1.

[3] *See* Request for a License to Import Radioactive Waste, 75 Fed. Reg. 74,107 (Nov. 30, 2010); Request for a License to Export Radioactive Waste, 75 Fed. Reg. 74,104 (Nov. 30, 2010) (application filed November 3, 2010). In response to several requests for additional time, the Secretary extended the deadline to file comments and/or request a hearing until January 18, 2011. *See* Order of the Secretary (Dec. 29, 2010) (unpublished) (ADAMS Accession No. ML103630731) (Order of the Secretary). No additional requests for hearing were received. Additional comments were received and reviewed. *See, e.g.,* E-mail Comments of Christopher Lish (Feb. 20, 2011) (ADAMS Accession No. ML110550132) (Lish Comment).

[4] OREPA/TEC/ENDIT Petition at 8.

authorization to import 1,000 tons of dry active low-level radioactive waste (LLRW) from Germany for processing at EnergySolutions' Bear Creek facility in Tennessee,[5] and for a companion license to export the resulting hearth ash, along with any nonincinerable and nonconforming waste, to Germany.[6] The imported materials would consist primarily of plastic, paper, wood, textiles, glass, and metal that have various levels of radioactive contamination.[7] According to the import application, the dry active material would undergo volume reduction through incineration at the Bear Creek facility.[8] The resulting hearth ash and any nonincinerable and nonconforming material would be sent to two facilities in Germany, via export license XW018.[9] EnergySolutions proposes to dispose of any residual radioactive material from processing the imported material, which is attributable to EnergySolutions under its Tennessee license, in accordance with applicable domestic license conditions and permits.[10]

The Department of State provided the Commission with Executive Branch views on the merits of EnergySolutions' applications on December 15, 2010.[11] The Executive Branch Views concluded that the proposed import and export application appeared consistent with the Joint Convention on the Safety of Spent Fuel Management and on Radioactive Waste Management guidelines. Further, the Executive Branch Views noted that the "German Government is prepared to issue the necessary import licenses for the return of the incineration residue to

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[5] *See* Letter from Philip Gianutsos, Duratek, to Scott Moore, NRC, "Combined Applications for the Export/Import of Radioactive Material" at 1 (Aug. 27, 2010) (import application cover letter), *available at* ADAMS Accession No. ML103090582 (appended to Application for Specific License to Import Radioactive Material (to Germany), Lic. No. IW029 (Aug. 27, 2010) (Import Application)). EnergySolutions purchased Duratek in 2006. *See* http://www.deseretnews.com/article/635182631/Energy Solutions-OKs-deal-to-buy-Duratek.html. The import/export applications reference Duratek, but for ease of reference, we will use EnergySolutions in this order, as Duratek is a subsidiary of EnergySolutions.

[6] Application for Specific License to Export Radioactive Material (to Germany), Lic. No. XW018 (Aug. 27, 2010) (ADAMS Accession No. ML103090595) (Export Application).

[7] EnergySolutions' Response to NRC Request for Additional Information [("RAI")] dated December 20, 2010, RAI # 2 Resp. (Jan. 19, 2011) (ADAMS Accession No. ML110210986) (Response to RAIs).

[8] Import Application at 6. EnergySolutions proposes to process the material in a "dedicated campaign so that the hearth ash generated can be segregated from the hearth ash generated through processing of domestic material at the Bear Creek Facility." *See also* Response to RAIs, RAI # 5 Resp.

[9] Export Application.

[10] Import Application at 8. *See* Response to RAIs, RAI # 4 Resp. (defining "residual waste" under Tennessee law, which is compatible with Appendix G of 10 C.F.R. Part 20).

[11] Letter from Robin DeLaBarre, Office of Nuclear Energy, Safety & Security, Bureau of International Security & Nonproliferation, U.S. Department of State, to Ms. Janice E. Owens, Branch Chief, Export Controls and International Organizations, Office of International Programs, U.S. NRC (Dec. 15, 2010) (ADAMS Accession No. ML110030659) (Executive Branch Views). *See* 10 C.F.R. § 110.41(a)(8).

Germany by EnergySolutions."[12] On February 10, 2011, the State of Tennessee stated that it reviewed the applications and the authorizations granted by the Tennessee Radioactive Material Licenses issued to EnergySolutions and found no technical reason to prohibit the processing of this described waste at the Bear Creek facility.[13] The Southeast Compact Commission for Low-Level Radioactive Waste Management had no comments with regard to the applications.[14]

III. PETITIONERS' REQUESTS FOR HEARING AND LEAVE TO INTERVENE

A. CAP

CAP filed a timely request for hearing on the import/export license application (1) to allow citizens of the area an opportunity to have their questions answered and raise any concerns in a public forum and (2) to argue that every country should have the capability of processing its own nuclear waste.[15] EnergySolutions filed a timely answer opposing CAP's Petition, arguing that the petition should be denied because (1) the Petition was not served on all parties, (2) CAP does not have standing, and (3) CAP does not show that a discretionary hearing would be in the public interest or assist the Commission in making its required determinations.[16]

B. OREPA/TEC/ENDIT

OREPA/TEC/ENDIT filed a timely petition for leave to intervene and a request for hearing on both applications, arguing that a hearing should be held to address several of its concerns, including (1) claimed deficiencies in EnergySolutions' applications and (2) public health, safety, security impacts related to these

[12] Executive Branch Views.

[13] Letter from Johnny C. Graves to Ms. Janice Owens, Application for NRC Import License IW029 (Feb. 10, 2011) (ADAMS Accession No. ML110450686) (Tennessee's Views). *See* 10 C.F.R. § 110.43(d).

[14] E-mail from Kathryn Haynes to Janice Owens, Jennifer Tobin, Johnny Graves, Debra Shults, Mike Mobley, NRC Import License Application IW029 (Feb. 15, 2011) (ADAMS Accession No. ML110460710) (Southeast Compact Commission's Views). *See* 10 C.F.R. § 110.43(d).

[15] CAP Petition. *See* 10 C.F.R. § 110.82. The petition did not provide information about the purpose of this group, but more information can be found at http://local-oversight.org/mission/.

[16] EnergySolutions' Answer Opposing Oak Ridge Reservation Local Oversight Committee's Request for Hearing (Jan. 26, 2011), at 2 (ADAMS Accession No. ML1102604411). *See* 10 C.F.R. § 110.83(a).

applications and whether the applications set precedent.[17] Petitioners also argue that the NRC should perform an environmental review of the import application. Petitioners therefore seek a waiver of 10 C.F.R. § 51.22(c)(15),[18] which provides a categorical exclusion from the National Environmental Policy Act (NEPA) requirement to prepare an environmental assessment or environmental impact statement for the issuance of import licenses involving LLRW.[19]

EnergySolutions filed a timely response to OREPA/TEC/ENDIT's waiver request, arguing that it should be denied because it does not show that special circumstances exist such that application of the rule would not serve the purposes for which it was adopted.[20] EnergySolutions also filed a timely answer, arguing that the hearing request should be denied because OREPA/TEC/ENDIT fail to (1) establish an interest that may be affected; and (2) show that a hearing would be in the public interest or that they can assist the Commission in making its required determinations.[21] OREPA/TEC/ENDIT filed a timely reply, arguing that OREPA/TEC/ENDIT (1) each have standing to request a hearing on EnergySolutions' import/export license application, (2) are entitled to a hearing on EnergySolutions' import license application, and (3) have satisfied the standard for a discretionary hearing.[22]

IV. WAIVER ANALYIS

A. Waiver Standard

Part 110 provides that "[a] participant may petition that a Commission rule or regulation be waived with respect to the license application under consideration."[23] To waive a Part 110 rule or regulation, the petitioner must show that "because

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[17] *See* 10 C.F.R. § 110.82. This is a summary of OREPA/TEC/ENDIT's concerns. *See* OREPA/TEC/ENDIT Petition at 5-9 for a detailed listing of all concerns. The petition did not provide information about the purpose of these groups, but more information can be found at http://www.tectn.org/about.php, http://getsustainablenow.org/orepa/, and http://www.change.org/citizens_to_end_nuclear_dumping_in_tn.

[18] OREPA/TEC/ENDIT Petition at 8.

[19] *Id.* at 8-9; Petitioners' Reply at 8-9. *See* 10 C.F.R. § 110.111.

[20] EnergySolutions' Response to Petitioners' Waiver Request (Jan. 10, 2011) (ADAMS Accession No. ML110100570), at 2 (EnergySolutions' Response to Waiver). *See* 10 C.F.R. § 110.111(d).

[21] EnergySolutions' Answer Opposing Various Tennessee Petitioners' Request for Hearing (Jan. 31, 2011) (ADAMS Accession No. ML1103108320) at 1 (EnergySolutions' Answer to OREPA/TEC/ENDIT). *See* 10 C.F.R. § 110.83(a).

[22] Petitioners' Reply to EnergySolutions' Answer to Hearing Request and Petition to Intervene (Feb. 10, 2011) (ADAMS Accession No. ML1104107310), at 1-9 (Petitioners' Reply). *See* 10 C.F.R. § 110.83(b).

[23] 10 C.F.R. § 110.111(a).

of special circumstances concerning the subject of the hearing, application of a rule or regulation would not serve the purposes for which it was adopted."[24] OREPA/TEC/ENDIT seek a waiver of 10 C.F.R. § 51.22(c)(15),[25] which provides a categorical exclusion from the NEPA requirement to prepare an environmental assessment or environmental impact statement for the issuance of an LLRW import license.[26] Petitioners argue that the NRC should "address the environmental impacts of importing and incinerating German radioactive waste and the relative costs and benefits of the alternatives."[27] Petitioners claim that NEPA requires the NRC to "prepare and publish for comment a study of those impacts and the relative cost-effectiveness of alternatives to mitigate or avoid those impacts."[28]

B. No Special Circumstances

In arguing that special circumstances exist in this proceeding, Petitioners assert that "the issuance of an import license is the key federal action that will allow the incineration of foreign-made radioactive waste in a Tennessee incinerator."[29] However, the key action that will allow the incineration of this material is the domestic license authorizing such processing, not the NRC's grant of an import license.[30] This is true in any import licensing proceeding. Thus, this argument does not support a finding of special circumstances unique to this proceeding. Petitioners also argue that this application to import LLRW from Germany is "an unusual and precedent-setting action with potentially significant adverse impacts to the environment that may not be justifiable in light of the availability of other alternatives for disposing of the waste."[31] However, Petitioners have not

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[24] 10 C.F.R. § 110.111(b).

[25] OREPA/TEC/ENDIT Petition at 8.

[26] *See* Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions and Related Conforming Amendments, 49 Fed. Reg. 9352, 9379 (Mar. 12, 1984) (codifying Commission's reasoned determination that issuance of a license to import nuclear material, except for spent power reactor fuel, is an action that does not individually or cumulatively have a significant effect on the human environment).

[27] Petitioners' Reply at 8.

[28] *Id. See also* OREPA/TEC/ENDIT Petition at 9 (asserting that the report should include an analysis of the claim that the import of foreign LLRW would be good for the U.S. economy).

[29] OREPA/TEC/ENDIT Petition at 9. *See also* Petitioners' Reply at 9 (arguing that there is no other forum in which their concerns will be addressed).

[30] 10 C.F.R. § 110.50(a)(3). *See* Import Application; EnergySolutions' Answer to OREPA/TEC/ENDIT at 19. The incinerator is licensed by the Tennessee Department of Environment and Conservation, Division of Radiological Health, pursuant to an Agreement State license. Therefore, it seems that the State of Tennessee is better situated than the NRC to address any concerns related to the incineration.

[31] Petitioners' Reply at 8.

demonstrated how this import of LLRW is unusual or different from any other import of LLRW.[32] Therefore, Petitioners have not demonstrated any special circumstances concerning this import application and their request for waiver is denied.[33]

V. THE PETITIONER'S STANDING

A. No Organization or Individual Has Standing to Intervene as a Matter of Right

Section 189a of the Atomic Energy Act of 1954, as amended (AEA) "provides, among other things, that the Commission grant a hearing, as a matter of right, to any person 'whose interest may be affected by' a proceeding under the [AEA] for the granting of any license."[34] In assessing whether a petitioner has set forth a sufficient "interest" to qualify for a hearing as a matter of right in a licensing proceeding,[35] the Commission has long applied contemporaneous judicial concepts of standing.[36] Essential to establishing standing are findings of (1) injury, (2) causation, and (3) redressability.[37] In this case, Petitioners assert organizational standing, both in their own capacity[38] and (in the case of TEC/ENDIT) in the capacity of representing their members.[39] However, Petitioners have not shown any injury-in-fact caused by the import or export license to either their organizations or any individual member. Thus, they are not entitled to a hearing as a matter of right.

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[32] *See* EnergySolutions' Response to Waiver at 3 (noting that this LLRW is indistinguishable from other LLRW that EnergySolutions receives via import from other generators). *See also* EnergySolutions' Answer to OREPA/TEC/ENDIT at 23 n.102.

[33] Petitioners also have not shown that there are "unresolved conflicts concerning alternative uses of available resources." 10 C.F.R. § 51.22(b).

[34] *Transnuclear, Inc.* (Export of 93.15% Enriched Uranium), CLI-94-1, 39 NRC 1, 3 (1994) (citing 42 U.S.C. § 2239a(1)(A)).

[35] *See* 42 U.S.C. § 2239a.(1)(A); 10 C.F.R. § 110.84(b).

[36] *See, e.g., Transnuclear, Inc.* (Export of 93.3% Enriched Uranium), CLI-99-15, 49 NRC 366, 367 (1999); *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995).

[37] *See Westinghouse Electric Corp.* (Nuclear Fuel Export License for Czech Republic — Temelin Nuclear Power Plants), CLI-94-7, 39 NRC 322, 331-32 (1994) (noting that standing is not a mere legal technicality).

[38] *See* Petitioners' Reply at 3 (OREPA). The CAP Petition does not indicate what type of standing it claims. *See Sierra Club v. Morton,* 405 U.S. 727 (1972); *Georgia Tech,* CLI-95-12, 42 NRC at 115 (outlining organizational standing requirements).

[39] *See* Harris Declaration ¶ 5 (TEC); Corrected Harris Declaration ¶¶ 3 and 4 (TEC/ENDIT). *See Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-98-13, 48 NRC 26 (1998) (outlining representational standing requirements).

First, CAP's generalized institutional interest in public forums and in preventing processing of foreign waste[40] is insufficient on its face to confer standing. Such claims are merely generalized grievances, not particular to CAP or its members, and thus not the kind of interest cognizable under traditional standing doctrine.[41]

Second, Petitioners' claimed interest in the public health, safety, and/or the environment[42] is insufficient to demonstrate standing because they have made no showing of a particularized injury caused by the import or export license. Although OREPA/TEC/ENDIT apparently have members living within 10-25 miles of the Bear Creek facility,[43] no "proximity presumption" applies in this case because Petitioners have not shown that the import or export "involves a significant source of radioactivity producing an obvious potential for offsite consequences."[44] Instead, Petitioners only speculate about an unexplained and undefined potential for radiological releases associated with the incineration of the LLRW.[45] They do not identify any specific risk or credible threat of any obvious offsite consequences.[46]

Similarly, Petitioners do not satisfy the traditional judicial standing test as they have not shown any injury-in-fact.[47] Specifically, OREPA/TEC/ENDIT have offered conclusory statements of harm, but no plausible explanation for why emissions from incinerating the imported LLRW would reach any of its

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[40] CAP Petition.

[41] *See Sierra Club,* 405 U.S. at 739 (noting that mere "interest" in a problem is not sufficient by itself to render the organization "adversely affected" or "aggrieved" within the meaning of the APA); *See also Edlow International Co.* (Agent for the Government of India on Application to Export Special Nuclear Material), CLI-76-6, 3 NRC 563, 572 (1976); *U.S. Department of Energy* (Plutonium Export License), CLI-04-17, 59 NRC 357, 363 (2004).

[42] *See* CAP Petition; OREPA/TEC/ENDIT Petition; Hutchison Declaration ¶ 5; Harris Declaration ¶ 4.

[43] *See* Hutchison Declaration ¶ 2; Harris Declaration ¶ 2.

[44] *Plutonium Export License,* CLI-04-17, 59 NRC at 365 (quoting *Ga. Tech,* CLI-95-12, 42 NRC at 116-17).

[45] *See* OREPA/TEC/ENDIT Petition at 10; CAP Petition.

[46] For example, even if the import or export license authorized possession and/or use of the LLRW, the petition does not assert how this LLRW is a significant source of radioactivity or provide any scenario in which the import or export of the LLRW would result in an accident that could produce obvious offsite consequences. *See Babcock & Wilcox* (Apollo, Pennsylvania Fuel Fabrication Facility), LBP-93-4, 37 NRC 72, 84 (1993); *Tennessee Valley Authority* (Sequoyah Nuclear Plant, Units 1 and 2; Watts Bar Nuclear Plant, Unit 1), LBP-02-14, 56 NRC 15, 25 (2002); *Northeast Nuclear Energy Co.* (Millstone Nuclear Power Station, Unit 2), LBP-92-28, 36 NRC 202, 213 (1992).

[47] *Plutonium Export License,* CLI-04-17, 59 NRC at 364-65 (noting that when no proximity presumption applies, petitioner must assert some specific "injury in fact" that will result from action taken). *See Dellums v. NRC,* 863 F.2d 968, 971 (D.C. Cir. 1988) and *Bennett v. Spear,* 520 U.S. 154, 175 (1997) (outlining traditional judicial standing test).

members or prove harmful 10, 17, or 25 miles away from the site.[48] CAP only asserts that incineration releases a number of contaminants to the air, including tritium and mercury, that are difficult or impossible to capture in filters.[49] OREPA/TEC/ENDIT also have not shown that there will be any impact from the transport of the LLRW to be imported.[50] "Mere potential exposure to minute doses of radiation within regulatory limits does not constitute a 'distinct and palpable' injury on which standing can be founded."[51] Because OREPA/TEC/ENDIT and CAP have not established standing, no Petitioner is entitled to a hearing as a matter of right.

Even if Petitioners had established standing, we would still deny Petitioners' hearing requests. NRC hearings on import or export licenses under 10 C.F.R. § 110.82 presuppose that a petitioner has set forth material issues warranting a hearing and has explained why a hearing would assist the Commission in making the determinations required by section 110.45. As discussed in detail below, the concerns Petitioners raise here are not material to our findings on the import and export licenses. Moreover, Petitioners have not shown that they would assist us in making the requisite determinations on the import/export license.

Petitioners' written views are on the record. We therefore need not devote adjudicatory resources to providing an oral hearing on Petitioners' grievances when they have been unable to articulate material issues that require litigation at a hearing, or how Petitioners will contribute to their proper resolution. The Part 110 procedures afford Petitioners an opportunity to submit and challenge evidence as to any and all issues of material fact regarding these applications.[52] Thus, any section 189a hearing rights to which Petitioners might be entitled (had they shown standing) have been satisfied.[53]

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[48] *See Nuclear Fuel Services, Inc.* (Erwin, Tennessee), LBP-04-5, 59 NRC 186, 195 (2004) (discussing petitioner's residence 20 miles from site), *aff'd,* CLI-04-13, 59 NRC 244 (2004).

[49] CAP Petition.

[50] OREPA/TEC/ENDIT Petition at 7, 10. *See International Uranium (USA) Corp.* (White Mesa Uranium Mill), CLI-01-21, 54 NRC 247, 253 (2001) (noting that speculation about accidents along feed material's transport routes does not establish standing under NRC case law).

[51] *Nuclear Fuel Services,* 59 NRC at 195. *See also Babcock & Wilcox* (Apollo, Pennsylvania Fuel Fabrication Facility), LBP-93-4, 37 NRC 72, 87-88 (1993); *Public Citizen, Inc. v. National Highway Traffic Safety Administration,* 513 F.3d 234, 237 (D.C. Cir. 2008). It is also not clear whether denying this import/export application would avoid the harms that Petitioners assert for standing purposes. *See Westinghouse,* CLI-94-7, 39 NRC at 331. We need not decide the redressability issue because Petitioners have asserted neither sufficient injury-in-fact nor causation to support standing.

[52] *See generally* Subpart G and Subpart H of Part 110.

[53] *See General Motors Corp. v. Federal Energy Regulatory Commission,* 656 F.2d 791, 795 & n.7 (D.C. Cir. 1981). *See also Braunkohle Transport, USA* (Import of South African Uranium Ore Concentrate), CLI-87-6, 25 NRC 891, 893-94 (1987) (noting that formal adjudicatory procedures

(Continued)

B. A Hearing or Intervention Would Not Assist the Commission in Making Its Findings on the Application

We have also considered whether to order a discretionary hearing in this proceeding. Our regulations provide for a discretionary hearing in an export or import licensing proceeding if a hearing would be in the public interest and would assist the Commission in making the statutory determinations required by the AEA.[54]

OREPA/TEC/ENDIT claim that a discretionary hearing is warranted because EnergySolutions has not provided adequate information to support the issuance of this import/export license.[55] Petitioners also claim a hearing is warranted because the public should have the opportunity to discuss import/export issues in a public forum.[56] We consider the adequacy of information in the application as well as written comments from the public in making an import or export licensing decision.[57] However, EnergySolutions has provided the information required by our Part 110 regulations,[58] the public has had the opportunity to express its views on this import/export application,[59] and we have reviewed the public's and Petitioners' comments. Therefore, we have sufficient information to make the requisite determinations on the import and export license application.

Petitioners also raise several policy concerns related to allowing the import of foreign LLRW.[60] However, Part 110 allows for the import and export of

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are inappropriate in export or import licensing proceedings). *See generally Siegel v. AEC,* 400 F.2d 778, 785-86 (D.C. Cir. 1968); *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.,* 435 U.S. 519, 547 (1978); *City of West Chicago v. NRC,* 701 F.2d 632, 642 (7th Cir. 1983).

[54] *See* 10 C.F.R. § 110.84(a).

[55] OREPA/TEC/ENDIT Petition at 9. *See id.* at 5-9 (outlining all the claimed deficiencies in EnergySolutions' applications).

[56] CAP Petition; OREPA/TEC/ENDIT Petition at 9 (noting that public needs clear explanation of NRC's import/export criteria).

[57] *See, e.g.,* 10 C.F.R. §§ 110.45 and 110.81.

[58] *See* Import and Export Application, Response to RAIs, 10 C.F.R. §§ 110.32, 110.42, 110.43.

[59] Both Petitions contained the organizations' comments offered pursuant to 10 C.F.R. § 110.81. *See* CAP Petition; OREPA/TEC/ENDIT Petition at 4. *See also* Order of the Secretary (extending opportunity to provide comments and/or request a hearing). Several members of the public also submitted comments pursuant to 10 C.F.R. § 110.81. *See, e.g.,* Lish Comment.

[60] *See* CAP Petition (noting that every country should have ability to process its own nuclear waste); OREPA/TEC/ENDIT Petition at 9-10 (noting that a hearing would address legal and policy issues raised by this proposal and would help identify where the larger decisions are made on how much waste overall could be imported to the U.S.).

such LLRW and provides the criteria for approving or denying these licenses.[61] Therefore, these claims amount to impermissible challenges to the Part 110 regulations and are not a valid basis for providing a discretionary hearing on a particular import/export license application.[62]

Finally, Petitioners raise issues related to impacts from transport or incineration of the LLRW to be imported.[63] As discussed, the grant of an import license only allows the materials to be brought into the United States.[64] Petitioners' questions or challenges to the domestic licenses that authorize possession, use, transport, and incineration of the waste are outside the scope of the proceeding.[65]

Notably, Petitioners do not claim to have special knowledge on any of the issues raised by this import/export application, nor have they presented any significant information not already available to and considered by us in assessing the applications. Thus, a discretionary hearing would impose unnecessary burdens on the participants without assisting us in making the requisite findings.[66]

For all of the foregoing reasons, we deny both requests for a discretionary hearing in this proceeding.

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[61] *See* Import and Export of Radioactive Waste, 60 Fed. Reg. 37,556, 37,557 (July 21, 1995) (rejecting comments requesting ban of import and export of radioactive waste). *See id.* at 37,556 (noting that after LLRW enters into the United States, domestic regulations of the NRC and Agreement States apply). *See also* 10 C.F.R. § 110.32 (outlining required information for specific license).

[62] In contrast, the Commission granted a discretionary hearing in *Advanced Nuclear Fuels Corp.* (Import of South African Enriched Uranium Hexafluoride), CLI-87-9, 26 NRC 109 (1987). In that case, the Commission was concerned with legal interpretations of the Anti-Apartheid Act, and the discretionary hearing involved written submissions on this issue.

[63] OREPA/TEC/ENDIT Petition at 10 (asserting that many individuals, residents, organizations, and the public at large will be impacted by the transport and incineration of the imported LLRW); CAP Petition (noting that incineration releases a number of contaminants, including tritium and mercury, to the air).

[64] Export and Import of Nuclear Equipment and Material; Updates and Clarifications, 75 Fed. Reg. 44,072, 44,075 (July 28, 2010). *See also* Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions and Related Conforming Amendments, 49 Fed. Reg. 9352, 9369 (Mar. 12, 1984) (discussing how transportation of material is not authorized by an import license and that in any event, the NRC has determined that the environmental impact of the transportation of imported LLRW from the time of its arrival in the United States until it reaches its ultimate destination is negligible).

[65] 75 Fed. Reg. 44,072, 44,075 (noting that an import license is not a mechanism to alter the established domestic authorization process, including Agreement State regulations). *See, e.g.,* Import Application at 8 (noting that imported LLRW will be possessed and incinerated in the U.S. in accordance with EnergySolutions' Tennessee Agreement State License No. R-73016).

[66] *Transnuclear, Inc.* (Export of 93.3% Enriched Uranium), CLI-00-16, 52 NRC 68, 72 (2000). *See also Transnuclear,* CLI-99-15, 49 NRC at 368.

VI. THE STATUTORY DETERMINATIONS

A. Import

Under the AEA, the NRC is responsible for authorizing the import of byproduct, source, and special nuclear material.[67] Under the NRC's regulations governing imports of nuclear materials, we will issue an LLRW import license if we find that: (1) the proposed import will not be inimical to the common defense and security; (2) the proposed import will not constitute an unreasonable risk to the public health and safety;[68] (3) the environmental requirements of Part 51 have been satisfied (to the extent applicable); and (4) an appropriate facility has agreed to accept the waste for management or disposal.[69]

As discussed above, the Executive Branch concluded that the import application appeared consistent with the Joint Convention on the Safety of Spent Fuel Management and on Radioactive Waste Management guidelines.[70] Further, the Executive Branch noted that the "German Government is prepared to issue the necessary import licenses for the return of the incineration residue to Germany by EnergySolutions."[71] Tennessee stated that it reviewed the applications and the authorizations granted by the Tennessee Radioactive Material Licenses issued to EnergySolutions and found no technical reason to prohibit the processing of this described waste at the Bear Creek facility.[72]

After reviewing the Executive Branch Views, Tennessee's Views, the Southeast Compact Commission's Views, the applications, and the responses to the request for additional information, we have determined that the import will not be inimical to the common defense and security[73] and will not constitute an unreasonable risk to the public health and safety. No environmental review is required for this import application, as 10 C.F.R. § 51.22(c)(15) specifically exempts the import application from an environmental review. The Bear Creek facility is an appropriate facility to manage the imported LLRW and has agreed to accept the waste for management. Moreover, the two German facilities identified in the applications are appropriate facilities to receive and dispose of the hearth ash generated from the incinerated imported LLRW, along with any nonincinerable

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[67] 42 U.S.C. § 2021(c)(2).

[68] *See* 42 U.S.C. § 2111(a).

[69] 10 C.F.R. § 110.45(b)(1)-(4). Section 110.45(b)(5), which pertains to Part 110 Appendix P, radioactive material, does not apply in this proceeding.

[70] Executive Branch Views.

[71] *Id.*

[72] Tennessee's Views.

[73] 10 C.F.R. § 110.42(d)(1).

and nonconforming waste, and have agreed to accept this waste for disposal.[74] Thus, the record reflects no "orphaned" foreign waste.[75]

B. Export

Under the AEA, the NRC is responsible for authorizing the export of byproduct, source, and special nuclear material.[76] Under our regulations governing exports of nuclear materials, we will issue a LLRW export license if: (1) we have been notified by the State Department that it is the judgment of the Executive Branch that the proposed export will not be inimical to the common defense and security,[77] (2) we have made an independent judgment that the export will not be inimical to the common defense and security,[78] (3) the receiving country has received a description of the equipment or material including the volume, physical and chemical characteristics, route of transit of shipment, and ultimate disposition (including forms of management or treatment) of the waste,[79] and (4) the receiving country has found it has the administrative and technical capacity and regulatory structure to manage and dispose of the waste and consents to the receipt of the radioactive waste.[80]

As discussed above, the Executive Branch concluded that the export application appeared consistent with the Joint Convention on the Safety of Spent Fuel Management and on Radioactive Waste Management guidelines.[81] Further, the Executive Branch noted that the "German Government is prepared to issue the necessary import licenses for the return of the incineration residue to Germany by EnergySolutions."[82]

After reviewing the Executive Branch Views, Tennessee's Views, the Southeast Compact Commission's Views, the applications, and the responses to the request for additional information, we have made an independent judgment that

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[74] *See* Executive Branch Views.

[75] *See* OREPA/TEC/ENDIT Petition at 7 (noting concern that radioactive materials will be orphaned in U.S.). Any residual waste attributable to EnergySolutions under its Tennessee license will be disposed of in accordance with domestic license conditions and permits. *See* Import Application at 8; Response to RAIs, RAI # 4 Resp.

[76] 42 U.S.C. § 2021(c)(2). This import/export involves waste that was contaminated with byproduct, so 42 U.S.C. §§ 2155, 2156, and 2157 do not apply.

[77] *See* 10 C.F.R. § 110.41(a)(8) and 10 C.F.R. § 110.41(b)(1).

[78] 10 C.F.R. § 110.42(d)(1).

[79] *See* 10 C.F.R. §§ 110.42(d)(2) and 110.32(f)(5). Classification of the waste to be imported or exported is not required because it is not being imported or exported for direct disposal at a Part 61 or equivalent Agreement State licensed facility.

[80] 10 C.F.R. § 110.42(d)(2).

[81] Executive Branch Views.

[82] *Id.*

the export will not be inimical to the common defense and security.[83] Germany has been advised of the applicable information regarding the export application and has found that it has "the administrative and technical capacity and regulatory structure to manage and dispose of the waste and consents to the receipt of the radioactive waste."[84]

VII. CONCLUSION AND ISSUANCE OF LICENSES

For the reasons stated above, we find that (1) OREPA/TEC/ENDIT have not met the standard to waive 10 C.F.R. § 51.22(c)(15), (2) no petitioner has demonstrated standing, and (3) a discretionary hearing in this matter would not assist us in making the requisite determinations on the import and export licenses. Accordingly, we deny Petitioners' requests for hearing, intervention, and waiver of 10 C.F.R. § 51.22(c)(15). We have determined that the statutory and regulatory import and export licensing criteria set forth in Part 110 have been met. Therefore, we direct the Office of International Programs to issue license IW029 to EnergySolutions for the import of up to 1,000 tons of dry active material from Germany and to issue license XW018 to EnergySolutions for the export of up to 1,000 tons of hearth ash and any nonincinerable and nonconforming materials to Germany.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 6th day of June 2011.

[83] 10 C.F.R. § 110.42(d)(1).

[84] 10 C.F.R. § 110.42(d). *See* Executive Branch Views.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

E. Roy Hawkens, Chairman
Dr. Michael F. Kennedy
Dr. William C. Burnett

In the Matter of **Docket Nos. 52-040-COL**
52-041-COL
(ASLBP No. 10-903-02-COL-BD01)

FLORIDA POWER & LIGHT COMPANY
(Turkey Point Nuclear Generating Plant, Units 6 and 7)

June 29, 2011

CONTENTIONS: NEW AND AMENDED; ADMISSIBILITY

To be admissible, a newly proffered contention must satisfy: (1) either the timeliness standards in 10 C.F.R. § 2.309(f)(2) *or* the standards in 10 C.F.R. § 2.309(c)(1) for newly proffered nontimely contentions; *and* (2) the contention admissibility standards in 10 C.F.R. § 2.309(f)(1).

CONTENTIONS: NEW AND AMENDED

A newly proffered contention that does not satisfy the timeliness requirements of section 2.309(f)(2) may still be considered for admission if it satisfies section 2.309(c)(1).

EMERGENCY PLANS: COMMUNICATIONS REQUIREMENTS; PROTECTIVE ACTIONS; BACKUP POWER SOURCE

Under NRC regulations, a power reactor's emergency plan must contain and describe "[a]dequate provisions . . . for emergency facilities and equipment, including . . . [a]t least one onsite and one offsite communications system; each system shall have a backup power source." 10 C.F.R. Part 50, App. E, § IV.E.9.

COMBINED LICENSES: PROTECTIVE ACTIONS; EMERGENCY PLANNING ZONES

Pursuant to 10 C.F.R. § 50.47(b)(10), a COL application must include an Emergency Plan that contains, in the event of a reactor emergency resulting in a radiological release, "[a] range of protective actions . . . for the public [located within about a 10-mile radius from the plant]. In developing this range of actions, consideration [will be] given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate." 10 C.F.R. § 50.47(b)(10). Section 50.47(b)(10) thus requires an Emergency Plan to have "[a] range of protective actions" for persons within about a 10-mile radius (*id.*), and it also requires that "[g]uidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place . . . ." *Id.* This regulation, on its face, eschews an inflexible "one size fits all" approach to planning for radiological emergencies.

EMERGENCY PLANNING ZONES (PLUME AND INGESTION EPZS); RADIOLOGICAL EXPOSURES

NRC regulations provide for two emergency planning zones (EPZs) around nuclear power plants in the event of a nuclear accident: (1) the plume exposure pathway EPZ, which consists of an area about 10 miles in radius around a plant, the principal concern of which is radiation exposure to the public (whole-body external exposure and inhalation exposure) from a radioactive plume; and (2) the ingestion exposure pathway EPZ, which consists of an area about 50 miles in radius around a plant, the principal concern of which is ingestion of contaminated water or foods (e.g., milk or fresh vegetables). *See* 10 C.F.R. § 50.47(c)(2); *id.,* Part 50, App. E; *cf.* 44 C.F.R. § 350.2(g)-(i) (defining plume and ingestion exposure pathway EPZs for federal emergency management purposes).

CONSTITUTIONAL REQUIREMENTS: EQUAL PROTECTION

The equal protection component of the Fifth Amendment's Due Process Clause applies to *federal* action, while the Equal Protection Clause of the Fourteenth

Amendment applies to *state* action. *See Schweiker v. Wilson,* 450 U.S. 221, 226 & n.6 (1981). As relevant here, equal protection principles require "'that all persons similarly situated shall be treated alike.'" *Nguyen v. Immigration and Naturalization Service,* 533 U.S. 53, 63 (2001) (quoting *Cleburne v. Cleburne Living Center, Inc.,* 473 U.S. 432, 439 (1985)).

ATOMIC ENERGY ACT: NRC RESPONSIBILITIES

EMERGENCY PLANNING: STATE AND LOCAL GOVERNMENT RESPONSIBILITIES

EVACUATION PLANS

During a nuclear emergency in the United States, the individual licensee and the appropriate state and local government officials have direct responsibilities for the coordinated response to the event. *See* 10 C.F.R. Part 50, App. E, § IV.A. The NRC — in its capacity as the federal agency charged with regulating the nuclear industry in a manner that protects public health and safety (Atomic Energy Act, 42 U.S.C. § 2232(a); 10 C.F.R. § 1.11(b)) — monitors the emergency (10 C.F.R. Part 50, App. E, § VI) and is available to provide recommendations for emergency actions to either the licensee or local government officials, including a recommendation for a more extensive evacuation area as warranted by actual circumstances.

MEMORANDUM AND ORDER
(Denying CASE's Motion to Admit Newly Proffered Contentions)

INTRODUCTION

Pending before this Licensing Board is a motion from an intervenor in this proceeding, Citizens Allied for Safe Energy, Inc. (CASE), seeking to admit three newly proffered contentions that are based, in part, on the recent events at the Fukushima Daiichi Nuclear Power Plant on the east coast of Honshu, Japan. For the reasons discussed below, we deny CASE's motion.[1]

[1] CASE characterizes its motion as a request to "amend" Contentions 1, 2, and 5. *See infra* note 7. In this Board's decision issued in February 2011, we rejected Contentions 1, 2, and 5 for failing to satisfy the 10 C.F.R. Part 2 admissibility requirements. *See infra* note 6 and accompanying text. Those contentions are thus no longer pending in this proceeding, and they are not susceptible to amendment by this Board. Therefore, CASE's motion, properly characterized, is one that seeks to admit newly proffered Contentions 1, 2, and 5, and we will so treat it.

At the outset, we note that the Commission has established a Task Force to conduct a systematic review of the Fukushima event. *See* NRC Actions Following the Events in Japan, COMGBJ11-0002 (Mar. 21, 2011). The Task Force is charged with performing near-term and long-term reviews that, among other things, "should evaluate all technical and policy issues related to the event to identify additional research, generic issues, changes to the reactor oversight process, rulemakings, and adjustments to the regulatory framework that should be conducted by NRC." *Id.* at 2. The NRC Staff "anticipate[s] that ongoing review and evaluation of the events in Japan by the NRC Staff and the Task Force will identify actions to further enhance the safety of U.S. nuclear facilities based on the lessons from the Japanese event."[2] If the Task Force's recommendations result in changes to regulations that are relevant to Florida Power & Light Company's (FPL's) Combined License (COL) application, FPL's compliance with those regulations would become part of the NRC Staff's technical review. *See id.* Additionally, such changes, or any other new and material information that emerges from the Fukushima event and its aftermath, might give rise to an opportunity to proffer new contentions in this proceeding.

At this juncture and on these pleadings, however, CASE's attempt to admit new contentions based on the events at Fukushima is unavailing.

I. BACKGROUND

This proceeding concerns FPL's application for a COL for two proposed nuclear power reactors, to be known as Turkey Point Units 6 and 7, that are planned to be located near Homestead, Florida.[3] In August 2010, CASE filed a petition to intervene challenging FPL's COL application.[4] On February 28, 2011, this Board granted CASE's petition and admitted portions of CASE's Contentions 6 and 7.[5] We declined, however, to admit the other contentions proffered by CASE. In particular, and as relevant here, we declined to admit Contentions 1 and 2 (which involved challenges concerning emergency planning) and Contention 5 (which involved a challenge concerning climate change-related sea-level rise).[6]

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[2] NRC Staff Answer to "[CASE] Motion to Amend Contentions 1, 2, and 5 of the CASE Revised Petition to Intervene" and "Amended Contentions 1, 2 and 5" (May 13, 2011) at 18 n.9 [hereinafter NRC Staff Response].

[3] *See* Florida Power & Light Company; Acceptance for Docketing of an Application for Combined License for Turkey Point Units 6 & 7 Nuclear Power Plants, 74 Fed. Reg. 51,621 (Oct. 7, 2009).

[4] *See* CASE [Revised] Petition to Intervene and Request for a Hearing (dated Aug. 17, 2010) (filed Aug. 20, 2010).

[5] *See* LBP-11-6, 73 NRC 149, 251 (2011).

[6] *See id.* at 227-32, 235-37.

On April 18, 2011, CASE filed a motion,[7] accompanied by a petition,[8] asking this Board to admit previously rejected Contentions 1, 2, and 5, and arguing that these contentions, as supplemented by new information relating to the Fukushima event, are now admissible.

On May 9 and 13, 2011, FPL[9] and the NRC Staff,[10] respectively, filed responses opposing CASE's motion and petition, arguing that the newly proffered contentions should be rejected because they are untimely, fail to satisfy admissibility standards, or both.

On May 16, 2011, CASE filed a reply to those responses, thus rendering CASE's motion ripe for resolution by this Board.[11]

II. APPLICABLE LEGAL STANDARDS

To be admissible, a newly proffered contention must satisfy: (1) either the timeliness standards in 10 C.F.R. § 2.309(f)(2) *or* the standards in 10 C.F.R. § 2.309(c)(1) for newly proffered nontimely contentions; *and* (2) the contention admissibility standards in 10 C.F.R. § 2.309(f)(1). We discuss these regulatory standards below.

A. The Standards in 10 C.F.R. § 2.309(f)(2) and (c)(1) for Consideration of, Respectively, Timely and Nontimely Contentions

On March 30, 2011, this Board issued an Initial Scheduling Order instructing the parties, *inter alia,* that if they wish to proffer a new or amended contention, their pleadings must state whether they seek "leave to file a *timely* new or amended contention under 10 C.F.R. § 2.309(f)(2), or . . . leave to file a *nontimely* new or amended contention under 10 C.F.R. § 2.309(c)(1)."[12] We also instructed that if a party "is uncertain [whether a newly proffered contention is timely or nontimely],

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[7] *See* Motion to Amend Contentions 1, 2, and 5 of the CASE Revised Petition to Intervene (August 20, 2010) (Apr. 18, 2011) [hereinafter CASE Motion].

[8] *See* Amended Contentions 1, 2 and 5 (Apr. 18, 2011) [hereinafter CASE Petition].

[9] *See* Florida Power & Light's Response Opposing Admission of CASE's Late Filed Contentions (May 9, 2011) [hereinafter FPL Response].

[10] *See* NRC Staff Response.

[11] *See* CASE's Reply to [FPL's] and NRC Staff's Answer to CASE's Motion to Amend Contentions 1, 2, and 5 of the CASE Revised Petition to Intervene (August 20, 2010) (May 16, 2011) [hereinafter CASE Reply].

[12] Licensing Board Initial Scheduling Order and Administrative Directives (Prehearing Conference Call Summary, Grant of Joint Motion Regarding Mandatory Disclosures, Initial Scheduling Order, and Administrative Directives) (Mar. 30, 2011) at 8 (unpublished) (emphasis in original) [hereinafter Initial Scheduling Order].

it may file pursuant to both [regulatory sections], and the [pleading] shall cover the three criteria of section 2.309(f)(2) *and* the eight criteria of section 2.309(c)(1)." Initial Scheduling Order at 8 (emphasis in original).

Pursuant to section 2.309(f)(2), a newly proffered contention is timely 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.

10 C.F.R. § 2.309(f)(2)(i)-(iii). Our Initial Scheduling Order provides that a newly proffered contention will be deemed submitted in a timely fashion pursuant to section 2.309(f)(2)(iii) "if it is filed within thirty (30) days of the date when the new and material information on which it is based first becomes available." Initial Scheduling Order at 8.

A newly proffered contention that does not satisfy the timeliness requirements of section 2.309(f)(2) may still be considered for admission if it satisfies section 2.309(c)(1), which requires a Board to balance the following factors:

> (i) Good cause, if any, for the failure to file on time;
>
> (ii) The nature of the requestor's . . . [statutory] right to be made a party to the proceeding;
>
> (iii) The nature and extent of the requestor'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 . . . interest;
>
> (v) The availability of other means whereby the requestor's . . . interest will be protected;
>
> (vi) The extent to which the requestor's . . . interests will be represented by existing parties;
>
> (vii) The extent to which the requestor's . . . participation will broaden the issues or delay the proceeding; and
>
> (viii) The extent to which the requestor's . . . participation may reasonably be expected to assist in developing a sound record.

10 C.F.R. § 2.309(c)(1)(i)-(viii). The first factor — i.e., good cause — is entitled to the most weight. *See, e.g., State of New Jersey* (Department of Law and Public Safety's Requests Dated October 8, 1993), CLI-93-25, 38 NRC 289, 296 (1993). Where good cause is not shown for the late filing of the contention, the requestor's "'demonstration on the other factors must be particularly strong.'" *Texas Utilities Electric Co.* (Comanche Peak Steam Electric Station, Units 1 and 2), CLI-92-12,

36 NRC 62, 73 (1992) (quoting *Duke Power Co.* (Perkins Nuclear Station, Units 1, 2, and 3), ALAB-431, 6 NRC 460, 462 (1977)).

B. The Contention Admissibility Standards in 10 C.F.R. § 2.309(f)(1)

To be admitted for adjudication, a contention — regardless of when it is filed — must also satisfy the requirements in 10 C.F.R. § 2.309(f)(1). Pursuant to those standards, an admissible contention must: (1) "[p]rovide a specific statement of the issue of law or fact to be raised"; (2) "[p]rovide a brief explanation of the basis for the contention"; (3) "[d]emonstrate that the issue raised in the contention is within the scope of the proceeding"; (4) "[d]emonstrate that the issue raised . . . is material to the findings the NRC must make to support the action that is involved in the proceeding"; (5) "[p]rovide a concise statement of the alleged facts or expert opinions . . . together with references to the specific sources and documents on which the requestor/petitioner intends to rely"; and (6) "provide sufficient information to show that a genuine dispute exists . . . on a material issue of law or fact," including "references to specific portions of the application . . . the petitioner disputes . . . 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 . . . ." 10 C.F.R. § 2.309(f)(1)(i)-(vi).

We now apply the above standards to CASE's newly proffered contentions.

III. CASE'S NEWLY PROFFERED CONTENTIONS ARE NOT ADMISSIBLE[13]

A. Newly Proffered Contention 1 Is Neither Timely Nor Admissible

CASE's newly proffered Contention 1 alleges that FPL's COL application "does not adequately protect public health of people in the Turkey Point Plume Exposure Zone following an accidental radiation release . . . ." CASE Petition at 3. In addition to grounding this contention on the same arguments previously

[13] Our regulations declare (10 C.F.R. § 2.323(b)) that "[a] motion must be rejected if it does not include a certification . . . that the movant has made a sincere effort to contact other parties . . . and resolve the issues(s) raised in the motion . . . ." In our Initial Scheduling Order, we emphasized this requirement, stating that "motions will be summarily rejected if they are not preceded by a sincere attempt to resolve the issues and include the certification required in 10 C.F.R. § 2.323(b)." *See* Initial Scheduling Order at 9. CASE failed to comply with this requirement. Although CASE's failure provides an alternative ground for rejecting its newly proffered contentions (*see* FPL Response at 5-6), we exercise our discretion to overlook its failure in this instance. We caution, however, that a moving party's future failure to comply with this requirement will render its motion vulnerable to summary denial with prejudice.

considered and rejected by this Board (*see supra* note 6 and accompanying text),[14] CASE advances the following two new arguments: (1) "[i]t is not clear that critical emergency communications will be viable in the event of a loss of power and back-up power at the site" (CASE Petition at 10); and (2) in the event of a core melt accident, FPL's Emergency Plan should "order an evacuation" of persons within a 10-mile radius of the Turkey Point facility. *Id.,* Exh. 7, Attachment C-1 Risk — 10-Mile [Emergency Planning Zone] and Probability Shenanigans [hereinafter CASE Petition, Exh. 7].[15]

FPL and the NRC Staff argue that Contention 1 should be rejected because (1) it is not timely, insofar as its allegedly "new" arguments could have been raised previously, and (2) it fails, in any event, to satisfy the admissibility requirements in 10 C.F.R. § 2.309(f)(1). *See* FPL Response at 6-11; NRC Staff Response at 7-14. We agree.[16]

First, although CASE proffered it within 30 days of certain events that occurred at Fukushima, this does not automatically render newly proffered Contention 1 timely within the meaning of 10 C.F.R. § 2.309(f)(2). As discussed *supra* Part II.A, for a newly proffered contention to be timely, it must, *inter alia,* be based on information that "was not previously available" (10 C.F.R. § 2.309(f)(2)(i)) and that "is materially different than information previously available." *Id.* § 2.309(f)(2)(ii). In our view, CASE has not shown that the two "new" arguments underlying Contention 1 — i.e., (1) FPL's emergency communications might not be viable in

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[14] CASE's original Contention 1 was grounded principally on the following four arguments:

> (1) FPL's evacuation plan will not be carried out in a timely manner for all those who could be affected by a radiation release; (2) FPL's plans for evacuation screening and shelter contain inadequate capacity for those living in the evacuation zone; (3) potassium iodide (KI) cannot be delivered to all those affected in a timely manner; and (4) because the design for Units 6 and 7 at Turkey Point increases the risk of radiation release, the importance of evacuation and KI distribution is enhanced.

LBP-11-6, 73 NRC at 227.

[15] In support of Contention 1, CASE also argues that (1) KI will not be timely administered in the event of a radiological emergency at Turkey Point (CASE Petition at 10-11), and (2) it is impossible to be "sufficiently prepared for what can evolve in a nuclear accident." *Id.* at 13. In our prior decision, we rejected both arguments as insubstantial. *See* LBP-11-6, 73 NRC at 229, 232. CASE fails to show that the Fukushima events it describes (CASE Reply at 6-8) provide new, material support for these recycled arguments. *See* FPL Response at 9-10; NRC Staff Response at 10-11.

[16] CASE repeatedly asks that we "reevaluate" and "revisit" the arguments it previously advanced for Contentions 1, 2, and 5. *See, e.g.,* CASE Petition at 50; CASE Reply at 11, 13. This we decline to do. Not only is CASE's request to revisit our prior decision untimely (*see* 10 C.F.R. § 2.323(e) (motions for reconsideration must be filed within 10 days of a Board's decision)), but CASE makes no effort to show that the stringent conditions for granting reconsideration are satisfied. *See id.* (motions for reconsideration require "a showing of compelling circumstances, such as the existence of a clear and material error in a decision . . . that renders the decision invalid"). Accordingly, we focus on CASE's new arguments, and we conclude that none — whether viewed individually or in concert with CASE's other arguments — renders newly proffered Contentions 1, 2, and 5 admissible.

the event of a station blackout, and (2) in the event of a core melt accident, FPL's Emergency Plan should order an evacuation of persons within a 10-mile radius of the Turkey Point facility — are based on new information that is materially different from previously available information. Notably, the record does *not* indicate (nor does CASE allege) that there has been any change in those portions of FPL's COL application that address emergency communications or emergency evacuation. Nor has CASE explained how the events at Fukushima require altering any of the data in FPL's COL application. In short, CASE could have raised the two arguments it now advances in support of Contention 1 in its August 2010 petition to intervene. Its failure to do so renders Contention 1 nontimely. *See* 10 C.F.R. § 2.309(f)(2). Because CASE made no effort to demonstrate that Contention 1, despite its lateness, should be considered for admission pursuant to 10 C.F.R. § 2.309(c)(1), we reject Contention 1 as inexcusably nontimely. *See AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260-61 (2009).

We also conclude Contention 1 must be rejected for the additional reason that it fails to satisfy the admissibility standards in 10 C.F.R. § 2.309(f)(1). With respect to the first argument underlying Contention 1, CASE asserts (CASE Petition at 10) that "[i]t is not clear that critical emergency communications will be viable in the event of a loss of power and back-up power at the site." Further, states CASE, "FPL['s] COL application . . . enumerate[s] the methods and equipment for communications during an emergency . . . however the [application] fails to clarify which of these emergency communication systems would be functional in the event of a Station Black-Out . . . ." *Id.* at 3.

Under NRC regulations, FPL's Emergency Plan must contain and describe "[a]dequate provisions . . . for emergency facilities and equipment, including . . . [a]t least one onsite and one offsite communications system; each system shall have a backup power source." 10 C.F.R. Part 50, App. E, § IV.E.9. CASE does not identify any regulatory requirement that FPL's COL application fails to satisfy with respect to its discussion of emergency communications and station blackouts, nor does CASE raise specific challenges to those portions of FPL's COL application pertaining to emergency communications. *See* Turkey Point Units 6 & 7, COL Application, Part 5: Radiological Emergency Plan, Rev. 2 at F-1 to F-8 (Dec. 2010). CASE also neglects to provide explanatory support for its claim (CASE Petition at 4) that a station blackout would "likely interfere with the communications from the reactor site." Accordingly, to the extent Contention 1 is grounded on CASE's first argument, it is not admissible because it fails to "provide sufficient information to show that a genuine dispute exists with [FPL's COL application] on a material issue of law or fact." 10 C.F.R. § 2.309(f)(1)(vi).

Nor is Contention 1 admissible under CASE's second argument, which alleges (CASE Petition, Exh. 7) that, in the event of a core melt accident, FPL's Emergency Plan should "order an evacuation" of persons within a 10-mile radius

of the Turkey Point facility. Notably, the rationale underlying CASE's argument (*infra* note 17) is not limited to the Turkey Point site or the proposed Turkey Point Units; rather, it would apply to all licensees and license applicants. Such an argument is foreclosed by 10 C.F.R. § 2.335(a), because it effectively attacks the NRC's regulation governing emergency planning.

Pursuant to 10 C.F.R. § 50.47(b)(10), a COL application must include an Emergency Plan that contains, in the event of a reactor emergency resulting in a radiological release, "[a] range of protective actions . . . for the public [located within about a 10-mile radius from the plant]. In developing this range of actions, consideration [will be] given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate." 10 C.F.R. § 50.47(b)(10). Section 50.47(b)(10) thus requires an Emergency Plan to have "[a] range of protective actions" for persons within about a 10-mile radius (*id.*), and it also requires that "[g]uidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place . . . ." *Id.* This regulation, on its face, thus eschews an inflexible "one size fits all" approach to planning for radiological emergencies. In our view, CASE's claim that FPL must craft a rigid Emergency Plan that "order[s] an evacuation" of all persons within a 10-mile radius — regardless of site-specific conditions or the availability of alternative, equally effective protective actions — is effectively a challenge to section 50.47(b)(10). Our regulations (10 C.F.R. § 2.335(a)) preclude CASE from advancing such a challenge in this proceeding. Rather, if CASE wishes to challenge section 50.47(b)(10), its recourse is to petition for a rule change pursuant to 10 C.F.R. § 2.802.[17]

For the foregoing reasons, we reject Contention 1.

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[17] CASE argues generically in favor of a mandatory 10-mile evacuation area. *See* CASE Petition, Exh. 7. CASE's argument is grounded on its factual assertion (CASE Petition at 4) that the "[c]alculations of possibility of radiological impact [at a 10-mile radius] in guidance materials [NUREG-0396] are incorrect and should not be used." But CASE is wrong in asserting that its calculations and conclusions, which are located in CASE Exhibit 7, differ from those in NUREG-0396. To the contrary, CASE's calculations and conclusions are consistent with those in NUREG-0396. Both show that the odds of exceeding the Protective Action Guide dose at 10 miles from a nuclear reactor due to a core melt accident are about 1.5×10^{-5} during any given year. *Compare* CASE Petition, Exh. 7 *with* NUREG-0396, "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants," at I-37, I-41 (Dec. 1978) [hereinafter NUREG-0396]. And both show that if a core melt accident occurs, the chance of exceeding the Protective Action Guide dose at 10 miles from a nuclear reactor is about 0.3. *Compare* CASE Petition, Exh. 7 *with* NUREG-0396 at I-37, I-38. Thus, even if Contention 1, as supported by CASE's second argument, were not an impermissible attack on an agency regulation, it would nevertheless be inadmissible for the dual reasons that (1) it fails to provide alleged facts or expert opinions that support CASE's position on the issue, contrary to 10 C.F.R. § 2.309(f)(1)(v), and (2) it fails to provide sufficient information to show a genuine dispute with FPL's COL application on a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

B. Newly Proffered Contention 2 Is Not Admissible

CASE's newly proffered Contention 2 alleges that FPL's COL application fails "to provide for the safe and orderly evacuation of the population during or following a nuclear event . . . ." CASE Petition at 14. In addition to grounding Contention 2 on the same arguments previously considered and rejected by this Board (*see supra* note 6 and accompanying text),[18] CASE advances the following argument: "[t]he NRC might be violating the [Fourteenth] Amendment to the U.S. Constitution and making a change in NRC policy" (CASE Petition at 21) to the extent it recommended in a March 18, 2011 U.S. Department of State Travel Warning that U.S. citizens in Japan evacuate the area within a 50-mile radius of the Fukushima facility rather than the 10-mile radius plume exposure pathway Emergency Planning Zone (EPZ) contemplated in the Turkey Point Emergency Plan.[19] CASE reasons that "[i]f the NRC . . . believe[s] a 50-mile [evacuation] radius of safety is necessary for U.S. Citizens near the crippled Fukushima plant, the Fourteenth Amendment requires equal protection under the law, so the same 50-mile [evacuation radius] must be addressed for safety for all U.S. nuclear power plants." *Id.* at 31-32.[20]

FPL and the NRC Staff argue that Contention 2 should not be admitted. *See* FPL Response at 11-15; NRC Staff Response at 14-19. We agree.

By way of background, NRC regulations provide for two EPZs around nuclear

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[18] CASE's original Contention 2 was grounded principally on the following three arguments: (1) FPL's evacuation plan fails to reflect the large expansion in permanent population during the past 40 years; (2) the plan improperly accepts sheltering over evacuation as an option in an emergency; and (3) the plan ignores the results of studies dealing with responses to actual emergencies. *See* LBP-11-6, 73 NRC at 230.

[19] As represented by CASE (CASE Petition at 21), the March 18, 2011 Department of State Travel Warning states in pertinent part:

> The United States Nuclear Regulatory Commission (NRC) recommends that U.S. citizens who live within 50 miles (80 kilometers) of the Fukushima Daiichi Nuclear Power Plant evacuate the area or take shelter indoors if safe evacuation is not practical. . . . Consistent with the NRC guidelines that would apply to such a situation in the United States, we are recommending, as a precaution, that U.S. citizens within 50 miles (80 kilometers) of the Fukushima Daiichi Nuclear Power Plant evacuate the area or take shelter indoors if safe evacuation is not practical.

CASE Petition, Exh. 6, U.S. Department of State, Travel Warning: Japan (Updated March 18, 2011) (Mar. 19, 2011), https://www.osac.gov/pages/contentreportdetails.aspx?cid=10685 (last visited June 29, 2011) [hereinafter CASE Petition, Exh. 6].

[20] Because CASE argues that the NRC's action might implicate equal protection concerns, we assume CASE intended to rely on the equal protection component of the Fifth Amendment's Due Process Clause that applies to *federal* action, rather than on the Equal Protection Clause of the Fourteenth Amendment that applies to *state* action. *See Schweiker v. Wilson,* 450 U.S. 221, 226 & n.6 (1981). As relevant here, equal protection principles require "'that all persons similarly situated shall be treated alike.'" *Nguyen v. Immigration and Naturalization Service,* 533 U.S. 53, 63 (2001) (quoting *Cleburne v. Cleburne Living Center, Inc.,* 473 U.S. 432, 439 (1985)).

power plants in the event of a nuclear accident: (1) the plume exposure pathway EPZ, which consists of an area about 10 miles in radius around a plant, the principal concern of which is radiation exposure to the public (whole-body external exposure and inhalation exposure) from a radioactive plume; and (2) the ingestion exposure pathway EPZ, which consists of an area about 50 miles in radius around a plant, the principal concern of which is ingestion of contaminated water or foods (e.g., milk or fresh vegetables). *See* 10 C.F.R. § 50.47(c)(2); *id.,* Part 50, App. E; *cf.* 44 C.F.R. § 350.2(g)-(i) (defining plume and ingestion exposure pathway EPZs for federal emergency management purposes).

Section 50.47(b)(10) requires in each COL application that:

> A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

10 C.F.R. § 50.47(b)(10). Guidance for the development of protective actions for the plume exposure pathway EPZ and for the ingestion exposure pathway EPZ is located in NUREG-0396. Significantly, NUREG-0396 states:

> *The emergency actions taken in any individual case must be based on the actual conditions that exist and are projected at the time of an accident.* For very serious accidents, predetermined protective actions would be taken if projected doses, at any place and time during an actual accident, appeared to be at or above the applicable proposed Protective Action Guides (PAGs), based on information readily available in the reactor control room, i.e., at predetermined emergency action levels. *Of course, ad hoc actions, based on plant or environmental measurements, could be taken at any time.*

NUREG-0396 at 2-3 (footnote removed and emphasis added).

According to CASE (*see* CASE Petition at 21-23), the NRC's recommendation that U.S. citizens within 50 miles of the Fukushima Daiichi Nuclear Power Plant evacuate or take shelter might constitute a policy change as well as an equal protection violation insofar as it treats U.S. citizens abroad differently than citizens in the United States. But CASE fails to explain why the NRC's recommendation in the fact-specific circumstances at Fukushima constitutes a

difference in treatment between U.S. citizens abroad and in the United States, much less how the recommendation constitutes a change in regulatory policy.[21]

It is important to recognize that the NRC's recommendation was in response to an emergency situation that was fraught with uncertainties and that appeared to be "deteriorating." CASE Petition, Exh. 6. The Travel Warning explained that "[t]here are numerous factors in the aftermath of the earthquake and tsunami, including weather, wind direction, and speed, and the nature of the reactor problem that affect the risk of radioactive contamination within this 50-mile (80 kilometer) radius or the possibility of low-level radioactive materials reaching greater distances." *Id.* Additionally, stated the Travel Warning, "[s]trong aftershocks are likely for weeks following a massive earthquake such as this one. . . . Due to the continuing possibility of strong aftershocks, Japan remains at risk for further tsunamis." *Id.* The likelihood of strong aftershocks and the possibility of additional tsunamis generated even greater uncertainty about "the risk of radioactive contamination within th[e] 50-mile (80 kilometer) radius." *Id.*

In such uncertain and potentially perilous circumstances, the NRC acts in accord with extant policy in providing precautionary recommendations designed to protect the health and safety of U.S. citizens, regardless of their location. During a nuclear emergency in the United States, the individual licensee and the appropriate state and local government officials have direct responsibilities for the coordinated response to the event. *See* 10 C.F.R. Part 50, App. E, § IV.A. The NRC — in its capacity as the federal agency charged with regulating the nuclear industry in a manner that protects public health and safety (Atomic Energy Act, 42 U.S.C. § 2232(a); 10 C.F.R. § 1.11(b)) — monitors the emergency (10 C.F.R. Part 50, App. E, § VI) and is available to provide recommendations for emergency actions to either the licensee or local government officials, including a recommendation for a more extensive evacuation area as warranted by actual circumstances. The guidance in NUREG-0396 confirms that "[t]he emergency actions taken in any individual case must be based on the actual conditions that exist and are projected at the time of an accident." NUREG-0396 at 2-3; *accord id.* at 8-10, 13-17.

Because CASE fails to show that the NRC's response to the Fukushima events constituted a change in policy (*supra* note 21) that resulted in the disparate

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[21] Notably, the NRC's recommendation was promulgated in a Travel Warning, which the Department of State issues "when long-term, protracted conditions that make a country dangerous or unstable lead the State Department to recommend that Americans avoid or consider the risk of travel to that country." *See* U.S. Department of State, Current Travel Warnings, http://travel.state.gov/travel/cis_pa_tw/tw/tw_1764.html (last visited June 29, 2011). Travel Warnings, which are currently in effect with respect to conditions in over thirty countries (*see id.*), contain *recommendations* that have no force of law and, thus, need not be obeyed. For this reason alone, CASE's assertion that the NRC's recommendation might constitute a change in policy lacks merit.

treatment of similarly situated U.S. citizens, CASE's equal protection claim is insubstantial. *See supra* note 20. Accordingly, Contention 2, as supported by CASE's new argument, is inadmissible pursuant to section 2.309(f)(1)(vi) for failing to show a genuine dispute with FPL's application on a material issue of law or fact.[22]

C. Newly Proffered Contention 5 Is Not Admissible

CASE's newly proffered Contention 5, like its original Contention 5 (*see* LBP-11-6, 73 NRC at 235), alleges that FPL's COL application is deficient because, contrary to 10 C.F.R. § 52.79, it fails "to consider or incorporate any 'scientifically valid projection for sea level rise and climate change through the end of this century and beyond.'" CASE Petition at 37. In addition to grounding Contention 5 on the same argument previously considered and rejected by this Board (*see supra* note 6 and accompanying text), CASE argues that the events at Fukushima demonstrate a potential for inundation of Turkey Point Units 3 and 4, which could, in turn, affect the operation of proposed Units 6 and 7. *See* CASE Petition at 41-50.

FPL and the NRC Staff argue that Contention 5 should not be admitted. *See* FPL Response at 16-17; NRC Staff Response at 19-25. We agree.

In support of newly proffered Contention 5, CASE relies principally on three sources: (1) a March 24, 2011 article from Climate Central appearing on the OnEarth website entitled "Sea Level Rise Brings Added Risks to Coastal Nuclear Plants," which has several references to Fukushima and to proposed Turkey Point Units 6 and 7 (*see* CASE Petition at 41-49); (2) the text of a Wikipedia entry regarding the tsunami waves that struck Japan incident to the Fukushima event (*id.* at 40-41); and (3) information from a March 28, 2011 posting on a blog entitled "Nuclear Power Plants," stating that "[h]igh levels of radiation from contaminated

[22] In support of Contention 2, CASE also advances several cursory challenges to the adequacy of FPL's evacuation preparation, arguing broadly that (1) a 10-mile plume exposure pathway EPZ is not sufficient to protect public health and safety, (2) FPL should consider planning for a "shadow evacuation" zone of 50 miles, and (3) the loss of engineered safety features at Fukushima militate in favor of hearing CASE's contentions on emergency planning and evacuation in full. *See* CASE Petition at 22-23, 30-32, 36. But CASE's perfunctory arguments fail to demonstrate a specific disagreement with an assumption, analysis, or conclusion in FPL's COL application, much less demonstrate a deficiency in the Emergency Plan or otherwise show a specific failure in the Plan to comply with a governing regulation.

Moreover, to the extent CASE seeks to raise a generic challenge to the 10-mile plume exposure pathway EPZ (*see* CASE Petition at 23, 32), such an argument constitutes an impermissible challenge to 10 C.F.R. § 50.47(c)(2). *See* 10 C.F.R. § 2.335(a) (barring challenges to Commission regulations in adjudicatory proceedings); *see also supra* text accompanying note 17.

water hindered work on restoring the cooling pumps and other power systems to [Fukushima] reactors 1-4." *Id.* at 49.

After examining these sources, we conclude they fail to provide the support necessary to render Contention 5 admissible because: (1) they fail to explain how the information relating to the Fukushima event supports an argument that the inundation of Turkey Point Units 3 and 4 is a plausible scenario;[23] and (2) they fail to explain how, even if such inundation were to occur, it could adversely affect the safe operation of proposed Units 6 and 7 given the characteristics of the Turkey Point site and the design of the proposed units. As supported by CASE's new argument, Contention 5 is thus inadmissible, because CASE fails to "[p]rovide sufficient information to show that a genuine dispute exists with [FPL] on a material issue of law or fact." 10 C.F.R. § 2.309(f)(1)(vi).

Contention 5, as supported by CASE's new argument, is also inadmissible for the independent reason that CASE fails, in derogation of section 2.309(f)(1)(vi), to controvert a specific portion of FPL's COL application or otherwise explain why FPL's analyses or conclusions are incorrect or inadequate. *See* 10 C.F.R. § 2.309(f)(1)(vi) (information accompanying an admissible contention "must include references to specific portions of the application . . . that the petitioner disputes and the supporting reasons for each dispute").[24]

IV. CONCLUSION

For the foregoing reasons, we *deny* CASE's motion to admit newly proffered contentions 1, 2, and 5, as supplemented by alleged new information relating to the events at the Fukushima Daiichi Nuclear Power Plant.

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[23] To the extent it attempts to argue that sea level rise could result in the inundation of Units 3 and 4 that could, in turn, affect operations of proposed Units 6 and 7, CASE fails to provide this Board with new and material information that was not previously available (LBP-11-6, 73 NRC at 235-37), thus rendering any such argument nontimely. *See* 10 C.F.R. § 2.309(f)(2). And because CASE made no effort to demonstrate that such an argument, despite its lateness, should be considered pursuant to 10 C.F.R. § 2.309(c)(1), it is rejected as inexcusably nontimely. *See Oyster Creek,* CLI-09-7, 69 NRC at 260-61.

As we indicated in our prior decision (LBP-11-6, 73 NRC at 217 n.78), if evidence subsequently indicates the design basis of an operating nuclear power plant will not withstand a maximum flooding event, the NRC Staff and a licensee have an obligation to take appropriate action to protect public health and safety. Additionally, in such circumstances, Commission regulations provide a remedial mechanism for members of the public to "file a request to institute a proceeding . . . to modify, suspend or revoke a license . . . ." 10 C.F.R. § 2.206(a).

[24] Notably, CASE fails to acknowledge, much less controvert, that portion of FPL's Final Safety Analysis Report (FSAR) that discusses radiological hazards and the possibility that a radiological release from Turkey Point Units 3 and 4 could affect operation of proposed Units 6 and 7. *See* Turkey Point Units 6 and 7 COL Application, Part 2 FSAR, Rev. 2, § 2.2.3.1.6.1 at 2.2-47 (Dec. 2010).

This Memorandum and Order is subject to interlocutory review in accordance with the provisions of 10 C.F.R. § 2.341(f)(2). A petition for review that meets the requirements of section 2.341(f)(2) must be filed within fifteen (15) days of service of this Memorandum and Order. *See* 10 C.F.R. § 2.341(b)(1).

It is so ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD

E. Roy Hawkens, Chairman
ADMINISTRATIVE JUDGE

Dr. Michael F. Kennedy
ADMINISTRATIVE JUDGE

Dr. William C. Burnett
ADMINISTRATIVE JUDGE

Rockville, Maryland
June 29, 2011[25]

[25] Copies of this Memorandum and Order were sent this date by the agency's e-filing system to: (1) counsel for Joint Intervenors; (2) counsel for Pinecrest; (3) the representative for CASE; (4) counsel for FPL; and (5) counsel for the NRC Staff.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Michael M. Gibson, Chairman
Dr. Anthony J. Baratta
Dr. Mark O. Barnett

In the Matter of **Docket No. 52-042**
(ASLBP No. 11-908-01-ESP-BD01)

EXELON NUCLEAR TEXAS HOLDINGS, LLC
(Victoria County Station Site) **June 30, 2011**

In this Memorandum and Order, the Board addresses Texans for a Sound Energy Policy's (TSEP or Petitioner) petition to intervene and request for hearing challenging the environmental report and site safety analysis report filed by Exelon Nuclear Texas Holdings, LLC (Exelon or Applicant) regarding the early site permit for one or more nuclear power reactors at the Victoria County Station site. After finding that TSEP does have standing and admitting TSEP as a party in the proceeding, the Board admits eight contentions, in part or in whole, for further adjudication.

EARLY SITE PERMIT APPLICATION

Under the 10 C.F.R. Part 52, Subpart A, licensing process, an entity may apply for an early site permit authorizing it to resolve key site-related environmental, safety, and emergency planning issues before selecting the design of a nuclear power facility for the subject site.

PROXIMITY PRESUMPTION

In cases involving the possible construction or operation of a nuclear power reactor, the NRC considers proximity to the proposed facility to be sufficient to establish standing. This "proximity presumption" applies when an individual or organization, or an individual authorizing an organization to represent his/her interests, seeks to establish its representational standing, resides within 50 miles of the proposed facility, or has "frequent contacts" with the area affected by the proposed facility.

STANDING TO INTERVENE, REPRESENTATIONAL

To demonstrate representational standing, the petitioner must show that at least one of its members would be affected by the proceeding and must identify that member by name and address. Further, the organization must show that the member would have standing to intervene in his/her own right and that the identified members have authorized the organization to request a hearing on their behalves. To determine if these elements are met, the petition is construed in favor of the petitioner.

CONTENTIONS, ADMISSIBILITY

To become a party in an adjudicatory proceeding, a petitioner must submit at least one admissible contention. A contention must satisfy six criteria to be admissible in a given adjudicatory proceeding: It must (1) provide a specific statement of the issue of law or fact to be raised or controverted; (2) provide a brief explanation of the basis for the contention; (3) demonstrate that the issue raised in the contention is within the scope of the proceeding; (4) 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; (5) provide a concise statement of the alleged fact or expert opinions which support the petitioner's position on the issue and on which the petitioner intends to rely, together with references to the specific sources and documents on which the petitioner intends to rely; and (6) provide sufficient information to show that a genuine dispute exists with regard to a material issue of law or fact, including either references to specific portions of the application that the petitioner disputes, or where the application is alleged to be deficient, the identification of such deficiencies and supporting reasons for this belief.

CONTENTIONS, ADMISSIBILITY

The petitioner's supporting information may be viewed in a light most favor-

able to the petitioner, but the petitioner is required to supply all of the required elements for a valid intervention petition. Mere notice pleading is insufficient.

CONTENTIONS, ADMISSIBILITY

A petitioner need not prove its contentions at the admissibility stage, as boards do not adjudicate disputed facts at this juncture. The factual support required for an admissible contention need not be of the quality necessary to withstand a summary disposition motion, but need only demonstrate that material facts are in dispute.

CONTENTIONS, ADMISSIBILITY

Absent a waiver, contentions challenging applicable statutory requirements or Commission regulations are not admissible in agency adjudications.

EARLY SITE PERMIT APPLICATIONS

To the extent growth faults constitute a mechanism of nontectonic deformation, the agency's siting criteria in 10 C.F.R. § 100.23(d) require their analysis in an early site permit application.

EARLY SITE PERMIT APPLICATIONS

Even though this plant's cooling pond is not a safety-related structure under paragraph VI(b)(3) to Appendix A of 10 C.F.R. Part 100, Appendix A nevertheless requires knowledge of the faulting under the pool and the impact this faulting might have on the pool's operation.

SITE SAFETY ANALYSIS REPORT

Under 10 C.F.R. § 52.17, an applicant need not submit information regarding control room habitability and ventilation system design in the site safety analysis report portion of an early site permit application.

CONTENTIONS, ADMISSIBILITY

A contention claiming that the application insufficiently addresses the safety implications of low water availability is inadmissible for failure to raise a genuine dispute with the application because the contention does not provide specific

references to relevant sections of the site safety analysis report that address low water considerations.

WATER

To show that it is within the realm of reason that the federal government may assert an implied water right, which would obligate an applicant to address this hypothetical scenario in its environmental report under 10 C.F.R. § 51.45, a petitioner must provide some indicia of an attempt, plan, or intention that the federal government will assert this hypothetical water right.

ENVIRONMENTAL REPORT

Climate change is considered an environmental impact that must be addressed, when applicable, to satisfy Commission regulations in 10 C.F.R. § 51.45.

ENVIRONMENTAL REPORT

A contention that alleges an omission, not an inadequacy, of an environmental report's analysis of socioeconomic impacts raises an issue that is not material to any finding the NRC must make in this early site permit proceeding and so is outside the scope of the proceeding because (1) 10 C.F.R. § 51.50(b)(2) states that the environmental report section of an early site permit application need not include an assessment of the economic, technical, or other benefits and costs of the proposed action and (2) 10 C.F.R. § 51.105(b) provides that the presiding officer in any early site permit hearing shall not admit contentions concerning the benefits assessment if the applicant does not address those issues in the early site permit application.

ENVIRONMENTAL REPORT

Applicants must evaluate alternative sites to determine whether there is any obviously superior alternative to the site proposed. The alternatives analysis is the "heart" of the environmental impacts analysis.

WAIVER OF RULE

A contention challenging the Waste Confidence Rule may not be admitted absent a waiver or exception. A ubiquitous issue that clearly applies to a large class of people or facilities is ineligible for a waiver.

MOOTNESS

Where a contention alleges the omission of particular information or an issue from an application, and the information is later supplied by the applicant, the contention is moot.

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MEMORANDUM AND ORDER
(Rulings on Standing, Contention Admissibility, and Selection of Hearing Procedures)

On March 25, 2010, Exelon Nuclear Texas Holdings, LLC (Exelon) applied to the Nuclear Regulatory Commission (NRC) for an early site permit (ESP) under 10 C.F.R. Part 52, Subpart A, that would approve the Victoria County Station (VCS) site in Victoria County, Texas, for one or more nuclear power reactors.[1] On January 24, 2011, Texans for a Sound Energy Policy (TSEP or Petitioner) filed a petition to intervene and request for hearing challenging the environmental report (ER) and site safety analysis report (SSAR) of the ESP application.

For the reasons set forth below, we conclude that TSEP has established the requisite standing to intervene in this proceeding, and has submitted eight admissible contentions, which are set forth in Attachment A to this decision. Accordingly, we admit TSEP as a party to this proceeding. Additionally, we rule on certain procedural and scheduling matters.

I. BACKGROUND

A. Exelon Early Site Permit Application

Under the 10 C.F.R. Part 52, Subpart A, licensing process, an entity may apply for an ESP authorizing it to resolve key site-related environmental, safety, and emergency planning issues before selecting the design of a nuclear power facility for the subject site. Thus, if granted, an ESP essentially allows an entity to "bank"

[1] Exelon Nuclear Texas Holdings, LLC, Early Site Permit Application for the Victoria County Station Site, Notice of Hearing, Opportunity to Petition for Leave to Intervene, and Associated Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information and Safeguards Information for Contention Preparation, 75 Fed. Reg. 71,467, 71,468 (Nov. 23, 2010); *see also* Exelon Nuclear Texas Holdings, LLC; Notice of Receipt and Availability of Application for an Early Site Permit, 75 Fed. Reg. 22,434, 22,434 (Apr. 28, 2010).

a site for the possible future construction of a specified number of new nuclear power generation facilities.[2]

Exelon seeks to obtain an ESP for an undeveloped area it refers to as the Victoria County Station (VCS) site, in Victoria County, Texas.[3] Exelon's ESP application includes a site safety analysis report (SSAR) and an environmental report (ER), which are the subject of the petition in the instant proceeding.[4]

B. TSEP Hearing Request/Licensing Board Establishment and Initial Procedures

In response to the November 23, 2010 notice of hearing and opportunity for leave to petition to intervene,[5] TSEP filed a timely petition to intervene seeking to establish its standing and the admissibility of twenty-three separate contentions.[6] Four of these contentions challenge the SSAR, eighteen challenge the ER, and one is a miscellaneous contention.[7] On February 2, 2011, this Atomic Safety and Licensing Board (Board) was established to adjudicate the VCS ESP proceeding.[8] Exelon responded to the TSEP petition on February 15, 2011, and the NRC Staff responded 3 days later.[9] TSEP submitted its reply brief on March 2, 2011.[10] On

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[2] *See* 10 C.F.R. Part 52, Subpart A; *see also Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-07-3, 65 NRC 237, 247 (2007).

[3] Letter from Marilyn C. Kray, Vice President, Nuclear Project Development, Exelon Generation Corp., to NRC Document Control Desk (Mar. 25, 2010) at 1 (ADAMS Accession No. ML101030742), *available at* http://www.nrc.gov/reactors/new-reactors/esp/victoria.html. Exelon previously submitted a combined license (COL) application for the VCS, which it subsequently withdrew. *See* Exelon Generation Company, LLC; Victoria County Station, Units 1 and 2; Notice of Withdrawal of Application for a Combined License, 75 Fed. Reg. 43,579, 43,579 (July 26, 2010).

[4] *See* Exelon Generation — Victoria County ESP, Part 2 — Site Safety Analysis Report (SSAR) (Apr. 22, 2010) (ADAMS Accession No. ML101120145) [hereinafter SSAR]; Exelon Generation — Victoria County ESP, Part 3 — Environmental Report (Apr. 20, 2010) (ADAMS Accession No. ML101120186) [hereinafter ER].

[5] 75 Fed. Reg. at 71,468.

[6] *See* Texans for a Sound Energy Policy's Petition to Intervene and Contentions (Jan. 24, 2011) at 7-8 [hereinafter Petition].

[7] *Id.*

[8] Exelon Nuclear Texas Holdings, LLC; Establishment of Atomic Safety and Licensing Board, 76 Fed. Reg. 6837, 6837 (Feb. 8, 2011).

[9] Exelon Nuclear Texas Holdings, LLC's Answer to Petition to Intervene and Contentions (Feb. 15, 2011) [hereinafter Exelon Answer]; NRC Staff's Answer to "Texans for a Sound Energy Policy's Petition to Intervene and Contentions" (Feb. 18, 2011) [hereinafter NRC Staff Answer].

[10] Texans for a Sound Energy Policy's Consolidated Reply to NRC Staff and Exelon Nuclear Texas Holdings, LLC's Answers (Mar. 2, 2011) [hereinafter Reply]. On February 18, 2011, the Board granted TSEP's request to submit a consolidated reply and extend the reply filing deadline to

(Continued)

March 16 and 17, 2011, we conducted oral argument in Victoria, Texas, regarding the admissibility of TSEP's twenty-three proffered contentions.[11] At that oral argument, TSEP, Exelon, and the NRC Staff agreed that TSEP-ENV-7 through TSEP-ENV-14 should be withdrawn and replaced with two revised contentions, revised TSEP-ENV-7 (TSEP-ENV-7a or ENV-7a) and revised TSEP-ENV-8 (TSEP-ENV-8a or ENV-8a), which TSEP, Exelon, and the NRC Staff agreed were admissible.[12]

II. ANALYSIS

A. Standing

1. Legal Standards Governing Standing

Under NRC regulations, a petitioner seeking to intervene in the licensing process must show that it has standing to participate as a party to the NRC proceeding.[13] The Commission's regulations state in 10 C.F.R. § 2.309(d)(1) that to establish standing, a petition for leave to intervene must state: (1) the name, address, and telephone number of the requestor or petitioner; (2) the nature of the requestor's/petitioner's right under the Act to be made a party to the proceeding; (3) the nature and extent of the requestor's/petitioner's property, financial, or other interest in the proceeding; and (4) the possible effect of any decision or order that may be issued in the proceeding on the requestor's/petitioner's interest.

In determining whether a petitioning entity has established standing under the provisions of 10 C.F.R. § 2.309(d)(1), the agency has applied judicial standing concepts that require a participant to establish that (1) it has suffered or will suffer a distinct and palpable injury that constitutes injury-in-fact within the zones of interests arguably protected by the governing statutes (*e.g.,* the Atomic Energy Act of 1954 (AEA), the National Environmental Policy Act of 1969 (NEPA)); (2) the injury is fairly traceable to the challenged action; and (3) the injury is likely to be redressed by a favorable decision.[14] In cases involving the possible construction or operation of a nuclear power reactor, the NRC considers

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March 2, 2011. Licensing Board Order (Granting Motion to Consolidate Reply and Extend Reply Date (Feb. 18, 2011) (unpublished).

[11] Tr. at 1-251.

[12] *Id.* at 207-19.

[13] 10 C.F.R. § 2.309(a).

[14] *See, e.g., Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 71-72 (1994) (quoting *Lujan v. Defenders of Wildlife,* 504 U.S. 555, 560-61 (1992)).

proximity to the proposed facility to be sufficient to establish standing.[15] This "proximity presumption" applies when an individual or organization, or an individual authorizing an organization to represent his or her interests seeks to establish its representational standing, resides within 50 miles of the proposed facility, or has "frequent contacts" with the area affected by the proposed facility.[16]

Where an organization petitions to intervene in a proceeding, it must demonstrate either organizational or representational standing. To demonstrate organizational standing, the petitioner must show "injury-in-fact" to the interests of the organization itself. Where, as here, an organization seeks to establish representational standing, that organization must show that at least one of its members would be affected by the proceeding and must identify that member by name and address. Further, the organization must show that the member would have standing to intervene in his or her own right and that the identified members have authorized the organization to request a hearing on their behalf.[17] To determine whether these elements are met, we are to "construe the petition in favor of the petitioner."[18] We apply these rules and guidelines in evaluating TSEP's standing presentation.

2. TSEP's Standing to Participate as a Party to This Proceeding

TSEP asserts it has standing to intervene as a representative of three of its members living within fifty (50) miles of the VCS site, who have authorized TSEP to represent their interests in this proceeding.[19] Exelon does not object to TSEP's claim for standing, and the NRC Staff concedes that TSEP has satisfied the standards for representational standing.[20] The Board agrees with the NRC

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[15] *See USEC Inc.* (American Centrifuge Plant), CLI-05-11, 61 NRC 309, 311 (2005) (citing *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 95 (1993)); *Vogtle,* LBP-07-3, 65 NRC at 249-50 (citing *Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989)).

[16] *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915-16 (2009); *see PPL Bell Bend, LLC* (Bell Bend Nuclear Power Plant), CLI-10-7, 71 NRC 133, 138 (2010).

[17] *See Consumers Energy Co.* (Palisades Nuclear Plant), CLI-07-18, 65 NRC 399, 409 (2007); *see also Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc.,* 528 U.S. 167, 181 (2000); *Vogtle,* LBP-07-3, 65 NRC at 250 (citing *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 163 (2000)).

[18] *See id.* (citing *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995)).

[19] Petition at 3 & n.1; *see* Petition Exh. A, Declaration of Ralph R. Gilster, III in Support of [TSEP's] Petition to Intervene and Contentions; Petition Exh. B, Declaration of Michael S. Anderson in Support of [TSEP's] Petition to Intervene and Contentions; Petition Exh. C, Declaration of Joe B. Bland in Support of [TSEP's] Petition to Intervene and Contentions.

[20] Exelon Answer at 1; Staff Answer at 1, 8; *see* Petition at 1-4.

Staff and, for the reasons set forth below, we conclude that TSEP has standing to intervene in this proceeding.[21]

TSEP has identified three members who reside within 50 miles of the proposed VCS site and who have provided declarations authorizing TSEP to represent their interests in this proceeding.[22] Following the "proximity presumption" of standing applicable in NRC proceedings relating to reactor or site permit applications, each of the three members has established standing in his own right. We therefore conclude that TSEP has satisfied the standards for representational standing.

B. TSEP's Contentions

1. Legal Standards Governing Contention Admissibility

To become a party in an adjudicatory proceeding, a petitioner must submit at least one admissible contention.[23] In 10 C.F.R. § 2.309(f)(1), the Commission specifies the six criteria that a contention must satisfy to be admissible for litigation in a given proceeding. Specifically, a contention must

> (i) [p]rovide a specific statement of the issue of law or fact to be raised or controverted . . . ;
>
> (ii) [p]rovide a brief explanation of the basis for the contention;
>
> (iii) [d]emonstrate that the issue raised in the contention is within the scope of the proceeding;
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> (iv) [d]emonstrate 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) [p]rovide a concise statement of the alleged facts or expert opinions which support the . . . petitioner's position on the issue and on which the petitioner intends to rely, together with references to the specific sources and documents on which the . . . petitioner intends to rely . . . ; 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 . . . that the petitioner disputes . . . , or if the petitioner believes that the application fails to contain

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[21] *See PPL Susquehanna LLC* (Susquehanna Steam Electric Station, Units, 1 and 2), LBP-07-10, 66 NRC 1, 11 (2007) (citing *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), LBP-04-27, 60 NRC 530, 542 n.3 (2004) (stating that "[E]ven if undisputed, jurisdictional nature of standing [in NRC Proceedings] requires independent examination by presiding officer.")).

[22] Petition Exh. A, Declaration of Ralph R. Gilster, III in Support of Texans for a Sound Energy Policy's Petition to Intervene and Contentions (Jan. 19, 2011); *id.* Exh. B, Declaration of Michael S. Anderson in Support of Texans for a Sound Energy Policy's Petition to Intervene and Contentions (Jan. 19, 2011); *id.* Exh. C, Declaration of Joe B. Bland in Support of Texans for a Sound Energy Policy's Petition to Intervene and Contentions (Jan. 19, 2011).

[23] 10 C.F.R. § 2.309(a).

> information, the identification of each failure, and the supporting reasons for the petitioner's belief [are required].[24]

The Commission's intent in 10 C.F.R. § 2.309(f)(1) is to "focus litigation on concrete issues and result in a clearer and more focused record for decision,"[25] and to ensure that the Commission expends resources to support "the hearing process [only for] issue[s] that [are] appropriate for, and susceptible to, resolution in an NRC hearing."[26] "While a board may view a petitioner's supporting information in a light favorable to the petitioner . . . the petitioner (not the board) [is required] to supply all of the required elements for a valid intervention petition."[27] The rules on contention admissibility are "strict by design."[28] Mere "notice pleading" is insufficient.[29] However, a petitioner need not prove its contentions at the admissibility stage,[30] as boards do not adjudicate disputed facts at this juncture.[31] The factual support required for an admissible contention is "a minimal showing that material facts are in dispute."[32] The necessary factual support "need not be in affidavit or formal evidentiary form and need not be of the quality necessary to withstand a summary disposition motion."[33] Further, absent a waiver, contentions challenging applicable statutory requirements or Commission regulations are not admissible in agency adjudications.[34] Failure to comply with any of these requirements is grounds for rejecting a contention as inadmissible.[35]

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[24] *See id.* § 2.309(f)(1)(i)-(vi).

[25] Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

[26] *Id.*

[27] *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260 (2009).

[28] *See, e.g., 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).

[29] *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003).

[30] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 139 (2004).

[31] *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), LBP-06-22, 64 NRC 229, 244 (2006).

[32] *Gulf States Utilities Co.* (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 51 (1994) (quoting Final Rule: "Rules of Practice for Domestic Licensing Proceedings — Procedural Changes in the Hearing Process," 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989)) (internal quotation marks omitted).

[33] 54 Fed. Reg. at 33,171.

[34] 10 C.F.R. § 2.335(a).

[35] *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 636 (2004).

2. Safety Contentions

a. TSEP-SAFETY-1: Inadequate Identification of Growth Faults

> CONTENTION: The Exelon application does not satisfy the requirements of 10 C.F.R. § 100.23(d)(2) because it does not provide sufficient geological data regarding growth faults or present an adequate evaluation of the potential for subsurface deformation. As a result, Exelon underestimates the risk of surface deformation.[36]

The focus of TSEP's concern in safety contention TSEP-SAFETY-1 (SAFETY-1) is that Exelon's SSAR fails to provide sufficient data to enable the requisite determination, under the NRC's regulations in 10 C.F.R. § 100.23(d)(2) and Part 100, Appendix A, of the potential for surface deformation as a result of growth faults at the VCS site. TSEP argues that this deficiency renders the VCS site unsuitable for a nuclear power station.[37]

Neither TSEP's petition nor the NRC Staff's answer provides a definition or description of "growth faults."[38] However, in response to SAFETY-1, Exelon summarizes its SSAR in explaining that there are numerous growth faults in the "thick layers of sediment, which extend more than 40,000 feet beneath the surface of the VCS site before reaching bedrock."[39] According to Exelon, the VCS is located within the Vicksburg fault zone, which is characterized by sedimentation and numerous growth faults.[40] Exelon states that "[t]hese growth faults do not originate in or extend to the basement bedrock and therefore are not tectonic in nature."[41] Exelon provides further description of growth faults as follows:

> Growth faults occur parallel to the Gulf Coast when the weight of the younger sediment causes the underlying sediment to slip and creep toward the Gulf. Movement of a growth fault occurs in a direction normal to the fault itself, with that portion of the sediment on the Gulf side of the fault dropping to a lower elevation than the inland side of the fault.
>
> Because growth faults occur in the sediment rather than the bedrock, growth faults do not have the capability to store significant amounts of elastic strain energy that can be released during movement of the fault in the form of an earthquake. In contrast, tectonic faults commonly release substantial elastic strain energy in the form of an earthquake when the fault moves. Accordingly, growth faults

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[36] Petition at 10; *see also id.* at 10-14; Exelon Answer at 13-22; NRC Staff Answer at 9-16; Reply at 7-17; Tr. at 23-62.

[37] Petition at 12.

[38] *See id.* at 10-14.

[39] Exelon Answer at 14 (citing SSAR at 2.5.3-11).

[40] *Id.* (citing SSAR at 2.5.1-45 to -46, 2.5.1-70 to -71).

[41] *Id.* (citing SSAR at 2.5.1-45 to -46, 2.5.1-70 to -72, 2.5.3-3, 2.5.3-11).

do not present any significant seismic hazard. Instead, growth faults represent a surface displacement hazard if they are active and move while directly underneath a structure. As stated in Regulatory Guide 1.208:

> Large, naturally occurring growth faults as those found in the coastal plain of Texas and Louisiana can pose a surface displacement hazard, even though offset most likely occurs at a much less rapid rate than that of tectonic faults. They are not regarded as having the capacity to generate damaging vibratory ground motion, can often be identified and avoided in siting, and their displacements can be monitored.[42]

In SAFETY-1, TSEP cites the summary and report of John C. Halepaska & Associates, Inc. (JCHA), attached to its Petition as Exhibits D-1 and D-2,[43] which reviews three-dimensional (3D) seismic data for the VCS site. TSEP argues that the 3D data provide a more complete picture of seismic conditions at the VCS site than that provided in the SSAR and indicate greater movement along growth faults than is shown in the two-dimensional (2D) seismic analysis in Exelon's SSAR.[44] TSEP also claims that the JCHA analysis identified four growth faults reaching the VCS site surface, whereas the SSAR only identified one such fault.

Specifically, TSEP claims that its expert's 3D analysis of growth faults at and near the VCS site shows evidence of historical, recent, and continuing movement at the fault traversing the cooling pond area, posing "an unacceptable risk to the proposed facility's cooling pond."[45] According to TSEP, the impacts of these growth faults on the design and operation of the VCS are ignored in the Exelon application, especially considering the application's lack of maps or figures showing the relationship of the growth faults to important plant infrastructure, with the one exception of the planned power block.[46] TSEP claims further that the possibility of seepage from the cooling pond into this fault zone could cause

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[42] *Id.* at 15 (citing SSAR at 2.5.1-47, 2.5.1-52, 2.5.1-70 to -73, 2.5.3-3; SSAR Figure 2.5.1-25; Regulatory Guide 1.208, A Performance-Based Approach to Define the Site-Specific Earthquake Ground Motion at C-7).

[43] Petition at 9 (citing *id.* Exh. D-1, Summary of Contentions, Exelon's ESP Application for the proposed Victoria County Station Site, John C. Halepaska and Associates, Inc., Water Resources Consultants (Oct. 8, 2010) [hereinafter JCHA Summary]; *id.* Exh. D-2 Texans for a Sound Energy Policy, Contested Issues Concerning Early Site Permit, Exelon's Victoria County Station, John C. Halepaska and Associates, Inc., Consulting Groundwater Engineers (Jan. 2011) [hereinafter JCHA Report]); *see also id.* Exh. D, Declaration of John C. Halepaska in Support of Texans for a Sound Energy Policy's Petition to Intervene and Contentions (Jan. 19, 2011).

[44] Petition at 10-14 (citing SSAR §§ 2.5.1.2.4.2; 2.5.3.2.2, 2.5.3.4.2.1; Figs. 2.5.1-37, 2.5.1-38, 2.5.1-39, 2.5.1-40, 2.5.1-41, 2.5.1-42, 2.5.1-43, 2.5.1-85).

[45] *Id.* at 10.

[46] *Id.* at 10, 12, 13-14.

activation of the fault leading to cooling pond infrastructure failure.[47] TSEP argues that the cooling pond is a safety feature, and that potential damage to the cooling pond is a considerable safety issue, in that it poses significant safety-related operational difficulties.[48] TSEP also cites the JCHA review of nuclear reactor sites across the United States in claiming that the VCS site "is the only site in the United States with faults showing evidence of current fault movement at the surface."[49] For these reasons, TSEP asserts that Exelon's analysis of the potential for surface deformation is insufficient to satisfy 10 C.F.R. § 100.23(d)(2) and Part 100, Appendix A.[50]

Exelon argues that SAFETY-1 is inadmissible for failure to raise a genuine dispute with the application on a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).[51] The NRC Staff argues it does not oppose admissibility of SAFETY-1, but only to the extent that SAFETY-1 alleges that Exelon's application fails to provide sufficient geological data regarding growth faults or present an adequate evaluation of the potential for subsurface deformation as required by 10 C.F.R. § 100.23(d)(2).[52] With respect to the other issues TSEP raises in SAFETY-1, the NRC Staff argues that the remainder of this contention is inadmissible either as not material to the findings the NRC must make in this proceeding, as lacking adequate factual or expert support, or as failing to demonstrate a genuine dispute with the application on a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(iv) through (vi).[53]

Looking to the application of the six factors under 10 C.F.R. § 2.309(f)(1) that govern contention admissibility, we begin by noting the agency's regulatory regime governing seismic siting criteria in 10 C.F.R. Part 100. In particular, 10 C.F.R. § 100.23 declares that it

> sets forth the principal geologic and seismic considerations that guide the Commission in its evaluation of the suitability of a proposed site and adequacy of the design bases established in consideration of the geologic and seismic characteristics of the proposed site, such that, there is a reasonable assurance that a nuclear power plant can be constructed and operated at the proposed site without undue risk to the health and safety of the public.[54]

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[47] *Id.* at 10.
[48] *Id.* at 10-11.
[49] *Id.* at 12-13.
[50] *Id.* at 11.
[51] Exelon Answer at 14.
[52] NRC Staff Answer at 9-10.
[53] *Id.*
[54] 10 C.F.R. § 100.23.

Further, 10 C.F.R. § 100.23(d) describes geologic and seismic siting factors, stating that

> [t]he geologic and seismic siting factors considered for design must include a determination of the Safe Shutdown Earthquake Ground Motion for the site, the potential for surface tectonic *and nontectonic deformations,* the design bases for seismically induced floods and water waves, and other design conditions as stated in paragraph (d)(4) of this section. . . .
>
> (2) Determination of the potential for surface tectonic *and nontectonic deformations. Sufficient geological, seismological, and geophysical data must be provided to clearly establish whether there is a potential for surface deformation.*[55]

Appendix A to 10 C.F.R. Part 100 also describes the NRC's required seismic and geologic siting criteria for nuclear power plants, and discusses surface faulting as follows:

> The design basis for surface faulting shall be taken into account in the design of the nuclear power plant by providing reasonable assurance that in the event of such displacement during faulting certain structures, systems, and components will remain functional. *These structures, systems, and components are those necessary to assure (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 the guideline exposures of this part.*[56]

As stated above, section 100.23(d) requires that "[t]he geologic and seismic siting factors considered for design must include a determination of the Safe Shutdown Earthquake Ground Motion for the site, [and] the potential for surface tectonic and *nontectonic* deformations . . . ."[57] Thus, to the extent growth faults constitute a mechanism of nontectonic deformation, the agency's siting criteria require their analysis in an ESP application.

For its part, Exelon asserts that its application states the cooling basin at the proposed VCS would not serve any of these safety functions. According to Exelon, it plans to use mechanical draft cooling towers to provide the ultimate heat sink (UHS) necessary to enable safe shutdown cooling and maintenance of a safe shutdown condition at the proposed VCS.[58] Nonetheless, paragraph VI(b)(3) to Appendix A of 10 C.F.R. Part 100 goes on to state that the design provisions shall be based on an assumption that the design basis for surface faulting can

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[55] *Id.* § 100.23(d) (emphasis added).

[56] 10 C.F.R. Part 100, Appendix A, ¶ VI(b)(3) (emphasis added).

[57] 10 C.F.R. § 100.23(d) (emphasis added).

[58] Exelon Answer at 20.

occur in any direction and azimuth and *under any part of the nuclear power plant* unless evidence indicates this assumption is not appropriate, and shall take into account the estimated rate at which the surface faulting may occur."[59] Also, 10 C.F.R. § 100.23(c) adds that "each applicant shall investigate all geologic and seismic factors (for example, volcanic activity) that may affect the design and *operation* of the proposed nuclear power plant irrespective of whether such factors are explicitly included in this section" (emphasis added). So, even though the cooling pond is not a safety-related structure, Appendix A requires knowledge of the faulting under the pool and the impact this faulting might have on the pool's operation.

In 1973, the Atomic Energy Commission (the predecessor agency to the NRC) amended 10 C.F.R. Part 100 to incorporate Appendix A.[60] Appendix A restricts the application of the "Operating Basis Earthquake" analysis to those features of a nuclear power plant that are *safety-related,* as opposed to the operability of structures, systems, and components (SSCs) necessary for power generation. However, in its promulgation of Appendix A, the Commission stated that

> [t]he purpose of [the seismic and geologic siting criteria in Appendix A] is to set forth the principal seismic and geologic considerations which guide the Commission in its evaluation of the suitability of proposed sites for nuclear power plants and the suitability of the plant design bases established in consideration of the seismic and geologic characteristics of the proposed sites in order *to provide reasonable assurance that the nuclear power plant can be constructed and operated at a proposed site without undue risk to the health and safety of the public.*[61]

The plain language of Appendix A also speaks to this intention of the Commission to address "Other Design Conditions" such as "soil instability due to ground disruption . . . not directly related to surface faulting." Section V(d)(1) in Appendix A provides

> geologic features which could affect the foundations of the proposed nuclear power plant structures shall be evaluated, taking into account the information concerning the physical properties of materials underlying the site . . .
>
> (i) Areas of actual or potential surface or subsurface subsidence, uplift, or collapse resulting from
>
> (a) Natural features such as tectonic depressions and cavernous or karst terrains, particularly those underlain by calcareous or other soluble deposits;

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[59] 10 C.F.R. Part 100, Appendix A, ¶ VI(b)(3) (emphasis added).

[60] Seismic and Geologic Siting Criteria, 38 Fed. Reg. 31,279, 31,279 (Nov. 13, 1973).

[61] *Id.*

(b) Man's activities such as withdrawal of fluid from or addition of fluid to the subsurface, extraction of minerals, or the loading effects of dams or reservoirs; and
(c) Regional deformation.

Against this regulatory backdrop, we conclude that SAFETY-1 is admissible because, while the cooling pond is not a "safety feature," faulting in the footprint of the cooling pond is nonetheless subject to the regulations in 10 C.F.R. Part 100 and Appendix A thereto, which govern the analysis in Exelon's SSAR. In SAFETY-1, TSEP outlines its central allegation that the SSAR does not comply with 10 C.F.R. § 100.23(d)(2) and Appendix A of 10 C.F.R. Part 100 because the SSAR does not assess adequately the growth faults at the VCS site and the related potential for subsurface deformation. In this regard, TSEP has submitted a "specific statement of the issue of law or fact to be raised or controverted."[62] TSEP also provides a "brief explanation of the basis" underlying SAFETY-1, by establishing a significant discrepancy between its expert's growth fault data and that which Exelon submitted in its application.[63]

Relying on its expert's analysis of this growth fault data, TSEP describes various surface deformation consequences that would result to the proposed VCS plant. As a result, SAFETY-1 addresses a potential failure of the ESP application to satisfy 10 C.F.R. Part 51, which sets forth the applicable safety regulations regarding geologic/seismic conditions at the VCS site and, therefore, alleges an inadequacy within the scope of this ESP proceeding that is material to the findings the NRC must make on whether to grant the ESP. Moreover, in formulating its allegations in SAFETY-1, TSEP makes numerous references to the report and summary of its expert, JCHA, and explains the methodology applied in the JCHA report. Therefore, SAFETY-1 meets the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (v).

Finally, although Exelon claims that it followed NRC regulatory guides in conducting its growth fault analysis of the VCS site, TSEP asserts that this analysis is deficient in light of the applicable NRC regulations that, unlike regulatory guidance, are binding on ESP applicants.[64] TSEP claims essentially that, while Exelon might have conducted its seismic analysis in accordance with NRC regulatory guidance, that analysis fails to satisfy the requisite safety

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[62] 10 C.F.R. § 2.309(f)(1)(i).

[63] *Id.* § 2.309(f)(1)(ii).

[64] *USEC Inc.* (American Centrifuge Plant), LBP-07-6, 65 NRC 429, 440 n.31 (2007) (citing *Curators of the University of Missouri* (TRUMP-S Project), CLI-95-1, 41 NRC 71, 98 (1995); *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), ALAB-852, 24 NRC 532, 544-45 (1986)); *see also New Jersey v. NRC,* 526 F.3d 98, 102 (3d Cir. 2008); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-03-8, 57 NRC 293, 319-20, *review denied,* CLI-03-8, 58 NRC 11 (2003).

regulations addressing the potential for surface deformation in 10 C.F.R. Part 100, and Appendix A thereto, because Exelon predicated that analysis on faulty data. TSEP's claim is that because Exelon's fundamental data on this subject are flawed, any conclusions flowing from those data are likewise flawed and inadequate. This assertion states a dispute with the portions of the SSAR on this subject in accordance with the pleading requirements for contentions under 10 C.F.R. § 2.309(f)(1)(i) through (vi).

We therefore admit SAFETY-1 in full, recognizing that, while the cooling pond is not a safety structure, system, or component, it is a part of the nuclear power plant that is required for plant operation.

b. TSEP-SAFETY-2: Rate of Recent Surface Movement at Growth Faults

> CONTENTION: Exelon fails to satisfy 10 C.F.R. § 100.23(d)(2) because the SSAR greatly understates the rate of recent surface movement of the growth faults, as established by field studies showing rates of movement 1000 to 10,000 times greater than Exelon estimates.[65]

In safety contention TSEP-SAFETY-2 (SAFETY-2), TSEP asserts that Exelon's SSAR is deficient under 10 C.F.R. Part 100, Appendix A, and section 100.23(d)(2), because it has not properly analyzed the rate of recent surface movement of the growth faults on the VCS site.[66] As a result of this asserted inadequate assessment of growth fault movement, TSEP claims that Exelon has inadequately assessed surface movement impacts on plant infrastructure, including the cooling pond and related pumps, pipes, and other structures.[67]

TSEP claims that the field data and testing its expert conducted "dramatically contradicts Exelon's estimates" of the activity of the two faults with a potential for surface deformation.[68] Based on field studies discussed in the JCHA report, TSEP alleges that the rate of movement of one of the growth faults onsite is approximately 1000 to 10,000 times larger than rates estimated in the SSAR.[69] TSEP states in its petition that "Exelon used a standard NRC procedure" to estimate activity at the two faults expected to cause surface deformation.[70] However, TSEP cites its expert's field data and testing results that "dramatically contradict[ ]

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[65] Petition at 14; *see also id.* at 14-18; Exelon Answer at 22-23; NRC Staff Answer at 16; Reply at 17-19; Tr. at 62-66.

[66] Petition at 14-15.

[67] *Id.*

[68] *Id.* at 18.

[69] *Id.* at 16.

[70] *Id.* at 17.

Exelon's estimates."[71] As a result of these alleged discrepancies, TSEP insists that Exelon's SSAR does not fully account for impacts resulting from movement of these growth faults on the design and operation of the VCS plant.[72] More specifically, TSEP asserts that the potential for failure or damage to the VCS structures constructed on top of these growth faults poses an unacceptable risk to the proposed facility's cooling pond.[73]

While the NRC Staff does not oppose admission of SAFETY-2,[74] Exelon opposes admission of SAFETY-2 as failing to raise a genuine dispute of material fact regarding the application, in contravention of 10 C.F.R. § 2.309(f)(1)(iv) and (vi).[75] Exelon argues that SAFETY-2 pertains only to Growth Fault E, which is located more than 2 miles from the VCS power block, and which Exelon asserts is the only area that contains safety-related structures, systems, and components (SSCs).[76] As such, Exelon insists that TSEP's characterization of this fault does not establish a dispute regarding a *material* fact, because Growth Fault E does not pose a threat to any safety-related structure on the VCS site.[77] According to Exelon, had SAFETY-2 addressed Growth Fault D, which is beneath the proposed VCS cooling basin, SAFETY-2 would still fail to dispute a material issue because the cooling basin is not a safety-related structure.[78] Finally, Exelon argues that TSEP's arguments in SAFETY-2 are based on speculation that surface changes near the VCS site are the result of growth fault movement, rather than some other cause.[79]

In assessing this contention's admissibility, we again recognize that the cooling basin of the proposed VCS is not a "safety feature." Nonetheless, the NRC's regulations in 10 C.F.R. Part 100 require investigation of geologic and seismic factors at the proposed plant site, given the impact these factors may have on design and operation of the entire plant, rather than merely on safety-related SSCs. With this in mind, we conclude that SAFETY-2 satisfies the general admissibility criteria of 10 C.F.R. § 2.309(f)(1)(i) through (vi). First, TSEP provides a specific statement and a brief explanation of its position that Exelon's assessment has inadequately characterized the rate of movement of growth faults at the VCS site, as it relates to its analysis of surface deformation required under

[71] *Id.* at 18.
[72] *Id.*
[73] *Id.*
[74] NRC Staff Answer at 16.
[75] Exelon Answer at 22.
[76] *Id.*
[77] *Id.*
[78] *Id.* at 23.
[79] *Id.*

10 C.F.R. § 100.23(d)(2).[80] Likewise, because SAFETY-2 explores the adequacy of Exelon's ESP application under an applicable regulation relating to this issue, it is within the scope of this proceeding, and is material to the findings the NRC must make to support the action involved in this proceeding.[81]

Relative to the 10 C.F.R. § 2.309(f)(1)(v) criteria, TSEP again references several times its JCHA report and summary in its statement of facts and expert opinion in support of its allegations in SAFETY-2, thus providing a concise statement of the alleged facts or expert opinions on which its allegations in SAFETY-2 rest.[82] Further, TSEP has made a sufficient showing in SAFETY-2, along with references to the SSAR, to articulate a genuine dispute with Exelon on a material issue, i.e., the issue of rate of movement of growth faults on and near the VCS site.[83]

We also note that, like SAFETY-1, SAFETY-2 asserts that Exelon's inadequate assessment of growth faults at and near the VCS site has led to its improper assessment of risks related thereto. Specific to SAFETY-2, TSEP alleges that Exelon's inadequate assessment of growth faults has led to inaccurate estimates of the rate of movement of growth faults leading to surface deformation at the VCS site. Exelon improperly focuses its opposition to this contention on the two faults it identified and analyzed in its SSAR, assuming that a more adequate analysis, if required under the NRC regulations, would detect no further growth faults. While SAFETY-1 concerns identification of growth faults at the VCS site, SAFETY-2 concerns a different, albeit related, matter of whether Exelon has adequately characterized the rate of movement of those faults.

We also reject Exelon's argument that SAFETY-2 is inadmissible because it is based on mere speculation. As TSEP explains in its reply, TSEP did not have access to the VCS property to conduct a full assessment of the growth faulting conditions at that location.[84] TSEP did, however, reference in SAFETY-2 its attached expert analysis of growth faulting in the vicinity of the VCS site, which TSEP maintains contains a reasonable extrapolation of the rate of movement along growth faults at the VCS site that is unaccounted for in Exelon's SSAR. At the contention admissibility stage of this proceeding, we decline to adjudicate the merits of the dispute and of the expert support on which TSEP relies in SAFETY-2, and conclude that TSEP provides sufficient support in SAFETY-2 to satisfy the requirement of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

We therefore admit SAFETY-2, in full.

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[80] 10 C.F.R. § 2.309(f)(1)(i), (ii).

[81] *Id.* § 2.309(f)(1)(iii), (iv).

[82] *Id.* § 2.309(f)(1)(v).

[83] *Id.* § 2.309(f)(1)(vi).

[84] Reply at 18.

c. TSEP-SAFETY-3: Dangers from Oil and Gas Wells and Borings

> CONTENTION: Exelon's SSAR fails to provide adequate data or an adequately reasoned evaluation of the threats of explosion and seepage of poisonous gas posed by the existence of hundreds of active and abandoned oil and gas wells and borings on and near the VCS site.[85]

In safety contention TSEP-SAFETY-3 (SAFETY-3), TSEP asserts that Exelon has failed to satisfy the requirements of 10 C.F.R. §§ 100.20(b) and 100.21(e) because the SSAR provides insufficient data to enable an evaluation of the condition and associated risks of active and abandoned oil and gas wells and borings on and near the VCS site.[86] TSEP claims that "[o]ld and abandoned wells are poorly documented, may be improperly plugged, and pose risks from possible emissions of explosive and poisonous gases and upward migration of hydrocarbons.[87] TSEP asserts that "[t]he site is a veritable 'Swiss cheese' and unsuitable as a location of a future nuclear power plant."[88]

Citing several times to the JCHA report and summary, TSEP describes various risks that it alleges Exelon evaluates improperly in Exelon's analysis of the wells and borings.[89] TSEP asserts that the active and abandoned oil and gas wells and borings: (1) pose threats of explosion on and near the proposed facility;[90] (2) pose threats of leakage of poisonous gas, such as hydrogen sulfide, on and near the proposed facility;[91] (3) allow the potential for upward migration of hydrocarbons and other contaminants at the VCS site;[92] and (4) are a rarity at nuclear power plant sites, so that construction and operation at the VCS site would represent a nearly unprecedented location for a nuclear power plant.[93]

The NRC Staff does not oppose admission of SAFETY-3, to the extent TSEP asserts the SSAR does not fully describe the active and abandoned oil and gas wells and borings on the VCS site as required by 10 C.F.R. Part 100 and the guidance in Regulatory Guide (RG) 1.70, "Standard Format and Content of Safety Analysis Report for Nuclear Power Plants LWR Edition."[94] Yet, the NRC Staff argues that the other aspects of SAFETY-3 are inadmissible. Namely, the NRC Staff

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[85] Petition at 18; *see also id.* at 18-26; Exelon Answer at 24-28; NRC Staff Answer at 16-22; Reply at 19-24; Tr. at 219-50.

[86] Petition at 18-19.

[87] *Id.* at 19.

[88] *Id.*

[89] *Id.* at 20-25.

[90] *Id.* at 22.

[91] *Id.* at 23.

[92] *Id.* at 24.

[93] *Id.*

[94] NRC Staff Answer at 17.

claims that potential hazards associated with upward migration of hydrocarbons and the risk of explosion is bounded by the SSAR analysis in section 2.2.2.3.4 of natural gas transmission lines, which are closer to the VCS site and pose a greater risk to safety at that site.[95] Because TSEP has not disputed the conclusions of this bounding analysis, the NRC Staff insists that this aspect of SAFETY-3 is inadmissible. Further, the NRC Staff argues that the portion of SAFETY-3 addressing the release of poisonous gases concerns facility design information (relating to control room ventilation and habitability) that is not required at the ESP stage, and hence is outside the scope of this proceeding.[96]

While the NRC Staff views SAFETY-3 as admissible in part, Exelon claims that SAFETY-3 is wholly inadmissible for failing to raise a genuine dispute of material fact. Exelon argues that SAFETY-3 is speculative because it has not identified any abandoned wells or borings that have not been properly plugged.[97] Exelon further claims that SAFETY-3 is inadmissible for its failure to raise a dispute with various portions of the SSAR in sections 2.2.2.3 and 2.2.3.1 describing oil and gas fields, natural gas/chemical pipelines, and potential accidents.[98] Exelon alleges that the potential for release of toxic or asphyxiating gases is a hazard that would be analyzed at the COL stage to account for control room ventilation design for the selected technology.[99] Lastly, Exelon claims that the risk of explosions at active wells at the VCS site is bounded by its analysis of the risk of fires and explosions posed by natural gas pipelines in the area, and that TSEP has not disputed this analysis in SAFETY-3.[100]

We agree with the NRC Staff that SAFETY-3 is admissible in part. We will first address those aspects of SAFETY-3 that are not admissible, and then will discuss the portion of SAFETY-3 that we find admissible. First, regarding TSEP's claim that Exelon has not properly analyzed the threat of explosion from active and abandoned oil and gas wells and borings on and near the VCS site, we conclude that TSEP fails to dispute the relevant analysis in Exelon's SSAR indicating that the proposed VCS would be designed to withstand an explosion of a natural gas pipeline.[101]

Pursuant to 10 C.F.R. § 2.309(f)(1)(vi), for a contention to be admissible, it must provide "sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact" together with "references to specific portions of the application . . . that the petitioner disputes and the

[95] *Id.* at 17-18.
[96] *Id.* at 20-22.
[97] Exelon Answer at 25.
[98] *Id.* at 26.
[99] *Id.* at 27.
[100] *Id.* at 28 (citing SSAR at 2.2-33 to -34).
[101] *See id.*; NRC Staff Answer at 18 (citing SSAR § 2.2.2.3.4 at 2.2-15).

supporting reasons for each dispute." TSEP asserts in SAFETY-3 that Exelon has not adequately assessed the risk of explosions due to improperly assessed oil and gas wells and borings on and near the VCS site.[102] The SSAR asserts that the VCS plant would be designed to withstand an explosion of a natural gas pipeline and that the risk of explosions at active wells is bounded by the risk posed by natural gas pipelines in the area.[103] The SSAR also concludes that external fires would not threaten the safety of the VCS plant and that the analysis of the risk of external fires bounds the risk of fires associated with oil and gas wells.[104] In SAFETY-3, TSEP claims that the analysis of gas pipeline explosions in SSAR § 2.2.2.3.4 is not bounding with regard to the risk of explosions at oil and gas wells. However, TSEP fails to explain or otherwise allege how the conclusions in that analysis are improper or inadequate under the NRC's requirements in 10 C.F.R. Part 100.[105]

Boards must not adjudicate the merits of allegations at the contention admissibility stage of an NRC proceeding. However, to be admissible, a contention must provide more than a "bare assertion," and must explain the supporting reasons for the dispute raised in that contention.[106] TSEP explains a mechanism for explosions in SAFETY-3, but it does not allege why the SSAR analysis of fires and explosions is not bounding and/or why it insufficiently addresses these risks at the proposed VCS site.[107] For this reason, we decline to admit this aspect of SAFETY-3 for failure to raise a genuine dispute of material fact or law with the SSAR pursuant to 10 C.F.R. § 2.309(f)(1)(vi).

We further decline to admit the portion of SAFETY-3 in which TSEP alleges that Exelon improperly characterized the threat of release of poisonous gases posed by these wells and borings on and near the proposed VCS site. In SAFETY-3, TSEP claims that the SSAR inadequately addresses the hazard of worker exposure to poisonous gases.[108] However, SAFETY-3 fails to explain or otherwise to allege why SSAR § 2.2.3.1.3 inadequately treats this issue. SSAR § 2.2.3.1.3 states that Exelon intends to provide a more detailed control room habitability assessment at the COL licensing stage, due to the current lack of information regarding onsite chemicals and control room ventilation design for the selected technology.[109] Exelon and the NRC Staff both maintain that an analysis of the hazard posed by

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[102] Petition at 22.

[103] *See* Exelon Answer at 26 (citing SSAR § 2.2.2.3.4).

[104] *See id.* at 27-28.

[105] Petition at 22-23, 25-26.

[106] *See* 10 C.F.R. § 2.309(f)(1)(vi); *Fansteel,* CLI-03-13, 58 NRC at 203; *see also USEC Inc.* (American Centrifuge Plant), LBP-05-28, 62 NRC 585, 597 (2005), *aff'd,* CLI-06-10, 63 NRC 451 (2006).

[107] Petition at 22-23, 25-26.

[108] *Id.* at 23.

[109] Exelon Answer at 27.

the potential release of poisonous gases is dependent on design information that is neither required nor available now, at the ESP stage.[110] The NRC Staff cites 10 C.F.R. § 52.17, which lists the requisite contents of an SSAR at the ESP stage.[111] This regulation does not require information regarding control room habitability and ventilation system design.[112]

TSEP fails to cite any other relevant NRC regulations that require the SSAR to assess the hazard of worker exposure to poisonous gases at the ESP stage. Although TSEP alleges that 10 C.F.R. §§ 100.20(b) and 100.21(e) require assessment of oil and gas wells and borings on and near the proposed VCS site, it fails to explain how these regulations require analysis of worker exposure in the absence of more detailed facility design information.

As such, this issue is outside the scope of the instant ESP proceeding, and is therefore inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(iii).

After eliminating these inadmissible portions of SAFETY-3, we are left with the following revision to SAFETY-3:

> Exelon's SSAR fails to provide adequate data regarding active and abandoned oil and gas wells and borings on and near the VCS site, contrary to the requirements of 10 C.F.R. Part 100.

As we explain below, we conclude that SAFETY-3, as thus revised, is admissible pursuant to 10 C.F.R. § 2.309(f)(1).

In accordance with 10 C.F.R. § 2.309(f)(1)(i), TSEP provides a specific statement of the issue of fact to be adjudicated in SAFETY-3, i.e., whether the SSAR sufficiently describes active and abandoned oil and gas wells and borings on and near the VCS site under 10 C.F.R. §§ 100.20(b) and 100.21(e). As required by 10 C.F.R. § 2.309(f)(1)(ii), TSEP provides a brief explanation of the basis for SAFETY-3 by claiming that there are insufficient data in Exelon's analysis of oil and gas wells and borings on and near the proposed VCS site to satisfy these regulations.

In this respect, SAFETY-3 raises an issue that is within the scope of this proceeding, as required by 10 C.F.R. § 2.309(f)(1)(iii). The Notice of Hearing in this proceeding specifies that the subject of this proceeding is Exelon's ESP application.[113] SAFETY-3 concerns whether the SSAR portion of that application has met site suitability requirements of 10 C.F.R. Part 100 with regard to the assessment of oil and gas wells and borings on and near the proposed VCS site.[114]

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[110] *Id.* at 27; NRC Staff Answer at 20-22; Tr. at 233-34, 241.

[111] NRC Staff Answer at 20.

[112] *See generally* 10 C.F.R. § 52.17.

[113] 75 Fed. Reg. at 71,467-68.

[114] *Id.*

Therefore, SAFETY-3 is within the scope of this proceeding as the Notice of Hearing defines it.

ESP applications must comply with 10 C.F.R. Part 100 requirements regarding reactor site suitability criteria. In SAFETY-3, TSEP questions whether the SSAR's assessment of oil and gas wells and borings on and near the VCS site satisfies these requirements and, as such, has raised an issue that is material to the findings the NRC must make to grant the ESP. Although we have rejected certain aspects of SAFETY-3 relating to how the oil and gas wells and borings affect the risk of explosions and worker exposure to toxic gases, the issue of whether the SSAR sufficiently assesses the presence and prospective treatment of these wells in terms of site suitability under the requirements of 10 C.F.R. Part 100 remains in issue. TSEP thus raises an issue that satisfies the materiality requirement for admissibility of 10 C.F.R. § 2.309(f)(1)(iv).

TSEP has also submitted alleged facts or expert opinions to support SAFETY-3, in satisfaction of 10 C.F.R. § 2.309(f)(1)(v). Citing to its expert's report and summary, TSEP alleges the SSAR does not contain adequate foundational data to enable an evaluation of active and abandoned oil and gas wells and borings on and near the VCS site as required by 10 C.F.R. §§ 100.20(b) and 100.21(e).[115] As Exelon and the NRC Staff point out, the SSAR discusses this issue in several locations.[116] However, TSEP is challenging the adequacy of the foundational information on which Exelon predicated these SSAR discussions.

We reject Exelon's argument that SAFETY-3 is too speculative to be admissible under 10 C.F.R. § 2.309(f)(1) because TSEP has neither identified wells other than those set forth in the SSAR nor identified a related release of toxic gases.[117] TSEP and its expert's report provide data from the Texas Railroad Commission (TRRC) indicating an unknown status for at least 70 of almost 300 wells within the VCS property and its vicinity.[118] On this foundation, TSEP reasonably disputes the SSAR conclusion that all wells are known and that unused wells have been properly abandoned, given extant uncertainties and incomplete data of the TRRC.[119]

Further, SAFETY-3 takes issue with the SSAR portion of the application, questioning whether that section meets the site criteria of 10 C.F.R. Part 100. Therefore, TSEP has raised in SAFETY-3 a genuine dispute of material fact with Exelon's ESP application under 10 C.F.R. § 2.309(f)(1)(vi).

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[115] *See* Petition at 20-25 (citing JCHA Report at 69-85).

[116] *See* Exelon Answer at 25-28 (citing SSAR §§ 2.2.2.3, 2.2.2.3.4, 2.2.3.1.1.1, 2.2.3.1.2.1; SSAR Fig. 2.2-5); NRC Staff Answer at 18-22 (citing SSAR §§ 2.2.2.3.4, 2.2.3, 2.5.4.5.1, 2.5.4.5.2).

[117] *See* Exelon Answer at 25.

[118] Petition at 20-22.

[119] *See id.* at 26.

Lastly, showing consistency with certain agency guidance documents does not affirmatively establish compliance with NRC regulations. While boards may give reasonable deference to NRC guidance, such agency guidance does not substitute for regulations, is not binding authority, and does not prescribe NRC requirements.[120]

We therefore admit SAFETY-3 in part, revised as follows:

> Exelon's SSAR fails to provide adequate data regarding active and abandoned oil and gas wells and borings on and near the VCS site, contrary to the requirements of 10 C.F.R. Part 100.

d. TSEP-SAFETY-4: Failure to Assure Dependable Water Supply

> CONTENTION: The ER fails to demonstrate the existence of a dependable water supply for a new reactor.[121]

In safety contention TSEP-SAFETY-4 (SAFETY-4), TSEP asserts that Exelon has failed to address, in its ER and its SSAR, whether the water supply in the drought-prone lower Guadalupe Basin area of the South Central Texas Regional Water Planning Area (Region L) is sufficiently dependable to comply with NRC's safety regulations in 10 C.F.R. Part 100, Appendix A.[122] Specifically, TSEP alleges there is no unappropriated (new) surface water right available that

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[120] *See USEC Inc.* (American Centrifuge Plant), LBP-07-6, 65 NRC 429, 440 n.31 (2007) (redacted public version) (citing *Curators of the University of Missouri* (TRUMP-S Project), CLI-95-1, 41 NRC 71, 98 (1995); *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), ALAB-852, 24 NRC 532, 544-45 (1986)); *see also New Jersey v. NRC,* 526 F.3d 98, 102 (3d Cir. 2008); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-03-8, 57 NRC 293, 320, *review denied* CLI-03-8, 58 NRC 11 (2003); *cf. Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348 n.22 (2002) (citing and quoting *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-91-2, 33 NRC 61, 72 n.3 (1991)); *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), LBP-91-41, 34 NRC 332, 339 (1991); *see generally Robertson v. Methow Valley Citizens Council,* 490 U.S. 332, 334, 355-56 (1989).

[121] Petition at 26; *see also id.* at 26-32; Exelon Answer at 28-32; NRC Staff Answer at 22-29; Reply at 24; Tr. at 88-108.

[122] Petition at 26-30. Exelon explains in its answer that the State of Texas has established Regional Water Planning Groups (RWPGs) that are required under Texas state law to plan for future water needs under drought conditions. As it further explains, "[t]he RWPG for the South Central Texas Regional Water Planning Area ("Region L") has prepared a water plan for the area encompassing VCS and the Guadalupe River, including a state-mandated, detailed analysis of projected water demands and supplies during a repeat of the drought of record (which occurred in 1950-57)." Exelon Answer at 37-38 (quoting ER at 2.3-121 to -131).

Exelon can seek.[123] TSEP explains that water use rights in the State of Texas are assigned according to the "prior appropriation doctrine," where "the oldest water right (the 'senior' right) has first call on available supplies."[124] Under this doctrine, "[i]f the water supplied to the VCS cooling system is an existing 'senior' water right, Exelon would have 'first call' on diverting the water during periods when the Guadalupe River flows are low."[125]

TSEP references its expert's report, as well as data from the South Texas Water Master, in claiming that Exelon both understates water usage in the area and fails to identify higher reported usages in earlier years.[126] Because several water use permit applications are currently pending with the Texas Commission on Environmental Quality (TCEQ),[127] collectively seeking 264,484 acre-feet per year (ac-ft/yr) of surface water from the Guadalupe River, TSEP claims that these potential water users will have priority over any new water use permit that Exelon may seek to obtain.[128] TSEP maintains that all of these factors together create uncertainty as to whether Exelon will be able to obtain sufficient surface water at the VCS plant.[129] Therefore, TSEP argues that Exelon has not adequately addressed this issue in its application, as required by 10 C.F.R. Part 100, Appendix A, paragraph V(d)(3) and the NRC Regulatory Guide 4.7 (RG 4.7).[130]

More specifically, in SAFETY-4, TSEP challenges Exelon's statement that the cooling basin would contain enough water to support operation of the plant for

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[123] *Id.* at 26-27. TSEP cites the ER at 2.3-134 in asserting that Exelon incorrectly states that unappropriated water remains available for new applications, further claiming that Exelon failed to identify appropriately two pending permit requests in the ESP application's discussion of obtaining new water rights in the basin. *Id.* at 29-30.

[124] *Id.* at 29 (citing ER at 5.2-10).

[125] *Id.*

[126] *Id.* at 27, 29. TSEP cites the report of its expert, Joseph F. Trungale, P.E. (Trungale Report), in stating that data obtained from the South Texas Water Master show that the reported water usage for one of GBRA's lower basin water rights (certificate of adjudication 18-5178) was actually higher than Exelon reported for all ten of the rights currently issued. *Id.* (citing *id.* Exh. E-1, Effect of Diversions from the Guadalupe River on San Antonio Bay and Estuary Health, Joseph F. Trungale, P.E., at 2-3, Table 1 (Jan. 20, 2011) [hereinafter Trungale Report]; *see also id.* Exh. E, Declaration of Joseph F. Trungale in Support of Texans for a Sound Energy Policy's Petition to Intervene and Contentions (Jan. 20, 2011); Exh. E-2, Curriculum Vitae of Joseph F. Trungale, P.E.

[127] As Exelon explains in its answer, the TCEQ is a governmental agency of the State of Texas, which analyzes requests for new water rights to use surface water in Texas. According to Exelon, the TCEQ "analyzes [requests for water use rights] with respect to water availability, effect on other water rights holders, and the impact on the environment." Exelon Answer at 37.

[128] Petition at 26-27.

[129] *Id.* at 27.

[130] *See* [RG 4.7], General Site Suitability Criteria for Nuclear Power Stations (Rev. 2, Apr. 1998) [hereinafter RG 4.7].

several months during low flow periods.[131] TSEP also takes issue with Exelon's assumption that 70,000 ac-ft/yr of return flow from San Antonio would be available during drought conditions. TSEP claims that, to the contrary, any such water would have to be drawn from the Edwards Aquifer — groundwater that would be required to supply San Antonio's water needs under drought conditions, and that would not be available for use at VCS.[132] By comparison, TSEP states that the alternative site in Matagorda County would use seawater from the Gulf of Mexico, which would eliminate the safety issues relating to water availability that are encompassed in SAFETY-4.[133]

TSEP also notes that of the sixty-four nuclear power plant sites in the United States, only twelve obtain cooling water from small rivers, and that the VCS would similarly obtain its cooling water from a small river (the Guadalupe River). However, TSEP argues, none of the twelve sites has a thermal capacity in the 7000 MWt range, far lower than the proposed VCS plant capacity of 9000 MWt.[134]

In SAFETY-4, TSEP makes a single general reference to Exelon's SSAR in claiming that it misrepresents actual water usage,[135] but otherwise references various sections of Exelon's ER and one of TSEP's expert reports in support of its argument that Exelon has not adequately discussed the availability of water for use at the proposed VCS.[136] TSEP claims that the application fails to comply with 10 C.F.R. Part 100, Appendix A, ¶ V(d)(3), which provides that "[a]ssurance of adequate cooling water supply for emergency and long-term shutdown decay heat removal shall be considered in the design of the nuclear power plant."[137]

TSEP argues that Exelon has failed to comply with two provisions of RG 4.7.[138] First, TSEP asserts that Exelon has failed to show that a "highly dependable system of water supply sources [would be] available under postulated occurrences of natural and site-related accidental phenomena or combinations of such phenomena."[139] Second, TSEP claims Exelon has failed to meet RG 4.7 because "[t]o evaluate the suitability of sites there should be reasonable assurance that permits for consumptive use of water in the quantities needed for a nuclear power plant . . . can be obtained by the applicant from the appropriate State, local

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[131] Petition at 27-30.

[132] *Id.* at 30.

[133] *Id.*

[134] *Id.* at 31.

[135] *Id.* at 26.

[136] *See id.* at 26-32.

[137] *Id.* at 27.

[138] RG 4.7 is a nonbinding agency guidance document that discusses compliance with 10 C.F.R. Part 100, Appendix A, ¶ V(d)(3).

[139] Petition at 27-28 (quoting RG 4.7 at 4.7-13).

or regional agency."[140] TSEP claims in SAFETY-4 that Exelon has not shown that it can meet these requirements.

Exelon argues that SAFETY-4 is inadmissible for its failure to raise a genuine dispute over a material issue of law or fact, in contravention of 10 C.F.R. § 2.309(f)(1)(vi).[141] Exelon maintains that adequate safety protection is provided without the cooling basin and that the cooling basin is, therefore, not a safety-related structure.[142] Because Exelon claims that safety of the VCS is maintained without a water supply to the cooling basin, Exelon argues that SAFETY-4 fails to raise an admissible dispute with the SSAR regarding availability of water to the cooling basin.[143] Exelon argues further that SAFETY-4 fails to raise an admissible dispute because SAFETY-4 does not challenge or address SSAR § 2.4.11, which discusses potential low water conditions at the VCS.[144] Exelon claims that the ultimate heat sink (UHS) provides the source of cooling water needed to maintain plant safety and that it can function without makeup water from the cooling basin.[145] Under conditions of insufficient water supply to the UHS, Exelon explains that the plant shuts down to maintain safety.[146] For this reason, Exelon argues that the issue of water supply to the cooling basin has no bearing on maintaining safety of the plant.[147] Because SAFETY-4 does not challenge this discussion in SSAR 2.4.11, Exelon argues that SAFETY-4 is inadmissible for failing to state a genuine dispute of material fact with the SSAR.[148]

Similarly, the NRC Staff argues that SAFETY-4 fails to challenge any portion of the SSAR that discusses water supply and availability, and therefore it is inadmissible for failure to raise a genuine dispute with the application over a material issue of law or fact.[149] According to the NRC Staff, these sections explain why the cooling basin does not serve a safety function, and thus that low flow conditions in the cooling basin will have no effect on safety-related SSCs at the VCS.[150] The NRC Staff also argues that SAFETY-4 fails to explain how the cited support for SAFETY-4 indicates inadequacies in the SSAR regarding

[140] *See id.* (quoting RG 4.7 at 4.7-13).
[141] Exelon Answer at 28.
[142] *Id.* at 29.
[143] *Id.* at 29, 30.
[144] *Id.*
[145] *Id.* at 30.
[146] *Id.* at 31.
[147] *Id.* at 31-32.
[148] *Id.* at 32.
[149] NRC Staff Answer at 23-25 (citing SSAR §§ 2.4.8.1, 2.4.11.6).
[150] *Id.* (citing SSAR at 2.4.8-5).

water availability and that SAFETY-4 thus fails to provide sufficient support in SAFETY-4, contrary to 10 C.F.R. § 2.309(f)(1)(v).[151]

We agree with Exelon and the NRC Staff that SAFETY-4 fails to raise a genuine dispute with the application and so conclude that it is inadmissible. As Exelon states in its answer, low water considerations are discussed in SSAR § 2.4.11, and the cooling basin, specifically, is discussed in SSAR § 2.4.8. Exelon claims that "'[t]he safety-related cooling functions for VCS, including the UHS [ultimate heat sink], do not rely upon river or stream flow rates or water levels.'"[152]

SAFETY-4 nowhere challenges or even addresses the discussion or conclusions in these sections of the SSAR regarding low water availability conditions in the cooling basin at the VCS. In fact, SAFETY-4 makes only one general, nonspecific reference to the SSAR, and otherwise cites to Exelon's ER to support TSEP's claim that safety implications of low water availability is insufficiently addressed in Exelon's ESP application. For a contention to be admissible it "must include references to specific portions of the application . . . that the petitioner disputes and the supporting reasons for each dispute."[153] SAFETY-4 does not provide specific references to relevant sections of the SSAR that address low water considerations, and it fails to explain how its supporting references might indicate an inadequacy in the SSAR regarding water availability to the VCS cooling basin.[154]

Although SAFETY-4 references RG 4.7 (a regulatory guidance document discussing reactor site criteria),[155] RG 4.7 is not a regulation. At most, it offers the NRC Staff's opinion as to what will satisfy 10 C.F.R. Part 100, but it does not itself impose legal requirements on license or permit applicants.[156] In addition, while SAFETY-4 references the report of TSEP's expert, Joseph F. Trungale, P.E.[157] (Trungale Report), to show that Exelon's ER misstates actual water use in the lower Guadalupe River basin, it nowhere attempts to explain how the *environmental* review portion of Exelon's ESP application indicates

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[151] *Id.* at 23, 25.

[152] *See* Exelon Answer at 30 (quoting SSAR at 2.4.11-2). Exelon notes that mechanical draft cooling towers would be used for the UHS for nonpassive reactor technologies, and that passive designs would rely on passive cooling mechanisms instead of an external UHS. *Id.* According to Exelon, neither of these systems would rely on the cooling basin for plant safety. *Id.*

[153] 10 C.F.R. § 2.309(f)(1)(vi).

[154] Petition at 27-32 (citing RG 4.7 at 4.7-13, Trungale Report at 2-3, tbl. 1, Region L 2011 Water Plan; JCHA Summary at 14, 18-19; JCHA Report at 66).

[155] *See* RG 4.7.

[156] *See American Centrifuge,* LBP-07-6, 65 NRC at 440 n.31; *see also New Jersey v. NRC*, 526 F.3d at 102; *Private Fuel Storage,* LBP-03-8, 57 NRC at 320; *cf. Private Fuel Storage,* CLI-02-25, 56 NRC at 348 n.22; *Claiborne,* LBP-91-41, 34 NRC at 339; *see generally Methow Valley,* 490 U.S. at 334, 355-56.

[157] Petition at 29, 31, 32 (citing Trungale Report at 2-3 tbl. 1).

an insufficiency in its *safety* review (the SSAR).[158] Finally, SAFETY-4 does not attempt to explain how increased demand for water or comparison to other nuclear power plants indicates an insufficiency with the SSAR regarding low water considerations.[159]

For these reasons, we conclude that SAFETY-4 fails to establish a genuine dispute with the SSAR, contrary to 10 C.F.R. § 2.309(f)(1)(vi), and is therefore inadmissible.

3. Environmental Contentions

a. TSEP-ENV-1: Impacts from Enhanced Cooling Basin Seepage

> CONTENTION: The ER fails to satisfy 10 C.F.R. § 51.45 because it understates and does not rigorously evaluate the environmental impacts of enhanced seepage of fluids and contaminants out of the cooling pond into oil and gas wells and borings beneath the VCS site. Exelon's ER does not identify how it will prevent or mitigate this impact by identifying and plugging the wells and borings.[160]

In environmental contention TSEP-ENV-1 (ENV-1), TSEP claims that the ER's discussion of environmental effects and cumulative impacts of seepage from the cooling basin into groundwater and surface water through undocumented or unplugged oil and gas wells and borings fails to comply with the requirements of 10 C.F.R. § 51.45(b) and (c).[161] TSEP insists that these wells and borings could pose a danger of enhanced seepage of contaminants and other fluids out of the proposed VCS cooling basin and into the groundwater.[162] Specifically, TSEP claims that tritium and other water treatment chemicals may seep out of the cooling basin at an enhanced rate because of the nature and location of these wells and borings, which act as additional conduits for groundwater contamination.[163] TSEP acknowledges that both the SSAR and the ER discuss the estimated 6 million gallons per day of water seepage from the cooling basin.[164] Still, TSEP insists that Exelon fails to provide an adequate account of the potential environmental impacts from enhanced seepage and movement of water due to the wells and borings located within the footprint of the cooling basin.[165]

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[158] *Id.*

[159] *See id.* at 30, 31 (citing JCHA Summary at 14, 18-19; JCHA Report at 66).

[160] *Id.* at 34; *see also id.* at 34-36; Exelon Answer at 32-37; NRC Staff Answer at 29-34; Reply at 25; Tr. at 108-31.

[161] Petition at 34.

[162] *Id.*

[163] *Id.* at 34, 35.

[164] *Id.* at 35.

[165] *Id.*

According to TSEP, it is not enough that Exelon's SSAR and ER represent that Exelon will locate and plug these wells and borings in accordance with the applicable state regulations.[166] Rather, TSEP maintains that Exelon must provide additional information detailing *how* it will locate and plug these wells.[167] TSEP acknowledges the SSAR's reference to state regulations for water wells, but notes that it does not reference specifically the proper regulations for plugging oil and gas wells.[168] TSEP claims that onsite wells and borings could serve as pathways for harmful chemicals to seep into freshwater aquifers, which could affect drinking water quality and overall ecosystem health.[169] TSEP asserts that Exelon must perform a more rigorous investigation and evaluation in its ER of the number and scope of oil and gas wells within the footprint of the cooling basin that could result in groundwater contamination.[170]

Both Exelon and the NRC Staff argue that ENV-1 is not admissible because it fails to provide adequate support and fails to raise a genuine dispute with the application regarding a material issue of fact or law, contrary to 10 C.F.R. § 2.309(f)(1)(v) and (vi).[171] Exelon argues that it addresses the possibility of increased seepage at oil and gas wells and borings and discusses how it will abandon such wells in accordance with applicable Texas law in ER §§ 4.2.3.2, 7.2.3.3, and 3.9.1.2.[172] Exelon argues further that TSEP does not provide legal authority that would obligate Exelon to provide a more detailed discussion than is contained in these sections of the ER, and that "boards do not sit to 'flyspeck' environmental documents or to add details or nuances."[173] Still further, Exelon alleges that ENV-1 impermissibly assumes that Exelon will violate applicable Texas law regarding its treatment of wells at the VCS site.[174] Exelon also maintains that TSEP provides insufficient support for ENV-1 with regard to seepage of radioactive materials.[175] Exelon claims to have explained sufficiently in its ER at 3.5-1 and 5.4-1 that any radioactive material, such as tritium, is discharged to the plant's liquid waste management system (LWMS), rather than to the cooling

[166] *Id.* (citing JCHA Report at 79).

[167] *Id.*

[168] *Id.*

[169] *Id.* at 35-36.

[170] *Id.* at 36.

[171] *See* Exelon Answer at 32; NRC Staff Answer at 29.

[172] Exelon Answer at 33-34, 35 (citing ER at 4.2-12, 3.9-3, 4.1-3; ER § 7.2.3.3).

[173] *Id.* at 34 (quoting *System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 13 (2005)) (internal quotation marks omitted).

[174] *Id.* (citing *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-01-9, 53 NRC 232, 235 (2001)).

[175] *Id.* at 34-35.

basin.[176] Even if radioactive materials were to leak to groundwater, Exelon cites its discussion in ER § 7.2 that those releases would be less than effluent concentration limits (ECL) listed in 10 C.F.R. Part 20, Appendix B, Table 2, Column 2.[177] Exelon claims that ENV-1 is inadmissible for its failure to dispute these sections of its ER and for its failure to provide sufficient support for its claims.[178]

Exelon also claims that ENV-1 consists of "'bare assertions and speculation'" with regard to seepage of environmentally harmful water treatment chemicals, and as a result, ENV-1 fails to comply with 10 C.F.R. § 2.309(f)(1)(v).[179] Exelon states that it discussed water treatment chemicals and other effluents in ER §§ 3.3.2 and 3.6.1, that any discharges to groundwater or to the Guadalupe River would be subject to state water quality standards, and that any related impacts would be "SMALL."[180] Because ENV-1 fails to controvert any of these sections of the ER, Exelon argues that it is inadmissible.

The NRC Staff also argues that ENV-1 fails to controvert directly relevant sections of the ER discussing the potential for seepage,[181] and that ENV-1 otherwise fails to allege why enhanced seepage, beyond that discussed in the ER, is reasonably foreseeable, i.e., required subject matter for the ER's environmental impacts analysis.[182] The NRC Staff also argues that ENV-1 fails to explain sufficiently the documentation it cites as support for its claims, contrary to 10 C.F.R. § 2.309(f)(1)(v).

We conclude that ENV-1 is admissible. First, ENV-1 presents "a specific statement of the issue of law or fact to be raised or controverted," as required by 10 C.F.R. § 2.309(f)(1)(i). Specifically, ENV-1 alleges that Exelon's ER fails to provide an adequate impacts analysis, as required by 10 C.F.R. § 51.45, regarding undocumented, improperly plugged, or unplugged wells beneath the VCS site that could serve as conduits for enhanced seepage of fluids and contaminants from the cooling pond into groundwater or surface water. ENV-1 also alleges that Exelon's explanation of how it will prevent and/or mitigate these impacts is deficient under the regulations.

Second, TSEP provides a brief explanation of the basis for ENV-1, by stating that undocumented or improperly plugged and abandoned oil and gas wells and borings beneath the VCS site could act as conduits for contaminated water to seep

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[176] *Id.*

[177] *Id.*

[178] *Id.*

[179] *Id.* (quoting *Fansteel,* CLI-03-13, 58 NRC at 203).

[180] *Id.* at 36 (citing ER §§ 5.2.3.1, 6.6.3.2, 5.3.2.2.2, 5.2.1.2.2).

[181] NRC Staff Answer at 29-31 (citing ER §§ 5.2.1.2.2.1, 5.2.1.2.1, 4.2.1.1.4, 3.9.1.2, 4.1.1.1, 4.2.3.2).

[182] *Id.* at 30 (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)).

from the cooling basin into groundwater. TSEP further explains that Exelon's ER improperly fails to discuss the resulting impacts to groundwater from enhanced seepage of fluids and contaminants at unidentified or improperly plugged wells and borings at the VCS site.

Third, ENV-1 is within the scope of this proceeding, as required by 10 C.F.R. § 2.309(f)(1)(iii) by challenging the ER, which is a required portion of Exelon's ESP application pursuant to 10 C.F.R. Part 51.

Fourth, ENV-1 meets the materiality requirement of 10 C.F.R. § 2.309(f)(1)(iv). Under 10 C.F.R. § 51.45(b)(1) and (2), Exelon must describe in its ER (1) reasonably foreseeable environmental impacts, which shall be discussed in proportion to their significance; and (2) adverse environmental effects that cannot be avoided should the proposal be implemented. In ENV-1, TSEP alleges that "Exelon has not rigorously investigated or evaluated the number or scope of oil and gas wells within the footprint of the cooling basin that could result in tritium seepage and groundwater contamination," and that a mere promise to follow applicable regulations in capping and abandoning active and inactive oil and gas wells in the footprint of the cooling basin and plant is insufficient to satisfy the NRC's regulations in 10 C.F.R. § 51.45.[183]

Exelon discusses its intentions to cap or to abandon active and inactive oil and gas wells within the footprint of the cooling basin, in accordance with applicable state regulations, for the purpose of "prevent[ing] the water and inactive oil and gas wells from acting as conduits to the underlying aquifers."[184] Given that Exelon itself discusses the potential for these wells to act as conduits for fluid transfer to the aquifer, it is hardly unreasonable to anticipate that unidentified or improperly capped and abandoned wells or borings could produce adverse impacts on groundwater.[185]

Fifth, ENV-1 provides alleged facts or expert opinions as required by 10 C.F.R. § 2.309(f)(1)(v) to support TSEP's claims that Exelon provides an inadequate analysis of the impacts and mitigation of enhanced seepage into groundwater of fluids from the cooling pond due to the presence of unidentified or abandoned oil and gas wells and borings beneath the VCS site. In support of its allegations in ENV-1, TSEP attaches and references the report of its expert (the JCHA Report at 79-81). Further, as mentioned above, Exelon itself acknowledges the

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[183] Petition at 36; Tr. at 110-11.

[184] Exelon Answer at 33 (quoting ER at 4.2-12).

[185] We take it as a given that Exelon intends to comply with state law. *See U.S. Army Installation Command* (Schofield Barracks, Oahu, Hawaii, and Pohakuloa Training Area, Island of Hawaii, Hawaii), CLI-10-20, 72 NRC 185, 194 (2010) (citing *Private Fuel Storage, L.L.C.*, CLI-01-9, 53 NRC at 235); *Crow Butte Resources, Inc.* (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 569 (2009). However, this assumption does not eliminate the need to address the environmental impacts of such actions as required by NEPA.

possibility that fluids could migrate from the cooling pond through wells and into the groundwater. This documentation is sufficient at the contention admissibility stage to support TSEP's claims in ENV-1. Accordingly, TSEP has provided in ENV-1 "a concise statement of the alleged facts . . . which support [its] position on the issue" along with specific references to "sources and documents on which" it purports "to rely to support its position on the issue."[186]

Finally, ENV-1 demonstrates a genuine dispute with the application on a material issue of law or fact, as required by 10 C.F.R. § 2.309(f)(1)(vi). ENV-1 is based on the premise, recognized by Exelon in its ER, that fluids and contaminants might seep from the cooling basin into groundwater through oil and gas wells located on the VCS site.[187] TSEP has shown a dispute of law regarding whether Exelon's discussion of impacts from potential seepage through these well conduits is sufficient under the NRC's environmental regulations in 10 C.F.R. § 51.45. Exelon asserts that any discharges of chemicals and other effluents from the VCS cooling basin to groundwater or surface water would nonetheless remain within limits stated in 10 C.F.R. Part 20, Appendix B, Table 2, Column 2.[188] Exelon and the NRC Staff both argue that any environmental impacts resulting from such discharge would be "SMALL," and that TSEP has failed to challenge the discussion of this issue in the ER.[189]

These arguments do not address the main focus of TSEP's claims in ENV-1, which is that the ER fails to address adequately the enhanced environmental impacts posed by undocumented or unplugged wells at the VCS site, much less how Exelon will mitigate these potentially enhanced impacts. At the contention admissibility stage of this proceeding, we decline to rule on the merits of this issue of whether the relevant sections of the ER discussing oil and gas wells and borings, state regulations, and 10 C.F.R. Part 20 satisfy 10 C.F.R. § 51.45. We conclude that TSEP has satisfied the admissibility criteria of 10 C.F.R. § 2.309(f)(1) for ENV-1, and we therefore admit contention ENV-1.

b. TSEP-ENV-2: Impacts of Limited Water Availability

> CONTENTION: The ER fails to provide an adequate evaluation of the environmental impacts of severe limits on water availability in the region of the VCS site.[190]

In environmental contention TSEP-ENV-2 (ENV-2), TSEP alleges that the

[186] 10 C.F.R. § 2.309(f)(1)(v).

[187] *See* Exelon Answer at 33 (quoting ER at 4.2-12).

[188] *Id.* at 35.

[189] *Id.* at 36-37; NRC Staff Answer at 29-30.

[190] Petition at 36; *see also id.* at 36-42; Exelon Answer at 37-47; NRC Staff Answer at 34-39; Reply at 25-34; Tr. at 131-43.

ER's analysis of environmental impacts and alternatives relating to water availability in the region of the VCS is inadequate under the applicable NRC regulations. TSEP claims that Exelon's ER bases its evaluation of water availability on lower-than-actual water usage for the lower basin water rights held by the Guadalupe-Blanco River Authority (GBRA) in the region of the VCS.[191] Specifically, TSEP claims that Exelon understates water usage in this region during the 2000-2006 time period and fails to account for greater usage in earlier years.[192] TSEP further claims that Exelon does not account for pending water permit applications that will, if issued, take priority over, and reduce the water available for, any new permit application from Exelon.[193] TSEP also claims that Texas water law would impose minimum flow requirements on any newly granted permit right,[194] and insists that Exelon does not consider the actual amount of water available during drought and other conditions, which makes long-term availability of surface water for the proposed VCS uncertain.[195]

TSEP draws attention in ENV-2 to various portions of the ER in which Exelon discusses its plans to obtain water from the Guadalupe River for the VCS raw water makeup system.[196] After noting that the VCS is located in Region L, TSEP argues that Exelon erroneously bases its analysis of available water for the proposed VCS, and potential impacts of that water use, on the 2006 Region L Plan.[197] TSEP also reiterates Exelon's discussion of the options that would be available at the COL licensing stage for obtaining water use rights, which include: (1) securing existing water rights via contract with an existing water rights holder, (2) securing existing water rights by obtaining ownership of existing rights, or (3) obtaining ownership of a new right to withdraw water from the Guadalupe River.[198]

TSEP further claims that there is no unappropriated[199] water right available to Exelon for the VCS property and that, as a consequence, only previously permitted water rights held by GBRA and Union Carbide Corporation (UCC), or singularly by GBRA, are available to Exelon for the proposed VCS plant.[200] TSEP cites the report of one of its experts (Trungale Report) in claiming that there are reliable data indicating greater reported water usage in one of the GBRA lower

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[191] Petition at 36.
[192] *Id.* at 37.
[193] *Id.*
[194] *Id.* at 37, 39.
[195] *Id.* at 36-37.
[196] *Id.* at 38.
[197] *Id.*
[198] *Id.*
[199] *See supra* notes 101 & 102 and accompanying text.
[200] Petition at 38.

basin water rights than Exelon reports in the ER.[201] TSEP asserts the increasing demands on water in the lower basin, as well as the drought-prone conditions in the area, will strain surface and groundwater resources.[202]

Upon reviewing information for the sixty-four nuclear power reactor sites in the United States, TSEP notes that only twelve of these sites obtain cooling water from small rivers. Of these twelve sites, eight have total thermal requirements less than 5000 MWt, and four have thermal requirements in the 7000-MWt range. TSEP notes that the proposed VCS site would have a thermal capacity of 9000 MWt, which would make it the largest plant on a small river (Guadalupe River) in the United States.[203]

Exelon argues that ENV-2 is inadmissible because it is not material to a finding that the NRC must make under NEPA and fails to raise a genuine dispute with the ER on an issue of material fact.[204] The NRC Staff also opposes the admissibility of the contention, claiming that the issues TSEP raises in ENV-2 are not material to the findings the NRC must make, that ENV-2 fails to provide a concise statement of the alleged facts or expert opinions to support TSEP's position, and that the contention fails to show a genuine dispute with the application, contrary to 10 C.F.R. § 2.309(iv) through (vi).[205]

For the reasons we explain below, we conclude that ENV-2 is inadmissible. TSEP provides three main allegations in ENV-2: (1) new water rights will not be available for the VCS project; (2) GBRA's existing water rights would not be sufficient to supply VCS, given the actual water use under those rights; and (3) Exelon's evaluations have not accounted for the effect of droughts. Regarding the first allegation, TSEP misinterprets the ER's discussion of the availability of new water rights for use at the VCS, which Exelon clarifies in its answer.[206] Exelon notes the discussion on page 5.2-12 of its ER, which explains Exelon's plans to obtain water at the COL stage, by contracting with one or more new water rights holders, in addition to, or in lieu of, contracting with more senior water rights holders.[207] Further countering TSEP's claims concerning availability of new water rights, Exelon notes, is ER § 5.11, which discusses the impacts of the pending GBRA water rights permits on water use and which it concludes will be "SMALL."[208] Because TSEP fails to contradict these statements specifically,

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[201] *Id.* at 39.

[202] *Id.* at 39-40.

[203] *Id.* at 40-41.

[204] Exelon Answer at 37.

[205] NRC Staff Answer at 35.

[206] Exelon Answer at 43 (citing Trungale Report at 3; ER at 2.3-133, -134, -157).

[207] *Id.* at 39.

[208] *Id.* at 40.

it has failed to show a genuine dispute with the ER, in contravention of 10 C.F.R. § 2.309(f)(1)(vi).

Regarding the second allegation in ENV-2, as Exelon and the NRC Staff note, TSEP misstates data from its own expert report (Trungale Report, Petition Exhibit E-1) and otherwise fails to allege a material difference between the data in that expert report versus data in the ER.[209] For water use in 2000, TSEP misquotes the report's water use value as 70,544; to the contrary, the Trungale Report states that value to be 47,046 acre-feet.[210] Furthermore, the ER states water use for that year as a more-conservative 49,930 acre-feet, and for 2001, the Trungale Report states 58,526 acre-feet of water use, as compared to the value of 51,670 acre-feet that Exelon reports in its ER at page 2.3-133.[211] Accordingly, ENV-2 fails to allege a material difference between these two values for water use on the existing GBRA water permits for 2001, considering the ER's statement that a sufficient amount of water — over 115,000 acre-feet — remained available for other users that year.[212] For these reasons, TSEP has not properly pleaded in ENV-2 that the 75,000 acre-feet per year of water the VCS would need to operate is unavailable under the existing GBRA permits. This aspect of ENV-2 accordingly fails to demonstrate a genuine dispute of material fact with the ER regarding past water usage under the existing GBRA water rights, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

Lastly, concerning the third allegation in ENV-2 — that the ER fails to address sufficiently the impact of drought conditions on water available to the VCS — TSEP fails to address or controvert the sections of the ER that discuss this issue. Exelon describes water budget modeling information in section 3.4.3.2 of its ER, which considers surface and groundwater supply available during the "drought of record," and the water availability analysis information derived from the Region L Water Plan. ENV-2 does not address or controvert this analysis or its conclusions. For a contention to be admissible, it must dispute specific portions of the application and must state the supporting reasons for each dispute.[213] This aspect of ENV-2 is also, therefore, inadmissible for failure to show a genuine dispute with the ER regarding a material issue of fact, as required under 10 C.F.R. § 2.309(f)(1)(vi).

Accordingly, ENV-2 is inadmissible.

c. TSEP-ENV-3: Impacts on Regional Water Availability

CONTENTION: The ER fails to satisfy 10 C.F.R. §§ 51.50 & 51.45 because it does

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[209] *Id.* at 43; NRC Staff Answer at 38.

[210] Exelon Answer at 43 (citing Trungale Report at 3; ER at 2.3-133, -134, -157).

[211] *Id.*

[212] *Id.*; NRC Staff Answer at 38.

[213] *See* 10 C.F.R. § 2.309(f)(1)(vi).

not evaluate the impacts on regional water availability. In order to provide water for Exelon, other water supply projects must be developed or changed in the region to satisfy other demands.[214]

In environmental contention TSEP-ENV-3 (ENV-3), TSEP claims that Exelon's ER does not properly evaluate the impacts of VCS water usage on the water that would remain available to satisfy the demands of other water users in the region.[215] TSEP further claims the amount of water that VCS plans to use could not be met with existing water supply plans, but rather would require that additional water supply projects be developed to satisfy the VCS water needs.[216] TSEP describes the region surrounding the VCS site in the Guadalupe and San Antonio River Basin as a drought-prone area where population growth continues to place increasing demands on water resources.[217]

As it argues in support of ENV-2, TSEP asserts in ENV-3 that no unappropriated water remains available to Exelon from the Guadalupe River for a new water use permit, and that Exelon "does not identify any particular existing permit that it might purchase or contract."[218] TSEP notes that Exelon does not mention in its ESP application its "Reservation Agreement" with GBRA — discussed in Exelon's previously withdrawn COL application for the VCS — that would provide up to 75,000 ac-ft/yr of water for use at the proposed VCS from one of GBRA's existing permits.[219] TSEP notes further that, while Exelon's ESP application nowhere identifies this ongoing agreement, it "instead discusses in detail the diversion point and raw water makeup intake system as being at the same location as already authorized for the GBRA/UCC rights."[220] TSEP asserts that the 2011 Region L Water Plan identifies the otherwise unused portion of this GBRA water right as potentially available for pipeline transmission to a different

[214] Petition at 42; *see also id.* at 42-47; Exelon Answer at 47-51; NRC Staff Answer at 39-44; Reply at 34-37; Tr. at 143-64.

[215] Petition at 42.

[216] *Id.*

[217] *Id.* at 42, 43 (citing 10 C.F.R. § 51.45(c)).

[218] *Id.* at 43.

[219] *Id.* at 43-44; *see* Exelon Answer at 2 n.4. Exelon explains that it requested withdrawal of its COL application for VCS Units 1 and 2 concurrently with the submission of its ESP application. *Id.* The Commission granted Exelon's withdrawal request on July 20, 2010. *Id.*; Exelon Generation Company, LLC; Victoria County Station, Units 1 and 2; Notice of Withdrawal of Application for a Combined License, 75 Fed. Reg. 43,579, 43,579 (July 26, 2010). Exelon states that it "has not resubmitted, or even decided whether to resubmit, an application to construct and operate a nuclear plant at the VCS site." Exelon Answer at 2 n.4.

[220] Petition at 44.

part of the basin — which would make it unavailable to supply the needs of VCS or any other use in this part of the basin.[221]

TSEP asserts that the VCS's use of water under the GBRA permit would deprive other projects in the region of water that would otherwise be available under the GBRA permit, and that Exelon's ER inadequately covers the resulting impacts of such deprivation of water for other users.[222] TSEP lists other potential water users — including long-term contract sales to municipalities, farmers, and other industrial users, as well as to other unspecified long-term water planning projects — which TSEP claims would need to obtain other water sources were VCS to secure water use under the GBRA permit.[223]

TSEP alleges that, in order to replace the available water it committed to VCS, GBRA has proposed new surface water rights on the Guadalupe River and the use of groundwater that, TSEP claims, will adversely impact surface water flows in the Guadalupe and San Antonio River basins.[224] TSEP further claims that Exelon's ER has not adequately addressed these environmental impacts.[225] TSEP argues that the ER inappropriately relies on the 2011 Regional Water Plan and water availability models, neither of which adequately analyzes the regional water availability impacts of GBRA committing 75,000 ac-ft/yr to the VCS.[226] TSEP argues that this commitment of water resources to the VCS will require GBRA to look elsewhere in order to satisfy future water demands of other users in the basin.[227] TSEP insists that, under 10 C.F.R. Part 51 and NEPA, Exelon's ER must describe with greater precision the additional water availability projects identified in the 2011 Regional Water Plan that TSEP claims would be indirect effects of supplying this water to VCS.[228]

Both Exelon and the NRC Staff argue that ENV-3 is inadmissible for its failure to raise a genuine dispute with the ER regarding a material issue of fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).[229] In addition, the NRC Staff claims that TSEP fails to provide adequate support for its position in ENV-3, contrary to 10 C.F.R. § 2.309(f)(1)(v).[230]

We agree that ENV-3 is inadmissible for failing to demonstrate a genuine dispute with the application. Contrary to TSEP's claims, ER § 5.11.2 discusses

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[221] *Id.* at 45.
[222] *Id.*
[223] *Id.* at 44, 45.
[224] *Id.* at 45.
[225] *Id.* at 46.
[226] *Id.*
[227] *Id.* at 46-47.
[228] *Id.* at 47.
[229] Exelon Answer at 47; NRC Staff Answer at 39.
[230] NRC Staff Answer at 39, 43.

cumulative impacts relating to proposed water withdrawals from the Guadalupe River basin for use at the VCS, and TSEP fails to dispute this evaluation or its conclusions.[231] TSEP also does not provide adequate support for its claims that the VCS's potential use of the GBRA water rights is itself the direct or indirect cause of GBRA's development of other water supply projects in the Region L Water Plan.

TSEP cites to its expert report to support its assertion that Exelon's ER fails to "demonstrate[ ] an understanding that removal of groundwater will reduce the amount of water available for surface flows and thus the amount of water available for diversion."[232] However, the portions of the JCHA report that TSEP cites, like ENV-3 itself, fail to take issue with relevant sections of the ER that address water availability and the GBRA water supply projects, and fails to do more than restate the assertions of the contention itself.[233] Without more, TSEP, and its experts, fail to show how TSEP's claims in ENV-3 are anything more than speculation.

As such, TSEP fails to show a genuine dispute with the ER on this issue, contrary to 10 C.F.R. § 2.309(f)(1)(vi), and ENV-3 is therefore inadmissible.

d. TSEP-ENV-4: Impacts on Long-Term Water Availability

> CONTENTION: The ER fails to satisfy 10 C.F.R. §§ 51.50 & 51.45 because it does not evaluate the impacts on long-term water availability. In order to provide water for Exelon, other water supply projects must be developed or changed to satisfy other demands. Because the ESP has a life span of twenty to forty years, water availability over that long-term period must be fully evaluated. The ER does not describe or evaluate the long-term impacts on water availability.[234]

In environmental contention TSEP-ENV-4 (ENV-4), TSEP claims that the ER's evaluation of impacts on long-term water availability, for the entire 20- to 40-year lifetime of the proposed ESP, is inadequate under 10 C.F.R. §§ 51.45 and 51.50.[235] TSEP claims that the Guadalupe and San Antonio River Basin is one of the most drought-prone areas of Texas,[236] and that a growing population in this area places increasing demands on regional water resources. TSEP incorporates

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[231] *Id.* at 40 (citing ER § 5.11 at 5.11-3 to -5).

[232] Petition at 46 (citing Petition Exh. D-2, JCHA Report at 67).

[233] *Id.* (citing JCHA Report at 64-67).

[234] Petition at 47; *see also id.* at 47-49; Exelon Answer at 51-53; NRC Staff Answer at 45-48; Reply at 37-38; Tr. at 164-68.

[235] Petition at 47.

[236] *Id.*

for ENV-4 the same supporting facts and opinions that it states for contention ENV-3.[237]

As it does for ENV-3, TSEP claims in ENV-4 that the ER inaccurately recounts water availability conditions in the Guadalupe River basin. In ENV-4, however, TSEP refers to this deficiency as an "omission," claiming that Exelon does not analyze future water availability over the entire lifetime of the proposed ESP, let alone the lifetime of the plant.[238]

Given that an ESP is valid for 20 to 40 years from the date of issuance, ENV-4 alleges that the ER must analyze future water availability over the potential lifetime of the ESP.[239] With regard to long-term water availability impacts, TSEP alleges that VCS water use will necessitate implementation of water supply projects other than those described in the 2011 Regional Water Plan.[240] TSEP claims that the VCS would need to use groundwater to meet its water use needs which, in turn, will reduce the amount of water available for surface flows in the Guadalupe River.[241] TSEP maintains that Exelon's ER fails to address the environmental impacts that will result from the altered flow conditions from groundwater use at the VCS over the lifetime of the ESP.[242] Even though the 2011 Regional Water Plan lists only potential water projects, TSEP claims that five of the projects mentioned in the 2011 Regional Water Plan must be described as indirect effects in Exelon's ER. TSEP argues that, for this reason, Exelon must describe or evaluate water availability over the 20- to 40-year life span of the ESP.[243]

Exelon and the NRC Staff argue that ENV-4 is inadmissible because it fails to demonstrate a genuine dispute with the application on a material issue of law or fact.[244] The NRC Staff also argues that ENV-4 is inadmissible for its failure to provide sufficient support.[245]

We conclude that ENV-4 is inadmissible. In section 5.11 of its ER, Exelon discusses both cumulative impacts of future water projects in the GBRA lower basin and water availability in this region through the year 2060.[246] This contradicts TSEP's assertion that Exelon "does not even begin to analyze future water availability over the potential lifetime of the ESP, let alone the lifetime of the

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[237] *Id.* at 48.

[238] *Id.*

[239] *Id.; see also id.* at 45 (citing 10 C.F.R. §§ 52.23(a), 52.33).

[240] *Id.* at 48.

[241] *Id.*

[242] *Id.* at 48-49.

[243] *Id.* at 49.

[244] Exelon Answer at 52; NRC Staff Answer at 45-46.

[245] NRC Staff Answer at 47.

[246] Exelon Answer at 52-53 (citing ER § 5.11).

plant."[247] Exelon concludes in this section of its ER that cumulative impacts related to the proposed withdrawals for the VCS cooling basin and LGWSP are expected to be "SMALL."[248] Exelon also addresses the Region L Water Plan water supply projects.[249] Consequently, TSEP is in error in asserting that the ER fails to discuss impacts on water availability in the region resulting from future water supply projects that are "a direct consequence of GBRA committing 75,000 ac-ft/yr to VCS and needing to replace it to satisfy the future demands elsewhere."[250]

TSEP fails to explain or to provide support that might indicate how this cumulative impacts discussion is insufficient, or why Exelon's conclusions in this section of its ER are incorrect. TSEP has neglected to challenge the cumulative impacts section of Exelon's ER, which discusses long-term water availability in the region of the VCS site through the year 2060, and fails to provide sufficient support for its claims that the ER omits an analysis of long-term water availability.

ENV-4 therefore fails to demonstrate a genuine dispute with the ER and fails to provide sufficient support for TSEP's claims in ENV-4. For these reasons, we conclude that ENV-4 is inadmissible.

e. TSEP-ENV-5: Potential Federal Reserved Water Right for the Aransas National Wildlife Refuge

> CONTENTION: The ER fails to document the potential federal reserved water right mandating freshwater inflow requirements for the Aransas National Wildlife Refuge. The Federal Government may invoke this right to protect the endangered Whooping Crane, which would preclude further use of the waters of the Guadalupe River.[251]

In environmental contention TSEP-ENV-5 (ENV-5), TSEP claims that Exelon's ER improperly fails to document the possibility that the federal government might invoke its "implied" right to mandate freshwater inflow from the Guadalupe River for the Aransas National Wildlife Refuge (ANWR) to protect the endangered whooping crane.[252] TSEP claims that the ER must consider this potential water right because it would reserve the same water from the Guadalupe River that

[247] Petition at 48.

[248] Exelon Answer at 52-53 (citing ER at 5.11-1).

[249] *Id.*

[250] Petition at 49.

[251] *Id.* at 49; *see also id.* at 49-52; Exelon Answer at 53-59; NRC Staff Answer at 48-52; Reply at 38-39; Tr. at 168-73.

[252] Petition at 49-50.

the VCS would otherwise use for operation.[253] TSEP maintains that San Antonio Bay and the ANWR are home to the last natural flock of endangered and federally protected whooping cranes.[254] TSEP asserts that reduced freshwater inflows due to drought have caused an increase in bay salinity and food shortages, resulting in the death of a significant number of cranes in the ANWR.[255]

Citing the reserved water rights doctrine established in *Winters v. United States,*[256] TSEP argues that the federal government's reservation of the ANWR is an implicit reservation of the minimum quantity of unappropriated water necessary to fulfill the primary purpose of that reservation.[257] According to TSEP, the federal government could therefore assert this implied water right for 1,242,500 ac-ft/yr of water from the Guadalupe River on behalf of the ANWR with a priority date of December 31, 1937 — the date on which it reserved the ANWR for the public purpose of fulfilling requirements of the Migratory Bird Treaty and the Migratory Bird Conservation Act.[258]

Were the federal government to assert this implied water right, TSEP claims that the water supply to the VCS would be unreliable.[259] TSEP quotes Regulatory Guide 4.7 (RG 4.7), arguing that a "highly dependable system of water supply sources must be shown to be available under postulated occurrences of natural and site-related accidental phenomena or combinations of such phenomena."[260] According to TSEP, the federal government's possible assertion of this implied water right on behalf of ANWR would compromise Exelon's demonstration of a "highly dependable" supply of water.[261] TSEP alleges that it is reasonably foreseeable that the federal government will assert this implied water right, and so, pursuant to 10 C.F.R. § 51.45(c), the ER impacts analysis must address it.[262]

Both Exelon and the NRC Staff argue that ENV-5 is inadmissible because TSEP fails to provide sufficient support for its claims in ENV-5, and because it fails to demonstrate a genuine dispute regarding a material issue of law.[263] The NRC Staff also argues that ENV-5 is inadmissible, because it fails to raise an

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[253] *Id.*

[254] *Id.* at 51.

[255] *Id.*

[256] *Id.* at 49-50 (citing *Winters v. United States,* 207 U.S. 564 (1908)).

[257] *Id.*

[258] *Id.* at 50, 51; *see also* Migratory Bird Conservation Act, 16 U.S.C. § 715 (2006); Migratory Bird Treaty Act, 16 U.S.C. §§ 701-712 (2006).

[259] Petition at 50, 51-52.

[260] *Id.* at 50 (quoting NRC RG 4.7, General Site Suitability Criteria for Nuclear Power Stations (Rev. 2, Apr. 1998) at 4.7-13).

[261] *Id.* at 52.

[262] *Id.* at 50.

[263] Exelon Answer at 53; NRC Staff Answer at 49-51.

issue that is material to the findings the NRC must make to grant the ESP at issue.[264]

To support its argument that ENV-5 fails to raise a genuine dispute with the ER regarding a material issue of law, Exelon cites to the U.S. Supreme Court decision in *United States v. New Mexico.*[265] In that decision, the Court held that where the federal government reserves land, a water right may be implied only where the underlying purposes of the reservation of land are "entirely defeated" absent such a water right.[266] Exelon also cites the decision of the Supreme Court of Idaho in *United States v. Idaho,* holding that the "primary purpose of the Migratory Bird Conservation Act will not be defeated without a federal reserved water right."[267] Exelon quotes that court's interpretation of the purpose of the Migratory Bird Conservation Act as providing sanctuaries "where the birds could not be molested by hunters."[268] Finally, Exelon claims that because TSEP does not allege that water flow is related to protection from *hunting,* a water right is not critical to the purpose of the ANWR reservation.[269]

The NRC Staff insists that TSEP merely speculates in ENV-5 that the federal government "may" assert its implied water right on behalf of the ANWR, much less that such a water right would require 1,242,500 ac-ft/yr from the Guadalupe River.[270] Accordingly, the NRC Staff asserts the ER need not consider such remote and speculative issues as the potential environmental impact of the federal government's assertion of an implied water right on behalf of the ANWR.[271] The NRC Staff also argues that TSEP fails to explain how the information TSEP cites in ENV-5 actually supports its claims.[272] Specifically, the NRC Staff notes ENV-5's reference to the JCHA Report's discussion of Texas prior appropriation water law doctrine, and to background and case law concerning application of the reserved water rights doctrine.[273] The NRC Staff claims that TSEP has failed to explain how this information indicates a deficiency in the ER for failing to account for the possibility that the federal government may invoke an implied water right on behalf of the ANWR.[274] The NRC Staff also argues that TSEP fails

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[264] NRC Staff Answer at 49-50.

[265] Exelon Answer at 54-55 (citing *United States v. New Mexico,* 438 U.S. 696, 700 & n.4 (1978)).

[266] *Id.*

[267] *Id.* at 56 (quoting *United States v. Idaho,* 135 Idaho 655, 665 (2001)) (internal quotation marks omitted).

[268] *Id.* (quoting *United States v. Idaho,* 135 Idaho at 661).

[269] *Id.* at 56-57.

[270] NRC Staff Answer at 49 (citing Petition at 51).

[271] *Id.* at 50.

[272] *Id.* at 50-52.

[273] *Id.* at 51 (citing JCHA Report at 12-32, 49-62).

[274] *Id.*

to explain how its reference to RG 4.7, an agency regulatory guide pertaining to *safety,* indicates a deficiency in Exelon's *environmental* review portion of its ESP application.[275]

We conclude that ENV-5 is inadmissible. Even assuming, *arguendo,* that the federal government has an implied reservation of water for the ANWR, under the *Winters* doctrine, TSEP fails to allege beyond mere speculation that the federal government might assert this hypothetical implied water right. In any event, we need not reach the issue of whether a reservation of water is implicit in the federal government's reservation of the ANWR in Executive Order No. 7784. The key question for purposes of contention admissibility is whether TSEP has provided any indication that it is reasonably foreseeable to expect the federal government to assert such an implied water right, which would obligate Exelon to address this hypothetical scenario in its ER under 10 C.F.R. § 51.45.[276] We agree with the NRC Staff in concluding that TSEP has not made this showing.

TSEP fails to allege facts or supporting information indicating, beyond mere speculation, that the federal government will assert an implied federal reserved water right to protect species in the ANWR. Neither ENV-5 nor the JCHA Report provides any indicia of an attempt, plan, or intention on behalf of the federal government indicating that it will assert this hypothetical water right it has not asserted in the 74 years since the 1937 reservation of the ANWR in Executive Order No. 7784.[277]

At the contention admissibility stage, boards merely decide whether a contention satisfies the six pleading criteria of 10 C.F.R. § 2.309(f)(1)(i)-(vi).[278] Accordingly, we must not rule on the merits of ENV-5, i.e., whether it is reasonably foreseeable that the federal government will assert a water right implicit in the ANWR reservation.[279] Instead, we must rule on whether TSEP alleges sufficient facts to support its claim in ENV-5 that the federal government's assertion of an implied water right on behalf of the ANWR is a scenario that is within the realm of reason, such that Exelon must consider it in its ER under 10 C.F.R. § 51.45.[280]

Because ENV-5 fails to allege, or otherwise show support for the allegation, that the federal government plans, or has any intention, to assert such a water right, ENV-5 is inadmissible. Under the NEPA "rule of reason," the agency's environmental analysis need only consider environmental impacts that are rea-

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[275] *Id.* at 52.

[276] *See* Petition at 50, 51-52.

[277] *See id.* (citing JCHA Report at 12-18, 49-62).

[278] 10 C.F.R. § 2.309(f)(1); *see Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-09-10, 70 NRC 51, 86-87 (2009).

[279] *See Levy County,* LBP-09-10, 70 NRC at 86.

[280] *See id.* at 87.

sonably foreseeable, and need not consider remote and speculative scenarios.[281] As such, the issue raised in ENV-5 regarding the federal government's possible, or hypothetical, assertion of an implied reservation of water in the ANWR reservation of 1937 is not material to the findings the NRC must make in this proceeding.

ENV-5 thus fails to satisfy 10 C.F.R. § 2.309(f)(1)(iv) and (v), and is, thus, inadmissible.

f. TSEP-ENV-6: Impacts on Water Availability and Aquatic Resources in Light of Reasonably Foreseeable Climate Changes

> CONTENTION: The ER fails to describe or analyze the future changes in water availability in light of the reasonably foreseeable impacts of a changing climate in the Guadalupe and San Antonio River basin.[282]

In environmental contention TSEP-ENV-6 (ENV-6), TSEP claims that Exelon's ER fails to discuss the reasonably foreseeable impacts of climate change on the future availability of water for the proposed VCS.[283] Based on hydroclimate models reviewed and analyzed by TSEP's expert, Dr. Ronald L. Sass, TSEP claims that, by the year 2100, reductions in precipitation and runoff to the Guadalupe and San Antonio River basin will decrease river flow, and increased evaporation will lead to increased salinity in San Antonio Bay.[284] Considered together, TSEP maintains that these impacts will lead to at least a 270,000 ac-ft/yr freshwater deficit to the Bay by the year 2100. This deficit, continues TSEP, will affect the availability of water for the VCS, and were the proposed VCS to continue to divert water despite this reduced flow, will affect as well the whooping crane.[285] TSEP claims that these impacts on long-term water availability and aquatic ecosystems from climate change are reasonably foreseeable and, as such, that Exelon must analyze these impacts in its ER under NEPA and 10 C.F.R. Part 51.[286]

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[281] *See Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-09-7, 69 NRC 613, 719 (2009) (citing *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.,* 435 U.S. 519, 515 (1978)).

[282] Petition at 53; *see also id.* at 53-55; Exelon Answer at 59-62; NRC Staff Answer at 52-56; Reply at 39-45; Tr. at 173-207.

[283] Petition at 53.

[284] *Id.* (citing *id.* Exh. F-1, *Grus americana* and a Texas River: A Case for Environmental Justice, Ronald Sass, Ph.D. (Nov. 9, 2010) [hereinafter Sass Report]); *see also id.* Exh. F, Declaration of Ronald L. Sass in Support of Texans for a Sound Energy Policy's Petition to Intervene and Contentions (Jan. 21, 2011); *id.* Exh. F-2, Curriculum Vitae of Ronald Sass.

[285] *Id.*

[286] *Id.* at 53-55.

TSEP alleges that climate change is predicted to cause a 3.5°C (6.3°F) temperature increase and a net decrease in annual precipitation of 15% along the Guadalupe River Basin, which will reduce freshwater inflows into San Antonio Bay by the year 2100.[287] TSEP cites to the report of Dr. Ronald L. Sass for these data, which itself relies on published studies and methodologies estimating the effect of climate change on river flows based on precipitation, runoff, and river flow data.[288] Dr. Sass calculates that leading up to the year 2100, there will be an estimated decrease in Guadalupe River flows of 120,000 ac-ft/yr, and in San Antonio River flows of 42,000 ac-ft/yr.[289] According to Dr. Sass, this flow reduction would in turn reduce freshwater river inflow to the San Antonio Bay to approximately 162,200 ac-ft/yr. TSEP also alleges that the salinity increase caused by increased temperature and attendant evaporation will require an additional 108,300 ac-ft/yr of freshwater input to maintain stable salinity.[290]

Exelon argues that ENV-6 raises issues outside the scope of this proceeding and fails to raise a genuine dispute with the application on a material issue of fact.[291] The NRC Staff argues that ENV-6 is inadmissible for failure to provide sufficient support and for failure to show a genuine dispute with the application.[292]

We conclude that ENV-6 is admissible. First, TSEP has provided a specific statement of the issue of law or fact in controversy as required by 10 C.F.R. § 2.309(f)(1)(i) — namely, that the ER fails to address the reasonably foreseeable impacts of climate change on water availability in the Guadalupe and San Antonio River Basin, where the proposed VCS would be located. Second, TSEP provides a brief explanation of the basis for ENV-6, by explaining how climate change will alter temperatures, evaporation, precipitation, and runoff, which in turn will affect river flow and salinity levels. TSEP further explains that these alterations are insufficiently addressed in Exelon's ER for the proposed VCS ESP.

Third, TSEP claims in ENV-6 that the ER's failure to address adequately climate change impacts constitutes a failure to satisfy the Commission's regulations in 10 C.F.R. § 51.45 regarding the required environmental analyses for ESPs. ENV-6 therefore raises an issue that is within the scope of this ESP proceeding as required by 10 C.F.R. § 2.309(f)(1)(iii). Furthermore, ENV-6 raises an issue that is material to the findings the NRC must make to grant the instant ESP, in that the agency must address all reasonably foreseeable environmental impacts, pursuant to 10 C.F.R. § 51.45.

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[287] *Id.* at 54 (citing Exh. F-1, Sass Report at 22-24).

[288] *Id.*

[289] *Id.* (citing Sass Report at 24).

[290] *Id.* at 54-55.

[291] Exelon Answer at 59.

[292] NRC Staff Answer at 53.

For support, TSEP references hydroclimatic modeling of its expert, Dr. Sass, to detail expected environmental impacts of climate change and how this will impact water availability in the Guadalupe and San Antonio River Basin — none of which the ER discusses. ENV-6 cites climate change information that is anchored to the year 2100, which may go beyond the expected life of the proposed ESP in this proceeding.[293] However, more importantly, ENV-6 alleges that this information supports the theory that reasonably foreseeable environmental impacts on water availability relating to climate change will take place leading up to the year 2100 and that these impacts will affect the suitability of the proposed site to accommodate the VCS plant.[294] We are satisfied that these facts and this material meet the 10 C.F.R. § 2.309(f)(1)(v) requirement that TSEP provide alleged facts or expert opinion to support its claims that climate change impacts on water availability are a required subject for evaluation in the ER.

The NRC Staff claims that ENV-6 is inadmissible for failing to challenge the ER discussion of cumulative impacts on future water availability.[295] ENV-6 specifically alleges that climate change impacts on water availability must be addressed and that the ER has failed to discuss them.[296] While Exelon has discussed cumulative impacts and future water availability, TSEP maintains that these discussions do not address how future water availability will be influenced by reasonably foreseeable climate change.[297] Furthermore, while Exelon addresses expected climate change in its SSAR § 2.3.1.7, ENV-6 addresses the lack of similar discussion in the ER.[298] As such, ENV-6 raises a genuine dispute regarding a material issue of law, and is therefore admissible.

g. TSEP-ENV-7 Through TSEP-ENV-14

During oral argument on March 17, 2011, TSEP, Exelon, and the NRC Staff announced their unanimous agreement supporting TSEP's withdrawal of environmental contentions TSEP-ENV-7 (ENV-7) through TSEP-ENV-14 (ENV-14)[299] and submission of two contentions to stand in place of withdrawn ENV-

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[293] *See* Petition at 54; Exelon Answer at 61.

[294] *See* Petition at 55.

[295] NRC Staff Answer at 53-54.

[296] Petition at 55.

[297] The NRC Staff quotes portions of ER §§ 5.2 and 5.11, which discuss future water availability and prospective water availability projects. NRC Staff Answer at 53-55. However, it is not clear from these quotations whether the ER sufficiently considers reasonably foreseeable impacts on water availability resulting from climate changes, as required by 10 C.F.R. Part 51 and NEPA.

[298] Exelon Answer at 59 (quoting SSAR at 2.3-23).

[299] Petition at 55-92, *see* Attachment B; *see also* Exelon Answer at 62-88; NRC Staff Answer at 57-61; Reply at 45-66; Tr. at 207-19.

7 through ENV-14 — revised TSEP-ENV-7 (TSEP-ENV-7a or ENV-7a) and revised TSEP-ENV-8 (TSEP-ENV-8a or ENV-8a). Like ENV-7 through ENV-14, ENV-7a and ENV-8a relate to the ER's discussion of protection of the endangered whooping crane and other species living in the San Antonio Bay. TSEP, Exelon, and the NRC Staff also agreed that both ENV-7a and ENV-8a would be admissible.[300] TSEP submitted these revised contentions as follows:

> Revised TSEP-ENV-7: KEY INDICATOR SPECIES IN THE BAY
>
> TSEP contends that VCS water use will significantly reduce fresh water flowing into San Antonio Bay estuary,
>
> a. which in turn will significantly increase the salinity of the water in San Antonio, Espiritu Santo, Carlos, and Mesquite bay systems;
>
> b. which in turn will have a significant impact on abundance of the Eastern Oyster, White Shrimp, and Blue Crab.
>
> Revised TSEP-ENV-8: WHOOPING CRANE
>
> TSEP contends that VCS water use will have a significant impact on Whooping Cranes in the Aransas National Wildlife Refuge because VCS water withdrawals from the Guadalupe River will significantly reduce fresh water flowing into San Antonio Bay estuary,
>
> a. which in turn will significantly increase the salinity of the water in the Bay;
>
> b. which in turn will significantly impact sources of drinking water, wolfberries, and blue crabs for Whooping Cranes;
>
> c. will either reduce appreciably the likelihood of Whooping Crane survival and recovery, or result in adverse modification of their designated critical habitat; and
>
> d. therefore, result in non-compliance with Section 7(a)(2) of the Endangered Species Act.
>
> The bases for the contention under 10 C.F.R. § 2.309(f)(1)(ii) include but are not limited to:
>
> (1) The ER's reliance on the SAGES Report;
>
> (2) Whooping Crane mortality in 2008-09; and

[300] Tr. at 207-19.

(3) The Endangered Species Act that requires the NRC to use the best scientific and commercial data available.[301]

Subsequent to oral argument, TSEP submitted its "Unopposed Motion for Admission of Revised Contentions and for Withdrawal of Certain Contentions."[302] In this motion, TSEP memorializes the agreement that TSEP and Exelon reached during a recess at the oral argument and, jointly with Exelon, moves to withdraw originally submitted contentions ENV-7, -8, -9, -10, -11, -12, -13, and -14, and submit ENV-7a and ENV-8a to supplant original contentions ENV-7 through ENV-14.[303] NRC Staff does not oppose this motion.[304]

Given that TSEP, Exelon, and the NRC Staff are in agreement regarding these contentions, we grant the motion to admit revised contentions ENV-7a and ENV-8a.

h. TSEP-ENV-15: Socioeconomic Impacts of Plugging Wells and of the Impacts on Mineral Rights Holders

CONTENTION: Exelon's ER fails to address the economic impacts of plugging oil and gas wells, and impacts of the VCS on owners of onsite and adjacent mineral rights.[305]

In environmental contention TSEP-ENV-15 (ENV-15), TSEP alleges the ER fails to address the economic impacts on owners of onsite and adjacent mineral rights that would result from plugging oil and gas wells.[306] Specifically, TSEP claims that Exelon must evaluate the costs of locating and properly plugging abandoned oil and gas wells on and around the VCS site, the costs of condemning the minerals within the site boundaries associated with ongoing mineral explo-

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[301] Unopposed Motion for Admission of Revised Contentions and for Withdrawal of Certain Contentions (Mar. 21, 2011) Exh. A at 1 [hereinafter Unopposed Motion]; *see also* Petition Exh. G, Comments on SAGES Final Report, From: Mr. Tom Stehn, of U.S. Fish and Wildlife Service [hereinafter SAGES Report]; *id.* Exh. H, Appendix D, Summary of Water Management Strategies; *id.* Exh. I, International Recovery Plan for the Whooping Crane (*Grus americana*) (3d Rev.), U.S. Fish & Wildlife Service (March 2007).

[302] Unopposed Motion at 1.

[303] *Id.*

[304] *Id.* at 2.

[305] Petition at 92; *see also id.* at 92-95; Exelon Answer at 88-90; NRC Staff Answer at 61-64; Reply at 66-67; Tr. at 66-70.

[306] *See* Petition at 92, 95 (asserting the ER "discusses possible purchase or condemnation of mineral rights as necessary, but does not include any details.").

ration and extraction activities on the site, and the impacts to owners of onsite and adjacent mineral rights.[307]

Exelon argues that ENV-15 presents an impermissible attack on the Commission's regulations in contravention of 10 C.F.R. § 2.335(a) and that ENV-15 is outside the permissible scope of this proceeding, contrary to 10 C.F.R. § 2.309(f)(1)(iii).[308] The NRC Staff argues that ENV-15 is inadmissible as outside the permissible scope of this proceeding[309] and argues further that ENV-15 is inadmissible for failure to state sufficient support and for failure to show a genuine dispute with the application on a material issue of law.[310]

We conclude that ENV-15 is inadmissible. The Commission's regulations in 10 C.F.R. § 51.50(b) establish the requirements for the environmental report section of an early site permit application. Specifically, 10 C.F.R. § 51.50(b)(2) states that "[t]he environmental report *need not* include an assessment of the economic, technical, or other benefits (for example, need for power) and costs of the proposed action."[311] In addition, 10 C.F.R. § 51.105(b) provides "[t]he presiding officer in an early site permit hearing shall *not* admit contentions proffered by any party concerning the benefits assessment . . . *if those issues were not addressed* by the applicant in the early site permit application."[312] Thus, the Commission makes clear that economic cost and benefit issues need not be considered at the ESP stage of a proceeding.

ENV-15 specifically references ER § 5.8, where Exelon provides an analysis of socioeconomic impacts.[313] However, ENV-5 alleges an omission, not an inadequacy, in this section of the ER.[314] Given that Exelon need not provide an analysis of costs and benefits in its ER, ENV-15 raises an issue that is outside the scope of this proceeding and that is not material to any finding the NRC must make in this ESP proceeding, in contravention of 10 C.F.R. § 2.309(f)(1)(iii) and (iv).

Accordingly, we conclude that ENV-15 is inadmissible.

i. TSEP-ENV-16: Obviously Superior Alternative Site at Matagorda County

CONTENTION: The Exelon ER does not comply with 10 C.F.R. § 51.50(b)(1) because it fails to rigorously explore and objectively evaluate all alternative sites.

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[307] *Id.* at 92.

[308] Exelon Answer at 88.

[309] NRC Staff Answer at 62.

[310] *Id.* at 63-64.

[311] 10 C.F.R. § 51.50(b)(2) (emphasis added).

[312] *See also id.* § 52.21 (emphasis added).

[313] Petition at 95 & n.323.

[314] *Id.* at 92.

> A comparison of the Matagorda County site and the Victoria County Station site shows that the Matagorda County site presents an obviously superior site for the construction and operation of a nuclear power plant. The alternative Matagorda County site considered by Exelon does not have the serious problems and large impacts identified at the Victoria site.[315]

In environmental contention TSEP-ENV-16 (ENV-16), TSEP claims that the Matagorda County alternative site is "obviously superior" to the proposed Victoria County site with regard to construction and operation of a nuclear power plant.[316] TSEP argues that Exelon's evaluation of alternatives is inadequate under 10 C.F.R. § 51.50(b)(1) and that Exelon "arrived at the wrong conclusion with respect to the feasibility of the Victoria Site" as a result of the allegedly inadequate evaluation.[317]

In support of this claim, TSEP quotes 10 C.F.R. § 51.50(b)(1), which states that "[t]he environmental report must include an evaluation of alternative sites to determine whether there is any obviously superior alternative to the site proposed." TSEP also quotes NRC Regulatory Guide 4.7, which states that

> [p]referred sites are those with a minimal likelihood of surface or near-surface deformation and a minimal likelihood of earthquakes on faults in the site vicinity (within a radius of 8 km (5 miles)). Because of the uncertainties and difficulties in mitigating the effects of permanent ground displacement phenomena such as surface faulting or folding, fault creep, subsidence or collapse, the NRC Staff considers it prudent to select an alternative site when the potential for permanent ground displacement exists at the site.[318]

TSEP claims that there are several negative impacts associated with the VCS site that make the Matagorda County site obviously superior for constructing and operating a nuclear power plant. TSEP argues that Exelon's alternatives analysis is based on inadequate information, as set forth in other contentions in TSEP's petition.[319] More specifically, TSEP alleges that the Matagorda site is obviously superior to the proposed VCS site with regard to water availability,[320] downstream

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[315] *Id.* at 95; *see also id.* at 95-105; Exelon Answer at 90-97; NRC Staff Answer at 64-70; Reply at 67-76; Tr. at 70-82.

[316] Petition at 95.

[317] *Id.* at 96.

[318] *Id.* at 96-97 (quoting RG 4.7 at 11).

[319] *Id.* at 97.

[320] *Id.*

impacts (including impacts on endangered species),[321] growth faults,[322] oil and gas wells,[323] oil and gas pipelines,[324] and power transmission lines.[325]

With regard to projected construction and operational impacts among the sites Exelon considered, TSEP challenges Exelon's conclusion that there is no significant difference in environmental impact among the five candidate sites.[326] TSEP thus disputes Exelon's conclusion that no alternative site is "environmentally preferable" to the proposed VCS site.[327] TSEP further disputes Exelon's conclusion that the impacts of construction and operation at the VCS site on water use, endangered species, and health and safety would be "SMALL."[328] TSEP also claims that the presence of growth faults and hundreds of oil and gas wells at the VCS site present unprecedented health and safety concerns for construction and operation of a nuclear power plant.[329]

According to TSEP, if one of these impacts were elevated from "SMALL" to "MODERATE," the Matagorda County site would have a more favorable score than the VCS site.[330] TSEP asserts that because the foundational data for the VCS site were flawed, the alternatives analysis based on these data was necessarily flawed.[331] TSEP alleges that, had Exelon conducted the alternatives analysis properly, the Matagorda County site would be scored as obviously superior to that in Victoria County.[332]

Exelon and the NRC Staff both argue that ENV-16 is inadmissible for failure to show a genuine dispute with the application on a material issue of law or fact. We conclude that ENV-16 is admissible in part, limited to its allegations regarding inadequate consideration of environmental issues in the site alternatives analysis portion of Exelon's ER.

First, we conclude that ENV-16 raises a specific statement of the issue of law or fact to be raised or controverted, as required under 10 C.F.R. § 2.309(f)(1)(i). Specifically, TSEP disputes Exelon's conclusion in the ER's alternatives analysis that there is no environmentally preferable site among the five sites considered and that the Matagorda County site is "obviously superior" to the VCS site.

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[321] *Id.* at 98.
[322] *Id.* at 99.
[323] *Id.* at 100.
[324] *Id.* at 101.
[325] *Id.*
[326] *Id.* at 102 (citing ER at 9.3-12, 9.3-86).
[327] *Id.* (citing ER at 9.3-12, 9.3-86).
[328] *Id.* at 103 (citing ER at 9.3-92 to -93, tbls. 9.3-2 & 9.3-3).
[329] *Id.*
[330] *Id.*
[331] *Id.*
[332] *Id.*

Second, TSEP provides a brief explanation of the basis for its claims in ENV-16. It explains that Exelon's assessment of alternatives in its ER is flawed because it is based on inadequate data. TSEP further explains that the Matagorda County site would be recognized as "obviously superior" to the VCS site, were proper consideration given to the environmental impacts relating to oil and gas wells and pipelines, power transmission lines, endangered species, and water availability.

Third, ENV-16 is within the scope of this proceeding, as required by 10 C.F.R. § 2.309(f)(1)(iii), in that it challenges Exelon's ER, which is a required portion of Exelon's ESP Application.[333] Furthermore, the alternatives analysis is the "heart" of the environmental impacts analysis.[334]

Fourth, TSEP raises a material issue of law in ENV-16 by alleging that the ER's site alternatives analysis fails to satisfy 10 C.F.R. § 51.50(b)(1), which requires Exelon to evaluate "alternative sites to determine whether there is any obviously superior alternative to the site proposed." TSEP claims that had Exelon conducted its alternatives analysis for the VCS ESP by giving appropriate consideration to comparative environmental impacts, the proper conclusion would be that the Matagorda County alternative site is obviously superior to TSEP.

Fifth, TSEP has provided sufficient support for ENV-16, as required by 10 C.F.R. § 2.309(f)(1)(v). TSEP alleges that with a proper assessment of impacts relating to water availability, threatened and endangered species, downstream ecological impacts, and transmission line impacts, the Matagorda County alternative site is obviously superior to the VCS site. In support of this claim, TSEP references the analysis and reports of its experts, Dr. Sass and John C. Halepaska and Associates, Inc., and cites specifically to the alternatives analysis of section 9.3 of the ER.[335] We are thus satisfied that TSEP has provided sufficient support for ENV-16, to the extent it alleges inadequate assessment of environmental impacts.

Finally, ENV-16 raises a genuine dispute with the application on a material issue of law or fact, as required by 10 C.F.R. § 2.309(f)(1)(vi). It challenges the ER's alternatives analysis, providing specific references to ER §§ 9.3, 5.2, 5.11, and 2.3 in support of its claim of inadequacy.[336] While we do not admit ENV-16 to the extent it alleges improper assessment of 10 C.F.R. Part 100 safety analysis issues, there is clearly a dispute regarding the adequacy of the environmental report alternatives analysis. TSEP has raised other environmental contentions alleging various inadequacies in Exelon's ER. We note, however, that insofar as TSEP's other environmental contentions allege various inadequacies in Exelon's ER, ENV-16 does not "bootstrap" its claims in ENV-16 on those contentions.

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[333] *See* 10 C.F.R. § 51.50(b).

[334] *Id.* Part 51, App. A, § 5.

[335] Petition at 97-102 (citing JCHA Report at 44, 72-74, 76, 77, 89, 90, 92-94; Sass Report at 21-25).

[336] *E.g., id.* at 97 nn.325-26, 98 nn.330, 334.

We conclude that ENV-16 includes independent allegations that go toward the alternatives analysis, not the impacts analysis, of Exelon's ER, which satisfy all six of the 10 C.F.R. § 2.309(f)(1) criteria. We therefore admit ENV-16, to the extent it alleges inadequacies under 10 C.F.R. Part 51 relating to the alternatives analysis in the environmental report.

j. TSEP-ENV-17: ER Lacks Basis for Reliance on Waste Confidence Rule

> CONTENTION: In Section 5.7.1.6 of the ER, Exelon relies on the Waste Confidence Decision for its assertion that a repository can and likely will be developed at some site that will comply with radiation dose limits imposed by the U.S. Environmental Protection Agency. *Id.* at 5.7-7. Because the assertion is not supported by an EIS, however, the ER is inadequate to comply with NEPA.[337]

Environmental contention TSEP-ENV-17 (ENV-17) is based on TSEP's comments to the 2008 revisions to the Waste Confidence Rule. ENV-17 alleges that the ER, in section 5.7.1.6, improperly relies on the Waste Confidence Decision in stating that a high-level waste ("HLW") repository will be built.[338] TSEP claims that the ER cannot properly rely on the Waste Confidence Rule because the Commission has refused to submit a generic EIS for the Waste Confidence Rule. As a consequence, TSEP claims the assertions contained in the Waste Confidence Rule must be analyzed in a site-specific EIS for this individual licensing proceeding.[339] Specifically, TSEP states that before an ESP is issued for the Victoria County Station site, an EIS must be prepared that

> examines the cumulative impacts and costs of the entire amount of radioactive waste that will be generated [by] new reactors, . . . weigh[s] the relative costs and benefits of licensing individual nuclear power plants . . . against the costs and benefits of other alternatives that would not involve the creation of that waste . . . [, and] address[es] the uncertainty that attends those predictions.[340]

Exelon and the NRC Staff both argue that ENV-17 is inadmissible because it impermissibly challenges the Commission's Waste Confidence Rule in 10 C.F.R. § 51.23, in contravention of 10 C.F.R. § 2.335(a).[341] Exelon and the NRC Staff

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[337] Petition at 105; *see also id.* at 105-08; Exelon Answer at 97-100; NRC Staff Answer at 70-75; Reply at 76-77; Tr. at 82-85.

[338] Petition at 105. This contention is based on and incorporates by reference TSEP's comments, submitted in 2009, on the revisions to the Waste Confidence Rule that was published by the NRC in 2008. *Id.* at 105-06.

[339] *See id.* at 107.

[340] *Id.* at 106.

[341] Exelon Answer at 97; NRC Staff Answer at 71-72.

also argue that ENV-17 is inadmissible because it raises an issue that is outside the scope of this proceeding.[342]

The Board agrees with Exelon and the NRC Staff, and concludes that ENV-17 is inadmissible. ENV-17 constitutes an impermissible attack on the Commission's Waste Confidence Rule, in violation of 10 C.F.R. § 2.335(a). Although TSEP does not explicitly state that it is challenging the Commission's Waste Confidence Rule, it does so implicitly by citing to both the Waste Confidence Decision[343] and its comments on the 2008 revisions to the Waste Confidence Rule,[344] and by stating that "[t]he contention is . . . within the scope of the hearing because the Commission recently refused to prepare an EIS to support its waste confidence findings."[345] In its Reply, TSEP also strongly suggests that it is challenging the Commission's Waste Confidence Rule when it states that it submitted ENV-17 (along with environmental contention TSEP-ENV-18) for the purpose of "preserving claims that it made in comments on the NRC's proposed Waste Confidence Update and Temporary Spent Fuel Storage rule regarding the inadequacy of the NRC's generic analysis of spent fuel disposal impacts to support the issuance of an ESP for the Victoria site."[346] At oral argument, TSEP even conceded this might be an impermissible challenge to the Commission's Waste Confidence Rule and that this contention therefore might not be admitted.[347]

According to the Waste Confidence Rule, the "Commission believes there is reasonable assurance that . . . sufficient repository capacity will be available within 30 years beyond the licensed life for operation of any reactor to dispose of the commercial high-level waste and spent fuel originating in such reactor and generated up to that time."[348] In its Waste Confidence Decision, the Commission squarely rejected the claim that an EIS must be prepared for the Waste Confidence Rule to assess the cumulative impacts and costs from the disposal of radioactive waste.[349] In addition, the Waste Confidence Rule itself states that

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[342] Exelon Answer at 97; NRC Staff Answer at 71.

[343] Petition at 105-08.

[344] *Id.* at 105-06, 108.

[345] *Id.* at 107. TSEP also strongly implies that it is challenging the Commission's Waste Confidence Rule when it states: "Having failed to obtain a full environmental analysis of the environmental impacts of spent fuel disposal, TSEP therefore seeks such an analysis in this individual licensing case." *Id.*

[346] Reply at 77.

[347] *See* Tr. at 83-85 (during which TSEP's counsel urged the Board "to rule against the admission of [this] contention, and that way we can carry it forward as something on record, that we filed it, [if] that ever comes up in the future.").

[348] 10 C.F.R. § 51.23(a).

[349] *See* Waste Confidence Decision Update, 75 Fed. Reg. 81,037, 81,041 (Dec. 23, 2010) ("Individual licensees and applicants, or in the case of a HLW repository, DOE, will have to apply for and meet all

(Continued)

> no discussion of any environmental impact of spent fuel storage in reactor facility storage pools or independent spent fuel storage installations (ISFSIs) for the period following the term of the reactor operating license or amendment, reactor combined license or amendment, or initial ISFSI license or amendment for which application is made, is required in any environmental report, environmental impact statement, environmental assessment, or other analysis.[350]

Under 10 C.F.R. § 2.335(a), contentions challenging NRC rules and regulations are impermissible and may not be admitted absent a waiver or exception as required by 10 C.F.R. § 2.335(b).[351] In this contention, TSEP challenges the Waste Confidence Rule, but has neither requested a waiver nor addressed the criteria upon which a waiver might be based. Even had TSEP requested a waiver, its request for a waiver could not be granted because ENV-17 challenges the ubiquitous issue concerning impacts of an HLW disposal facility, which clearly applies to a "'large class of people or facilities'" and thus is ineligible for a waiver according to the Commission's decision in *Bellefonte*.[352]

ENV-17 thus constitutes an impermissible challenge to the Commission's Waste Confidence Rule, in violation of 10 C.F.R. § 2.335(a). Accordingly, ENV-17 is inadmissible.

k. TSEP-ENV-18: ER Lacks Basis for Reliance on Table S-3

> CONTENTION: The ER lacks an adequate legal or factual basis to rely on Table S-3 for its assessment of the environmental impacts of the uranium fuel cycle because the assumptions on which Table S-3 is based are grossly outdated.[353]

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of the NRC's safety and environmental requirements before the NRC will issue a license for storage or disposal.").

[350] 10 C.F.R. § 51.23(b).

[351] The Commission requires, under 10 C.F.R. § 2.335(b), that any request for a waiver or exception "be accompanied by an affidavit that identifies . . . the subject matter of the proceeding as to which the application of the . . . regulation . . . would not serve the purposes for which the . . . regulation was adopted" and that the affidavit "state with particularity the special circumstances alleged to justify the waiver or exception requested." 10 C.F.R. § 2.335(b). This regulation further declares that "[t]he 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 application of the rule or regulation . . . would not serve the purposes for which the rule or regulation was adopted." *Id.* In addition, waivers are not granted where "the circumstances on which the waiver's proponent relies are common to 'a large class of applicants or facilities.'" *Tennessee Valley Authority* (Bellefonte Nuclear Power Plant, Units 3 and 4), CLI-09-3, 69 NRC 68, 75 n.38 (2009) (citing *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-88-10, 28 NRC 573, 596-97 (1988)).

[352] *See Bellefonte,* CLI-09-3, 69 NRC at 75 n.38.

[353] Petition at 108; *see also id.* at 108-10; Exelon Answer at 101-02; NRC Staff Answer at 76-78; Reply at 76-77; Tr. at 82-85.

Like ENV-17, environmental contention TSEP-ENV-18 (ENV-18) is based on and incorporates by reference comments that TSEP made in 2009 regarding revisions to the Waste Confidence Rule the NRC published in 2008.[354] In the Waste Confidence Decision Update, the Commission declined to reconsider Table S-3,[355] a regulation that the Commission promulgated in 10 C.F.R. § 51.51(b). The Commission concluded that reconsideration of Table S-3 is unnecessary, as long as the Commission continues to have a basis for confidence in the technical feasibility of a mined geologic repository.[356] TSEP, however, questions the basis of the Commission's confidence on this matter and argues that an EIS should be prepared to fully examine the environmental impacts of the Waste Confidence Rule.[357] As a result of the Commission's refusal to revisit Table S-3 on a generic basis in the Waste Confidence Decision Update, TSEP filed ENV-18 (along with ENV-17) for the purpose of "preserving claims that it made in its comments on the NRC's proposed Waste Confidence Update and Temporary Spent Fuel Storage rule regarding the inadequacy of the NRC's generic analysis of spent fuel disposal impacts to support the issuance of an ESP for the Victoria site."[358]

Exelon and the NRC Staff both argue that ENV-18 is inadmissible because it presents an impermissible attack on the adequacy of Table S-3.[359] It also argues that ENV-18 is inadmissible because it fails to raise an issue that is within the scope of this proceeding.[360]

We conclude that ENV-18 is inadmissible because it involves an impermissible attack on agency regulations, specifically Table S-3 of 10 C.F.R. § 51.51. In this contention, much as in ENV-17, TSEP impermissibly attacks NRC regulations. In fact, 10 C.F.R. § 51.51(a) requires, in pertinent part, that every ER for an ESP use Table S-3 as the basis for its discussion of the uranium fuel cycle.[361] Pursuant to this regulation, ER § 5.7.1.6 relies on Table S-3 in reaching its conclusion that the environmental impacts of radioactive waste disposal for the Victoria County Station ESP site will be "SMALL."[362] Therefore, because it challenges an NRC regulation (Table S-3) without in any way attempting to request a waiver or exception to that regulation, ENV-18 is inadmissible.

For this reason, ENV-18 is inadmissible.

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[354] Petition at 108.

[355] 75 Fed. Reg. at 81,044.

[356] *Id.* at 81,043-44.

[357] *See* Petition at 109.

[358] Reply at 77; *see also* Petition at 109.

[359] Exelon Answer at 101; NRC Staff Answer at 76-77.

[360] Exelon Answer at 101; NRC Staff Answer at 78.

[361] 10 C.F.R. § 51.51(a).

[362] ER at 5.7-7 to 5.7-8.

4. Miscellaneous Contention

a. TSEP-MISC-1 — Coastal Zone Management Act Consistency Determination

> CONTENTION: The Exelon application does not satisfy the requirements of the Coastal Zone Management Act ("CZMA"), 16 U.S.C. § 1456(c)(3)(A), because it does not include the required determination that the proposed activity is consistent with the Texas Coastal Management Program.[363]

In miscellaneous contention TSEP-MISC-1 (MISC-1), TSEP maintains that the CZMA requires an applicant to submit its certification from the relevant state of jurisdiction, indicating that the project in question will comply with the CZMA.[364] From this CZMA certification, the reviewing state will then issue its consistency determination, which is the ultimate decision on the Applicant's CZMA certification.[365]

TSEP filed its petition, which includes MISC-1, on January 24, 2011.[366] MISC-1 alleges that Exelon's ESP application violates the CZMA because it does not include any certification to the Texas General Land Office (TGLO) stating that the proposed activity is consistent with the Texas Coastal Management Program

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[363] Petition at 110; *see also id.* at 110-14; Exelon Answer at 102-04; NRC Staff Answer at 79-81; Reply at 78; Tr. at 85-88.

[364] Petition at 110. The CZMA requires, in pertinent part, that:

> After final approval by the Secretary of a state's management program, any applicant for required Federal license or permit to conduct an activity, in or outside of the coastal zone, affecting any land or water use or natural resource of the coastal zone of that state shall provide in the application to the licensing or permitting agency a certification that the proposed activity complies with the enforceable policies of the state's approved program and that such activity will be conducted in a manner consistent with the program. At the same time, the applicant shall furnish to the state or its designated agency a copy of the certification, with all necessary information and data.

16 U.S.C. § 1456(c)(3)(A). These requirements are also reflected in the regulations implementing the National Oceanic and Atmospheric Agency. *See* 15 C.F.R. § 930.57(a) ("Following appropriate coordination and cooperation with the State agency, all applicants for required federal licenses or permits subject to State agency review shall provide in the application to the federal licensing or permitting agency a certification that the proposed activity complies with and will be conducted in a manner consistent with the management program. At the same time, the applicant shall furnish to the State agency a copy of the certification and necessary data and information."). Further, NRC regulations require that an ER identify and discuss the status of all permits, licenses, and other approvals that are required from federal, state, and local agencies. 10 C.F.R. § 51.45(d).

[365] *See* 15 C.F.R. § 930.60(a) ("The State agency's six-month review period . . . of an applicant's consistency certification begins on the date the State agency receives the consistency certification . . . .").

[366] Petition at 115.

(TCMP).[367] As such, MISC-1 is a contention of omission, alleging that the ER is in violation of the CZMA because it "does not include any certification" of compliance with TCMP.[368]

On January 25, 2011, one day after TSEP filed its Petition containing MISC-1, Exelon submitted a certification of consistency with TCMP, including necessary information and data, to the TGLO.[369] Additionally, Exelon provided a copy of this submission to the NRC Staff for inclusion in Appendix A of its ESP application.[370]

In doing so, Exelon has supplied the allegedly omitted information at issue in MISC-1. The Commission, along with numerous Licensing Boards, has made clear that "[w]here a contention alleges the omission of particular information or an issue from an application, and the information is later supplied by the applicant . . . the contention is moot."[371] Thus, because Exelon has submitted a certificate of consistency with TCMP and provided the NRC Staff with a copy of this submission to be included in Exelon's ESP application, MISC-1 is now rendered moot.[372] As such, MISC-1 is inadmissible, because it fails to present a genuine dispute of material fact or law as required by 10 C.F.R. § 2.309(f)(1)(vi).

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[367] *Id.* at 112. In addition, as NRC Staff point out, TSEP also seems to confuse an applicant's CZMA certification with a state's final consistency decision when it implies in Miscellaneous Contention 1 that the ER is in violation of the CZMA because the ER neglects to include a final consistency determination from the Texas Coastal Coordination Council ("TCCC"). *See id.* at 113; NRC Staff Answer at 79-81. As NRC Staff correctly note, TSEP fails to point to any regulation indicating that an applicant's ER must include a final consistency determination by the relevant state, and the regulations clearly state that only a consistency certification must be submitted, not a final consistency determination as well. *See* 16 U.S.C. § 1456(c)(3)(A); NRC Staff Answer at 80. Thus, to the extent that TSEP bases MISC-1 on Exelon's failure to include a final consistency determination, MISC-1 is inadmissible because it fails to present a genuine dispute of material law or fact. *See* 10 C.F.R. § 2.309(f)(1)(iv).

[368] *See* Petition at 112; *see also* Exelon Answer at 103.

[369] Exelon Answer at 103 (citing *id.,* Attach. 2, Encl. 1, Letter from Marilyn C. Kray, Vice President, Nuclear Project Development, Exelon Generation, to Document Control Desk, U.S. Nuclear Regulatory Commission, to Kate Zultner, Coastal Resources Division, Texas General Land Office (Jan. 25, 2011)).

[370] *See id.* Attach. 2, Encl. 1, Letter from Marilyn C. Kray, Vice President, Nuclear Project Development, Exelon Generation, to Document Control Desk, U.S. Nuclear Regulatory Commission, to Kate Zultner, Coastal Resources Division, Texas General Land Office (Jan. 25, 2011); NRC Answer at 80.

[371] *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).

[372] TSEP acknowledges that the deficiency alleged in MISC-1 has now been cured and that the contention is therefore moot: "On January 25, Exelon cured the deficiency that TSEP identified and submitted documents to the appropriate state agency. TSEP agrees that the contention is now moot." Reply at 78. TSEP does note, however, that it "is reviewing the new Exelon documents and will take further action as necessary." *Id.*

III. PROCEDURAL MATTERS

A. Selection of Hearing Procedures

In accordance with 10 C.F.R. § 2.310, upon admission of a contention, a board must identify the specific hearing procedure to be used in the adjudication of the admitted contentions. The NRC regulations provide in 10 C.F.R. § 2.310(a) that the hearing procedures in Subpart L of 10 C.F.R. Part 2 may be used in proceedings for the "grant, renewal, licensee-initiated amendment, or termination of licenses or permits."[373] Pursuant to 10 C.F.R. § 2.310(d), the hearing for resolution of a contention must be conducted under Subpart G of 10 C.F.R. Part 2 in the event the contested matter in that contention necessitates resolution of a material issue of fact relating to a past activity "where the credibility of an eyewitness may reasonably be expected to be at issue, and/or issues of motive or intent of the party or eyewitness material to the resolution of the contested matter."[374] Under 10 C.F.R. § 2.309(g), a petitioner may "address the selection of hearing procedures, taking into account the provisions of 10 C.F.R. § 2.310."[375]

In its petition, TSEP does not address these regulations or argue for either Subpart L or Subpart G hearing procedures for contested issues admitted for litigation in this proceeding. Exelon argues Subpart L hearing procedures should be applied.[376] At oral argument, neither TSEP, Exelon, nor the NRC Staff objected to the use of adjudicatory procedures described in Subpart L for adjudication of admitted contentions in this proceeding.[377] Based on the foregoing, the hearing on the contentions we have admitted in this proceeding shall be conducted in accordance with the informal adjudicatory procedures described in Subpart L of 10 C.F.R. Part 2.

B. Matters Regarding Scheduling

The Board will issue a subsequent order establishing a date and time for a scheduling teleconference in which to address matters pursuant to 10 C.F.R. § 2.332.

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[373] 10 C.F.R. § 2.310(a).

[374] *Id.* § 2.310(d).

[375] *Id.* § 2.309(g).

[376] Exelon Answer at 104-05.

[377] *See* Tr. at 250-51.

IV. CONCLUSION AND ORDER

For the reasons set forth above, we find that Petitioner, Texans for a Sound Energy Policy, has established its standing to intervene, and has properly pleaded eight (8) admissible contentions for litigation. TSEP is thus entitled to party status in this proceeding. The text of the admitted contentions is set forth in Attachment A to this decision.

For the foregoing reasons, it is, this 30th day of June 2011, ORDERED that:

1. Relative to the contentions admitted herein, TSEP's petition and hearing request is *granted* and TSEP is admitted as a party to this proceeding.

2. The following eight TSEP contentions are *admitted* for litigation in this proceeding: TSEP-SAFETY-1; TSEP-SAFETY-2; TSEP-SAFETY-3 (in part); TSEP-ENV-1; TSEP-ENV-6; revised TSEP-ENV-7a; revised TSEP-ENV-8a; and TSEP-ENV-16.[378]

3. The following TSEP contentions are *rejected* as inadmissible for litigation in this proceeding: TSEP-SAFETY-4; TSEP-ENV-2; TSEP-ENV-3; TSEP-ENV-4; TSEP-ENV-5; TSEP-ENV-15; TSEP-ENV-17; TSEP-ENV-18; and TSEP-MISC-1.

4. TSEP's Unopposed Motion for Admission of Revised Contentions and for Withdrawal of Certain Contentions is *granted.* Pursuant to this motion, environmental contentions revised TSEP-ENV-7a (ENV-7a) and revised TSEP-ENV-8a (ENV-8a) are *admitted* for litigation in this proceeding, and the following environmental contentions are *withdrawn*: TSEP-ENV-7; TSEP-ENV-8; TSEP-ENV-9; TSEP-ENV-10; TSEP-ENV-11; TSEP-ENV-12; TSEP-ENV-13; and TSEP-ENV-14.

5. As the Board rules herein upon an intervention petition, any appeal to the Commission from this Memorandum and Order meeting the requirements of 10 C.F.R. § 2.311, must be taken within ten (10) days after service of this Memorandum and Order. Any petitions for interlocutory review meeting the requirements of 10 C.F.R. § 2.341(f)(2) must be filed within fifteen (15) days of service of this Memorandum and Order.

[378] *See* Attachment A.

It is so ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD

Michael M. Gibson, Chairman
ADMINISTRATIVE JUDGE

Dr. Anthony J. Baratta
ADMINISTRATIVE JUDGE

Dr. Mark O. Barnett
ADMINISTRATIVE JUDGE

Rockville, Maryland
June 30, 2011

ATTACHMENT A

ADMITTED CONTENTIONS

TSEP-SAFETY-1: INADEQUATE IDENTIFICATION OF GROWTH FAULTS

The Exelon application does not satisfy the requirements of 10 C.F.R. § 100.23(d)(2) because it does not provide sufficient geological data regarding growth faults or present an adequate evaluation of the potential for subsurface deformation. As result [sic], Exelon underestimates the risk of surface deformation.

TSEP-SAFETY-2: RATE OF RECENT SURFACE MOVEMENT AT GROWTH FAULTS

Exelon fails to satisfy 10 C.F.R. § 100.23(d)(2) because the SSAR greatly understates the rate of recent surface movement of the growth faults, as established by field studies showing rates of movement 1000 to 10,000 times greater than Exelon estimates.

TSEP-SAFETY-3: DANGERS FROM OIL AND GAS WELLS AND BORINGS

Exelon's SSAR fails to provide adequate data regarding active and abandoned oil and gas wells and borings on and near the VCS site, contrary to the requirements of 10 C.F.R. Part 100.

TSEP-ENV-1: IMPACTS FROM ENHANCED COOLING BASIN SEEPAGE

The ER fails to satisfy 10 C.F.R. § 51.45 because it understates and does not rigorously evaluate the environmental impacts of enhanced seepage of fluids and contaminants out of the cooling pond into oil and gas wells and borings beneath the VCS site. Exelon's ER does not identify how it will prevent or mitigate this impact by identifying and plugging the wells and borings.

TSEP-ENV-6: IMPACTS ON WATER AVAILABILITY AND AQUATIC RESOURCES IN LIGHT OF REASONABLY FORESEEABLE CLIMATE CHANGES

The ER fails to describe or analyze the future changes in water availability in light of the reasonably foreseeable impacts of a changing climate in the Guadalupe and San Antonio River basin.

Revised TSEP-ENV-7a: KEY INDICATOR SPECIES IN THE BAY

TSEP contends that VCS water use will significantly reduce fresh water flowing into San Antonio Bay estuary,

a. Which in turn will significantly increase the salinity of the water in San Antonio, Espiritu Santo, Carlos, and Mesquite bay systems;

b. which in turn will have a significant impact on abundance of the Eastern Oyster, White Shrimp, and Blue Crab.

Revised TSEP-ENV-8a: WHOOPING CRANE

TSEP contends that VCS water use will have a significant impact on Whooping Cranes in the Aransas National Wildlife Refuge because VCS water withdrawals from the Guadalupe River will significantly reduce fresh water flowing into San Antonio Bay estuary —

a. which in turn will significantly increase the salinity of the water in the Bay;

b. which in turn will significantly impact sources of drinking water, wolfberries, and blue crabs for Whooping Cranes;

c. will either reduce appreciably the likelihood of Whooping Crane survival and recovery, or result in adverse modification of their designated critical habitat; and

d. therefore result in non-compliance with Section 7(a)(2) of the Endangered Species Act,

The bases for the contention under 10 C.F.R. 2.309(f)(1)(ii) include but are not limited to:

(1) The ER's reliance on the SAGES Report;

(2) Whooping Crane mortality in 2008-09; and

(3) The Endangered Species Act that requires the NRC to use the best scientific and commercial data available.

TSEP-ENV-16: OBVIOUSLY SUPERIOR ALTERNATIVE SITE AT MATAGORDA COUNTY

The Exelon ER does not comply with 10 C.F.R. § 51.50(b)(1) because it fails to rigorously explore and objectively evaluate all alternative sites. A comparison of the Matagorda County site and the Victoria County Station site shows that the Matagorda County site presents an obviously superior site for the construction and operation of a nuclear power plant. The alternative Matagorda County site considered by Exelon does not have the serious problems and large impacts identified at the Victoria site.

ATTACHMENT B

WITHDRAWN CONTENTIONS

TSEP-ENV-7: CATASTROPHIC IMPACTS TO THE ENDANGERED WHOOPING CRANE

The Exelon ER is inadequate because it fails to rigorously explore and objectively evaluate the potential for catastrophic impacts of VCS water use on the endangered Whooping Crane — impacts that threaten the survival of the species.

TSEP-ENV-8: WHOOPING CRANE MORTALITY IN 2008-2009

Exelon's ER fails to rigorously explore and objectively evaluate the unprecedented 2008-2009 mortality event of Whooping Cranes at the Aransas National Wildlife Refuge. In the ER, Exelon attempts to undermine the official reports of a federal agency and urges the NRC to rely instead on biologically unsound rationales.

TSEP-ENV-9: THE FLAWED SAGES REPORT

The ER fails to rigorously explore and objectively evaluate the impact of VCS water use on food resources and energetics of Whooping Cranes. Exelon relies heavily upon the SAGES report, despite the fact that it was universally criticized by experts in the field as flawed. Experts agreed it contained false assumptions, and was inconsistent and contrary to published science.

TSEP-ENV-10: REDUCED SEDIMENT AND NUTRIENT INFLOW INTO SAN ANTONIO BAY

The ER fails to explore and evaluate the impacts that the diversion and consumption of water from the Guadalupe River will have upon the San Antonio Bay due to the reduced sediment and nutrient inflows.

TSEP-ENV-11: TREMENDOUS AQUATIC IMPACTS TO SAN ANTONIO BAY AND ITS IMPORTANT ECOSYSTEMS

The water used by VCS will have tremendous aquatic impacts; it will result in more severe, more frequent, and longer lasting "man-made" high salinity drought conditions in the San Antonio Bay system. It will also significantly impact the bay's ecosystems.

TSEP-ENV-12: ADVERSE MODIFICATION OF WHOOPING CRANE DESIGNATED CRITICAL HABITAT

The water used by VCS will have tremendous aquatic impacts; it will result in more severe, more frequent, and longer lasting "man-made" high salinity drought conditions in the San Antonio Bay system. It will significantly impact the bay's ecosystems and will adversely modify designated critical habitat for an endangered species.

TSEP-ENV-13: MONITORING IMPACTS TO WHOOPING CRANE DESIGNATED CRITICAL HABITAT

Exelon fails to satisfy 10 C.F.R. § 51.50(b)(4) because Exelon has not identified the procedures to protect the endangered Whooping Cranes' environment, specifically the designated critical habitat at the Aransas National Wildlife Refuge.

TSEP-ENV-14: COMPLIANCE WITH THE ENDANGERED SPECIES ACT

The Exelon application does not include sufficient or accurate information to enable the NRC to comply with the requirements of the federal Endangered Species Act, 16 U.S.C. § 1531 *et seq.,* because Exelon has not rigorously explored or objectively evaluated the impacts of the proposed VCS plant on listed Whooping Cranes.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF FEDERAL AND STATE MATERIALS AND ENVIRONMENTAL MANAGEMENT PROGRAMS

Scott W. Moore, Acting Director

In the Matter of **Docket No. 50-320**
(License No. DPR-73)

FIRSTENERGY NUCLEAR OPERATING COMPANY
(Three Mile Island Nuclear Station, Unit 2)

June 2, 2011

The Petitioner requested that the NRC take enforcement action in the form of a Demand for Information from FirstEnergy Nuclear Operating Company (FENOC) relating to inadequate financial assurances provided by the Licensee for Three Mile Island Unit-2's (TMI-2's) nuclear decommissioning fund prior to the consummation of FENOC's proposed merger with Allegheny Energy. As the basis for this request, the Petitioner states that the current radiological decommissioning cost estimate is $831.5 million and the current amount in the decommissioning trust fund is $484.5 million, as of December 31, 2008. Further, the Petitioner asserts that FirstEnergy does not provide adequate financial assurance for decommissioning funding of TMI-2: (1) FirstEnergy's annual report fails to account for the special status of TMI-2, (2) the current level of the decommissioning trust fund demonstrates underfunding, and (3) that the underfunding would increase once decommissioning rate recovery payments from Metropolitan Edison and Pennsylvania Electric were terminated on December 31, 2010, pursuant to Pennsylvania Public Utility Commission orders.

The final Director's Decision (DD) on this petition was signed on June 3, 2011. The petition was denied and the Staff addressed the Petitioner's comments as follows:

(1) As stated in the petition, the Petitioner evaluated the 2008 Decommissioning Funding Status Report, which was the most current information at the

time. However, in order to determine the current state of the Licensee's decommissioning funding assurance, the Staff critically reviewed and evaluated the site-specific 2009 Decommissioning Funding Status Report for TMI-2, which was submitted by GPU Nuclear (the Licensee) on March 29, 2010. The Licensee submitted additional information on November 9, 2010, and February 10, 2011, as part of the 2.206 process. The Staff reviewed the Licensee's submittals and determined that GPU Nuclear provided the information required by NRC regulations in 10 C.F.R. § 50.75. The Staff found that the Licensee's decommissioning trust fund demonstrates adequate decommissioning funding assurance, and that no modification of the Licensee's schedule for the accumulation of decommissioning funds is necessary at this time.

(2) The merger between FirstEnergy and Allegheny Energy is outside the regulatory authority of the NRC; specifically, under NRC regulations the NRC does not have authority to analyze the impact of the merger. NRC evaluates mergers when nuclear interests are involved; no evidence has been provided by the Petitioner of any nuclear interests that were under the control of Allegheny Energy. Moreover, the Licensee's Decommissioning Funding Status Report meets the requirements of 10 C.F.R. § 50.75, and the Staff's review was conducted in accordance with NRC guidance documents, NUREG-1307, Rev. 14, and LIC- 205, Rev. 4.

The Staff concludes that the Petitioner's comments reflect dissatisfaction with the regulatory requirements of 10 C.F.R. § 50.75. Changes to this regulation are outside the scope of the 2.206 petition process.

DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

On September 30, 2010, Eric J. Epstein filed a Petition pursuant to Title 10 of the *Code of Federal Regulations* (10 C.F.R.), section 2.206. The Petitioner requested that the U.S. Nuclear Regulatory Commission (NRC) take enforcement action in the form of a Demand for Information from FirstEnergy Corp. relating to inadequate financial assurance provided by the Licensee for Three Mile Island, Unit 2's (TMI-2's) nuclear decommissioning fund prior to the consummation of FirstEnergy's proposed merger with Allegheny Energy. (NOTE: GPU Nuclear, Inc. is the license holder for TMI-2.) GPU Nuclear, Inc. submitted the 2009 Decommissioning Funding Status Report for TMI-2 on March 29, 2010 (available in NRC's Agencywide Documents Access and Management System (ADAMS)

under ADAMS Accession No. ML100960464). As the basis for this request, the Petitioner states that the current radiological decommissioning cost estimate is $831.5 million and the current amount in the decommissioning trust fund is $484.5 million, as of December 31, 2008. Further, the Petitioner asserts that FirstEnergy does not provide adequate financial assurance for decommissioning funding of TMI-2: (1) FirstEnergy's annual report fails to account for the special status of TMI-2, (2) the current level of the decommissioning trust fund demonstrates underfunding, and (3) the underfunding would increase once decommissioning rate recovery payments from Metropolitan Edison and Pennsylvania Electric were terminated on December 31, 2010, pursuant to Pennsylvania Public Utility Commission orders.

This Petition was assigned to the NRC's Office of Federal and State Materials and Environmental Management Programs (FSME) for review. FSME convened a Petition Review Board (PRB) that met, via teleconference, with the Petitioner and Licensee on October 19, 2010, to discuss the issues raised in the Petition. The transcript of this meeting is a supplement to the Petition. The Petition and transcript are available in ADAMS 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 Public Electronic Reading Room on the NRC Web site at http://www.nrc.gov/reading-rm/adams.html under ADAMS Accession Nos. ML102770308 and ML103120216, respectively. Persons who do not have access to ADAMS or who have problems 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@nrc.gov. By letter dated November 9, 2010 (ADAMS Accession No. ML101310049), NRC informed the Petitioner that his request met the criteria for accepting the petition for enforcement, pursuant to 10 C.F.R. § 2.206.

By letter dated November 9, 2010, FirstEnergy Nuclear Operating Company (FENOC) transmitted information regarding the Petition. Additional information was provided by e-mail dated February 10, 2011. This information is available under ADAMS Accession Nos. ML103200528 and ML110540341, respectively. The information provided by GPU Nuclear, Inc. and FENOC was considered by the Staff in its evaluation of the Petition.

The NRC sent a copy of the proposed Director's Decision to the Petitioner and to GPU Nuclear, Inc. for comment on April 5, 2011 (ADAMS Accession Nos. ML110680183 and ML110940183). The Petitioner responded with comments on May 1, 2011 (ADAMS Accession No. ML111260128), and the Licensee responded on April 18, 2011 (ADAMS Accession No. ML11116A073). Comments submitted by the Petitioner and Licensee, and the NRC Staff responses, are discussed in the Attachment to this Director's Decision.

II. DISCUSSION

The Petitioner seeks enforcement action in the form of a Demand for Information (DFI) requiring FirstEnergy to provide the NRC with site-specific information and financial guarantees that demonstrate and verify the Licensee has adequate funding in place to decommission and decontaminate TMI-2. The Petitioner requests specifically that the NRC demand the following information from FirstEnergy Corporation:

1. A Site-Specific Decommissioning Funding Plan for TMI-2

a. Petitioner Basis for Request

The Petitioner states that the Decommissioning Trust Fund for TMI-2 is underfunded. As of December 31, 2008, the radiological decommissioning cost estimate was $831.5 million. However, the amount in the decommissioning trust fund was $484.5 million. The Petitioner states that the TMI-2 decommissioning report "is inadequate and fails to account for the special status of TMI-2, the current level of underfunding, or the fact that decommissioning rate recovery for Metropolitan Edison and Pennsylvania Electric cease per [Pennsylvania Public Utility Commission] PUC Orders on December 31, 2010."

b. NRC Staff Response

The Petition was based on outdated data contained in the March 2009 report; the Staff is using the data contained in the Licensee's 2010 Decommissioning Funding Status Report. The Petitioner raised concerns over the decommissioning cost estimates and the decommissioning trust fund amounts that were accurate for the reporting period ending December 31, 2008. The Commission's regulations in 10 C.F.R. § 50.75(f)(2) require that "[e]ach power reactor licensee shall report, on a calendar-year basis, to the NRC . . . at least once every 2 years . . . on the status of its decommissioning funding for each reactor or part of a reactor that it owns." However, NRC regulations require that an *annual report* be submitted by a licensee for a plant that has closed before the end of its licensed life. The requirement to submit an *annual* decommissioning funding status report applies to TMI-2. The information in a decommissioning funding status report must include:

(1) "the amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75(b) and (c);"

(2) "the amount accumulated to the end of the calendar year preceding the date of the report;"

(3) "a schedule of the annual amounts remaining to be collected;"

(4) "the assumptions used regarding rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections;"

(5) "any contracts upon which the licensee is relying pursuant to paragraph (e)(1)(v) of this section;"

(6) "any modifications occurring to a licensee's current method of providing financial assurance since the last submitted report; and"

(7) "any material changes to trust agreements."

Therefore, a reactor licensee must submit annual recalculations of decommissioning cost estimates and projected available funding that will be at the time of decommissioning. GPU Nuclear submitted its annual decommissioning funding status report for TMI-2, in compliance with NRC regulations in 10 C.F.R. § 50.75(f) (ADAMS Accession No. ML100960464). The Licensee's most current decommissioning funding status report states:

- Based on the *site-specific* decommissioning cost estimate (SSCE), *Decommissioning Cost Analysis for Three Mile Island, Unit 2,* dated January 2009, the cost for the radiological decommissioning of TMI-2 is estimated to be $836,859,007.
- As of December 31, 2009, the amount accumulated in all the external decommissioning trust funds dedicated to TMI-2, totaled $576,826,096.
- Additionally, the annual report stated that one remaining annual collection from Metropolitan Edison Company and Jersey Central Power and Light Company, in the amount of $4,054,046, was to be deposited into the TMI-2 decommissioning trust fund in 2010.

The Staff evaluated the information provided in the March 29, 2010, decommissioning funding status report, to determine whether the Licensee provided reasonable assurance that funds will be available for the TMI-2 decommissioning process scheduled to begin in 2034. The Staff reviewed the payment schedule filed with the Licensee's *site-specific Decommissioning Cost Analysis for Three Mile Island, Unit 2,* dated January 2009. NRC regulations in 10 C.F.R. § 50.75(e)(1)(ii) provide:

> A licensee that has collected funds based on a *site-specific estimate* under § 50.75(b)(1) of this section may take credit for projected earnings on the external sinking funds using up to a *2 percent annual real rate of return* from the time of future funds' collection through the decommissioning period, provided that the site-specific estimate is based on a period of safe storage that is specifically described

> in the estimate. This includes the periods of safe storage, final dismantlement, and license termination. (Emphasis added.)

The payment schedule provided in the 2009 report incorporates the Licensee's use of the forecast interest rate of 4.8%. The forecast interest rate is offset by the Licensee's assumption of an annual rate of inflation of 2.81%. The Staff determined that the use of the 4.81% forecast interest rate and the 2.81% annual inflation rate is in compliance with the regulations in 10 C.F.R. § 50.75(e)(1)(ii), which permit using a 2.00% real rate of return. [4.81% (forecast interest rate) − 2.81% (projected inflation rate) = 2.0% real rate of return.] The Staff accepts the Licensee's projection that the effect of compounding interest over the period of Post Defueling Monitored Storage will result in sufficient growth of the trust funds to provide reasonable assurance for estimated decommissioning costs. The Staff emphasizes that the regulations in 10 C.F.R. § 50.75 provide for ongoing reanalysis of the TMI-2 decommissioning trust fund; the financial qualifications review for decommissioning funding assurance is revisited every year until the license is terminated.

Moreover, if Three Mile Island Unit 1 (TMI-1) ceases operations prior to 2034, the NRC Staff would require the TMI-1 and TMI-2 licensees to provide new SSCE for both facilities. The new SSCE would be required to provide a revised timeline for conducting decommissioning activities at the two facilities, as well as a revised plan demonstrating reasonable assurance that funds will be available for the decommissioning process, pursuant to 10 C.F.R. § 50.75(a). NRC would analyze the revised SSCEs to assess whether the Licensee provided reasonable assurance. More importantly, if the Staff made a finding of no reasonable assurance, pursuant to 10 C.F.R. § 50.75(e)(2),

> [t]he NRC reserves the right to take the following steps in order to ensure a licensee's adequate accumulation of decommissioning funds: review, as needed, the rate of accumulation of decommissioning funds; and, either independently or in cooperation with the FERC and the licensee's State PUC, take additional actions as appropriate on a case-by-case basis, including *modification of a licensee's schedule for the accumulation of decommissioning funds.* (Emphasis added.)

The Staff reviewed the Petition, as well as the related documentation referenced and supplied by the Petitioner and the Licensee. Based on this review, the NRC Staff has determined that the Licensee has met the requirement for providing decommissioning funding assurance for TMI-2 and finds that no further information is required from the Licensee at this time.

2. FENOC's Site-Specific Funding Plan for the TMI-2 Decommissioning Trust After the Rate Caps Expire for Metropolitan Edison and Pennsylvania Electric on December 31, 2010

a. Petitioner Basis for Request

The Petitioner states "FirstEnergy's rate recovery opportunities in Pennsylvania are restricted after December 31, 2010. Three Mile Island Unit-2 will no longer receive rate payer funding for decommissioning after December 31, 2010, when Metropolitan Edison and Penn Elec's rate cap are lifted."

b. NRC Staff Response

The March 29, 2010 Decommissioning Funding Status Report includes the "Schedule of Annual Amounts Remaining to Be Collected as of December 31, 2009" (Schedule 1) for TMI-2 (ADAMS Accession No. ML100960464). In Schedule 1, the Licensee reported $4,054,046 was to be deposited into the TMI-2 decommissioning trust fund in 2010 (ADAMS Accession No. ML100960464). Schedule 1 also reports that on February 19, 2010, the Jersey Central Power & Light Company filed a request with the New Jersey Board of Public Utilities to reduce the Nuclear Decommissioning Cost charge to zero by June 1, 2010. If approved, Jersey Central Power & Light Company is expected to collect $1,206,046 in 2010 with no further deposits anticipated (ADAMS Accession No. ML100960464). Although no additional ratepayer contributions to the decommissioning trust funds are contemplated at this time, this does not mean that the decommissioning trust funds will remain stagnant. The Staff evaluated the projected annual earnings on the decommissioning funds, as detailed in Schedules 2 and 3 of the 2010 Decommissioning Funding Status Report. The NRC Staff found in its review of the 2010 TMI-2 Decommissioning Funding Status Report that the compounded projected earnings on the trust funds, permitted under 10 C.F.R. § 50.75(e)(1)(ii), that the Licensee provided reasonable assurance that adequate funds will be available for the decommissioning of TMI-2. The Staff has determined that no further information is required at this time.

3. FENOC's Investment Plan to Make Up the Current Decommissioning Shortfall

a. Petitioner Basis for Request

The Petitioner states that FENOC's Decommissioning Trust Fund for TMI-2 is underfunded. At the time the petition was filed, the radiological decommissioning cost estimate was $831.5 million. However, as of December 31, 2008, the amount in the decommissioning trust fund was $484.5 million.

b. NRC Staff Response

As mentioned earlier, the Petition was based on outdated data contained in the March 2009 report; the Staff is using the data contained in the Licensee's 2010 Decommissioning Funding Status Report. The Staff points out that as of December 31, 2009, the total amount accumulated in all the external decommissioning trust funds dedicated to TMI-2 is $576,826,096.

Based on the Staff's review of the March 29, 2010 submittal (ADAMS Accession No. ML100960464), and in accordance with NRC regulations in 10 C.F.R. § 50.75, guidance document NUREG-1307, Rev. 14, "Report on Waste Burial Charges," and Staff guidance LIC-205, Rev. 4, "Procedures for NRC Independent Analysis of Decommissioning Funding Assurance for Operating Nuclear Power Reactors," the NRC Staff has found that the Licensee is providing reasonable decommissioning funding assurance. Therefore, no modification of the Licensee's schedule for the accumulation of decommissioning funds is necessary at this time. Had the Staff found the Licensee had not provided adequate assurance for decommissioning funding, the NRC Staff would have sought further assurances from the Licensee through the methods available to the Licensee under 10 C.F.R.§§ 50.75(e)(1).

4. FENOC's Proposed Financial Contribution Plan to Make Up the Current Decommissioning Shortfall

a. Petitioner Basis for Request

The Petitioner raises concerns that the financial contribution plan submitted by the Licensee in 2008 indicates a shortfall in the required funding amount and that adequate funds will not be available at the time of decommissioning. The Petitioner points out that in the 2009 status report, the radiological decommissioning cost estimate was $831.5 million and the amount of funds in the decommissioning trust fund was $484.5 million, as of December 31, 2008. The Petitioner raises an additional concern that the cost to decommission TMI-2 increased by $26.5 million in less than 3 years, while FENOC's decommissioning trust fund assets decreased by $116.5 million during the same time period.

b. NRC Staff Response

As was discussed above, the Staff's review of the March 29, 2010 submittal (ADAMS Accession No. ML100960464) determined that no further contributions to the Licensee's external decommissioning trust funds were necessary. The Staff agrees with the Petitioner that market fluctuations and other site-specific factors may affect trust fund balances; for this reason the regulations in 10 C.F.R.

§ 50.75(f)(2) require annual submittals for TMI-2 updating, and any change to the decommissioning plans, as well as any deviations experienced in decommissioning funding, shall be reviewed accordingly. Future NRC Staff reviews may reveal circumstances that require the Licensee to make appropriate funding changes, pursuant to 10 C.F.R. § 50.75(e)(2), so that reasonable decommissioning funding assurance will be preserved.

5. FirstEnergy's Plan to Fund the Decommissioning Trust for TMI-2, if TMI-1 Is Prematurely Retired

a. Petitioner Basis for Request

FENOC anticipates that TMI-1 will operate at least until the end of its current license. In the event that any of the nuclear generating stations are retired early, FENOC anticipates that funding will be adjusted to match any change in decommissioning schedule and/or cost scenario.

b. NRC Staff Response

As stated in the SSCE, FirstEnergy Corp. plans on synchronizing the decommissioning of TMI-2 with the decommissioning of TMI-1. At this time, GPU Nuclear has not declared any schedule deviations since the March 29, 2010 submittal, and the NRC regulations do not require a licensee to speculate about possible decommissioning funding alternatives. According to the SSCE, TMI-2 will remain in a state of Post-Defueling Monitored Storage until decommissioning activities begin in 2034. However, should TMI-1 cease operations prior to 2034, FirstEnergy will be required to provide a new site-specific decommissioning cost estimate, subject to approval by NRC Staff, addressing the revised timeline, as well as a revised plan to satisfactorily meet decommissioning funding assurance.

6. FirstEnergy's Planned Timing for Decommissioning TMI-2, if TMI-1 Is Prematurely Retired

a. Petitioner Basis for Request

FENOC anticipates that TMI-1 will operate at least until the end of its current license. In the event that any of the nuclear generating stations are retired early, FENOC anticipates that funding will be adjusted to match any change in decommissioning schedule and/or cost scenario.

b. NRC Staff Response

As indicated above, at this time, GPU Nuclear has not declared any schedule deviations since the March 29, 2010 submittal, and NRC regulations do not require a licensee to speculate about possible decommissioning funding alternatives. If GPU Nuclear changes the current decommissioning plans for TMI-2, then appropriate submittals attesting to the change will be required by the Staff, pursuant to 10 C.F.R. § 50.75.

7. Petitioner Requested the NRC Provide the Petitioner with Copies of Correspondence Concerning NRC's Review of the Petition, as Well as, Notice of Meetings and the Opportunity to Participate in Meeting Related to the Petition

a. Petitioner Requests

Petitioner requested

(a) Copies of all correspondence sent to FirstEnergy regarding this Petition;

(b) Advance notice of all public and private meetings conducted by the Agency regarding this Petition;

(c) An opportunity to participate in all relevant phone calls between NRC Staff and FirstEnergy regarding this Petition;

(d) Copies of all correspondence sent to Members of Congress and/or industry organizations (e.g., the Nuclear Energy Institute, the Electric Power Research Institute, the Institute for Nuclear Power Operations, Commonwealth of Pennsylvania), Department of Justice, and the Securities and Exchange Commission regarding this Petition.

b. NRC Staff Response

The Staff has provided the Petitioner ADAMS Accession numbers for all documents and correspondence relevant to the review of the Petition. Petitioner was provided with notice of and an opportunity to participate in telephone calls between the Staff and the Licensee. With the exception of a short conversation on February 10, 2011, between the Staff and the Licensee (memorialized in ADAMS Accession No. ML110540341), the Staff held no public or private meetings concerning this Petition. In addition, no correspondence from third parties concerning the Petition was received by the Staff.

8. Petitioner Raised the Concern That a Proposed Merger Between FirstEnergy and Allegheny Energy Will "place additional financial pressures on FirstEnergy's ability to satisfy its decommissioning obligations in 2036"

a. NRC Staff Response

In the teleconference of October 19, 2010, the Staff and the Petitioner discussed the proposed merger between FirstEnergy and Allegheny Energy; the Petitioner stated he understood that FirstEnergy has not filed a formal application with the NRC for a review of the merger and that the NRC was not planning to take any action in the matter (ADAMS Accession No. ML103120216 at 15-16). The Staff's evaluation of the Licensee's decommissioning funding status report for 2010 determined there is reasonable assurance of adequate funding for the decommissioning process, and the Staff considers this issue to be closed.

III. CONCLUSION

On March 29, 2010, GPU Nuclear submitted an updated decommissioning funding status report for TMI-2, which is the latest site-specific decommissioning funding plan. The NRC Staff reviewed this submission and determined that GPU Nuclear is providing adequate decommissioning funding assurance. (Note: Although the Petitioner referred to a March 2009 Decommissioning Funding Status Report, the Staff reviewed and discussed the March 2010 report because it contained current data.) Furthermore, in accordance with NRC Regulations in 10 C.F.R. § 50.75, and guidance documents, NUREG-1307, Rev. 14, "Report on Waste Burial Charges," and LIC- 205, Rev. 4, "Procedures for NRC Independent Analysis of Decommissioning Funding Assurance for Operating Nuclear Power Reactors," Staff has determined that GPU Nuclear is providing reasonable decommissioning funding assurance and no modification of the Licensee's schedule for the accumulation of decommissioning funds is necessary at this time.

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

Scott W. Moore, Acting Director
Office of Federal and State
Materials and Environmental
Management Programs

Dated at Rockville, Maryland,
this 2nd day of June 2011.

ATTACHMENT TO THE FINAL DIRECTOR'S DECISION

COMMENTS ON THE PROPOSED DIRECTOR'S DECISION FROM THE PETITIONER AND LICENSEE, AND THE NRC STAFF RESPONSES

The U.S. Nuclear Regulatory Commission (NRC) sent a copy of the proposed Director's Decision to the Petitioner and to GPU Nuclear, Inc. for comment on April 5, 2011 (ADAMS Accession Nos. ML110680183 and ML110940183). The Petitioner responded with comments on May 1, 2011 (ADAMS Accession No. ML11111260128), and the Licensee responded on April 18, 2011 (ADAMS Accession No. ML11116A073). NRC's response to the comments received is provided below.

The NRC Staff Response to the Petitioner's Comments

The Petitioner provided comments on the proposed Director's Decision via e-mail dated May 1, 2011. The Petitioner's comments are publicly available in ADAMS (ADAMS Accession No. ML111260128). The Petitioner's comments made changes to the NRC-published proposed Director's Decision. The Staff notes that much of the text included under the headings titled "NRC Staff's Response" in the Petitioner's comments was inconsistent with the text of the proposed Director's Decision.

In the Petition, the Petitioner seeks enforcement action in the form of a Demand for Information (DFI) requiring FirstEnergy to provide the NRC with site-specific information and financial guarantees that demonstrate and verify the Licensee has adequate funding in place to decommission and decontaminate Three Mile Island, Unit 2 (TMI-2). As stated in the Petition, the Petitioner evaluated the 2008 Decommissioning Funding Status Report, which was the most current information at the time. However, in March 2010, GPU Nuclear submitted the 2009 Decommissioning Funding Status Report for TMI-2. Therefore, in order to determine the current state of the Licensee's decommissioning funding assurance, the Staff critically reviewed and evaluated the site-specific 2009 Decommissioning Funding Status Report for TMI-2, which was submitted by GPU Nuclear (the Licensee) on March 29, 2010.

The Licensee submitted additional information on November 9, 2010, and February 10, 2011, as part of the 2.206 process. All information submitted by the Licensee was available to the Petitioner as public documents in ADAMS. The Staff reviewed the Licensee's submittals and determined that GPU Nuclear provided the information required by NRC regulations in 10 C.F.R. § 50.75. The Staff found that the Licensee's decommissioning trust fund demonstrates adequate

decommissioning funding assurance, and that no modification of the Licensee's schedule for the accumulation of decommissioning funds is necessary at this time.

The Petitioner's comments on the proposed Director's Decision are generally critical of the Staff's evaluation and dispute the Staff findings, as indicated by repeating the following comment in several places on the proposed Director's Decision:

> The Staff's review is fatally flawed and based on limited assumptions, incomplete analyses and licensee driven predictions which are unverifiable and have historically proven to be grossly inaccurate. For a complete discussion of the "Petitioner's Responses and Discussion" to the Draft Director's Decision please refer to pp. 15-20.
>
> In addition, please see the Petitioner's DFI, p. 2, pp. 5-6 and pp.5-9, for a thorough analyses of TMI-2 inability to predict funding targets.

The Staff reviewed the "Petitioner's Responses and Discussion to Draft Decision to the proposed Director's Decision." The Petitioner failed to raise any new information in the first 15 pages of his response. He refers the Staff to concerns raised in this original DFI and reiterates them in the response. These concerns were fully evaluated and discussed in the proposed Director's Decision. The NRC Staff reviewed this submission and determined that Licensee is providing adequate decommissioning funding assurance and no modification of the Licensee's schedule for the accumulation of decommissioning funds is necessary at this time.

The Petitioner raises new concerns and provides new information in the Response, specifically at pages 15-20. The Petitioner states that the proposed Director's Decision is deficient because the Staff's review of the 2009 Decommissioning Funding Status Report did not include a number of evaluations concerning the merger of FirstEnergy and Allegheny Energy and that data FirstEnergy provided concerning the merger was in some way flawed. As the Staff discussed in the proposed Director's Decision, the merger between FirstEnergy and Allegheny Energy is outside the regulatory authority of the NRC; specifically, under NRC regulations the NRC does not have authority to analyze the impact of the merger. NRC evaluates mergers when nuclear interests are involved; no evidence has been provided by the Petitioner of any nuclear interests that were under the control of Allegheny Energy. Moreover, the Licensee's Decommissioning Funding Status Report meets the requirements of 10 C.F.R. § 50.75, and the Staff's review was conducted in accordance with NRC guidance documents, NUREG-1307, Rev. 14, and LIC-205, Rev. 4.

The Staff concludes that the Petitioner's comments reflect dissatisfaction with the regulatory requirements of 10 C.F.R.§ 50.75. Changes to this regulation are outside the scope of the 2.206 petition process.

The NRC Staff Response to the Licensee's Comments

The Licensee requested that NRC revise page 5 of the proposed Director's Decision to clarify that the $4,054,046 was to be deposited in the TMI-2 decommissioning trust in 2010 on behalf of Metropolitan Edison Company and Jersey Central Power and Light Company instead of Metropolitan Edison Company and Pennsylvania Electric Company as stated in the proposed Director's Decision. The Staff evaluated the Licensee's requested clarification and found it to be accurate, and the Director's Decision was changed accordingly.

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AREVA ENRICHMENT SERVICES, LLC
MATERIALS LICENSE; FIRST PARTIAL INITIAL DECISION (Uncontested/Mandatory Hearing on Safety Matters); Docket No. 70-7015-ML (ASLBP No. 10-899-02-ML-BD01); LBP-11-11, 73 NRC 455 (2011)

DAVID GEISEN
ENFORCEMENT; MEMORANDUM AND ORDER (Denying Application for Attorneys' Fees); Docket No. IA-05-052 (ASLBP No. 06-845-01-EA); LBP-11-8, 73 NRC 349 (2011)

DETROIT EDISON COMPANY
COMBINED LICENSE; MEMORANDUM AND ORDER (Denying Motions for Summary Disposition of Contentions 6 and 8; Denying in Part and Granting in Part Motion to Strike); Docket No. 52-033-COL (ASLBP No. 09-880-05-COL-BD01); LBP-11-14, 73 NRC 591 (2011)

DOMINION VIRGINIA POWER
COMBINED LICENSE; MEMORANDUM AND ORDER (Declining to Admit New Contentions 12 and 13); Docket No. 52-017-COL (ASLBP No. 08-863-01-COL); LBP-11-10, 73 NRC 424 (2011)

ENERGYSOLUTIONS, LLC
INPORT AND EXPORT LICENSES; MEMORANDUM AND ORDER; Docket Nos. 110-05896 (Import), 110-05897 (Export); CLI-11-3, 73 NRC 613 (2011)

ENTERGY NUCLEAR OPERATIONS, INC.
LICENSE RENEWAL; MEMORANDUM AND ORDER; Docket No. 50-271-LR; CLI-11-2, 73 NRC 333 (2011)
REQUEST FOR ACTION; DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206; Docket No. 50-271 (License No. DPR-28); DD-11-1, 73 NRC 7 (2011); DD-11-3, 73 NRC 375 (2011)

ENTERGY NUCLEAR VERMONT YANKEE, LLC
LICENSE RENEWAL; MEMORANDUM AND ORDER; Docket No. 50-271-LR; CLI-11-2, 73 NRC 333 (2011)
REQUEST FOR ACTION; DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206; Docket No. 50-271 (License No. DPR-28); DD-11-1, 73 NRC 7 (2011); DD-11-3, 73 NRC 375 (2011)

EXELON NUCLEAR TEXAS HOLDINGS, LLC
EARLY SITE PERMIT; MEMORANDUM AND ORDER (Rulings on Standing, Contention Admissibility, and Selection of Hearing Procedures); Docket No. 52-042 (ASLBP No. 11-908-01-ESP-BD01); LBP-11-16, 73 NRC 645 (2011)

FIRSTENERGY NUCLEAR OPERATING COMPANY
LICENSE RENEWAL; April 26, 2011; MEMORANDUM AND ORDER (Ruling on Petition to Intervene and Request for Hearing); LBP-11-13, 73 NRC 534 (2011)
REQUEST FOR ACTION; DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206; Docket No. 50-346 (License No. NPF-3); DD-11-2, 73 NRC 323 (2011)
REQUEST FOR ACTION; DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206; Docket No. 50-320 (License No. DPR-73); DD-11-4, 73 NRC 713 (2011)

FLORIDA POWER & LIGHT COMPANY
COMBINED LICENSE; MEMORANDUM AND ORDER (Ruling on Petitions to Intervene); Docket Nos. 52-040-COL, 52-041-COL (ASLBP No. 10-903-02-COL-BD01); LBP-11-6, 73 NRC 149 (2011)
COMBINED LICENSE; MEMORANDUM AND ORDER (Denying CASE's Motion to Admit Newly Proffered Contentions); Docket Nos. 52-040-COL, 52-041-COL (ASLBP No. 10-903-02-COL-BD01); LBP-11-15, 73 NRC 629 (2011)

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LUMINANT GENERATION COMPANY, LLC
COMBINED LICENSE; MEMORANDUM AND ORDER (Ruling on Motion for Summary Disposition of Contention 18 and Alternatives Contention A); Docket Nos. 52-034-COL, 52-035-COL (ASLBP No. 09-886-09-COL-BD01); LBP-11-4, 73 NRC 91 (2011)

MATTINGLY TESTING SERVICES, INC.
ENFORCEMENT; MEMORANDUM AND ORDER (Accepting Proposed Settlement and Dismissing Proceeding); Docket No. 30-20836-EA (ASLBP No. 10-905-02-EA-BD01); LBP-11-3, 73 NRC 81 (2011)

NEXTERA ENERGY SEABROOK, LLC
LICENSE RENEWAL; MEMORANDUM AND ORDER (Ruling on Petitions for Intervention and Requests for Hearing); Docket No. 50-443-LR (ASLBP No. 10-906-02-LR-BD01); LBP-11-2, 73 NRC 28 (2011)

NUCLEAR INNOVATION NORTH AMERICA LLC
COMBINED LICENSE; MEMORANDUM AND ORDER (Rulings on Question Regarding Intervenors' Challenge to NRC Staff Denial of Documentary Access, on Motions for the Summary Disposition of Contention CL-2, and on the Admissibility of New DEIS Contentions); Docket Nos. 52-12-COL, 52-13-COL (ASLBP No. 09-885-08-COL-BD01); LBP-11-7, 73 NRC 254 (2011)

OLD DOMINION ELECTRIC COOPERATIVE
COMBINED LICENSE; MEMORANDUM AND ORDER (Declining to Admit New Contentions 12 and 13); Docket No. 52-017-COL (ASLBP No. 08-863-01-COL); LBP-11-10, 73 NRC 424 (2011)

PACIFIC GAS AND ELECTRIC COMPANY
LICENSE RENEWAL; MEMORANDUM AND ORDER (Concerning Protective Order and Nondisclosure Agreement); Docket Nos. 50-275-LR, 50-323-LR (ASLBP No. 10-890-01-LR-BD01); LBP-11-5, 73 NRC 131 (2011)

PA'INA HAWAII, LLC
MATERIALS LICENSE; MEMORANDUM AND ORDER (Terminating Proceeding); Docket No. 30-36974-ML (ASLBP No. 06-843-01-ML); LBP-11-12, 73 NRC 531 (2011)

PETITION FOR RULEMAKING TO AMEND 10 C.F.R. § 54.17(c)
RULEMAKING PETITION; MEMORANDUM AND ORDER; Docket No. PRM-54-6; CLI-11-1, 73 NRC 1 (2011)

PROGRESS ENERGY FLORIDA, INC.
COMBINED LICENSE; MEMORANDUM AND ORDER (Denying Motion to Dismiss Portions of Contention 4 as Moot); Docket Nos. 52-029-COL, 52-030-COL (ASLBP No. 09-879-04-COL-BD01); LBP-11-1, 73 NRC 19 (2011)

SHAW AREVA MOX SERVICES
MATERIALS LICENSE AMENDMENT; MEMORANDUM AND ORDER (Admitting New Contentions 9, 10, and 11); Docket No. 70-3098-MLA (ASLBP No. 07-856-02-MLA-BD01); LBP-11-9, 73 NRC 391 (2011)

VIRGINIA ELECTRIC AND POWER COMPANY
COMBINED LICENSE; MEMORANDUM AND ORDER (Declining to Admit New Contentions 12 and 13); Docket No. 52-017-COL (ASLBP No. 08-863-01-COL); LBP-11-10, 73 NRC 424 (2011)

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Advanced Medical Systems, Inc. (One Factory Row, Geneva, OH 44041), ALAB-929, 31 NRC 271, 281-82 (1990)

a materials license suspension proceeding is not an adversary adjudication for purposes of the Equal Access to Justice Act because the Atomic Energy Act of 1954, as amended, does not require such a hearing to be on the record pursuant to Administrative Procedure Act § 554; LBP-11-8, 73 NRC 355 (2011)

Advanced Medical Systems, Inc. (One Factory Row, Geneva, OH 44041), ALAB-929, 31 NRC 271, 284 (1990)

in cases involving license suspension or revocation, where the Atomic Energy Commission's staff is cast in an accusatory role, the precautions prescribed by the Administrative Procedure Act should be carefully observed; LBP-11-8, 73 NRC 357 n.31 (2011)

Advanced Medical Systems, Inc. (One Factory Row, Geneva, OH 44041), ALAB-929, 31 NRC 271, 289 (1990)

the Administrative Conference of the United States 1981 and 1985 Model Rules rejected language that would have extended the Equal Access to Justice Act's applicability to proceedings in which an agency observes formal Administrative Procedure Act § 554 procedures as a matter of discretion; LBP-11-8, 73 NRC 356 (2011)

Advanced Medical Systems, Inc. (One Factory Row, Geneva, OH 44041), ALAB-929, 31 NRC 271, 289-91 (1990)

an agency's discretionary choice to conduct a formal on-the-record hearing is irrelevant when determining whether the Equal Access to Justice Act applies to a particular proceeding; LBP-11-8, 73 NRC 360 (2011)

the Equal Access to Justice Act does not apply when an agency merely voluntarily chooses to abide by formal Administrative Procedure Act § 554 procedures, despite lacking a statutory mandate to do so; LBP-11-8, 73 NRC 356 (2011)

Advanced Medical Systems, Inc. (One Factory Row, Geneva, OH 44041), ALAB-929, 31 NRC 271, 291 (1990)

attorneys' fees may be awarded in adversary adjudications that are governed by Administrative Procedure Act § 554, but they may not be awarded in adversary adjudications that Congress did not subject to that section; LBP-11-8, 73 NRC 356 (2011)

because the Equal Access to Justice Act operates as a waiver of sovereign immunity it must be narrowly construed to avoid creating a waiver of sovereign immunity that Congress did not intend; LBP-11-8, 73 NRC 357 (2011)

despite the fact that, although not required by statute, the Commission conducts materials license suspension cases as formal, on-the-record hearings like those described by Administrative Procedure Act § 554, the Equal Access to Justice Act does not apply to such proceedings and may not serve as the basis for an award of attorney's fees; LBP-11-8, 73 NRC 356-57 (2011)

Advanced Medical Systems, Inc. (One Factory Row, Geneva, OH 44041), ALAB-929, 31 NRC 271, 291 n.14 (1990)

inasmuch as litigants against the government manifestly have no constitutional right to be compensated out of public funds for their attorneys' fees, it cannot be doubted that Congress has the power to limit the reach of the Equal Access to Justice Act; LBP-11-8, 73 NRC 357, 361 (2011)

the Equal Access to Justice Act applies only when an adjudication is required by statute, not when required by the Constitution, to be conducted on the record; LBP-11-8, 73 NRC 362 (2011)

there is nothing in the legislative history of the Equal Access to Justice Act or the pertinent case law to suggest a congressional intent to extend the EAJA to cases in which due process, rather than a statute, requires an Administrative Procedure Act § 554 hearing; LBP-11-8, 73 NRC 357 (2011)

Advanced Medical Systems, Inc. (One Factory Row, Geneva, OH 44041), CLI-93-22, 38 NRC 98, 102 (1993)

any doubt as to the existence of a genuine issue of material fact is resolved against the summary disposition movant; LBP-11-4, 73 NRC 100 (2011)

because the initial burden rests on the summary disposition movant, a licensing board must examine the record in the light most favorable to the nonmoving party and all justifiable inferences must be drawn in favor of the nonmoving party; LBP-11-14, 73 NRC 595 (2011)

if a summary disposition proponent fails to make the requisite showing, the board must deny the motion even if the opposing party chooses not to respond or its response is inadequate; LBP-11-4, 73 NRC 99 (2011); LBP-11-14, 73 NRC 595 (2011)

if movant makes a proper showing for summary disposition, and if the opposing party does not show that a genuine issue of material fact exists, the board may summarily dispose of all arguments on the basis of the pleadings; LBP-11-4, 73 NRC 100 n.19 (2011); LBP-11-7, 73 NRC 263 (2011)

NRC standards for ruling on summary disposition motions are analogous to the standards for granting summary judgment motions under Rule 56 of the Federal Rules of Civil Procedure; LBP-11-7, 73 NRC 263 (2011)

summary judgment should be granted only where the truth is clear; LBP-11-14, 73 NRC 595 (2011)

summary judgment, which is appropriate upon proper showings of the lack of a genuine, triable issue of material fact, is an integral part of the Federal Rules as a whole, which are designed to secure the just, speedy, and inexpensive determination of every action; LBP-11-4, 73 NRC 99 (2011)

Advanced Medical Systems, Inc. (One Factory Row, Geneva, Ohio 44041), CLI-93-22, 38 NRC 98, 102-03 (1993)

when ruling on motions for summary disposition, the Commission applies standards analogous to those used by federal courts when ruling on motions for summary judgment under Rule 56 of the Federal Rules of Civil Procedure; LBP-11-14, 73 NRC 595 (2011)

Advanced Medical Systems, Inc. (One Factory Row, Geneva, Ohio 44041), CLI-94-6, 39 NRC 285, 301 (1994)

immediately effective enforcement orders must be based on preliminary investigation or other emerging information that is reasonably reliable and indicates the need for immediate action; LBP-11-8, 73 NRC 369-70 (2011)

the standard that must be met before NRC Staff can issue an immediately effective enforcement order is one of adequate evidence, which is akin to the test for probable cause; LBP-11-8, 73 NRC 9 (2011)

Advanced Medical Systems, Inc. (One Factory Row, Geneva, Ohio 44041), CLI-94-6, 39 NRC 285, 306 n.31 (1994)

even if a witness's testimony was entirely hearsay, evidence of that kind is generally admissible in administrative proceedings; LBP-11-14, 73 NRC 600 n.59 (2011)

Advanced Medical Systems, Inc. (One Factory Row, Geneva, Ohio 44041), CLI-94-6, 39 NRC 285, 306-07 (1994)

in upholding summary disposition in a proceeding to enforce a suspension order, the Commission ruled that the hearsay nature of a witness's statement did not preclude the licensing board from considering it, at least in the absence of evidence questioning its reliability; LBP-11-14, 73 NRC 600 n.59 (2011)

Advanced Nuclear Fuels Corp. (Import of South African Enriched Uranium Hexafluoride), CLI-87-9, 26 NRC 109 (1987)

a discretionary hearing on an import/export license application was allowed where the Commission was concerned with legal interpretations of the Anti-Apartheid Act, and the hearing involved written submissions on this issue; CLI-11-3, 73 NRC 625 n.62 (2011)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 118 (2006)

the multifactor contention admissibility test in 10 C.F.R. 2.309(f)(1) is strict by design; LBP-11-6, 73 NRC 170-71 (2010)

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AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 123 n.71 (2006)

petitioners have an affirmative obligation to request confidential and proprietary information that has not been made publicly available, in order to support a proposed contention; LBP-11-9, 73 NRC 416 (2011)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124, 129 (2007)

NEPA imposes no legal duty on NRC to consider intentional malevolent acts in conjunction with commercial power reactor license renewal applications; LBP-11-2, 73 NRC 64 (2011); LBP-11-13, 73 NRC 571 (2011)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124, 131 (2007)

NRC has analyzed terrorist acts in connection with license renewal and concluded that the core damage and radiological release from such acts would be no worse than the damage and release expected from internally initiated events; LBP-11-2, 73 NRC 64 (2011)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 484 (2008)

suspension of licensing proceedings is considered a drastic action that is not warranted absent immediate threats to public health and safety; CLI-11-1, 73 NRC 4 (2011)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 484-85 (2008)

the Commission has occasionally considered requests to suspend proceedings or hold them in abeyance in the exercise of its inherent supervisory powers over proceedings; CLI-11-1, 73 NRC 3 n.5 (2011)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC 658, 668 (2008)

because petitioner seeks both to reopen the record and to submit a late contention, it must successfully satisfy two elevated standards; CLI-11-2, 73 NRC 338 (2011)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC 658, 674 (2008)

bare assertions and speculation do not supply the requisite support for a motion to reopen; CLI-11-2, 73 NRC 346 (2011)

NRC imposes a deliberately heavy burden on petitioners seeking to reopen a record; CLI-11-2, 73 NRC 338 (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 the petitioner, petitioner (not the board) is required to supply all of the required elements for a valid intervention petition; LBP-11-16, 73 NRC 655 (2011)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260-61 (2009)

because petitioner made no effort to demonstrate that its contention, despite its lateness, should be considered for admission pursuant to 10 C.F.R. 2.309(c)(1), it is rejected as inexcusably late; LBP-11-15, 73 NRC 637, 643 n.23 (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 factor of the 10 C.F.R. 2.309(c) analysis; LBP-11-6, 73 NRC 247 n.113 (2010); LBP-11-9, 73 NRC 401 (2011); LBP-11-10, 73 NRC 446 (2011)

petitioner, having failed in its revised petition to challenge applicant's reliance on the generic environmental impact statement cannot raise that challenge for the first time in its reply; LBP-11-6, 73 NRC 235 (2010)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 271-72 (2009)

NRC's expanding adjudicatory docket makes it critically important that parties comply with its pleading requirements and that boards enforce those requirements; CLI-11-2, 73 NRC 339 n.22 (2011)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 277 n.240 (2009)

the burden of setting forth a clear and coherent argument is on petitioner, and it should not be necessary to speculate about what a pleading is supposed to mean; CLI-11-2, 73 NRC 337 n.14 (2011)

the Commission will not accept the filing of a vague, unparticularized issue; CLI-11-2, 73 NRC 337 n.14 (2011)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 287 (2009)
bare assertions and speculation do not supply the requisite support for a motion to reopen; CLI-11-2, 73 NRC 346 (2011)
NRC imposes a deliberately heavy burden on an intervenor who seeks to supplement the evidentiary record after it has been closed, even with respect to an existing contention; CLI-11-2, 73 NRC 338 (2011)
the burden of satisfying the requirement for reopening a record is a heavy one; CLI-11-2, 73 NRC 346 (2011)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), LBP-06-16, 63 NRC 737, 742 (2006)
a contention of omission alleges that an application suffers from an improper omission, whereas a contention of adequacy raises a specific substantive challenge to how particular information or issues have been discussed in the application; LBP-11-6, 73 NRC 200 n.53 (2010)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), LBP-06-16, 63 NRC 737, 742 n.7 (2006)
it is possible for a contention to contain an omission component and an inadequacy component; LBP-11-6, 73 NRC 200 n.53 (2010)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), LBP-06-22, 64 NRC 229, 244 (2006)
petitioner need not prove its contentions at the admissibility stage because boards do not adjudicate disputed facts at that juncture; LBP-11-2, 73 NRC 45 (2011); LBP-11-16, 73 NRC 655 (2011)

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), LBP-06-22, 64 NRC 229, 246 (2006), *aff'd,* CLI-09-7, 69 NRC 235, 274 (2009)
as a matter of law and logic if applicant's enhanced program is inadequate, then applicant's unenhanced program is a fortiori inadequate, and intervenor has a regulatory obligation to challenge it in its original petition to intervene; LBP-11-9, 73 NRC 417 (2011)

Anderson v. Liberty Lobby, Inc. 477 U.S. 242, 247-52 (1986)
at issue is not whether evidence unmistakably favors one side or the other, but whether there is sufficient evidence favoring the summary disposition opponent for a reasonable trier of fact to find in favor of that party; LBP-11-4, 73 NRC 100 (2011)
if evidence in favor of the summary disposition opponent is merely colorable or not significantly probative, summary disposition may be granted; LBP-11-4, 73 NRC 100 (2011)
only disputes over facts that might affect the outcome of a proceeding would preclude summary disposition; LBP-11-4, 73 NRC 100 (2011)

Anderson v. Liberty Lobby, Inc. 477 U.S. 242, 248 (1986)
if the question is a close one, boards must, in considering summary disposition opponent's submission, carefully ascertain whether any factual disputes asserted are genuine and relate to issues that would affect the outcome of the proceeding under relevant substantive law; LBP-11-4, 73 NRC 100 (2011)
summary disposition, like summary judgment, is an extreme remedy that should be granted with caution especially before the parties have been afforded an opportunity to marshal their evidence; LBP-11-7, 73 NRC 263 (2011)

Ardestani v. Immigration and Naturalization Service, 502 U.S. 129, 134 (1991)
the Equal Access to Justice Act does not apply to a proceeding that is not governed by the provisions of Administrative Procedure Act § 554 even if the procedures governing the proceeding substantially conform to the procedures required for formal adjudication under the APA; LBP-11-8, 73 NRC 360 n.48 (2011)

Ardestani v. Immigration and Naturalization Service, 502 U.S. 129, 135 (1991)
the most natural reading of the Equal Access to Justice Act's applicability to adjudications under Administrative Procedure Act § 554 is that those proceedings must be subject to or governed by § 554; LBP-11-8, 73 NRC 354-55 n.14 (2011)

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Ardestani v. Immigration and Naturalization Service, 502 U.S. 129, 137 (1991)
an agency's discretionary choice to conduct a formal on-the-record hearing is irrelevant when determining whether the Equal Access to Justice Act applies to a particular proceeding; LBP-11-8, 73 NRC 360 (2011)
only in rare cases does legislative history overcome the strong presumption that the legislative purpose is expressed by the ordinary meaning of the statutory language; LBP-11-8, 73 NRC 357 n.31 (2011)
the Equal Access to Justice Act renders the United States liable for attorney's fees for which it would not otherwise be liable, and thus amounts to a partial waiver of sovereign immunity, and any such waiver must be strictly construed in favor of the United States; LBP-11-8, 73 NRC 357 n.28 (2011)

Ardestani v. Immigration and Naturalization Service, 502 U.S. 129, 138 (1991)
the underlying purpose of the Equal Access to Justice Act is to eliminate financial disincentives for those who would defend against unjustified governmental action and thereby to deter the unreasonable exercise of government authority; LBP-11-8, 73 NRC 363 n.60 (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 requirements of 10 C.F.R. 2.309(f)(1) precludes admission of a contention; LBP-11-7, 73 NRC 280 (2011)

Babcock & Wilcox (Apollo, Pennsylvania Fuel Fabrication Facility), LBP-93-4, 37 NRC 72, 84 (1993)
even if an import or export license authorized possession and/or use of the low-level radioactive waste, the petition does not assert how the LLRW is a significant source of radioactivity or provide any scenario in which the import or export of the LLRW would result in an accident that could produce obvious offsite consequences; CLI-11-3, 73 NRC 622 n.46 (2011)

Babcock & Wilcox (Apollo, Pennsylvania Fuel Fabrication Facility), LBP-93-4, 37 NRC 72, 87-88 (1993)
mere potential exposure to minute doses of radiation within regulatory limits does not constitute a distinct and palpable injury on which standing can be founded; CLI-11-3, 73 NRC 623 n.51 (2011)

Babcock & Wilcox Co. v. United Technologies Corp., 435 F. Supp. 1249, 1256 (N.D. Ohio 1977)
baseload generation is different than peaking power, which provides supplemental power during hours of the day when demand is highest; LBP-11-13, 73 NRC 563 (2011)

Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc., 462 U.S. 87, 97 (1983)
in enacting NEPA, Congress's twin aims were to require an agency to consider every significant aspect of the environmental impact of a proposed action and ensure that the agency will inform the public that it has considered environmental concerns in its decisionmaking process; LBP-11-6, 73 NRC 172 n.20 (2010); LBP-11-7, 73 NRC 264 (2011)
NEPA requires an agency to take a hard look at the environmental consequences before taking a major action and to report the result of that hard look in an environmental impact statement; LBP-11-6, 73 NRC 172 n.20 (2010)

Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc., 462 U.S. 87, 104-05 (1983)
as a logical proposition, risk equals the likelihood of an occurrence times the severity of the consequences; LBP-11-2, 73 NRC 63 n.212 (2011)

Baltimore Gas & Electric Co. (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 347 (1998), *aff'd, National Whistleblower Center v. NRC,* 208 F.3d 256 (D.C. Cir. 2000)
with respect to contentions filed after the initial petition, failure to address the requirements of 10 C.F.R. 2.309(c) and 2.309(f)(2) is reason enough to reject the new contentions; LBP-11-7, 73 NRC 289 n.227 (2011)

Baltimore Gas & Electric Co. (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 347 & n.9 (1998), *aff'd, National Whistleblower Center v. NRC,* 208 F.3d 256 (D.C. Cir. 2000)
intervenors seeking admission of a nontimely filed contention bear the burden of showing that, on balance, the section 2.309(c)(1) factors weigh in favor of admitting the proposed contention; LBP-11-7, 73 NRC 279 (2011)

Baltimore Gas & Electric Co. (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 347-48 (1998), *aff'd, National Whistleblower Center v. NRC,* 208 F.3d 256 (D.C. Cir. 2000)
the Commission has summarily dismissed petitioners who failed to address the factors for a late-filed petition; LBP-11-7, 73 NRC 279 n.159 (2011)

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Bennett v. Spear, 520 U.S. 154, 175 (1997)
when no proximity presumption applies, petitioner must assert some specific injury in fact that will result from action taken; CLI-11-3, 73 NRC 622 n.47 (2011)

Bolvin v. Black, 225 F.3d 36, 42-43 (1st Cir. 2000)
the Commission's action in adopting new procedural rules meets the rational basis test; LBP-11-4, 73 NRC 125 n.147 (2011)

Braunkohle Transport, USA (Import of South African Uranium Ore Concentrate), CLI-87-6, 25 NRC 891, 893-94 (1987)
formal adjudicatory procedures are inappropriate in export or import licensing proceedings; CLI-11-3, 73 NRC 623-24 n.53 (2011)

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915 (2009)
the proximity presumption applies if petitioner has frequent contacts with the geographic zone of potential harm; LBP-11-13, 73 NRC 546 (2011)

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915-16 (2009)
standing based on the proximity presumption has been found if petitioner or a representative of a petitioner organization resides within approximately 50 miles of the facility in question; LBP-11-13, 73 NRC 546, 548 (2011); LBP-11-16, 73 NRC 653 (2011)

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 917 (2009)
the proximity presumption's rationale is that in construction permit and operating license cases, persons living within the roughly 50-mile radius of the facility face a realistic threat of harm if a release from the facility of radioactive material were to occur; LBP-11-2, 73 NRC 41 n.51 (2011); LBP-11-13, 73 NRC 546 (2011)

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 924 (2009)
contentions challenging the ability of combined license applicants to handle onsite storage of Classes B and C low-level radioactive waste, as well as the attendant potential environmental impacts of such storage in the wake of the closure of the Barnwell facility in South Carolina to states outside of the Atlantic Compact are admissible; LBP-11-6, 73 NRC 242 (2010)
mere existence of the letter of intent to ship low-level radioactive waste to a disposal facility does not answer questions as to whether such a plan will ultimately result in a transfer of LLRW title and permanent offsite disposition of the LLRW and whether nontransfer of title will result in environmental impacts; LBP-11-6, 73 NRC 242 (2010)
merits determination cannot be resolved at the contention admissibility stage of the proceeding; LBP-11-6, 73 NRC 241 (2010)

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-09-4, 69 NRC 170, 183 (2009)
the proximity presumption's rationale is that persons living within the roughly 50-mile radius of the facility face a realistic threat of harm if a release from the facility of radioactive material were to occur; LBP-11-13, 73 NRC 546 (2011)

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-09-4, 69 NRC 170, 219-20, 224, *aff'd,* CLI-09-20, 70 NRC 911, 921-24 (2009)
contentions challenging the ability of combined license applicants to handle onsite storage of Classes B and C low-level radioactive waste, as well as the attendant potential environmental impacts of such storage in the wake of the closure of the Barnwell facility in South Carolina to states outside of the Atlantic Compact are admissible; LBP-11-6, 73 NRC 239 (2010)

Calvert Cliffs 3 Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-10-24, 72 NRC 720, 729-31 (2010)
intervenor may propose new or amended contentions based on data or conclusions in the NRC draft or final environmental impact statement, environmental assessment, or any supplements relating thereto, that differ significantly from the data or conclusions in the applicant's environmental documents; LBP-11-7, 73 NRC 277 (2011)

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Calvert Cliffs' Coordinating Committee, Inc. v. AEC, 449 F.2d 1109, 1123 (D.C. Cir. 1971)
- although NEPA does not explicitly mention cost-benefit balancing, courts have interpreted the statute as requiring federal agencies to balance the environmental costs against the anticipated benefits of a proposed action; LBP-11-7, 73 NRC 281 (2011)
- impacts of the possible routes that applicant will use for its transmission lines must be analyzed for applicant to give the NRC the requisite information to make an informed decision on its license; LBP-11-6, 73 NRC 199 n.52 (2010)

Carolina Environmental Study Group v. United States 510 F.2d 796, 801 (D.C. Cir. 1975)
- applicant's obligation is to consider alternatives as they exist and are likely to exist; LBP-11-2, 73 NRC 51 (2011); LBP-11-13, 73 NRC 563 (2011)

Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant), ALAB-852, 24 NRC 532, 544-45 (1986)
- although boards may give reasonable deference to NRC guidance, such agency guidance does not substitute for regulations, is not binding authority, and does not prescribe NRC requirements; LBP-11-16, 73 NRC 661, 670 (2011)

Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant), LBP-99-25, 50 NRC 25, 29 (1999)
- the interests a municipality seeks to represent on behalf of its residents are germane to its own purposes in the context of standing; LBP-11-6, 73 NRC 170 n.15 (2010)

Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant, Units 1, 2, 3, and 4), ALAB-490, 8 NRC 234, 240-41 (1978)
- NRC Staff's need-for-power analysis may accord an expert, independent agency's forecasts and studies great weight and may give heavy reliance to those forecasts and studies absent a showing that they contain a fundamental error; LBP-11-7, 73 NRC 282-83 n.178 (2011)

Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant, Units 1, 2, 3, and 4), ALAB-490, 8 NRC 234, 241 (1978)
- a state public service commission's determination of need for power may be relied on by the NRC in its own analysis, as long as that determination is neither shown nor appears on its face to be seriously defective; LBP-11-6, 73 NRC 218, 223 (2010)
- in its need-for-power analysis, NRC Staff may rely on studies and forecasts prepared by expert, independent agencies charged with the duty of ensuring that the utilities within their jurisdiction fulfill the legal obligation to meet customer demands; LBP-11-7, 73 NRC 282 (2011)

Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant, Units 1, 2, 3, and 4), CLI-79-5, 9 NRC 607, 609-10 (1979)
- because need-for-power assessments necessarily entail forecasting power demands in light of substantial uncertainty and the duty of providing adequate and reliable service to the public, they are inherently conservative; LBP-11-7, 73 NRC 283 (2011)
- long-range forecasts of demand for power are especially uncertain in that they are affected by trends in usage, increasing rates, demographic changes, industrial growth or decline, and the general state of the economy, among others; LBP-11-6, 73 NRC 223 n.84 (2010)

Celotex Corp. v. Catrett, 477 U.S. 317, 325 (1986)
- when the issue on which summary judgment is sought is one on which the nonmoving party bears the burden of proof, the burden on the moving party may be discharged by showing that there is an absence of evidence to support the nonmoving party's case; LBP-11-4, 73 NRC 100 n.16 (2011)

Celotex Corp. v. Catrett, 477 U.S. 317, 327 (1986)
- summary judgment, which is appropriate upon proper showings of the lack of a genuine, triable issue of material fact, is an integral part of the Federal Rules as a whole, which are designed to secure the just, speedy, and inexpensive determination of every action; LBP-11-4, 73 NRC 99 (2011)

Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 195 (D.C. Cir. 1991)
- agencies need only discuss those alternatives that are reasonable and will bring about the ends of the proposed action; LBP-11-13, 73 NRC 553 n.114 (2011)

Citizens Awareness Network, Inc. v. NRC, 391 F.3d 338, 343 (1st Cir. 2004)
- in 1982, NRC started to relax the procedural requirements for certain types of proceedings; LBP-11-8, 73 NRC 358 (2011)

the Atomic Energy Act requirement that NRC grant a hearing upon the request of any person whose interest may be affected by certain agency proceedings is interpreted as requiring formal Administrative Procedure Act § 554 on-the-record hearings; LBP-11-8, 73 NRC 358 (2011)

Citizens Awareness Network, Inc. v. NRC, 391 F.3d 338, 344 (1st Cir. 2004)

the Atomic Energy Act does not mandate on-the-record hearings for reactor licensing proceedings and the Commission therefore has the option of replacing existing procedural requirements with more informal ones; LBP-11-8, 73 NRC 358 (2011)

Citizens Awareness Network, Inc. v. NRC, 391 F.3d 338, 351 (1st Cir. 2004)

NRC's new procedural rules meet the requirements for Administrative Procedure Act § 554 on-the-record formal hearings but the question of whether the Atomic Energy Act requires NRC hearings to be on-the-record was not resolved; LBP-11-8, 73 NRC 359 (2011)

Citizens Awareness Network, Inc. v. NRC, 391 F.3d 338, 354 (1st Cir. 2004)

once a legally protectable interest is shown and intervenors are admitted as parties, the procedural rules cannot be administered so as to deprive intervenors of their interest in such rights without due process of law, or without arguably running afoul of the Administrative Procedure Act; LBP-11-4, 73 NRC 125 n.147 (2011)

should the agency's administration of its new procedural rules contradict its present representations that cross-examination will be allowed under the rules when required for a full and true disclosure of the facts or otherwise flout this principle, the rules may be subject to future challenges; LBP-11-4, 73 NRC 125 n.147 (2011)

there is no fundamental right to participate in administrative adjudications; LBP-11-4, 73 NRC 125 n.147 (2011)

Citizens Awareness Network, Inc. v. NRC, 391 F.3d 338, 355 (1st Cir. 2004)

the Commission's action in adopting new procedural rules meets the rational basis test; LBP-11-4, 73 NRC 125 n.147 (2011)

the Court applied a rational basis review to intervenor's challenge to NRC's 2004 changes to its procedural rules, citing cases involving challenges to laws regulating aspects of prisoners' right to access to the courts; LBP-11-4, 73 NRC 125 n.147 (2011)

City of Carmel-by-the-Sea v. Department of Transportation, 123 F.3d 1142, 1155 (9th Cir. 1997)

applicant's alternatives analysis need not discuss every conceivable alternative to the proposed action, but rather only feasible, nonspeculative, and reasonable alternatives; LBP-11-13, 73 NRC 553 (2011)

City of West Chicago v. NRC, 701 F.2d 632, 638 (7th Cir. 1983)

NRC may hold an informal hearing in which it requests and considers written materials without providing for traditional trial-type procedures such as oral testimony and cross-examination; LBP-11-4, 73 NRC 124 n.147 (2011)

City of West Chicago v. NRC, 701 F.2d 632, 642 (7th Cir. 1983)

formal adjudicatory procedures are inappropriate in export or import licensing proceedings; CLI-11-3, 73 NRC 623-24 n.53 (2011)

City of West Chicago v. NRC, 701 F.2d 632, 644 n.11 (7th Cir. 1983)

if a formal adjudicatory hearing is mandated by the due process clause, the absence of the on-the-record requirement will not preclude application of the Administrative Procedure Act; LBP-11-8, 73 NRC 361 (2011)

City of West Chicago v. NRC, 701 F.2d 632, 645 (7th Cir. 1983)

health, safety, and environmental concerns do not constitute liberty or property subject to due process protection; LBP-11-4, 73 NRC 124-25 n.147 (2011)

intervenors in reactor licensing proceedings ordinarily cannot raise constitutional due process issues with respect to NRC hearing procedures, inasmuch as intervenors cannot claim government deprivation of life, liberty or property as a result of the NRC's licensing action; LBP-11-4, 73 NRC 124 n.147 (2011)

Cleburne v. Cleburne Living Center, Inc., 473 U.S. 432, 439 (1985)

equal protection principles require that all persons similarly situated shall be treated alike; LBP-11-15, 73 NRC 639 n.20 (2011)

Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 92 (1993)

NRC generally applies traditional judicial standing concepts which require a showing that the individual has suffered or might suffer a concrete and particularized injury that is fairly traceable to

the challenged action, likely redressible by a favorable decision, and arguably within the zone of interests protected by the governing statutes; LBP-11-2, 73 NRC 40 (2011); LBP-11-13, 73 NRC 546 (2011)

Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 95 (1993)
in cases involving the possible construction or operation of a nuclear power reactor, the NRC considers proximity to the proposed facility to be sufficient to establish standing; LBP-11-16, 73 NRC 653 (2011)

Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), ALAB-443, 6 NRC 741, 754 (1977)
if summary disposition proponent meets its burden, the party opposing the motion must set forth specific facts showing that there is a genuine issue, and may not rely on mere allegations or denials, but no defense to an insufficient showing is required; LBP-11-7, 73 NRC 263 (2011); LBP-11-14, 73 NRC 595 (2011)

Coalition of Arizona/New Mexico Counties for Stable Economic Growth v. Department of Interior, 100 F.3d 837, 840-41 (10th Cir. 1996)
a prospective intervenor must show a direct, substantial, and legally protectable interest, the test for which is primarily a practical guide to disposing of lawsuits by involving as many apparently concerned persons as is compatible with efficiency and due process; LBP-11-4, 73 NRC 125 n.147 (2011)

Connecticut Bankers Association v. Board of Governors, 627 F.2d 245, 251 (D.C. Cir. 1980)
at the admission stage, petitioners should provide a minimal showing that material facts are in dispute, thereby demonstrating that an inquiry in depth is appropriate; LBP-11-2, 73 NRC 50 n.122 (2011); LBP-11-13, 73 NRC 564 n.196 (2011)

Consolidated Edison Co. of New York (Indian Point, Unit 3), CLI-74-28, 8 AEC 7, 8 (1974)
it is not enough, in an agency that values the hearing process and has preserved the opportunity for boards to look at matters on their own motion, just to refer safety matters to the Staff for resolution; LBP-11-9, 73 NRC 421 (2011)

Consolidated Edison Co. of New York (Indian Point, Unit 3), CLI-74-28, 8 AEC 7, 8-9 (1974)
to tie a board's hands when it sees an issue that needs to be explored would be utterly inconsistent with its stature and the responsibility of these expert tribunals, and simply referring such a matter to the Staff for resolution would not be an adequate solution; LBP-11-9, 73 NRC 418 n.12 (2011)

Consumers Energy Co. (Palisades Nuclear Plant), CLI-07-18, 65 NRC 399, 409 (2007)
interests that an 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-11-6, 73 NRC 169 (2010)
to demonstrate representational standing, an organization must show that at least one of its members might be affected by the proceeding, identify that member by name and address, and show that the member has authorized the organization to represent him or her and to request a hearing on his or her behalf; LBP-11-2, 73 NRC 40 (2011); LBP-11-6, 73 NRC 169 (2010); LBP-11-13, 73 NRC 545 (2011); LBP-11-16, 73 NRC 653 (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 factor of the 10 C.F.R. 2.309(c) analysis; LBP-11-2, 73 NRC 38 (2011); LBP-11-9, 73 NRC 401 (2011); LBP-11-13, 73 NRC 543 (2011)

Crow Butte Resources, Inc. (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 550-52 (2009)
petitioner may not rely on a document generated by a state agency if that document contains nothing more than a request for information; LBP-11-6, 73 NRC 249 n.115 (2010)

Crow Butte Resources, Inc. (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 552 (2009)
boards may reformulate contentions to eliminate extraneous issues or to consolidate issues for a more efficient proceeding; LBP-11-6, 73 NRC 193-94 (2010); LBP-11-13, 73 NRC 556 n.133, 568 n.222 (2011)

Crow Butte Resources, Inc. (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 569 (2009)
it is presumed that applicants intend to comply with state law; LBP-11-16, 73 NRC 678 n.185 (2011)

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Crowe Butte Resources, Inc. (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 571 (2009)
materials license regulations contain no express prohibition on foreign ownership, but require Staff to make a finding that license issuance will not be inimical to the common defense and security or the health and safety of the public; LBP-11-11, 73 NRC 488 (2011)

Curators of the University of Missouri (TRUMP-S Project), CLI-95-1, 41 NRC 71, 98 (1995)
although boards may give reasonable deference to NRC guidance, such agency guidance does not substitute for regulations, is not binding authority, and does not prescribe NRC requirements; LBP-11-16, 73 NRC 661, 670 (2011)

Curators of the University of Missouri (TRUMP-S Project), CLI-95-8, 41 NRC 386, 395 (1995)
permitting an application to be modified or improved throughout the NRC's review is compatible with the dynamic licensing process followed in Commission licensing proceedings; CLI-11-2, 73 NRC 345 (2011)

Dellums v. NRC, 863 F.2d 968, 971 (D.C. Cir. 1988)
when no proximity presumption applies, petitioner must assert some specific injury in fact that will result from action taken; CLI-11-3, 73 NRC 622 n.47 (2011)

Detroit Edison Co. (Enrico Fermi Atomic Power Plant, Unit 2), LBP-78-37, 8 NRC 575, 583 (1978)
an organization's standing can be demonstrated through the interests of its members, but if a member acts or speaks on behalf of the organization, that member must also demonstrate authorization by that organization to represent it; LBP-11-13, 73 NRC 548-49 (2011)

Detroit Edison Co. (Fermi Nuclear Power Plant, Unit 3), CLI-09-4, 69 NRC 80, 85 (2009)
the Commission refused to suspend the combined license proceeding pending completion of the design certification review of the ESBWR design certification process; CLI-11-1, 73 NRC 4 n.11 (2011)

Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 213 (2003)
the rules on contention admissibility are strict by design; LBP-11-16, 73 NRC 655 (2011)

Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 124 (2009)
section 2.309(f)(1) establishes the basic admissibility criteria that all contentions must satisfy; LBP-11-9, 73 NRC 400 n.55 (2011)

Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 126 (2009)
with respect to contentions filed after the initial petition, failure to address the requirements of 10 C.F.R. 2.309(c) and 2.309(f)(2) is reason enough to reject proposed new contentions; LBP-11-7, 73 NRC 286 n.203, 289 n.227 (2011)

Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358-59 (2001)
the rules on contention admissibility are strict by design; LBP-11-16, 73 NRC 655 (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 is grounds for rejecting a contention; LBP-11-16, 73 NRC 655 (2011)

Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 564 (2005)
if good cause is not shown, a board may still permit the late filing, but petitioner or intervenor must make a strong showing on the other factors of 10 C.F.R. 2.309(c); LBP-11-9, 73 NRC 401 (2011)

Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 564-65 (2005)
"good cause" for late filing is defined as a showing that petitioner could not have met the filing deadline and filed as soon as possible thereafter; LBP-11-7, 73 NRC 288 n.213 (2011)

Dominion Nuclear North Anna, LLC (Early Site Permit for North Anna ESP Site), LBP-07-9, 65 NRC 539, *permit issuance authorized,* CLI-07-27, 66 NRC 215 (2007)
mandatory proceedings for licensing of proposed uranium enrichment facility sites were conducted; LBP-11-11, 73 NRC 475 (2011)

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Dominion Nuclear North Anna, LLC (Early Site Permit for North Anna ESP Site), LBP-07-9, 65 NRC 539, 559-60, *permit issuance authorized,* CLI-07-27, 66 NRC 215 (2007)
relative to NEPA, in mandatory hearings, boards are to determine whether the review conducted by NRC Staff has been adequate, but they need not rethink or redo every aspect of Staff's environmental findings or undertake their own fact-finding activities; LBP-11-11, 73 NRC 476 (2011)

Duke Energy Carolinas, LLC (William States Lee III Nuclear Station, Units 1 and 2), CLI-09-21, 70 NRC 927, 931 (2009)
if impacts are remote or speculative, the environmental impact statement need not discuss them, including greenhouse gas emissions; LBP-11-7, 73 NRC 301 (2011)
under NEPA, NRC Staff must consider the cumulative impact of greenhouse gas emissions from a proposed facility; LBP-11-7, 73 NRC 307 (2011)

Duke Energy Carolinas, LLC (William States Lee III Nuclear Station, Units 1 and 2), LBP-08-17, 68 NRC 431, 447 (2008)
boards admit contentions, not their supporting bases; LBP-11-2, 73 NRC 56 (2011)

Duke Energy Corp. (Catawba Nuclear Station, Units 1 and 2), CLI-04-6, 59 NRC 62, 67 (2004)
board determination of expert's need to know with regard to a document withheld as safeguards information was reversed; LBP-11-9, 73 NRC 405 n.87 (2011)

Duke Energy Corp. (Catawba Nuclear Station, Units 1 and 2), CLI-04-6, 59 NRC 62, 67-69 (2004)
petitioner was denied access to a safeguards-protected design-related document on the basis of his lacking a need to know; LBP-11-9, 73 NRC 410 (2011)

Duke Energy Corp. (Catawba Nuclear Station, Units 1 and 2), CLI-04-21, 60 NRC 21, 27-28, *aff'g* LBP-04-13, 60 NRC 33, 36-37 (2004)
intervenors have demonstrated their ability to contribute to the development of a sound record where they have put forward in support of those contentions the views of a witness whose expertise has been recognized in other NRC proceedings; LBP-11-9, 73 NRC 413 n.123 (2011)

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 4 (2002)
cost-effective candidate severe accident mitigation alternatives are identified by comparing the annualized cost of the mitigation measure with the benefit as determined by the averted cost of severe accidents (consequences), as weighted by the probability of the accidents' occurrence; LBP-11-13, 73 NRC 565 (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)
severe accident mitigation alternatives analyses identify and assess possible plant changes, such as hardware modifications and improved training or procedures, that could cost-effectively reduce the radiological risk from a severe accident; LBP-11-13, 73 NRC 565 (2011)

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 7 (2002)
a SAMA analysis fulfills the requirement to provide a consideration of alternatives to mitigate severe accidents and therefore is governed by NEPA's rule of reason; LBP-11-13, 73 NRC 566 (2011)

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 7-8 (2002)
whether a SAMA may be worthwhile to implement is based upon a cost-benefit analysis, i.e., a weighing of the cost to implement with the reduction in risks to public health, occupational health, and offsite and onsite property; LBP-11-2, 73 NRC 63 (2011)

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 12 (2002)
a severe accident mitigation alternatives analysis is mandated by NEPA considerations and thus subject to a rule of reason; LBP-11-2, 73 NRC 61 (2011)

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358, 363-64 (2002)
safety issues that are routinely addressed through the agency's ongoing regulatory oversight are outside the scope of license renewal proceedings because considering them in that context would be unnecessary and wasteful; LBP-11-2, 73 NRC 45 (2011)

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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 an admitted contention is determined by the bases set forth in support of the contention; LBP-11-14, 73 NRC 609 (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)
the draft environmental impact statement might cure alleged omissions or deficiencies in the environmental report by including additional analysis that addresses such omissions or deficiencies; LBP-11-7, 73 NRC 276 n.150 (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, 383 n.44 (2002)
a contention contesting an applicant's environmental report generally may be viewed as a challenge to the NRC Staff's subsequent draft EIS, but new claims must be raised in a new or amended contention; LBP-11-1, 73 NRC 26 n.12 (2011)

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 382-83 (2002)
a contention based solely upon omissions from the environmental report is rendered moot when the missing information is supplied; LBP-11-14, 73 NRC 598 (2011)

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)
the board may consider environmental contentions made against an applicant's ER as challenges to an agency's subsequent DEIS only as long as the DEIS analysis or discussion at issue is essentially *in para materia* with the ER analysis or discussion that is the focus of the contention; LBP-11-1, 73 NRC 26 n.14 (2011)
where a contention alleges the omission of particular information or an issue from an application, and the information is later supplied by the applicant, the contention is moot; LBP-11-16, 73 NRC 705 (2011)
where the information in the DEIS is so different from the information in the ER that the DEIS dispenses with and moots the issues raised in the original contention, intervenor must file a new or amended contention against the DEIS; LBP-11-1, 73 NRC 26 (2011)

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 383 n.45 (2002)
a board's conclusion that a contention is one of omission is driven by its examination of the contention, including its underlying arguments; LBP-11-6, 73 NRC 200 (2010)

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 386 (2002)
hearing petitioners have an ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to uncover any information that could serve as the foundation for a specific contention; LBP-11-9, 73 NRC 403 n.73, 405 (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)
a SAMA analysis need only ensure that the environmental consequences of the project have been fairly evaluated; LBP-11-2, 73 NRC 64 (2011)
contentions must directly controvert relevant sections of the environmental report; LBP-11-16, 73 NRC 677 (2011)

Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 333-34 (1999)
under 10 C.F.R. 2.309(f)(1)(iv), intervenors need only demonstrate that the issue raised in the contention is material, i.e., that it would make a difference in the licensing decision; LBP-11-7, 73 NRC 292 (2011)
where implementation of a building code could not make a difference in the outcome of the proceeding, it cannot be material; LBP-11-7, 73 NRC 292 (2011)

Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999)
Congress called upon the Commission to make fundamental changes in its public hearing process to ensure that hearings adjudicate genuine, substantive safety and environmental issues placed in contention by qualified intervenors; LBP-11-6, 73 NRC 171 (2010)

the Commission toughened its contention admissibility rule in 1989 to ensure that only intervenors with genuine and particularized concerns participate in NRC hearings; LBP-11-6, 73 NRC 171 (2010)
the contention admissibility rule serves to ensure that admitted contentions focus on real disputes that can be resolved in an adjudication, establish a sufficient factual and legal foundation to warrant further inquiry, and put other parties on notice of the disputed issues so they will know precisely those claims they must support or oppose; LBP-11-6, 73 NRC 171 n.17 (2010)
the multifactor contention admissibility test in section 2.309(f)(1) was crafted by the Commission to raise the threshold bar for an admissible contention; LBP-11-6, 73 NRC 170-71 (2010)
under the previous contention admissibility rule, a contention could be admitted and litigated based on little more than speculation, with parties attempting to unearth a case through cross-examination; LBP-11-6, 73 NRC 171 (2010)

Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334-35 (1999)
the rules on contention admissibility are strict by design; LBP-11-16, 73 NRC 655 (2011)

Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 335 (1999)
that the contention admissibility rule is designedly strict is not to say that it should serve as a fortress to deny intervention; LBP-11-6, 73 NRC 171 (2010)

Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), ALAB-355, 4 NRC 397, 410 (1976)
because need-for-power assessments necessarily entail forecasting power demands in light of substantial uncertainty and the duty of providing adequate and reliable service to the public, they are inherently conservative; LBP-11-7, 73 NRC 283 n.183 (2011)

Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), ALAB-355, 4 NRC 397, 412 (1976)
even if a witness's testimony was entirely hearsay, evidence of that character is generally admissible in administrative proceedings; LBP-11-14, 73 NRC 600 n.59 (2011)

Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1050 (1983)
putative intervenors must raise issues as early as possible; LBP-11-9, 73 NRC 417 (2011)

Duke Power Co. (Perkins Nuclear Station, Units 1, 2, and 3), ALAB-431, 6 NRC 460, 462 (1977)
where good cause is not shown for the late filing of a contention, the requestor's demonstration on the other factors must be particularly strong; LBP-11-15, 73 NRC 634-35 (2011)

Duquesne Light Co. (Beaver Valley Power Station, Unit 1), ALAB-408, 5 NRC 1383, 1385 (1977)
boards' authority to seek to trigger review in extraordinary circumstances remains and has been put to good use; LBP-11-9, 73 NRC 418 n.13 (2011)

Ed A. Wilson, Inc. v. General Services Administration, 126 F.3d 1406, 1408 (Fed. Cir. 1997)
neither the Equal Access to Justice Act nor the legislative history provides a definition of the word "incur"; LBP-11-8, 73 NRC 364 (2011)

Ed A. Wilson, Inc. v. General Services Administration, 126 F.3d 1406, 1409 (Fed. Cir. 1997)
the presence of an attorney-client relationship suffices to entitle prevailing litigants to receive fee awards; LBP-11-8, 73 NRC 366 (2011)

Ed A. Wilson, Inc. v. General Services Administration, 126 F.3d 1406, 1410 (Fed. Cir. 1997)
both the union employee and the insured can be viewed as having incurred legal fees insofar as they have paid for legal services in advance as a component of the union dues or insurance premiums; LBP-11-8, 73 NRC 365 n.74 (2011)
denying Equal Access to Justice Act awards in insurance contexts would undermine the dual purposes of EAJA by both maintaining financial deterrents for those who would want to challenge unjust government action and not deterring unreasonable government actions; LBP-11-8, 73 NRC 366 (2011)

Edlow International Co. (Agent for the Government of India on Application to Export Special Nuclear Material), CLI-76-6, 3 NRC 563, 572 (1976)
mere interest in a problem is not sufficient by itself to render the organization adversely affected or aggrieved within the meaning of the Administrative Procedure Act; CLI-11-3, 73 NRC 622 n.41 (2011)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-09-11, 69 NRC 529, 533 (2009)
NRC adjudicatory hearings are not environmental impact statement editing sessions; LBP-11-2, 73 NRC 62 (2011)

petitioners have not established that use of another source term would identify additional cost-beneficial severe accident mitigation alternatives; LBP-11-13, 73 NRC 579 n.323 (2011)
the ultimate issue on severe accident mitigation alternatives analysis is whether any additional SAMA should have been identified as potentially cost-beneficial, not whether further analysis may refine the details in the SAMA NEPA analysis; LBP-11-2, 73 NRC 62 (2011); LBP-11-13, 73 NRC 566 (2011)
Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 287 (2010)
at issue is not whether evidence unmistakably favors one side or the other, but whether there is sufficient evidence favoring the summary disposition opponent for a reasonable trier of fact to find in favor of that party; LBP-11-4, 73 NRC 100 (2011)
if evidence in favor of the summary disposition opponent is merely colorable or not significantly probative, summary disposition may be granted; LBP-11-4, 73 NRC 100 (2011)
only disputes over facts that might affect the outcome of a proceeding would preclude summary disposition; LBP-11-4, 73 NRC 100 (2011)
summary disposition opponent may not rest upon mere allegations or denials, but must state specific facts showing that there is a genuine issue of fact for hearing; LBP-11-4, 73 NRC 100 (2011)
Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 291 (2010)
the very essence of severe accident mitigation analysis is to assess to what extent the probability-weighted consequences of the analyzed severe accident sequences would decrease if a specific SAMA were implemented; LBP-11-2, 73 NRC 63 (2011)
Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 297 (2010)
in applying the summary disposition standard, it is appropriate for the board to look not only to NRC regulatory and case law, but also to federal court case law on summary judgment under Rule 56 of the Federal Rules of Civil Procedure; LBP-11-4, 73 NRC 99 (2011)
when considering a motion for summary disposition, the function of the board is not to weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for hearing; LBP-11-14, 73 NRC 601 (2011)
Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 297-98 (2010)
at the summary disposition stage, the judge's function is not to weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for hearing; LBP-11-14, 73 NRC 595 (2011)
caution should be exercised in granting summary disposition, which may be denied if there is reason to believe that the better course would be to proceed to a full hearing; LBP-11-7, 73 NRC 264 (2011)
if reasonable minds could differ as to the import of the evidence, summary disposition is not appropriate; LBP-11-14, 73 NRC 595 (2011)
Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 301 (2010)
the Gaussian plume model's incorporation in the MACCS2 code and the wide, customary use of the code are not sufficient grounds to exclude the code's integral dispersion model from all challenge if adequate support is provided for a contention; LBP-11-2, 73 NRC 71 n.301 (2011)
Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 303, 305 (2010)
it is rarely appropriate to resolve complex, fact-intensive issues on the initial pleadings; LBP-11-13, 73 NRC 564 n.195 (2011)
Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 303, 317 (2010)
a SAMA contention is admissible only if 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; LBP-11-13, 73 NRC 566 (2011)
Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 305 (2010)
complex, fact-intensive issues are rarely appropriate for summary disposition, much less for resolution on the initial pleadings; LBP-11-2, 73 NRC 50 (2011)
Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 306 (2010)
severe accident mitigation alternatives do not encompass spent fuel pool accidents; LBP-11-2, 73 NRC 65 (2011)

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Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 307 (2010)
the Commission reversed the board's grant of summary disposition of a severe accident mitigation alternatives contention; LBP-11-2, 73 NRC 62 (2011)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 310 (2010)
a party responding to a summary disposition motion may not raise distinctly new asserted deficiencies; LBP-11-4, 73 NRC 124 (2011)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 312 (2010)
claim that SAMA analysis is deficient for failing to address potential spent fuel pool accidents falls beyond the scope of NRC SAMA analysis and impermissibly challenges NRC regulations; LBP-11-13, 73 NRC 570 n.245 (2011)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 315 (2010)
a licensing board's inquiry should not be whether there are plainly better methodologies or whether the severe accident mitigation alternatives analysis can be refined further, but rather whether the SAMA analysis resulted in erroneous conclusions on which SAMAs and SAMDAs are found cost-beneficial to implement; LBP-11-7, 73 NRC 265 (2011)
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-11-7, 73 NRC 265 (2011)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 316 (2010)
a severe accident mitigation alternatives analysis is neither a worst-case nor a best-case impacts analysis; LBP-11-7, 73 NRC 265 (2011)
NEPA permits agencies to select their own methodology for mitigation analysis as long as that methodology is reasonable; LBP-11-2, 73 NRC 71 (2011); LBP-11-7, 73 NRC 265 (2011)
NRC is required to consider severe accident mitigation alternatives in issuing a new operating license; LBP-11-7, 73 NRC 264-65 (2011)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 316-17 (2010)
license renewal applicants are not required to base their SAMA analysis on consequence values at the 95th percentile consequence level; LBP-11-2, 73 NRC 77 (2011)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 317 (2010)
severe accident mitigation alternatives contentions are admissible only if 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; LBP-11-2, 73 NRC 46, 62 (2011); LBP-11-7, 73 NRC 265, 273 n.128, 315 (2011); LBP-11-13, 73 NRC 579 (2011)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 454 (2010)
active components are not subject to an aging management review because existing regulatory programs, including required maintenance programs, can be expected to directly detect the effects of aging on active functions; LBP-11-2, 73 NRC 57 (2011)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 461 (2010)
key functions of buried structures, systems, and components that are the focus of the license renewal safety review under Part 54 do not include the prevention of inadvertent radioactive leaks from buried structures; LBP-11-2, 73 NRC 60 (2011)
through the regulatory process, which includes plant inspections, notice and guidance to licensees, and enforcement actions, NRC takes a host of measures to improve the ability to timely detect and correct inadvertent leaks to assure compliance with public dose limits; LBP-11-2, 73 NRC 60 n.194 (2011)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 461-62 (2010)
current operating issues are, by their very nature, beyond the scope of a license renewal proceeding; CLI-11-2, 73 NRC 348 n.77 (2011)
license renewal is limited to aging-related issues, not issues already monitored and reviewed in the ongoing regulatory oversight processes; CLI-11-2, 73 NRC 348 n.77 (2011)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 462 (2010)
applicant must demonstrate that the effects of aging will be managed so that the intended function(s) will be maintained consistent with the current licensing basis and that the intended functions are described in section 54.4(a)(1)-(3); LBP-11-2, 73 NRC 60 (2011)

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Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 474 (2010)
chapter 6 of the generic environmental impact statement clearly is not limited to discussing only normal operations, but also discusses potential accidents and other nonroutine events, and the Category 1 finding for onsite spent fuel storage is not limited to routine or normal operations; LBP-11-2, 73 NRC 66 (2011); LBP-11-13, 73 NRC 570 n.248 (2011)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 476 (2010)
NEPA imposes no legal duty on NRC to consider intentional malevolent acts in conjunction with commercial power reactor license renewal applications; LBP-11-2, 73 NRC 64 (2011); LBP-11-13, 73 NRC 571 (2011)
NRC has analyzed terrorist acts in connection with license renewal and concluded that the core damage and radiological release from such acts would be no worse than the damage and release expected from internally initiated events; LBP-11-2, 73 NRC 64 (2011)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-22, 72 NRC 202, 207 n.34 (2010)
petitioner may question the practice for severe accident mitigation alternatives analysis to utilize mean consequence values, which results in an averaging of potential consequences; LBP-11-13, 73 NRC 576 n.296 (2011)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), CLI-10-22, 72 NRC 202, 208 (2010)
it is not possible simply to plug in and run a different atmospheric dispersion model in the MACCS2 code; LBP-11-2, 73 NRC 72 (2011)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), LBP-06-23, 64 NRC 257, 288 (2006)
Commission precedent interprets the term, "severe accidents," to encompass only reactor accidents and not spent fuel pool accidents; LBP-11-2, 73 NRC 66 n.237 (2011)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), LBP-06-23, 64 NRC 257, 341 (2006)
a severe accident mitigation alternatives contention was admitted; LBP-11-2, 73 NRC 62 (2011)

Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), LBP-07-13, 66 NRC 131, 137 (2007)
a severe accident mitigation alternatives contention was summarily dismissed; LBP-11-2, 73 NRC 62 (2011)

Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), CLI-09-6, 69 NRC 128, 135 & n.25 (2009)
the ordinary burden on parties in pursuing litigation pending rulemaking does not justify disrupting ongoing license review; CLI-11-1, 73 NRC 6 (2011)

Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), LBP-08-13, 68 NRC 43, 89 (2008)
whether petitioners have adequately raised an issue as to whether transformers constitute active or passive components survived a motion for summary disposition; LBP-11-2, 73 NRC 57 (2011)
whether transformers are active or passive components remains an unresolved issue and thus requires fact-based determinations best left to further adjudicatory proceedings; LBP-11-2, 73 NRC 58 (2011)

Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), LBP-08-13, 68 NRC 43, 95 (2008)
applicant's alternatives analysis need not discuss every conceivable alternative to the proposed action, but rather only feasible, nonspeculative, and reasonable alternatives; LBP-11-13, 73 NRC 553 (2011)

Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), LBP-08-13, 68 NRC 43, 95-96 (2008)
allegation that multiple, unrelated sources of electricity ought to be evaluated collectively is inadmissible; LBP-11-2, 73 NRC 52 (2011)

Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), LBP-10-13, 71 NRC 673, 680-81 (2010)
including probability-weighted consequences into SAMA analyses does not reduce the consequences so low as to reject all possible mitigation as too costly; LBP-11-2, 73 NRC 63 (2011)

Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-10-17, 72 NRC 1, 10 & n.36 (2010)
the Commission generally has declined to hold proceedings in abeyance pending the outcome of other Commission actions or adjudications; CLI-11-1, 73 NRC 4 (2011)

Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-10-17, 72 NRC 1, 36 (2010)
commitment to implement an aging management plan that NRC finds is consistent with the GALL Report constitutes one acceptable method for demonstrating that the effects of aging will be adequately managed; LBP-11-2, 73 NRC 55 (2011)

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Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-10-17, 72 NRC 1, 38 (2010)
referencing an aging management program described in the GALL Report does not insulate a program from an adequately supported challenge at a hearing; LBP-11-2, 73 NRC 55 (2011)

Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-10-17, 72 NRC 1, 45 n.246 (2010)
pro se litigants are to be treated more leniently than litigants with counsel; LBP-11-9, 73 NRC 408 (2011)

Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-06-20, 64 NRC 131, 152-55 (2006), *rev'd on other grounds,* CLI-07-16, 65 NRC 371, 375 (2007)
contention regarding severe spent fuel pool accidents is not admissible in license renewal proceeding because it is a Category 1 issue; LBP-11-2, 73 NRC 66 n.236 (2011)

Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-06-20, 64 NRC 131, 201 (2006)
Subpart G procedures are mandated for certain proceedings and parties are permitted to propound interrogatories, take depositions, and cross-examine witnesses without leave of the board; LBP-11-13, 73 NRC 587 (2011)

Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-07-15, 66 NRC 261, 272 (2007)
selection of hearing procedures for contentions at the outset of a proceeding is not immutable because availability of Subpart G procedures under 10 C.F.R. 2.310(d) depends critically on whether the credibility of eyewitnesses is important in resolving a contention, and witnesses relevant to each contention are not identified, under 10 C.F.R. 2.336(a)(1), until after contentions are admitted; LBP-11-13, 73 NRC 588 n.389 (2011)

Environmental Law & Policy Center v. NRC, 470 F.3d 676, 684 (7th Cir. 2006)
generation of baseload power is an acceptable purpose for a licensing action and has been determined to be broad enough to permit consideration of a host of energy-generating alternatives; LBP-11-13, 73 NRC 553 (2011)

Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5, 39 (2005)
for mandatory proceedings, licensing boards are to conduct a simple sufficiency review rather than a de novo review on both AEA and NEPA issues; LBP-11-11, 73 NRC 475, 526 (2011)
in mandatory proceedings, boards should inquire whether the NRC Staff performed an adequate review and made findings with reasonable support in logic and fact; LBP-11-11, 73 NRC 475-76 (2011)

Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5, 39-40 (2005)
the board's role in mandatory hearings is to carefully probe NRC Staff findings by asking appropriate questions and by requiring supplemental information when necessary, but Staff's underlying technical and factual findings are not open to board reconsideration unless, after a review of the record, the board finds the Staff review inadequate or its findings insufficient; LBP-11-11, 73 NRC 476 (2011)

Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 806-08 (2005)*aff'd, Environmental Law and Policy Center v. NRC,* 470 F.3d 676 (7th Cir. 2006)
an alternative that fails to meet the purpose of the project does not need to be further examined in the environmental report; LBP-11-6, 73 NRC 225 (2010)
energy efficiency alternative is excluded because it would not advance applicant's goal to provide additional baseload electrical generation capacity for use in the owner's current markets and/or for potential sale on the wholesale markets; LBP-11-7, 73 NRC 304 n.333 (2011)

Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 810 (2005)*aff'd, Environmental Law and Policy Center v. NRC,* 470 F.3d 676 (7th Cir. 2006)
because a solely wind- or solar-powered facility could not satisfy the project's purpose, there was no need to compare the impact of such facilities to the impact of the proposed nuclear plant; LBP-11-7, 73 NRC 308 n.371 (2011)

Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site), CLI-06-20, 64 NRC 15, 21-22 (2006)
based on Staff's and applicant's written responses to board questions, and on the resumes, CVs, and SPQs admitted as part in the evidentiary record to respond to the questions, the board considers safety issues resolved for the proceeding; LBP-11-11, 73 NRC 514, 525-26, 529 (2011)

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highly site-specific seismic hazard analysis reflects consideration not only of the location and magnitude of historic earthquakes, but also the nature of the bedrock and the style of faulting in the surrounding region; LBP-11-11, 73 NRC 519 (2011)

in a mandatory hearing, licensing boards must narrow their inquiry to 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-11-11, 73 NRC 476 (2011)

Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site), LBP-06-28, 64 NRC 460 (2006), *permit issuance authorized,* CLI-07-12, 65 NRC 203 (2007)

mandatory proceedings for licensing of proposed uranium enrichment facility sites were conducted; LBP-11-11, 73 NRC 475 (2011)

F.J. Vollmer Co., Inc. v. Magaw, 102 F.3d 591, 595 (D.C. Cir. 1996)

although a court's merits reasoning may be quite relevant to the resolution of the substantial justification question, the inquiry into the reasonableness of the government's position may not be collapsed into an antecedent evaluation of the merits; LBP-11-8, 73 NRC 368-69 (2011)

Fansteel, Inc. (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003)

boards must not adjudicate the merits of allegations at the contention admissibility stage, but, to be admissible, a contention must provide more than a bare assertion, and must explain the supporting reasons for the dispute raised in that contention; LBP-11-16, 73 NRC 667, 677 (2011)

mere notice pleading is insufficient for contention admission; LBP-11-2, 73 NRC 45 (2011); LBP-11-13, 73 NRC 551 (2011); LBP-11-16, 73 NRC 655 (2011)

petitioner's issue will be ruled inadmissible if petitioner has offered no tangible information, no experts, no substantive affidavits, but instead only bare assertions and speculation; LBP-11-6, 73 NRC 250 (2010)

Federal Election Commission v. Rose, 806 F.2d 1081, 1087 (D.C. Cir. 1986)

reasonableness, the legal standard governing the determination of substantial justification, is separate and distinct from the legal standard used in assessing the merits phase of a proceeding; LBP-11-8, 73 NRC 369 (2011)

Five Points Road Joint Venture v. Johanns, 542 F.3d 1121, 1124 n.3 (7th Cir. 2008)

once Congress has waived sovereign immunity over certain subject matter, a court should be careful not to assume the authority to narrow the waiver that Congress intended; LBP-11-8, 73 NRC 360 (2011)

Flaherty v. Coughlin, 713 F.2d 10, 13 (2d. Cir. 1983)

summary disposition, like summary judgment, is an extreme remedy that should be granted with caution; LBP-11-7, 73 NRC 263 (2011)

Florida Power & Light Co. (Calvert Cliffs Nuclear Power Plant, Units 1 and 2, et al.), CLI-06-21, 64 NRC 30, 33-34 (2006)

failure to comply with pleading requirements for late filings constitutes sufficient grounds for rejecting intervention and hearing requests; LBP-11-7, 73 NRC 279 n.159 (2011)

Florida Power & Light Co. (Calvert Cliffs Nuclear Power Plant, Units 1 and 2, et al.), CLI-06-21, 64 NRC 30, 34 (2006)

a late-filed contention is inadmissible both for lack of a good cause showing and for failure to address the other factors of 10 C.F.R. 2.309(c)(1); LBP-11-6, 73 NRC 247 (2010)

Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989)

although NRC applies traditional standing concepts, it presumes that an individual has standing to intervene without the need to address them upon a showing that he or she lives within, or otherwise has frequent contacts with, a geographic zone of potential harm; LBP-11-2, 73 NRC 41 (2011); LBP-11-16, 73 NRC 653 (2011)

traditional judicial standing concepts require a showing that the individual has suffered or might suffer a concrete and particularized injury that is fairly traceable to the challenged action, likely to be redressed by a favorable decision, and arguably within the zone of interests protected by the governing statutes; LBP-11-2, 73 NRC 40 (2011)

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Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 8 (2001)
for license renewal, it is unnecessary to review all those issues already monitored, reviewed, and commonly resolved as needed by ongoing regulatory oversight; LBP-11-2, 73 NRC 45-46 n.92 (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 because they involve environmental effects that are essentially similar for all plants and need not be assessed repeatedly on a site-specific basis; LBP-11-13, 73 NRC 551 (2011)
license renewal applicants need not submit in their site-specific environmental reports an analysis of Category 1 issues; LBP-11-2, 73 NRC 76 n.306 (2011)

Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 21 (2001)
Part 51's reference to severe accident mitigation alternatives deals only with nuclear reactor accidents, not spent fuel storage accidents; LBP-11-2, 73 NRC 66 (2011)

Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 22 (2001)
Part 51 treats all spent fuel pool accidents, whatever their cause, as generic, Category 1 events not suitable for case-by-case adjudication; LBP-11-2, 73 NRC 66 (2011)

Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 23 (2001)
license renewal boards cannot admit environmental challenges regarding spent fuel pool issues; LBP-11-2, 73 NRC 65 (2011)
Part 51's license renewal provisions cover environmental issues relating to onsite spent fuel storage generically and all such issues, including accident risk, fall outside the scope of license renewal proceedings; LBP-11-13, 73 NRC 570 n.244 (2011)

Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-6, 73 NRC 149, 244 n.111 (2011)
board members are not required to comb through the record seeking support for contentions; LBP-11-13, 73 NRC 575 n.287 (2011)
judges are not like pigs, hunting for truffles buried in briefs; LBP-11-14, 73 NRC 608 n.106 (2011)

Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc., 528 U.S. 167, 181 (2000)
an association has standing to bring suit on behalf of its members when its members would otherwise have standing to sue in their own right, the interests at stake are germane to the organization's purpose, and neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit; LBP-11-2, 73 NRC 40 (2011); LBP-11-13, 73 NRC 545 n.52 (2011); LBP-11-16, 73 NRC 653 (2011)

Friends of the Earth, Inc. v. O'Reilly, 966 F.2d 690, 695 (D.C. Cir. 1992)
a proceeding is an adversary adjudication under the Equal Access to Justice Act only if Congress intended that the proceeding be subject to Administrative Procedure Act § 554; LBP-11-8, 73 NRC 356 n.26 (2011)
an agency's decision to add protections matching those of Administrative Procedure Act § 554 is irrelevant absent Congress's having compelled the augmentation; LBP-11-8, 73 NRC 356 n.26 (2011)
an agency's discretionary choice to conduct a formal on-the-record hearing is irrelevant when determining whether the Equal Access to Justice Act applies to a particular proceeding; LBP-11-8, 73 NRC 360 (2011)

Fuel Safe Washington v. Federal Energy Regulatory Commission, 389 F.3d 1313, 1323 (10th Cir. 2004)
under NEPA, an agency need not compare the environmental impacts of the proposed action with the environmental impacts of alternatives that are not reasonable or feasible; LBP-11-7, 73 NRC 308 n.371 (2011)

General Motors Corp. v. Federal Energy Regulatory Commission, 656 F.2d 791, 795 & n.7 (D.C. Cir. 1981)
any AEA § 189a hearing rights to which petitioners might be entitled had they shown standing have been satisfied; CLI-11-3, 73 NRC 623-24 n.53 (2011)

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Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995)
- boards are to construe intervention petitions in favor of petitioners in determining whether petitioner has demonstrated standing; LBP-11-2, 73 NRC 41 (2011); LBP-11-13, 73 NRC 548 (2011); LBP-11-16, 73 NRC 653 (2011)
- essential to establishing standing are findings of injury, causation, and redressability; CLI-11-3, 73 NRC 621 (2011)
- NRC generally applies traditional judicial standing concepts which require a showing that the individual has suffered or might suffer a concrete and particularized injury that is fairly traceable to the challenged action and likely redressible by a favorable decision; LBP-11-2, 73 NRC 40 (2011); LBP-11-13, 73 NRC 545-46 (2011)
- organizational standing requirements are outlined; CLI-11-3, 73 NRC 621 n.38 (2011)

Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 116-17 (1995)
- no proximity presumption applies in an import/export licensing case because petitioners have not shown that the import or export involves a significant source of radioactivity producing an obvious potential for offsite consequences; CLI-11-3, 73 NRC 622 (2011)

Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-19, 42 NRC 191, 194 (1995)
- in ruling on whether a contention is moot, boards look to whether a justiciable controversy still exists and whether an issue is still live, such that a party still has a legal interest in the issue; LBP-11-4, 73 NRC 127 (2011)

GPU Nuclear, Inc. (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 202 (2000)
- to demonstrate representational standing, an organization must show that at least one of its members might be affected by the proceeding, identify that member by name and address, and show that the member has authorized the organization to represent him or her and to request a hearing on his or her behalf; LBP-11-6, 73 NRC 169 (2010)

GPU Nuclear, Inc. (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 208 (2000)
- petitioner's issue will be ruled inadmissible if petitioner has offered no tangible information, no experts, no substantive affidavits, but instead only 'bare assertions and speculation; LBP-11-6, 73 NRC 250 (2010)

Grand Canyon Trust v. Federal Aviation Administration, 290 F.3d 339, 341, 346 (D.C. Cir. 2002)
- a draft environmental impact statement does not and cannot treat identified environmental concerns in a vacuum; LBP-11-7, 73 NRC 302 (2011)

Gulf States Utilities Co. (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 51 (1994)
- factual support required for a contention at the admission stage is a minimal showing that material facts are in dispute; LBP-11-2, 73 NRC 45 (2011); LBP-11-13, 73 NRC 551 (2011); LBP-11-14, 73 NRC 609 (2011); LBP-11-16, 73 NRC 655 (2011)

Halverson v. Slater, 206 F.3d 1205, 1208 (D.C. Cir. 2000)
- although a court's merits reasoning may be quite relevant to the resolution of the substantial justification question, the inquiry into the reasonableness of the government's position may not be collapsed into an antecedent evaluation of the merits; LBP-11-8, 73 NRC 368-69 (2011)

Houston Lighting and Power Co. (Allens Creek Nuclear Generating Station, Unit 1), ALAB-535, 9 NRC 377, 395-96 (1979)
- although an allegation that a purported representative is acting without his or her organization's authorization, i.e., is acting *ultra vires*, is distinct from a challenge to the organization's standing, petitioner may cure such a defect in representation as well; LBP-11-13, 73 NRC 549 (2011)
- authority of an officer or attorney to sign a petition is distinguished from an authorization addressed to the organization's standing to intervene; LBP-11-13, 73 NRC 549 (2011)

Houston Lighting and Power Co. (South Texas Project, Units 1 and 2), ALAB-799, 21 NRC 360, 382, 384-85 (1985)
- issues originally raised by a later-withdrawing party have been remanded to the board for further consideration of whether issues presented serious safety or environmental questions that warrant Board examination pursuant to its sua sponte authority; LBP-11-9, 73 NRC 414 n.125 (2011)

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Hughes River Watershed Conservancy v. Glickman, 81 F.3d 437, 443 (4th Cir.1996)
the principal goals of NEPA's environmental impact statement requirement are to force agencies to take a hard look at the environmental consequences of a proposed project, and, by making relevant analyses openly available, to permit the public a role in the agency's decisionmaking process; LBP-11-14, 73 NRC 598 (2011)

Hunt v. Washington State Apple Advertising Commission, 432 U.S. 333, 343 (1977)
an association has standing to bring suit on behalf of its members when its members would otherwise have standing to sue in their own right, the interests at stake are germane to the organization's purpose, and neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit; LBP-11-2, 73 NRC 40 (2011); LBP-11-13, 73 NRC 545 n.52 (2011)

Hydro Resources, Inc. (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-98-16, 48 NRC 119, 120-22 & n.3 (1998)
petitioner's demand for compliance with U.S. Army Corps of Engineers requirements is not within the scope of a combined license proceeding, because it is not the province of NRC to enforce another agency's regulations; LBP-11-6, 73 NRC 236 n.102 (2010)

Hydro Resources, Inc. (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 55 (2001)
an environmental report need only consider the range of alternatives that are capable of achieving the goals of the proposed action; LBP-11-13, 73 NRC 553 n.114 (2011)
NRC Staff may accord substantial weight to the stated purpose of the project, i.e., to provide additional baseload electrical generation capacity for use in the owner's current markets and/or for potential sale on the wholesale market; LBP-11-7, 73 NRC 304 (2011)

Idaho By and Through Idaho Public Utilities Commission v. Interstate Commerce Commission, 35 F.3d 585, 595 (D.C. Cir. 1994)
although NEPA does not explicitly mention cost-benefit balancing, courts have interpreted the statute as requiring federal agencies to balance the environmental costs against the anticipated benefits of a proposed action; LBP-11-7, 73 NRC 281 (2011)

International Uranium (USA) Corp. (White Mesa Uranium Mill), CLI-01-21, 54 NRC 247, 251 (2001)
as a matter of law and logic, if applicant's enhanced program is inadequate, then applicant's unenhanced program is a fortiori inadequate, and intervenor has a regulatory obligation to challenge it in its original petition to intervene; LBP-11-9, 73 NRC 417 (2011)

International Uranium (USA) Corp. (White Mesa Uranium Mill), CLI-01-21, 54 NRC 247, 252 (2001)
an organization may establish organizational standing; LBP-11-6, 73 NRC 169 (2010)

International Uranium (USA) Corp. (White Mesa Uranium Mill), CLI-01-21, 54 NRC 247, 253 (2001)
speculation about accidents along feed material's transport routes does not establish standing; CLI-11-3, 73 NRC 623 n.50 (2011)

Irwin v. Department of Veterans Affairs, 498 U.S. 89, 95 (1990)
waivers of the government's sovereign immunity, to be effective, must be unequivocally expressed; LBP-11-8, 73 NRC 360 n.46 (2011)

Jackson v. Chater, 94 F.3d 274, 278 (7th Cir. 1996)
in determining whether the government's position was substantially justified, the board does not make separate determinations regarding each stage but arrives at one conclusion that simultaneously encompasses and accommodates the entire civil action; LBP-11-8, 73 NRC 368 (2011)

James v. Honaker Drilling, Inc., 254 F.2d 702, 706 (10th Cir. 1958)
summary disposition, like summary judgment, is an extreme remedy that should be granted with caution; LBP-11-7, 73 NRC 263 (2011)

Kansas Gas and Electric Co. (Wolf Creek Generating Station, Unit 1), ALAB-462, 7 NRC 320, 327 (1978)
demand for electricity is of course the justification for building any power plant, although other benefits have been considered; LBP-11-7, 73 NRC 282 n.174 (2011)

Kansas Gas and Electric Co. (Wolf Creek Generating Station, Unit 1), ALAB-462, 7 NRC 320, 328 (1978)
given the legal responsibility imposed upon a public utility to provide at all times adequate, reliable service, and the severe consequences that may attend upon a failure to discharge that responsibility, the most that can be required is that the forecast be a reasonable one in light of what is ascertainable at the time made; LBP-11-7, 73 NRC 283 n.179 (2011)

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Kerr-McGee Corp. (West Chicago Rare Earths Facility), CLI-82-2, 15 NRC 232, 235 (1982)
NRC started to relax the procedural requirements for certain types of proceedings; LBP-11-8, 73 NRC 358 (2011)

Kleppe v. Sierra Club, 427 U.S. 390, 405-06 (1976)
applicant's obligation is to consider alternatives as they exist and are likely to exist; LBP-11-2, 73 NRC 51 n.132 (2011)

Kleppe v. Sierra Club, 427 U.S. 390, 410 n.21 (1976)
if the adverse environmental impacts of the proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs; LBP-11-14, 73 NRC 605 (2011)

Laguna Greenbelt, Inc. v. U.S. Department of Transportation, 42 F.3d 517, 528 (9th Cir. 1994)
NEPA does not require a fully developed plan that will mitigate all environmental harm before an agency can act, but only requires that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fully evaluated; LBP-11-14, 73 NRC 607 (2011)

Legal Environmental Assistance Foundation, Inc. v. Environmental Protection Agency, 400 F.3d 1278, 1279 (11th Cir. 2005)
a source permit is an operating permit that the Clean Air Act requires major stationary sources of air pollution to obtain; LBP-11-13, 73 NRC 583 n.356 (2011)

Limerick Ecology Action, Inc. v. NRC, 869 F.2d 719, 738 (3d Cir. 1989)
as a logical proposition, risk equals the likelihood of an occurrence times the severity of the consequences; LBP-11-2, 73 NRC 63 n.212 (2011)

Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-91-2, 33 NRC 61, 66, 74-75 (1991)
the Commission, in deciding an issue, can take into consideration a matter beyond reasonable controversy and one that is capable of immediate and accurate determination by resort to easily accessible sources of indisputable accuracy; LBP-11-7, 73 NRC 290 n.231 (2011)

Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-91-2, 33 NRC 61, 71 (1991)
applicant's alternatives analysis need not discuss every conceivable alternative to the proposed action, but rather only feasible, nonspeculative, and reasonable alternatives; LBP-11-13, 73 NRC 553 (2011)

Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-91-2, 33 NRC 61, 72 n.3 (1991)
although boards may give reasonable deference to NRC guidance, such agency guidance does not substitute for regulations, is not binding authority, and does not prescribe NRC requirements; LBP-11-16, 73 NRC 670 (2011)

Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), LBP-91-7, 33 NRC 179, 195 (1991)
NRC is lenient in permitting pro se petitioners the opportunity to cure procedural defects in petitions to intervene regarding standing; LBP-11-13, 73 NRC 549 (2011)

Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 84 (1998)
a contention contesting applicant's environmental report may be viewed as a challenge to the Staff's subsequently issued DEIS/EIS, but this "migration" tenet does not change the basic form of the contention, i.e., whether it challenges the soundness of the information provided or claims that necessary information has been omitted (or some combination of the two); LBP-11-1, 73 NRC 26 n.13 (2011)
if all matters at issue in a contention of omission are addressed by NRC Staff in its DEIS through the actual provision of information on all such matters, then no legal interest in that contention remains, and the contention is moot; LBP-11-4, 73 NRC 127-28 n.155 (2011)
once NRC Staff issues the draft EIS, a contention that was originally admitted as a challenge to the environmental report may be treated as a challenge to the similar section of the DEIS; LBP-11-1, 73 NRC 26 n.12 (2011)

Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 87 (1998)
the principal goals of NEPA's environmental impact statement requirement are to force agencies to take a hard look at the environmental consequences of a proposed project, and, by making relevant analyses openly available, to permit the public a role in the agency's decisionmaking process; LBP-11-14, 73 NRC 598 (2011)

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Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 88 (1998)
although NEPA does not explicitly mention cost-benefit balancing, courts have interpreted the statute as requiring federal agencies to balance the environmental costs against the anticipated benefits of a proposed action; LBP-11-7, 73 NRC 281 (2011)
as part of NRC's NEPA analysis for licensing a nuclear power plant, the agency must balance the costs and benefits resulting from issuance of a license, but the EIS need not always contain a formal or mathematical cost-benefit analysis; LBP-11-7, 73 NRC 281-82 n.173 (2011)
NEPA itself does not mandate a cost-benefit analysis, but the statute is generally regarded as calling for some sort of a weighing of the environmental costs against the economic, technical, or other public benefits of a proposal; LBP-11-6, 73 NRC 218 (2010)

Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 88, 94 (1998)
the need-for-power assessment need not precisely identify future market conditions and energy demand, or develop detailed analyses of system generating assets, costs of production, capital replacement ratios, and the like in order to establish with certainty that the construction and operation of a nuclear power plant is the most economical alternative for generation of power; LBP-11-7, 73 NRC 283 (2011)

Louisiana Energy Services, L.P. (Claiborne Enrichment Center), LBP-91-41, 34 NRC 332, 339 (1991)
although boards may give reasonable deference to NRC guidance, such agency guidance does not substitute for regulations, is not binding authority, and does not prescribe NRC requirements; LBP-11-16, 73 NRC 670, 674 (2011)

Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-04-25, 60 NRC 223, 225 (2004)
petitioner's reply must be narrowly focused on the legal or logical arguments presented in the applicant's or NRC Staff's answer; LBP-11-6, 73 NRC 229 n.93 (2010)

Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-04-35, 60 NRC 619, 623 (2004)
NRC regulations do not allow use of reply briefs to provide, for the first time, the necessary threshold support for contentions; LBP-11-6, 73 NRC 237 n.105 (2010)

Louisiana Energy Services, L.P. (National Enrichment Facility), LBP-06-8, 63 NRC 241, 259 (2006)
NRC Staff's reference to, and reliance in its DEIS on, state issuance of a site certification order and associated certificate of compliance on groundwater use does not dispense with NRC's duty under NEPA to conduct an independent hard look at environmental impacts related to active dewatering during operations at a nuclear plant; LBP-11-1, 73 NRC 25 (2011)

Louisiana Energy Services, L.P. (National Enrichment Facility), LBP-06-17, 63 NRC 747 (2006)
mandatory proceedings for licensing of proposed uranium enrichment facility sites were conducted; LBP-11-11, 73 NRC 475 (2011)

Louisiana Power & Light Co. (Waterford Steam Electric Station, Unit 3), CLI-86-1, 23 NRC 1, 5 (1986)
the burden of satisfying the requirement for reopening a record is a heavy one; CLI-11-2, 73 NRC 346 (2011)

Lujan v. Defenders of Wildlife, 504 U.S. 555, 560-61 (1992)
contemporaneous judicial concepts of standing require a petitioner to allege an injury in fact that is fairly traceable to the challenged action and likely to be redressed by a favorable decision
NRC generally applies traditional judicial standing concepts which require a showing that the individual has suffered or might suffer a concrete and particularized injury that is fairly traceable to the challenged action and likely redressible by a favorable decision; LBP-11-2, 73 NRC 40 (2011); LBP-11-6, 73 NRC 168-69 (2010); LBP-11-13, 73 NRC 545-46 (2011); LBP-11-16, 73 NRC 652 (2011)

Maine Yankee Atomic Power Co. (Maine Yankee Atomic Power Station), LBP-03-23, 58 NRC 372, 378 (2003)
petitioners who are proceeding pro se should be shown greater leeway on the question of whether they have demonstrated good cause for lateness than petitioners represented by counsel; LBP-11-13, 73 NRC 543 (2011)

McKinney v. Dole, 765 F.2d 1129, 1135 (D.C. Cir. 1985)
although it is risky for a nonmoving party to fail to proffer evidence in response to the summary judgment movant's showing, such a failure does not automatically mandate granting of the motion; LBP-11-4, 73 NRC 100 n.16 (2011)

if summary judgment movant does not meet its burden, the nonmoving party is, without making any showing, entitled to a denial of the motion; LBP-11-4, 73 NRC 100 n.16 (2011)
in assessing whether a summary judgment movant has met his or her burden, a court must view all inferences to be drawn from underlying facts in the light most favorable to the party opposing the motion; LBP-11-4, 73 NRC 99-100 n.16 (2011)
only when the summary judgment movant meets its burden is the nonmoving party required to proffer evidence that contradicts the moving party's showing and that proves the existence of a genuine issue of material fact; LBP-11-4, 73 NRC 100 n.16 (2011)
summary judgment should be awarded only when the truth is quite clear; LBP-11-4, 73 NRC 100 n.16 (2011)
the record must show movant's right to summary judgment with such clarity as to leave no room for controversy, and must demonstrate that his opponent would not be entitled to prevail under any discernible circumstances; LBP-11-4, 73 NRC 100 n.16 (2011)
McSpadden v. Mullins, 456 F.2d 428, 430 (8th Cir. 1972)
summary disposition, like summary judgment, is an extreme remedy that should be granted with caution; LBP-11-7, 73 NRC 263 (2011)
Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit 1), CLI-83-25, 18 NRC 327, 332 (1983)
traditional judicial standing concepts require a showing that the individual has suffered or might suffer a concrete and particularized injury that is fairly traceable to the challenged action, likely redressible by a favorable decision, and arguably within the zone of interests protected by the governing statutes; LBP-11-2, 73 NRC 40 (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-11-2, 73 NRC 45 (2011); LBP-11-13, 73 NRC 551 (2011)
petitioner does not have to prove its contentions at the admissibility stage; LBP-11-14, 73 NRC 609 (2011)
Montalvo-Huertas v. Rivera-Cruz, 885 F.3d 971, 978-79 (1st Cir. 1989)
the Commission's action in adopting new procedural rules meets the rational basis test; LBP-11-4, 73 NRC 125 n.147 (2011)
Moore v. Jackson, 123 F.3d 1082, 1086 (8th Cir. 1997)
summary disposition, like summary judgment, is an extreme remedy; LBP-11-7, 73 NRC 263 (2011)
Morrison v. Commissioner of Internal Revenue, 565 F.3d 658, 666 (9th Cir. 2009)
when a third party who has no direct interest in the litigation pays fees on behalf of a taxpayer, the taxpayer incurs the fees so long as he assumes an absolute obligation to repay the fees or a contingent obligation to pay the fees in the event that he is able to recover them; LBP-11-8, 73 NRC 365 n.74 (2011)
Mt. Lookout-Mt. Nebo Property Protection Assosiation v. Federal Energy Regulatory Commission, 143 F.3d 165, 172-73 (4th Cir. 1998)
agency's consideration of three alternative routes is sufficient to meet its NEPA obligations to consider reasonable transmission line route alternatives; LBP-11-6, 73 NRC 208 (2010)
Natural Resources Defense Council, Inc. v. Hodel, 865 F.2d 288, 294 (D.C. Cir. 1988)
NEPA requires that an environmental review provide a sufficient discussion of alternatives to enable the decisionmaker to take a hard look at environmental factors, and to make a reasoned decision; LBP-11-13, 73 NRC 552 (2011)
Natural Resources Defense Council, Inc. v. Morton, 458 F.2d 827, 837-38 (1972)
remote and speculative alternatives need not be addressed in applicant's environmental report; LBP-11-2, 73 NRC 51 (2011)
New Jersey v. NRC, 526 F.3d 98, 102 (3d Cir. 2008)
although boards may give reasonable deference to NRC guidance, such agency guidance does not substitute for regulations, is not binding authority, and does not prescribe NRC requirements; LBP-11-16, 73 NRC 670, 674 (2011)
regulatory guidance is not binding on applicants; LBP-11-16, 73 NRC 661 (2011)

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NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), LBP-11-2, 73 NRC 28, 47, 53 (2011)
at the contention admission stage, it is sufficient for petitioners to proffer some minimal factual support for their contention; LBP-11-13, 73 NRC 564 (2011)

NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), LBP-11-2, 73 NRC 28, 47, 62 (2011)
the materiality standard requires only that petitioners provide sufficient information to show that, if their proposed refinements were incorporated, it is genuinely plausible that cost-benefit conclusions might change; LBP-11-13, 73 NRC 580 (2011)

Nguyen v. Immigration and Naturalization Service, 533 U.S. 53, 63 (2001)
equal protection principles require that all persons similarly situated shall be treated alike; LBP-11-15, 73 NRC 639 n.20 (2011)

Niagara Mohawk Power Corp. (Nine Mile Point Nuclear Station, Unit 2), ALAB-264, 1 NRC 347, 365 (1975)
inherent in any forecast of future electric power demands is a substantial margin of uncertainty; LBP-11-6, 73 NRC 219-20 (2010)

Niagara Mohawk Power Corp. (Nine Mile Point Nuclear Station, Unit 2), ALAB-264, 1 NRC 347, 365-66 (1975)
forecasting of need for power is inherently uncertain; LBP-11-6, 73 NRC 222 (2010)

Niagara Mohawk Power Corp. (Nine Mile Point Nuclear Station, Unit 2), ALAB-264, 1 NRC 347, 365-68 (1975)
because need-for-power assessments necessarily entail forecasting power demands in light of substantial uncertainty and the duty of providing adequate and reliable service to the public, they are inherently conservative; LBP-11-7, 73 NRC 283 (2011)

Niagara Mohawk Power Corp. (Nine Mile Point Nuclear Station, Unit 2), ALAB-264, 1 NRC 347, 366-67 (1975)
regardless of whether NRC itself conducts the need-for-power assessment or relies on another agency's forecasts and studies, that assessment need only be reasonable; LBP-11-7, 73 NRC 283 (2011)

Norfolk Southern Corp. v. Oberly, 632 F. Supp. 1225, 1243 (D. Del. 1986), *aff'd on other grounds,* 822 F.2d 3888 (3d Cir. 1987)
summary disposition is particularly inappropriate when a licensing board is presented with conflicting expert testimony, for at that stage of a proceeding it is not the role of licensing boards to untangle the expert affidavits and decide which experts are more correct; LBP-11-7, 73 NRC 263 (2011); LBP-11-14, 73 NRC 595 (2011)

North Atlantic Energy Service Corp. (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 223 (1999)
petitioner lacked good cause for a hearing request filed 7 days after the filing deadline when the argument relied on a misimpression of due dates; LBP-11-9, 73 NRC 403, 409 n.107 (2011)

Northeast Nuclear Energy Co. (Millstone Nuclear Power Station, Unit 2), LBP-92-28, 36 NRC 202, 213 (1992)
even if an import or export license authorized possession and/or use of the low-level radioactive waste, the petition does not assert how the LLRW is a significant source of radioactivity or provide any scenario in which the import or export of the LLRW would result in an accident that could produce obvious offsite consequences; CLI-11-3, 73 NRC 622 n.46 (2011)

Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481, 494 (2010)
NRC generally considers approximately 30-60 days as the limit for timely filings based on new information; CLI-11-2, 73 NRC 342 n.43 (2011)

Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481, 496 (2010)
adoption of building code rules by a state presents new and materially different information not previously available, upon which intervenors may rest their proposed contention; LBP-11-7, 73 NRC 290 n.233 (2011)
in the context of a new contention filed after the initial petition, the Commission has a longstanding policy that petitioner has an iron-clad obligation to examine the publicly available documentary material with sufficient care to enable it to uncover any information that could serve as the foundation for a specific contention; CLI-11-2, 73 NRC 339 n.22 (2011)

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Nuclear Fuel Services, Inc. (Erwin, Tennessee), LBP-04-5, 59 NRC 186, 195 (2004), *aff'd,* CLI-04-13, 59 NRC 244 (2004)
mere potential exposure to minute doses of radiation within regulatory limits does not constitute a distinct and palpable injury on which standing can be founded; CLI-11-3, 73 NRC 623 n.51 (2011)
petitioners have offered conclusory statements of harm, but no plausible explanation for why emissions from incinerating imported low-level radioactive waste would reach any of its members or prove harmful 10, 17, or 25 miles away from the site; CLI-11-3, 73 NRC 622-23 n.48 (2011)

Nuclear Management Co., LLC (Monticello Nuclear Generating Plant), CLI-06-6, 63 NRC 161, 163 (2006)
in determining whether an individual member of an organization qualifies for standing in his or her own right, NRC generally applies traditional judicial standing concepts; LBP-11-13, 73 NRC 545 (2011)

Nuclear Management Co., LLC (Monticello Nuclear Generating Plant), CLI-06-6, 63 NRC 161, 164 (2006)
mere existence of comments and questions generated by NRC Staff do not, in and of themselves, demonstrate a material deficiency in applicant's combined license application; LBP-11-6, 73 NRC 178 n.26 (2010)

Nuclear Management Co., LLC (Monticello Nuclear Generating Plant), LBP-05-31, 62 NRC 735, 753 (2005)
applicant's alternatives analysis need not discuss every conceivable alternative to the proposed action, but rather only feasible, nonspeculative, and reasonable alternatives; LBP-11-13, 73 NRC 553 (2011)

Office of Disciplinary Counsel v. Bursey, 919 N.E.2d 198, 204-06 (Ohio 2009)
an attorney whose violations of the Rules of Professional Conduct included negotiating a settlement for a client that had never given him settlement authority, forging client's name on settlement check, and depositing it into attorney's bank account was disbarred permanently; LBP-11-13, 73 NRC 549 (2011)

Owens v. Brock, 860 F.2d 1363, 1366 (6th Cir. 1988)
an agency's discretionary choice to conduct a formal on-the-record hearing is irrelevant when determining whether the Equal Access to Justice Act applies to a particular proceeding; LBP-11-8, 73 NRC 360 (2011)

Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-82-39, 16 NRC 1712, 1715 (1982)
the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention; CLI-11-2, 73 NRC 338 n.20 (2011)

Pacific Gas and Electric Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-03-4, 57 NRC 273, 277 (2003)
the Commission declined to stay dry cask storage proceedings pending requested rule changes; CLI-11-1, 73 NRC 5 (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 is not shown, a board may still permit the late filing, but petitioner or intervenor must make a strong showing on the other factors of 10 C.F.R. 2.309(c); LBP-11-9, 73 NRC 401 (2011)

Pennsylvania Power & Light Co. (Susquehanna Steam Electric Station, Units 1 and 2), LBP-79-6, 9 NRC 291, 295-96 (1979)
although a licensing board is not required to recast contentions to make them acceptable, it is also not precluded from doing so; LBP-11-13, 73 NRC 565 n.199 (2011)

Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20-21 (1974)
a contention must be rejected if it attacks applicable statutory requirements or regulations, challenges the basic structure of the regulatory process, merely expresses petitioner's view of policy, seeks to raise an issue improper for adjudication in the proceeding or not applicable to the facility in question, or raises an issue that is not concrete or is otherwise not litigable; LBP-11-6, 73 NRC 170 n.16 (2010)

Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 21 (1974)
that the contention admissibility rule is designedly strict is not to say that it should serve as a fortress to deny intervention; LBP-11-6, 73 NRC 171 (2010)

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Phillips v. Cohen, 400 F.3d 388, 399 (6th Cir. 2005)
when presented with conflicting expert opinions, licensing boards should be mindful that summary disposition is rarely proper; LBP-11-7, 73 NRC 263 (2011)

Pierce v. Underwood, 487 U.S. 552, 565-66 (1988)
justification "in substance or in the main" is equated with the "reasonable basis both in law and fact" standard that has been applied by a majority of federal appellate courts; LBP-11-8, 73 NRC 368 n.95 (2011)

Pierce v. Underwood, 487 U.S. 552, 566 n.2 (1988)
for the purposes of the Equal Access to Justice Act, the government's position should be considered substantially justified if a reasonable person could think it correct, that is, if it has a reasonable basis in law and fact; LBP-11-8, 73 NRC 368 (2011)

Pierce v. Underwood, 487 U.S. 552, 569 (1988)
the fact that one other court agreed or disagreed with the government does not establish whether its position was substantially justified; LBP-11-8, 73 NRC 368 n.100 (2011)

Poller v. Columbia Broadcasting System, Inc., 368 U.S. 464, 467 (1962)
summary judgment should be granted only where the truth is clear; LBP-11-14, 73 NRC 595 (2011)

Power Authority of the State of New York (James A. FitzPatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-00-22, 52 NRC 266, 293 (2000)
an organization that seeks to intervene in a representative capacity must show that the interests it seeks to protect are germane to its own purpose, and identify, by name and address at least one member who qualifies for standing in his or her own right; LBP-11-13, 73 NRC 545 (2011)

Power Authority of the State of New York (James A. FitzPatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-00-22, 52 NRC 266, 295 (2000)
where a municipality seeks to participate in a reactor licensing proceeding that does not involve a facility within the municipality's boundaries, it can, for purposes of establishing standing, rely on the 50-mile proximity presumption to the same extent as an individual or an organization; LBP-11-6, 73 NRC 170 n.14 (2010)

Powertech (USA), Inc. (Dewey-Burdock In Situ Uranium Recovery Facility), LBP-10-16, 72 NRC 361, 390 (2010)
an individual may not intervene in his or her own right while simultaneously being represented by another petitioner in the same proceeding; LBP-11-13, 73 NRC 550 n.90 (2011)

PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), CLI-10-7, 71 NRC 133, 138 (2010)
the proximity presumption applies when an individual or organization, or an individual authorizing an organization to represent his or her interests seeks to establish its representational standing, resides within 50 miles of the proposed facility, or has frequent contacts with the area affected by the proposed facility; LBP-11-6, 73 NRC 169 (2010); LBP-11-16, 73 NRC 653 (2011)

PPL Bell Bend LLC (Bell Bend Nuclear Power Plant), LBP-09-18, 70 NRC 385, 396 (2009)
NRC is lenient in permitting pro se petitioners the opportunity to cure procedural defects in petitions to intervene regarding standing; LBP-11-13, 73 NRC 549 (2011)

PPL Susquehanna LLC (Susquehanna Steam Electric Station, Units 1 and 2), CLI-07-25, 66 NRC 101, 105 (2007)
NRC's adjudicatory process is not the proper forum for investigating alleged violations that are primarily the responsibility of other federal, state, or local agencies; LBP-11-6, 73 NRC 249 n.115 (2010)

PPL Susquehanna LLC (Susquehanna Steam Electric Station, Units, 1 and 2), LBP-07-10, 66 NRC 1, 11 (2007)
even if undisputed, the jurisdictional nature of standing in NRC Proceedings requires independent examination by presiding officer; LBP-11-16, 73 NRC 653-54 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-98-13, 48 NRC 26 (1998)
organizational standing requirements are outlined; CLI-11-3, 73 NRC 621 n.39 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-98-13, 48 NRC 26, 32 (1998)
the interests a municipality seeks to represent on behalf of its residents are germane to its own purposes in the context or standing; LBP-11-6, 73 NRC 170 n.15 (2010)

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Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-98-13, 48 NRC 26, 33-34 (1998)
a governmental body's interest in protecting the individuals and territory that fall under that body's authority establishes an organizational interest for standing purposes; LBP-11-6, 73 NRC 170 n.15 (2010)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 323 (1999)
interests that an 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-11-6, 73 NRC 169 (2010)

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 requirements of 10 C.F.R. 2.309(f)(1) precludes admission of a contention; LBP-11-7, 73 NRC 280 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-9, 53 NRC 232, 235 (2001)
it is presumed that applicants intend to comply with state law; LBP-11-16, 73 NRC 678 n.185 (2011)
petitioner impermissibly assumes that applicant will violate applicable state law regarding its treatment of wells at the site; LBP-11-16, 73 NRC 676 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-12, 53 NRC 459, 474 (2001)
the choice between rulemaking and adjudication (i.e., issuing orders or other license revisions) is within the agency's discretion; LBP-11-11, 73 NRC 505-06 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-22, 54 NRC 255, 264 (2001)
although NUREGs are not legally binding, they are guidance documents, and applicant's failure to comply with such documents could give rise to an admissible contention; LBP-11-6, 73 NRC 221 n.81 (2010)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 380 (2001)
petitioners have not shown that interim docketing and Staff review of license renewal applications 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 ongoing evaluation of licensing policies; CLI-11-1, 73 NRC 5 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 380-81 (2001)
the Commission declined to stay dry cask storage proceedings pending requested rule changes; CLI-11-1, 73 NRC 5 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 381 (2001)
longstanding NRC practice has been to limit orders delaying proceedings to the duration and scope necessary to promote the Commission's dual goals of public safety and timely adjudication; CLI-11-1, 73 NRC 3-4 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 383 (2001)
because the Commission will have an opportunity to take a fresh look at concerns petitioners have expressed once the particulars of their rulemaking petition have been scrutinized by public comment and agency review, holding up proceedings is not necessary to ensure that the public will realize the full benefit of ongoing regulatory review; CLI-11-1, 73 NRC 5 (2011)

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Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348 (2002)
NEPA demands a discussion of the environmental impact of any proposed major federal action significantly affecting the quality of the human environment; LBP-11-6, 73 NRC 198 (2010)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348 n.22 (2002)
although boards may give reasonable deference to NRC guidance, such agency guidance does not substitute for regulations, is not binding authority, and does not prescribe NRC requirements; LBP-11-16, 73 NRC 670, 674 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348-49 (2002)
an environmental report need only consider environmental impacts that are reasonably foreseeable; LBP-11-6, 73 NRC 239 (2010)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 130 (2004)
the draft environmental impact statement might cure alleged omissions or deficiencies in the environmental report by including additional analysis that addresses such omissions or deficiencies; LBP-11-7, 73 NRC 276 n.150 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 139 (2004)
petitioner does not have to prove its contentions at the admissibility stage; LBP-11-2, 73 NRC 45 (2011); LBP-11-13, 73 NRC 551 (2011); LBP-11-16, 73 NRC 655 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 145 (2004)
quibbling over the details of an economic analysis would effectively stand NEPA on its head by asking that the license be rejected not due to environmental costs, but because the economic benefits are not as great as estimated; LBP-11-7, 73 NRC 283 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-05-12, 61 NRC 345, 350 (2005)
the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention; CLI-11-2, 73 NRC 338 n.20 (2011)
to justify reopening the record, the moving papers must be strong enough, in the light of any opposing filings, to avoid summary disposition; CLI-11-2, 73 NRC 346 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-05-12, 61 NRC 345, 350 n.18 (2005)
NRC generally disfavors the filing of new contentions at the eleventh hour of an adjudication, a policy that is grounded in the doctrine of finality, which states that at some point, an adjudicatory proceeding must come to an end; CLI-11-2, 73 NRC 337-38 n.15 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-05-12, 61 NRC 345, 355 (2005)
petitioner's appellate argument must pass regulatory muster under the rigorous standards of 10 C.F.R. 2.326(a)(3); CLI-11-2, 73 NRC 347 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 179-80, *aff'd as to other matters,* CLI-98-13, 48 NRC 26 (1998)
under 10 C.F.R. 2.309(f)(1), petitioner need only properly allege a defect in meeting the materiality requirement; LBP-11-7, 73 NRC 292 n.250 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-99-32, 50 NRC 155, 158 (1999)
summary judgment should be granted only where the truth is clear; LBP-11-14, 73 NRC 595 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-00-27, 52 NRC 216, 223 (2000)
contentions that address an important security issue regarding Part 74's strict requirements for the proposed facility, which applicant previously admitted it failed to satisfy, are admissible; LBP-11-9, 73 NRC 412 n.119 (2011)

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Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-22, 54 NRC 155, 161 (2001)

where the information in the DEIS is so different from the information in the environmental report that the DEIS dispenses with and moots the issues raised in the original contention, intervenor must file a new or amended contention against the DEIS; LBP-11-1, 73 NRC 26 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-23, 54 NRC 163, 172 n.3 (2001)

a contention contesting applicant's environmental report may be viewed as a challenge to the Staff's subsequently issued DEIS/EIS, but this "migration" tenet does not change the basic form of the contention, i.e., whether it challenges the soundness of the information provided or claims that necessary information has been omitted (or some combination of the two); LBP-11-1, 73 NRC 26 n.13 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-30, 54 NRC 231, 235 (2001)

if summary disposition movant meets its burden, the nonmoving party must counter each adequately supported material fact with its own statement of material facts in dispute and supporting documentation and cannot rely on mere allegations or denials, or the facts in controversy will be deemed admitted; LBP-11-14, 73 NRC 595 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-39, 54 NRC 497, 509 (2001)

during summary disposition, it is not appropriate for boards to untangle the expert affidavits and decide which experts are more correct; LBP-11-7, 73 NRC 263 (2011)

summary disposition is not a tool for trying to convince a licensing board to decide, on written submissions, genuine issues of material fact that warrant resolution at a hearing; LBP-11-14, 73 NRC 595 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-39, 54 NRC 497, 510 (2001)

summary disposition is particularly inappropriate when a licensing board is presented with conflicting expert testimony, for at that stage of a proceeding it is not the role of licensing boards to untangle the expert affidavits and decide which experts are more correct; LBP-11-14, 73 NRC 595 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-03-8, 57 NRC 293, 319-20, *review denied,* CLI-03-8, 58 NRC 11 (2003)

regulatory guidance is not binding on applicants; LBP-11-16, 73 NRC 661 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-03-8, 57 NRC 293, 320, *review denied* CLI-03-8, 58 NRC 11 (2003)

although boards may give reasonable deference to NRC guidance, such agency guidance does not substitute for regulations, is not binding authority, and does not prescribe NRC requirements; LBP-11-16, 73 NRC 670, 674 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-03-30, 58 NRC 454, 479 (2003)

although there are many possible combinations of wind and solar power, storage, and natural gas, it is not necessary to examine every possible combination; LBP-11-4, 73 NRC 104 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-05-12, 61 NRC 319, 326, *aff'd,* CLI-05-19, 62 NRC 403 (2005)

although an applicant has the ultimate burden of proof on any issues on which a hearing is held, hearings are held on only those issues that an intervenor brings to the fore; LBP-11-4, 73 NRC 100 n.16 (2011)

Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-05-29, 62 NRC 635, 710 & n.12 (2005)

if NRC Staff detects deficiencies in an application before or after a notice of hearing opportunity is issued, the applicant will freely be given (outside the adjudicatory process) ample opportunity to amend it; LBP-11-9, 73 NRC 412 n.118 (2011)

the public interest can well be served by revisions to an application that end up "getting it right" and by the Staff's expected thorough analysis of such revisions; LBP-11-9, 73 NRC 412 (2011)

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Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-08-15, 68 NRC 1 (2008)
- the Commission refused to suspend the combined license proceeding pending completion of the design certification review of the AP1000 reactor; CLI-11-1, 73 NRC 4 (2011)

Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-08-15, 68 NRC 1, 4 (2008)
- lack of finality in the design certification process is anticipated in the rulemaking, and hearing procedures can be adjusted to account for any new or amended contentions based on information relating to design certification; CLI-11-1, 73 NRC 4 (2011)
- there is no basis to hold a notice of hearing in abeyance pending completion of the design certification rulemaking; CLI-11-1, 73 NRC 4-5 (2011)

Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-10-9, 71 NRC 245, 252 (2010)
- when intervenors renewed a request to hold a proceeding in abeyance pending completion of the design certification rulemaking, the Commission found no new justification for reconsideration or any changed circumstances that could not previously have been brought; CLI-11-1, 73 NRC 5 n.12 (2011)

Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-2, 71 NRC 27, 34 (2010)
- an environmental report's adequacy is examined under NEPA as well as under Part 51 because the ER is the basis upon which the NRC's environmental impact statement will be prepared; LBP-11-13, 73 NRC 552 n.110 (2011); LBP-11-14, 73 NRC 598 (2011)

Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-2, 71 NRC 27, 46 (2010)
- absent a licensed low-level radioactive waste disposal facility that will accept waste from the proposed facility, it is reasonably foreseeable that LLRW generated by normal operations will be stored at the site for a longer term than is currently envisioned in applicant's combined license application; LBP-11-6, 73 NRC 239 (2010)
- an environmental report need only discuss reasonably foreseeable environmental impacts of a proposed action; LBP-11-6, 73 NRC 217 n.78 (2010)

Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-2, 71 NRC 27, 46-47 (2010)
- contentions challenging the ability of combined license applicants to handle onsite storage of Classes B and C low-level radioactive waste, as well as the attendant potential environmental impacts of such storage in the wake of the closure of the Barnwell facility in South Carolina to states outside of the Atlantic Compact are admissible; LBP-11-6, 73 NRC 239 (2010)

Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-2, 71 NRC 27, 47-48 (2010)
- challenges to a combined license applicant's failure to provide information on long-term storage of Greater-Than-Class-C radioactive waste are outside the scope of a combined license proceeding; LBP-11-6, 73 NRC 240 n.109 (2010)

Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), LBP-09-10, 70 NRC 51, 86 (2009), *rev'd in part on other grounds,* CLI-10-2, 71 NRC 27, 29 (2010)
- when a contention alleges the need for further study of an alternative, from an environmental perspective, such reasonableness determinations are the merits, and should only be decided after the contention is admitted; LBP-11-2, 73 NRC 50 (2011); LBP-11-13, 73 NRC 564 (2011)

Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), LBP-09-10, 70 NRC 51, 86-87 (2009)
- at the contention admissibility stage, boards merely decide whether a contention satisfies the six pleading criteria of 10 C.F.R. 2.309(f)(1)(i)-(vi); LBP-11-16, 73 NRC 690 (2011)

Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), LBP-10-20, 72 NRC 571, 590 (2010)
- applicant has described the kinds and quantities of radioactive materials expected to be produced in the operation to the extent its combined license application references a standardized design; LBP-11-6, 73 NRC 245 n.112 (2010)

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Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), LBP-10-23, 72 NRC 692, 703-04 (2010)
"document" means any medium (electronic, paper, or of any other kind) that contains or stores any information, including text, data, audio, video, computer software, or computer modeling information; LBP-11-5, 73 NRC 137 (2011)

Public Citizen, Inc. v. National Highway Traffic Safety Administration, 513 F.3d 234, 237 (D.C. Cir. 2008)
mere potential exposure to minute doses of radiation within regulatory limits does not constitute a distinct and palpable injury on which standing can be founded; CLI-11-3, 73 NRC 623 n.51 (2011)

Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-422, 6 NRC 33, 82-90 (1977), *aff'd, New England Coalition on Nuclear Pollution v. NRC,* 582 F.2d 87 (1st Cir. 1978)
although NRC Staff's argument against contention admission appears to have some weight, the board need not resolve it, because the contention is inadmissible for failing to raise a genuine dispute of material fact or law with the environmental report; LBP-11-6, 73 NRC 207 n.63 (2010)

Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-422, 6 NRC 33, 83 (1977), *aff'd, New England Coalition on Nuclear Pollution v. NRC,* 582 F.2d 87 (1st Cir. 1978)
NRC authority to review offsite impacts of transmission lines goes beyond merely factoring them into a final cost-benefit balance and includes as well the authority where necessary to impose license conditions to minimize those impacts; LBP-11-6, 73 NRC 250 n.116 (2010)

Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-422, 6 NRC 33, 90 (1977), *aff'd, New England Coalition on Nuclear Pollution v. NRC,* 582 F.2d 87 (1st Cir. 1978)
need for power is a shorthand expression for the benefit side of the cost-benefit balance that NEPA mandates for a proceeding considering the licensing of a nuclear power plant; LBP-11-6, 73 NRC 218 (2010)

Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-422, 6 NRC 33, 111 (1977)
boards' authority to seek to trigger review in extraordinary circumstances remains and has been put to good use; LBP-11-9, 73 NRC 418-19 n.13 (2011)

Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-471, 7 NRC 477, 504-08 (1978)
aesthetic impacts of energy sources may vary according to individual location; LBP-11-4, 73 NRC 112 (2011)

Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), CLI-88-10, 28 NRC 573, 596-97 (1988)
rule waivers are not granted where the circumstances on which the waiver's proponent relies are common to a large class of applicants or facilities; LBP-11-16, 73 NRC 702 n.351 (2011)

Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), CLI-89-3, 29 NRC 234, 241 (1989)
parties are expected to bear their burden and to clearly identify the matters on which they intend to rely with reference to a specific point; LBP-11-6, 73 NRC 220 n.80 (2010)

Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2), ALAB-573, 10 NRC 775, 804 (1979)
demand for electricity is of course the justification for building any power plant, and satisfaction of that demand is the principal beneficial factor weighed against the environmental costs in striking the balance that NEPA requires; LBP-11-7, 73 NRC 282 n.174, 291 n.242 (2011)
inasmuch as NRC Staff relies on the benefits of proposed units to satisfy an otherwise unmet need for power, the adequacy of the need-for-power assessment is material to granting the proposed combined license; LBP-11-7, 73 NRC 291 (2011)

Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2), LBP-78-28, 8 NRC 281, 282 (1978)
NRC Staff need not replicate the work completed by another entity, but rather must independently review and find relevant and scientifically reasonable any outside reports or analyses on which it intends to rely in its environmental impact statement; LBP-11-1, 73 NRC 25 n.9 (2011)

Roanoke River Basin Association v. Hudson, 991 F.2d 132, 139 (4th Cir. 1993)
in determining whether the government's position was substantially justified, courts must look to the totality of the circumstances; LBP-11-8, 73 NRC 368 (2011)

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Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 334, 355-56 (1989)
although boards may give reasonable deference to NRC guidance, such agency guidance does not substitute for regulations, is not binding authority, and does not prescribe NRC requirements; LBP-11-16, 73 NRC 670, 674 (2011)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 348 (1989)
NEPA establishes a broad national commitment to protecting and promoting environmental quality; LBP-11-7, 73 NRC 264 (2011)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349-50 (1989)
the principal goals of NEPA's environmental impact statement requirement are to force agencies to take a hard look at the environmental consequences of a proposed project, and, by making relevant analyses openly available, to permit the public a role in the agency's decisionmaking process; LBP-11-14, 73 NRC 598 (2011)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989)
if the adverse environmental impacts of the proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs; LBP-11-14, 73 NRC 605 (2011)
NEPA itself does not mandate particular results, but simply prescribes the necessary process; LBP-11-7, 73 NRC 264 (2011)
NEPA's requirement that federal agencies prepare an environmental impact statement when considering a major action serves the statute's action-forcing purpose in two ways; LBP-11-7, 73 NRC 264 (2011)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350-51 (1989)
if the adverse environmental effects of a proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs; LBP-11-7, 73 NRC 281 n.168 (2011)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 351 (1989)
one important component of an environmental impact statement is the discussion of possible actions that might mitigate adverse environmental consequences; LBP-11-7, 73 NRC 264 (2011)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 352 (1989)
NEPA only requires that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated; LBP-11-2, 73 NRC 64 (2011); LBP-11-7, 73 NRC 265 (2011); LBP-11-13, 73 NRC 566 (2011)
there is a fundamental distinction between a requirement that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated, on the one hand, and a substantive requirement that a complete mitigation plan be actually formulated and adopted, on the other; LBP-11-14, 73 NRC 607 n.104 (2011)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 352-53 (1989)
NEPA does not demand the presence of a fully developed plan or a detailed explanation of specific measures that will be employed to mitigate the adverse impacts of a proposed action; LBP-11-7, 73 NRC 265 (2011)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 353 n.16 (1989)
NEPA imposes no substantive requirement that mitigation measures actually be taken; LBP-11-14, 73 NRC 607 (2011)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 354 (1989)
as a mitigation analysis, a severe accident mitigation alternatives analysis is neither a worst-case nor a best-case impacts analysis; LBP-11-7, 73 NRC 265 (2011)

Rodriguez v. Taylor, 569 F.2d 1231, 1245 (3d Cir. 1977)
the presence of an attorney-client relationship suffices to entitle prevailing litigants to receive fee awards; LBP-11-8, 73 NRC 366 (2011)

Role Models America, Inc. v. Brownlee, 353 F.3d 962, 967 (D.C. Cir. 2004)
the government must demonstrate the reasonableness not only of its litigation position, but also of the agency's actions; LBP-11-8, 73 NRC 368 n.97 (2011)

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Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), CLI-92-2, 35 NRC 47, 56 (1992)
in determining whether an individual member of an organization qualifies for standing in his or her own right, NRC generally applies traditional judicial standing concepts; LBP-11-13, 73 NRC 545 (2011)

Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), CLI-93-3, 37 NRC 135, 147 (1993)
in the context of a new contention filed after the initial petition, petitioner has an iron-clad obligation to examine the publicly available documentary material with sufficient care to enable it to uncover any information that could serve as the foundation for a specific contention; CLI-11-2, 73 NRC 339 n.22 (2011)

Scarborough v. Principi, 541 U.S. 401, 414 (2004)
under the Equal Access to Justice Act, the government bears the burden of establishing that its position was substantially justified; LBP-11-8, 73 NRC 368 (2011)

Scarborough v. Principi, 541 U.S. 401, 415 (2004)
Congress did not want the "substantially justified" standard to be read to raise a presumption that the government position was not substantially justified simply because it lost the case; LBP-11-8, 73 NRC 368 n.100 (2011)

Schweiker v. Wilson, 450 U.S. 221, 226 & n.6 (1981)
the equal protection component of the Fifth Amendment's Due Process Clause applies to federal action, and the Equal Protection Clause of the Fourteenth Amendment applies to state action; LBP-11-15, 73 NRC 639 n.20 (2011)

Securities and Exchange Commission v. Comserv Corp., 908 F.2d 1407, 1409-10, 1413 (8th Cir. 1990)
neither the Equal Access to Justice Act nor the legislative history provides a definition of the word "incur"; LBP-11-8, 73 NRC 363-64 (2011)

Securities and Exchange Commission v. Comserv Corp., 908 F.2d 1407, 1409-10, 1415 (8th Cir. 1990)
where a pro bono attorney forgives a fee to a client unable to afford legal expenses, that client is eligible for an Equal Access to Justice Act award on the basis of that arrangement with the attorney; LBP-11-8, 73 NRC 365 n.74 (2011)

Securities and Exchange Commission v. Comserv Corp., 908 F.2d 1407, 1409-10, 1416 (8th Cir. 1990)
the fee-deterrent-removal purpose of the Equal Access to Justice Act would not be served by an award of fees to an individual whose fees are fully paid by a ineligible organization; LBP-11-8, 73 NRC 363 (2011)

Sequoyah Fuels Corp. and General Atomics (Gore, Oklahoma Site), CLI-94-11, 40 NRC 55, 59 n.2 (1994)
although the Appeal Panel was abolished in 1991, the Commission explicitly directed that the decisions of its boards were still to carry precedential weight; LBP-11-8, 73 NRC 358 (2011)

Sequoyah Fuels Corp. and General Atomics (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 71-72 (1994)
NRC applies judicial standing concepts that require a participant to establish that it has suffered or will suffer a distinct and palpable injury that constitutes injury-in-fact within the zones of interests arguably protected by the governing, the injury is fairly traceable to the challenged action, and the injury is likely to be redressed by a favorable decision; LBP-11-6, 73 NRC 168-69 (2010); LBP-11-16, 73 NRC 652 (2011)

Shaw AREVA MOX Services, LLC (Mixed Oxide Fuel Fabrication Facility), CLI-09-2, 69 NRC 55, 63 n.33 (2009)
although the Appeal Panel was abolished in 1991, the Commission explicitly directed that the decisions of its boards were still to carry precedential weight; LBP-11-8, 73 NRC 358 (2011)

Shaw AREVA MOX Services, LLC (Mixed Oxide Fuel Fabrication Facility), CLI-09-2, 69 NRC 55, 65 n.47 (2009)
hearing petitioners have an ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to uncover any information that could serve as the foundation for a specific contention; LBP-11-9, 73 NRC 403 n.73 (2011)

Shaw AREVA MOX Services, LLC (Mixed Oxide Fuel Fabrication Facility), LBP-08-11, 67 NRC 460, 482 (2008)
boards may reformulate contentions to consolidate issues for a more efficient proceeding; LBP-11-13, 73 NRC 556 n.133, 568 n.222 (2011)

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Sheppard v. Maxwell, 384 U.S. 333, 349 (1966)
the principle that justice cannot survive behind walls of silence has long been reflected in the Anglo-American distrust for secret trials; LBP-11-5, 73 NRC 134 n.6 (2011)

Siegel v. AEC, 400 F.2d 778, 785-86 (D.C. Cir. 1968)
formal adjudicatory procedures are inappropriate in export or import licensing proceedings; CLI-11-3, 73 NRC 623-24 n.53 (2011)

Sierra Club v. Georgia Power Co., 443 F.3d 1346, 1348 (11th Cir. 2006)
a source permit is an operating permit that the Clean Air Act requires major stationary sources of air pollution to obtain; LBP-11-13, 73 NRC 583 n.356 (2011)

Sierra Club v. Lynn, 502 F.2d 43, 61 (5th Cir. 1974), *cert. denied,* 422 U.S. 1049 (1975)
NEPA does not demand that every federal decision be verified by reduction to mathematical absolutes for insertion into a precise formula; LBP-11-7, 73 NRC 282 n.173 (2011)

Sierra Club v. Morton, 405 U.S. 727 (1972)
petitioners cannot assert organizational standing both in their own capacity and as members of an organization; CLI-11-3, 73 NRC 621 n.38 (2011)

Sierra Club v. Morton, 405 U.S. 727, 739 (1972)
mere interest in a problem is not sufficient by itself to render the organization adversely affected or aggrieved within the meaning of the Administrative Procedure Act; CLI-11-3, 73 NRC 622 n.41 (2011)

Silkwood v. Kerr-McGee Corp., 464 U.S. 238, 249 (1984)
the Atomic Energy Act is designed to regulate the radiological safety aspects involved in the construction and operation of a nuclear plant; LBP-11-6, 73 NRC 233 (2010)

Smeldberg Machine & Tool, Inc. v. Donovan, 730 F.2d 1089, 1092-93 (7th Cir. 1984)
an agency's discretionary choice to conduct a formal on-the-record hearing is irrelevant when determining whether the Equal Access to Justice Act applies to a particular proceeding; LBP-11-8, 73 NRC 360 (2011)

SmithKline Beecham Corp. v. Apotex Corp., 439 F.3d 1312, 1320 (Fed. Cir. 2006)
it is not the function of a licensing board to comb through the record searching for arguments in support of a proffered contention; LBP-11-6, 73 NRC 244 n.111 (2010); LBP-11-13, 73 NRC 575 n.287 (2011)

South Carolina v. O'Leary, 64 F.3d 892, 899 (4th Cir. 1995)
for an environmental impact statement, separate actions may be considered connected if, among other things, they are interdependent parts of a larger action and depend on the larger action for their justification; LBP-11-10, 73 NRC 441 (2011)

South Carolina Electric & Gas Co. (Virgil C. Summer Nuclear Station, Unit 1), ALAB-642, 13 NRC 881, 887 n.5 (1981)
contentions that address an important security issue regarding Part 74's strict requirements for the proposed facility, which applicant previously admitted it failed to satisfy, are admissible; LBP-11-9, 73 NRC 412 n.119 (2011)

South Carolina Electric & Gas Co. (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 6 (2010)
although pro se litigants are expected to comply with procedural rules, they are generally extended some latitude; LBP-11-2, 73 NRC 38 (2011); LBP-11-13, 73 NRC 543 (2011)

South Carolina Electric & Gas Co. (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 6-7 (2010)
petitioner was allowed to clarify standing declarations by submitting revised declarations with reply; LBP-11-13, 73 NRC 549 (2011)

South Carolina Electric & Gas Co. (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 17 (2010)
discussion of need for power is required in an environmental report, but applicant need not precisely identify future market conditions and energy demand or develop other detailed analyses in order to establish with certainty that construction and operation of a nuclear power plant is the most economical alternative; LBP-11-6, 73 NRC 218 (2010)

it is sufficient if the need-for-power analysis is at a level of detail sufficient to reasonably characterize the costs and benefits associated with proposed licensing actions; LBP-11-7, 73 NRC 283 n.181 (2011)

South Carolina Electric & Gas Co. (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 18-19 & n.84 (2010)

proposed need-for-power contention based on merely conclusory statements, without supporting facts or detail, is inadmissible; LBP-11-7, 73 NRC 298 n.296 (2011)

South Carolina Electric & Gas Co. (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 20-21 (2010)

applicant who is a state-regulated utility is in a position to implement and promote programs such as energy conservation, efficiency, and load management such that the need for additional generation capacity may be reduced; LBP-11-6, 73 NRC 224 (2010)

South Carolina Electric & Gas Co. (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 21 (2010)

NEPA's rule of reason would not exclude consideration of demand-side management as part of an alternatives analysis when applicant is a state-regulated utility; LBP-11-6, 73 NRC 224 (2010)

South Carolina Electric & Gas Co. (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 23-24 (2010)

the extent to which operation and maintenance costs of a solar facility may present a comparative benefit is immaterial since the four-part combination of alternative energy sources is not environmentally preferable to two new nuclear units; LBP-11-4, 73 NRC 111 (2011)

South Carolina Electric & Gas Co. (Virgil C. Summer Nuclear Station, Units 2 and 3), LBP-09-2, 69 NRC 87, 100 (2009), *aff'd in part and rev'd and remanded on other grounds,* CLI-10-1, 71 NRC 1 (2010)

a combined license applicant will have to demonstrate that the site-specific parameters are bounded by the parameters developed for the certified design; LBP-11-10, 73 NRC 450 (2011)

each combined license applicant will have to determine whether it will adopt in toto the certified design, or whether it will take exemptions thereto and/or departures therefrom; LBP-11-10, 73 NRC 450 (2011)

South Carolina Electric & Gas Co. (Virgil C. Summer Nuclear Station, Units 2 and 3), LBP-09-2, 69 NRC 87, 110 (2009)

NRC generally defers to an applicant's stated purpose as long as that purpose is not so narrow as to eliminate alternatives; LBP-11-13, 73 NRC 553 (2011)

South Texas Project Nuclear Operating Co. (South Texas Project, Units 3 and 4), CLI-10-24, 72 NRC 451, 453-55 (2010)

lack of clarity in the terms and application of the agency's newly established SUNSI policy contributed to Intervenors' misapprehension that they were required to demonstrate a need for the information in order to request SUNSI documents; LBP-11-9, 73 NRC 410 (2011)

South Texas Project Nuclear Operating Co. (South Texas Project, Units 3 and 4), CLI-10-24, 72 NRC 451, 454 (2010)

the SUNSI policy does not change any of the statutory, regulatory, or other obligations of the agency with respect to the handling of information; LBP-11-5, 73 NRC 140 (2011)

South Texas Project Nuclear Operating Co. (South Texas Project, Units 3 and 4), CLI-10-24, 72 NRC 451, 454-55 (2010)

rules governing access to SUNSI apply only to potential parties, whereas party access to SUNSI is governed by protective orders and nondisclosure agreements; LBP-11-9, 73 NRC 410 (2011)

South Texas Project Nuclear Operating Co. (South Texas Project, Units 3 and 4), CLI-10-24, 72 NRC 451, 465-68 (2010)

NRC Staff was admonished for having imposed a stricter-than-necessary standard of "need" for access to SUNSI; LBP-11-9, 73 NRC 410 (2011)

South Texas Project Nuclear Operating Co. (South Texas Project, Units 3 and 4), CLI-10-24, 72 NRC 451, 468 n.99 (2010)

any reasonably segregable portion of the record shall be provided to any person requesting such record after deletion of the portions that are exempt; LBP-11-5, 73 NRC 139 n.14 (2011)

board requests that applicant and NRC Staff review the nonpublic appendix within 7 days of the date of issuance of the decision and provide the board with a joint report indicating whether all, or any

portion, of the appendix can be publicly released, and in the event portions of the appendix can be made publicly available, indicate what redactions are appropriate; LBP-11-11, 73 NRC 525 n.36 (2011)

South Texas Project Nuclear Operating Co. (South Texas Project, Units 3 and 4), LBP-10-2, 71 NRC 190, 205-09 (2010), *rev'd on other grounds,* CLI-10-24, 72 NRC 451, 461-64 (2010)

the principle that justice cannot survive behind walls of silence has long been reflected in the Anglo-American distrust for secret trials; LBP-11-5, 73 NRC 134 n.6 (2011)

Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-07-3, 65 NRC 237, 247 (2007)

an ESP essentially allows an entity to bank a site for the possible future construction of a specified number of new nuclear power generation facilities; LBP-11-16, 73 NRC 650-51 (2011)

Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-07-3, 65 NRC 237, 249-50 (2007)

in cases involving the possible construction or operation of a nuclear power reactor, NRC considers proximity to the proposed facility to be sufficient to establish standing; LBP-11-16, 73 NRC 653 (2011)

Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-07-3, 65 NRC 237, 250 (2007)

an organization that seeks to establish representational standing must show that at least one of its members would be affected by the proceeding and must identify that member by name and address, show that the member would have standing to intervene in his or her own right, and that the identified members have authorized the organization to request a hearing on their behalf; LBP-11-16, 73 NRC 653 (2011)

to determine whether the elements for standing are met, boards are to construe the petition in favor of the petitioner; LBP-11-16, 73 NRC 653 (2011)

Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-07-3, 65 NRC 237, 255 (2007)

boards have authority under 10 C.F.R. 2.316, 2.319, 2.329 to further define petitioners' admitted contentions when redrafting would clarify the scope of the contentions; LBP-11-13, 73 NRC 565 n.199 (2011)

Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-08-2, 67 NRC 54, 63-64 (2008)

the migration tenet applies where the information in the DEIS is sufficiently similar to the information in the environmental report; LBP-11-1, 73 NRC 26 n.14 (2011)

where the information in the DEIS is so different from the information in the environmental report that the DEIS dispenses with and moots the issues raised in the original contention, intervenor must file a new or amended contention against the DEIS; LBP-11-1, 73 NRC 26 (2011)

Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-08-2, 67 NRC 54, 66-67 (2008)

the proper method for raising an issue addressed in a motion to strike is to seek leave to file a reply in support of the summary disposition motion; LBP-11-14, 73 NRC 608 n.108 (2011)

Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-08-2, 67 NRC 54, 67-68 n.9 (2008)

if summary disposition movant discusses a matter in its statement of undisputed facts, the board may view with skepticism any later argument by that movant that a response regarding that issue is outside the scope of the contention, particularly given the onus that is placed upon an opposing party to respond to such a statement; LBP-11-4, 73 NRC 123 (2011)

Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-08-2, 67 NRC 54, 78 (2008)

the board refused to consider new bases that were included in an answer to a summary disposition motion and were outside the scope of the original contention; LBP-11-4, 73 NRC 123 (2011)

Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-09-7, 69 NRC 613, 719 (2009)

NRC's environmental analysis need only consider environmental impacts that are reasonably foreseeable, and need not consider remote and speculative scenarios; LBP-11-16, 73 NRC 690-91 (2011)

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CASES

Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-09-19, 70 NRC 433 (2009)
mandatory hearings have been conducted by licensing boards in 10 C.F.R. Part 52 early site permit proceedings; LBP-11-11, 73 NRC 475 (2011)

Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-09-19, 70 NRC 433, 503-04 (2009)
there is no NRC 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-11-11, 73 NRC 507 (2011)

Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-09-19, 70 NRC 433, 540 (2009)
license conditions imposed on an applicant as a result of the Staff's review process and applicant-requested exemptions from agency regulatory requirements that are granted by the Staff have a strong potential to fall into a "non-routine matter" category; LBP-11-11, 73 NRC 494-95 (2011)

SRI International v. Matsushita Electric Corp. of America, 775 F.2d 1107, 1116 (9th Cir. 1985)
summary disposition, like summary judgment, is an extreme remedy; LBP-11-7, 73 NRC 263 (2011)

St. Louis Fuel and Supply Co. v. Federal Energy Regulatory Commission, 890 F.2d 446, 448-91 (D.C. Cir. 1989)
an agency's discretionary choice to conduct a formal on-the-record hearing is irrelevant when determining whether the Equal Access to Justice Act applies to a particular proceeding; LBP-11-8, 73 NRC 360 (2011)

St. Louis Fuel and Supply Co. v. Federal Energy Regulatory Commission, 890 F.2d 446, 451 (D.C. Cir. 1989)
attorneys' fees may be awarded in adversary adjudications that are governed by Administrative Procedure Act § 554, but they may not be awarded in adversary adjudications that Congress did not subject to that section; LBP-11-8, 73 NRC 356 (2011)

State of New Jersey (Department of Law and Public Safety), CLI-93-25, 38 NRC 289, 296 (1993)
good cause for failure to file on time is entitled to the most weight; LBP-11-7, 73 NRC 279 (2011); LBP-11-15, 73 NRC 634 (2011)

Statement of Policy on Conduct of Adjudicatory Proceedings, CLI-98-12, 48 NRC 18, 22-23 (1998)
boards are not to proceed with sua sponte issues absent the Commission's approval; LBP-11-9, 73 NRC 419 n.13 (2011)

Strycker's Bay Neighborhood Council, Inc. v. Karlen, 444 U.S. 223, 227-28 (1980)
if the adverse environmental effects of a proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs; LBP-11-7, 73 NRC 281 n.168 (2011); LBP-11-14, 73 NRC 605 (2011)
NEPA itself does not mandate particular results, but simply prescribes the necessary process; LBP-11-7, 73 NRC 264 (2011)

System Energy Resources, Inc. (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 13 (2005)
boards do not sit to flyspeck environmental documents or to add details or nuances; LBP-11-16, 73 NRC 676 (2011)

System Energy Resources, Inc. (Early Site Permit for Grand Gulf ESP Site), CLI-07-10, 65 NRC 144, 146 (2007)
tardy filing of a contention may be excusable only where the facts upon which the amended or new contention is based were previously unavailable; CLI-11-2, 73 NRC 344 (2011)

System Energy Resources, Inc. (Early Site Permit for Grand Gulf ESP Site), LBP-07-1, 65 NRC 27, *permit issuance authorized,* CLI-07-14, 65 NRC 216 (2007)
mandatory proceedings for licensing of proposed uranium enrichment facility sites were conducted; LBP-11-11, 73 NRC 475 (2011)

Taxpayers of Michigan Against Casinos v. Norton, 433 F.3d 852, 864 (D.C. Cir. 2006)
a draft environmental impact statement does not and cannot treat identified environmental concerns in a vacuum; LBP-11-7, 73 NRC 302 (2011)

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CASES

Tennessee Valley Authority (Bellefonte Nuclear Power Plant, Units 3 and 4), CLI-09-3, 69 NRC 68, 75 n.38 (2009)
rule waivers are not granted where the circumstances on which the waiver's proponent relies are common to a large class of applicants or facilities; LBP-11-16, 73 NRC 702 n.351 (2011)

Tennessee Valley Authority (Bellefonte Nuclear Power Plant, Units 1 and 2), CLI-10-26, 72 NRC 474, 478 n.23 (2010)
NRC has a strong policy in favor of openness and transparency; LBP-11-5, 73 NRC 134 (2011)

Tennessee Valley Authority (Bellefonte Nuclear Power Plant, Units 3 and 4), LBP-08-16, 68 NRC 361, 410 (2008)
potential legislative action that might result in a reduction in demand is speculative and therefore does not provide a basis for admission of a contention on need for power; LBP-11-7, 73 NRC 287 n.206, 298 n.296 (2011)

Tennessee Valley Authority (Hartsville Nuclear Plant, Units 1A, 2A, 1B, and 2B), LBP-76-44, 4 NRC 637, 648-49 (1976)
boards' authority to seek to trigger review in extraordinary circumstances remains and has been put to good use; LBP-11-9, 73 NRC 418 n.13 (2011)

Tennessee Valley Authority (Sequoyah Nuclear Plant, Units 1 and 2; Watts Bar Nuclear Plant, Unit 1), LBP-02-14, 56 NRC 15, 25 (2002)
even if an import or export license authorized possession and/or use of the low-level radioactive waste, the petition does not assert how the LLRW is a significant source of radioactivity or provide any scenario in which the import or export of the LLRW would result in an accident that could produce obvious offsite consequences; CLI-11-3, 73 NRC 622 n.46 (2011)

Tennessee Valley Authority (Watts Bar Nuclear Plant, Unit 2), CLI-10-12, 71 NRC 319, 323 (2010)
if good cause is not shown, a board may still permit the late filing, but petitioner or intervenor must make a strong showing on the other factors of 10 C.F.R. 2.309(c); LBP-11-9, 73 NRC 401 (2011)

Tennessee Valley Authority (Watts Bar Nuclear Plant, Units 1 and 2), ALAB-413, 5 NRC 1418, 1421 (1977)
an organization's standing can be demonstrated through the interests of its members, but if a member acts or speaks on behalf of the organization, that member must also demonstrate authorization by that organization to represent it; LBP-11-13, 73 NRC 548-49 (2011)

Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Unit 2), CLI-93-10, 37 NRC 192, 200 (1993)
in ruling on whether a contention is moot, boards look to whether an issue is still live, such that a party still has a legal interest in the issue; LBP-11-4, 73 NRC 127 (2011)

Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Units 1 and 2), CLI-92-12, 36 NRC 62, 69-70 (1992)
availability of new information may provide good cause for nontimely filing, but the test for good cause is not simply when the intervenor became aware of the material sought to be introduced but when the information became available and when the intervenor reasonably should have become aware of the information; LBP-11-7, 73 NRC 279 n.162 (2011)
not only must intervenor act promptly after learning of new information, but the information itself must be new information, not information already in the public domain; LBP-11-7, 73 NRC 279-80 n.162 (2011)

Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Units 1 and 2), CLI-92-12, 36 NRC 62, 73 (1992)
if intervenor fails to show good cause for a late filing, its demonstration on the other late-filing factors must be particularly strong; LBP-11-7, 73 NRC 280 (2011) ; LBP-11-15, 73 NRC 634-35 (2011)

Texas Utilities Generating Co. (Comanche Peak Steam Electric Station, Units 1 and 2), CLI-81-24, 14 NRC 614 (1981)
rulings seeking to invoke sua sponte review must be transmitted to the Commission for approval; LBP-11-9, 73 NRC 419 n.13 (2011)

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CASES

Three Mile Island Alert v. NRC, 771 F.2d 720, 728 (3d Cir. 1985), *cert. denied sub nom. Aamodt v. NRC,* 475 U.S. 1082, *reh'g denied,* 476 U.S. 1179 (1986)
in the context of a new contention filed after the initial petition, petitioner has an iron-clad obligation to examine the publicly available documentary material with sufficient care to enable it to uncover any information that could serve as the foundation for a specific contention; CLI-11-2, 73 NRC 339 n.22 (2011)

Toledo Edison Co. (Davis-Besse Nuclear Power Station, Units 1, 2, and 3), ALAB-378, 5 NRC 557, 561 (1977)
relitigation of an issue previously decided by a licensing board or the Commission may also be barred by the doctrine of collateral estoppel; LBP-11-10, 73 NRC 433 n.47 (2011)

Tongass Conservation Society v. Cheney, 924 F.2d 1137, 1140 (D.C. Cir. 1991)
NEPA requires that an environmental review provide a sufficient discussion of alternatives to enable the decisionmaker to take a hard look at environmental factors, and to make a reasoned decision; LBP-11-13, 73 NRC 552 (2011)

Town of Huntington v. Marsh, 859 F.2d 1134, 1142 (2d Cir. 1988)
for an environmental impact statement, separate actions may be considered connected if, among other things, they are interdependent parts of a larger action and depend on the larger action for their justification; LBP-11-10, 73 NRC 441 (2011)

Town of Winthrop v. Federal Aviation Administration, 535 F.3d 1, 11-13 (1st Cir. 2008)
NEPA permits agencies to select their own methodology for mitigation analysis as long as that methodology is reasonable; LBP-11-7, 73 NRC 265 (2011)

Transnuclear, Inc. (Export of 93.15% Enriched Uranium), CLI-94-1, 39 NRC 1, 3 (1994)
in assessing whether a petitioner has set forth a sufficient interest to qualify for a hearing as a matter of right in a licensing proceeding, the Commission has long applied contemporaneous judicial concepts of standing; CLI-11-3, 73 NRC 621 (2011)

Transnuclear, Inc. (Export of 93.3% Enriched Uranium), CLI-99-15, 49 NRC 366, 367 (1999)
essential to establishing standing are findings of injury, causation, and redressability; CLI-11-3, 73 NRC 621 (2011)

Transnuclear, Inc. (Export of 93.3% Enriched Uranium), CLI-99-15, 49 NRC 366, 368 (1999)
where petitioners do not claim to have special knowledge on any of the issues raised by an import/export application or present any significant information not already available to and considered by the Commission in assessing the applications, a discretionary hearing would impose unnecessary burdens on the participants without assisting in the Commission in making the requisite findings; CLI-11-3, 73 NRC 625 (2011)

Transnuclear, Inc. (Export of 93.3% Enriched Uranium), CLI-00-16, 52 NRC 68, 72 (2000)
where petitioners do not claim to have special knowledge on any of the issues raised by an import/export application or present any significant information not already available to and considered by the Commission in assessing the applications, a discretionary hearing would impose unnecessary burdens on the participants without assisting in the Commission in making the requisite findings; CLI-11-3, 73 NRC 625 (2011)

Transource International., Inc. v. Trinity Industries, Inc., 725 F.2d 274, 279 (5th Cir. 1984)
summary disposition, like summary judgment, is an extreme remedy; LBP-11-7, 73 NRC 263 (2011)

United States v. Bosurgi, 530 F.2d 1105, 1110 (2d. Cir. 1976)
summary disposition, like summary judgment, is an extreme remedy; LBP-11-7, 73 NRC 263 (2011)

United States v. Cinergy Corp., 623 F.3d 455, 459-60 (7th Cir. 2010)
baseload generation is different than peaking power, which provides supplemental power during hours of the day when demand is highest; LBP-11-13, 73 NRC 563 (2011)

United States v. Dunkel, 927 F.2d 955, 956 (7th Cir. 1991)
judges are not like pigs, hunting for truffles buried in briefs; LBP-11-6, 73 NRC 244 n.111 (2010); LBP-11-14, 73 NRC 608 n.106 (2011)

United States v. Hallmark Construction Co., 200 F.3d 1076, 1080 (7th Cir. 2000)
in determining whether the government's position was substantially justified, the board does not make separate determinations regarding each stage but arrives at one conclusion that simultaneously encompasses and accommodates the entire civil action; LBP-11-8, 73 NRC 368 (2011)

the government must demonstrate the reasonableness not only of its litigation position, but also of the agency's actions; LBP-11-8, 73 NRC 368 (2011)

United States v. Idaho, 135 Idaho 655, 661 (2001)
the purpose of the Migratory Bird Conservation Act is to provide sanctuaries where birds cannot be molested by hunters; LBP-11-16, 73 NRC 689 (2011)

United States v. Idaho, 135 Idaho 655, 665 (2001)
the primary purpose of the Migratory Bird Conservation Act will not be defeated without a federal reserved water right; LBP-11-16, 73 NRC 689 (2011)

United States v. King, 395 U.S. 1, 4 (1969)
waivers of the government's sovereign immunity, to be effective, must be unequivocally expressed; LBP-11-8, 73 NRC 360 (2011)

United States v. New Mexico, 438 U.S. 696, 700 & n.4 (1978)
where the federal government reserves land, a water right may be implied only where the underlying purposes of the reservation of land are entirely defeated absent such a water right; LBP-11-16, 73 NRC 689 (2011)

United States v. Nordic Village Inc., 503 U.S. 30, 33 (1992)
waivers of the government's sovereign immunity, to be effective, must be unequivocally expressed; LBP-11-8, 73 NRC 360 n.46 (2011)

United States v. Paisley, 957 F.2d 1161, 1163-64 (4th Cir. 1992)
the term "incur" within the context of Equal Access to Justice Act means that an individual who is a prevailing party meeting the financial qualification of the EAJA is ineligible to receive an EAJA award when that individual was not responsible for the costs of the attorney's fees; LBP-11-8, 73 NRC 363 (2011)

United States v. Paisley, 957 F.2d 1161, 1164 (4th Cir. 1992)
claimant with a legally enforceable right to full indemnification of attorney fees from a solvent third party cannot be deemed to have incurred that expense for purposes of the Equal Access to Justice Act, hence is not eligible for an award of fees under that Act; LBP-11-8, 73 NRC 363 (2011)

United States v. Thouvenot, Wade & Moerschen, Inc., 596 F.3d 378, 383 (7th Cir. 2010)
an award of attorneys' fees under the Equal Access to Justice Act can include fees paid by a third-party liability insurer; LBP-11-8, 73 NRC 365 n.74 (2011)
in an actuarial sense the cost of the defense, to the extent borne by the insurance company, is a cost that the insured paid for, just as he would have paid a lawyer for his defense had he had no insurance; LBP-11-8, 73 NRC 365 (2011)
nothing in the Equal Access to Justice Act suggests a purpose to prevent a contractual agreement, or more broadly, to discourage the purchase of liability insurance; LBP-11-8, 73 NRC 365 (2011)

United States Energy Research and Development Administration (Clinch River Breeder Reactor Plant), CLI-76-13, 4 NRC 67, 77 (1976)
regardless of whether NRC itself conducts the need-for-power assessment or relies on another agency's forecasts and studies, that assessment need only be reasonable; LBP-11-7, 73 NRC 283 (2011)

U.S. Army Installation Command (Schofield Barracks, Oahu, Hawaii, and Pohakuloa Training Area, Island of Hawaii, Hawaii), CLI-10-20, 72 NRC 185, 194 (2010)
it is presumed that applicants intend to comply with state law; LBP-11-16, 73 NRC 678 n.185 (2011)

U.S. Department of Energy (High-Level Waste Repository), LBP-09-6, 69 NRC 367, 413-16 (2009)
a test for materiality that would require petitioners to demonstrate quantitatively how an alleged defect would result in a violation of pertinent requirements is rejected; LBP-11-7, 73 NRC 292 n.250 (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-11-7, 73 NRC 292-93 n.252 (2011)

U.S. Department of Energy (Plutonium Export License), CLI-04-17, 59 NRC 357, 363 (2004)
in determining whether an individual member of an organization qualifies for standing in his or her own right, NRC generally applies traditional judicial standing concepts; LBP-11-13, 73 NRC 545 (2011)

mere interest in a problem is not sufficient by itself to render the organization adversely affected or aggrieved within the meaning of the Administrative Procedure Act; CLI-11-3, 73 NRC 622 n.41 (2011)

U.S. Department of Energy (Plutonium Export License), CLI-04-17, 59 NRC 357, 364-65 (2004)
when no proximity presumption applies, petitioner must assert some specific injury in fact that will result from the action taken; CLI-11-3, 73 NRC 622 n.47 (2011)

U.S. Department of Energy (Plutonium Export License), CLI-04-17, 59 NRC 357, 365 (2004)
no proximity presumption applies in an import/export licensing case because petitioners have not shown that the import or export involves a significant source of radioactivity producing an obvious potential for offsite consequences; CLI-11-3, 73 NRC 622 (2011)

U.S. Enrichment Corp. (Paducah, Kentucky Gaseous Diffusion Plant), CLI-01-23, 54 NRC 267, 272 (2001)
pro se litigants are to be treated more leniently than litigants with counsel; LBP-11-9, 73 NRC 408 (2011)

USEC Inc. (American Centrifuge Plant), CLI-05-11, 61 NRC 309, 311 (2005)
in cases involving the possible construction or operation of a nuclear power reactor, the NRC considers proximity to the proposed facility to be sufficient to establish standing; LBP-11-16, 73 NRC 653 (2011)

USEC Inc. (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 456 (2006)
a contention of omission may be summarily rejected as inadmissible if there is no requirement to address the topic allegedly omitted from the application or the topic that allegedly is omitted is, in fact, included in the application; LBP-11-6, 73 NRC 235 (2010)
if petitioner believes that an application fails to contain information on a relevant matter as required by law, the contention must identify each failure and the supporting reasons for the petitioner's belief; LBP-11-6, 73 NRC 214 (2010)

USEC Inc. (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 457 (2006)
it is insufficient for petitioner to point to an Internet Web site or article and expect the board on its own to discern what particular issue a petitioner is raising, including what section of the application, if any, is being challenged as deficient and why; LBP-11-6, 73 NRC 228 n.91 (2010)

USEC Inc. (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 460 (2006)
petitioners have an affirmative obligation to request confidential and proprietary information that has not been made publicly available in order to support a proposed contention; LBP-11-9, 73 NRC 405, 416 (2011)

USEC Inc. (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006)
a conclusory assertion, even if made by an expert, is inadequate because it deprives the board of the ability to make the necessary, reflective assessment of the opinion; LBP-11-6, 73 NRC 240 (2010)

USEC Inc. (American Centrifuge Plant), LBP-05-28, 62 NRC 585, 597 (2005), *aff'd,* CLI-06-10, 63 NRC 451 (2006)
boards must not adjudicate the merits of allegations at the contention admissibility stage, but, to be admissible, a contention must provide more than a bare assertion, and must explain the supporting reasons for the dispute raised; LBP-11-16, 73 NRC 667 (2011)

USEC Inc. (American Centrifuge Plant), LBP-07-6, 65 NRC 429 (2007)
mandatory proceedings for licensing of proposed uranium enrichment facility sites were conducted; LBP-11-11, 73 NRC 475 (2011)

USEC Inc. (American Centrifuge Plant), LBP-07-6, 65 NRC 429, 440 n.31 (2007)
although boards may give reasonable deference to NRC guidance, such guidance does not substitute for regulations, is not binding authority, and does not prescribe NRC requirements; LBP-11-16, 73 NRC 670, 674 (2011)
regulatory guidance is not binding on applicants; LBP-11-16, 73 NRC 661 (2011)

USEC Inc. (American Centrifuge Plant), LBP-07-6, 65 NRC 429, 442-46 (2007)
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Utahans for Better Transportation v. U.S. Department of Transportation, 305 F.3d 1152, 1172 (10th Cir. 2002)
aesthetic impacts of energy sources may vary according to individual location; LBP-11-4, 73 NRC 112 (2011)

Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 515 (1978)
NRC's environmental analysis need only consider environmental impacts that are reasonably foreseeable, and need not consider remote and speculative scenarios; LBP-11-16, 73 NRC 690-91 (2011)

Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 547 (1978)
formal adjudicatory procedures are inappropriate in export or import licensing proceedings; CLI-11-3, 73 NRC 623-24 n.53 (2011)

Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 551 (1978)
if impacts are remote or speculative, the environmental impact statement need not discuss them, including greenhouse gas emissions; LBP-11-7, 73 NRC 301 n.314 (2011)
remote and speculative alternatives need not be addressed in an applicant's environmental report; LBP-11-2, 73 NRC 51 (2011)

Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 553 (1978)
NEPA places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action and ensures that the agency will inform the public that it has indeed considered environmental concerns in its decisionmaking process; LBP-11-7, 73 NRC 264 (2011)
the concept of alternatives evolves, and agencies must explore alternatives as they become better known and understood; LBP-11-13, 73 NRC 562 (2011)

Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 555 (1978), *petition for review held in abeyance sub nom. Ohngo Gaudadeh Devia v. NRC,* 492 F.3d 421 (D.C. Cir. 2007)
there would be little hope of completing administrative proceedings if each newly arising allegation required an agency to reopen its hearings; CLI-11-2, 73 NRC 337-38 n.15 (2011)

Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 558 (1978)
if the adverse environmental effects of a proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs; LBP-11-7, 73 NRC 281 n.168 (2011)
NEPA itself does not mandate particular results, but simply prescribes the necessary process; LBP-11-7, 73 NRC 264 (2011)

Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 48 (1989), *vacated on other grounds,* CLI-90-4, 31 NRC 333 (1990)
boards must do more than uncritically accept a party's mere assertion that a particular document supplies the basis for its contention, without even reviewing the document itself to determine if it appears to support a litigable contention; LBP-11-6, 73 NRC 176 n.24 (2010)

Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 163 (2000)
an organization that seeks to establish representational standing must show that at least one of its members would be affected by the proceeding, identify that member by name and address, and show that the member would have standing to intervene in his or her own right and that the member has authorized the organization to request a hearing; LBP-11-16, 73 NRC 653 (2011)

Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 173-74 (2000)
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Virginia Electric and Power Co. (North Anna Power Station, Unit 3), LBP-08-15, 68 NRC 294, 303 (2008)
although neither applicant nor NRC Staff challenges petitioner's standing, the board must make its own determination whether petitioner has satisfied standing requirement; LBP-11-2, 73 NRC 41 n.54 (2011)

Weinberger v. Catholic Action of Hawaii, 454 U.S. 139, 143 (1981)
NEPA places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action and ensures that the agency will inform the public that it has indeed considered environmental concerns in its decisionmaking process; LBP-11-7, 73 NRC 264 (2011)

Westinghouse Electric Corp. (Nuclear Fuel Export License for Czech Republic — Temelin Nuclear Power Plants), CLI-94-7, 39 NRC 322, 329 (1994)
in addressing the good cause factor for late filing, petitioner must explain not only why it failed to file within the time required, but also why it did not file as soon thereafter as possible; LBP-11-7, 73 NRC 279 n.161 (2011)

Westinghouse Electric Corp. (Nuclear Fuel Export License for Czech Republic — Temelin Nuclear Power Plants), CLI-94-7, 39 NRC 322, 331 (1994)
if it is not clear that denying an import/export application would avoid the harms that petitioners assert for standing purposes, then the redressibility standard is not met; CLI-11-3, 73 NRC 623 n.51 (2011)

Westinghouse Electric Corp. (Nuclear Fuel Export License for Czech Republic — Temelin Nuclear Power Plants), CLI-94-7, 39 NRC 322, 331-32 (1994)
standing is not a mere legal technicality; CLI-11-3, 73 NRC 621 n.37 (2011)

Wong Yang Sung v. McGrath, 339 U.S. 33 (1950)
if a formal adjudicatory hearing is mandated by the due process clause, the absence of the on-the-record requirement will not preclude application of the Administrative Procedure Act; LBP-11-8, 73 NRC 361 n.53 (2011)

Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 6 (1996)
NRC generally applies traditional judicial standing concepts which require a showing that the individual has suffered or might suffer a concrete and particularized injury that is fairly traceable to the challenged action, likely redressible by a favorable decision, and arguably within the zone of interests protected by the governing statutes; LBP-11-13, 73 NRC 546 (2011)

Yankee Atomic Electric Co. (Yankee Nuclear Power Station), LBP-04-27, 60 NRC 530, 542 n.3 (2004)
even if undisputed, the jurisdictional nature of standing in NRC proceedings requires independent examination by presiding officer; LBP-11-16, 73 NRC 654 n.21 (2011)

Ziegler v. Connecticut General Life Insurance Co., 916 F.2d 548, 553 (9th Cir. 1990)
findings concerning personal knowledge are entirely factual and largely dependent on witness credibility; LBP-11-8, 73 NRC 371 (2011)

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10 C.F.R. 2.203
the public interest does not require additional adjudication of an enforcement matter and, given that all matters required to be adjudicated as part of this proceeding have been resolved, the proceeding is dismissed; LBP-11-3, 73 NRC 83 (2011)
10 C.F.R. 2.206
dissatisfaction with regulatory requirements of 10 C.F.R. 50.75 is outside an enforcement petition; DD-11-4, 73 NRC 726 (2011)
petition requesting that the NRC not allow restart after scheduled refueling outage until completion of all environmental remediation work and relevant reports on leaking tritium at the plant is denied; DD-11-1, 73 NRC 8-17 (2011)
petitioners' request for cold shutdown because of tritium contamination of groundwater is denied; DD-11-3, 73 NRC 378-90 (2011)
request for enforcement action to prevent reactor restart until applicable adequate protection standards regarding zero pressure boundary leakage and operation of the reactor have been met is denied; DD-11-2, 73 NRC 324-31 (2011)
request that NRC issue a demand for information from licensee relating to adequacy of financial assurances for decommissioning is denied; DD-11-4, 73 NRC 714-27 (2011)
10 C.F.R. 2.206(a)
any person may file a request to institute a proceeding to modify, suspend, or revoke a license; LBP-11-6, 73 NRC 217 n.78 (2010)
if evidence subsequently indicates that the design basis of an operating nuclear power plant will not withstand a maximum flooding event, members of the public may file a request to institute a proceeding to modify, suspend, or revoke a license; LBP-11-15, 73 NRC 643 n.23 (2011)
10 C.F.R. 2.302(d)(1)
an electronic filing is only complete when the filer performs the last act that it must perform to transmit a document in its entirety; LBP-11-13, 73 NRC 543 (2011)
10 C.F.R. 2.304(d)
submitted documents must be signed; LBP-11-2, 73 NRC 43 (2011)
10 C.F.R. 2.304(d)(1)(ii)
persons without digital ID certificates may sign electronically by typing "Executed in Accord with 10 C.F.R. 2.304(d)" or its equivalent on the signature line and including the date of signature and the signatory's name, capacity, address, phone number, and e-mail address; LBP-11-2, 73 NRC 43 (2011)
10 C.F.R. 2.309(a)
to intervene as a party in an adjudicatory proceeding addressing a proposed licensing action, petitioner must establish standing and proffer at least one admissible contention; LBP-11-2, 73 NRC 37 (2011); LBP-11-6, 73 NRC 168 (2010); LBP-11-13, 73 NRC 542 (2011); LBP-11-16, 73 NRC 652, 654 (2011)
10 C.F.R. 2.309(c)
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if good cause for a late filing is not shown, a board may still permit the late filing, but petitioner or intervenor must make a strong showing on the other factors; LBP-11-9, 73 NRC 401 (2011)
NRC frowns on intervenors seeking to introduce a new contention later than the deadline established by its regulations, and it accordingly holds them to a higher standard for the admission of such contentions; CLI-11-2, 73 NRC 338 (2011)

this section deals with the admission of nontimely contentions; LBP-11-9, 73 NRC 400 (2011)
with respect to contentions filed after the initial petition, intervenors have the burden to show that they meet the criteria of this section; LBP-11-7, 73 NRC 286 n.203 (2011)
10 C.F.R. 2.309(c)(1)
a late-filed contention shall not be considered by a licensing board unless the petitioner demonstrates that a multifactor balancing test weighs in favor of consideration; LBP-11-2, 73 NRC 38 (2011); LBP-11-6, 73 NRC 246 (2010); LBP-11-7, 73 NRC 278-79 (2011)
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good cause for failure to file on time is the most important of the late-filing criteria; LBP-11-2, 73 NRC 38 (2011)
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if any portion of a filing is untimely tendered, it must be accompanied by a motion to file out of time; LBP-11-13, 73 NRC 545 (2011)
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10 C.F.R. 2.309(c)(1)(i)
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10 C.F.R. 2.309(c)(1)(i)-(viii)
good cause for late filing is entitled to the most weight; LBP-11-15, 73 NRC 634 (2011)
10 C.F.R. 2.309(c)(2)
persistent difficulties with the NRC electronic filing system despite petitioners' good-faith efforts is good cause for late filing; LBP-11-2, 73 NRC 38 (2011)
10 C.F.R. 2.309(d)(1)
petitioners must state their name, address, and telephone number, the nature of their right to be made a party, the nature and extent of their property, financial, or other interest in the proceeding, and the possible effect of any decision or order that may be issued in the proceeding on their interest; LBP-11-2, 73 NRC 41 n.49 (2011); LBP-11-6, 73 NRC 168 (2010); LBP-11-16, 73 NRC 652 (2011)
10 C.F.R. 2.309(d)(1)(ii)-(iv)
in ruling on standing and determining whether petitioner has established the necessary interest, licensing boards are directed to follow the guidance found in judicial concepts of standing; LBP-11-4, 73 NRC 125 n.147 (2011)
NRC generally applies traditional judicial standing concepts which require a showing that the individual has suffered or might suffer a concrete and particularized injury that is fairly traceable to the challenged action, likely redressible by a favorable decision, and arguably within the zone of interests protected by the governing statutes; LBP-11-13, 73 NRC 546(2011)
10 C.F.R. 2.309(d)(2)
a municipality is deemed to have standing in a reactor licensing proceeding that involves a facility located within its boundaries; LBP-11-6, 73 NRC 169 (2010)
10 C.F.R. 2.309(d)(3)
even if there are no objections to petitioners' representational standing, boards have an independent obligation to determine whether they have adequately demonstrated standing; LBP-11-2, 73 NRC 41 (2011)
10 C.F.R. 2.309(f)
licensing boards are bound to admit for litigation contentions that are material and supported by reasonably specific factual and legal allegations; LBP-11-6, 73 NRC 171 (2010)
10 C.F.R. 2.309(f)(1)
any person or organization seeking to intervene as a party in an NRC adjudicatory proceeding addressing a proposed licensing action must establish standing and proffer at least one admissible contention; LBP-11-13, 73 NRC 550 (2011)
contention asserting that the applicant's environmental report fails to address the reasonably foreseeable impacts of climate change on water availability is admissible; LBP-11-16, 73 NRC 692 (2011)
for a timely filed contention to be admissible, it must satisfy six pleading requirements; LBP-11-6, 73 NRC 170 (2010); LBP-11-16, 73 NRC 654-55 (2011)

new and amended contentions submitted after an intervenor's initial hearing request are evaluated under 10 C.F.R. 2.309(f)(2) for timeliness and, if found timely, their general admissibility is analyzed; LBP-11-10, 73 NRC 445 (2011)
regardless of when filed, all proposed contentions must comply with the general contention admissibility criteria of this section; LBP-11-7, 73 NRC 280 (2011); LBP-11-9, 73 NRC 400 n.55 (2011)
the Commission's intent is to focus litigation on concrete issues and result in a clearer and more focused record for decision and to ensure that the Commission expends resources to support the hearing process only for issues that are appropriate for, and susceptible to, resolution in an NRC hearing; LBP-11-16, 73 NRC 655 (2011)
10 C.F.R. 2.309(f)(1)(i)-(iv)
an admissible contention must satisfy six pleading requirements; LBP-11-2, 73 NRC 44-45 (2011); LBP-11-13, 73 NRC 550 (2011)
at the contention admissibility stage, boards merely decide whether a contention satisfies the six pleading criteria; LBP-11-16, 73 NRC 690 (2011)
contention questioning the accuracy of the SAMA results, given the geographic location and variable meteorological conditions at the site and the large population base surrounding the plant, is admissible; LBP-11-2, 73 NRC 70 (2011)
to be admitted for adjudication, a contention, regardless of when it is filed, must also satisfy the requirements of this section; LBP-11-15, 73 NRC 635 (2011)
10 C.F.R. 2.309(f)(1)(ii)
a brief explanation of the basis for a contention is required; LBP-11-13, 73 NRC 558 (2011)
10 C.F.R. 2.309(f)(1)(iii)
applicant's rule exemption request could be subject to litigation in a combined license proceeding, and thus is within the scope of the proceeding; LBP-11-10, 73 NRC 452 (2011)
because petitioner's issue of the inadvertent release of radioactivity does not specifically relate to the ability of buried structures to perform their intended functions as defined by 10 C.F.R. 54.4(a)(1)-(3), the contention is not within the scope of a license renewal proceeding; LBP-11-2, 73 NRC 60 (2011)
contention asserting that a license renewal environmental report must include a discussion of need for power is inadmissible; LBP-11-13, 73 NRC 556-57 (2011)
contention that wastewater contains chemical contaminants that are not discussed in the environmental report, and that when the wastewater is discharged via deep injection wells, the chemicals might migrate to an aquifer is within the scope of a combined license proceeding; LBP-11-6, 73 NRC 191 (2010)
10 C.F.R. 2.309(f)(1)(iv)
intentional malevolent acts, such as sabotage and terrorism, are not material to the SAMA findings the NRC must make in deciding whether to extend an operating license; LBP-11-13, 73 NRC 571 (2011)
intervenors need only demonstrate that the issue raised in the contention is material to a licensing decision, i.e., would make a difference in the licensing decision; LBP-11-7, 73 NRC 292 (2011)
petitioners did not demonstrate that the issue of whether the MACCS2 code was subject to quality assurance is material to the findings the NRC must make under NEPA to support the requested license extension; LBP-11-13, 73 NRC 571 (2011)
whether the safe shutdown earthquake exceedance in applicant's exemption request does in fact comply with 10 C.F.R. Part 50, Appendix S and 10 C.F.R. 100.23 is a question currently before the NRC Staff and is thus material to the NRC's licensing decision in this proceeding; LBP-11-10, 73 NRC 452 (2011)
10 C.F.R. 2.309(f)(1)(v)
by failing to provide any support that the integrity of leaking structures has the potential to prevent licensee from maintaining pressure, providing flow, or both, petitioners do not present the requisite factual bases; LBP-11-2, 73 NRC 61 (2011)
petitioner may question the practice for severe accident mitigation alternatives analysis to utilize mean consequence values, which results in an averaging of potential consequences, but must support such a challenge with alleged facts or expert opinion; LBP-11-13, 73 NRC 576 n.296 (2011)
petitioners do not provide any alleged facts or expert support indicating that the river valley is within the geographic area for which applicant was required to model atmospheric dispersion; LBP-11-13, 73 NRC 573 (2011)

petitioners must provide alleged facts or expert opinion to support their claims; LBP-11-13, 73 NRC 572 (2011)
10 C.F.R. 2.309(f)(1)(vi)
a vague accusation does not rise to the level of an admissible genuine dispute of material fact or law; LBP-11-10, 73 NRC 452 (2011)
boards must not adjudicate the merits of allegations at the contention admissibility stage of an NRC proceeding, but, to be admissible, a contention must provide more than a bare assertion, and must explain the supporting reasons for the dispute raised in that contention; LBP-11-16, 73 NRC 664, 667 (2011)
contention is inadmissible because it fails to controvert a specific portion of the combined license application or otherwise explain why applicant's analyses or conclusions are incorrect or inadequate; LBP-11-15, 73 NRC 643 (2011)
contention that fails to provide sufficient information to show that a genuine dispute exists with a combined license application on a material issue of law or fact is inadmissible; LBP-11-15, 73 NRC 637, 638 n.17 (2011)
to the extent a contention is premised on error, it is inadmissible for failing to raise a genuine dispute of fact; LBP-11-6, 73 NRC 202 (2010)
10 C.F.R. 2.309(f)(2)
although petitioner proffered a contention within 30 days of events that prompted it, this does not automatically render a newly proffered contention timely; LBP-11-15, 73 NRC 636 (2011)
intervenor may propose new or amended contentions based on data or conclusions in the NRC draft or final environmental impact statement, environmental assessment, or any supplements relating thereto, that differ significantly from the data or conclusions in the applicant's environmental documents; LBP-11-6, 73 NRC 177 n.25 (2010); LBP-11-7, 73 NRC 277 (2011)
new and amended contentions submitted after an intervenor's initial hearing request are evaluated under this section for timeliness and, if found timely, their general admissibility is analyzed pursuant to 10 C.F.R. 2.309(f)(1); LBP-11-10, 73 NRC 445 (2011)
new or amended contentions are considered to be timely if filed within 60 days of any triggering event; LBP-11-9, 73 NRC 397 (2011)
petitioner or intervenor may file timely new or amended contentions, with leave of the board, if the three requirements of this section are met; LBP-11-9, 73 NRC 400-01 (2011)
petitioners and intervenors are obliged to challenge applicant's environmental report; LBP-11-7, 73 NRC 276 (2011)
this section deals with the factors that govern the admission of timely new or amended contentions; LBP-11-9, 73 NRC 400 (2011)
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with respect to contentions filed after the initial petition, intervenors have the burden to show that they meet the criteria of this section; LBP-11-7, 73 NRC 286 n.203 (2011)
10 C.F.R. 2.309(f)(2)(i)
for a newly proffered contention to be timely, it must be based on information that was not previously available; LBP-11-15, 73 NRC 636 (2011)
10 C.F.R. 2.309(f)(2)(i)-(iii)
a new or amended contention may be filed after initial docketing with leave of the presiding officer upon a showing that the information upon which the contention is based was not previously available, is based on materially different information previously unavailable, and has been submitted in a timely fashion based on the availability of the subsequent information; CLI-11-2, 73 NRC 339 (2011); LBP-11-7, 73 NRC 277-78 (2011); LBP-11-10, 73 NRC 445 (2011)
if, within 60 days after pertinent information supporting a new contention first becomes available, Intervenors submit a particularized and otherwise admissible contention regarding construction of a mixed oxide facility, then the contention will be deemed timely without the need to satisfy the balancing test for late-filing requirements or the requirements for reopening the record; LBP-11-9, 73 NRC 401 (2011)

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10 C.F.R. 2.309(f)(2)(i), (ii)
adoption of building code rules by a state presents new and materially different information not previously available, upon which intervenors may rest their proposed contention; LBP-11-7, 73 NRC 290 n.233 (2011)

10 C.F.R. 2.309(f)(2)(ii)
for a newly proffered contention to be timely, it must be based on information that is materially different than information previously available; LBP-11-15, 73 NRC 636 (2011)

10 C.F.R. 2.309(f)(2)(iii)
a proposed new contention will be considered timely if it is filed within 30 days of the date when the new and material information on which the proposed contention is based first becomes available; LBP-11-7, 73 NRC 287 (2011)

10 C.F.R. 2.309(g)
petitioner may address the selection of hearing procedures, taking into account the provisions of 10 C.F.R. 2.310; LBP-11-16, 73 NRC 706 (2011)
petitioner requesting Subpart G procedures must demonstrate by reference to the contention and the bases provided and the specific procedures in Subpart G that resolving the contention will require resolution of material issues of fact that may be best determined through use of the identified procedures; LBP-11-2, 73 NRC 78 (2011)

10 C.F.R. 2.309(h)(3)
petitions, answers, and replies are allowed unless otherwise specified by the Commission or the presiding officer, but no other written answers or replies will be entertained; LBP-11-2, 73 NRC 39 (2011)

10 C.F.R. 2.310
upon admission of a contention, a board must identify the specific hearing procedure to be used in the adjudication; LBP-11-16, 73 NRC 706 (2011)

10 C.F.R. 2.310(a)
a license renewal proceeding may be conducted under the relatively informal procedures of Subpart L; LBP-11-2, 73 NRC 79 (2011)
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upon admission of a contention in a licensing proceeding, the board must identify the specific hearing procedures to be used to adjudicate the contention; LBP-11-2, 73 NRC 78 (2011); LBP-11-13, 73 NRC 587 (2011)

10 C.F.R. 2.310(b)-(c)
unless the parties agree otherwise, enforcement matters and licensing of uranium enrichment facility construction and operation must be conducted under Subpart G; LBP-11-2, 73 NRC 79 n.322 (2011)

10 C.F.R. 2.310(d)
in reactor licensing matters, the relatively formal procedures provided in Subpart G of Part 2 govern if a contention necessitates resolution of issues of material fact relating to the occurrence of a past activity, where the credibility of an eyewitness may reasonably be expected to be at issue, and/or issues of motive or intent of the party or eyewitness material to the resolution of the contested matter; LBP-11-2, 73 NRC 78 (2011); LBP-11-16, 73 NRC 706 (2011)

10 C.F.R. 2.310(h)(1)
if the hearing on a contention is expected to take no more than 2 days to complete, the board can impose the Subpart N procedures for expedited proceedings with oral hearings specified in 10 C.F.R. 2.1400-.1407; LBP-11-13, 73 NRC 587 (2011)

10 C.F.R. 2.314
"representative" means the attorney or other authorized representative of a party who has entered a notice of appearance; LBP-11-5, 73 NRC 139 (2011)

10 C.F.R. 2.314(b)
a duly authorized member or officer may represent his or her partnership, corporation, or unincorporated association even if he or she is not an attorney at law, but the representative's notice of appearance must state the basis of his or her authority to act on behalf of the party; LBP-11-13, 73 NRC 548 (2011)

an officer, member, or attorney representing an organization in a proceeding must file a written notice of appearance stating, among other things, his or her basis for representing the organization; LBP-11-13, 73 NRC 542-43 (2011)
10 C.F.R. 2.315(a)
no duty is imposed on a board to respond to limited appearance statements as litigable concerns; LBP-11-11, 73 NRC 521 n.31 (2011)
10 C.F.R. 2.315(c)
a local governmental body that is not admitted as a party shall, upon request, be permitted to participate in a hearing as an interested nonparty; LBP-11-6, 73 NRC 166 n.4 (2010)
an interested governmental entity may introduce evidence, interrogate witnesses where cross-examination by the parties is permitted, advise the Commission without being required to take a position with respect to the issue, file proposed findings, and petition for review by the Commission; LBP-11-6, 73 NRC 166 n.4 (2010)
10 C.F.R. 2.316
any consolidation of multiple parties' presentations of evidence that would prejudice the rights of any party may not be ordered; LBP-11-4, 73 NRC 124 (2011)
10 C.F.R. 2.319(d)
boards are not precluded from considering documents despite their hearsay nature; LBP-11-14, 73 NRC 600 n.59 (2011)
boards may on motion or on their own initiative strike any portion of a written presentation that is unreliable; LBP-11-14, 73 NRC 600 n.59 (2011)
in proceedings under Part 2, strict rules of evidence do not apply to written submissions; LBP-11-14, 73 NRC 600 n.59 (2011)
10 C.F.R. 2.319(e)
the presiding officer may restrict irrelevant, immaterial, unreliable, duplicative, or cumulative evidence and/or arguments; LBP-11-13, 73 NRC 556 n.134 (2011)
10 C.F.R. 2.323
if any portion of a filing is untimely tendered, it must be accompanied by a motion to file out of time; LBP-11-13, 73 NRC 545 (2011)
10 C.F.R. 2.323(b)
a motion must be rejected if it does not include a certification that movant has made a sincere effort to contact other parties and resolve the issues raised in the motion; LBP-11-15, 73 NRC 635 n.13 (2011)
all motions must include a certification that movant has made a sincere effort to contact other parties in the proceeding and resolve the issue raised in the motion, and that the movant's efforts to resolve the issue have been unsuccessful; LBP-11-2, 73 NRC 47 (2011)
because applicant did not comply with this section, the board does not consider information supplied with applicant's letter in connection with the board's analysis of petitioner's contention; LBP-11-2, 73 NRC 47 (2011)
10 C.F.R. 2.323(e)
motions for reconsideration must be filed within 10 days of a board's decision; LBP-11-15, 73 NRC 616 n.16 (2011)
motions for reconsideration require a showing of compelling circumstances, such as the existence of a clear and material error in a decision that renders the decision invalid; LBP-11-15, 73 NRC 616 n.16 (2011)
10 C.F.R. 2.325
summary disposition movant bears the initial burden of demonstrating that no genuine issue as to any material fact exists and that it is entitled to judgment as a matter of law; LBP-11-14, 73 NRC 595 (2011)
10 C.F.R. 2.326(a)
NRC imposes a deliberately heavy burden on an intervenor who seeks to supplement the evidentiary record after it has been closed, even with respect to an existing contention; CLI-11-2, 73 NRC 338 (2011)
10 C.F.R. 2.326(a)(1)
motions to reopen must be timely filed; CLI-11-2, 73 NRC 339 (2011)

NRC recognizes an exception to the timeliness requirement in rare instances in which petitioner raises an exceptionally grave issue; CLI-11-2, 73 NRC 342 n.43 (2011)
10 C.F.R. 2.326(a)(3)
petitioner failed to satisfy NRC standards for reopening because its motion was untimely and it failed to demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially; CLI-11-2, 73 NRC 335 (2011)
proponent of a motion to reopen the record must demonstrate that a materially different result would have been likely had the newly proffered evidence been considered initially; CLI-11-2, 73 NRC 346 (2011)
10 C.F.R. 2.326(b)
bare assertions and speculation do not supply the requisite support for a motion to reopen; CLI-11-2, 73 NRC 346 (2011)
10 C.F.R. 2.327(b)
transcript of Atomic Safety and Licensing Board hearings will be available for inspection in the agency's public records system; LBP-11-5, 73 NRC 134 (2011)
10 C.F.R. 2.328
all hearings will be public; LBP-11-5, 73 NRC 134 (2011)
an adjudicatory hearing can be closed if the Commission orders it; LBP-11-5, 73 NRC 134 n.4 (2011)
boards may exclude the public from adjudicatory hearings or actions that involve restricted data, defense information, safeguards information protected from disclosure under the authority of AEA § 147, or information protected from disclosure under the authority of section 148; LBP-11-5, 73 NRC 134 n.4 (2011)
10 C.F.R. 2.335
absent a waiver, no rule or regulation of the Commission is subject to challenge in an adjudicatory proceeding; LBP-11-13, 73 NRC 568 (2011)
Category 1 issues are not subject to challenge in a relicensing proceeding because they involve environmental effects that are essentially similar for all plants and need not be assessed repeatedly on a site-specific basis; LBP-11-13, 73 NRC 551 (2011)
Part 51's license renewal provisions cover environmental issues relating to onsite spent fuel storage generically and all such issues, including accident risk, fall outside the scope of license renewal proceedings; LBP-11-13, 73 NRC 570 (2011)
10 C.F.R. 2.335(a)
absent a waiver, contentions challenging applicable statutory requirements or Commission regulations are not admissible in agency adjudications; LBP-11-2, 73 NRC 46 (2011); LBP-11-13, 73 NRC 550, 553, 566 n.204 (2011); LBP-11-16, 73 NRC 655 701, 702 (2011)
contention that, in the event of a core melt accident, applicant's emergency plan should order an evacuation of persons within a 10-mile radius of the facility attacks NRC's emergency planning regulation; LBP-11-15, 73 NRC 638 (2011)
to the extent petitioner seeks to raise a generic challenge to the 10-mile plume exposure pathway EPZ, such an argument constitutes an impermissible challenge to 10 C.F.R. 50.47(c)(2); LBP-11-15, 73 NRC 642 n.22 (2011)
to the extent that petitioner challenges the board's decision to apply the reopening standards strictly, its challenge constitutes an improper collateral attack on NRC regulations; CLI-11-2, 73 NRC 338 n.21 (2011)
10 C.F.R. 2.335(b)
any request for a rule waiver or exception must be accompanied by an affidavit that identifies the subject matter of the proceeding as to which the application of the regulation would not serve the purposes for which the regulation was adopted, and the affidavit must state with particularity the special circumstances alleged to justify the waiver or exception requested; LBP-11-16, 73 NRC 702 n.351 (2011)
contentions challenging NRC rules and regulations are impermissible and may not be admitted absent a waiver or exception; LBP-11-16, 73 NRC 702 (2011)
10 C.F.R. 2.336
"disclosing party" means the party required to make mandatory disclosure; LBP-11-5, 73 NRC 136 (2011)
each party to a proceeding must disclose all documents relevant to the admitted contentions, except those documents for which a claim of privilege or protected status is made; LBP-11-5, 73 NRC (2011)

"receiving party" means the party to whom the mandatory disclosure must be made; LBP-11-5, 73 NRC 139 (2011)
the SUNSI policy does not expand upon or create any new category of legally privileged or confidential information that is exempt from discovery or from mandatory disclosure; LBP-11-5, 73 NRC 139-40 (2011)
10 C.F.R. 2.336(a)(3)
parties must list documents claimed to be privileged or protected on a privilege log; LBP-11-5, 73 NRC (2011)
10 C.F.R. 2.336(b)
NRC Staff is exempted from the obligations of the protective order, even though Staff might hold many documents that are subject to the mandatory disclosure requirements; LBP-11-5, 73 NRC 133 (2011)
10 C.F.R. 2.337
this section, in establishing the evidentiary standard of "relevant, material, and reliable evidence" being admissible in a hearing, thereby establishes the right of all parties to present such admissible evidence; LBP-11-4, 73 NRC 124 (2011)
10 C.F.R. 2.337(f)
although this section, by its terms, applies to evidence at hearings, the bounds this rule places on official notice is also appropriate for the contention admissibility stage of a proceeding; LBP-11-7, 73 NRC 290 n.231 (2011)
promulgation of state regulations falls within the broad reach 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-11-7, 73 NRC 290 n.231 (2011)
10 C.F.R. 2.338(i)
upon review of a settlement agreement, the board is satisfied that its terms reflect a fair and reasonable settlement in keeping with the objectives of the NRC's enforcement policy, and satisfy the requirements of 10 C.F.R. 2.338(g) and (h); LBP-11-3, 73 NRC 83 (2011)
10 C.F.R. 2.340(a)
boards have limited authority to consider matters in addition to those properly put into controversy by the parties; LBP-11-9, 73 NRC 417-18 (2011)
boards may consider any matter, but only to the extent that the board determines that a serious safety, environmental, or common defense and security matter exists, and the Commission approves of an examination of and decision on the matter upon its referral by the board; LBP-11-9, 73 NRC 418 (2011)
requesting authorization from the Commission for the board, on its own motion, to examine and decide the serious safety or common defense and security matters underlying contentions is allowed to be used for matters that were initially raised by a party, where that party later withdrew; LBP-11-9, 73 NRC 414 (2011)
10 C.F.R. 2.341(b)(4)
a petition for review may be granted if it presents a substantial question with respect to one or more of five considerations; CLI-11-2, 73 NRC 336-37 (2011)
10 C.F.R. 2.390(a)(1)-(9)
the SUNSI policy does not expand upon or create any new category of legally privileged or confidential information that is exempt from discovery or from mandatory disclosure; LBP-11-5, 73 NRC 139-40 (2011)
10 C.F.R. 2.390(a)(1), (3), (4)
parties shall produce, as part of their mandatory disclosures, privilege logs covering any documents claimed to qualify for protected status as security-related information and/or as protected information; LBP-11-5, 73 NRC 133 (2011)
10 C.F.R. 2.390(b)
the protective order, and the good-faith representation and designation of documents as protected documents, serves in lieu of the requirement for marking and for an affidavit; LBP-11-5, 73 NRC 141 n.18 (2011)

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10 C.F.R. 2.390(d)(1)
parties shall produce, as part of their mandatory disclosures, privilege logs covering any documents claimed to qualify for protected status as security-related information and/or as protected information under; LBP-11-5, 73 NRC 133 (2011)

10 C.F.R. 2.710(a)
all material facts set forth in the statement required to be served by summary disposition movant will be considered to be admitted unless controverted by the statement required to be served by the opposing party; LBP-11-4, 73 NRC 123 (2011)
if summary disposition movant meets its burden, the nonmoving party must counter each adequately supported material fact with its own statement of material facts in dispute and supporting documentation and cannot rely on mere allegations or denials, or the facts in controversy will be deemed admitted; LBP-11-14, 73 NRC 595 (2011)
this section establishes not only an obligation but also a right to respond in a summary disposition context; LBP-11-4, 73 NRC 124 (2011)

10 C.F.R. 2.710(b)
at issue is not whether evidence unmistakably favors one side or the other, but whether there is sufficient evidence favoring the summary disposition opponent for a reasonable trier of fact to find in favor of that party; LBP-11-4, 73 NRC 100 (2011)
if evidence in favor of the summary disposition opponent is merely colorable or not significantly probative, summary disposition may be granted; LBP-11-4, 73 NRC 100 (2011)
only disputes over facts that might affect the outcome of a proceeding would preclude summary disposition; LBP-11-4, 73 NRC 100 (2011)

10 C.F.R. 2.710(d)(2)
at issue is not whether evidence unmistakably favors one side or the other, but whether there is sufficient evidence favoring the summary disposition opponent for a reasonable trier of fact to find in favor of that party; LBP-11-4, 73 NRC 100 (2011)
if evidence in favor of the summary disposition opponent is merely colorable or not significantly probative, summary disposition may be granted; LBP-11-4, 73 NRC 100 (2011)
movant may obtain summary disposition if the filings in the proceeding, 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; LBP-11-7, 73 NRC 263 (2011); LBP-11-14, 73 NRC 594 (2011)
only disputes over facts that might affect the outcome of a proceeding would preclude summary disposition; LBP-11-4, 73 NRC 100 (2011)
summary disposition should be granted if filings in the proceeding, depositions, answers to interrogatories, and admissions on file, together with statements of parties and affidavits 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-11-4, 73 NRC 98-99 (2011)

10 C.F.R. 2.802
if petitioner wishes to challenge an NRC regulation, its recourse is to petition for a rule change; LBP-11-15, 73 NRC 638 (2011)
petitioners request that NRC amend 10 C.F.R. 54.17(c) to permit a reactor licensee to file a license renewal application no sooner than 10 years before the expiration of the current license; CLI-11-1, 73 NRC 2-3 (2011)

10 C.F.R. 2.1203(d)
Subpart L procedures provide for a more informal proceeding in which discovery is generally prohibited except for specified mandatory disclosures under 10 C.F.R. 2.336 and the mandatory production of the hearing file under 10 C.F.R. 2.1203(a); LBP-11-13, 73 NRC 587 (2011)

10 C.F.R. 2.1205
in Subpart L proceedings, licensing boards must apply the summary disposition standard for Subpart G proceedings, found in 10 C.F.R. 2.710; LBP-11-14, 73 NRC 594 (2011)

10 C.F.R. 2.1205(c)
in ruling on a motion for summary disposition, boards apply the standards of Subpart G; LBP-11-4, 73 NRC 98 (2011)

licensing boards are to apply the same standards for granting or denying summary disposition as would be applied in proceedings conducted under Subpart G, which are set forth in section 2.710; LBP-11-7, 73 NRC 263 (2011)

10 C.F.R. 2.1207(a)(2)

requests for protected documents shall be filed within 60 days of the listing of the document on the privilege log and, in any event, no later than 10 days after the deadline for filing rebuttal testimony; LBP-11-5, 73 NRC 141 (2011)

10 C.F.R. 2.1207(b)(6)

when using Subpart L procedures, the board has the primary responsibility for questioning the witnesses at any evidentiary hearing; LBP-11-13, 73 NRC 587 (2011)

10 C.F.R. 2.1212

a petition for review may be granted if it presents a substantial question with respect to one or more five considerations; CLI-11-2, 73 NRC 336-37 (2011)

10 C.F.R. 2.1402(b)

selection of hearing procedures for contentions at the outset of a proceeding is not immutable because availability of Subpart G procedures under 10 C.F.R. 2.310(d) depends critically on whether the credibility of eyewitnesses is important in resolving a contention, and witnesses relevant to each contention are not identified, under 10 C.F.R. 2.336(a)(1), until after contentions are admitted; LBP-11-13, 73 NRC 588 n.389 (2011)

10 C.F.R. 9.19(b)

any reasonably segregable portion of the record shall be provided to any person requesting such record after deletion of the portions that are exempt; LBP-11-5, 73 NRC 139 n.14 (2011)

10 C.F.R. 12.101

parties who prevail against the government in certain types of agency proceedings are allowed to recover attorneys' fees and other expenses incurred in connection with the proceeding unless the government's position was substantially justified, or other special circumstances render an award unjust; LBP-11-8, 73 NRC 354 (2011)

10 C.F.R. 12.103

adversary adjudications conducted by the Commission pursuant to any other statutory provision that requires a proceeding before the NRC to be so conducted as to fall within the meaning of adversary adjudication under Equal Access to Justice Act are included; LBP-11-8, 73 NRC 354 (2011)

10 C.F.R. 12.105(a)

a prevailing party is not entitled to an award for attorneys' fees and expenses if the position of the Commission over which the applicant has prevailed was substantially justified; LBP-11-8, 73 NRC 368 (2011)

for a prevailing party to recover attorneys' fees and expenses, the party must have incurred those fees and expenses in connection with the adversary adjudication in question; LBP-11-8, 73 NRC 362 (2011)

10 C.F.R. 12.204(a)

within 30 days of the Commission's decision upholding the board majority decision setting aside the NRC Staff's immediately effective enforcement order, petitioner applied for an award of over $250,000 in attorneys' fees; LBP-11-8, 73 NRC 353 (2011)

10 C.F.R. 12.306(a)

the board's determination of whether the government's position was substantially justified is made on the basis of the written record and oral argument; LBP-11-8, 73 NRC 368 (2011)

10 C.F.R. 20.1301

dose limits for individual members of the public are 100 millirem in a year; DD-11-3, 73 NRC 382 (2011)

dose limits from tritium in groundwater for individual members of the public were never approached; DD-11-1, 73 NRC 11 (2011)

10 C.F.R. Part 20, Appendix B, tab. 2, col. 2

discharges of chemicals and other effluents from the cooling basin to groundwater or surface water must remain within limits stated in this table; LBP-11-16, 73 NRC 679 (2011)

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10 C.F.R. 21.3
applicant requests an exemption from the definitions of "commercial grade items," "basic component," "critical characteristic," "dedication," and "dedicated entity" to permit applicant to have some procurement flexibility; LBP-11-11, 73 NRC 504 (2011)

10 C.F.R. 30.4
applicant seeks an exemption from the requirements of this section to permit it to begin certain preconstruction activities at the site before completion of NRC's environmental review under Part 51; LBP-11-11, 73 NRC 503-04 (2011)
"commencement of construction" is defined to include clearing of land, excavation, or other substantial action that would adversely affect the environment of the site; LBP-11-11, 73 NRC 506 (2011)

10 C.F.R. 30.11(a)
NRC may grant an exemption from the regulatory requirements if it determines the exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest; LBP-11-11, 73 NRC 497 (2011)

10 C.F.R. 30.33(a)(5)
applicant seeks an exemption from the requirements of this section to permit it to begin certain preconstruction activities at the site before completion of NRC's environmental review under Part 51; LBP-11-11, 73 NRC 503-04 (2011)
for a proposed nuclear materials-related activity, including uranium enrichment, commencement of construction prior to a favorable Staff conclusion regarding the NEPA cost-benefit balance is grounds for denial of the authorization to conduct that activity; LBP-11-11, 73 NRC 506 (2011)

10 C.F.R. 30.34(e)
NRC may issue a license to impose such additional conditions, requirements, and limitations as may be necessary to effectuate the purposes of the Atomic Energy Act and the agency's regulations; LBP-11-11, 73 NRC 497 (2011)

10 C.F.R. 40.4
applicant seeks an exemption from the requirements of this section to permit it to begin certain preconstruction activities at the site before completion of NRC's environmental review under Part 51; LBP-11-11, 73 NRC 503-04 (2011)
"commencement of construction" is defined to include clearing of land, excavation, or other substantial action that would adversely affect the environment of the site; LBP-11-11, 73 NRC 506 (2011)

10 C.F.R. 40.14(a)
NRC may grant an exemption from regulatory requirements if it determines that the exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest; LBP-11-11, 73 NRC 497 (2011)

10 C.F.R. 40.32(e)
applicant seeks an exemption from the requirements of this section to permit it to begin certain preconstruction activities at the site before completion of NRC's environmental review under Part 51; LBP-11-11, 73 NRC 503-04 (2011)
for a proposed nuclear materials-related activity, including uranium enrichment, commencement of construction prior to a favorable Staff conclusion regarding the NEPA cost-benefit balance is grounds for denial of the authorization to conduct that activity; LBP-11-11, 73 NRC 506 (2011)

10 C.F.R. 40.36(d)
applicant seeks authorization to provide financial assurance for decommissioning funding on a forward-looking, incremental basis; LBP-11-11, 73 NRC 503 (2011)

10 C.F.R. 40.38(a)
this section applies on;y to enrichment facility licensee USEC, and it has no relevance to any other enrichment facility applicant; LBP-11-11, 73 NRC 488 n.16 (2011)

10 C.F.R. 40.41(e)
NRC may issue a license to impose such additional conditions, requirements, and limitations as may been necessary to effectuate the purposes of the Atomic Energy Act and the agency's regulations; LBP-11-11, 73 NRC 497 (2011)

10 C.F.R. 40.41(g)
a uranium enrichment facility cannot be operated until the agency verifies through inspection that the facility has been constructed in accordance with the license; LBP-11-11, 73 NRC 509 (2011)

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10 C.F.R. 50.10
NEPA's requirement to discuss alternatives to the proposed action does not extend to the construction of transmission line corridors, because it is not "construction" as defined in the regulation; LBP-11-6, 73 NRC 207 n.63 (2010)
10 C.F.R. 50.10(a)(2)
activities that are no longer considered "construction" are listed; LBP-11-11, 73 NRC 506 n.23 (2011)
10 C.F.R. 50.10(d)
certain "construction" activities are allowed at a reactor site pursuant to a limited work authorization as long as a site redress plan is submitted; LBP-11-11, 73 NRC 507 (2011)
10 C.F.R. 50.10(g)
certain "construction" activities are allowed at a reactor site pursuant to a limited work authorization as long as a site redress plan is submitted; LBP-11-11, 73 NRC 507 (2011)
10 C.F.R. 50.12(a)(1)
exemption from a regulation will be granted when the request is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security; LBP-11-10, 73 NRC 451 n.158 (2011)
10 C.F.R. 50.12(a)(2)(i)-(vi)
exemption from a regulation will be granted if application of the regulation in the particular circumstances conflicts with other NRC rules or requirements, would not serve or is not necessary to achieve the underlying purpose of the rule, would result in undue hardship or other costs, would not benefit public health and safety, would provide only temporary relief, or there is present any other material circumstance not considered when the regulation was adopted; LBP-11-10, 73 NRC 451 n.158 (2011)
10 C.F.R. 50.34a(a)
a combined license application must identify the means for keeping levels of radioactive material in effluents to unrestricted areas as low as is reasonably achievable; LBP-11-6, 73 NRC 245 (2010)
10 C.F.R. 50.47(a)(1)(ii)
before issuing a combined license, NRC must conclude that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency; LBP-11-6, 73 NRC 227 (2010)
10 C.F.R. 50.47(a)(2)
in any NRC licensing proceeding, a FEMA finding will constitute a rebuttable presumption on questions of adequacy and implementation capability; LBP-11-6, 73 NRC 227 (2010)
10 C.F.R. 50.47(b)(10)
contention that, in the event of a core-melt accident, applicant's emergency plan should order an evacuation of persons within a 10-mile radius of the facility attacks this emergency planning regulation; LBP-11-15, 73 NRC 638 (2011)
sheltering must be considered in developing the recommended range of protective actions in an emergency plan; LBP-11-6, 73 NRC 232 n.96 (2010)
10 C.F.R. 50.47(c)(2)
NRC provides for a plume exposure pathway emergency planning zone and an ingestion exposure pathway EPZ around nuclear power plants in the event of a nuclear accident; LBP-11-15, 73 NRC 640 (2011)
to the extent petitioner seeks to raise a generic challenge to the 10-mile plume exposure pathway EPZ, such an argument constitutes an impermissible challenge to this regulation; LBP-11-15, 73 NRC 642 n.22 (2011)
10 C.F.R. 50.59
any changes to the facility as described in the final safety analysis report must be either submitted to the NRC for approval through a license amendment or changed in accordance with the provisions of this section; DD-11-3, 73 NRC 385 (2011)
10 C.F.R. 50.71(e)
licensees are required to update their final safety analysis report, which was originally submitted as part of the application for the license, to ensure that the information included in the FSAR contains the latest information developed; DD-11-3, 73 NRC 385 (2011)

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10 C.F.R. 50.75
licensee must file an annual report to NRC certifying that financial assurance for decommissioning will be or has been provided in an amount that may be more, but not less, than the amount stated in the regulations, adjusted as appropriate for changes in labor, energy, and waste burial costs; DD-11-3, 73 NRC 388 (2011)
the financial qualifications review for decommissioning funding assurance is revisited every year until the license is terminated; DD-11-4, 73 NRC 718 (2011)
10 C.F.R. 50.75(e)(1)(ii)
licensee who has collected funds based on a site-specific estimate under section 50.75(b)(1) may take credit for projected earnings on the external sinking funds using up to a 2% annual real rate of return from the time of future funds' collection through the decommissioning period, provided that the site-specific estimate is based on a period of safe storage that is specifically described in the estimate; DD-11-4, 73 NRC 717-18 (2011)
use of the 4.81% forecast interest rate and the 2.81% annual inflation rate is in compliance; DD-11-4, 73 NRC 718 (2011)
10 C.F.R. 50.75(e)(2)
if NRC Staff makes a finding of no reasonable assurance, NRC reserves the right to take steps to ensure a licensee's adequate accumulation of decommissioning funds; DD-11-4, 73 NRC 718 (2011)
10 C.F.R. 50.75(f)
an annual report on recalculations of decommissioning cost estimates and projected available decommissioning funding must be submitted by a licensee for a plant that has closed before the end of its licensed life; DD-11-4, 73 NRC 716-17 (2011)
10 C.F.R. 50.75(f)(2)
power reactor licensees must report to the NRC at least once every 2 years on the status of their decommissioning funding for each reactor or part of a reactor that they own; DD-11-4, 73 NRC 716 (2011)
10 C.F.R. 50.82
areas of minor radioactive contamination are evaluated and remediated as needed during plant decommissioning; DD-11-1, 73 NRC 12 (2011)
10 C.F.R. Part 50, App. A, § I, Criterion 2
NRC Staff ensures that applicant's design basis for the new units will protect public health and safety by verifying that the design basis will withstand maximum flooding events; LBP-11-6, 73 NRC 217 n.78(2010)
10 C.F.R. Part 50, App. E
NRC provides for a plume exposure pathway emergency planning zone and an ingestion exposure pathway EPZ around nuclear power plants in the event of a nuclear accident; LBP-11-15, 73 NRC 640 (2011)
10 C.F.R. Part 50, App. E, § IV.A
during a nuclear emergency in the United States, the individual licensee and the appropriate state and local government officials have direct responsibilities for the coordinated response to the event; LBP-11-15, 73 NRC 641 (2011)
10 C.F.R. Part 50, App. E, § IV.E.9
combined license applicant's emergency plan must contain and describe adequate provisions for emergency facilities and equipment, including at least one onsite and one offsite communications system, each of which shall have a backup power source; LBP-11-15, 73 NRC 637 (2011)
10 C.F.R. Part 50, App. E, § VI
NRC, in its capacity as the federal agency charged with regulating the nuclear industry in a manner that protects public health and safety, monitors nuclear emergencies; LBP-11-15, 73 NRC 641 (2011)
10 C.F.R. Part 50, App. B
petitioners' assertions that the MACCS2 code was not subjected to quality assurance requirements is deficient because a SAMA analysis is not subject to such requirements; LBP-11-2, 73 NRC 69 (2011)
10 C.F.R. Part 50, App. I
NRC established reasonable assurance that the dose consequence attributable to tritium in groundwater remains well below the ALARA dose objectives; DD-11-1, 73 NRC 11 (2011)

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10 C.F.R. Part 50, App. S, § III
safe shutdown earthquake is defined; LBP-11-10, 73 NRC 452 (2011)
10 C.F.R. Part 51
relative to NEPA, in mandatory hearings, boards are to determine whether the review conducted by NRC Staff has been adequate, but they need not rethink or redo every aspect of the NRC Staff's environmental findings or undertake their own fact-finding activities; LBP-11-11, 73 NRC 476 n.10 (2011)
10 C.F.R. 51.1(a)
severe accident mitigation alternatives analyses are required pursuant to NEPA; LBP-11-13, 73 NRC 571 (2011)
10 C.F.R. 51.10(a)
the Commission shall prepare an environmental impact statement during review of the early site permit application; LBP-11-10, 73 NRC 440 n.93 (2011)
10 C.F.R. 51.14(a)
every combined license application must be accompanied by an environmental report to aid the Commission in its preparation of an environmental impact statement; LBP-11-6, 73 NRC 172 (2010)
10 C.F.R. 51.14(b)
applicant's environmental report is not the vehicle for the NRC Staff's safety review; LBP-11-6, 73 NRC 216 (2010)
in implementing its NEPA obligations, NRC expressly adopts certain definitions promulgated by the Council on Environmental Quality; LBP-11-7, 73 NRC 301 n.314 (2011)
the scope of environmental concerns that must be considered in the environmental impact statement are discussed; LBP-11-6, 73 NRC 172-73 (2010)
10 C.F.R. 51.20(b)(1)
actions requiring an environmental impact statement or a supplement to an EIS are a limited work authorization, construction permit for a nuclear power reactor, testing facility, or fuel reprocessing plant, or an early site permit; LBP-11-10, 73 NRC 440 n.93 (2011)
10 C.F.R. 51.22(b)
petitioners' request for waiver of 10 C.F.R. 51.22(c)(15) has not shown that there are unresolved conflicts concerning alternative uses of available resources; CLI-11-3, 73 NRC 621 n.33 (2011)
10 C.F.R. 51.22(c)(15)
a categorical exclusion from the NEPA requirement to prepare an environmental assessment or environmental impact statement for the issuance of import licenses involving low-level radioactive waste is provided; CLI-11-3, 73 NRC 619, 620 (2011)
request for rule waiver is denied; CLI-11-3, 73 NRC 616 (2011)
10 C.F.R. 51.23(a)
the Commission believes there is reasonable assurance that sufficient repository capacity will be available within 30 years beyond the licensed life for operation of any reactor to dispose of the commercial high-level waste and spent fuel originating in such reactor and generated up to that time; LBP-11-16, 73 NRC 701 (2011)
10 C.F.R. 51.23(b)
discussion of any environmental impact of spent fuel storage in reactor facility storage pools or independent spent fuel storage installations for the period following the term of the reactor operating license or amendment, reactor combined license or amendment, or initial ISFSI license or amendment for which application is made, is required in any environmental report, environmental impact statement, environmental assessment, or other analysis; LBP-11-16, 73 NRC 701 (2011)
10 C.F.R. 51.29(a)(1)
the scope of an environmental impact statement is governed by the provisions of 40 C.F.R. 1502.4; LBP-11-10, 73 NRC 440 (2011)
10 C.F.R. 51.45
a mere promise by applicant to follow applicable regulations in capping and abandoning active and inactive oil and gas wells in the footprint of the cooling basin and plant is insufficient to satisfy the NRC's regulations; LBP-11-16, 73 NRC 678 (2011)
contention alleging that applicant's environmental report does not evaluate the impacts on water availability fails to show a genuine dispute; LBP-11-16, 73 NRC 682-83, 685 (2011)

contention asserting that the applicant's environmental report fails to address the reasonably foreseeable impacts of climate change on water availability is admissible; LBP-11-16, 73 NRC 692 (2011)
contention claiming that the environmental report's discussion of environmental effects and cumulative impacts of seepage from the cooling basin into groundwater and surface water through undocumented or unplugged oil and gas wells and borings fails to comply with the requirements of this section is admissible; LBP-11-16, 73 NRC 675, 677 (2011)
10 C.F.R. 51.45(b)(1)
an environmental report must discuss environmental impacts in proportion to their significance; LBP-11-6, 73 NRC 173 (2010)
applicant must submit an environmental report discussing the impact of the proposed action on the environment; LBP-11-6, 73 NRC 197 n.50, 216(2010)
10 C.F.R. 51.45(b)(1)-(2)
applicant's environmental report must describe reasonably foreseeable environmental impacts, discussed in proportion to their significance, and adverse environmental effects that cannot be avoided should the proposal be implemented; LBP-11-6, 73 NRC 191, 242 (2010); LBP-11-16, 73 NRC 678 (2011)
10 C.F.R. 51.45(b)(3)
applicant's alternatives analysis must be sufficiently complete to aid the Commission in developing and exploring appropriate alternatives to the proposed action; LBP-11-13, 73 NRC 552 (2011)
applicant's environmental report must discuss appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources; LBP-11-6, 73 NRC 197 n.50 (2010)
merely describing an alternative is insufficient to comply with NEPA; LBP-11-14, 73 NRC 605 n.92 (2011)
10 C.F.R. 51.45(c)
an environmental report must contain a full discussion of mitigation plans; LBP-11-6, 73 NRC 208 (2010)
an environmental report must contain an analysis of the cumulative impacts of the activities to be authorized by a combined license; LBP-11-6, 73 NRC 173 (2010)
an environmental report must include an analysis that considers and balances the environmental effects of the proposed action, the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects; LBP-11-6, 73 NRC 173 (2010); LBP-11-13, 73 NRC 552 (2011)
an environmental report should contain sufficient data to aid the Commission in its development of an independent analysis; LBP-11-6, 73 NRC 173, 242 (2010)
applicant's environmental report must contain a sufficient analysis of potential environmental consequences and alternatives to enable the NRC Staff to prepare an environmental impact statement that fulfills the agency's obligations under NEPA; LBP-11-14, 73 NRC 598 (2011)
merely describing an alternative is insufficient to comply with NEPA; LBP-11-14, 73 NRC 605 n.92 (2011)
10 C.F.R. 51.45(d)
applicant's environmental report must identify and discuss the status of all permits, licenses, and other approvals that are required from federal, state, and local agencies; LBP-11-16, 73 NRC 704 n.364 (2011)
10 C.F.R. 51.50
contention alleging that applicant's environmental report does not evaluate the impacts on water availability fails to show a genuine dispute; LBP-11-16, 73 NRC 682-83, 685 (2011)
10 C.F.R. 51.50(b)(1)
applicant's environmental report must include an evaluation of alternative sites to determine whether there is any obviously superior alternative to the site proposed; LBP-11-16, 73 NRC 697 (2011)
early site permit applicant is required to evaluate alternative sites to determine whether there is any obviously superior alternative to the site proposed; LBP-11-16, 73 NRC 699 (2011)
10 C.F.R. 51.50(b)(2)
applicant's environmental report need not include an assessment of the economic, technical, or other benefits (e.g., need for power) and costs of the proposed action; LBP-11-16, 73 NRC 696 (2011)

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10 C.F.R. 51.53(c)(2)
a license renewal environmental report is not required to include a discussion of need for power; LBP-11-13, 73 NRC 556-57 (2011)
alternatives for reducing adverse environmental impacts, including impacts of severe accidents, are among the limited issues within the scope of a license renewal proceeding; LBP-11-13, 73 NRC 550 (2011)
among the limited issues within the scope of a license renewal proceeding are cost-effective alternatives for mitigating severe accidents; LBP-11-2, 73 NRC 45 (2011)
operating license renewal applications need not discuss the need for power; LBP-11-2, 73 NRC 53 (2011)
10 C.F.R. 51.53(c)(3)(ii)(L)
a SAMA analysis fulfills the requirement to provide a consideration of alternatives to mitigate severe accidents; LBP-11-13, 73 NRC 566 (2011)
alternatives for reducing adverse environmental impacts, including impacts of severe accidents, are among the limited issues within the scope of a license renewal proceeding; LBP-11-13, 73 NRC 550 (2011)
alternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives; LBP-11-2, 73 NRC 46 (2011); LBP-11-13, 73 NRC 566 (2011)
although a consideration of alternatives to mitigate severe accidents must be provided if not previously performed, applicant must provide this analysis only for those issues identified as Category 2 issues in Appendix B to Subpart A of Part 51; LBP-11-2, 73 NRC 65 (2011)
among the limited issues within the scope of a license renewal proceeding are cost-effective alternatives for mitigating severe accidents; LBP-11-2, 73 NRC 45 (2011)
petitioner's assertion that severe accidents from spent fuel pools must be considered in applicant's SAMA analysis is in direct conflict with NRC regulations; LBP-11-2, 73 NRC 65 (2011)
severe accident mitigation alternatives analyses are required pursuant to NEPA; LBP-11-13, 73 NRC 571 (2011)
10 C.F.R. 51.53(c)(3)(iii)
among the limited issues within the scope of a license renewal proceeding are alternatives for reducing adverse environmental impacts listed as Category 2 issues in Appendix B to Subpart A of 10 C.F.R. Part 51; LBP-11-2, 73 NRC 45 (2011); LBP-11-13, 73 NRC 550 (2011) 10 C.F.R. 51.70
NRC Staff's NEPA responsibilities for preparing an environmental impact statement are described; LBP-11-6, 73 NRC 177 n.25 (2010)
10 C.F.R. 51.70(b)
NRC Staff need not replicate the work completed by another entity, but rather must independently review and find relevant and scientifically reasonable any outside reports or analyses on which it intends to rely in its environmental impact statement; LBP-11-1, 73 NRC 25 n.9 (2011)
10 C.F.R. 51.71
NRC Staff's NEPA responsibilities for preparing an environmental impact statement are described; LBP-11-6, 73 NRC 177 n.25 (2010)
10 C.F.R. 51.71(d)
if important factors in the cost-benefit balancing cannot be quantified, they may be discussed qualitatively; LBP-11-7, 73 NRC 282 n.173 (2011)
NRC is required to consider alternatives available for reducing or avoiding adverse environmental effects; LBP-11-7, 73 NRC 264 n.49 (2011)
NRC must address any purported need for additional power during its environmental review of a combined license application; LBP-11-7, 73 NRC 282 n.175 (2011)
NRC Staff is to consider and weigh the environmental, technical, and other costs and benefits of a proposed action and alternatives, and, to the fullest extent practicable, quantify the various factors considered; LBP-11-7, 73 NRC 282 n.173 (2011)
the draft environmental impact statement must consider the economic, technical, and other benefits and costs of the proposed action; LBP-11-7, 73 NRC 282 n.175 (2011)
10 C.F.R. 51.73, 51.74
NRC Staff's NEPA responsibilities for preparing an environmental impact statement are described; LBP-11-6, 73 NRC 177 n.25 (2010)
10 C.F.R. 51.90, 51.91, 51.93, 51.94
NRC Staff's NEPA responsibilities for preparing an environmental impact statement are described; LBP-11-6, 73 NRC 177 n.25 (2010)

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10 C.F.R. 51.103(a)(3)
the record of decision must discuss relevant factors including economic and technical considerations among alternatives; LBP-11-7, 73 NRC 282 n.175 (2011)
10 C.F.R. 51.105(b)
the presiding officer in an early site permit hearing shall not admit contentions proffered by any party concerning the benefits assessment if those issues were not addressed by applicant in the early site permit application; LBP-11-16, 73 NRC 696 (2011)
10 C.F.R. 51.107(a)(3)
environmental, economic, technical, and other benefits must be weighed against environmental and other costs for each proposed action; LBP-11-7, 73 NRC 281 (2011)
10 C.F.R. 51.107(b)(3)
a matter resolved in an early site permit proceeding may be revisited in the combined license proceeding when new and significant information is presented; LBP-11-10, 73 NRC 431 (2011)
10 C.F.R. Part 51, Subpart A, App. A, § 5
the alternatives analysis is the heart of the environmental impact analysis; LBP-11-16, 73 NRC 699 (2011)
10 C.F.R. Part 51, Subpart A, App. 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-11-13, 73 NRC 551 (2011)
issues that require site-specific analysis are identified as Category 2 issues; LBP-11-13, 73 NRC 551 (2011)
the Commission has codified generic determinations for certain environmental issues, identified as Category 1 issues, for license renewal proceedings; LBP-11-13, 73 NRC 551 (2011)
10 C.F.R. Part 51, Subpart A, App. B, tbl. B-1
all uranium fuel cycle and waste management issues, including low-level waste storage and disposal, mixed waste storage and disposal, onsite spent fuel storage, and transportation, are Category 1 issues with a small impact; LBP-11-2, 73 NRC 75-76 (2011)
for all plants, onsite dry or pool storage can safely accommodate spent fuel accumulated from a 20-year license extension with small environmental effects; LBP-11-13, 73 NRC 570 (2011)
for Category 1 issues, mitigation of adverse impacts has already been generically analyzed and it has already been determined that additional plant-specific mitigation measures are likely not to be sufficiently beneficial to warrant implementation; LBP-11-13, 73 NRC 570 (2011)
probability-weighted consequences of a severe accident (risk) are small in the context of a license renewal proceeding; LBP-11-13, 73 NRC 566 n.203, 568 (2011)
the determination that, for any license renewal of a nuclear power plant, the probability-weighted consequences of a severe accident are small cannot be challenged; LBP-11-2, 73 NRC 46 (2011)
the very essence of severe accident mitigation analysis is to assess to what extent the probability-weighted consequences of the analyzed severe accident sequences would decrease if a specific SAMA were implemented; LBP-11-2, 73 NRC 63 (2011)
10 C.F.R. Part 51, Subpart A, App. B, tbl. B-1, n.3
definitions of "significance"are provided; LBP-11-4, 73 NRC 103 (2011)
10 C.F.R. 52.1(a)
an early site permit authorizes the use of a specific site for the construction and operation of a new nuclear power plant, with the actual construction and operation authorized by a subsequently issued combined license; LBP-11-10, 73 NRC 441 (2011)
10 C.F.R. Part 52, Subpart A
an ESP essentially allows an entity to bank a site for the possible future construction of a specified number of new nuclear power generation facilities; LBP-11-16, 73 NRC 650-51 (2011)
10 C.F.R. 52.12
an early site permit authorizes the use of a specific site for the construction and operation of a new nuclear power plant, with the actual construction and operation authorized by a subsequently issued combined license; LBP-11-10, 73 NRC 441 (2011)
10 C.F.R. 52.17
information regarding control room habitability and ventilation system design is not required in a site safety analysis report at the early site permit stage; LBP-11-16, 73 NRC 668 (2011)

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10 C.F.R. 52.18
to issue an early site permit, NRC must comply with the National Environmental Policy Act; LBP-11-10, 73 NRC 440 n.93 (2011)
10 C.F.R. 52.21
an uncontested early site permit proceeding is subject to mandatory hearing requirements; LBP-11-10, 73 NRC 436 (2011)
the presiding officer in an early site permit hearing shall not admit contentions proffered by any party concerning the benefits assessment if those issues were not addressed by the applicant in the early site permit application; LBP-11-16, 73 NRC 696 (2011)
10 C.F.R. 52.23(a)
an early site permit is valid for 20 to 40 years from the date of issuance; LBP-11-16, 73 NRC 686 (2011)
10 C.F.R. 52.33
an early site permit is valid for 20 to 40 years from the date of issuance; LBP-11-16, 73 NRC 686 (2011)
10 C.F.R. 52.39
insofar as a contention requests consideration of a dry cooling design alternative, that matter must be considered resolved in the early site permit proceeding; LBP-11-10, 73 NRC 431 (2011)
10 C.F.R. 52.39(a)(2)
a contention should be deemed resolved during the early site permit proceeding if the subject of the contention was actually litigated and decided during the ESP proceeding, or the subject of the contention, although not actually litigated, was decided by the Staff, was necessary for the Staff to resolve in the ESP proceeding, and was within the scope of that proceeding as defined in the *Federal Register* notice of opportunity for a hearing; LBP-11-10, 73 NRC 433 (2011)
if a matter is resolved in an early site permit proceeding, then it is considered resolved in a subsequent combined license proceeding when the COLA references the ESP, subject to certain exceptions; LBP-11-10, 73 NRC 433 (2011)
10 C.F.R. 52.39(c)(1)
in any combined license proceeding referencing an early site permit, any significant environmental issue that was not resolved in the ESP proceeding, or any issue involving the impacts of construction and operation of the facility that was resolved in the ESP for which significant new information has been identified, may be litigated; LBP-11-10, 73 NRC 442 (2011)
in any combined license proceeding referencing an early site permit, contentions may be litigated on whether the nuclear power reactor proposed to be built does not fit within one or more of the site characteristics or design parameters included in the early site permit; LBP-11-10, 73 NRC 442 (2011)
10 C.F.R. 52.39(c)(1)(v)
a matter resolved in an early site permit proceeding may be revisited in the combined license proceeding when new and significant information is presented; LBP-11-10, 73 NRC 431 (2011)
10 C.F.R. 52.55(c)
a combined license applicant may reference a docketed-but-not-yet-certified design in its application, but does so at its own risk; LBP-11-10, 73 NRC 450 (2011)
10 C.F.R. 52.63(a)(5)
in making the findings required for issuance of a combined license, finality is afforded to those matters resolved in connection with a design certification; LBP-11-7, 73 NRC 274 (2011)
10 C.F.R. 52.63(b)(1)
exemption requests are subjected to the same level of litigation as other issues that could be admissibly raised in a COL proceeding; LBP-11-10, 73 NRC 451 n.157, 452 (2011)
grants of exemptions from referenced design certification rules are conditioned on the Commission's finding that the request complies with section 52.7 and that the special circumstances provided for section 52.7 outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption; LBP-11-10, 73 NRC 451 (2011)
10 C.F.R. 52.73
applicants may incorporate a certified reactor design in a combined license application; LBP-11-10, 73 NRC 428 (2011)

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10 C.F.R. 52.79
although the combined license application is not expressly required to consider sea level rise, the board decides that the issue is within the scope of a combined license proceeding; LBP-11-6, 73 NRC 236 (2010)

10 C.F.R. 52.79(a)(3)
the final safety analysis report for a combined license must include information regarding the kinds and quantities of radioactive materials expected to be produced in the operation and the means for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in Part 20; LBP-11-6, 73 NRC 245 (2010)

10 C.F.R. 52.93(a)(1)
a combined license applicant incorporating a certified design may include in its COLA a request for an exemption from any part of a referenced design certification rule, which may be granted if NRC determines that the exemption complies with any exemption provisions of the referenced design certification rule, or with 10 C.F.R. 52.63 if there are no applicable exemption provisions in the referenced design certification rule; LBP-11-10, 73 NRC 451 (2011)

10 C.F.R. 52.97(a)(1)(v)
NRC Staff, incident to its preparation of the safety evaluation report, is obliged to ensure that applicant's design basis for the new units will protect public health and safety; LBP-11-6, 73 NRC 217 n.78 (2010)

10 C.F.R. Part 52, App. A, §§ VI.B
all environmental issues concerning severe accident mitigation design alternatives associated with the information in NRC's final environmental assessment for certified reactor design are deemed resolved for plants referencing this appendix whose site parameters are within those specified in the technical support document; LBP-11-7, 73 NRC 274 n.135 (2011)

10 C.F.R. Part 52, App. A, § VI.B.7
NRC Staff's creation of a list of site parameters for use in the combined license proceeding cannot cure the absence of a list of site parameters in the technical support document, rendering it impossible to resolve SAMDA issues by rule; LBP-11-7, 73 NRC 275-76 (2011)

10 C.F.R. 54.17(c)
applicant may seek license renewal as early as 20 years prior to expiration; LBP-11-2, 73 NRC 52 (2011)

10 C.F.R. 54.21(a)(1)(i)
structures and components that are subject to aging management review include those that perform certain safety-related functions without moving parts or without a change in configuration or properties; LBP-11-2, 73 NRC 57 (2011)

10 C.F.R. 54.21(a)(3)
applicant must demonstrate that the effects of aging will be managed so that the intended function(s) will be maintained consistent with the current licensing basis; LBP-11-2, 73 NRC 60 (2011)

10 C.F.R. 54.29
for license renewal, there must be reasonable assurance that applicant will manage the effects of aging on certain structures and components during extended operation; LBP-11-2, 73 NRC 60 n.195 (2011)

10 C.F.R. 54.29(a)(1)
among the limited issues within the scope of a license renewal proceeding are plans to manage the effects of aging on enumerated functions of certain systems, structures, and components during the period of extended operation; LBP-11-2, 73 NRC 45 (2011)

10 C.F.R. 54.29(b)
alternatives for reducing adverse environmental impacts, including impacts of severe accidents, are among the limited issues within the scope of a license renewal proceeding; LBP-11-13, 73 NRC 550 (2011)
among the limited issues within the scope of a license renewal proceeding are alternatives for reducing adverse environmental impacts listed as Category 2 issues in Appendix B to Subpart A of 10 C.F.R. Part 51; LBP-11-2, 73 NRC 45 (2011)
among the limited issues within the scope of a license renewal proceeding are cost-effective alternatives for mitigating severe accidents; LBP-11-2, 73 NRC 45 (2011)

10 C.F.R. 54.30(b)
the licensee's compliance with the obligation to take measures under its current license is not within the scope of the license renewal review; LBP-11-2, 73 NRC 56 n.168 (2011)

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10 C.F.R. 54.4
among the limited issues within the scope of a license renewal proceeding are plans to manage the effects of aging on enumerated functions of certain systems, structures, and components during the period of extended operation; LBP-11-2, 73 NRC 45 (2011)

10 C.F.R. 54.4(a)(1)-(3)
because petitioner's issue of the inadvertent release of radioactivity does not specifically relate to the ability of buried structures to perform their intended functions, the contention is not within the scope of a license renewal proceeding; LBP-11-2, 73 NRC 60 (2011)

10 C.F.R. 70.4
applicant seeks an exemption from the requirements of this section to permit it to begin certain preconstruction activities at the site before completion of NRC's environmental review under Part 51; LBP-11-11, 73 NRC 503-04 (2011)
"commencement of construction" is defined to include clearing of land, excavation, or other substantial action that would adversely affect the environment of the site; LBP-11-11, 73 NRC 506 (2011)

10 C.F.R. 70.17(a)
NRC may grant an exemption from regulatory requirements if it determines such an exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest; LBP-11-11, 73 NRC 497 (2011)

10 C.F.R. 70.22(a)(3)
applicant must indicate the period of time for which a Part 70 license is requested; LBP-11-11, 73 NRC 503 (2011)

10 C.F.R. 70.22(b)
materials license amendment applications must contain a full description of the applicant's program for control and accounting of special nuclear material to show how it will comply with the 10 C.F.R. Part 74 requirements; LBP-11-9, 73 NRC 394 n.1 (2011)

10 C.F.R. 70.22(m)
application for a uranium enrichment facility is required to contain a description of the security program to protect against unauthorized disclosure of classified matter in accord with Part 95; LBP-11-11, 73 NRC 489, 490 (2011)

10 C.F.R. 70.23(a)(7)
applicant seeks an exemption from the requirements of this section to permit it to begin certain preconstruction activities at the site before completion of NRC's environmental review under Part 51; LBP-11-11, 73 NRC 503-04 (2011)
for a proposed nuclear materials-related activity, including uranium enrichment, 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-11-11, 73 NRC 506 (2011)

10 C.F.R. 70.25(e)
applicant seeks authorization to provide financial assurance for decommissioning funding on a forward-looking, incremental basis; LBP-11-11, 73 NRC 503 (2011)

10 C.F.R. 70.31(a)
NRC may issue a license to impose such additional conditions, requirements, and limitations as may been necessary to effectuate the purposes of the Atomic Energy Act and the agency's regulations; LBP-11-11, 73 NRC 497 (2011)

10 C.F.R. 70.31(b)(2)
NRC may issue a license to impose such additional conditions, requirements, and limitations as may been necessary to effectuate the purposes of the Atomic Energy Act and the agency's regulations; LBP-11-11, 73 NRC 497 (2011)

10 C.F.R. 70.32(c)
a uranium enrichment facility license must have a condition requiring the licensee to maintain and follow a source material control and accounting program and maintain records of any MC&A program changes made without Commission approval for 5 years from the date of the change; LBP-11-11, 73 NRC 501-02 (2011)

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10 C.F.R. 70.32(c)(2)
reports to the agency regarding unapproved changes made to the material control and accounting program must be filed no more than 6 months after the changes; LBP-11-11, 73 NRC 502 (2011)

10 C.F.R. 70.32(k)
a uranium enrichment facility cannot be operated until the agency verifies through inspection that the facility has been constructed in accordance with the license; LBP-11-11, 73 NRC 509 (2011)
although construction of a fuel cycle facility can begin as soon as the license authorizing the facility is granted, prior to the introduction of UF_6 into any EREF module, NRC must verify through inspection that the facility was constructed in accordance with the agency's regulatory requirements and license requirements; LBP-11-11, 73 NRC 502 (2011)
applicant is to provide an items-relied-on-for-safety boundary package to verify that a facility is constructed in accord with all license requirements; LBP-11-11, 73 NRC 500 (2011)

10 C.F.R. 70.40
this section applies only to enrichment facility licensee USEC and has no relevance to any other enrichment facility applicant; LBP-11-11, 73 NRC 488 n.16 (2011)

10 C.F.R. 70.61
analysis of potential volcanic hazard at applicant's site raises the question whether the probability of such an event is sufficiently low to be considered "highly unlikely"; LBP-11-11, 73 NRC 518-19 (2011)
under risk-informed performance-based requirements, applicants must ensure that each item relied on for safety will be available and reliable to perform its function when needed; LBP-11-11, 73 NRC 500 (2011)

10 C.F.R. 70.62(c)
applicant for a Part 70 license is required to establish and maintain a safety program, which includes performing an integrated safety analysis; LBP-11-11, 73 NRC 480 (2011)
items relied on for safety that are a central focus of the integrated safety analysis process are the subject of three proposed license conditions; LBP-11-11, 73 NRC 500 (2011)

10 C.F.R. 70.62(c)(1)(iv)
applicant's integrated safety analysis must consider potential accident sequences caused either by deviations in the processes that will be conducted at the proposed facility or by credible external events, including natural phenomena; LBP-11-11, 73 NRC 480 (2011)

10 C.F.R. 70.65(b)
along with the requirement to perform an integrated safety analysis is the requirement for applicant to provide the NRC Staff with an ISA summary, the content of which is specified; LBP-11-11, 73 NRC 481 (2011)

10 C.F.R. 70.72
Staff proposes to include a condition in the license that incorporates a special authorization to permit applicant to make changes to its SAR without seeking prior NRC approval; LBP-11-11, 73 NRC 505 (2011)

10 C.F.R. 74.51(a)
applicant is required to establish, implement, and maintain a Commission-approved material control and accounting system that will achieve the five objectives of this section; LBP-11-9, 73 NRC 419 (2011)

10 C.F.R. 74.55(b)
the ability to detect the loss of plutonium in a timely manner, to allow for an effective response, is a crucial security requirement; LBP-11-9, 73 NRC 420 (2011)

10 C.F.R. 74.57(b)
the ability to resolve within approved time periods the nature and cause of any materials control and accounting alarm signaling the possible loss or theft of strategic special nuclear material, to allow for an effective response, is a crucial security requirement; LBP-11-9, 73 NRC 420 (2011)

10 C.F.R. Part 95
relative to the issue of foreign ownership or control, NRC imposes restrictions on the physical security and control of information at licensed facilities to safeguard restricted data and national security information; LBP-11-11, 73 NRC 489 (2011)
Staff imposed a license condition to ensure that clearances are obtained before classified matter is processed, stored, reproduced, transmitted, handled, or accessed; LBP-11-11, 73 NRC 484-85 (2011)

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10 C.F.R. 95.15
a Pentapartite Agreement between the United States and four European governments to prevent new restricted data from being disseminated to European nationals will be a prerequisite to the NRC Staff issuing a facility clearance; LBP-11-11, 73 NRC 485 (2011)

10 C.F.R. 95.17
applicant must obtain a facility security clearance, which would include a determination that granting the clearance would not be inconsistent with the national interest, including a finding that the facility is not under foreign ownership, control, or influence to such a degree that a determination could not be made; LBP-11-11, 73 NRC 490 (2011)

10 C.F.R. 95.17(d)(1)
an enrichment facility security clearance requires a determination that granting the clearance would not be inconsistent with the national interest, including a finding that the facility is not under foreign ownership, control, or influence to such a degree that a determination could not be made; LBP-11-11, 73 NRC 489 (2011)

10 C.F.R. 100.20(b)
applicant must assess oil and gas wells and borings on and near the proposed site; LBP-11-16, 73 NRC 668 (2011)

10 C.F.R. 100.21(e)
applicant must assess oil and gas wells and borings on and near the proposed site and include them in the site safety evaluation report; LBP-11-16, 73 NRC 668 (2011)

10 C.F.R. 100.23
the principal geologic and seismic considerations that guide the Commission in its evaluation of the suitability of a proposed site and adequacy of the design bases are set forth; LBP-11-16, 73 NRC 658 (2011)

10 C.F.R. 100.23(c)
applicant shall investigate all geologic and seismic factors (e.g., volcanic activity) that may affect the design and operation of the proposed nuclear power plant irrespective of whether such factors are explicitly included in this section; LBP-11-16, 73 NRC 660 (2011)
geological, seismological, and engineering characteristics of a site and its environs must be investigated in sufficient scope and detail; LBP-11-10, 73 NRC 452 (2011)

10 C.F.R. 100.23(d)
factors used for a site geological and seismological evaluation are stated; LBP-11-10, 73 NRC 452 n.160 (2011)
geologic and seismic siting factors that must be considered for design are set forth; LBP-11-16, 73 NRC 659 (2011)
sufficient geological, seismological, and geophysical data must be provided to clearly establish whether there is a potential for surface deformation; LBP-11-16, 73 NRC 659 (2011)
the geologic and seismic siting factors considered for design must include a determination of the safe shutdown earthquake ground motion for the site and the potential for surface tectonic and nontectonic deformations; LBP-11-16, 73 NRC 659 (2011)

10 C.F.R. 100.23(d)(2)
applicant's site safety analysis report must provide sufficient data to enable the requisite determination of the potential for surface deformation as a result of growth faults at the site; LBP-11-16, 73 NRC 656, 658 (2011)
contention that applicant's site assessment has inadequately characterized the rate of movement of growth faults at the site, as it relates to its analysis of surface deformation is admissible; LBP-11-16, 73 NRC 663-64 (2011)

10 C.F.R. Part 100, Appendix A
applicant's site safety analysis report must provide sufficient data to enable the requisite determination of the potential for surface deformation as a result of growth faults at the site; LBP-11-16, 73 NRC 658 (2011)
application of the operating basis earthquake analysis is restricted to those features of a nuclear power plant that are safety-related, as opposed to the operability of structures, systems, and components necessary for power generation; LBP-11-16, 73 NRC 660 (2011)

even though a cooling pond is not a safety-related structure, knowledge of faulting under the pool and the impact this faulting might have on the pool's operation are required; LBP-11-16, 73 NRC 660 (2011)
the purpose of the seismic and geologic siting criteria is set forth; LBP-11-16, 73 NRC 660 (2011)
10 C.F.R. Part 100, Appendix A, ¶ V(d)(1)
the plain language of this appendix speaks to the intention of the Commission to address other design conditions such as soil instability due to ground disruption not directly related to surface faulting; LBP-11-16, 73 NRC 660 (2011)
10 C.F.R. Part 100, Appendix A, ¶ V(d)(3)
assurance of adequate cooling water supply for emergency and long-term shutdown decay heat removal shall be considered in the design of the nuclear power plant; LBP-11-16, 73 NRC 671 (2011)
10 C.F.R. Part 100, Appendix A, ¶ VI(b)(3)
design provisions shall be based on an assumption that the design basis for surface faulting can occur in any direction and azimuth and under any part of the nuclear power plant unless evidence indicates this assumption is not appropriate, and shall take into account the estimated rate at which the surface faulting may occur; LBP-11-16, 73 NRC 659-60 (2011)
the design basis for surface faulting shall be taken into account in the design of the nuclear power plant by providing reasonable assurance that in the event of such displacement during faulting certain structures, systems, and components will remain functional; LBP-11-16, 73 NRC 659 (2011)
10 C.F.R. 110.111
petitioner requests a waiver from a 10 C.F.R. 51.22(c)(15); CLI-11-3, 73 NRC 619 (2011)
10 C.F.R. 110.111(a)
a participant may petition that a Commission rule or regulation be waived with respect to the license application under consideration; CLI-11-3, 73 NRC 619 (2011)
10 C.F.R. 110.111(b)
to waive a Part 110 rule or regulation, petitioner must show that because of special circumstances concerning the subject of the hearing, application of a rule or regulation would not serve the purposes for which it was adopted; CLI-11-3, 73 NRC 619-20 (2011)
10 C.F.R. 110.111(d)
replies to waiver petitions are allowed; CLI-11-3, 73 NRC 619 (2011)
10 C.F.R. 110.32(f)(5)
NRC will issue a low-level radioactive waste export license if the receiving country has received a description of the equipment or material including the volume, physical and chemical characteristics, route of transit of shipment, and ultimate disposition (including forms of management or treatment) of the waste; CLI-11-3, 73 NRC 627 (2011)
10 C.F.R. 110.41(a)(8)
NRC will issue a low-level radioactive Waste export license if it has been notified by the State Department that it is the judgment of the Executive Branch that the proposed export will not be inimical to the common defense and security; CLI-11-3, 73 NRC 627 (2011)
the Department of State provides the Commission with Executive Branch views on the merits of import/export applications; CLI-11-3, 73 NRC 617 n.11 (2011)
10 C.F.R. 110.41(b)(1)
NRC will issue a low-level radioactive waste export license if it has been notified by the State Department that it is the judgment of the Executive Branch that the proposed export will not be inimical to the common defense and security; CLI-11-3, 73 NRC 627 (2011)
10 C.F.R. 110.42(d)(1)
NRC will issue a low-level radioactive waste export license if it has made an independent judgment that the export will not be inimical to the common defense and security; CLI-11-3, 73 NRC 627 (2011)
10 C.F.R. 110.42(d)(2)
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NRC will issue a low-level radioactive waste export license if the receiving country has received a description of the equipment or material including the volume, physical and chemical characteristics, route of transit of shipment, and ultimate disposition (including forms of management or treatment) of the waste; CLI-11-3, 73 NRC 627 (2011)

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10 C.F.R. 110.43(d)
the Southeast Compact Commission for Low-Level Radioactive Waste Management had no comments with regard to the import/export applications; CLI-11-3, 73 NRC 618 (2011)
the state reviewed the applications and the authorizations and found no technical reason to prohibit processing of imported waste; CLI-11-3, 73 NRC 618 (2011)
10 C.F.R. 110.45
the Commission considers the adequacy of information in the application as well as written comments from the public in making an import or export licensing decision; CLI-11-3, 73 NRC 624 (2011)
10 C.F.R. 110.50(a)(3)
the key action that will allow incineration of imported low-level-radioactive waste material is the domestic license authorizing such processing, not NRC's grant of an import license; CLI-11-3, 73 NRC 620 (2011)
10 C.F.R. 110.81
the Commission considers the adequacy of information in the application as well as written comments from the public in making an import or export licensing decision; CLI-11-3, 73 NRC 624 (2011)
10 C.F.R. 110.82
intervention petition argues that a hearing should be held to address claimed deficiencies in import/export applications and public health, safety, security impacts and whether the applications set precedent; CLI-11-3, 73 NRC 618-19 (2011)
petitioner filed a timely request for hearing on the import/export license application to allow citizens of the area an opportunity to have their questions answered and raise any concerns in a public forum and to argue that every country should have the capability of processing its own nuclear waste; CLI-11-3, 73 NRC 618 (2011)
10 C.F.R. 110.83(a)
deadline for answer to hearing petition is specified; CLI-11-3, 73 NRC 619 (2011)
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10 C.F.R. 110.83(b)
deadline for reply to an answer to a hearing petition is specified; CLI-11-3, 73 NRC 619 (2011)
10 C.F.R. 110.84(a)
a discretionary hearing on an export or import license is allowed if a hearing would be in the public interest and would assist the Commission in making the statutory determinations required by the AEA; CLI-11-3, 73 NRC 624 (2011)
10 C.F.R. 140.13b
holders of a Part 40/70 uranium enrichment facility license are required to maintain adequate nuclear liability insurance, with proof of such insurance necessary prior to a license being issued; LBP-11-11, 73 NRC 498 (2011)
10 C.F.R. 150.20
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15 C.F.R. 930.57(a)
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15 C.F.R. 930.60(a)
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40 C.F.R. 1501.7
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40 C.F.R. 1502.4
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40 C.F.R. 1502.4(a)
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40 C.F.R. 1502.14
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40 C.F.R. 1502.23
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40 C.F.R. 1508.7
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in implementing its NEPA obligations, NRC expressly adopts certain definitions promulgated by the Council on Environmental Quality; LBP-11-7, 73 NRC 301 n.314 (2011)
40 C.F.R. 1508.8
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in implementing its NEPA obligations, NRC expressly adopts certain definitions promulgated by the Council on Environmental Quality; LBP-11-7, 73 NRC 301 n.314 (2011)
40 C.F.R. 1508.25
in implementing its NEPA obligations, NRC expressly adopts certain definitions promulgated by the Council on Environmental Quality; LBP-11-7, 73 NRC 301 n.314 (2011)
40 C.F.R. 1508.25(a)(1)
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40 C.F.R. 1508.25(a)(1)(iii)
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40 C.F.R. 1508.25(c)
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44 C.F.R. 350.2(g)-(i)
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Atomic Energy Act, 69, 42 U.S.C. § 2099
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Atomic Energy Act, 103, 104
the Commission is prohibited from granting a license that would be inimical to the common defense and security or the health and safety of the public, and prohibits the granting of a license if the Commission knows or has reason to believe the applicant is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government; LBP-11-11, 73 NRC 488 (2011)
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the federal government could assert an implied water right on behalf of a wildlife refuge; LBP-11-16, 73 NRC 688 (2011)
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National Environmental Policy Act, 42 U.S.C. § 4332
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National Environmental Policy Act, 42 U.S.C. § 4332(2)(C)(i)-(iii)
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National Environmental Policy Act, 102(2)(E), 42 U.S.C. § 4332(2)(E)
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Tex. Sess. Law Serv. Ch. 939 (West) (codified as Tex. Util. Code Ann. § 39.905(a)(3)(B), (C) (2007)
demand-side management programs require regulated utilities in the region and integrated utilities outside the region to offer DSM programs sufficient to offset 15% of the growth in demand by December 31, 2008, and 20% of the growth in demand by December 31, 2009; LBP-11-7, 73 NRC 286 n.199 (2011)

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Fed. R. Evid. 801(c)
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Hearings Before the Subcommittee on Legislation, Joint Committee on Atomic Energy, 87th Cong. 60 (1962) (letter of AEC Commissioner Loren K. Olsen)
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H.R. Rep. No. 97-177, at 151 (1981)
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Ohio Rules of Prof'l Conduct R. 3.3(a)(1) (2007)
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S. Rep. No. 1677, 87th Cong., 2d Sess., *reprinted in* 1962 *U.S. Code Cong. & Admin. News* 2207, 2213)
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1 Staff of Joint Committee on Atomic Energy, 87th Cong., 1st Sess., *Improving the AEC Regulatory Process* (Joint Comm. Print 1961)
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for license renewal, there must be reasonable assurance that applicant will manage the effects of aging on certain structures and components during extended operation; LBP-11-2, 73 NRC 28 (2011)
key functions of buried structures, systems, and components that are the focus of the license renewal safety review under Part 54 do not include the prevention of inadvertent radioactive leaks from buried structures; LBP-11-2, 73 NRC 28 (2011)
referencing an aging management program described in the GALL Report does not insulate a program from an adequately supported challenge at a hearing; LBP-11-2, 73 NRC 28 (2011)

structures and components that are subject to aging management review include those that perform certain safety-related functions without moving parts or without a change in configuration or properties; LBP-11-2, 73 NRC 28 (2011)
whether petitioners have adequately raised an issue as to whether transformers constitute active or passive components survived a motion for summary disposition; LBP-11-2, 73 NRC 28 (2011)
AGREEMENTS
a Pentapartite Agreement between the United States and four European governments to prevent new restricted data from being disseminated to European nationals will be a prerequisite to the NRC Staff issuing a facility clearance; LBP-11-11, 73 NRC 455 (2011)
AIR POLLUTION
a source permit is an operating permit that the Clean Air Act requires major stationary sources of air pollution to obtain; LBP-11-13, 73 NRC 534 (2011)
ALARA
a combined license application must identify the means for keeping levels of radioactive material in effluents to unrestricted areas as low as is reasonably achievable; LBP-11-6, 73 NRC 149 (2011)
dose limits for individual members of the public are 100 millirem in a year; DD-11-3, 73 NRC 375 (2011)
NRC established reasonable assurance that the dose consequence attributable to tritium in groundwater remains well below the dose objectives; DD-11-1, 73 NRC 7 (2011)
AMENDMENT
if NRC Staff detects deficiencies in an application before or after a notice of hearing opportunity is issued, the applicant will freely be given (outside the adjudicatory process) ample opportunity to amend it; LBP-11-9, 73 NRC 391 (2011)
permitting an application to be modified or improved throughout the NRC's review is compatible with the dynamic licensing process followed in Commission licensing proceedings; CLI-11-2, 73 NRC 333 (2011)
AMENDMENT OF CONTENTIONS
applicant's change of legal position, its claims that such change no longer entails a need for an exemption from the regulations, and its identification of new means/systems to satisfy the regulations are all types of materially new information that can enable a contention to satisfy the timely new or amended contention requirements of 10 C.F.R. 2.309(f)(2)(i)-(ii); LBP-11-9, 73 NRC 391 (2011)
intervenor may propose new or amended contentions based on data or conclusions in the NRC draft or final environmental impact statement, environmental assessment, or any supplements relating thereto, that differ significantly from the data or conclusions in the applicant's environmental documents; LBP-11-1, 73 NRC 19 (2011); LBP-11-6, 73 NRC 149 (2011); LBP-11-7, 73 NRC 254 (2011)
new and amended contentions submitted after an intervenor's initial hearing request are evaluated under 10 C.F.R. 2.309(f)(2) for timeliness and, if found timely, their general admissibility is analyzed pursuant to section 2.309(f)(1); LBP-11-9, 73 NRC 391 (2011); LBP-11-10, 73 NRC 424 (2011)
new or amended contentions are considered to be timely if filed within 60 days of any triggering event; LBP-11-9, 73 NRC 391 (2011)
newly proffered contention must satisfy either the timeliness standards in 10 C.F.R. 2.309(f)(2) or the standards in 10 C.F.R. 2.309(c)(1) for newly proffered nontimely contentions, and the contention admissibility standards in 10 C.F.R. 2.309(f)(1); LBP-11-15, 73 NRC 629 (2011)
petitioner or intervenor may file timely new or amended contentions, with leave of the board, if three requirements are met; LBP-11-9, 73 NRC 391 (2011)
APPEAL PANEL
although the Appeal Panel was abolished in 1991, the Commission explicitly directed that the decisions of its boards were still to carry precedential weight; LBP-11-8, 73 NRC 349 (2011)
APPEALS
to the extent that petitioner challenges the board's decision to apply the reopening standards strictly, its challenge constitutes an improper collateral attack on NRC regulations; CLI-11-2, 73 NRC 333 (2011)
APPELLATE BRIEFS
petition for review falls short of satisfying 10 C.F.R. 2.341(b)(4) if it does not specify the subsections upon which it relies but merely sets forth a series of general grievances fundamentally going to the correctness of the board's decision; CLI-11-2, 73 NRC 333 (2011)

petitioner's appellate argument must pass regulatory muster under the rigorous standards of 10 C.F.R. 2.326(a)(3); CLI-11-2, 73 NRC 333 (2011)
the burden of setting forth a clear and coherent argument is on petitioner, and it should not be necessary to speculate about what a pleading is supposed to mean; CLI-11-2, 73 NRC 333 (2011)
APPELLATE REVIEW
a petition for review may be granted if it presents a substantial question with respect to one or more five considerations of 10 C.F.R. 2.341(b)(4); CLI-11-2, 73 NRC 333 (2011)
petition falls short of satisfying 10 C.F.R. 2.341(b)(4) if it does not specify the subsections upon which it relies but merely sets forth a series of general grievances fundamentally going to the correctness of the board's decision; CLI-11-2, 73 NRC 333 (2011)
APPLICANTS
although applicant has the ultimate burden of proof on any issues upon which a hearing is held, hearings are held on only those issues that an intervenor brings to the fore; LBP-11-4, 73 NRC 91 (2011)
petitioner impermissibly assumes that applicant will violate applicable state law regarding its treatment of wells at the site; LBP-11-16, 73 NRC 645 (2011)
ATOMIC ENERGY ACT
a materials license suspension proceeding is not an adversary adjudication for purposes of the Equal Access to Justice Act because the AEA does not require such a hearing to be on the record pursuant to Administrative Procedure Act § 554; LBP-11-8, 73 NRC 349 (2011)
all hearings will be public; LBP-11-5, 73 NRC 131 (2011)
because the application for a uranium enrichment facility is governed by AEA §§ 53 and 63, 42 U.S.C. § 2073, 2093, foreign ownership and control issues are evaluated under sections 57 and 69; LBP-11-11, 73 NRC 455 (2011)
boards may exclude the public from adjudicatory hearings or actions that involve restricted data, defense information, safeguards information protected from disclosure under the authority of AEA § 147, or information protected from disclosure under the authority of section 148; LBP-11-5, 73 NRC 131 (2011)
NRC has a clear statutory mandate to regulate the construction and operation of a uranium enrichment facility; LBP-11-11, 73 NRC 455 (2011)
the AEA is designed to regulate the radiological safety aspects involved in the construction and operation of a nuclear plant; LBP-11-6, 73 NRC 149 (2011)
the Commission is required to grant a hearing upon the request of any person whose interest may be affected by certain agency proceedings; LBP-11-6, 73 NRC 149 (2011); CLI-11-3, 73 NRC 613 (2011); LBP-11-8, 73 NRC 349 (2011)
the Commission shall conduct a single adjudicatory hearing on the record with regard to the licensing of the construction and operation of a uranium enrichment facility; LBP-11-11, 73 NRC 455 (2011)
ATTORNEYS' FEES AND EXPENSES
a prevailing party is not entitled to an award for attorneys' fees and expenses if the position of the Commission over which the applicant has prevailed was substantially justified; LBP-11-8, 73 NRC 349 (2011)
an award of attorneys' fees under the Equal Access to Justice Act can include fees paid by a third-party liability insurer; LBP-11-8, 73 NRC 349 (2011)
both union employees and the insured can be viewed as having incurred legal fees insofar as they have paid for legal services in advance as a component of the union dues or insurance premiums; LBP-11-8, 73 NRC 349 (2011)
claimant with a legally enforceable right to full indemnification of attorney fees from a solvent third party cannot be deemed to have incurred that expense for purposes of the Equal Access to Justice Act, and hence is not eligible for an award of fees; LBP-11-8, 73 NRC 349 (2011)
denying Equal Access to Justice Act awards in insurance contexts would undermine the dual purposes of EAJA by both maintaining financial deterrents for those who would want to challenge unjust government action and not deterring unreasonable government actions; LBP-11-8, 73 NRC 349 (2011)
fees may be awarded in adversary adjudications that are governed by Administrative Procedure Act § 554, but they may not be awarded in adversary adjudications that Congress did not subject to that section; LBP-11-8, 73 NRC 349 (2011)

for a prevailing applicant to recover attorneys' fees and expenses, the applicant must have incurred those fees and expenses in connection with the adversary adjudication in question; LBP-11-8, 73 NRC 349 (2011)
in an actuarial sense the cost of the defense, to the extent borne by the insurance company, is a cost that the insured paid for, just as he would have paid a lawyer for his defense had he had no insurance; LBP-11-8, 73 NRC 349 (2011)
inasmuch as litigants against the government manifestly have no constitutional right to be compensated out of public funds for their attorneys' fees, it cannot be doubted that Congress has the power to limit the reach of the Equal Access to Justice Act; LBP-11-8, 73 NRC 349 (2011)
"incur" within the context of Equal Access to Justice Act means that an individual who is a prevailing party meeting the financial qualification of the EAJA is ineligible to receive an EAJA award when that individual was not responsible for the costs of the attorney's fees; LBP-11-8, 73 NRC 349 (2011)
nothing in the Equal Access to Justice Act suggests a purpose to prevent a contractual agreement, or more broadly, to discourage the purchase of liability insurance; LBP-11-8, 73 NRC 349 (2011)
parties who prevail against the government in certain types of agency proceedings are allowed to recover attorneys' fees and other expenses incurred in connection with the proceeding unless the government's position was substantially justified, or other special circumstances render an award unjust; LBP-11-8, 73 NRC 349 (2011)
the Equal Access to Justice Act applies to any adjudication required by statute to be determined on the record in which the government is represented by counsel; LBP-11-8, 73 NRC 349 (2011)
the Equal Access to Justice Act renders the United States liable for attorney's fees for which it would not otherwise be liable, and thus amounts to a partial waiver of sovereign immunity, and any such waiver must be strictly construed in favor of the United States; LBP-11-8, 73 NRC 349 (2011)
the fee-deterrent-removal purpose of the Equal Access to Justice Act would not be served by an award of fees to an individual whose fees are fully paid by a ineligible organization; LBP-11-8, 73 NRC 349 (2011)
the presence of an attorney-client relationship suffices to entitle prevailing litigants to receive fee awards; LBP-11-8, 73 NRC 349 (2011)
when a third party who has no direct interest in the litigation pays fees on behalf of a taxpayer, the taxpayer incurs the fees so long as he assumes an absolute obligation to repay the fees or a contingent obligation to pay the fees in the event that he is able to recover them; LBP-11-8, 73 NRC 349 (2011)
where a pro bono attorney forgives a fee to a client unable to afford legal expenses, that client is eligible for an Equal Access to Justice Act award on the basis of that arrangement with the attorney; LBP-11-8, 73 NRC 349 (2011)
within 30 days of the Commission's decision upholding the board majority decision setting aside the NRC Staff's immediately effective enforcement order, petitioner applied for an award of over $250,000 in attorneys' fees; LBP-11-8, 73 NRC 349 (2011)
BENEFIT-COST ANALYSIS
a licensing board's inquiry should not be whether there are plainly better methodologies or whether the severe accident mitigation alternatives analysis can be refined further, but rather whether the SAMA analysis resulted in erroneous conclusions on which SAMAs and SAMDAs are found cost-beneficial to implement; LBP-11-7, 73 NRC 254 (2011)
a SAMA contention is admissible only if 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; LBP-11-7, 73 NRC 254 (2011); LBP-11-13, 73 NRC 534 (2011)
a severe accident mitigation alternatives analysis is governed by NEPA's rule of reason; LBP-11-13, 73 NRC 534 (2011)
although NEPA does not explicitly mention cost-benefit balancing, courts have interpreted the statute as requiring federal agencies to balance the environmental costs against the anticipated benefits of a proposed action; LBP-11-7, 73 NRC 254 (2011)
an environmental impact statement need not always contain a formal or mathematical cost-benefit analysis; LBP-11-7, 73 NRC 254 (2011)
because need-for-power assessments necessarily entail forecasting power demands in light of substantial uncertainty and the duty of providing adequate and reliable service to the public, they are inherently conservative; LBP-11-7, 73 NRC 254 (2011)

contention that alleges an omission, not an inadequacy, of an environmental report's analysis of socioeconomic impacts raises an issue that is not material to any finding NRC must make in an early site permit proceeding; LBP-11-16, 73 NRC 645 (2011)
contentions concerning benefits assessment shall not be admitted if the applicant does not address those issues in the early site permit application; LBP-11-16, 73 NRC 645 (2011)
cost-effective candidate severe accident mitigation alternatives are identified by comparing the annualized cost of the mitigation measure with the benefit as determined by the averted cost of severe accidents (consequences), as weighted by the probability of the accidents' occurrence; LBP-11-13, 73 NRC 534 (2011)
demand for electricity is the justification for building any power plant, and satisfaction of that demand is the principal beneficial factor weighed against the environmental costs in striking the balance that NEPA requires; LBP-11-7, 73 NRC 254 (2011)
for a proposed nuclear materials-related activity, including uranium enrichment, commencement of construction prior to favorable Staff conclusions regarding the NEPA cost-benefit balance is grounds for denial of the authorization to conduct that activity; LBP-11-11, 73 NRC 455 (2011)
if important factors in the cost-benefit balancing cannot be quantified, they may be discussed qualitatively; LBP-11-7, 73 NRC 254 (2011)
if the adverse environmental effects of a proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs; LBP-11-7, 73 NRC 254 (2011); LBP-11-14, 73 NRC 591 (2011)
it is sufficient if the need-for-power analysis is at a level of detail that reasonably characterizes the costs and benefits associated with proposed licensing actions; LBP-11-7, 73 NRC 254 (2011)
need for power is a shorthand expression for the benefit side of the cost-benefit balance that NEPA mandates for a proceeding considering the licensing of a nuclear power plant; LBP-11-6, 73 NRC 149 (2011)
NEPA itself does not mandate a cost-benefit analysis, but the statute is generally regarded as calling for some sort of a weighing of the environmental costs against the economic, technical, or other public benefits of a proposal; LBP-11-6, 73 NRC 149 (2011)
NRC authority to review offsite impacts of transmission lines goes beyond merely factoring them into a final cost-benefit balance and includes as well the authority, where necessary, to impose license conditions to minimize those impacts; LBP-11-6, 73 NRC 149 (2011)
NRC Staff is to consider and weigh the environmental, technical, and other costs and benefits of a proposed action and alternatives, and, to the fullest extent practicable, quantify the various factors considered; LBP-11-7, 73 NRC 254 (2011)
NRC Staff may accord substantial weight to the stated purpose of the project, i.e., to provide additional baseload electrical generation capacity for use in the owner's current markets and/or for potential sale on the wholesale market; LBP-11-7, 73 NRC 254 (2011)
petitioners have not established that use of another source term would identify additional cost-beneficial severe accident mitigation alternatives; LBP-11-13, 73 NRC 534 (2011)
quibbling over the details of an economic analysis would effectively stand NEPA on its head by asking that the license be rejected not due to environmental costs, but because the economic benefits are not as great as estimated; LBP-11-7, 73 NRC 254 (2011)
the draft environmental impact statement must consider the economic, technical, and other benefits and costs of the proposed action; LBP-11-7, 73 NRC 254 (2011)
the extent to which operation and maintenance costs of a solar facility may present a comparative benefit is immaterial since the four-part combination of alternative energy sources is not environmentally preferable to two new nuclear units; LBP-11-4, 73 NRC 91 (2011)
the need-for-power assessment need not precisely identify future market conditions and energy demand, or develop detailed analyses of system generating assets, costs of production, capital replacement ratios, and the like in order to establish with certainty that the construction and operation of a nuclear power plant is the most economical alternative for generation of power; LBP-11-7, 73 NRC 254 (2011)
the record of decision must discuss relevant factors including economic and technical considerations among alternatives; LBP-11-7, 73 NRC 254 (2011)
the ultimate concern in a SAMA contention is whether any additional SAMA should have been identified as potentially cost-beneficial, not whether further analysis may refine the details in the SAMA NEPA

analysis; LBP-11-13, 73 NRC 534 (2011)
weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations; LBP-11-7, 73 NRC 254 (2011)
whether a SAMA may be worthwhile to implement is based upon a weighing of the cost to implement with the reduction in risks to public health, occupational health, and offsite and onsite property; LBP-11-2, 73 NRC 28 (2011)
BRIEFS
judges are not like pigs, hunting for truffles buried in briefs; LBP-11-6, 73 NRC 149 (2011); LBP-11-14, 73 NRC 591 (2011)
See also Appellate Briefs; Reply Briefs
BURDEN OF PROOF
although an applicant has the ultimate burden of proof on any issues upon which a hearing is held, hearings are held on only those issues that an intervenor brings to the fore; LBP-11-4, 73 NRC 91 (2011)
if, considering only the summary disposition movant's support for its motion, the board determines that it has met its burden, the board then looks to whether an opponent of the motion has overcome the movant's case by showing a genuine dispute on a material issue of fact; LBP-11-4, 73 NRC 91 (2011)
summary disposition movant bears the initial burden of demonstrating that no genuine issue as to any material fact exists and that it is entitled to judgment as a matter of law; LBP-11-14, 73 NRC 591 (2011)
under the Equal Access to Justice Act, the government bears the burden of establishing that its position was substantially justified; LBP-11-8, 73 NRC 349 (2011)
when the issue on which summary judgment is sought is one on which the nonmoving party bears the burden of proof, the burden on the moving party may be discharged by showing that there is an absence of evidence to support the nonmoving party's case; LBP-11-4, 73 NRC 91 (2011)
CASE MANAGEMENT
boards may reformulate contentions to eliminate extraneous issues or to consolidate issues for a more efficient proceeding; LBP-11-6, 73 NRC 149 (2011)
where the board allowed petitioners to file a corrected version of an expert declaration that contained numerous typographical errors, and where some of petitioners' corrections clearly went beyond what the board expected, the board did not try to parse which changes were authorized and did not consider or rely on the corrected version; LBP-11-2, 73 NRC 28 (2011)
CERTIFICATE OF COMPLIANCE
NRC Staff's reference to, and reliance in its draft environmental impact statement on, state issuance of a site certification order and associated certificate of compliance on groundwater use does not dispense with NRC's duty under NEPA to conduct an independent hard look at environmental impacts related to active dewatering during operations at a nuclear plant; LBP-11-1, 73 NRC 19 (2011)
CERTIFICATION
all motions must include a certification that movant has made a sincere effort to contact other parties in the proceeding and resolve the issue raised in the motion, and that the movant's efforts to resolve the issue have been unsuccessful; LBP-11-2, 73 NRC 28 (2011); LBP-11-15, 73 NRC 629 (2011)
applicant is required to submit its certification from the relevant state of jurisdiction, indicating that the project in question will comply with this statute; LBP-11-16, 73 NRC 645 (2011)
the state agency's 6-month review period of an applicant's consistency certification begins on the date the state agency receives the consistency certification; LBP-11-16, 73 NRC 645 (2011)
See also Design Certification
CLASSIFIED INFORMATION
application for a uranium enrichment facility is required to contain a description of the security program to protect against unauthorized disclosure of classified matter in accord with Part 95; LBP-11-11, 73 NRC 455 (2011)
CLEAN AIR ACT
a source permit is an operating permit that the Clean Air Act requires major stationary sources of air pollution to obtain; LBP-11-13, 73 NRC 534 (2011)

SUBJECT INDEX

CLIMATE CHANGE
- although the combined license application is not expressly required to consider sea level rise, the board decides that the issue is within the scope of a combined license proceeding; LBP-11-6, 73 NRC 149 (2011)
- applicant's environmental report for an early site permit application must address climate change because it is considered an environmental impact; LBP-11-16, 73 NRC 645 (2011)
- if impacts are remote or speculative, the environmental impact statement need not discuss them, including greenhouse gas emissions; LBP-11-7, 73 NRC 254 (2011)

CLOSED HEARINGS
- an adjudicatory hearing can be closed if the Commission orders it; LBP-11-5, 73 NRC 131 (2011)
- boards may exclude the public from adjudicatory hearings or actions that involve restricted data, defense information, safeguards information protected from disclosure under the authority of Atomic Energy Act § 147, or information protected from disclosure under the authority of section 148; LBP-11-5, 73 NRC 131 (2011)

COASTAL ZONE MANAGEMENT ACT
- applicant is required to submit its certification from the relevant state of jurisdiction, indicating that the project in question will comply with this statute; LBP-11-16, 73 NRC 645 (2011)

COLLATERAL ESTOPPEL
- relitigation of an issue previously decided by a licensing board or the Commission may also be barred by the doctrine of collateral estoppel; LBP-11-10, 73 NRC 424 (2011)

COMBINED LICENSE APPLICATION
- although the COLA is not expressly required to consider sea level rise, the board decides that the issue is within the scope of a combined license proceeding; LBP-11-6, 73 NRC 149 (2011)
- an environmental report must contain an analysis of the cumulative impacts of the activities to be authorized; LBP-11-6, 73 NRC 149 (2011)
- an environmental report must discuss environmental impacts in proportion to their significance; LBP-11-6, 73 NRC 149 (2011)
- an exemption from any part of a referenced design certification rule may be granted if NRC determines that the exemption complies with any exemption provisions of the referenced design certification rule, or with 10 C.F.R. 52.63 if there are no applicable exemption provisions in the referenced rule; LBP-11-10, 73 NRC 424 (2011)
- applicant has described the kinds and quantities of radioactive materials expected to be produced in the operation to the extent its COLA references a standardized design; LBP-11-6, 73 NRC 149 (2011)
- applicant may reference a docketed-but-not-yet-certified design in its application, but does so at its own risk; LBP-11-10, 73 NRC 424 (2011)
- applicant must identify the means for keeping levels of radioactive material in effluents to unrestricted areas as low as is reasonably achievable; LBP-11-6, 73 NRC 149 (2011)
- applicant must include an emergency plan that contains, in the event of a reactor emergency resulting in a radiological release, a range of protective actions for the public located within about a 10-mile radius from the plant; LBP-11-15, 73 NRC 629 (2011)
- applicant will have to demonstrate that the site-specific parameters are bounded by the parameters developed for the certified design; LBP-11-10, 73 NRC 424 (2011)
- applicant will have to determine whether it will adopt in toto the certified design, or whether it will take exemptions thereto and/or departures therefrom; LBP-11-10, 73 NRC 424 (2011)
- applicant's emergency plan must contain and describe adequate provisions for emergency facilities and equipment, including at least one onsite and one offsite communication system, each of which shall have a backup power source; LBP-11-15, 73 NRC 629 (2011)
- applicant's environmental report must describe reasonably foreseeable environmental impacts, discussed in proportion to their significance, and adverse environmental effects that cannot be avoided should the proposal be implemented; LBP-11-6, 73 NRC 149 (2011)
- applicants may incorporate a certified reactor design in a combined license application; LBP-11-10, 73 NRC 424 (2011)
- comments and questions generated by a state agency that is examining a state application to determine compliance with state legal and technical standards do not, in and of themselves, demonstrate a material deficiency in the application; LBP-11-6, 73 NRC 149 (2011)

every COLA must be accompanied by an environmental report to aid the Commission in its preparation of an environmental impact statement; LBP-11-6, 73 NRC 149 (2011)
exemption requests are subjected to the same level of litigation as other issues that could be admissibly raised in a COL proceeding; LBP-11-10, 73 NRC 424 (2011)
factors used for a site geological and seismological evaluation are stated in 10 C.F.R. 100.23(d); LBP-11-10, 73 NRC 424 (2011)
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impacts of the possible routes that applicant will use for its transmission lines must be analyzed for applicant to give the NRC the requisite information to make an informed decision on its license application; LBP-11-6, 73 NRC 149 (2011)
mere existence of a letter of intent to ship low-level radioactive waste to a disposal facility does not answer questions as to whether such a plan will ultimately result in a transfer of LLRW title and permanent offsite disposition of the LLRW and whether nontransfer of title will result in environmental impacts; LBP-11-6, 73 NRC 149 (2011)
mere existence of comments and questions generated by NRC Staff do not, in and of themselves, demonstrate a material deficiency in applicant's combined license application; LBP-11-6, 73 NRC 149 (2011)
NRC must address any purported need for additional power during its environmental review of a combined license application; LBP-11-7, 73 NRC 254 (2011)
COMBINED LICENSE PROCEEDINGS
a contention should be deemed resolved during the early site permit proceeding if the subject of the contention was actually litigated and decided during the ESP proceeding, or, although not actually litigated, was decided by the Staff, was necessary for the Staff to resolve in the ESP proceeding, and was within the scope of that proceeding as defined in the *Federal Register* notice of opportunity for a hearing; LBP-11-10, 73 NRC 424 (2011)
a matter resolved in an early site permit proceeding may be revisited in the COL proceeding when new and significant information is presented; LBP-11-10, 73 NRC 424 (2011)
challenges to a combined license applicant's failure to provide information on long-term storage of Greater-Than-Class-C radioactive waste are outside the scope of a combined license proceeding; LBP-11-6, 73 NRC 149 (2011)
contention that wastewater contains chemical contaminants that are not discussed in the environmental report, and that when the wastewater is discharged via deep injection wells, the chemicals might migrate to an aquifer is within the scope of the proceeding; LBP-11-6, 73 NRC 149 (2011)
hearing procedures in Subpart L of 10 C.F.R. Part 2 will ordinarily be used in proceedings for the grant, renewal, licensee-initiated amendment, or termination of licenses or permits; LBP-11-6, 73 NRC 149 (2011)
in any COL proceeding referencing an early site permit, contentions may be litigated on whether the nuclear power reactor proposed to be built does not fit within one or more of the site characteristics or design parameters included in the early site permit; LBP-11-10, 73 NRC 424 (2011)
insofar as a contention requests consideration of a dry cooling design alternative, that matter must be considered resolved in the early site permit proceeding; LBP-11-10, 73 NRC 424 (2011)
NRC Staff's creation of a list of site parameters for use in the combined license proceeding cannot cure the absence of a list of site parameters in the technical support document, rendering it impossible to resolve SAMDA issues by rule; LBP-11-7, 73 NRC 254 (2011)
petitioner's demand for compliance with U.S. Army Corps of Engineers requirements is not within the scope of a combined license proceeding, because it is not the province of the NRC to enforce another agency's regulations; LBP-11-6, 73 NRC 149 (2011)
whether the safe shutdown earthquake exceedance in applicant's exemption request does in fact comply with 10 C.F.R. Part 50, Appendix S and 10 C.F.R. 100.23 is a question currently before the NRC Staff

and is thus material to the NRC's licensing decision in this proceeding; LBP-11-10, 73 NRC 424 (2011)
COMBINED LICENSES
an early site permit authorizes the use of a specific site for the construction and operation of a new nuclear power plant, with the actual construction and operation authorized by a subsequently issued COL; LBP-11-10, 73 NRC 424 (2011)
before issuing a combined license, NRC must conclude that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency; LBP-11-6, 73 NRC 149 (2011)
in making the findings required for issuance of a combined license, finality is afforded to those matters resolved in connection with a design certification; LBP-11-7, 73 NRC 254 (2011)
inasmuch as NRC Staff relies on the benefits of proposed units to satisfy an otherwise unmet need for power, the adequacy of the need-for-power assessment is material to granting the proposed combined license; LBP-11-7, 73 NRC 254 (2011)
issuance of an early site permit and the subsequent authorization of construction and operation of a new nuclear power plant qualify as connected actions under 40 C.F.R. 1508.25 and should be evaluated in one environmental impact statement; LBP-11-10, 73 NRC 424 (2011)
licensee who has obtained an early site permit is not required to apply for a combined license or to actually construct and operate a nuclear power plant at the authorized site; LBP-11-10, 73 NRC 424 (2011)
NEPA only requires that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated; LBP-11-7, 73 NRC 254 (2011)
NRC is required to consider severe accident mitigation alternatives in issuing a new operating license; LBP-11-7, 73 NRC 254 (2011)
sheltering must be considered in developing the recommended range of protective actions in an emergency plan; LBP-11-6, 73 NRC 149 (2011)
the final safety analysis report must include information regarding the kinds and quantities of radioactive materials expected to be produced in the operation and the means for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in Part 20; LBP-11-6, 73 NRC 149 (2011)
COMMON DEFENSE AND SECURITY
materials license regulations contain no express prohibition on foreign ownership, but require Staff to make a finding that license issuance will not be inimical to the common defense and security or the health and safety of the public; LBP-11-11, 73 NRC 455 (2011)
NRC may deny uranium enrichment facility applicant a license based on foreign ownership, control, or domination concerns to the extent it concludes granting such a license would be inimical to the common defense and security or the health and safety of the public; LBP-11-11, 73 NRC 455 (2011)
requesting authorization from the Commission for the board, on its own motion, to examine and decide the serious safety or common defense and security matters underlying contentions is allowed to be used for matters that were initially raised by a party, where that party later withdrew; LBP-11-9, 73 NRC 391 (2011)
the pertinent language in 10 C.F.R. 70.31(d) and 40.32(d) tracks the statutory language identically, i.e., "inimical to the common defense and security or the health and safety of the public"; LBP-11-11, 73 NRC 455 (2011)
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combined license applicant's emergency plan must contain and describe adequate provisions for emergency facilities and equipment, including at least one onsite and one offsite communications system, each of which shall have a backup power source; LBP-11-15, 73 NRC 629 (2011)
COMPLIANCE
although NUREGs are not legally binding, they are guidance documents and applicant's failure to comply with such documents can potentially give rise to an admissible contention; LBP-11-6, 73 NRC 149 (2011)
See also Certificate of Compliance; Procedure Compliance

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COMPUTER CODE
- citation of studies indicating that source terms from the Modular Accident Analysis Progression (MAAP) code are lower than results from Source Term Code Package or NUREG-1150 satisfies the requirements of 10 C.F.R. 2.309(f)(1)(v); LBP-11-2, 73 NRC 28 (2011)
- it is not possible simply to plug in and run a different atmospheric dispersion model in the MACCS2 code; LBP-11-2, 73 NRC 28 (2011)
- petitioners' assertions that the MACCS2 code was not subjected to quality assurance requirements is deficient because a SAMA analysis is not subject to such requirements; LBP-11-2, 73 NRC 28 (2011)
- petitioners did not demonstrate that the issue of whether the MACCS2 was subject to quality assurance is material to the findings the NRC must make under NEPA to support the requested license extension; LBP-11-13, 73 NRC 534 (2011)
- petitioners do not provide any alleged facts or expert support indicating that the river valley is within the geographic area for which applicant was required to model atmospheric dispersion; LBP-11-13, 73 NRC 534 (2011)
- the Gaussian plume model's incorporation in the MACCS2 code and the wide, customary use of the code are not a sufficient grounds to exclude the code's integral dispersion model from all challenge if adequate support is provided for a contention; LBP-11-2, 73 NRC 28 (2011)

CONFIDENTIAL INFORMATION
- petitioners have an affirmative obligation to request confidential and proprietary information that has not been made publicly available in order to support a proposed contention; LBP-11-9, 73 NRC 391 (2011)
- requests for protected documents shall be filed within 60 days of the listing of the document on the privilege log and, in any event, no later than 10 days after the deadline for filing rebuttal testimony; LBP-11-5, 73 NRC 131 (2011)
- the SUNSI policy does not expand upon or create any new category of legally privileged or confidential information that is exempt from discovery or from mandatory disclosure; LBP-11-5, 73 NRC 131 (2011)

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- aesthetic impacts of energy sources may vary according to individual location; LBP-11-4, 73 NRC 91 (2011)
- agencies need only discuss those alternatives that are reasonable and will bring about the ends of the proposed action; LBP-11-13, 73 NRC 534 (2011)
- agency's consideration of three alternative routes is sufficient to meet its NEPA obligations to consider reasonable transmission line route alternatives; LBP-11-6, 73 NRC 149 (2011)
- allegation that multiple, unrelated sources of electricity ought to be evaluated collectively is inadmissible; LBP-11-2, 73 NRC 28 (2011)
- although there are many possible combinations of wind and solar power, storage, and natural gas, it is not necessary to examine every possible combination; LBP-11-4, 73 NRC 91 (2011)
- an alternative that fails to meet the purpose of the project does not need to be further examined in the environmental report; LBP-11-6, 73 NRC 149 (2011)
- an environmental impact statement must describe the potential environmental impact of the proposed action and discuss any reasonable alternatives; LBP-11-7, 73 NRC 254 (2011)
- an environmental report need only consider the range of alternatives that are capable of achieving the goals of the proposed action; LBP-11-13, 73 NRC 534 (2011)
- applicant's alternatives analysis must be sufficiently complete to aid the Commission in developing and exploring appropriate alternatives to the proposed action; LBP-11-13, 73 NRC 534 (2011)
- applicant's alternatives analysis need not discuss every conceivable alternative to the proposed action, but rather only feasible, nonspeculative, and reasonable alternatives; LBP-11-13, 73 NRC 534 (2011)
- applicant's environmental report must discuss appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources; LBP-11-6, 73 NRC 149 (2011)
- applicants must evaluate alternative sites to determine whether there is any obviously superior alternative to the site proposed; LBP-11-16, 73 NRC 645 (2011)
- applicant's obligation is to consider alternatives as they exist and are likely to exist; LBP-11-2, 73 NRC 28 (2011)

because a solely wind- or solar-powered facility could not satisfy the projects purpose, there was no need to compare the impact of such facilities to the impact of the proposed nuclear plant; LBP-11-7, 73 NRC 254 (2011)
discussion of need for power is required in an environmental report, but applicant need not precisely identify future market conditions and energy demand or develop other detailed analyses in order to establish with certainty that construction and operation of a nuclear power plant is the most economical alternative; LBP-11-6, 73 NRC 149 (2011)
energy efficiency alternative is excluded because it would not advance applicant's goal to provide additional baseload electrical generation capacity for use in the owner's current markets and/or for potential sale on the wholesale markets; LBP-11-7, 73 NRC 254 (2011)
federal agencies must rigorously explore and objectively evaluate all reasonable alternatives and devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits; LBP-11-14, 73 NRC 591 (2011)
generation of baseload power is an acceptable purpose for a licensing action and has been determined to be broad enough to permit consideration of a host of energy-generating alternatives; LBP-11-13, 73 NRC 534 (2011)
if the adverse environmental impacts of the proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs; LBP-11-14, 73 NRC 591 (2011)
license renewal applicant must file an environmental report that includes an alternatives analysis that considers and balances the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects; LBP-11-13, 73 NRC 534 (2011)
merely describing an alternative is insufficient to comply with NEPA; LBP-11-14, 73 NRC 591 (2011)
need for power is a shorthand expression for the benefit side of the cost-benefit balance that NEPA mandates for a proceeding considering the licensing of a nuclear power plant; LBP-11-6, 73 NRC 149 (2011)
NEPA requires that an environmental review provide a sufficient discussion of alternatives to enable the decisionmaker to take a hard look at environmental factors, and to make a reasoned decision; LBP-11-13, 73 NRC 534 (2011)
NEPA's requirement to discuss alternatives to the proposed action does not extend to the construction of transmission line corridors, because it is not "construction" as defined in 10 C.F.R. 50.10; LBP-11-6, 73 NRC 149 (2011)
NEPA's rule of reason would not exclude consideration of demand-side management as part of an alternatives analysis when applicant is a state-regulated utility; LBP-11-6, 73 NRC 149 (2011)
NRC generally defers to an applicant's stated purpose as long as that purpose is not so narrow as to eliminate alternatives; LBP-11-13, 73 NRC 534 (2011)
NRC Staff is to consider and weigh the environmental, technical, and other costs and benefits of a proposed action and alternatives, and, to the fullest extent practicable, quantify the various factors considered; LBP-11-7, 73 NRC 254 (2011)
remote and speculative alternatives need not be addressed in an applicant's environmental report; LBP-11-2, 73 NRC 28 (2011)
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the record of decision must discuss relevant factors including economic and technical considerations among alternatives; LBP-11-7, 73 NRC 254 (2011)
there exists an obligation to consider alternatives as they exist and are likely to exist; LBP-11-13, 73 NRC 534 (2011)
weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations; LBP-11-7, 73 NRC 254 (2011)

when a contention alleges the need for further study of an alternative, from an environmental perspective, such reasonableness determinations are the merits, and should only be decided after the contention is admitted; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011)
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"commencement of construction" is defined to include clearing of land, excavation, or other substantial action that would adversely affect the environment of the site; LBP-11-11, 73 NRC 455 (2011)
for a proposed nuclear materials-related activity, including uranium enrichment, commencement of construction prior to a favorable Staff conclusion regarding the NEPA cost-benefit balance is grounds for denial of the authorization to conduct that activity; LBP-11-11, 73 NRC 455 (2011)
NEPA's requirement to discuss alternatives to the proposed action does not extend to the construction of transmission line corridors, because it is not "construction" as defined in 10 C.F.R. 50.10; LBP-11-6, 73 NRC 149 (2011)
under 10 C.F.R. 40.41(g) and 70.32(k), a uranium enrichment facility cannot be operated until the agency verifies through inspection that the facility has been constructed in accordance with the license; LBP-11-11, 73 NRC 455 (2011)
CONSTRUCTION OF MEANING
boards are to construe intervention petitions in favor of petitioners in determining whether petitioner has demonstrated standing; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011)
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all motions must include a certification that movant has made a sincere effort to contact other parties in the proceeding and resolve the issue raised in the motion, and that the movant's efforts to resolve the issue have been unsuccessful; LBP-11-2, 73 NRC 28 (2011); LBP-11-15, 73 NRC 629 (2011)
because applicant did not comply with the consultation requirement of 10 C.F.R. 2.323(b), the board does not consider information supplied with applicant's letter in connection with the board's analysis of petitioner's contention; LBP-11-2, 73 NRC 28 (2011)
CONTENTIONS
a board's conclusion that a contention is one of omission is driven by its examination of the contention, including its underlying arguments; LBP-11-6, 73 NRC 149 (2011)
a contention based solely upon omissions from the environmental report is rendered moot when the missing information is supplied; LBP-11-14, 73 NRC 591 (2011)
a contention of omission alleges that an application suffers from an improper omission, whereas a contention of adequacy raises a specific substantive challenge to how particular information or issues have been discussed in the application; LBP-11-6, 73 NRC 149 (2011)
although applicant has the ultimate burden of proof on any issues upon which a hearing is held, hearings are held on only those issues that an intervenor brings to the fore; LBP-11-4, 73 NRC 91 (2011)
an environmental report's adequacy is examined under the auspices of NEPA because the ER is the foundation upon which NRC's environmental impact statement is prepared and contentions that seek compliance with NEPA must be based on that environmental report; LBP-11-13, 73 NRC 534 (2011)
any person or organization seeking to intervene as a party in an NRC adjudicatory proceeding addressing a proposed licensing action must establish standing and proffer at least one admissible contention; LBP-11-13, 73 NRC 534 (2011)
boards may reformulate contentions to consolidate issues for a more efficient proceeding; LBP-11-13, 73 NRC 534 (2011)
if all matters at issue in a contention of omission are addressed by NRC Staff in its draft environmental impact statement through the actual provision of information on all such matters, then no legal interest in that contention remains, and the contention is moot; LBP-11-4, 73 NRC 91 (2011)

in ruling on whether a contention is moot, boards look to whether a justiciable controversy still exists and whether an issue is still live, such that a party still has a legal interest in the issue; LBP-11-4, 73 NRC 91 (2011)
it is possible for a contention to contain an omission component and an inadequacy component; LBP-11-6, 73 NRC 149 (2011)
on issues arising under NEPA, intervenor must file contentions based on the applicant's environmental report, but may amend those contentions or file new contentions; LBP-11-7, 73 NRC 254 (2011)
where a contention alleges the omission of particular information or an issue from an application, and the information is later supplied by the applicant, the contention is moot; LBP-11-16, 73 NRC 645 (2011)
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CONTENTIONS, ADMISSIBILITY
a brief explanation of the basis for a contention is required; LBP-11-13, 73 NRC 534 (2011)
a conclusory assertion, even if made by an expert, is inadequate because it deprives the board of the ability to make the necessary, reflective assessment of the opinion; LBP-11-6, 73 NRC 149 (2011)
a contention must be rejected if it attacks applicable statutory requirements or regulations, challenges the basic structure of the regulatory process, merely expresses petitioner's view of policy, seeks to raise an issue improper for adjudication in the proceeding or not applicable to the facility in question, or raises an issue that is not concrete or is otherwise not litigable; LBP-11-6, 73 NRC 149 (2011)
a contention of omission may be summarily rejected as inadmissible if there is no requirement to address the topic allegedly omitted from the application or the topic that allegedly is omitted is in fact included in the application; LBP-11-6, 73 NRC 149 (2011)
a contention should be deemed resolved during the early site permit proceeding if the subject of the contention was actually litigated and decided during the ESP proceeding, or, although not actually litigated, was decided by the Staff, was necessary for the Staff to resolve in the ESP proceeding, and was within the scope of that proceeding as defined in the *Federal Register* notice of opportunity for a hearing; LBP-11-10, 73 NRC 424 (2011)
a contention that was originally admitted as a challenge to the environmental report may be treated as a challenge to the similar section of the draft environmental impact statement; LBP-11-1, 73 NRC 19 (2011)
a late-filed contention is inadmissible both for lack of a good-cause showing and for failure to address the other factors of 10 C.F.R. 2.309(c)(1); LBP-11-6, 73 NRC 149 (2011)
a late-filed contention shall not be considered by a licensing board unless the petitioner demonstrates that a multifactor balancing test weighs in favor of consideration; LBP-11-6, 73 NRC 149 (2011)
a matter resolved in an early site permit proceeding may be revisited in the combined license proceeding when new and significant information is presented; LBP-11-10, 73 NRC 424 (2011)
a newly proffered contention that does not satisfy the timeliness requirements of section 2.309(f)(2) may still be considered for admission if it satisfies section 2.309(c)(1); LBP-11-15, 73 NRC 629 (2011)
a nontimely proposed contention may be admissible if, on balance, it satisfies eight criteria; LBP-11-7, 73 NRC 254 (2011)
a proposed new contention will be considered timely if it is filed within 30 days of the date when the new and material information on which the proposed contention is based first becomes available; LBP-11-7, 73 NRC 254 (2011)
a SAMA contention is admissible only if 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; LBP-11-13, 73 NRC 534 (2011)
a test for materiality that would require petitioners to demonstrate quantitatively how an alleged defect would result in a violation of pertinent requirements is rejected; LBP-11-7, 73 NRC 254 (2011)
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allegation that multiple, unrelated sources of electricity ought to be evaluated collectively is inadmissible; LBP-11-2, 73 NRC 28 (2011)

allegation that other costs were ignored is not admissible because petitioners presented no facts or expert opinion that show it to be plausible that including them might affect the outcome of the severe accident mitigation alternatives analysis; LBP-11-2, 73 NRC 28 (2011)

alternatives for reducing adverse environmental impacts, including impacts of severe accidents, are among the limited issues within the scope of a license renewal proceeding; LBP-11-13, 73 NRC 534 (2011)

although 10 C.F.R. 2.337(f), by its terms, applies to evidence at hearings, the bounds that this rule places on official notice is also appropriate for the contention admissibility stage of a proceeding; LBP-11-7, 73 NRC 254 (2011)

although a board may view petitioner's supporting information in a light favorable to the petitioner, petitioner (not the board) is required to supply all of the required elements for a valid intervention petition; LBP-11-16, 73 NRC 645 (2011)

although a licensing board is not required to recast contentions to make them acceptable, it is also not precluded from doing so; LBP-11-13, 73 NRC 534 (2011)

although NRC Staff's argument against contention admission appears to have some weight, the board need not resolve it, because the contention is inadmissible for failing to raise a genuine dispute of material fact or law with the environmental report; LBP-11-6, 73 NRC 149 (2011)

although NUREGs are not legally binding, they are guidance documents, and applicant's failure to comply with such documents could give rise to an admissible contention; LBP-11-6, 73 NRC 149 (2011)

although petitioner proffered a contention within 30 days of events that prompted it, this does not automatically render a newly proffered contention timely; LBP-11-15, 73 NRC 629 (2011)

although the COLA is not expressly required to consider sea level rise, the board decides that the issue is within the scope of a combined license proceeding; LBP-11-6, 73 NRC 149 (2011)

among the limited issues within the scope of a license renewal proceeding are alternatives for reducing adverse environmental impacts listed as Category 2 issues in Appendix B to Subpart A of 10 C.F.R. Part 51; LBP-11-2, 73 NRC 28 (2011)

an admissible contention must satisfy six pleading requirements; LBP-11-2, 73 NRC 28 (2011; LBP-11-13, 73 NRC 534 (2011)

applicant's change of legal position, its claims that such change no longer entails a need for an exemption from the regulations, and its identification of new means/systems to satisfy the regulations are all types of materially different new information that can enable a contention to satisfy the timely new or amended contention requirements of 10 C.F.R. 2.309(f)(2)(i)-(ii); LBP-11-9, 73 NRC 391 (2011)

as a matter of law and logic, if applicant's enhanced program is inadequate, then applicant's unenhanced program is a fortiori inadequate, and intervenor has a regulatory obligation to challenge it in its original petition to intervene; LBP-11-9, 73 NRC 391 (2011)

assertion that a license renewal environmental report must include a discussion of need for power is inadmissible; LBP-11-13, 73 NRC 534 (2011)

at the admission stage, petitioners should provide a minimal showing that material facts are in dispute, thereby demonstrating that an inquiry in depth is appropriate; LBP-11-13, 73 NRC 534 (2011)

availability of new information may provide good cause for nontimely filing, but the test for good cause is not simply when the intervenor became aware of the material sought to be introduced but when the information became available and when the intervenor reasonably should have become aware of the information; LBP-11-7, 73 NRC 254 (2011)

basic admissibility criteria that all contentions must satisfy are governed by 10 C.F.R. 2.309(f)(1); LBP-11-9, 73 NRC 391 (2011)

because petitioner's issue of the inadvertent release of radioactivity does not specifically relate to the ability of buried structures to perform their intended functions as defined by 10 C.F.R. 54.4(a)(1)-(3), the contention is not within the scope of a license renewal proceeding; LBP-11-2, 73 NRC 28 (2011)

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boards may reformulate contentions to eliminate extraneous issues or to consolidate issues for a more efficient proceeding; LBP-11-6, 73 NRC 149 (2011)
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Category 1 issues are not subject to challenge in a relicensing proceeding because they involve environmental effects that are essentially similar for all plants and need not be assessed repeatedly on a site-specific basis; LBP-11-13, 73 NRC 534 (2011)
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Congress called upon the Commission to make fundamental changes in its public hearing process to ensure that hearings adjudicate genuine, substantive safety and environmental issues placed in contention by qualified intervenors; LBP-11-6, 73 NRC 149 (2011)
contention asserting that the applicant's environmental report fails to address the reasonably foreseeable impacts of climate change on water availability is admissible; LBP-11-16, 73 NRC 645 (2011)
contention challenging the Waste Confidence Rule may not be admitted absent a waiver or exception; LBP-11-16, 73 NRC 645 (2011)
contention claiming that the application insufficiently addresses the safety implications of low water availability is inadmissible for failure to raise a genuine dispute with the application because the contention does not provide specific references to relevant sections of the site safety analysis report that address low-water considerations; LBP-11-16, 73 NRC 645 (2011)
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unplugged oil and gas wells and borings fails to comply with NRC requirements is admissible; LBP-11-16, 73 NRC 645 (2011)
contention questioning the accuracy of the severe accident mitigation alternatives analysis results given the geographic location and variable meteorological conditions at the site and the large population base surrounding the plant is admissible; LBP-11-2, 73 NRC 28 (2011)
contention that applicant's severe accident mitigation alternatives analysis improperly ignored radioactive waste disposal is outside the scope of the proceeding because it directly challenges the generic determinations in Table B-1 of Appendix B to Part 51; LBP-11-2, 73 NRC 28 (2011)
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"good cause" for late filing is defined as a showing that petitioner could not have met the filing deadline and filed as soon as possible thereafter; LBP-11-7, 73 NRC 254 (2011)
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if a new contention is not timely filed, it must meet an eight-factor test to be deemed admissible; LBP-11-10, 73 NRC 424 (2011)
if a proposed new contention that is filed after the initial filing period set forth in the hearing notice is not timely under 10 C.F.R. 2.309(f)(2)(iii), then proponent must address the eight criteria of section 2.309(c)(1) and show that a balance of these factors weighs in favor of admitting that contention; LBP-11-9, 73 NRC 391 (2011)
if good cause is not shown, a board may still permit the late filing, but petitioner or intervenor must make a strong showing on the other factors of 10 C.F.R. 2.309(c); LBP-11-9, 73 NRC 391 (2011)
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if petitioner believes that an application fails to contain information on a relevant matter as required by law, the contention must identify each failure and the supporting reasons for the petitioner's belief; LBP-11-6, 73 NRC 149 (2011)
if, within 60 days after pertinent information supporting a new contention first becomes available, Intervenors submit a particularized and otherwise admissible contention regarding construction of a mixed oxide facility, then the contention will be deemed timely without the need to satisfy the balancing test for late-filing requirements or the requirements for reopening the record; LBP-11-9, 73 NRC 391 (2011)
in addressing the good cause factor for late filing, petitioner must explain not only why it failed to file within the time required, but also why it did not file as soon thereafter as possible; LBP-11-7, 73 NRC 254 (2011)
in analyzing the admissibility of a proffered contention, a licensing board need not turn a blind eye to those portions of a petitioner's exhibits that might militate against admissibility; LBP-11-6, 73 NRC 149 (2011)
in any combined license proceeding referencing an early site permit, contentions may be litigated on whether the nuclear power reactor proposed to be built does not fit within one or more of the site characteristics or design parameters included in the early site permit; LBP-11-10, 73 NRC 424 (2011)
inasmuch as NRC Staff relies on the benefits of proposed units to satisfy an otherwise unmet need for power, the adequacy of the need-for-power assessment is material to granting the proposed combined license; LBP-11-7, 73 NRC 254 (2011)
insofar as a contention requests consideration of a dry cooling design alternative, that matter must be considered resolved in the early site permit proceeding; LBP-11-10, 73 NRC 424 (2011)
intervenor may file a new or amended contention challenging relevant new portions of the draft environmental impact statement that differ from applicant's environmental report; LBP-11-1, 73 NRC 19 (2011)
intervenors' challenges to adequacy of applicant's environmental report with respect to environmental impacts of dewatering associated with the proposed nuclear plant continue to serve as viable challenges to similar sections of Staff's draft environmental impact statement and thus are not moot; LBP-11-1, 73 NRC 19 (2011)
intervenors have demonstrated their ability to contribute to the development of a sound record where they have put forward in support of those contentions the views of a witness whose expertise has been recognized in other NRC proceedings; LBP-11-9, 73 NRC 391 (2011)
intervenors need only demonstrate that the issue raised in the contention is material to a licensing decision, i.e., that the issue would make a difference in the decision; LBP-11-7, 73 NRC 254 (2011)
it is insufficient for petitioner to point to an Internet Web site or article and expect the board on its own to discern what particular issue a petitioner is raising, including what section of the application, if any, is being challenged as deficient and why; LBP-11-6, 73 NRC 149 (2011)
it is not the function of a licensing board to comb through the record searching for arguments in support of a proffered contention; LBP-11-6, 73 NRC 149 (2011)
judges are not like pigs, hunting for truffles buried in briefs; LBP-11-6, 73 NRC 149 (2011)

license renewal is limited to age-related issues, not issues already monitored and reviewed in the ongoing regulatory oversight processes; CLI-11-2, 73 NRC 333 (2011)
licensing boards are bound to admit for litigation contentions that are material and supported by reasonably specific factual and legal allegations; LBP-11-6, 73 NRC 149 (2011)
mere existence of comments and questions generated by NRC Staff do not, in and of themselves, demonstrate a material deficiency in applicant's combined license application; LBP-11-6, 73 NRC 149 (2011)
mere notice pleading is insufficient for contention admission; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011); LBP-11-16, 73 NRC 645 (2011)
merits determination cannot be resolved at the contention admission stage of the proceeding; LBP-11-6, 73 NRC 149 (2011)
new and amended contentions submitted after an intervenor's initial hearing request are evaluated under 10 C.F.R. 2.309(f)(2) for timeliness and, if found timely, their general admissibility is analyzed pursuant to section 2.309(f)(1); LBP-11-10, 73 NRC 424 (2011)
new or amended contentions are considered to be timely if filed within 60 days of any triggering event; LBP-11-9, 73 NRC 391 (2011)
not only must intervenor act promptly after learning of new information, but the information itself must be new information, not information already in the public domain; LBP-11-7, 73 NRC 254 (2011)
NRC adjudicatory hearings are not environmental impact statement editing sessions; LBP-11-2, 73 NRC 28 (2011)
NRC regulations do not allow use of reply briefs to provide, for the first time, the necessary threshold support for contentions; LBP-11-6, 73 NRC 149 (2011)
Part 51's license renewal provisions cover environmental issues relating to onsite spent fuel storage generically and all such issues, including accident risk, fall outside the scope of license renewal proceedings; LBP-11-13, 73 NRC 534 (2011)
parties are expected to bear their burden and to clearly identify the matters on which they intend to rely with reference to a specific point; LBP-11-6, 73 NRC 149 (2011)
petitioner does not have to prove its contentions at the admission stage; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011); LBP-11-14, 73 NRC 591 (2011)
petitioner impermissibly assumes that applicant will violate applicable state law regarding its treatment of wells at the site; LBP-11-16, 73 NRC 645 (2011)
petitioner lacked good cause for a hearing request filed 7 days after the filing deadline when the argument relied on a misimpression of due dates; LBP-11-9, 73 NRC 391 (2011)
petitioner may not rely on a document generated by a state agency if that document contains nothing more than a request for information; LBP-11-6, 73 NRC 149 (2011)
petitioner may question the practice for severe accident mitigation alternatives analysis to utilize mean consequence values, which results in an averaging of potential consequences; LBP-11-13, 73 NRC 534 (2011)
petitioner need not prove its contentions at the admissibility stage; LBP-11-16, 73 NRC 645 (2011)
petitioner or intervenor may file timely new or amended contentions, with leave of the board, if three requirements are met; LBP-11-9, 73 NRC 391 (2011)
petitioner, having failed in its revised petition to challenge applicant's reliance on the generic environmental impact statement cannot raise that challenge for the first time in its reply; LBP-11-6, 73 NRC 149 (2011)
petitioner's assertion that severe accidents from spent fuel pools must be considered in applicant's SAMA analysis is in direct conflict with NRC regulations; LBP-11-2, 73 NRC 28 (2011)
petitioners' assertions that the MACCS2 code was not subjected to quality assurance requirements is deficient because a severe accident mitigation alternatives analysis is not subject to such requirements; LBP-11-2, 73 NRC 28 (2011)
petitioner's demand for compliance with U.S. Army Corps of Engineers requirements is not within the scope of a combined license proceeding, because it is not the province of the NRC to enforce another agency's regulations; LBP-11-6, 73 NRC 149 (2011)
petitioners did not demonstrate that the issue of whether the MACCS2 was subject to quality assurance is material to the findings the NRC must make under NEPA to support the requested license extension; LBP-11-13, 73 NRC 534 (2011)

petitioners do not provide any alleged facts or expert support indicating that the river valley is within the geographic area for which applicant was required to model atmospheric dispersion; LBP-11-13, 73 NRC 534 (2011)
petitioners have an affirmative obligation to request confidential and proprietary information that has not been made publicly available in order to support a proposed contention; LBP-11-9, 73 NRC 391 (2011)
petitioners have not established that use of another source term would identify additional cost-beneficial severe accident mitigation alternatives; LBP-11-13, 73 NRC 534 (2011)
petitioner's issue will be ruled inadmissible if the petitioner has offered no tangible information, no experts, no substantive affidavits, but instead only bare assertions and speculation; LBP-11-6, 73 NRC 149 (2011)
potential legislative action that might result in a reduction in demand is speculative and therefore does not provide a basis for admission of a contention on need for power; LBP-11-7, 73 NRC 254 (2011)
publication of NRC Staff's draft environmental impact statement may moot a contention challenging the environmental analysis in the applicant's environmental report, if the DEIS dispenses with the issues raised in the original contention challenging the ER; LBP-11-1, 73 NRC 19 (2011)
referencing an aging management program described in the GALL Report does not insulate a program from an adequately supported challenge at a hearing; LBP-11-2, 73 NRC 28 (2011)
regardless of when filed, all proposed contentions must comply with the general contention admissibility criteria; LBP-11-7, 73 NRC 254 (2011)
relitigation of an issue previously decided by a licensing board or the Commission may also be barred by the doctrine of collateral estoppel; LBP-11-10, 73 NRC 424 (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-11-7, 73 NRC 254 (2011)
safety issues that are routinely addressed through the agency's ongoing regulatory oversight are outside the scope of license renewal proceedings because considering them in that context would be unnecessary and wasteful; LBP-11-2, 73 NRC 28 (2011)
severe accident mitigation alternatives contentions are admissible only if 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; LBP-11-2, 73 NRC 28 (2011)
the Commission toughened its contention admissibility rule in 1989 to ensure that only intervenors with genuine and particularized concerns participate in NRC hearings; LBP-11-6, 73 NRC 149 (2011)
the contention admissibility rule serves to ensure that admitted contentions focus on real disputes that can be resolved in an adjudication, establish a sufficient factual and legal foundation to warrant further inquiry, and put other parties on notice of the disputed issues so they will know precisely those claims they must support or oppose; LBP-11-6, 73 NRC 149 (2011)
the contention admissibility rule should not serve as a fortress to deny intervention; LBP-11-6, 73 NRC 149 (2011)
the contention admissibility test in section 2.309(f)(1) was crafted by the Commission to raise the threshold bar for an admissible contention; LBP-11-6, 73 NRC 149 (2011)
the determination that, for any license renewal of a nuclear power plant, the probability-weighted consequences of a severe accident are small cannot be challenged; LBP-11-2, 73 NRC 28 (2011)
the Gaussian plume model's incorporation in the MACCS2 code and the wide, customary use of the code are not sufficient grounds to exclude the code's integral dispersion model from all challenge if adequate support is provided for a contention; LBP-11-2, 73 NRC 28 (2011)
the intent of 10 C.F.R. 2.309(f)(1) is to focus litigation on concrete issues and result in a clearer and more focused record for decision and to ensure that the Commission expends resources to support the hearing process only for issues that are appropriate for, and susceptible to, resolution in an NRC hearing; LBP-11-16, 73 NRC 645 (2011)
the migration tenet applies where the information in the draft environmental impact statement is sufficiently similar to the information in the environmental report; LBP-11-1, 73 NRC 19 (2011)
the multifactor contention admissibility test in section 2.309(f)(1) is strict by design; LBP-11-6, 73 NRC 149 (2011); LBP-11-16, 73 NRC 645 (2011)
the presiding officer may restrict irrelevant, immaterial, unreliable, duplicative or cumulative evidence and/or arguments; LBP-11-13, 73 NRC 534 (2011)

the scope of an admitted contention is determined by the bases set forth in support of the contention; LBP-11-14, 73 NRC 591 (2011)
the trigger date for a filing period can be especially unclear where both public and nonpublic documents associated with a proceeding are produced and where an applicant's stated compliance with NRC regulations shifts over time; LBP-11-9, 73 NRC 391 (2011)
the ultimate concern in a SAMA contention is whether any additional SAMA should have been identified as potentially cost-beneficial, not whether further analysis may refine the details in the SAMA NEPA analysis; LBP-11-13, 73 NRC 534 (2011)
the ultimate issue on severe accident mitigation alternatives analysis is whether any additional SAMA should have been identified as potentially cost-beneficial, not whether further analysis may refine the details in the SAMA NEPA analysis; LBP-11-2, 73 NRC 28 (2011)
to be admissible, a newly proffered contention must satisfy either the timeliness standards in 10 C.F.R. 2.309(f)(2) or the standards in 10 C.F.R. 2.309(c)(1) for newly proffered nontimely contentions, and the contention admissibility standards in 10 C.F.R. 2.309(f)(1); LBP-11-15, 73 NRC 629 (2011)
to be admissible, all contentions must satisfy the six criteria of 10 C.F.R. 2.309(f)(1); LBP-11-16, 73 NRC 645 (2011)
to participate in a proceeding as an intervenor, petitioner must establish standing and proffer at least one admissible contention; LBP-11-6, 73 NRC 149 (2011); LBP-11-16, 73 NRC 645 (2011)
to show that it is within the realm of reason that the federal government may assert an implied water right, petitioner must provide some indicia of an attempt, plan, or intention; LBP-11-16, 73 NRC 645 (2011)
to the extent a contention is premised on error, it is inadmissible for failing to raise a genuine dispute of fact; LBP-11-6, 73 NRC 149 (2011)
to the extent petitioner seeks to raise a generic challenge to the 10-mile plume exposure pathway EPZ, such an argument constitutes an impermissible challenge NRC regulations; LBP-11-15, 73 NRC 629 (2011)
under 10 C.F.R. 2.309(f)(1), petitioner need only properly allege a defect in meeting materiality requirement; LBP-11-7, 73 NRC 254 (2011)
under the previous contention admissibility rule, a contention could be admitted and litigated based on little more than speculation, with parties attempting to unearth a case through cross-examination; LBP-11-6, 73 NRC 149 (2011)
when a contention alleges the need for further study of an alternative, from an environmental perspective, such reasonableness determinations are the merits, and should only be decided after the contention is admitted; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011)
when NRC Staff issues the environmental impact statement, intervenors have an opportunity to either amend admitted contentions or proffer new contentions based on data or conclusions in the NRC draft or final EIS or any supplements relating thereto, that differ significantly from the data or conclusions in the applicant's documents; LBP-11-6, 73 NRC 149 (2011)
where applicant deletes a material portion of its application and replaces it with a changed explanation of legal compliance, that replacement is materially different information that was previously unavailable and thus can satisfy the requirements of 10 C.F.R. § 2.309(f)(2)(i)-(ii); LBP-11-9, 73 NRC 391 (2011)
where good cause is not shown for the late filing of a contention, the requestor's demonstration on the other factors must be particularly strong; LBP-11-15, 73 NRC 629 (2011)
where implementation of a building code could not make a difference in the outcome of the proceeding, it cannot be material; LBP-11-7, 73 NRC 254 (2011)
with respect to contentions filed after the initial petition, failure to address the requirements of 10 C.F.R. 2.309(c) and 2.309(f)(2) is reason enough to reject the new contentions; LBP-11-7, 73 NRC 254 (2011)
CONTENTIONS, LATE-FILED
a late-filed contention is inadmissible both for lack of a good-cause showing and for failure to address the other factors of 10 C.F.R. 2.309(c)(1); LBP-11-6, 73 NRC 149 (2011)
a newly proffered contention that does not satisfy the timeliness requirements of section 2.309(f)(2) may still be considered for admission if it satisfies section 2.309(c)(1); LBP-11-15, 73 NRC 629 (2011)
a nontimely proposed contention may be admissible if, on balance, it satisfies eight criteria; LBP-11-7, 73 NRC 254 (2011)

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admission is allowed only upon a showing that information upon which the new contention is based was not previously available and is materially different than information previously available and the new contention has been submitted in a timely fashion based on the availability of the subsequent information; CLI-11-2, 73 NRC 333 (2011)

although petitioner proffered a contention within 30 days of events that prompted it, this does not automatically render a newly proffered contention timely; LBP-11-15, 73 NRC 629 (2011)

applicant's change of legal position, its claims that such change no longer entails a need for an exemption from the regulations, and its identification of new means/systems to satisfy the regulations are all types of materially different new information that can enable a contention to satisfy the timely new or amended contention requirements of 10 C.F.R. 2.309(f)(2)(i)-(ii); LBP-11-9, 73 NRC 391 (2011)

as a matter of law and logic if applicant's enhanced program is inadequate, then applicant's unenhanced program is a fortiori inadequate, and intervenor has a regulatory obligation to challenge it in their original petition to intervene; LBP-11-9, 73 NRC 391 (2011)

availability of new information may provide good cause for nontimely filing, but the test for good cause is not simply when the intervenor became aware of the material sought to be introduced but when the information became available and when the intervenor reasonably should have become aware of the information; LBP-11-7, 73 NRC 254 (2011)

basic admissibility criteria that all contentions must satisfy are governed by 10 C.F.R. 2.309(f)(1); LBP-11-9, 73 NRC 391 (2011)

challenges to an enhanced version of an application alone are insufficient to vitiate intervenors' obligation to file any challenges to the original version of that application at the outset of the proceeding; LBP-11-9, 73 NRC 391 (2011)

contentions based on new information in a document that was not previously available and that is materially different from a document that was previously available are not untimely simply for not being included in an intervenor's initial hearing request filed at the outset of a proceeding; LBP-11-9, 73 NRC 391 (2011)

criteria that nontimely contentions must address are governed by 10 C.F.R. 2.309(c); LBP-11-9, 73 NRC 391 (2011)

documents merely summarizing earlier documents or compiling preexisting, publicly available information into a single source do not render "new" the summarized or compiled information; CLI-11-2, 73 NRC 333 (2011)

factors that timely new or amended contentions must satisfy are governed by are 10 C.F.R. 2.309(f)(2); LBP-11-9, 73 NRC 391 (2011)

failure to comply with pleading requirements for late filings constitutes sufficient grounds for rejecting intervention and hearing requests; LBP-11-7, 73 NRC 254 (2011)

for a newly proffered contention to be timely, it must be based on information that was not previously available; LBP-11-15, 73 NRC 629 (2011)

good cause for failure to file on time is the most important of the late-filing criteria; LBP-11-7, 73 NRC 254 (2011); LBP-11-6, 73 NRC 149 (2011); LBP-11-9, 73 NRC 391 (2011); LBP-11-10, 73 NRC 424 (2011); LBP-11-15, 73 NRC 629 (2011)

"good cause" for late filing is defined as a showing that petitioner could not have met the filing deadline and filed as soon as possible thereafter; LBP-11-7, 73 NRC 254 (2011)

hearing petitioners have an ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to uncover any information that could serve as the foundation for a specific contention; LBP-11-9, 73 NRC 391 (2011)

if a new contention is not timely filed, it must meet an eight-factor test to be deemed admissible; LBP-11-9, 73 NRC 391 (2011); LBP-11-10, 73 NRC 424 (2011)

if good cause is not shown, a board may still permit the late filing, but petitioner or intervenor must make a strong showing on the other factors of 10 C.F.R. 2.309(c); LBP-11-7, 73 NRC 254 (2011); LBP-11-9, 73 NRC 391 (2011); LBP-11-15, 73 NRC 629 (2011)

in addressing the good cause factor for late filing, petitioner must explain not only why it failed to file within the time required, but also why it did not file as soon thereafter as possible; LBP-11-7, 73 NRC 254 (2011)

in the context of a new contention filed after the initial petition, petitioner has an iron-clad obligation to examine the publicly available documentary material with sufficient care to enable it to uncover any

information that could serve as the foundation for a specific contention; CLI-11-2, 73 NRC 333 (2011)
new and amended contentions submitted after an intervenor's initial hearing request are evaluated under 10 C.F.R. 2.309(f)(2) for timeliness and, if found timely, their general admissibility is analyzed pursuant to section 2.309(f)(1); LBP-11-10, 73 NRC 424 (2011)
new or amended contentions are considered to be timely if filed within 60 days of any triggering event; LBP-11-9, 73 NRC 391 (2011)
not only must intervenor act promptly after learning of new information, but the information itself must be new information, not information already in the public domain; LBP-11-7, 73 NRC 254 (2011)
NRC generally considers approximately 30-60 days as the limit for timely filings based on new information; CLI-11-2, 73 NRC 333 (2011)
NRC generally disfavors the filing of new contentions at the eleventh hour of an adjudication, a policy that is grounded in the doctrine of finality, which states that at some point, an adjudicatory proceeding must come to an end; CLI-11-2, 73 NRC 333 (2011)
NRC recognizes an exception to the timeliness requirement in rare instances in which petitioner raises an exceptionally grave issue; CLI-11-2, 73 NRC 333 (2011)
petitioner demonstrates that a multifactor balancing test weighs in favor of consideration; LBP-11-6, 73 NRC 149 (2011)
petitioner lacked good cause for a hearing request filed 7 days after the filing deadline when the argument relied on a misimpression of due dates; LBP-11-9, 73 NRC 391 (2011)
petitioner or intervenor may file timely new or amended contentions, with leave of the board, if the three requirements are met; LBP-11-9, 73 NRC 391 (2011)
petitioner who seeks both to reopen the record and to submit a late contention must successfully satisfy two elevated standards; CLI-11-2, 73 NRC 333 (2011)
standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention; CLI-11-2, 73 NRC 333 (2011)
tardy filing of a contention may be excusable only where the facts upon which the amended or new contention is based were previously unavailable; CLI-11-2, 73 NRC 333 (2011)
the trigger date for a filing period can be especially unclear where both public and nonpublic documents associated with a proceeding are produced and where an applicant's stated compliance with NRC regulations shifts over time; LBP-11-9, 73 NRC 391 (2011)
to be admissible, a newly proffered contention must satisfy either the timeliness standards in 10 C.F.R. 2.309(f)(2) or the standards in 10 C.F.R. 2.309(c)(1) for newly proffered nontimely contentions, and the contention admissibility standards in 10 C.F.R. 2.309(f)(1); LBP-11-15, 73 NRC 629 (2011)
understandable misapprehension of the start of the filing period for contentions, leading to inadvertent late filing of new contentions, establishes good cause to excuse missing the filing deadline pursuant to 10 C.F.R. 2.309(c)(1); LBP-11-9, 73 NRC 391 (2011)
where applicant deletes a material portion of its application and replaces it with a changed explanation of legal compliance, that replacement is materially different information that was previously unavailable and thus can satisfy the requirements of 10 C.F.R. 2.309(f)(2)(i)-(ii); LBP-11-9, 73 NRC 391 (2011)
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See Benefit-Cost Analysis
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an environmental report must contain an analysis of the cumulative impacts of the activities to be authorized by a combined license; LBP-11-6, 73 NRC 149 (2011)
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deadline for reply to an answer to a hearing petition is specified; CLI-11-3, 73 NRC 613 (2011)
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balancing test for late-filing requirements or the requirements for reopening the record; LBP-11-9, 73 NRC 391 (2011)
motions for reconsideration must be filed within 10 days of a Board's decision; LBP-11-15, 73 NRC 629 (2011)
NRC generally considers approximately 30-60 days as the limit for timely filings based on new information; CLI-11-2, 73 NRC 333 (2011)
requests for protected documents shall be filed within 60 days of the listing of the document on the privilege log and, in any event, no later than 10 days after the deadline for filing rebuttal testimony; LBP-11-5, 73 NRC 131 (2011)
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it is rarely appropriate to resolve complex, fact-intensive issues on the initial pleadings; LBP-11-13, 73 NRC 534 (2011)
when a contention alleges the need for further study of an alternative, from an environmental perspective, such reasonableness determinations are the merits, and should only be decided after the contention is admitted; LBP-11-13, 73 NRC 534 (2011)
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if NRC Staff makes a finding of no reasonable assurance, NRC reserves the right to take steps to ensure a licensee's adequate accumulation of decommissioning funds; DD-11-4, 73 NRC 713 (2011)
licensee must file an annual report to NRC certifying that financial assurance for decommissioning will be or has been provided in an amount that may be more, but not less, than the amount stated in the regulations, adjusted as appropriate for changes in labor, energy, and waste burial costs; DD-11-3, 73 NRC 375 (2011)
power reactor licensees must report to the NRC at least once every 2 years on the status of their decommissioning funding for each reactor or part of a reactor that they own; DD-11-4, 73 NRC 713 (2011)
request that NRC issue a demand for information from licensee relating to adequacy of financial assurances for decommissioning is denied; DD-11-4, 73 NRC 713 (2011)
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a licensee that has collected funds based on a site-specific estimate under section 50.75(b)(1) may take credit for projected earnings on the external sinking funds using up to a 2% annual real rate of return from the time of future funds' collection through the decommissioning period, provided that the site-specific estimate is based on a period of safe storage that is specifically described in the estimate; DD-11-4, 73 NRC 713 (2011)
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"adversary adjudication" is defined as an adjudication under section 554 of the Administrative Procedure Act in which the position of the United States is represented by counsel or otherwise; LBP-11-8, 73 NRC 349 (2011)
baseload generation is different than peaking power, which provides supplemental power during hours of the day when demand is highest; LBP-11-13, 73 NRC 534 (2011)
"commencement of construction" includes clearing of land, excavation, or other substantial action that would adversely affect the environment of the site; LBP-11-11, 73 NRC 455 (2011)
cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time; LBP-11-7, 73 NRC 254 (2011)
direct impacts are those caused by the federal action, 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-11-7, 73 NRC 254 (2011)
"disclosing party" means the party required to make mandatory disclosure; LBP-11-5, 73 NRC 131 (2011)
"document" means any medium (electronic, paper, or any other kind) that contains or stores any information, including text, data, audio, video, computer software, or computer modeling information; LBP-11-5, 73 NRC 131 (2011)
"good cause" for late filing is defined as a showing that petitioner could not have met the filing deadline and filed as soon as possible thereafter; LBP-11-7, 73 NRC 254 (2011)
"incur" within the context of Equal Access to Justice Act means that an individual who is a prevailing party meeting the financial qualification of the EAJA is ineligible to receive an EAJA award when that individual was not responsible for the costs of the attorney's fees; LBP-11-8, 73 NRC 349 (2011)
"receiving party" means the party to whom the mandatory disclosure must be made; LBP-11-5, 73 NRC 131 (2011)
"representative" means the attorney or other authorized representative of a party who has entered a notice of appearance; LBP-11-5, 73 NRC 131 (2011)
DELAY OF PROCEEDING
longstanding NRC practice has been to limit orders delaying proceedings to the duration and scope necessary to promote the Commission's dual goals of public safety and timely adjudication; CLI-11-1, 73 NRC 1 (2011)
suspension of licensing proceedings is considered a drastic action that is not warranted absent immediate threats to public health and safety; CLI-11-1, 73 NRC 1 (2011)
the Commission generally has declined to hold proceedings in abeyance pending the outcome of other Commission actions or adjudications; CLI-11-1, 73 NRC 1 (2011)
DEMAND FOR INFORMATION
request that NRC issue a demand for information from licensee relating to adequacy of financial assurances for decommissioning is denied; DD-11-4, 73 NRC 713 (2011)
DEMAND-SIDE MANAGEMENT
applicant who is a state-regulated utility is in a position to implement and promote programs such as energy conservation, efficiency, and load management such that the need for additional generation capacity may be reduced; LBP-11-6, 73 NRC 149 (2011)
energy efficiency alternative is excluded because it would not advance applicant's goal to provide additional baseload electrical generation capacity for use in the owner's current markets and/or for potential sale on the wholesale markets; LBP-11-7, 73 NRC 254 (2011)
NEPA's rule of reason would not exclude consideration of demand-side management as part of an alternatives analysis when applicant is a state-regulated utility; LBP-11-6, 73 NRC 149 (2011)
DESIGN
assurance of adequate cooling water supply for emergency and long-term shutdown decay heat removal shall be considered in the design of the nuclear power plant; LBP-11-16, 73 NRC 645 (2011)
process designs for uranium enrichment facilities should be described in a level of detail in the integrated safety analysis that is sufficient to allow a Staff reviewer to understand the theory of operation for the process; LBP-11-11, 73 NRC 455 (2011)

SUBJECT INDEX

DESIGN BASIS
if evidence subsequently indicates that the design basis of an operating nuclear power plant will not withstand a maximum flooding event, members of the public may file a request to institute a proceeding to modify, suspend, or revoke a license; LBP-11-15, 73 NRC 629 (2011)
NRC Staff ensures that applicant's design basis for the new units will protect public health and safety by verifying that the design basis will withstand maximum flooding events; LBP-11-6, 73 NRC 149 (2011)
NRC Staff, incident to its preparation of the safety evaluation report, is obliged to ensure that applicant's design basis for the new units will protect public health and safety; LBP-11-6, 73 NRC 149 (2011)
DESIGN CERTIFICATION
a combined license applicant may reference a docketed-but-not-yet-certified design in its application, but does so at its own risk; LBP-11-10, 73 NRC 424 (2011)
a combined license applicant will have to demonstrate that the site-specific parameters are bounded by the parameters developed for the certified design; LBP-11-10, 73 NRC 424 (2011)
all environmental issues concerning severe accident mitigation design alternatives associated with the information in NRC's final environmental assessment for certified reactor design are deemed resolved for plants whose site parameters are within those specified in the technical support document; LBP-11-7, 73 NRC 254 (2011)
an exemption from any part of a referenced design certification rule may be granted if NRC determines that the exemption complies with any exemption provisions of the referenced design certification rule, or with 10 C.F.R. 52.63 if there are no applicable exemption provisions in the referenced rule; LBP-11-10, 73 NRC 424 (2011)
applicant has described the kinds and quantities of radioactive materials expected to be produced in the operation to the extent its combined license application references a standardized design; LBP-11-6, 73 NRC 149 (2011)
applicants may incorporate a certified reactor design in a combined license application; LBP-11-10, 73 NRC 424 (2011)
each combined license applicant will have to determine whether it will adopt in toto the certified design, or whether it will take exemptions thereto and/or departures therefrom; LBP-11-10, 73 NRC 424 (2011)
exemption requests are subjected to the same level of litigation as other issues that could be admissibly raised in a COL proceeding; LBP-11-10, 73 NRC 424 (2011)
grants of exemptions from referenced design certification rules are conditioned on the Commission's finding that the request complies with section 52.7 and that the special circumstances provided for section 52.7 outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption; LBP-11-10, 73 NRC 424 (2011)
in making the findings required for issuance of a combined license, finality is afforded to those matters resolved in connection with a design certification; LBP-11-7, 73 NRC 254 (2011)
NRC Staff's creation of a list of site parameters for use in the combined license proceeding cannot cure the absence of a list of site parameters in the technical support document, rendering it impossible to resolve severe accident mitigation design alternatives issues by rule; LBP-11-7, 73 NRC 254 (2011)
DISCLOSURE
any reasonably segregable portion of the record shall be provided to any person requesting such record after deletion of the portions that are exempt; LBP-11-5, 73 NRC 131 (2011)
board determination of expert's need to know with regard to a document withheld as safeguards information was reversed; LBP-11-9, 73 NRC 391 (2011)
"disclosing party" means the party required to make mandatory disclosures; LBP-11-5, 73 NRC 131 (2011)
"document" means any medium (electronic, paper, or any other kind) that contains or stores any information, including text, data, audio, video, computer software, or computer modeling information; LBP-11-5, 73 NRC 131 (2011)
each party to a proceeding must disclose all documents relevant to the admitted contentions, except those documents for which a claim of privilege or protected status is made; LBP-11-5, 73 NRC 131 (2011)
NRC Staff and its counsel, like the board and its staff, are federal government employees and are thus subject to stringent sanctions for the unauthorized disclosure of the protected information or protected documents; LBP-11-5, 73 NRC 131 (2011)

NRC Staff is exempted from the obligations of the protective order, even though Staff might hold many documents that are subject to the mandatory disclosure requirements; LBP-11-5, 73 NRC 131 (2011)
parties must list documents claimed to be privileged or protected on a privilege log; LBP-11-5, 73 NRC 131 (2011)
petitioner was denied access to a safeguards-protected design-related document on the basis of his lacking a need to know; LBP-11-9, 73 NRC 391 (2011)
"receiving party" means the party to whom the mandatory disclosure must be made; LBP-11-5, 73 NRC 131 (2011)
"representative" means the attorney or other authorized representative of a party who has entered a notice of appearance; LBP-11-5, 73 NRC 131 (2011)
the principle that justice cannot survive behind walls of silence has long been reflected in the Anglo-American distrust for secret trials; LBP-11-5, 73 NRC 131 (2011)
the SUNSI policy does not expand upon or create any new category of legally privileged or confidential information that is exempt from discovery or from mandatory disclosure; LBP-11-5, 73 NRC 131 (2011)
DISCOVERY
lack of clarity in the terms and application of the agency's newly established SUNSI policy contributed to intervenors' misapprehension that they were required to demonstrate a need for the information in order to request SUNSI documents; LBP-11-9, 73 NRC 391 (2011)
petitioners have an affirmative obligation to request confidential and proprietary information that has not been made publicly available in order to support a proposed contention; LBP-11-9, 73 NRC 391 (2011)
requests for protected documents shall be filed within 60 days of the listing of the document on the privilege log and, in any event, no later than 10 days after the deadline for filing rebuttal testimony; LBP-11-5, 73 NRC 131 (2011)
the SUNSI policy does not expand upon or create any new category of legally privileged or confidential information that is exempt from discovery or from mandatory disclosure; LBP-11-5, 73 NRC 131 (2011)
DISCOVERY AGAINST NRC STAFF
NRC Staff is exempted from the obligations of the protective order, even though Staff might hold many documents that are subject to the mandatory disclosure requirements; LBP-11-5, 73 NRC 131 (2011)
DISMISSAL OF PROCEEDING
the public interest does not require additional adjudication of an enforcement matter and, given that all matters required to be adjudicated as part of the proceeding have been resolved, the proceeding is dismissed; LBP-11-3, 73 NRC 81 (2011)
DOCUMENT PRODUCTION
"document" means any medium (electronic, paper, or any other kind) that contains or stores any information, including text, data, audio, video, computer software, or computer modeling information; LBP-11-5, 73 NRC 131 (2011)
NRC Staff was admonished for having imposed a stricter-than-necessary standard of "need" for access to SUNSI; LBP-11-9, 73 NRC 391 (2011)
rules governing access to SUNSI apply only to potential parties, whereas party access to SUNSI is governed by protective orders and nondisclosure agreements; LBP-11-9, 73 NRC 391 (2011)
DOCUMENTATION
along with the requirement to perform an integrated safety analysis is the requirement for applicant to provide the NRC Staff with an ISA summary, the content of which is specified in 10 C.F.R. 70.65(b); LBP-11-11, 73 NRC 455 (2011)
DOSE, RADIOLOGICAL
challenges to the $2000/person-rem conversion factor, to use of a single dose-rate reduction effectiveness factor, and to evacuation times and assumptions are not admissible because petitioners presented no facts or expert opinion of error; LBP-11-2, 73 NRC 28 (2011)
NRC established reasonable assurance that the dose consequence attributable to tritium in groundwater remains well below the ALARA dose objectives; DD-11-1, 73 NRC 7 (2011)
DRAFT ENVIRONMENTAL IMPACT STATEMENT
a DEIS does not and cannot treat identified environmental concerns in a vacuum; LBP-11-7, 73 NRC 254 (2011)

intervenor may file a new or amended contention challenging relevant new portions of the DEIS that differ from applicant's environmental report; LBP-11-1, 73 NRC 19 (2011)
intervenors' challenges to adequacy of applicant's environmental report with respect to environmental impacts of dewatering associated with the proposed nuclear plant continue to serve as viable challenges to similar sections of Staff's DEIS and thus are not moot; LBP-11-1, 73 NRC 19 (2011)
NRC Staff must consider the economic, technical, and other benefits and costs of the proposed action; LBP-11-7, 73 NRC 254 (2011)
publication of NRC Staff's DEIS may moot a contention challenging the environmental analysis in the applicant's environmental report, if the DEIS dispenses with the issues raised in the original contention challenging the ER; LBP-11-1, 73 NRC 19 (2011)
the DEIS might cure alleged omissions or deficiencies in the environmental report by including additional analysis that addresses such omissions or deficiencies; LBP-11-7, 73 NRC 254 (2011)
the DEIS, like the environmental report, must cover all significant environmental impacts associated with the combined license, including offsite environmental impacts; LBP-11-1, 73 NRC 19 (2011)
DUE PROCESS
health, safety, and environmental concerns do not constitute liberty or property subject to due process protection; LBP-11-4, 73 NRC 91 (2011)
intervenors in reactor licensing proceedings ordinarily cannot raise constitutional due process issues with respect to NRC hearing procedures, inasmuch as intervenors cannot claim government deprivation of life, liberty, or property as a result of the NRC's licensing action; LBP-11-4, 73 NRC 91 (2011)
prospective intervenors must show a direct, substantial, and legally protectable interest, the test for which is primarily a practical guide to disposing of lawsuits by involving as many apparently concerned persons as is compatible with efficiency and due process; LBP-11-4, 73 NRC 91 (2011)
there is no fundamental right to participate in administrative adjudications; LBP-11-4, 73 NRC 91 (2011)
there is nothing in the legislative history of the Equal Access to Justice Act or the pertinent case law to suggest a congressional intent to extend the EAJA to cases in which due process, rather than a statute, requires an Administrative Procedure Act § 554 hearing; LBP-11-8, 73 NRC 349 (2011)
EARLY SITE PERMIT APPLICATION
applicant need not submit information regarding control room habitability and ventilation system design in the site safety analysis report portion of an early site permit application; LBP-11-16, 73 NRC 645 (2011)
applicant's site safety analysis report must provide sufficient data to enable the requisite determination of the potential for surface deformation as a result of growth faults at the site; LBP-11-16, 73 NRC 645 (2011)
climate change is considered an environmental impact that must be addressed; LBP-11-16, 73 NRC 645 (2011)
even though a cooling pond is not a safety-related structure, knowledge of faulting under the pool and the impact this faulting might have on the pool's operation are required; LBP-11-16, 73 NRC 645 (2011)
geologic and seismic siting factors considered for design must include a determination of the safe shutdown earthquake ground motion for the site and the potential for surface tectonic and nontectonic deformations; LBP-11-16, 73 NRC 645 (2011)
EARLY SITE PERMIT PROCEEDINGS
a contention should be deemed resolved during the ESP proceeding if the subject of the contention was actually litigated and decided during the ESP proceeding, or, although not actually litigated, was decided by the Staff, was necessary for the Staff to resolve in the ESP proceeding, and was within the scope of that proceeding as defined in the *Federal Register* notice of opportunity for a hearing; LBP-11-10, 73 NRC 424 (2011)
a matter resolved in an ESP proceeding may be revisited in the combined license proceeding when new and significant information is presented; LBP-11-10, 73 NRC 424 (2011)
an uncontested proceeding is subject to mandatory hearing requirements; LBP-11-10, 73 NRC 424 (2011)
contention claiming that the environmental report's discussion of environmental effects and cumulative impacts of seepage from the cooling basin into groundwater and surface water through undocumented or unplugged oil and gas wells and borings fails to comply with NRC requirements is admissible; LBP-11-16, 73 NRC 645 (2011)

contention that alleges an omission, not an inadequacy, of an environmental report's analysis of socioeconomic impacts raises an issue that is not material to any finding NRC must make; LBP-11-16, 73 NRC 645 (2011)
contentions concerning benefits assessment shall not be admitted if applicant does not address those issues in the ESP application; LBP-11-16, 73 NRC 645 (2011)
insofar as a contention requests consideration of a dry cooling design alternative, that matter must be considered resolved in the ESP proceeding; LBP-11-10, 73 NRC 424 (2011)
EARLY SITE PERMITS
an entity is allowed to bank a site for the possible future construction of a specified number of new nuclear power generation facilities; LBP-11-16, 73 NRC 645 (2011)
an entity may apply for an early site permit authorizing it to resolve key site-related environmental, safety, and emergency planning issues before selecting the design of a nuclear power facility for the subject site; LBP-11-16, 73 NRC 645 (2011)
an ESP authorizes the use of a specific site for the construction and operation of a new nuclear power plant, with the actual construction and operation authorized by a subsequently issued combined license; LBP-11-10, 73 NRC 424 (2011)
an ESP is valid for 20 to 40 years from the date of issuance; LBP-11-16, 73 NRC 645 (2011)
applicant's environmental report must identify and discuss the status of all permits, licenses, and other approvals that are required from federal, state, and local agencies; LBP-11-16, 73 NRC 645 (2011)
applicants must evaluate alternative sites to determine whether there is any obviously superior alternative to the site proposed; LBP-11-16, 73 NRC 645 (2011)
issuance of an ESP and the subsequent authorization of construction and operation of a new nuclear power plant qualify as connected actions under 40 C.F.R. 1508.25 and should be evaluated in one environmental impact statement; LBP-11-10, 73 NRC 424 (2011)
licensee who has obtained an ESP is not required to apply for a combined license or to actually construct and operate a nuclear power plant at the authorized site; LBP-11-10, 73 NRC 424 (2011)
the agency responsible for preparing the environmental impact statement must define the scope of the issues it will address; LBP-11-10, 73 NRC 424 (2011)
to issue an ESP, NRC must comply with the National Environmental Policy Act by including in an environmental impact statement a detailed statement on the environmental impact of the proposed action, any unavoidable adverse environmental effects that cannot be avoided, and alternatives to the proposed action; LBP-11-10, 73 NRC 424 (2011)
EARTHQUAKES
highly site-specific seismic hazard analysis reflects consideration not only of the location and magnitude of historic earthquakes, but also the nature of the bedrock and the style of faulting in the surrounding region; LBP-11-11, 73 NRC 455 (2011)
ECONOMIC ISSUES
quibbling over the details of an economic analysis would effectively stand NEPA on its head by asking that the license be rejected not due to environmental costs, but because the economic benefits are not as great as estimated; LBP-11-7, 73 NRC 254 (2011)
See also Costs
ELECTRICAL EQUIPMENT
whether petitioners have adequately raised an issue as to whether transformers constitute active or passive components survived a motion for summary disposition; LBP-11-2, 73 NRC 28 (2011)
ELECTRICAL POWER
baseload generation is different than peaking power, which provides supplemental power during hours of the day when demand is highest; LBP-11-13, 73 NRC 534 (2011)
ELECTRONIC FILING
a filing is only complete when the filer performs the last act that it must perform to transmit a document in its entirety; LBP-11-13, 73 NRC 534 (2011)
persistent difficulties with the NRC electronic filing system despite petitioners' good-faith efforts is good cause for late filing; LBP-11-2, 73 NRC 28 (2011)
persons without digital ID certificates may sign electronically by typing "Executed in Accord with 10 C.F.R. 2.304(d)" or its equivalent on the signature line and including the date of signature and the signatory's name, capacity, address, phone number, and e-mail address; LBP-11-2, 73 NRC 28 (2011)

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EMERGENCY BACKUP POWER
combined license applicant's emergency plan must contain and describe adequate provisions for emergency facilities and equipment, including at least one onsite and one offsite communication system, each of which shall have a backup power source; LBP-11-15, 73 NRC 629 (2011)
EMERGENCY EXERCISES
whether exercise frequency is adequate to maintain personnel knowledge and skill to implement emergency responsibilities for proposed uranium enrichment facility is discussed; LBP-11-11, 73 NRC 455 (2011)
EMERGENCY OPERATIONS FACILITY
combined license applicant's emergency plan must contain and describe adequate provisions for emergency facilities and equipment, including at least one onsite and one offsite communication system, each of which shall have a backup power source; LBP-11-15, 73 NRC 629 (2011)
EMERGENCY PLANNING
before issuing a combined license, NRC must conclude that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency; LBP-11-6, 73 NRC 149 (2011)
in any NRC licensing proceeding, a FEMA finding will constitute a rebuttable presumption on questions of adequacy and implementation capability; LBP-11-6, 73 NRC 149 (2011)
sheltering must be considered in developing the recommended range of protective actions in an emergency plan; LBP-11-6, 73 NRC 149 (2011)
EMERGENCY PLANNING ZONES
a combined license application must include an emergency plan that contains, in the event of a reactor emergency resulting in a radiological release, a range of protective actions for the public located within about a 10-mile radius from the plant; LBP-11-15, 73 NRC 629 (2011)
the ingestion exposure pathway consists of an area about 50 miles in radius around a plant and its principal concern is ingestion of contaminated water or foods; LBP-11-15, 73 NRC 629 (2011)
the pertinent zone in operating license renewal proceedings and other power reactor license matters is the area within a 50-mile radius of the site; LBP-11-2, 73 NRC 28 (2011)
the plume exposure pathway consists of an area about 10 miles in radius around a plant, the principal concern of which is radiation exposure to the public (whole-body external exposure and inhalation exposure) from a radioactive plume; LBP-11-15, 73 NRC 629 (2011)
to the extent petitioner seeks to raise a generic challenge to the 10-mile plume exposure pathway EPZ, such an argument constitutes an impermissible challenge to this regulation; LBP-11-15, 73 NRC 629 (2011)
EMERGENCY PLANS
a combined license application must include an emergency plan that contains, in the event of a reactor emergency resulting in a radiological release, a range of protective actions for the public located within about a 10-mile radius from the plant; LBP-11-15, 73 NRC 629 (2011)
a range of protective actions for persons within about a 10-mile radius is required, and guidelines for the choice of protective actions during an emergency, consistent with federal guidance, must be developed and in place; LBP-11-15, 73 NRC 629 (2011)
combined license applicant's emergency plan must contain and describe adequate provisions for emergency facilities and equipment, including at least one onsite and one offsite communication system, each of which shall have a backup power source; LBP-11-15, 73 NRC 629 (2011)
contention that, in the event of a core-melt accident, applicant's emergency plan should order an evacuation of persons within a 10-mile radius of the facility attacks NRC's emergency planning regulation; LBP-11-15, 73 NRC 629 (2011)
in developing the range of protective actions, consideration will be given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide, as appropriate; LBP-11-15, 73 NRC 629 (2011)
EMERGENCY PREPAREDNESS
whether exercise frequency is adequate to maintain personnel knowledge and skill to implement emergency responsibilities for proposed uranium enrichment facility is discussed; LBP-11-11, 73 NRC 455 (2011)

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EMERGENCY RESPONSE
during a nuclear emergency in the United States, the individual licensee and the appropriate state and local government officials have direct responsibilities for the coordinated response to the event; LBP-11-15, 73 NRC 629 (2011)
NRC, in its capacity as the federal agency charged with regulating the nuclear industry in a manner that protects public health and safety, monitors nuclear emergencies; LBP-11-15, 73 NRC 629 (2011)
whether exercise frequency is adequate to maintain personnel knowledge and skill to implement emergency responsibilities for proposed uranium enrichment facility is discussed; LBP-11-11, 73 NRC 455 (2011)
ENFORCEMENT
petitioner's demand for compliance with U.S. Army Corps of Engineers requirements is not within the scope of a combined license proceeding, because it is not the province of the NRC to enforce another agency's regulations; LBP-11-6, 73 NRC 149 (2011)
ENFORCEMENT ACTIONS
dissatisfaction with regulatory requirements of 10 C.F.R. 50.75 are outside an enforcement petition; DD-11-4, 73 NRC 713 (2011)
if NRC Staff makes a finding of no reasonable assurance, NRC reserves the right to take steps to ensure a licensee's adequate accumulation of decommissioning funds; DD-11-4, 73 NRC 713 (2011)
request that NRC issue a demand for information from licensee relating to adequacy of financial assurances for decommissioning is denied; DD-11-4, 73 NRC 713 (2011)
the public interest does not require additional adjudication of an enforcement matter and, given that all matters required to be adjudicated as part of this proceeding have been resolved, the proceeding is dismissed; LBP-11-3, 73 NRC 81 (2011)
upon review of a settlement agreement, the board is satisfied that its terms reflect a fair and reasonable settlement in keeping with the objectives of the NRC's enforcement policy, and satisfy the requirements of 10 C.F.R. 2.338(g) and (h); LBP-11-3, 73 NRC 81 (2011)
ENFORCEMENT ORDERS
immediately effective enforcement orders must be based on preliminary investigation or other emerging information that is reasonably reliable and indicates the need for immediate action; LBP-11-8, 73 NRC 349 (2011)
the standard that must be met before NRC Staff can issue an immediately effective enforcement order is one of adequate evidence, which is akin to the test for probable cause; LBP-11-8, 73 NRC 349 (2011)
within 30 days of the Commission's decision upholding the board majority decision setting aside the NRC Staff's immediately effective enforcement order, petitioner applied for an award of over $250,000 in attorneys' fees; LBP-11-8, 73 NRC 349 (2011)
ENFORCEMENT PROCEEDINGS
in cases involving license suspension or revocation, where the Atomic Energy Commission's staff is cast in an accusatory role, the precautions prescribed by the Administrative Procedure Act should be carefully observed; LBP-11-8, 73 NRC 349 (2011)
parties who prevail against the government in certain types of agency proceedings are allowed to recover attorneys' fees and other expenses incurred in connection with the proceeding unless the government's position was substantially justified, or other special circumstances render an award unjust; LBP-11-8, 73 NRC 349 (2011)
ENVIRONMENTAL ASSESSMENT
a categorical exclusion from the NEPA requirement to prepare an EA or environmental impact statement for the issuance of import licenses involving low-level radioactive waste is provided; CLI-11-3, 73 NRC 613 (2011)
ENVIRONMENTAL EFFECTS
cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time; LBP-11-7, 73 NRC 254 (2011)
direct impacts are those caused by the federal action, 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-11-7, 73 NRC 254 (2011)

if the adverse environmental effects of a proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs; LBP-11-7, 73 NRC 254 (2011)
in enacting NEPA, Congress's twin aims were to require an agency to consider every significant aspect of the environmental impact of a proposed action and ensure that the agency will inform the public that it has considered environmental concerns in its decisionmaking process; LBP-11-6, 73 NRC 149 (2011)
NRC authority to review offsite impacts of transmission lines goes beyond merely factoring them into a final cost-benefit balance and includes as well the authority where necessary to impose license conditions to minimize those impacts; LBP-11-6, 73 NRC 149 (2011)
the DEIS, like the environmental report, must cover all significant environmental impacts associated with the combined license, including offsite environmental impacts; LBP-11-1, 73 NRC 19 (2011)
ENVIRONMENTAL IMPACT STATEMENT
a categorical exclusion from the NEPA requirement to prepare an environmental assessment or EIS for issuance of import licenses involving low-level radioactive waste is provided; CLI-11-3, 73 NRC 613 (2011)
a contention that was originally admitted as a challenge to the environmental report may be treated as a challenge to the similar section of the DEIS; LBP-11-1, 73 NRC 19 (2011)
a detailed statement by the responsible agency official on, among other things, the environmental impact of the proposed action, any unavoidable adverse environmental effects that cannot be avoided, and alternatives to the proposed action must be included; LBP-11-10, 73 NRC 424 (2011)
a state public service commission's determination of need for power may be relied on by the NRC in its own analysis, as long as that determination is neither shown nor appears on its face to be seriously defective; LBP-11-6, 73 NRC 149 (2011)
actions requiring an environmental impact statement or a supplement to an EIS are a limited work authorization, construction permit for a nuclear power reactor, testing facility, or fuel reprocessing plant, or an early site permit; LBP-11-10, 73 NRC 424 (2011)
agencies shall use the criteria for scope in 40 C.F.R. 1508.25 to determine which proposal shall be the subject of a particular statement; LBP-11-10, 73 NRC 424 (2011)
although NEPA does not explicitly mention cost-benefit balancing, courts have interpreted the statute as requiring federal agencies to balance the environmental costs against the anticipated benefits of a proposed action; LBP-11-7, 73 NRC 254 (2011)
an environmental impact statement must consider the direct, indirect, and cumulative impacts of an action; LBP-11-7, 73 NRC 254 (2011)
an environmental report's adequacy is examined under NEPA as well as under Part 51 because the ER is the basis upon which NRC's EIS will be prepared; LBP-11-13, 73 NRC 534 (2011); LBP-11-14, 73 NRC 591 (2011)
applicant's environmental report must contain a sufficient analysis of potential environmental consequences and alternatives to enable the NRC Staff to prepare an EIS that fulfills the agency's obligations under NEPA; LBP-11-14, 73 NRC 591 (2011)
as part of NRC's NEPA analysis for licensing a nuclear power plant, the agency must balance the costs and benefits resulting from issuance of a license, but the EIS need not always contain a formal or mathematical cost-benefit analysis; LBP-11-7, 73 NRC 254 (2011)
every combined license application must be accompanied by an environmental report to aid the Commission in its preparation of an EIS; LBP-11-6, 73 NRC 149 (2011)
federal agencies must prepare an EIS for those proposed actions that have the potential to significantly affect the quality of the human environment; LBP-11-7, 73 NRC 254 (2011)
if impacts are remote or speculative, the EIS need not discuss them, including greenhouse gas emissions; LBP-11-7, 73 NRC 254 (2011)
in defining the scope of the EIS, all connected actions must be analyzed in one statement; LBP-11-10, 73 NRC 424 (2011)
intervenor may propose new or amended contentions based on data or conclusions in the NRC draft or final environmental impact statement, environmental assessment, or any supplements relating thereto, that differ significantly from the data or conclusions in the applicant's environmental documents; LBP-11-7, 73 NRC 254 (2011)

issuance of an early site permit and the subsequent authorization of construction and operation of a new nuclear power plant qualify as connected actions under 40 C.F.R. 1508.25 and should be evaluated in one EIS; LBP-11-10, 73 NRC 424 (2011)
NEPA places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action and ensures that the agency will inform the public that it has indeed considered environmental concerns in its decisionmaking process; LBP-11-7, 73 NRC 254 (2011)
NEPA requires an agency to take a hard look at the environmental consequences before taking a major action and to report the result of that hard look in an EIS; LBP-11-6, 73 NRC 149 (2011)
NEPA's requirement that federal agencies prepare an EIS when considering a major action serves the statute's action-forcing purpose in two ways; LBP-11-7, 73 NRC 254 (2011)
NRC adjudicatory hearings are not EIS editing sessions; LBP-11-2, 73 NRC 28 (2011)
NRC Staff may accord substantial weight to the stated purpose of the project, i.e., to provide additional baseload electrical generation capacity for use in the owner's current markets and/or for potential sale on the wholesale market; LBP-11-7, 73 NRC 254 (2011)
NRC Staff's NEPA responsibilities for preparing an EIS are described; LBP-11-6, 73 NRC 149 (2011)
NRC Staff's reference to, and reliance in its DEIS on, state issuance of a site certification order and associated certificate of compliance on groundwater use does not dispense with NRC's duty under NEPA to conduct an independent hard look at environmental impacts related to active dewatering during operations at a nuclear plant; LBP-11-1, 73 NRC 19 (2011)
NRC's environmental analysis need only consider environmental impacts that are reasonably foreseeable, and need not consider remote and speculative scenarios; LBP-11-16, 73 NRC 645 (2011)
one important component of an EIS is the discussion of possible actions that might mitigate adverse environmental consequences; LBP-11-7, 73 NRC 254 (2011)
proposals or parts of proposals that are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single EIS; LBP-11-10, 73 NRC 424 (2011)
separate actions may be considered connected if, among other things, they are interdependent parts of a larger action and depend on the larger action for their justification; LBP-11-10, 73 NRC 424 (2011)
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for plants whose site parameters are within those specified in the technical support document; LBP-11-7, 73 NRC 254 (2011)
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health, safety, and environmental concerns do not constitute liberty or property subject to due process protection; LBP-11-4, 73 NRC 91 (2011)
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an alternative that fails to meet the purpose of the project does not need to be further examined in the ER; LBP-11-6, 73 NRC 149 (2011)
an ER's adequacy is examined under NEPA as well as under Part 51 because the ER is the basis upon which the NRC's environmental impact statement will be prepared; LBP-11-13, 73 NRC 534 (2011); LBP-11-14, 73 NRC 591 (2011)
applicant must describe and discuss reasonably foreseeable environmental impacts in proportion to their significance and adverse environmental effects that cannot be avoided should the proposal be implemented; LBP-11-6, 73 NRC 149 (2011); LBP-11-16, 73 NRC 645 (2011)
applicant must discuss appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources; LBP-11-6, 73 NRC 149 (2011)
applicant must identify and discuss the status of all permits, licenses, and other approvals that are required from federal, state, and local agencies; LBP-11-16, 73 NRC 645 (2011)
applicant must include an analysis that considers and balances the environmental effects of the proposed action, the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects; LBP-11-6, 73 NRC 149 (2011)
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applicant's alternatives analysis must be sufficiently complete to aid the Commission in developing and exploring appropriate alternatives to the proposed action; LBP-11-13, 73 NRC 534 (2011)
applicant's alternatives analysis need not discuss every conceivable alternative to the proposed action, but rather only feasible, nonspeculative, and reasonable alternatives; LBP-11-13, 73 NRC 534 (2011)
applicant's ER is not the vehicle for the NRC Staff's safety review; LBP-11-6, 73 NRC 149 (2011)
applicant's ER must contain a sufficient analysis of potential environmental consequences and alternatives to enable the NRC Staff to prepare an environmental impact statement that fulfills the agency's obligations under NEPA; LBP-11-14, 73 NRC 591 (2011)
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boards do not sit to flyspeck environmental documents or to add details or nuances; LBP-11-16, 73 NRC 645 (2011)

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commitment to implement an aging management plan that NRC finds is consistent with the GALL Report constitutes one acceptable method for demonstrating that the effects of aging will be adequately managed; LBP-11-2, 73 NRC 28 (2011)

contention asserting that a license renewal ER must include a discussion of need for power is inadmissible; LBP-11-13, 73 NRC 534 (2011)

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intervenor may file a new or amended contention challenging relevant new portions of the draft environmental impact statement that differ from applicant's ER; LBP-11-1, 73 NRC 19 (2011)

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on issues arising under NEPA, intervenor must file contentions based on the applicant's ER, but may amend those contentions or file new contentions; LBP-11-7, 73 NRC 254 (2011)

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severe accident mitigation alternatives analyses identify and assess possible plant changes, such as hardware modifications and improved training or procedures, that could cost-effectively reduce the radiological risk from a severe accident; LBP-11-13, 73 NRC 534 (2011)

the draft environmental impact statement might cure alleged omissions or deficiencies in the ER by including additional analyses that address such omissions or deficiencies; LBP-11-7, 73 NRC 254 (2011)

the migration tenet applies where the information in the draft environmental impact statement is sufficiently similar to the information in the ER; LBP-11-1, 73 NRC 19 (2011)

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NEPA requires that an environmental review provide a sufficient discussion of alternatives to enable the decisionmaker to take a hard look at environmental factors, and to make a reasoned decision; LBP-11-13, 73 NRC 534 (2011)
NRC must address any purported need for additional power during its environmental review of a combined license application; LBP-11-7, 73 NRC 254 (2011)
NRC Staff's need-for-power analysis may accord an expert, independent agency's forecasts and studies great weight and may give heavy reliance to those forecasts and studies absent a showing they contain a fundamental error; LBP-11-7, 73 NRC 254 (2011)
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awards in insurance contexts would undermine the dual purposes of EAJA by both maintaining financial deterrents for those who would want to challenge unjust government action and not deterring unreasonable government actions; LBP-11-8, 73 NRC 349 (2011)
because the act operates as a waiver of sovereign immunity it must be narrowly construed to avoid creating a waiver that Congress did not intend; LBP-11-8, 73 NRC 349 (2011)
both a union employee and the insured can be viewed as having incurred legal fees insofar as they have paid for legal services in advance as a component of the union dues or insurance premiums; LBP-11-8, 73 NRC 349 (2011)
claimant with a legally enforceable right to full indemnification of attorney fees from a solvent third party cannot be deemed to have incurred that expense for purposes of the Act, and hence is not eligible for an award of fees under the Act; LBP-11-8, 73 NRC 349 (2011)
Congress did not want the "substantially justified" standard to be read to raise a presumption that the government position was not substantially justified simply because it lost the case; LBP-11-8, 73 NRC 349 (2011)
for a prevailing party to recover attorneys' fees and expenses, the party must have incurred those fees and expenses in connection with the adversary adjudication in question; LBP-11-8, 73 NRC 349 (2011)
in an actuarial sense, the cost of the defense, to the extent borne by the insurance company, is a cost that the insured paid for, just as he would have paid a lawyer for his defense had he had no insurance; LBP-11-8, 73 NRC 349 (2011)
in determining whether the government's position was substantially justified, the board does not make separate determinations regarding each stage but arrives at one conclusion that simultaneously encompasses and accommodates the entire civil action; LBP-11-8, 73 NRC 349 (2011)
"incur" means that an individual who is a prevailing party meeting the financial qualification of the EAJA is ineligible to receive an EAJA award when that individual was not responsible for the costs of the attorney's fees; LBP-11-8, 73 NRC 349 (2011)
nothing in the Act suggests a purpose to prevent a contractual agreement, or more broadly, to discourage the purchase of liability insurance; LBP-11-8, 73 NRC 349 (2011)

parties who prevail against the government in certain types of agency proceedings are allowed to recover attorneys' fees and other expenses incurred in connection with the proceeding unless the government's position was substantially justified, or other special circumstances render an award unjust; LBP-11-8, 73 NRC 349 (2011)
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the act does not apply when an agency merely voluntarily chooses to abide by formal Administrative Procedure Act § 554 procedures, despite lacking a statutory mandate to do so; LBP-11-8, 73 NRC 349 (2011)
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the fee-deterrent-removal purpose of the Act would not be served by an award of fees to an individual whose fees are fully paid by a ineligible organization; LBP-11-8, 73 NRC 349 (2011)
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the underlying purpose of the Act is to eliminate financial disincentives for those who would defend against unjustified governmental action and thereby to deter the unreasonable exercise of government authority; LBP-11-8, 73 NRC 349 (2011)
there is nothing in the legislative history of the Equal Access to Justice Act or the pertinent case law to suggest a congressional intent to extend the EAJA to cases in which due process, rather than a statute, requires an Administrative Procedure Act § 554 hearing; LBP-11-8, 73 NRC 349 (2011)
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- any consolidation of multiple parties' presentations of evidence that would prejudice the rights of any party may not be ordered; LBP-11-4, 73 NRC 91 (2011)
- if evidence in favor of the summary disposition opponent is merely colorable or not significantly probative, summary disposition may be granted; LBP-11-4, 73 NRC 91 (2011)
- in establishing the evidentiary standard of "relevant, material, and reliable evidence" being admissible in a hearing, 10 C.F.R. 2.337 thereby establishes the right of all parties to present such admissible evidence; LBP-11-4, 73 NRC 91 (2011)

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- applicant should clearly describe any exemptions or authorizations of an unusual nature and adequately justify them for the NRC's consideration; LBP-11-11, 73 NRC 455 (2011)
- each combined license applicant will have to determine whether it will adopt in toto the certified design, or whether it will take exemptions thereto and/or departures therefrom; LBP-11-10, 73 NRC 424 (2011)
- exemption from a regulation will be granted if application of the regulation in the particular circumstances conflicts with other NRC rules or requirements, would not serve or is not necessary to achieve the underlying purpose of the rule, would result in undue hardship or other costs, would not benefit public health and safety, would provide only temporary relief, or there is present any other material circumstance not considered when the regulation was adopted; LBP-11-10, 73 NRC 424 (2011)
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to determine if a petitioner has sufficient interest in a proceeding to be entitled to intervene as a matter of right under section 189a, the Commission has long applied contemporaneous judicial concepts of standing; CLI-11-3, 73 NRC 613 (2011)
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all uranium fuel cycle and waste management issues, including low-level waste storage and disposal, mixed waste storage and disposal, onsite spent fuel storage, and transportation, are Category 1 issues with a small impact; LBP-11-2, 73 NRC 28 (2011)
Category 1 issues are not subject to challenge in a relicensing proceeding because they involve environmental effects that are essentially similar for all plants and need not be assessed repeatedly on a site-specific basis; LBP-11-13, 73 NRC 534 (2011)
contention that applicant's SAMA analysis improperly ignored radioactive waste disposal is outside the scope of the proceeding because it directly challenges the generic determinations in Table B-1 of Appendix B to Part 51; LBP-11-2, 73 NRC 28 (2011)
Part 51 license renewal provisions cover environmental issues relating to onsite spent fuel storage generically and all such issues, including accident risk, fall outside the scope of license renewal proceedings; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011)
to the extent petitioner seeks to raise a generic challenge to the 10-mile plume exposure pathway EPZ, such an argument constitutes an impermissible challenge to NRC regulations; LBP-11-15, 73 NRC 629 (2011)
GEOLOGIC CONDITIONS
geologic and seismic siting factors considered for design must include a determination of the safe shutdown earthquake ground motion for the site and the potential for surface tectonic and nontectonic deformations; LBP-11-16, 73 NRC 645 (2011)
GOVERNMENT PARTIES
a governmental body's interest in protecting the individuals and territory that fall under that body's authority establishes an organizational interest for standing purposes; LBP-11-6, 73 NRC 149 (2011)
a municipality is deemed to have standing in a reactor licensing proceeding that involves a facility located within its boundaries; LBP-11-6, 73 NRC 149 (2011)
where a municipality seeks to participate in a reactor licensing proceeding that does not involve a facility within the municipality's boundaries, it can, for purposes of establishing standing, rely on the 50-mile proximity presumption to the same extent as an individual or an organization; LBP-11-6, 73 NRC 149 (2011)
GREENHOUSE GAS EMISSIONS
if impacts are remote or speculative, the environmental impact statement need not discuss them, including greenhouse gas emissions; LBP-11-7, 73 NRC 254 (2011)
under NEPA, NRC Staff must consider the cumulative impact of greenhouse gas emissions from a proposed facility; LBP-11-7, 73 NRC 254 (2011)
GROUNDWATER CONTAMINATION
contention claiming that the environmental report's discussion of environmental effects and cumulative impacts of seepage from the cooling basin into groundwater and surface water through undocumented or unplugged oil and gas wells and borings fails to comply with NRC requirements is admissible; LBP-11-16, 73 NRC 645 (2011)
contention that wastewater contains chemical contaminants that are not discussed in the environmental report, and that when the wastewater is discharged via deep injection wells, the chemicals might

migrate to an aquifer is within the scope of a combined license proceeding; LBP-11-6, 73 NRC 149 (2011)
dose limits from tritium in groundwater for individual members of the public were never approached; DD-11-1, 73 NRC 7 (2011)
NRC established reasonable assurance that the dose consequence attributable to tritium in groundwater remains well below the ALARA dose objectives; DD-11-1, 73 NRC 7 (2011)
petitioners' request for cold shutdown because of radiological contamination of groundwater from tritium is denied; DD-11-3, 73 NRC 375 (2011)
HEALTH AND SAFETY
before issuing a combined license, NRC must conclude that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency; LBP-11-6, 73 NRC 149 (2011)
health, safety, and environmental concerns do not constitute liberty or property subject to due process protection; LBP-11-4, 73 NRC 91 (2011)
in any NRC licensing proceeding, a FEMA finding will constitute a rebuttable presumption on questions of adequacy and implementation capability; LBP-11-6, 73 NRC 149 (2011)
materials license regulations contain no express prohibition on foreign ownership, but require Staff to make a finding that license issuance will not be inimical to the common defense and security or the health and safety of the public; LBP-11-11, 73 NRC 455 (2011)
NRC may deny uranium enrichment facility applicant a license based on foreign ownership, control, or domination concerns to the extent it concludes granting such a license would be inimical to the common defense and security or the health and safety of the public; LBP-11-11, 73 NRC 455 (2011)
the Atomic Energy Act is designed to regulate the radiological safety aspects involved in the construction and operation of a nuclear plant; LBP-11-6, 73 NRC 149 (2011)
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formal adjudicatory procedures are inappropriate in export or import licensing proceedings; CLI-11-3, 73 NRC 613 (2011)
if the hearing on a contention is expected to take no more than 2 days to complete, the board can impose the Subpart N procedures for expedited proceedings with oral hearings specified in 10 C.F.R. 2.1400-.1407; LBP-11-13, 73 NRC 534 (2011)
in the absence of any assertion that Subpart G procedures should be used to resolve any of the admitted contentions, the Subpart L hearing procedures will be used to adjudicate each admitted contention; LBP-11-2, 73 NRC 28 (2011)
intervenors in reactor licensing proceedings ordinarily cannot raise constitutional due process issues with respect to NRC hearing procedures, inasmuch as intervenors cannot claim government deprivation of life, liberty, or property as a result of the NRC's licensing action; LBP-11-4, 73 NRC 91 (2011)
NRC may hold an informal hearing in which it requests and considers written materials without providing for traditional trial-type procedures such as oral testimony and cross-examination; LBP-11-4, 73 NRC 91 (2011)
petitioner may address the selection of hearing procedures, taking into account the provisions of 10 C.F.R. 2.310; LBP-11-6, 73 NRC 149 (2011)
petitioner requesting Subpart G procedures must demonstrate by reference to the contention and its bases and the specific procedures in Subpart G that resolving the contention will require resolution of material issues of fact that may be best determined through use of the identified procedures; LBP-11-2, 73 NRC 28 (2011)
selection of hearing procedures for contentions at the outset of a proceeding is not immutable because availability of Subpart G procedures under 10 C.F.R. 2.310(d) depends critically on whether the credibility of eyewitnesses is important in resolving a contention, and witnesses relevant to each contention are not identified, under 10 C.F.R. 2.336(a)(1), until after contentions are admitted; LBP-11-6, 73 NRC 149 (2011); LBP-11-13, 73 NRC 534 (2011)
Subpart G procedures are mandated for certain proceedings and parties are permitted to propound interrogatories, take depositions, and cross-examine witnesses without leave of the board; LBP-11-13, 73 NRC 534 (2011)

Subpart L procedures provide for a more informal proceeding in which discovery is generally prohibited except for specified mandatory disclosures under 10 C.F.R. 2.336 and the mandatory production of the hearing file under 10 C.F.R. 2.1203(a); LBP-11-13, 73 NRC 534 (2011)
Subpart L procedures will ordinarily be used in proceedings for the grant, renewal, licensee-initiated amendment, or termination of licenses or permits; LBP-11-6, 73 NRC 149 (2011)
upon admission of a contention in a licensing proceeding, the board must identify the specific hearing procedures to be used to adjudicate the contention; LBP-11-13, 73 NRC 534 (2011)
upon admission of a contention, a board must identify the specific hearing procedure to be used in the adjudication of the admitted contentions; LBP-11-16, 73 NRC 645 (2011)
when using Subpart L procedures, the board has the primary responsibility for questioning the witnesses at any evidentiary hearing; LBP-11-13, 73 NRC 534 (2011)
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a "rational basis review" was applied to intervenor's challenge to the NRC's 2004 changes to its procedural rules, citing cases involving challenges to laws regulating aspects of prisoners' right to access to the courts; LBP-11-4, 73 NRC 91 (2011)
in establishing the evidentiary standard of "relevant, material, and reliable evidence" being admissible in a hearing, 10 C.F.R. 2.337 thereby establishes the right of all parties to present such admissible evidence; LBP-11-4, 73 NRC 91 (2011)
the Commission is required to grant a hearing upon the request of any person whose interest may be affected by certain agency proceedings; CLI-11-3, 73 NRC 613 (2011); LBP-11-8, 73 NRC 349 (2011)
there is no fundamental right to participate in administrative adjudications; LBP-11-4, 73 NRC 91 (2011)
IMMEDIATE EFFECTIVENESS
immediately effective enforcement orders must be based on preliminary investigation or other emerging information that is reasonably reliable and indicates the need for immediate action; LBP-11-8, 73 NRC 349 (2011)
the standard that must be met before NRC Staff can issue an immediately effective enforcement order is one of adequate evidence, which is akin to the test for probable cause; LBP-11-8, 73 NRC 349 (2011)
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a categorical exclusion from the NEPA requirement to prepare an environmental assessment or environmental impact statement for the issuance of import licenses involving low-level radioactive waste is provided; CLI-11-3, 73 NRC 613 (2011)
a discretionary hearing may be held on export or import licenses if a hearing would be in the public interest and would assist the Commission in making the statutory determinations required by the Atomic Energy Act; CLI-11-3, 73 NRC 613 (2011)
a discretionary hearing to discuss policy issues related to import of foreign low-level radioactive waste and domestic incineration and transportation issues is not warranted because these issues are either challenges to the Commission's regulations or are outside the scope of the proceeding; CLI-11-3, 73 NRC 613 (2011)
a discretionary hearing to discuss the adequacy of information provided by applicant in a public forum would not assist the Commission in making its determinations on the export and import license applications because the applicant provided the information required by the Commission's regulations; CLI-11-3, 73 NRC 613 (2011)
formal adjudicatory procedures are inappropriate in export or import licensing proceedings; CLI-11-3, 73 NRC 613 (2011)
no proximity presumption applies in an import/export licensing case because petitioners have not shown that the import or export involves a significant source of radioactivity producing an obvious potential for offsite consequences; CLI-11-3, 73 NRC 613 (2011)
petitioners' claims of potential injury are also so speculative, and separate from the import and export license, that they do not amount to cognizable harm for purposes of standing; CLI-11-3, 73 NRC 613 (2011)
petitioners' generalized institutional interest in public forums and in preventing processing of foreign waste is insufficient to confer standing; CLI-11-3, 73 NRC 613 (2011)
request for waiver of 10 C.F.R. 51.22(c)(15) is denied; CLI-11-3, 73 NRC 613 (2011)
the Department of State provides the Commission with Executive Branch views on the merits of import/export applications; CLI-11-3, 73 NRC 613 (2011)

the key action that will allow incineration of imported low-level-radioactive waste material is the domestic license authorizing such processing, not NRC's grant of an import license; CLI-11-3, 73 NRC 613 (2011)
the state reviewed the applications and the authorizations and found no technical reason to prohibit processing of imported waste; CLI-11-3, 73 NRC 613 (2011)
to determine if a petitioner has sufficient interest in a proceeding to be entitled to intervene as a matter of right under section 189a, the Commission has long applied contemporaneous judicial concepts of standing; CLI-11-3, 73 NRC 613 (2011)
to waive a Part 110 rule or regulation, petitioner must show special circumstances concerning the subject of the hearing such that application of the rule or regulation would not serve the purposes for which it was adopted; CLI-11-3, 73 NRC 613 (2011)
INCINERATION
a discretionary hearing to discuss policy issues related to import of foreign low-level radioactive waste and domestic incineration and transportation issues is not warranted because these issues are either challenges to the Commission's regulations or are outside the scope of the proceeding; CLI-11-3, 73 NRC 613 (2011)
the key action that will allow incineration of imported low-level-radioactive waste material is the domestic license authorizing such processing, not NRC's grant of an import license; CLI-11-3, 73 NRC 613 (2011)
INFORMAL PROCEEDINGS
NRC may hold an informal hearing in which it requests and considers written materials without providing for traditional trial-type procedures such as oral testimony and cross-examination; LBP-11-4, 73 NRC 91 (2011)
INJURY IN FACT
mere potential exposure to minute doses of radiation within regulatory limits does not constitute a distinct and palpable injury on which standing can be founded; CLI-11-3, 73 NRC 613 (2011)
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through the regulatory process, which includes plant inspections, notice and guidance to licensees, and enforcement actions, NRC takes a host of measures to improve the ability to timely detect and correct inadvertent leaks to assure compliance with public dose limits; LBP-11-2, 73 NRC 28 (2011)
under 10 C.F.R. 40.41(g) and 70.32(k), a uranium enrichment facility cannot be operated until the agency verifies through inspection that the facility has been constructed in accordance with the license; LBP-11-11, 73 NRC 455 (2011)
INTEGRATED SAFETY ANALYSIS
along with the requirement to perform an ISA is the requirement for applicant to provide the NRC Staff with an ISA summary, the content of which is specified in 10 C.F.R. 70.65(b); LBP-11-11, 73 NRC 455 (2011)
applicant for a Part 70 license is required to establish and maintain a safety program, which includes performing an ISA; LBP-11-11, 73 NRC 455 (2011)
applicant must consider potential accident sequences caused either by deviations in the processes that will be conducted at the proposed facility or by credible external events, including natural phenomena; LBP-11-11, 73 NRC 455 (2011)
items relied on for safety that are a central focus of the ISA process for a uranium enrichment facility are the subject of three proposed license conditions; LBP-11-11, 73 NRC 455 (2011)
items relied upon for safety in uranium enrichment facilities should be described in sufficient detail to allow a Staff reviewer to understand the IROFS's functions in relation to the performance standards in section 70.61, which specifies limitations on the levels of risk for credible high- and intermediate-consequence accidents and nuclear criticality accidents; LBP-11-11, 73 NRC 455 (2011)
process designs for uranium enrichment facilities should be described in a level of detail sufficient to allow a Staff reviewer to understand the theory of operation for the process; LBP-11-11, 73 NRC 455 (2011)
to perform an appropriate ISA, NUREG-1520 standard review plan guidance for fuel cycle facilities indicates that applicant should identify the process designs, accident sequences, and items relied upon for safety that are associated with the facility; LBP-11-11, 73 NRC 455 (2011)

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a governmental body's interest in protecting the individuals and territory that fall under that body's authority establishes an organizational interest for standing purposes; LBP-11-6, 73 NRC 149 (2011)
prospective intervenors must show a direct, substantial, and legally protectable interest, the test for which is primarily a practical guide to disposing of lawsuits by involving as many apparently concerned persons as is compatible with efficiency and due process; LBP-11-4, 73 NRC 91 (2011)
INTERESTED GOVERNMENTAL ENTITY
a local governmental body that is not admitted as a party shall, upon request, be permitted to participate in a hearing as an interested nonparty; LBP-11-6, 73 NRC 149 (2011)
if at least one petitioner demonstrates standing and proffers an admissible contention so that its petition to intervene is granted, section 2.315(c) allows a local governmental body that has not been admitted as a party to participate in a hearing as an interested nonparty; LBP-11-6, 73 NRC 149 (2011)
such a nonparty may introduce evidence, interrogate witnesses where cross-examination by the parties is permitted, advise the Commission without being required to take a position with respect to the issue, file proposed findings, and petition for review by the Commission; LBP-11-6, 73 NRC 149 (2011)
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Commission precedent interprets the term, "severe accidents," to encompass only reactor accidents and not spent fuel pool accidents; LBP-11-2, 73 NRC 28 (2011)
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any person or organization seeking to intervene as a party in an NRC adjudicatory proceeding addressing a proposed licensing action must establish standing and proffer at least one admissible contention; LBP-11-13, 73 NRC 534 (2011)
Congress called upon the Commission to make fundamental changes in its public hearing process to ensure that hearings adjudicate genuine, substantive safety and environmental issues placed in contention by qualified intervenors; LBP-11-6, 73 NRC 149 (2011)
prospective intervenors must show a direct, substantial, and legally protectable interest, the test for which is primarily a practical guide to disposing of lawsuits by involving as many apparently concerned persons as is compatible with efficiency and due process; LBP-11-4, 73 NRC 91 (2011)
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to become a party, petitioner must establish standing and proffer at least one admissible contention; LBP-11-2, 73 NRC 28 (2011); LBP-11-6, 73 NRC 149 (2011); LBP-11-16, 73 NRC 645 (2011)
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although a board may view petitioner's supporting information in a light favorable to the petitioner, petitioner (not the board) is required to supply all of the required elements for a valid intervention petition; LBP-11-16, 73 NRC 645 (2011)
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NRC is lenient in permitting pro se petitioners the opportunity to cure procedural defects in petitions to intervene regarding standing; LBP-11-13, 73 NRC 534 (2011)
INTERVENTION PETITIONS, LATE-FILED
although an intervention petition itself was timely filed, the board must balance the eight factors to determine whether petitioner's late-filed exhibits are admissible; LBP-11-13, 73 NRC 534 (2011)
an electronic filing is only complete when the filer performs the last act that it must perform to transmit a document in its entirety; LBP-11-13, 73 NRC 534 (2011)
because a pro se first-time filer experienced problems with the NRC E-Filing system, the board concludes that petitioners' efforts demonstrate the requisite good cause for acceptance of the nontimely exhibits for consideration with the timely filed petition; LBP-11-13, 73 NRC 534 (2011)
boards must balance the eight factors to determine whether petitioner's late-filed petition will be considered; LBP-11-2, 73 NRC 28 (2011)
failure to comply with pleading requirements for late filings constitutes sufficient grounds for rejecting intervention and hearing requests; LBP-11-7, 73 NRC 254 (2011)

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petitioners who are proceeding pro se should be shown greater leeway on the question of whether they have demonstrated good cause for lateness than petitioners represented by counsel; LBP-11-13, 73 NRC 534 (2011)
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boards must do more than uncritically accept a party's mere assertion that a particular document supplies the basis for its contention, without even reviewing the document itself to determine if it appears to support a litigable contention; LBP-11-6, 73 NRC 149 (2011)
even if there are no objections to petitioners' representational standing, boards have an independent obligation to determine whether they have adequately demonstrated standing; LBP-11-2, 73 NRC 28 (2011)
merits determination cannot be resolved at the contention admissibility stage of the proceeding; LBP-11-6, 73 NRC 149 (2011)
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a discretionary hearing may be held on export or import licenses if a hearing would be in the public interest and would assist the Commission in making the statutory determinations required by the Atomic Energy Act; CLI-11-3, 73 NRC 613 (2011)
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because petitioner's issue of the inadvertent release of radioactivity does not specifically relate to the ability of buried structures to perform their intended functions as defined by 10 C.F.R. 54.4(a)(1)-(3), the contention is not within the scope of a license renewal proceeding; LBP-11-2, 73 NRC 28 (2011)
key functions of buried structures, systems, and components that are the focus of the license renewal safety review under Part 54 do not include the prevention of inadvertent radioactive leaks from buried structures; LBP-11-2, 73 NRC 28 (2011)
petitioners' request for cold shutdown because of radiological contamination of groundwater from tritium is denied; DD-11-3, 73 NRC 375 (2011)
request for enforcement action to prevent reactor restart until applicable adequate protection standards regarding zero pressure boundary leakage and operation of the reactor have been met is denied; DD-11-2, 73 NRC 323 (2011)
through the regulatory process, which includes plant inspections, notice and guidance to licensees, and enforcement actions, NRC takes a host of measures to improve the ability to timely detect and correct inadvertent leaks to assure compliance with public dose limits; LBP-11-2, 73 NRC 28 (2011)
LIABILITY INSURANCE
an award of attorneys' fees under the Equal Access to Justice Act can include fees paid by a third-party liability insurer; LBP-11-8, 73 NRC 349 (2011)
claimant with a legally enforceable right to full indemnification of attorney fees from a solvent third party cannot be deemed to have incurred that expense for purposes of the Equal Access to Justice Act, and hence is not eligible for an award of fees under that Act; LBP-11-8, 73 NRC 349 (2011)

denying Equal Access to Justice Act awards in insurance contexts would undermine the dual purposes of EAJA by both maintaining financial deterrents for those who would want to challenge unjust government action and not deterring unreasonable government actions; LBP-11-8, 73 NRC 349 (2011)
holders of a Parts 40/70 uranium enrichment facility license are required to maintain adequate nuclear liability insurance, with proof of such insurance necessary prior to a license being issued; LBP-11-11, 73 NRC 455 (2011)
in an actuarial sense the cost of the defense, to the extent borne by the insurance company, is a cost that the insured paid for, just as he would have paid a lawyer for his defense had he had no insurance; LBP-11-8, 73 NRC 349 (2011)
nothing in the Equal Access to Justice Act suggests a purpose to prevent a contractual agreement, or more broadly, to discourage the purchase of liability insurance; LBP-11-8, 73 NRC 349 (2011)
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any changes to the facility as described in the final safety analysis report must be either submitted to the NRC for approval through a license amendment or changed in accordance with the provisions of this section; DD-11-3, 73 NRC 375 (2011)
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LICENSE APPLICATIONS
if NRC Staff detects deficiencies in an application before or after a notice of hearing opportunity is issued, applicant will freely be given (outside the adjudicatory process) ample opportunity to amend it; LBP-11-9, 73 NRC 391 (2011)
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the public interest can well be served by revisions to an application that end up "getting it right" and by the Staff's expected thorough analysis of such revisions; LBP-11-9, 73 NRC 391 (2011)
See also Combined License Application; Early Site Permit Application; License Renewal Applications; Materials License Applications; Uncontested License Applications
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a Pentapartite Agreement between the United States and four European governments to prevent new restricted data from being disseminated to European nationals will be a prerequisite to the NRC Staff issuing a facility clearance; LBP-11-11, 73 NRC 455 (2011)
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items relied on for safety that are a central focus of the integrated safety analysis process are the subject of three proposed license conditions for a uranium enrichment facility; LBP-11-11, 73 NRC 455 (2011)
NRC authority to review offsite impacts of transmission lines goes beyond merely factoring them into a final cost-benefit balance and includes as well the authority where necessary to impose license conditions to minimize those impacts; LBP-11-6, 73 NRC 149 (2011)
NRC may impose such additional conditions, requirements, and limitations on a license as may be necessary to effectuate the purposes of the Atomic Energy Act and the agency's regulations; LBP-11-11, 73 NRC 455 (2011)
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petitioners request that NRC amend 10 C.F.R. 54.17(c) to permit a reactor licensee to file a license renewal application no sooner than 10 years before the expiration of the current license; CLI-11-1, 73 NRC 1 (2011)
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for mandatory proceedings on uranium enrichment facility licensing, licensing boards are to conduct a simple sufficiency review rather than a de novo review on both AEA and NEPA issues; LBP-11-11, 73 NRC 455 (2011)
in mandatory proceedings for uranium enrichment facility licensing, boards are to make independent environmental judgments with respect to certain NEPA findings; LBP-11-11, 73 NRC 455 (2011)
in mandatory proceedings on uranium enrichment facility licensing, boards should inquire whether the NRC Staff performed an adequate review and made findings with reasonable support in logic and fact; LBP-11-11, 73 NRC 455 (2011)
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boards are not to proceed with sua sponte issues absent the Commission's approval; LBP-11-9, 73 NRC 391 (2011)
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even if there are no objections to petitioners' representational standing, boards have an independent obligation to determine whether they have adequately demonstrated standing; LBP-11-2, 73 NRC 28 (2011)
if no genuine dispute remains, then the board may dispose of all arguments based on the pleadings; LBP-11-7, 73 NRC 254 (2011)
it is not the function of a licensing board to comb through the record searching for arguments in support of a proffered contention; LBP-11-6, 73 NRC 149 (2011)
NRC may hold an informal hearing in which it requests and considers written materials without providing for traditional trial-type procedures such as oral testimony and cross-examination; LBP-11-4, 73 NRC 91 (2011)
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where the board allowed petitioners to file a corrected version of an expert declaration that contained numerous typographical errors, and where some of petitioners' corrections clearly went beyond what the board expected, the board did not try to parse which changes were authorized and did not consider or rely on the corrected version; LBP-11-2, 73 NRC 28 (2011)
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the Atomic Energy Act does not mandate on-the-record hearings for reactor licensing proceedings and the Commission therefore has the option of replacing existing procedural requirements with more informal ones; LBP-11-8, 73 NRC 349 (2011)
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no duty is imposed on a board to respond to such statements as litigable concerns; LBP-11-11, 73 NRC 455 (2011)
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during a nuclear emergency in the United States, the individual licensee and the appropriate state and local government officials have direct responsibilities for the coordinated response to the event; LBP-11-15, 73 NRC 629 (2011)
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an uncontested early site permit proceeding is subject to mandatory hearing requirements; LBP-11-10, 73 NRC 424 (2011)
based on Staff's and applicant's written responses to board questions, and on the resumes, CVs, and SPQs admitted as part of the evidentiary record to respond to the questions, the board considers safety issues resolved for the proceeding; LBP-11-11, 73 NRC 455 (2011)
even if no intervention petitions are received, the Commission must still conduct adjudicatory hearing on the record with regard to the licensing of the construction and operation of a uranium enrichment facility; LBP-11-11, 73 NRC 455 (2011)
for uranium enrichment facility licensing, boards should inquire whether the NRC Staff performed an adequate review and made findings with reasonable support in logic and fact; LBP-11-11, 73 NRC 455 (2011)
in uranium enrichment facility licensing proceedings, boards are to make independent environmental judgments with respect to certain NEPA findings; LBP-11-11, 73 NRC 455 (2011)
license conditions imposed on applicant as a result of NRC Staff's review process and applicant-requested exemptions from agency regulatory requirements that are granted by Staff have a strong potential to fall into a "nonroutine matter" category; LBP-11-11, 73 NRC 455 (2011)
licensing boards are to conduct a simple sufficiency review rather than a de novo review on both AEA and NEPA issues for uranium enrichment facility licensing; LBP-11-11, 73 NRC 455 (2011)
licensing boards must narrow their inquiry to 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-11-11, 73 NRC 455 (2011)
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of the NRC Staff's environmental findings or undertake their own fact-finding activities; LBP-11-11, 73 NRC 455 (2011)
the board's role in mandatory hearings is to carefully probe Staff findings by asking appropriate questions and by requiring supplemental information when necessary, but the 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-11-11, 73 NRC 455 (2011)
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materials license amendment applications must contain a full description of the applicant's program for control and accounting of special nuclear material to show how it will comply with the 10 C.F.R. Part 74 requirements; LBP-11-9, 73 NRC 391 (2011)
reports to the agency regarding unapproved changes made to the MC&A program must be filed within no more than 6 months after the changes; LBP-11-11, 73 NRC 455 (2011)
the ability to detect the loss of plutonium in a timely manner, to allow for an effective response, is a crucial security requirement; LBP-11-9, 73 NRC 391 (2011)
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a test for materiality that would require petitioners to demonstrate quantitatively how an alleged defect would result in a violation of pertinent requirements is rejected; LBP-11-7, 73 NRC 254 (2011)
although NRC Staff's argument against contention admission appears to have some weight, the board need not resolve it, because the contention is inadmissible for failing to raise a genuine dispute of material fact or law with the environmental report; LBP-11-6, 73 NRC 149 (2011)
inasmuch as NRC Staff relies on the benefits of proposed units to satisfy an otherwise unmet need for power, the adequacy of the need-for-power assessment is material to granting the proposed combined license; LBP-11-7, 73 NRC 254 (2011)
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whether the safe shutdown earthquake exceedance in applicant's exemption request does in fact comply with 10 C.F.R. Part 50, Appendix S and 10 C.F.R. 100.23 is a question currently before the NRC Staff and is thus material to the NRC's licensing decision in this proceeding; LBP-11-10, 73 NRC 424 (2011)
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along with the requirement to perform an integrated safety analysis is the requirement for applicant to provide the NRC Staff with an ISA summary, the content of which is specified in 10 C.F.R. 70.65(b); LBP-11-11, 73 NRC 455 (2011)
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Staff and its counsel, like the board and its staff, are federal government employees and are thus subject to stringent sanctions for the unauthorized disclosure of the protected information or protected documents; LBP-11-5, 73 NRC 131 (2011)
See also Discovery Against NRC Staff
NRC STAFF REVIEW
an expert, independent agency's forecasts and studies may be accorded great weight and heavy reliance given to those forecasts and studies absent a showing that they contain a fundamental error; LBP-11-7, 73 NRC 254 (2011)
applicant's environmental report is not the vehicle for the NRC Staff's safety review; LBP-11-6, 73 NRC 149 (2011)
environmental, technical, and other costs and benefits of a proposed action and alternatives are to be considered and weighed, and, to the fullest extent practicable, quantified; LBP-11-7, 73 NRC 254 (2011)
for a proposed nuclear materials-related activity, including uranium enrichment, commencement of construction prior to a favorable Staff conclusion regarding the NEPA cost-benefit balance is grounds for denial of the authorization to conduct that activity; LBP-11-11, 73 NRC 455 (2011)

for power reactors, NRC developed a Commission-approved standard review plan to assist in evaluating applications for reactor licenses or applications for the transfer of such licenses; LBP-11-11, 73 NRC 455 (2011)
if after conducting a threshold review, NRC Staff concludes that the applicant may be considered to be foreign owned, controlled, or dominated, or that additional action would be necessary to negate the foreign ownership, control, or domination, applicant shall be promptly advised and requested to submit a negation action plan; LBP-11-11, 73 NRC 455 (2011)
in its need-for-power analysis, NRC Staff may rely on studies and forecasts prepared by expert, independent agencies charged with the duty of ensuring that the utilities within their jurisdiction fulfill the legal obligation to meet customer demands; LBP-11-7, 73 NRC 254 (2011)
inasmuch as NRC Staff relies on the benefits of proposed units to satisfy an otherwise unmet need for power, the adequacy of the need-for-power assessment is material to granting the proposed combined license; LBP-11-7, 73 NRC 254 (2011)
incident to its preparation of the safety evaluation report, NRC Staff is obliged to ensure that applicant's design basis for the new units will protect public health and safety; LBP-11-6, 73 NRC 149 (2011)
mere existence of comments and questions generated by NRC Staff do not, in and of themselves, demonstrate a material deficiency in applicant's combined license application; LBP-11-6, 73 NRC 149 (2011)
NRC must address any purported need for additional power during its environmental review of a combined license application; LBP-11-7, 73 NRC 254 (2011)
regardless of whether NRC itself conducts the need-for-power assessment or relies on another agency's forecasts and studies, that assessment need only be reasonable; LBP-11-7, 73 NRC 254 (2011)
Staff ensures that applicant's design basis for the new units will protect public health and safety by verifying that the design basis will withstand maximum flooding events; LBP-11-6, 73 NRC 149 (2011)
Staff's NEPA responsibilities for preparing an environmental impact statement are described; LBP-11-6, 73 NRC 149 (2011)
the agency responsible for preparing the environmental impact statement must define the scope of the issues it will address; LBP-11-10, 73 NRC 424 (2011)
to issue an early site permit, NRC must comply with the National Environmental Policy Act by including in an environmental impact statement a detailed statement on the environmental impact of the proposed action, any unavoidable adverse environmental effects that cannot be avoided, and alternatives to the proposed action; LBP-11-10, 73 NRC 424 (2011)
NUCLEAR REGULATORY COMMISSION, AUTHORITY
a discretionary hearing may be held on export or import licenses if a hearing would be in the public interest and would assist the Commission in making the statutory determinations required by the Atomic Energ Act; CLI-11-3, 73 NRC 613 (2011)
adjudicatory hearings can be closed if the Commission orders it; LBP-11-5, 73 NRC 131 (2011)
even absent an express provision authorizing such relief, the Commission has occasionally considered requests to suspend proceedings or hold them in abeyance in the exercise of its inherent supervisory powers over proceedings; CLI-11-1, 73 NRC 1 (2011)
if the adverse environmental effects of a proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs; LBP-11-7, 73 NRC 254 (2011)
NEPA allows agencies to select their own methodology as long as that methodology is reasonable; LBP-11-2, 73 NRC 28 (2011)
NRC authority to review offsite impacts of transmission lines goes beyond merely factoring them into a final cost-benefit balance and includes as well the authority where necessary to impose license conditions to minimize those impacts; LBP-11-6, 73 NRC 149 (2011)
NRC may hold an informal hearing in which it requests and considers written materials without providing for traditional trial-type procedures such as oral testimony and cross-examination; LBP-11-4, 73 NRC 91 (2011)
NRC may impose such additional conditions, requirements, and limitations on a license as may be necessary to effectuate the purposes of the Atomic Energy Act and the agency's regulations; LBP-11-11, 73 NRC 455 (2011)

NRC, in its capacity as the federal agency charged with regulating the nuclear industry in a manner that protects public health and safety, monitors nuclear emergencies; LBP-11-15, 73 NRC 629 (2011)
promulgation of state regulations falls within the broad reach 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-11-7, 73 NRC 254 (2011)
the choice between rulemaking and adjudication (i.e., issuing orders or other license revisions) is within the agency's discretion; LBP-11-11, 73 NRC 455 (2011)
the Commission, in deciding an issue, can take into consideration a matter beyond reasonable controversy and one that is capable of immediate and accurate determination by resort to easily accessible sources of indisputable accuracy; LBP-11-7, 73 NRC 254 (2011)
NUCLEAR REGULATORY COMMISSION, JURISDICTION
NRC's adjudicatory process is not the proper forum for investigating alleged violations that are primarily the responsibility of other federal, state, or local agencies; LBP-11-6, 73 NRC 149 (2011)
petitioner's demand for compliance with U.S. Army Corps of Engineers requirements is not within the scope of a combined license proceeding, because it is not the province of the NRC to enforce another agency's regulations; LBP-11-6, 73 NRC 149 (2011)
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although 10 C.F.R. 2.337(f), by its terms, applies to evidence at hearings, the bounds this rule places on official notice is also appropriate for the contention admissibility stage of a proceeding; LBP-11-7, 73 NRC 254 (2011)
judicial notice may be taken at any stage of the proceeding; LBP-11-7, 73 NRC 254 (2011)
promulgation of state regulations falls within the broad reach 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-11-7, 73 NRC 254 (2011)
the Commission, in deciding an issue, can take into consideration a matter beyond reasonable controversy and one that is capable of immediate and accurate determination by resort to easily accessible sources of indisputable accuracy; LBP-11-7, 73 NRC 254 (2011)
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active components are not subject to an aging management review because existing regulatory programs, including required maintenance programs, can be expected to directly detect the effects of aging on active functions; LBP-11-2, 73 NRC 28 (2011)
alternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives; LBP-11-2, 73 NRC 28 (2011)
applicant may seek license renewal as early as 20 years prior to expiration; LBP-11-2, 73 NRC 28 (2011)
applicants are not required to base their severe accident mitigation alternatives analysis on consequence values at the 95th percentile consequence level; LBP-11-2, 73 NRC 28 (2011)
applicants need not submit an analysis of Category 1 issues in their site-specific environmental reports; LBP-11-2, 73 NRC 28 (2011)
applications need not discuss the need for power; LBP-11-2, 73 NRC 28 (2011)
commitment to implement an aging management plan that NRC finds is consistent with the GALL Report constitutes one acceptable method for demonstrating that the effects of aging will be adequately managed; LBP-11-2, 73 NRC 28 (2011)
contention asserting that a license renewal environmental report must include a discussion of need for power is inadmissible; LBP-11-13, 73 NRC 534 (2011)
for all plants, onsite dry or pool storage can safely accommodate spent fuel accumulated from a 20-year license extension with small environmental effects; LBP-11-13, 73 NRC 534 (2011)
for license renewal, there must be reasonable assurance that applicant will manage the effects of aging on certain structures and components during extended operation; LBP-11-2, 73 NRC 28 (2011)
key functions of buried structures, systems, and components that are the focus of the license renewal safety review under Part 54 do not include the prevention of inadvertent radioactive leaks from buried structures; LBP-11-2, 73 NRC 28 (2011)

license renewal applicant must file an environmental report that includes an alternatives analysis that considers and balances the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects; LBP-11-13, 73 NRC 534 (2011)
NEPA imposes no legal duty on NRC to consider intentional malevolent acts in conjunction with commercial power reactor license renewal applications; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011)
NRC has analyzed terrorist acts in connection with license renewal and concluded that the core damage and radiological release from such acts would be no worse than the damage and release expected from internally initiated events; LBP-11-2, 73 NRC 28 (2011)
Part 51 license renewal provisions cover environmental issues relating to onsite spent fuel storage generically and all such issues, including accident risk, fall outside the scope of license renewal proceedings; LBP-11-13, 73 NRC 534 (2011)
structures and components that are subject to aging management review include those that perform certain safety-related functions without moving parts or without a change in configuration or properties; LBP-11-2, 73 NRC 28 (2011)
whether petitioners have adequately raised an issue as to whether transformers constitute active or passive components survived a motion for summary disposition; LBP-11-2, 73 NRC 28 (2011)
OPERATING LICENSE RENEWAL PROCEEDINGS
alternatives for reducing adverse environmental impacts, including impacts of severe accidents, are among the limited issues within the scope of a license renewal proceeding; LBP-11-13, 73 NRC 534 (2011)
although a consideration of alternatives to mitigate severe accidents must be provided if not previously performed, applicant must provide this analysis only for those issues identified as Category 2 issues in Appendix B to Subpart A of Part 51; LBP-11-2, 73 NRC 28 (2011)
because petitioner's issue of the inadvertent release of radioactivity does not specifically relate to the ability of buried structures to perform their intended functions as defined by 10 C.F.R. 54.4(a)(1)-(3), the contention is not within the scope of a license renewal proceeding; LBP-11-2, 73 NRC 28 (2011)
Category 1 issues are not subject to challenge in a relicensing proceeding because they involve environmental effects that are essentially similar for all plants and need not be assessed repeatedly on a site-specific basis; LBP-11-13, 73 NRC 534 (2011)
Category 2 issues must be reviewed on a site-specific basis because they have not been determined to be essentially similar for all plants and thus can be the subject of a contention; LBP-11-13, 73 NRC 534 (2011)
contention that applicant's SAMA analysis improperly ignored radioactive waste disposal is outside the scope of the proceeding because it directly challenges the generic determinations in Table B-1 of Appendix B to Part 51; LBP-11-2, 73 NRC 28 (2011)
contentions are limited to aging-related issues, not issues already monitored and reviewed in the ongoing regulatory oversight processes; CLI-11-2, 73 NRC 333 (2011)
current operating issues are, by their very nature, beyond the scope of a license renewal proceeding; CLI-11-2, 73 NRC 333 (2011)
in the absence of any assertion that Subpart G procedures should be used to resolve any of the admitted contentions, the Subpart L hearing procedures will be used to adjudicate each admitted contention; LBP-11-2, 73 NRC 28 (2011)
petitioner's assertion that severe accidents from spent fuel pools must be considered in applicant's SAMA analysis is in direct conflict with NRC regulations; LBP-11-2, 73 NRC 28 (2011)
petitioners' assertions that the MACCS2 code was not subjected to quality assurance requirements is deficient because a SAMA analysis is not subject to such requirements; LBP-11-2, 73 NRC 28 (2011)
probability-weighted consequences of a severe accident (risk) are small in the context of a license renewal proceeding; LBP-11-13, 73 NRC 534 (2011)
referencing an aging management program described in the GALL Report does not insulate a program from an adequately supported challenge at a hearing; LBP-11-2, 73 NRC 28 (2011)
safety issues that are routinely addressed through the agency's ongoing regulatory oversight are outside the scope of license renewal proceedings because considering them in that context would be unnecessary and wasteful; LBP-11-2, 73 NRC 28 (2011)

severe accident mitigation alternatives contentions are admissible only if 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; LBP-11-2, 73 NRC 28 (2011)
standing based on the proximity presumption has been found if petitioner or a representative of a petitioner organization resides within approximately 50 miles of the facility in question; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011)
the Commission has codified generic determinations for certain environmental issues, identified as Category 1 issues, for license renewal proceedings; LBP-11-13, 73 NRC 534 (2011)
the determination that, for any license renewal of a nuclear power plant, the probability-weighted consequences of a severe accident are small cannot be challenged; LBP-11-2, 73 NRC 28 (2011)
the relatively formal procedures in Subpart G of Part 2 govern where the credibility of an eyewitness may reasonably be expected to be at issue and/or issues of motive or intent of the party or eyewitness material to the resolution of the contested matter; LBP-11-2, 73 NRC 28 (2011)
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the ordinary burden on parties in pursuing litigation pending rulemaking does not justify disrupting ongoing license review; CLI-11-1, 73 NRC 1 (2011)
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a source permit is an operating permit that the Clean Air Act requires major stationary sources of air pollution to obtain; LBP-11-13, 73 NRC 534 (2011)
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because petitioner's issue of the inadvertent release of radioactivity does not specifically relate to the ability of buried structures to perform their intended functions as defined by 10 C.F.R. 54.4(a)(1)-(3), the contention is not within the scope of a license renewal proceeding; LBP-11-2, 73 NRC 28 (2011)
key functions of buried structures, systems, and components that are the focus of the license renewal safety review under Part 54 do not include the prevention of inadvertent radioactive leaks from buried structures; LBP-11-2, 73 NRC 28 (2011)
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judges are not like pigs, hunting for truffles buried in briefs; LBP-11-6, 73 NRC 149 (2011)
petitions, answers, and replies are allowed unless otherwise specified by the Commission or the presiding officer, but no other written answers or replies will be entertained; LBP-11-2, 73 NRC 28 (2011)
submitted documents must be signed; LBP-11-2, 73 NRC 28 (2011)
the Commission will not accept the filing of a vague, unparticularized issue; CLI-11-2, 73 NRC 333 (2011)
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uranium enrichment facility applicant seeks an exemption from regulations to permit it to begin certain preconstruction activities at the site before completion of NRC's environmental review under Part 51; LBP-11-11, 73 NRC 455 (2011)

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NRC is lenient in permitting pro se petitioners the opportunity to cure procedural defects in petitions to intervene regarding standing; LBP-11-13, 73 NRC 534 (2011)
petitioner was allowed to clarify standing declarations by submitting revised declarations with its reply; LBP-11-13, 73 NRC 534 (2011)
petitioners who are not represented by counsel generally should be extended some latitude, but they are still expected to comply with procedural rules; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011)
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emergency plans are to have a range of protective actions for persons within about a 10-mile radius, and guidelines for the choice of protective actions during an emergency, consistent with federal guidance, must be developed and in place; LBP-11-15, 73 NRC 629 (2011)
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"disclosing party" means the party required to make mandatory disclosure; LBP-11-5, 73 NRC 131 (2011)
"document" means any medium (electronic, paper, or any other kind) that contains or stores any information, including text, data, audio, video, computer software, or computer modeling information; LBP-11-5, 73 NRC 131 (2011)
NRC has a strong policy in favor of openness and transparency; LBP-11-5, 73 NRC 131 (2011)
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rules governing access to SUNSI apply only to potential parties, whereas party access to SUNSI is governed by protective orders and nondisclosure agreements; LBP-11-9, 73 NRC 391 (2011)
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no proximity presumption applies in an import/export licensing case because petitioners have not shown that the import or export involves a significant source of radioactivity producing an obvious potential for offsite consequences; CLI-11-3, 73 NRC 613 (2011)
petitioner is deemed to have standing in reactor licensing proceedings by showing that he or she, or an individual authorizing an organization to represent his or her interests, resides in, or frequents the area within, a 50-mile radius of the facility; LBP-11-2, 73 NRC 28 (2011); LBP-11-2, 73 NRC 28 (2011); LBP-11-6, 73 NRC 149 (2011); LBP-11-13, 73 NRC 534 (2011); LBP-11-16, 73 NRC 645 (2011)
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the final safety analysis report must include information regarding the kinds and quantities of radioactive materials expected to be produced in the operation and the means for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in Part 20; LBP-11-6, 73 NRC 149 (2011)
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the final safety analysis report must include information regarding the kinds and quantities of radioactive materials expected to be produced in the operation and the means for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in Part 20; LBP-11-6, 73 NRC 149 (2011)
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contentions challenging the ability of combined license applicants to handle onsite storage of Classes B and C LLRW, as well as the attendant potential environmental impacts of such storage in the wake of the closure of the Barnwell facility in South Carolina to states outside of the Atlantic Compact are admissible; LBP-11-6, 73 NRC 149 (2011)
mere existence of a letter of intent to ship low-level radioactive waste to a disposal facility does not answer questions as to whether such a plan will ultimately result in a transfer of LLRW title and permanent offsite disposition of the LLRW and whether nontransfer of title will result in environmental impacts; LBP-11-6, 73 NRC 149 (2011)
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NRC established reasonable assurance that the dose consequence attributable to tritium in groundwater remains well below the ALARA dose objectives; DD-11-1, 73 NRC 7 (2011)
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dose limits for individual members of the public are 100 millirem in a year the As Low As Is Reasonably Achievable (ALARA) dose objectives specified in 10 C.F.R. 50, Appendix I; DD-11-3, 73 NRC 375 (2011)
dose limits from tritium in groundwater for individual members of the public were never approached; DD-11-1, 73 NRC 7 (2011)
mere potential exposure to minute doses of radiation within regulatory limits does not constitute a distinct and palpable injury on which standing can be founded; CLI-11-3, 73 NRC 613 (2011)
NRC established reasonable assurance that the dose consequence attributable to tritium in groundwater remains well below the ALARA dose objectives; DD-11-1, 73 NRC 7 (2011)
the final safety analysis report must include information regarding the kinds and quantities of radioactive materials expected to be produced in the operation and the means for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in Part 20; LBP-11-6, 73 NRC 149 (2011)
RADIOLOGICAL MONITORING
through the regulatory process, which includes plant inspections, notice and guidance to licensees, and enforcement actions, NRC takes a host of measures to improve the ability to timely detect and correct inadvertent leaks to assure compliance with public dose limits; LBP-11-2, 73 NRC 28 (2011)
REACTOR CONTROL RODS
request for enforcement action to prevent reactor restart until applicable adequate protection standards regarding zero pressure boundary leakage and operation of the reactor have been met is denied; DD-11-2, 73 NRC 323 (2011)
REACTOR DESIGN
a combined license applicant may reference a docketed-but-not-yet-certified design in its application, but does so at its own risk; LBP-11-10, 73 NRC 424 (2011)
a combined license applicant will have to demonstrate that the site-specific parameters are bounded by the parameters developed for the certified design; LBP-11-10, 73 NRC 424 (2011)
all environmental issues concerning severe accident mitigation design alternatives associated with the information in NRC's final environmental assessment for certified reactor design are deemed resolved for plants whose site parameters are within those specified in the technical support document; LBP-11-7, 73 NRC 254 (2011)
an exemption from any part of a referenced design certification rule may be granted if NRC determines that the exemption complies with any exemption provisions of the referenced design certification rule, or with 10 C.F.R. 52.63 if there are no applicable exemption provisions in the referenced design certification rule; LBP-11-10, 73 NRC 424 (2011)
applicant has described the kinds and quantities of radioactive materials expected to be produced in the operation to the extent its combined license application references a standardized design; LBP-11-6, 73 NRC 149 (2011)
applicants may incorporate a certified reactor design in a combined license application; LBP-11-10, 73 NRC 424 (2011)
each combined license applicant will have to determine whether it will adopt in toto the certified design, or whether it will take exemptions thereto and/or departures therefrom; LBP-11-10, 73 NRC 424 (2011)
exemption requests are subject to the same level of litigation as other issues that could be admissible in a combined license proceeding; LBP-11-10, 73 NRC 424 (2011)
grants of exemptions from referenced design certification rules are conditioned on the Commission's finding that the request complies with section 52.7 and that the special circumstances provided for section 52.7 outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption; LBP-11-10, 73 NRC 424 (2011)
REACTOR PRESSURE VESSEL
request for enforcement action to prevent reactor restart until applicable adequate protection standards regarding zero pressure boundary leakage and operation of the reactor have been met is denied; DD-11-2, 73 NRC 323 (2011)

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for the purposes of the Equal Access to Justice Act, the government's position should be considered substantially justified if a reasonable person could think it correct, that is, if it has a reasonable basis in law and fact; LBP-11-8, 73 NRC 349 (2011)
justification "in substance or in the main" is equated with the "reasonable basis both in law and fact" standard that has been applied by a majority of federal appellate courts; LBP-11-8, 73 NRC 349 (2011)
the government must demonstrate the reasonableness not only of its litigation position, but also of the agency's actions; LBP-11-8, 73 NRC 349 (2011)
the legal standard governing the determination of substantial justification is separate and distinct from the legal standard used in assessing the merits phase of a proceeding; LBP-11-8, 73 NRC 349 (2011)
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in any NRC licensing proceeding, a FEMA finding will constitute a rebuttable presumption on questions of adequacy and implementation capability; LBP-11-6, 73 NRC 149 (2011)
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a materials license suspension proceeding is not an adversary adjudication for purposes of the Equal Access to Justice Act because the Atomic Energy Act of 1954, as amended, does not require such a hearing to be on the record pursuant to Administrative Procedure Act § 554; LBP-11-8, 73 NRC 349 (2011)
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applicant seeking an exemption should clearly describe any exemptions or authorizations of an unusual nature and adequately justify them for the NRC's consideration; LBP-11-11, 73 NRC 455 (2011)
dissatisfaction with regulatory requirements of 10 C.F.R. 50.75 are outside an enforcement petition; DD-11-4, 73 NRC 713 (2011)
exemption from a regulation will be granted if application of the regulation in the particular circumstances conflicts with other NRC rules or requirements, would not serve or is not necessary to achieve the underlying purpose of the rule, would result in undue hardship or other costs, would not be a benefit to public health and safety, would provide only temporary relief, or there is present any other material circumstance not considered when the regulation was adopted; LBP-11-10, 73 NRC 424 (2011)
exemption from a regulation will be granted when the request is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security; LBP-11-10, 73 NRC 424 (2011)
in implementing its NEPA obligations, NRC expressly adopts certain definitions promulgated by the Council on Environmental Quality; LBP-11-7, 73 NRC 254 (2011)
no rule or regulation of the Commission is subject to attack in any adjudicatory proceeding unless petitioner first obtains a waiver; LBP-11-2, 73 NRC 28 (2011)
NRC may grant exemptions from the regulatory requirements if it determines such an exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest; LBP-11-11, 73 NRC 455 (2011)
petitioner's demand for compliance with U.S. Army Corps of Engineers requirements is not within the scope of a combined license proceeding, because it is not the province of the NRC to enforce another agency's regulations; LBP-11-6, 73 NRC 149 (2011)
the basic regulatory framework that governs the licensing of an entity to construct and operate an enrichment facility is found in 10 C.F.R. Part 70, but Parts 19, 20, 21, 25, 30, 40, 51, 71, 73, 74, 95, 140, 170, 171, are also applicable; LBP-11-11, 73 NRC 455 (2011)
whether the safe shutdown earthquake exceedance in applicant's exemption request does in fact comply with 10 C.F.R. Part 50, Appendix S and 10 C.F.R. 100.23 is a question currently before the NRC Staff and is thus material to the NRC's licensing decision in this proceeding; LBP-11-10, 73 NRC 424 (2011)
See also State Regulatory Requirements; Waiver of Rule
REGULATIONS, INTERPRETATION
application of 10 C.F.R. 40.38(a) and 70.40 is limited to USEC alone and has no relevance to any other enrichment facility applicant; LBP-11-11, 73 NRC 455 (2011)

because there is no list of site parameters specified in the technical support document, a prerequisite for resolving severe accident mitigation design alternatives issues by 10 C.F.R. Part 52, Appendix A, § VI.B.7 is lacking; LBP-11-7, 73 NRC 254 (2011)
NEPA's requirement to discuss alternatives to the proposed action does not extend to the construction of transmission line corridors, because it is not "construction" as defined in 10 C.F.R. 50.10; LBP-11-6, 73 NRC 149 (2011)
the pertinent language in 10 C.F.R. 70.31(d) and 40.32(d) tracks the statutory language identically, i.e., "inimical to the common defense and security or the health and safety of the public"; LBP-11-11, 73 NRC 455 (2011)
REGULATORY GUIDES
to perform an appropriate integrated safety analysis, NUREG-1520 standard review plan guidance for fuel cycle facilities indicates that applicant should identify the process designs, accident sequences, and items relied upon for safety that are associated with the facility; LBP-11-11, 73 NRC 455 (2011)
See also NRC Guidance Documents
RENEWABLE ENERGY SOURCES
although there are many possible combinations of wind and solar power, storage, and natural gas, it is not necessary to examine every possible combination; LBP-11-4, 73 NRC 91 (2011)
See also Solar Power; Wind Power
REOPENING A RECORD
standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention; CLI-11-2, 73 NRC 333 (2011)
there would be little hope of completing administrative proceedings if each newly arising allegation required an agency to reopen its hearings; CLI-11-2, 73 NRC 333 (2011)
See also Motions to Reopen
REPLY BRIEFS
a board refused to consider new bases that were included in an answer to summary disposition motion and were outside the scope of the original contention; LBP-11-4, 73 NRC 91 (2011)
NRC regulations do not allow use of reply briefs to provide, for the first time, the necessary threshold support for contentions; LBP-11-6, 73 NRC 149 (2011)
petitioner was allowed to clarify standing declarations by submitting revised declarations with its reply; LBP-11-13, 73 NRC 534 (2011)
petitioner, having failed in its revised petition to challenge applicant's reliance on the generic environmental impact statement, cannot raise that challenge for the first time in its reply; LBP-11-6, 73 NRC 149 (2011)
petitioner's reply must be narrowly focused on the legal or logical arguments presented in the applicant's or NRC Staff's answer; LBP-11-6, 73 NRC 149 (2011)
replies to waiver petitions are allowed; CLI-11-3, 73 NRC 613 (2011)
the proper method for raising an issue addressed in a motion to strike is to seek leave to file a reply in support of the summary disposition motion; LBP-11-14, 73 NRC 591 (2011)
REPLY TO ANSWER TO MOTION
deadline for reply to an answer to a hearing petition is specified; CLI-11-3, 73 NRC 613 (2011)
petitions, answers, and replies are allowed unless otherwise specified by the Commission or the presiding officer, but no other written answers or replies will be entertained; LBP-11-2, 73 NRC 28 (2011)
REPORTING REQUIREMENTS
an annual report on recalculations of decommissioning cost estimates and projected available decommissioning funding must be submitted by a licensee for a plant that has closed before the end of its licensed life; DD-11-4, 73 NRC 713 (2011)
power reactor licensees must report to the NRC at least once every 2 years on the status of their decommissioning funding for each reactor or part of a reactor that they own; DD-11-4, 73 NRC 713 (2011)
reports to the agency regarding unapproved changes made to the material control and accounting program must be filed within no more than 6 months after the changes; LBP-11-11, 73 NRC 455 (2011)
REPRESENTATION
a duly authorized member or officer may represent his or her partnership, corporation, or unincorporated association even if he or she is not an attorney at law, but the representative's notice of appearance

must state the basis of his or her authority to act on behalf of the party; LBP-11-13, 73 NRC 534 (2011)
although an allegation that a purported representative is acting without his or her organization's authorization, i.e., is acting *ultra vires*, is distinct from a challenge to the organization's standing, petitioner may cure such a defect in representation as well; LBP-11-13, 73 NRC 534 (2011)
an attorney who purports to represent a client without authorization is subject to disciplinary proceedings by the state bar association; LBP-11-13, 73 NRC 534 (2011)
an individual may not intervene in his or her own right while simultaneously being represented by another petitioner in the same proceeding; LBP-11-13, 73 NRC 534 (2011)
an organization's standing can be demonstrated through the interests of its members, but if a member acts or speaks on behalf of the organization, that member must also demonstrate authorization by that organization to represent it; LBP-11-13, 73 NRC 534 (2011)
authority of an officer or attorney to sign a petition is distinguished from an authorization addressed to the organization's standing to intervene; LBP-11-13, 73 NRC 534 (2011)
REQUEST FOR ACTION
any person may file a request to institute a proceeding to modify, suspend, or revoke a license; LBP-11-6, 73 NRC 149 (2011)
if evidence subsequently indicates that the design basis of an operating nuclear power plant will not withstand a maximum flooding event, members of the public may file a request to institute a proceeding to modify, suspend, or revoke a license; LBP-11-15, 73 NRC 629 (2011)
petition requesting that the NRC not allow restart after scheduled refueling outage until completion of all environmental remediation work and relevant reports on leaking tritium at the plant is denied; DD-11-1, 73 NRC 7 (2011)
petitioners' request for cold shutdown because of radiological contamination of groundwater from tritium is denied; DD-11-3, 73 NRC 375 (2011)
request for enforcement action to prevent reactor restart until applicable adequate protection standards regarding zero pressure boundary leakage and operation of the reactor have been met is denied; DD-11-2, 73 NRC 323 (2011)
REQUEST FOR ADDITIONAL INFORMATION
petitioner may not rely on a document generated by a state agency if that document contains nothing more than a request for information; LBP-11-6, 73 NRC 149 (2011)
RESPONSES TO PETITIONS
petitions, answers, and replies are allowed unless otherwise specified by the Commission or the presiding officer, but no other written answers or replies will be entertained; LBP-11-2, 73 NRC 28 (2011)
RESTART
petition requesting that the NRC not allow restart after scheduled refueling outage until completion of all environmental remediation work and relevant reports on leaking tritium at the plant is denied; DD-11-1, 73 NRC 7 (2011)
request for enforcement action to prevent reactor restart until applicable adequate protection standards regarding zero pressure boundary leakage and operation of the reactor have been met is denied; DD-11-2, 73 NRC 323 (2011)
RESTRICTED DATA
relative to the issue of foreign ownership or control, NRC imposes restrictions on the physical security and control of information at licensed facilities to safeguard restricted data and national security information; LBP-11-11, 73 NRC 455 (2011)
REVIEW
See Appellate Review; NRC Staff Review; Standard of Review
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except for ownership of NRC-licensed materials outlined in the settlement agreement, licensee will refrain from engaging in conducting radiography or a radiographers duties, or assisting, directing, or supervising such activities in an NRC jurisdiction under an NRC license or an agreement state license; LBP-11-3, 73 NRC 81 (2011)
RISK-INFORMED PERFORMANCE-BASED PROGRAMS
uranium enrichment facility applicants must ensure that each item relied on for safety will be available and reliable to perform its function when needed; LBP-11-11, 73 NRC 455 (2011)

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RISKS
as a logical proposition, risk equals the likelihood of an occurrence times the severity of the consequences; LBP-11-2, 73 NRC 28 (2011)
RULE OF REASON
a severe accident mitigation alternatives analysis is mandated by NEPA considerations and thus subject to a rule of reason; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011)
applicant's alternatives analysis need not discuss every conceivable alternative to the proposed action, but rather only feasible, nonspeculative, and reasonable alternatives; LBP-11-13, 73 NRC 534 (2011)
given the legal responsibility imposed upon a public utility to provide at all times adequate, reliable service, and the severe consequences that may attend upon a failure to discharge that responsibility, the most that can be required is that the forecast be a reasonable one in light of what is ascertainable at the time made; LBP-11-7, 73 NRC 254 (2011)
NEPA does not exclude consideration of demand-side management as part of an alternatives analysis when applicant is a state-regulated utility; LBP-11-6, 73 NRC 149 (2011)
regardless of whether NRC itself conducts the need-for-power assessment or relies on another agency's forecasts and studies, that assessment need only be reasonable; LBP-11-7, 73 NRC 254 (2011)
RULEMAKING
because the Commission will have an opportunity to take a fresh look at concerns petitioners have expressed once the particulars of their rulemaking petition have been scrutinized by public comment and agency review, holding up proceedings is not necessary to ensure that the public will realize the full benefit of our ongoing regulatory review; CLI-11-1, 73 NRC 1 (2011)
if petitioner wishes to challenge an NRC regulation, its recourse is to petition for a rule change; LBP-11-15, 73 NRC 629 (2011)
petitioners request that NRC amend 10 C.F.R. 54.17(c) to permit a reactor licensee to file a license renewal application no sooner than 10 years before the expiration of the current license; CLI-11-1, 73 NRC 1 (2011)
the choice between rulemaking and adjudication (i.e., issuing orders or other license revisions) is within the agency's discretion; LBP-11-11, 73 NRC 455 (2011)
the ordinary burden to parties in pursuing litigation pending rulemaking does not justify disrupting ongoing license review; CLI-11-1, 73 NRC 1 (2011)
RULES OF PRACTICE
a brief explanation of the basis for a contention is required; LBP-11-13, 73 NRC 534 (2011)
a contention must be rejected if it attacks applicable statutory requirements or regulations, challenges the basic structure of the regulatory process, merely expresses petitioner's view of policy, seeks to raise an issue improper for adjudication in the proceeding or not applicable to the facility in question, or raises an issue that is not concrete or is otherwise not litigable; LBP-11-6, 73 NRC 149 (2011)
a contention that was originally admitted as a challenge to the environmental report may be treated as a challenge to the similar section of the draft environmental impact statement; LBP-11-1, 73 NRC 19 (2011)
a governmental body's interest in protecting the individuals and territory that fall under that body's authority establishes an organizational interest for standing purposes; LBP-11-6, 73 NRC 149 (2011)
a late-filed contention is inadmissible both for lack of a good cause showing and for failure to address the other factors of 10 C.F.R. 2.309(c)(1); LBP-11-6, 73 NRC 149 (2011)
a late-filed contention shall not be considered by a licensing board unless the petitioner demonstrates that a multifactor balancing test weighs in favor of consideration; LBP-11-6, 73 NRC 149 (2011)
a local governmental body that is not admitted as a party shall, upon request, be permitted to participate in a hearing as an interested nonparty; LBP-11-6, 73 NRC 149 (2011)
a municipality is deemed to have standing in a reactor licensing proceeding that involves a facility located within its boundaries; LBP-11-6, 73 NRC 149 (2011)
a newly proffered contention that does not satisfy the timeliness requirements of section 2.309(f)(2) may still be considered for admission if it satisfies section 2.309(c)(1); LBP-11-15, 73 NRC 629 (2011)
a nontimely proposed contention may be admissible if, on balance, it satisfies eight criteria; LBP-11-7, 73 NRC 254 (2011)
a petition for review may be granted if it presents a substantial question with respect to one or more of the five considerations of 10 C.F.R. 2.341(b)(4); CLI-11-2, 73 NRC 333 (2011)

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a proposed new contention will be considered timely if it is filed within 30 days of the date when the new and material information on which the proposed contention is based first becomes available; LBP-11-7, 73 NRC 254 (2011)

a vague accusation does not rise to the level of an admissible genuine dispute of material fact or law; LBP-11-10, 73 NRC 424 (2011)

absent a waiver, contentions challenging applicable statutory requirements or Commission regulations are not admissible in agency adjudications; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011); LBP-11-16, 73 NRC 645 (2011)

admission of late-filed contentions is allowed only upon a showing that information upon which the new contention is based was not previously available and is materially different than information previously available and the new contention has been submitted in a timely fashion based on the availability of the subsequent information; CLI-11-2, 73 NRC 333 (2011)

adoption of building code rules by a state presents new and materially different information not previously available, upon which Intervenors may rest their proposed contention; LBP-11-7, 73 NRC 254 (2011)

all material facts set forth in the statement required to be served by summary disposition movant will be considered to be admitted unless controverted by the statement required to be served by the opposing party; LBP-11-4, 73 NRC 91 (2011)

although 10 C.F.R. 2.337(f), by its terms, applies to evidence at hearings, the bounds that this rule places on official notice is also appropriate for the contention admissibility stage of a proceeding; LBP-11-7, 73 NRC 254 (2011)

although a board may view petitioner's supporting information in a light favorable to petitioner, petitioner (not the board) is required to supply all of the required elements for a valid intervention petition; LBP-11-16, 73 NRC 645 (2011)

although an intervention petition itself was timely filed, the board must balance the eight factors to determine whether petitioner's late-filed exhibits are admissible; LBP-11-13, 73 NRC 534 (2011)

although it is risky for a nonmoving party to fail to proffer evidence in response to the summary judgment movant's showing, such a failure does not automatically mandate granting of the motion; LBP-11-4, 73 NRC 91 (2011)

although petitioner proffered a contention within 30 days of events that prompted it, this does not automatically render a newly proffered contention timely; LBP-11-15, 73 NRC 629 (2011)

although pro se litigants are expected to comply with procedural rules, they are generally extended some latitude; LBP-11-2, 73 NRC 28 (2011)

an admissible contention must satisfy six pleading requirements; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011)

an interested governmental entity may introduce evidence, interrogate witnesses where cross-examination by the parties is permitted, advise the Commission without being required to take a position with respect to the issue, file proposed findings, and petition for review by the Commission; LBP-11-6, 73 NRC 149 (2011)

an officer, member, or attorney representing an organization in a proceeding must file a written notice of appearance stating, among other things, his or her basis for representing the organization; LBP-11-13, 73 NRC 534 (2011)

an organization may base its standing on immediate or threatened injury to its organizational interests; CLI-11-3, 73 NRC 613 (2011)

an organization may establish organizational standing; LBP-11-6, 73 NRC 149 (2011)

an organization that seeks to establish representational standing, must show that at least one of its members would be affected by the proceeding and identify that member by name and address, show that the member would have standing to intervene in his or her own right, and that the identified member has authorized the organization to request a hearing on their behalf; CLI-11-3, 73 NRC 613 (2011); LBP-11-13, 73 NRC 534 (2011); LBP-11-16, 73 NRC 645 (2011)

an organization's standing can be demonstrated through the interests of its members, but if a member acts or speaks on behalf of the organization, that member must also demonstrate authorization by that organization to represent it; LBP-11-13, 73 NRC 534 (2011)

any doubt as to the existence of a genuine issue of material fact is resolved against the summary disposition movant; LBP-11-4, 73 NRC 91 (2011)

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any person may file a request to institute a proceeding to modify, suspend, or revoke a license; LBP-11-6, 73 NRC 149 (2011)

any person or organization seeking to intervene as a party in an NRC adjudicatory proceeding addressing a proposed licensing action must establish standing and proffer at least one admissible contention; LBP-11-13, 73 NRC 534 (2011)

applicant's change of legal position, its claims that such change no longer entails a need for an exemption from the regulations, and its identification of new means/systems to satisfy the regulations are all types of materially different new information that can enable a contention to satisfy the timely new or amended contention requirements of 10 C.F.R. 2.309(f)(2)(i)-(ii); LBP-11-9, 73 NRC 391 (2011)

at issue is not whether evidence unmistakably favors one side or the other, but whether there is sufficient evidence favoring the summary disposition opponent for a reasonable trier of fact to find in favor of that party; LBP-11-4, 73 NRC 91 (2011)

at the admission stage, petitioners should provide a minimal showing that material facts are in dispute, thereby demonstrating that an inquiry in depth is appropriate; LBP-11-13, 73 NRC 534 (2011)

at the summary disposition stage, the judge's function is not to weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for hearing; LBP-11-14, 73 NRC 591 (2011)

availability of new information may provide good cause for nontimely filing, but the test for good cause is not simply when the intervenor became aware of the material sought to be introduced but when the information became available and when the intervenor reasonably should have become aware of the information; LBP-11-7, 73 NRC 254 (2011)

bare assertions and speculation do not supply the requisite support for a motion to reopen; CLI-11-2, 73 NRC 333 (2011)

basic admissibility criteria that all contentions must satisfy are governed by 10 C.F.R. 2.309(f)(1); LBP-11-9, 73 NRC 391 (2011)

because a pro se first-time filer experienced problems with the NRC E-Filing system, the board concludes that petitioners' efforts demonstrate the requisite good cause for acceptance of the nontimely exhibits for consideration with the timely filed petition; LBP-11-13, 73 NRC 534 (2011)

because applicant did not comply with the consultation requirement of 10 C.F.R. 2.323(b), the board does not consider information supplied with applicant's letter in connection with the board's analysis of petitioner's contention; LBP-11-2, 73 NRC 28 (2011)

because the initial burden rests on the summary disposition movant, a licensing board must examine the record in the light most favorable to the nonmoving party and all justifiable inferences must be drawn in favor of the nonmoving party; LBP-11-4, 73 NRC 91 (2011); LBP-11-14, 73 NRC 591 (2011)

board refused to consider new bases that were included in an answer to summary disposition motion and were outside the scope of the original contention; LBP-11-4, 73 NRC 91 (2011)

boards admit contentions, not their supporting bases; LBP-11-2, 73 NRC 28 (2011)

boards are to construe intervention petitions in favor of petitioners in determining whether petitioner has demonstrated standing; LBP-11-2, 73 NRC 28 (2011)

boards do not adjudicate disputed facts at the contention admission stage; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011)

boards must balance the eight factors to determine whether petitioner's late-filed petition will be considered and good cause for the failure to file on time is the most important; LBP-11-2, 73 NRC 28 (2011)

caution should be exercised in granting summary disposition, which may be denied if there is reason to believe that the better course would be to proceed to a full hearing; LBP-11-7, 73 NRC 254 (2011)

challenges to an enhanced version of an application alone are insufficient to vitiate intervenors' obligation to file any challenges to the original version of that application at the outset of the proceeding; LBP-11-9, 73 NRC 391 (2011)

complex, fact-intensive issues are rarely appropriate for summary disposition, much less for resolution on the initial pleadings; LBP-11-2, 73 NRC 28 (2011)

conclusory allegations about potential radiological harm are insufficient to establish standing; CLI-11-3, 73 NRC 613 (2011)

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Congress called upon the Commission to make fundamental changes in its public hearing process to ensure that hearings adjudicate genuine, substantive safety and environmental issues placed in contention by qualified intervenors; LBP-11-6, 73 NRC 149 (2011)

contemporaneous judicial concepts of standing require a petitioner to allege an injury in fact that is fairly traceable to the challenged action and likely to be redressed by a favorable decision; LBP-11-6, 73 NRC 149 (2011)

contentions based on new information in a document that was not previously available and that is materially different from a document that was previously available are not untimely simply for not being included in an intervenor's initial hearing request filed at the outset of a proceeding; LBP-11-9, 73 NRC 391 (2011)

contentions must satisfy six criteria of 10 C.F.R. 2.309(f)(1) to be admissible; LBP-11-16, 73 NRC 645 (2011)

contentions that address an important security issue regarding Part 74's strict requirements for the proposed facility, which applicant previously admitted it failed to satisfy, are admissible; LBP-11-9, 73 NRC 391 (2011)

criteria that nontimely contentions must address are governed by 10 C.F.R. 2.309(c); LBP-11-9, 73 NRC 391 (2011)

"disclosing party" means the party required to make mandatory disclosure pursuant to 10 C.F.R. 2.336; LBP-11-5, 73 NRC 131 (2011)

documents merely summarizing earlier documents or compiling preexisting, publicly available information into a single source do not render "new" the summarized or compiled information; CLI-11-2, 73 NRC 333 (2011)

during summary disposition, it is not appropriate for boards to untangle the expert affidavits and decide which experts are more correct; LBP-11-7, 73 NRC 254 (2011)

each party to a proceeding must disclose all documents relevant to the admitted contentions, except those documents for which a claim of privilege or protected status is made; LBP-11-5, 73 NRC 131 (2011)

essential to establishing standing are findings of injury, causation, and redressability; CLI-11-3, 73 NRC 613 (2011)

even if there are no objections to petitioners' representational standing, boards have an independent obligation to determine whether they have adequately demonstrated standing; LBP-11-2, 73 NRC 28 (2011); LBP-11-16, 73 NRC 645 (2011)

factors that timely new or amended contentions must satisfy are governed by are 10 C.F.R. 2.309(f)(2); LBP-11-9, 73 NRC 391 (2011)

factual support required for a contention at the admission stage is a minimal showing that material facts are in dispute; LBP-11-2, 73 NRC 28 (2011)

factual support required for an admissible contention need not be of the quality necessary to withstand a summary disposition motion, but need only demonstrate that material facts are in dispute; LBP-11-13, 73 NRC 534 (2011); LBP-11-16, 73 NRC 645 (2011)

failure to comply with any of the requirements of 10 C.F.R. 2.309(f)(1) precludes admission of a contention; LBP-11-7, 73 NRC 254 (2011)

failure to comply with pleading requirements for late filings constitutes sufficient grounds for rejecting intervention and hearing requests; LBP-11-7, 73 NRC 254 (2011)

for a newly proffered contention to be timely, it must be based on information that was not previously available; LBP-11-15, 73 NRC 629 (2011)

for a timely filed contention to be admissible, it must satisfy six pleading requirements; LBP-11-6, 73 NRC 149 (2011)

for representational standing, neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit; LBP-11-13, 73 NRC 534 (2011)

"good cause" for late filing is defined as a showing that petitioner could not have met the filing deadline and filed as soon as possible thereafter; LBP-11-7, 73 NRC 254 (2011)

good cause for the failure to file on time is the most important of the late-filing factors; LBP-11-2, 73 NRC 28 (2011); LBP-11-6, 73 NRC 149 (2011); LBP-11-7, 73 NRC 254 (2011); LBP-11-9, 73 NRC 391 (2011); LBP-11-10, 73 NRC 424 (2011); LBP-11-13, 73 NRC 534 (2011); LBP-11-15, 73 NRC 629 (2011)

hearing petitioners have an ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to uncover any information that could serve as the foundation for a specific contention; LBP-11-9, 73 NRC 391 (2011)
if a proposed new contention that is filed after the initial filing period set forth in the hearing notice is not timely under 10 C.F.R. 2.309(f)(2)(iii), then proponent must address the eight criteria of section 2.309(c)(1) and show that a balance of these factors weighs in favor of admitting that contention; LBP-11-9, 73 NRC 391 (2011); LBP-11-10, 73 NRC 424 (2011)
if a summary disposition proponent fails to make the requisite showing, the board must deny the motion even if the opposing party chooses not to respond or its response is inadequate; LBP-11-4, 73 NRC 91 (2011)
if any portion of a filing is untimely tendered, it must be accompanied by a motion to file out of time; LBP-11-13, 73 NRC 534 (2011)
if at least one petitioner demonstrates standing and proffers an admissible contention so that its petition to intervene is granted, section 2.315(c) allows a local governmental body that has not been admitted as a party to participate in a hearing as an interested nonparty; LBP-11-6, 73 NRC 149 (2011)
if evidence in favor of the summary disposition opponent is merely colorable or not significantly probative, summary disposition may be granted; LBP-11-4, 73 NRC 91 (2011)
if good cause is not shown, a board may still permit the late filing, but petitioner or intervenor must make a strong showing on the other factors of 10 C.F.R. 2.309(c); LBP-11-9, 73 NRC 391 (2011)
if intervenor fails to show good cause for a late filing, its demonstration on the other late-filing factors must be particularly strong; LBP-11-7, 73 NRC 254 (2011)
if movant makes a proper showing for summary disposition, and if the opposing party does not show that a genuine issue of material fact exists, the board may summarily dispose of all arguments on the basis of the pleadings; LBP-11-4, 73 NRC 91 (2011)
if no genuine dispute remains, then the board may dispose of all arguments based on the pleadings; LBP-11-7, 73 NRC 254 (2011)
if petitioner believes that an application fails to contain information on a relevant matter as required by law, the contention must identify each failure and the supporting reasons for the petitioner's belief; LBP-11-6, 73 NRC 149 (2011)
if reasonable minds could differ as to the import of the evidence, summary disposition is not appropriate; LBP-11-14, 73 NRC 591 (2011)
if summary disposition movant discusses a matter in its statement of undisputed facts, the board may view with skepticism any later argument by that movant that a response regarding that issue is outside the scope of the contention, particularly given the onus that is placed upon an opposing party to respond to such a statement; LBP-11-4, 73 NRC 91 (2011)
if summary disposition movant fails to make the requisite showing to satisfy that initial burden, then the board must deny the motion even if the opposing party chooses not to respond or its response is inadequate; LBP-11-14, 73 NRC 591 (2011)
if summary disposition proponent meets its burden, the party opposing the motion must set forth specific facts showing that there is a genuine issue, and may not rely on mere allegations or denials but no defense to an insufficient showing is required; LBP-11-7, 73 NRC 254 (2011); LBP-11-14, 73 NRC 591 (2011)
if the question is a close one, boards must, in considering summary disposition opponent's submission, carefully ascertain whether any factual disputes asserted are genuine and relate to issues that would affect the outcome of the proceeding under relevant substantive law; LBP-11-4, 73 NRC 91 (2011)
if the summary disposition movant meets its burden, then and only then is the nonmoving party required to proffer evidence that contradicts the moving party's showing and that proves the existence of a genuine issue of material fact; LBP-11-4, 73 NRC 91 (2011)
if the summary disposition proponent does not meet its burden, the nonmoving party is, without making any showing, entitled to a denial of the motion; LBP-11-4, 73 NRC 91 (2011)
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if, within 60 days after pertinent information supporting a new contention first becomes available, intervenors submit a particularized and otherwise admissible contention regarding construction of a

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in analyzing the admissibility of a proffered contention, a licensing board need not turn a blind eye to those portions of a petitioner's exhibits that might militate against admissibility; LBP-11-6, 73 NRC 149 (2011)
in applying the summary disposition standard, it is appropriate for the board to look not only to NRC regulatory and case law, but also to federal court case law on summary judgment under Rule 56 of the Federal Rules of Civil Procedure; LBP-11-4, 73 NRC 91 (2011)
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in determining whether an individual member of an organization qualifies for standing in his or her own right, NRC generally applies traditional judicial standing concepts; LBP-11-13, 73 NRC 534 (2011)
in determining whether petitioner has demonstrated standing, the Commission applies contemporaneous judicial concepts of standing; LBP-11-6, 73 NRC 149 (2011)
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interests a municipality seeks to represent on behalf of its residents are germane to its own purposes in the context or standing; LBP-11-6, 73 NRC 149 (2011)
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intervenors have demonstrated their ability to contribute to the development of a sound record where they have put forward in support of those contentions the views of a witness whose expertise has been recognized in other NRC proceedings; LBP-11-9, 73 NRC 391 (2011)
judicial standing concepts are applied in NRC proceedings; LBP-11-2, 73 NRC 28 (2011)
licensing boards are bound to admit for litigation contentions that are material and supported by reasonably specific factual and legal allegations; LBP-11-6, 73 NRC 149 (2011)
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mere interest in a problem is not sufficient by itself to render the organization adversely affected or aggrieved within the meaning of the Administrative Procedure Act; CLI-11-3, 73 NRC 613 (2011)
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no defense to an insufficient showing by summary disposition proponent is required; LBP-11-14, 73 NRC 591 (2011)
no proximity presumption applies in an import/export licensing case because petitioners have not shown that the import or export involves a significant source of radioactivity producing an obvious potential for offsite consequences; CLI-11-3, 73 NRC 613 (2011)
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NRC generally applies traditional judicial standing concepts which require a showing that the individual has suffered or might suffer a concrete and particularized injury that is fairly traceable to the challenged action and likely redressible by a favorable decision; LBP-11-13, 73 NRC 534 (2011); LBP-11-16, 73 NRC 645 (2011)
NRC generally considers approximately 30-60 days as the limit for timely filings based on new information; CLI-11-2, 73 NRC 333 (2011)
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NRC imposes a deliberately heavy burden on petitioners seeking to reopen a record, even with respect to an existing contention; CLI-11-2, 73 NRC 333 (2011)
NRC must provide a hearing upon the request of any person whose interest may be affected by the proceeding; LBP-11-6, 73 NRC 149 (2011)
NRC presumes that an individual has standing to intervene without the need to address traditional standing concepts upon a showing that he or she lives within, or otherwise has frequent contacts with, a geographic zone of potential harm; LBP-11-2, 73 NRC 28 (2011)
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NRC standards for ruling on summary disposition motions are analogous to the standards for granting summary judgment motions under Rule 56 of the Federal Rules of Civil Procedure; LBP-11-7, 73 NRC 254 (2011)
only disputes over facts that might affect the outcome of a proceeding would preclude summary disposition; LBP-11-4, 73 NRC 91 (2011)
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organizations may represent the interests of members using representational standing if it can show that the interests it seeks to protect are germane to its own purpose, identify by name and address at least one member who qualifies for standing in his or her own right, show that it is authorized by that member to request a hearing on his or her behalf and show that neither the claim asserted nor the relief requested requires an individual member's participation in the organization's legal action; LBP-11-2, 73 NRC 28 (2011)
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petition for review falls short of satisfying 10 C.F.R. 2.341(b)(4) if it does not specify the subsections upon which it relies but merely sets forth a series of general grievances fundamentally going to the correctness of the board's decision; CLI-11-2, 73 NRC 333 (2011)
petitioner does not have to prove its contentions at the admission stage; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011); LBP-11-14, 73 NRC 591 (2011); LBP-11-16, 73 NRC 645 (2011)
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petitioner lacked good cause for a hearing request filed 7 days after the filing deadline when the argument relied on a misimpression of due dates; LBP-11-9, 73 NRC 391 (2011)
petitioner may address the selection of hearing procedures, taking into account the provisions of 10 C.F.R. 2.310; LBP-11-6, 73 NRC 149 (2011)
petitioner or intervenor may file timely new or amended contentions, with leave of the board, if the three requirements are met; LBP-11-9, 73 NRC 391 (2011)
petitioner who seeks both to reopen the record and to submit a late contention must successfully satisfy two elevated standards; CLI-11-2, 73 NRC 333 (2011)
petitioner's appellate argument must pass regulatory muster under the rigorous standards of 10 C.F.R. 2.326(a)(3); CLI-11-2, 73 NRC 333 (2011)
petitioners' claims of potential injury are also so speculative, and separate from the import and export license, that they do not amount to cognizable harm for purposes of standing; CLI-11-3, 73 NRC 613 (2011)
petitioners' generalized institutional interest in public forums and in preventing processing of foreign waste is insufficient to confer standing; CLI-11-3, 73 NRC 613 (2011)
petitioners must state their name, address, and telephone number, the nature of their right to be made a party, the nature and extent of their property, financial, or other interest in the proceeding, and the possible effect of any decision or order that may be issued in the proceeding on their interest; LBP-11-6, 73 NRC 149 (2011)
petitioner's reply must be narrowly focused on the legal or logical arguments presented in the applicant's or NRC Staff's answer; LBP-11-6, 73 NRC 149 (2011)
petitioners who are proceeding pro se should be shown greater leeway on the question of whether they have demonstrated good cause for lateness than petitioners represented by counsel; LBP-11-13, 73 NRC 534 (2011)
petitions, answers, and replies are allowed unless otherwise specified by the Commission or the presiding officer, but no other written answers or replies will be entertained; LBP-11-2, 73 NRC 28 (2011)
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pro se litigants generally should be extended some latitude, but they are still expected to comply with procedural rules; LBP-11-13, 73 NRC 534 (2011)
proponent must demonstrate that a materially different result would have been likely had the newly proffered evidence been considered initially; CLI-11-2, 73 NRC 333 (2011)
"receiving party" means the party to whom the mandatory disclosure must be made pursuant to 10 C.F.R. 2.336; LBP-11-5, 73 NRC 131 (2011)
regardless of when filed, all proposed contentions must comply with the general contention admissibility criteria; LBP-11-7, 73 NRC 254 (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-11-7, 73 NRC 254 (2011)
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standing based on the proximity presumption has been found if petitioner or a representative of a petitioner organization resides within approximately 50 miles of the facility in question; LBP-11-13, 73 NRC 534 (2011)
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summary disposition is particularly inappropriate when a licensing board is presented with conflicting expert testimony, for at that stage of a proceeding it is not the role of licensing boards to untangle the expert affidavits and decide which experts are more correct; LBP-11-14, 73 NRC 591 (2011)
summary disposition movant bears the burden of demonstrating that there is no genuine issue as to any material fact and that it is entitled to a decision in its favor; LBP-11-4, 73 NRC 91 (2011); LBP-11-14, 73 NRC 591 (2011)
summary disposition opponent may not rest upon mere allegations or denials, but must state specific facts showing that there is a genuine issue of fact for hearing; LBP-11-4, 73 NRC 91 (2011)
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tardy filing of a contention may be excusable only where the facts upon which the amended or new contention is based were previously unavailable; CLI-11-2, 73 NRC 333 (2011)
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the burden of setting forth a clear and coherent argument is on petitioner, and it should not be necessary to speculate about what a pleading is supposed to mean; CLI-11-2, 73 NRC 333 (2011)
the Commission toughened its contention admissibility rule in 1989 to ensure that only intervenors with genuine and particularized concerns participate in NRC hearings; LBP-11-6, 73 NRC 149 (2011)
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the contention admissibility rule serves to ensure that admitted contentions focus on real disputes that can be resolved in an adjudication, establish a sufficient factual and legal foundation to warrant further inquiry, and put other parties on notice of the disputed issues so they will know precisely those claims they must support or oppose; LBP-11-6, 73 NRC 149 (2011)
the contention admissibility rule should not serve as a fortress to deny intervention; LBP-11-6, 73 NRC 149 (2011)
the contention admissibility test in section 2.309(f)(1) was crafted by the Commission to raise the threshold bar for an admissible contention; LBP-11-6, 73 NRC 149 (2011)
the factual support required at the contention admission stage is only a minimal showing that material facts are in dispute; LBP-11-14, 73 NRC 591 (2011)
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the pertinent zone in operating license renewal proceedings and other power reactor license matters is the area within a 50-mile radius of the site; LBP-11-2, 73 NRC 28 (2011)
the proximity presumption applies if petitioner has frequent contacts with the geographic zone of potential harm his or her interests seeks to establish its representational standing, resides within 50 miles of the proposed facility, or has frequent contacts with the area affected by the proposed facility; LBP-11-13, 73 NRC 534 (2011); LBP-11-16, 73 NRC 645 (2011)
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the record must show movant's right to summary judgment with such clarity as to leave no room for controversy, and must demonstrate that his opponent would not be entitled to prevail under any discernible circumstances; LBP-11-4, 73 NRC 91 (2011)
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to determine if a petitioner has sufficient interest in a proceeding to be entitled to intervene as a matter of right under section 189a, the Commission has long applied contemporaneous judicial concepts of standing; CLI-11-3, 73 NRC 613 (2011)
to determine whether the elements for standing are met, boards are to construe the petition in favor of the petitioner; LBP-11-16, 73 NRC 645 (2011)
to establish standing, an intervention petition must state petitioner's name, address, and telephone number, the nature of the petitioner's right to be made a party, the nature and extent of petitioner's property, financial, or other interest, and the possible effect of any decision or order on petitioner's interest; LBP-11-16, 73 NRC 645 (2011)
to establish standing, petitioner must allege a concrete and particularized injury that is fairly traceable to the challenged action and likely to be redressed by a favorable decision; CLI-11-3, 73 NRC 613 (2011)
to justify reopening the record, the moving papers must be strong enough, in the light of any opposing filings, to avoid summary disposition; CLI-11-2, 73 NRC 333 (2011)
to participate in a proceeding as an intervenor, petitioner must establish standing and proffer at least one admissible contention; LBP-11-2, 73 NRC 28 (2011); LBP-11-6, 73 NRC 149 (2011)
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when presented with conflicting expert opinions, licensing boards should be mindful that summary disposition is rarely proper; LBP-11-7, 73 NRC 254 (2011)
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contentions that address an important security issue regarding Part 74's strict requirements for the proposed facility, which applicant previously admitted it failed to satisfy, are admissible; LBP-11-9, 73 NRC 391 (2011)
the ability to detect the loss of plutonium in a timely manner, to allow for an effective response, is a crucial security requirement; LBP-11-9, 73 NRC 391 (2011)
See also Physical Security
SECURITY CLEARANCES
a Pentapartite Agreement between the United States and four European governments to prevent new restricted data from being disseminated to European nationals will be a prerequisite to the NRC Staff issuing a facility clearance; LBP-11-11, 73 NRC 455 (2011)
an enrichment facility security clearance requires a determination that granting the clearance would not be inconsistent with the national interest, including a finding that the facility is not under foreign ownership, control, or influence to such a degree that a determination could not be made; LBP-11-11, 73 NRC 455 (2011)
Staff imposed a license condition on a uranium enrichment facility to ensure that clearances are obtained before classified matter is processed, stored, reproduced, transmitted, handled, or accessed; LBP-11-11, 73 NRC 455 (2011)
SECURITY PROGRAM
application for a uranium enrichment facility is required to contain a description of the security program to protect against unauthorized disclosure of classified matter in accord with Part 95; LBP-11-11, 73 NRC 455 (2011)

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SEISMIC ANALYSIS
geologic and seismic siting factors considered for design must include a determination of the safe shutdown earthquake ground motion for the site and the potential for surface tectonic and nontectonic deformations; LBP-11-16, 73 NRC 645 (2011)
highly site-specific seismic hazard analysis reflects consideration not only of the location and magnitude of historic earthquakes, but also the nature of the bedrock and the style of faulting in the surrounding region; LBP-11-11, 73 NRC 455 (2011)
SENSITIVE UNCLASSIFIED NONSAFEGUARDS INFORMATION
lack of clarity in the terms and application of the agency's newly established SUNSI policy contributed to intervenors' misapprehension that they were required to demonstrate a need for the information in order to request SUNSI documents; LBP-11-9, 73 NRC 391 (2011)
NRC Staff was admonished for having imposed a stricter-than-necessary standard of "need" for access to SUNSI; LBP-11-9, 73 NRC 391 (2011)
rules governing access to SUNSI apply only to potential parties, whereas party access to SUNSI is governed by protective orders and nondisclosure agreements; LBP-11-9, 73 NRC 391 (2011)
the SUNSI policy does not expand upon or create any new category of legally privileged or confidential information that is exempt from discovery or from mandatory disclosure; LBP-11-5, 73 NRC 131 (2011)
SETTLEMENT AGREEMENTS
the public interest does not require additional adjudication of an enforcement matter and, given that all matters required to be adjudicated as part of this proceeding have been resolved, the proceeding is dismissed; LBP-11-3, 73 NRC 81 (2011)
upon review of a settlement agreement, the board is satisfied that its terms reflect a fair and reasonable settlement in keeping with the objectives of the NRC's enforcement policy, and satisfy the requirements of 10 C.F.R. 2.338(g) and (h); LBP-11-3, 73 NRC 81 (2011)
SEVERE ACCIDENT MITIGATION ALTERNATIVES ANALYSIS
a SAMA analysis fulfills the requirement to provide a consideration of alternatives to mitigate severe accidents and therefore is governed by NEPA's rule of reason; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011)
a SAMA analysis is neither a worst-case nor a best-case impacts analysis; LBP-11-7, 73 NRC 254 (2011)
a SAMA contention is admissible only if 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; LBP-11-7, 73 NRC 254 (2011); LBP-11-13, 73 NRC 534 (2011)
alternatives for reducing adverse environmental impacts, including impacts of severe accidents, are among the limited issues within the scope of a license renewal proceeding; LBP-11-13, 73 NRC 534 (2011)
alternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives; LBP-11-2, 73 NRC 28 (2011)
although a SAMA analysis must be provided if not previously performed, applicant must provide this analysis only for those issues identified as Category 2 issues in Appendix B to Subpart A of Part 51; LBP-11-2, 73 NRC 28 (2011)
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-11-7, 73 NRC 254 (2011)
among the limited issues within the scope of a license renewal proceeding are alternatives for reducing adverse environmental impacts listed as Category 2 issues in Appendix B to Subpart A of 10 C.F.R. Part 51; LBP-11-2, 73 NRC 28 (2011)
an environmental report must contain a full discussion of mitigation plans; LBP-11-6, 73 NRC 149 (2011)
applicant need only ensure that the environmental consequences of the project have been fairly evaluated; LBP-11-2, 73 NRC 28 (2011)
applicant's environmental report must contain a sufficient analysis of potential environmental consequences and alternatives to enable the NRC Staff to prepare an environmental impact statement that fulfills the agency's obligations under NEPA; LBP-11-14, 73 NRC 591 (2011)
citation of studies indicating that source terms from the Modular Accident Analysis Progression (MAAP) code are lower than results from Source Term Code Package or NUREG-1150 satisfies the requirements of 10 C.F.R. 2.309(f)(1)(v); LBP-11-2, 73 NRC 28 (2011)

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claim that SAMA analysis is deficient for failing to address potential spent fuel pool accidents falls beyond the scope of NRC SAMA analysis and impermissibly challenges NRC regulations; LBP-11-13, 73 NRC 534 (2011)
contention questioning the accuracy of the SAMA results given the geographic location and variable meteorological conditions at the site and the large population base surrounding the plant is admissible; LBP-11-2, 73 NRC 28 (2011)
contention that applicant's SAMA analysis improperly ignored radioactive waste disposal is outside the scope of the proceeding because it directly challenges the generic determinations in Table B-1 of Appendix B to Part 51; LBP-11-2, 73 NRC 28 (2011)
contention that other costs were ignored is not admissible because petitioners presented no facts or expert opinion that show it to be plausible that including them might affect the outcome of the SAMA analysis; LBP-11-2, 73 NRC 28 (2011)
cost-effective candidate SAMAs are identified by comparing the annualized cost of the mitigation measure with the benefit as determined by the averted cost of severe accidents (consequences), as weighted by the probability of the accidents' occurrence; LBP-11-13, 73 NRC 534 (2011)
it is not possible simply to plug in and run a different atmospheric dispersion model in the MACCS2 code; LBP-11-2, 73 NRC 28 (2011)
license renewal applicant must file an environmental report that includes an alternatives analysis that considers and balances the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects; LBP-11-13, 73 NRC 534 (2011)
license renewal applicants are not required to base their analysis on consequence values at the 95th percentile consequence level; LBP-11-2, 73 NRC 28 (2011)
NEPA allows agencies to select their own methodology as long as that methodology is reasonable; LBP-11-2, 73 NRC 28 (2011); LBP-11-7, 73 NRC 254 (2011)
NEPA does not require a fully developed plan that will mitigate all environmental harm before an agency can act, but only requires that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fully evaluated; LBP-11-7, 73 NRC 254 (2011); LBP-11-14, 73 NRC 591 (2011)
NEPA imposes no substantive requirement that mitigation measures actually be taken; LBP-11-14, 73 NRC 591 (2011)
NRC is required to consider severe accident mitigation alternatives in issuing a new operating license; LBP-11-7, 73 NRC 254 (2011)
one important component of an environmental impact statement is the discussion of possible actions that might mitigate adverse environmental consequences; LBP-11-7, 73 NRC 254 (2011)
petitioner may question the practice for severe accident mitigation alternatives analysis to utilize mean consequence values, which results in an averaging of potential consequences; LBP-11-13, 73 NRC 534 (2011)
petitioner's assertion that severe accidents from spent fuel pools must be considered in applicant's SAMA analysis is in direct conflict with NRC regulations; LBP-11-2, 73 NRC 28 (2011)
petitioners' assertions that the MACCS2 code was not subjected to quality assurance requirements is deficient because a SAMA analysis is not subject to such requirements; LBP-11-2, 73 NRC 28 (2011)
petitioners have not established that use of another source term would identify additional cost-beneficial severe accident mitigation alternatives; LBP-11-13, 73 NRC 534 (2011)
possible plant changes, such as hardware modifications and improved training or procedures, that could cost-effectively reduce the radiological risk from a severe accident are identified and assessed; LBP-11-13, 73 NRC 534 (2011)
SAMA contentions are admissible only if 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; LBP-11-2, 73 NRC 28 (2011)
the Gaussian plume model's incorporation in the MACCS2 code and the wide, customary use of the code are not a sufficient ground to exclude the code's integral dispersion model from all challenge if adequate support is provided for a contention; LBP-11-2, 73 NRC 28 (2011)
the ultimate concern in a SAMA contention is whether any additional SAMA should have been identified as potentially cost-beneficial, not whether further analysis may refine the details in the SAMA NEPA analysis; LBP-11-13, 73 NRC 534 (2011)

the ultimate issue on SAMA analysis is whether any additional SAMA should have been identified as potentially cost-beneficial, not whether further analysis may refine the details in the SAMA NEPA analysis; LBP-11-2, 73 NRC 28 (2011)
whether a SAMA may be worthwhile to implement is based upon a cost-benefit analysis; LBP-11-2, 73 NRC 28 (2011)
SEVERE ACCIDENT MITIGATION DESIGN ALTERNATIVES ANALYSIS
all environmental issues concerning SAMDAs associated with the information in NRC's final environmental assessment for certified reactor design are deemed resolved for plants whose site parameters are within those specified in the technical support document; LBP-11-7, 73 NRC 254 (2011)
NRC Staff's creation of a list of site parameters for use in the combined license proceeding cannot cure the absence of a list of site parameters in the technical support document, rendering it impossible to resolve SAMDA issues by rule; LBP-11-7, 73 NRC 254 (2011)
there is no purpose for further refining a SAMDA analysis, 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; LBP-11-7, 73 NRC 254 (2011)
SHELTERING
in developing the recommended range of protective actions in an emergency plan, sheltering must be considered; LBP-11-6, 73 NRC 149 (2011)
SHUTDOWN
assurance of adequate cooling water supply for emergency and long-term shutdown decay heat removal shall be considered in the design of the nuclear power plant; LBP-11-16, 73 NRC 645 (2011)
petitioners' request for cold shutdown because of radiological contamination of groundwater from tritium is denied; DD-11-3, 73 NRC 375 (2011)
SIGNATURE
persons without digital ID certificates may sign electronically by typing "Executed in Accord with 10 C.F.R. 2.304(d)" or its equivalent on the signature line and including the date of signature and the signatory's name, capacity, address, phone number, and e-mail address; LBP-11-2, 73 NRC 28 (2011)
submitted documents must be signed; LBP-11-2, 73 NRC 28 (2011)
SITE CHARACTERIZATION
factors used for a site geological and seismological evaluation are stated in 10 C.F.R. 100.23(d); LBP-11-10, 73 NRC 424 (2011)
geological, seismological, and engineering characteristics of a site and its environs must be investigated in sufficient scope and detail; LBP-11-10, 73 NRC 424 (2011)
NRC Staff's creation of a list of site parameters for use in the combined license proceeding cannot cure the absence of a list of site parameters in the technical support document, rendering it impossible to resolve SAMDA issues by rule; LBP-11-7, 73 NRC 254 (2011)
SITE REMEDIATION
areas of minor radioactive contamination are evaluated and remediated as needed during plant decommissioning; DD-11-1, 73 NRC 7 (2011)
certain "construction" activities are allowed at a reactor site pursuant to a limited work authorization as long as a site redress plan is submitted; LBP-11-11, 73 NRC 455 (2011)
petition requesting that the NRC not allow restart after scheduled refueling outage until completion of all environmental remediation work and relevant reports on leaking tritium at the plant is denied; DD-11-1, 73 NRC 7 (2011)
there is no NRC 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-11-11, 73 NRC 455 (2011)
SITE SAFETY ANALYSIS REPORT
applicant need not submit information regarding control room habitability and ventilation system design in the SSAR portion of an early site permit application; LBP-11-16, 73 NRC 645 (2011)
applicant's SSAR must provide sufficient data to enable the requisite determination of the potential for surface deformation as a result of growth faults at the site; LBP-11-16, 73 NRC 645 (2011)
even though a cooling pond is not a safety-related structure, knowledge of faulting under the pool and the impact this faulting might have on the pool's operation are required; LBP-11-16, 73 NRC 645 (2011)

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SOCIOECONOMIC IMPACTS
contention that alleges an omission, not an inadequacy, of an environmental report's analysis of socioeconomic impacts raises an issue that is not material to any finding NRC must make in an early site permit proceeding; LBP-11-16, 73 NRC 645 (2011)
SOLAR POWER
because a solely wind- or solar-powered facility could not satisfy the projects purpose, there was no need to compare the impact of such facilities to the impact of the proposed nuclear plant; LBP-11-7, 73 NRC 254 (2011)
the extent to which operation and maintenance costs of a solar facility may present a comparative benefit is immaterial since the four-part combination of alternative energy sources is not environmentally preferable to two new nuclear units; LBP-11-4, 73 NRC 91 (2011)
SOURCE TERM
petitioners have not established that use of another source term would identify additional cost-beneficial severe accident mitigation alternatives; LBP-11-13, 73 NRC 534 (2011)
SOVEREIGN IMMUNITY DOCTRINE
because Equal Access to Justice Act operates as a waiver of sovereign immunity it must be narrowly construed to avoid creating a waiver of sovereign immunity that Congress did not intend; LBP-11-8, 73 NRC 349 (2011)
once Congress has waived sovereign immunity over certain subject matter, a court should be careful not to assume the authority to narrow the waiver that Congress intended; LBP-11-8, 73 NRC 349 (2011)
the Equal Access to Justice Act renders the United States liable for attorney's fees for which it would not otherwise be liable, and thus amounts to a partial waiver of sovereign immunity and any such waiver must be strictly construed in favor of the United States; LBP-11-8, 73 NRC 349 (2011)
SPECIAL NUCLEAR MATERIALS
materials license amendment applications must contain a full description of applicant's program for control and accounting of special nuclear material to show how it will comply with the 10 C.F.R. Part 74 requirements; LBP-11-9, 73 NRC 391 (2011)
SPENT FUEL POOLS
Part 51 treats all spent fuel pool accidents, whatever their cause, as generic, Category 1 events not suitable for case-by-case adjudication; LBP-11-2, 73 NRC 28 (2011)
petitioner's assertion that severe accidents from spent fuel pools must be considered in applicant's SAMA analysis is in direct conflict with NRC regulations; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011)
SPENT FUEL STORAGE
for all plants, onsite dry or pool storage can safely accommodate spent fuel accumulated from a 20-year license extension with small environmental effects; LBP-11-13, 73 NRC 534 (2011)
Part 51's license renewal provisions cover environmental issues relating to onsite spent fuel storage generically and all such issues, including accident risk, fall outside the scope of license renewal proceedings; LBP-11-13, 73 NRC 534 (2011)
STANDARD OF REVIEW
a "rational basis review" was applied to intervenor's challenge to the NRC's 2004 changes to its procedural rules, citing cases involving challenges to laws regulating aspects of prisoners' right to access to the courts; LBP-11-4, 73 NRC 91 (2011)
a licensing board's inquiry should not be whether there are plainly better methodologies or whether the severe accident mitigation alternatives analysis can be refined further, but rather whether the SAMA analysis resulted in erroneous conclusions on which SAMAs and SAMDAs are found cost-beneficial to implement; LBP-11-7, 73 NRC 254 (2011)
for mandatory proceedings on uranium enrichment facility licensing, licensing boards are to conduct a simple sufficiency review rather than a de novo review on both AEA and NEPA issues; LBP-11-11, 73 NRC 455 (2011)
in a mandatory hearing, licensing boards must narrow their inquiry to 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-11-11, 73 NRC 455 (2011)

in mandatory proceedings for uranium enrichment facility licensing, boards are to make independent environmental judgments with respect to certain NEPA findings; LBP-11-11, 73 NRC 455 (2011)
in mandatory proceedings on uranium enrichment facility licensing, boards should inquire whether the NRC Staff performed an adequate review and made findings with reasonable support in logic and fact; LBP-11-11, 73 NRC 455 (2011)
NRC Staff may accord substantial weight to the stated purpose of the project, i.e., to provide additional baseload electrical generation capacity for use in the owner's current markets and/or for potential sale on the wholesale market; LBP-11-7, 73 NRC 254 (2011)
the board's role in mandatory hearings is to carefully probe Staff findings by asking appropriate questions and by requiring supplemental information when necessary, but the 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-11-11, 73 NRC 455 (2011)
STANDARD REVIEW PLANS
for power reactors, NRC developed a Commission-approved standard review plan to assist in evaluating applications for reactor licenses or applications for the transfer of such licenses; LBP-11-11, 73 NRC 455 (2011)
if after conducting a threshold review, NRC Staff concludes that the applicant may be considered to be foreign owned, controlled, or dominated, or that additional action would be necessary to negate the foreign ownership, control, or domination, applicant shall be promptly advised and requested to submit a negation action plan; LBP-11-11, 73 NRC 455 (2011)
to perform an appropriate integrated safety analysis, NUREG-1520 standard review plan guidance for fuel cycle facilities indicates that applicant should identify the process designs, accident sequences, and items relied upon for safety that are associated with the facility; LBP-11-11, 73 NRC 455 (2011)
STANDING TO INTERVENE
a municipality is deemed to have standing in a reactor licensing proceeding that involves a facility located within its boundaries; LBP-11-6, 73 NRC 149 (2011)
boards are to construe intervention petitions in favor of petitioners in determine whether petitioner has demonstrated standing; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011); LBP-11-16, 73 NRC 645 (2011)
conclusory allegations about potential radiological harm are insufficient to establish standing; CLI-11-3, 73 NRC 613 (2011)
contemporaneous judicial concepts of standing require a petitioner to allege an injury in fact that is fairly traceable to the challenged action and likely to be redressed by a favorable decision; LBP-11-2, 73 NRC 28 (2011); LBP-11-6, 73 NRC 149 (2011)
essential to establishing standing are findings of injury, causation, and redressability; CLI-11-3, 73 NRC 613 (2011)
even if undisputed, the jurisdictional nature of standing in NRC proceedings requires independent examination by the presiding officer; LBP-11-16, 73 NRC 645 (2011)
in cases involving the possible construction or operation of a nuclear power reactor, proximity to the proposed facility is considered sufficient to establish standing; LBP-11-16, 73 NRC 645 (2011)
in determining whether petitioner has demonstrated standing, the Commission applies contemporaneous judicial concepts of standing; LBP-11-2, 73 NRC 28 (2011); CLI-11-3, 73 NRC 613 (2011); LBP-11-6, 73 NRC 149 (2011)
in reactor licensing proceedings, petitioner is deemed to have standing pursuant to the Commission's proximity presumption rule by showing that he or she resides in, or frequents the area within, a 50-mile radius of the facility; LBP-11-2, 73 NRC 28 (2011); LBP-11-6, 73 NRC 149 (2011)
mere potential exposure to minute doses of radiation within regulatory limits does not constitute a distinct and palpable injury on which standing can be founded; CLI-11-3, 73 NRC 613 (2011)
no proximity presumption applies in an import/export licensing case because petitioners have not shown that the import or export involves a significant source of radioactivity producing an obvious potential for offsite consequences; CLI-11-3, 73 NRC 613 (2011)
NRC generally applies traditional judicial standing concepts which require a showing that the individual has suffered or might suffer a concrete and particularized injury that is fairly traceable to the

challenged action and likely redressible by a favorable decision; LBP-11-13, 73 NRC 534 (2011); LBP-11-16, 73 NRC 645 (2011)
NRC is lenient in permitting pro se petitioners the opportunity to cure procedural defects in petitions to intervene regarding standing; LBP-11-13, 73 NRC 534 (2011)
NRC must provide a hearing upon the request of any person whose interest may be affected by the proceeding; LBP-11-6, 73 NRC 149 (2011)
petitioner must allege a concrete and particularized injury that is fairly traceable to the challenged action and likely to be redressed by a favorable decision; CLI-11-3, 73 NRC 613 (2011)
petitioner was allowed to clarify standing declarations by submitting revised declarations with its reply; LBP-11-13, 73 NRC 534 (2011)
petitioners must state their name, address, and telephone number, the nature of their right to be made a party, the nature and extent of their property, financial, or other interest in the proceeding, and the possible effect of any decision or order that may be issued in the proceeding on their interest; LBP-11-6, 73 NRC 149 (2011); LBP-11-16, 73 NRC 645 (2011)
the proximity presumption applies if petitioner has frequent contacts with the geographic zone of potential harm; LBP-11-13, 73 NRC 534 (2011)
the proximity presumption applies when an individual or organization, or an individual authorizing an organization to represent his or her interests seeks to establish its representational standing, resides within 50 miles of the proposed facility, or has frequent contacts with the area affected by the proposed facility; LBP-11-13, 73 NRC 534 (2011); LBP-11-16, 73 NRC 645 (2011)
the proximity presumption's rationale is that persons living within the roughly 50-mile radius of the facility face a realistic threat of harm if a release from the facility of radioactive material were to occur; LBP-11-2, 73 NRC 28 (2011); LBP-11-13, 73 NRC 534 (2011)
to participate in a proceeding as an intervenor, petitioner must establish standing and proffer at least one admissible contention; LBP-11-6, 73 NRC 149 (2011); LBP-11-13, 73 NRC 534 (2011)
where a municipality seeks to participate in a reactor licensing proceeding that does not involve a facility within the municipality's boundaries, it can, for purposes of establishing standing, rely on the 50-mile proximity presumption to the same extent as an individual or an organization; LBP-11-6, 73 NRC 149 (2011)
STANDING TO INTERVENE, ORGANIZATIONAL
a governmental body's interest in protecting the individuals and territory that fall under that body's authority establishes an organizational interest for standing purposes; LBP-11-6, 73 NRC 149 (2011)
an association has standing to bring suit on behalf of its members when its members would otherwise have standing to sue in their own right, the interests at stake are germane to the organization's purpose, and neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit; LBP-11-2, 73 NRC 28 (2011); LBP-11-6, 73 NRC 149 (2011)
an organization may base its standing on immediate or threatened injury to its organizational interests; CLI-11-3, 73 NRC 613 (2011)
an organization may derive standing from a member if the organization demonstrates that the individual member has standing to participate and has authorized the organization to represent his or her interests; CLI-11-3, 73 NRC 613 (2011)
an organization may establish organizational standing; LBP-11-6, 73 NRC 149 (2011)
an organization that seeks to intervene in a representative capacity must show that the interests it seeks to protect are germane to its own purpose, identify, by name and address at least one member who qualifies for standing in his or her own right, and show that it is authorized by that member to request a hearing on his or her behalf; LBP-11-13, 73 NRC 534 (2011)
an organization's standing can be demonstrated through the interests of its members, but if a member acts or speaks on behalf of the organization, that member must also demonstrate authorization by that organization to represent it; LBP-11-13, 73 NRC 534 (2011)
mere interest in a problem is not sufficient by itself to render the organization adversely affected or aggrieved within the meaning of the Administrative Procedure Act; CLI-11-3, 73 NRC 613 (2011)
petitioners' claims of potential injury are also so speculative, and separate from the import and export license, that they do not amount to cognizable harm for purposes of standing; CLI-11-3, 73 NRC 613 (2011)

petitioners' generalized institutional interest in public forums and in preventing processing of foreign waste is insufficient to confer standing; CLI-11-3, 73 NRC 613 (2011)
STANDING TO INTERVENE, REPRESENTATIONAL
although an allegation that a purported representative is acting without his or her organization's authorization, i.e., is acting *ultra vires*, is distinct from a challenge to the organization's standing, petitioner may cure such a defect in representation as well; LBP-11-13, 73 NRC 534 (2011)
an association has standing to bring suit on behalf of its members when its members would otherwise have standing to sue in their own right, the interests at stake are germane to the organization's purpose, and neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit; LBP-11-2, 73 NRC 28 (2011); LBP-11-6, 73 NRC 149 (2011)
an individual may not intervene in his or her own right while simultaneously being represented by another petitioner in the same proceeding; LBP-11-13, 73 NRC 534 (2011)
an organization must show that at least one of its members might be affected by the proceeding, identify that member by name and address, and show that the member has authorized the organization to represent him or her and to request a hearing on his or her behalf; LBP-11-6, 73 NRC 149 (2011); LBP-11-13, 73 NRC 534 (2011); LBP-11-16, 73 NRC 645 (2011)
authority of an officer or attorney to sign a petition is distinguished from an authorization addressed to the organization's standing to intervene; LBP-11-13, 73 NRC 534 (2011)
even if there are no objections to petitioners' representational standing, boards have an independent obligation to determine whether they have adequately demonstrated standing; LBP-11-2, 73 NRC 28 (2011)
in determining whether an individual member of an organization qualifies for standing in his or her own right, NRC generally applies traditional judicial standing concepts; LBP-11-13, 73 NRC 534 (2011)
interests a municipality seeks to represent on behalf of its residents are germane to its own purposes in the context of standing; LBP-11-6, 73 NRC 149 (2011)
neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit; LBP-11-13, 73 NRC 534 (2011)
STATE GOVERNMENT
during a nuclear emergency in the United States, the individual licensee and the appropriate state and local government officials have direct responsibilities for the coordinated response to the event; LBP-11-15, 73 NRC 629 (2011)
STATE REGULATORY REQUIREMENTS
adoption of building code rules by a state presents new and materially different information not previously available, upon which intervenors may rest their proposed contention; LBP-11-7, 73 NRC 254 (2011)
comments and questions generated by a state agency that is examining a state application to determine compliance with state legal and technical standards do not, in and of themselves, demonstrate a material deficiency in applicant's combined license application; LBP-11-6, 73 NRC 149 (2011)
NRC Staff's reference to, and reliance in its draft environmental impact statement on, state issuance of a site certification order and associated certificate of compliance on groundwater use does not dispense with NRC's duty under NEPA to conduct an independent hard look at environmental impacts related to active dewatering during operations at a nuclear plant; LBP-11-1, 73 NRC 19 (2011)
promulgation of state regulations falls within the broad reach 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-11-7, 73 NRC 254 (2011)
the state agency's 6-month review period of an applicant's consistency certification begins on the date the state agency receives the consistency certification; LBP-11-16, 73 NRC 645 (2011)
where implementation of a building code could not make a difference in the outcome of the proceeding, it cannot be material; LBP-11-7, 73 NRC 254 (2011)
STATUTORY CONSTRUCTION
"incur" within the context of Equal Access to Justice Act means that an individual who is a prevailing party meeting the financial qualification of the EAJA is ineligible to receive an EAJA award when that individual was not responsible for the costs of the attorney's fees; LBP-11-8, 73 NRC 349 (2011)
it remains open to Congress to consider whether a ruling comports with actual legislative intent and, if appropriate, to enact clarifying legislation that, consistent with legislative history, mandates

Administrative Procedure Act § 554 hearings in Atomic Energy Act enforcement proceedings; LBP-11-8, 73 NRC 349 (2011)
only in rare cases does legislative history overcome the strong presumption that the legislative purpose is expressed by the ordinary meaning of the statutory language; LBP-11-8, 73 NRC 349 (2011)
STRIKING TESTIMONY
boards may on motion or on their own initiative strike any portion of a written presentation that is unreliable; LBP-11-14, 73 NRC 591 (2011)
SUA SPONTE ISSUES
boards are not to proceed with sua sponte issues absent the Commission's approval; LBP-11-9, 73 NRC 391 (2011)
boards' authority to seek to trigger review in extraordinary circumstances remains and has been put to good use; LBP-11-9, 73 NRC 391 (2011)
boards have limited authority to consider matters in addition to those properly put into controversy by the parties; LBP-11-9, 73 NRC 391 (2011)
boards may consider any matter, but only to the extent that the board determines that a serious safety, environmental, or common defense and security matter exists, and the Commission approves of an examination of and decision on the matter upon its referral by the board; LBP-11-9, 73 NRC 391 (2011)
referring serious safety, environmental, or common defense and security matter to the Staff for resolution is not an adequate solution; LBP-11-9, 73 NRC 391 (2011)
requesting authorization from the Commission for the board, on its own motion, to examine and decide the serious safety or common defense and security matters underlying contentions is allowed to be used for matters that were initially raised by a party, where that party later withdrew; LBP-11-9, 73 NRC 391 (2011)
SUBPART G PROCEDURES
licensing boards are to apply the same standards for granting or denying summary disposition that are set forth in section 2.710; LBP-11-4, 73 NRC 91 (2011); LBP-11-7, 73 NRC 254 (2011)
petitioner must demonstrate by reference to the contention and its bases and the specific procedures in Subpart G that resolving the contention will require resolution of material issues of fact that may be best determined through use of the identified procedures; LBP-11-2, 73 NRC 28 (2011)
the presiding officer must determine by order that a contested matter necessitates resolution of a material issue of fact relating to a past activity where the credibility of an eyewitness and/or issues of motive or intent of the party or eyewitness material to the resolution of the contested matter may reasonably be expected to be at issue; LBP-11-6, 73 NRC 149 (2011)
the relatively formal procedures in Subpart G of Part 2 govern where the credibility of an eyewitness may reasonably be expected to be at issue and/or issues of motive or intent of the party or eyewitness material to the resolution of the contested matter; LBP-11-2, 73 NRC 28 (2011); LBP-11-16, 73 NRC 645 (2011)
SUBPART L PROCEDURES
in the absence of any assertion that Subpart G procedures should be used to resolve any of the admitted contentions, the Subpart L hearing procedures will be used to adjudicate each admitted contention; LBP-11-2, 73 NRC 28 (2011)
informal hearing procedures will ordinarily be used in proceedings for the grant, renewal, licensee-initiated amendment, or termination of licenses or permits; LBP-11-6, 73 NRC 149 (2011); LBP-11-16, 73 NRC 645 (2011)
SUBPART L PROCEEDINGS
licensing boards are to apply the same standards for granting or denying summary disposition as would be applied in proceedings conducted under Subpart G, which are set forth in section 2.710; LBP-11-7, 73 NRC 254 (2011); LBP-11-14, 73 NRC 591 (2011)
SUBSTANTIAL JUSTIFICATION STANDARD
a prevailing party is not entitled to an award for attorneys' fees and expenses if the position of the Commission over which the applicant has prevailed was substantially justified; LBP-11-8, 73 NRC 349 (2011)

although a court's merits reasoning may be quite relevant to the resolution of the substantial justification question, the inquiry into the reasonableness of the government's position may not be collapsed into an antecedent evaluation of the merits; LBP-11-8, 73 NRC 349 (2011)

Congress did not want the "substantially justified" standard to be read to raise a presumption that the government position was not substantially justified simply because it lost the case; LBP-11-8, 73 NRC 349 (2011)

for the purposes of the Equal Access to Justice Act, the government's position should be considered substantially justified if a reasonable person could think it correct, that is, if it has a reasonable basis in law and fact; LBP-11-8, 73 NRC 349 (2011)

in determining whether the government's position was substantially justified, courts must look to the totality of the circumstances; LBP-11-8, 73 NRC 349 (2011)

in determining whether the government's position was substantially justified, the board does not make separate determinations regarding each stage but arrives at one conclusion that simultaneously encompasses and accommodates the entire civil action; LBP-11-8, 73 NRC 349 (2011)

justification "in substance or in the main" is equated with the "reasonable basis both in law and fact" standard that has been applied by a majority of federal appellate courts; LBP-11-8, 73 NRC 349 (2011)

reasonableness, the legal standard governing the determination of substantial justification, is separate and distinct from the legal standard used in assessing the merits phase of a proceeding; LBP-11-8, 73 NRC 349 (2011)

the board's determination of whether the government's position was substantially justified is made on the basis of the written record and oral argument; LBP-11-8, 73 NRC 349 (2011)

the fact that one other court agreed or disagreed with the government does not establish whether its position was substantially justified; LBP-11-8, 73 NRC 349 (2011)

the government must demonstrate the reasonableness not only of its litigation position, but also of the agency's actions; LBP-11-8, 73 NRC 349 (2011)

under the Equal Access to Justice Act, the government bears the burden of establishing that its position was substantially justified; LBP-11-8, 73 NRC 349 (2011)

SUMMARY DISPOSITION

all material facts set forth in the statement required to be served by movant will be considered to be admitted unless controverted by the statement required to be served by the opposing party; LBP-11-4, 73 NRC 91 (2011)

although it is risky for a nonmoving party to fail to proffer evidence in response to the summary judgment movant's showing, such a failure does not automatically mandate granting of the motion; LBP-11-4, 73 NRC 91 (2011)

any doubt as to the existence of a genuine issue of material fact is resolved against the movant; LBP-11-4, 73 NRC 91 (2011)

at issue is not whether evidence unmistakably favors one side or the other, but whether there is sufficient evidence favoring the summary disposition opponent for a reasonable trier of fact to find in favor of that party; LBP-11-4, 73 NRC 91 (2011)

because the initial burden rests on summary disposition movant, a licensing board must examine the record in the light most favorable to the nonmoving party and all justifiable inferences must be drawn in favor of that party; LBP-11-14, 73 NRC 591 (2011)

board refused to consider new bases that were included in an answer to summary disposition motion and were outside the scope of the original contention; LBP-11-4, 73 NRC 91 (2011)

caution should be exercised in granting summary disposition, which may be denied if there is reason to believe that the better course would be to proceed to a full hearing; LBP-11-7, 73 NRC 254 (2011)

complex, fact-intensive issues are rarely appropriate for summary disposition, much less for resolution on the initial pleadings; LBP-11-2, 73 NRC 28 (2011)

if evidence in favor of the summary disposition opponent is merely colorable or not significantly probative, summary disposition may be granted; LBP-11-4, 73 NRC 91 (2011)

if movant discusses a matter in its statement of undisputed facts, the board may view with skepticism any later argument by that movant that a response regarding that issue is outside the scope of the contention, particularly given the onus that is placed on an opposing party to respond to such a statement; LBP-11-4, 73 NRC 91 (2011)

if movant fails to make the requisite showing to satisfy that initial burden, then the board must deny the motion even if the opposing party chooses not to respond or its response is inadequate; LBP-11-4, 73 NRC 91 (2011); LBP-11-14, 73 NRC 591 (2011)
if movant makes a proper showing, and if the opposing party does not show that a genuine issue of material fact exists, the board may summarily dispose of all arguments on the basis of the pleadings; LBP-11-4, 73 NRC 91 (2011)
if movant meets its burden, the nonmoving party must counter each adequately supported material fact with its own statement of material facts in dispute and supporting documentation and cannot rely on mere allegations or denials, or the facts in controversy will be deemed admitted; LBP-11-14, 73 NRC 591 (2011)
if movant meets its burden, then and only then is the nonmoving party required to proffer evidence that contradicts the moving party's showing and that proves the existence of a genuine issue of material fact; LBP-11-4, 73 NRC 91 (2011)
if no genuine dispute remains, then the board may dispose of all arguments based on the pleadings; LBP-11-7, 73 NRC 254 (2011)
if reasonable minds could differ as to the import of the evidence, summary disposition is not appropriate; LBP-11-14, 73 NRC 591 (2011)
if summary disposition proponent meets its burden, the party opposing the motion must set forth specific facts showing that there is a genuine issue, and may not rely on mere allegations or denials, but no defense to an insufficient showing is required; LBP-11-7, 73 NRC 254 (2011)
if the question is a close one, boards must, in considering summary disposition opponent's submission, carefully ascertain whether any factual disputes asserted are genuine and relate to issues that would affect the outcome of the proceeding under relevant substantive law; LBP-11-4, 73 NRC 91 (2011)
in applying the summary disposition standard, it is appropriate for the board to look not only to NRC regulatory and case law, but also to federal court case law on summary judgment under Rule 56 of the Federal Rules of Civil Procedure; LBP-11-4, 73 NRC 91 (2011)
in assessing whether movant has met his or her burden, a court must view all inferences to be drawn from underlying facts in the light most favorable to the party opposing the motion; LBP-11-4, 73 NRC 91 (2011)
in establishing the evidentiary standard of "relevant, material, and reliable evidence" being admissible in a hearing, 10 C.F.R. 2.337 thereby establishes the right of all parties to present such admissible evidence; LBP-11-4, 73 NRC 91 (2011)
in ruling on a motion for summary disposition, boards apply the standards of Subpart G, which are set forth in section 2.710; LBP-11-4, 73 NRC 91 (2011); LBP-11-7, 73 NRC 254 (2011)
in Subpart L proceedings, licensing boards must apply the summary disposition standard for Subpart G proceedings; LBP-11-14, 73 NRC 591 (2011)
in upholding summary disposition in a proceeding to enforce a suspension order, the Commission ruled that the hearsay nature of a witness's statement did not preclude the licensing board from considering it, at least in the absence of evidence questioning its reliability; LBP-11-14, 73 NRC 591 (2011)
it is not appropriate for boards to untangle the expert affidavits and decide which experts are more correct; LBP-11-7, 73 NRC 254 (2011); LBP-11-14, 73 NRC 591 (2011)
like summary judgment, summary disposition is an extreme remedy that should be granted with caution especially before the parties have been afforded an opportunity to marshal their evidence; LBP-11-7, 73 NRC 254 (2011)
motions should be granted if filings in the proceeding, depositions, answers to interrogatories, and admissions on file, together with statements of parties and affidavits 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-11-4, 73 NRC 91 (2011); LBP-11-7, 73 NRC 254 (2011); LBP-11-14, 73 NRC 591 (2011)
movant bears the burden of demonstrating that there is no genuine issue as to any material fact and that it is entitled to a decision in its favor; LBP-11-4, 73 NRC 91 (2011); LBP-11-14, 73 NRC 591 (2011)
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no defense to an insufficient showing by summary disposition proponent is required; LBP-11-14, 73 NRC 591 (2011)

NRC standards for ruling on summary disposition motions are analogous to the standards for granting summary judgment motions under Rule 56 of the Federal Rules of Civil Procedure; LBP-11-7, 73 NRC 254 (2011); LBP-11-14, 73 NRC 591 (2011)
only disputes over facts that might affect the outcome of a proceeding would preclude summary disposition; LBP-11-4, 73 NRC 91 (2011)
opponent may not rest upon mere allegations or denials, but must state specific facts showing that there is a genuine issue of fact for hearing; LBP-11-4, 73 NRC 91 (2011)
opponent of a summary disposition motion may not raise distinctly new asserted deficiencies; LBP-11-4, 73 NRC 91 (2011)
the judge's function is not to weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for hearing; LBP-11-14, 73 NRC 591 (2011)
the proper method for raising an issue addressed in a motion to strike is to seek leave to file a reply in support of the summary disposition motion; LBP-11-14, 73 NRC 591 (2011)
the record must show movant's right to summary judgment with such clarity as to leave no room for controversy, and must demonstrate that his opponent would not be entitled to prevail under any discernible circumstances; LBP-11-4, 73 NRC 91 (2011)
to justify reopening the record, the moving papers must be strong enough, in the light of any opposing filings, to avoid summary disposition; CLI-11-2, 73 NRC 333 (2011)
when presented with conflicting expert opinions, licensing boards should be mindful that summary disposition is rarely proper; LBP-11-7, 73 NRC 254 (2011)
when the issue on which summary judgment is sought is one on which the nonmoving party bears the burden of proof, the burden on the moving party may be discharged by showing that there is an absence of evidence to support the nonmoving party's case; LBP-11-4, 73 NRC 91 (2011)
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NRC standards for ruling on summary disposition motions are analogous to the standards for granting summary judgment motions under Rule 56 of the Federal Rules of Civil Procedure; LBP-11-7, 73 NRC 254 (2011); LBP-11-14, 73 NRC 591 (2011)
summary disposition, like summary judgment, is an extreme remedy that should be granted with caution especially before the parties have been afforded an opportunity to marshal their evidence; LBP-11-7, 73 NRC 254 (2011)
summary judgment, which is appropriate upon proper showings of the lack of a genuine, triable issue of material fact, is an integral part of the Federal Rules as a whole, which are designed to secure the just, speedy, and inexpensive determination of every action; LBP-11-4, 73 NRC 91 (2011)
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because the application for a uranium enrichment facility is governed by AEA §§ 53 and 63, 42 U.S.C. § 2073, 2093, foreign ownership and control issues would be evaluated under sections 57 and 69; LBP-11-11, 73 NRC 455 (2011)

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NRC has a clear statutory mandate to regulate the construction and operation of a uranium enrichment facility; LBP-11-11, 73 NRC 455 (2011)

NRC may deny applicant a license based on foreign ownership, control, or domination concerns to the extent it concludes granting such a license would be inimical to the common defense and security or the health and safety of the public; LBP-11-11, 73 NRC 455 (2011)

process designs should be described in a level of detail in the integrated safety analysis that is sufficient to allow a Staff reviewer to understand the theory of operation for the process; LBP-11-11, 73 NRC 455 (2011)

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there is no NRC requirement that applicant submit a redress plan relative to preconstruction activities or, absent state or local requirements, take any remedial action regarding preconstruction activities if it decides not to complete the project or is denied agency authorization to construct and operate the facility; LBP-11-11, 73 NRC 455 (2011)
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the board's role in mandatory hearings is to carefully probe Staff findings by asking appropriate questions and by requiring supplemental information when necessary, but the 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-11-11, 73 NRC 455 (2011)
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to show that it is within the realm of reason that the federal government may assert an implied water right, petitioner must provide some indicia of an attempt, plan, or intention; LBP-11-16, 73 NRC 645 (2011)
WETLANDS
intervenors' challenges to adequacy of applicant's environmental report with respect to environmental impacts of dewatering associated with the proposed nuclear plant continue to serve as viable challenges to similar sections of Staff's draft environmental impact statement and thus are not moot; LBP-11-1, 73 NRC 19 (2011)
WILDFIRES
credibility of hazard to uranium enrichment facility is discussed; LBP-11-11, 73 NRC 455 (2011)
WIND POWER
because a solely wind- or solar-powered facility could not satisfy the projects purpose, there was no need to compare the impact of such facilities to the impact of the proposed nuclear plant; LBP-11-7, 73 NRC 254 (2011)
WITNESSES
findings concerning personal knowledge are entirely factual and largely dependent on witness credibility; LBP-11-8, 73 NRC 349 (2011)
WITNESSES, EXPERT
a conclusory assertion, even if made by an expert, is inadequate because it deprives the board of the ability to make the necessary, reflective assessment of the opinion; LBP-11-6, 73 NRC 149 (2011)
intervenors have demonstrated their ability to contribute to the development of a sound record where they have put forward in support of those contentions the views of a witness whose expertise has been recognized in other NRC proceedings; LBP-11-9, 73 NRC 391 (2011)
summary disposition is particularly inappropriate when a licensing board is presented with conflicting expert testimony, for at that stage of a proceeding it is not the role of licensing boards to untangle the expert affidavits and decide which experts are more correct; LBP-11-14, 73 NRC 591 (2011)
ZERO PRESSURE BOUNDARY
request for enforcement action to prevent reactor restart until applicable adequate protection standards regarding zero pressure boundary leakage and operation of the reactor have been met is denied; DD-11-2, 73 NRC 323 (2011)

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COMBINED LICENSE; February 24, 2011; MEMORANDUM AND ORDER (Ruling on Motion for Summary Disposition of Contention 18 and Alternatives Contention A); LBP-11-4, 73 NRC 91 (2011)
DAVIS-BESSE NUCLEAR POWER STATION, Unit 1; Docket No. 50-346
LICENSE RENEWAL; LICENSE RENEWAL; April 26, 2011; MEMORANDUM AND ORDER (Ruling on Petition to Intervene and Request for Hearing); LBP-11-13, 73 NRC 534 (2011)
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