

**NUCLEAR REGULATORY COMMISSION  
ISSUANCES**

**OPINIONS AND DECISIONS OF THE  
NUCLEAR REGULATORY COMMISSION  
WITH SELECTED ORDERS**

July 1, 2006 – December 31, 2006

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## PREFACE

This is the sixty-fourth volume of issuances (1–499) of the Nuclear Regulatory Commission and its Atomic Safety and Licensing Boards, Administrative Law Judges, and Office Directors. It covers the period from July 1, 2006, to December 31, 2006.

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

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

On June 29, 1990, however, the Commission voted to abolish the Atomic Safety and Licensing Appeal Panel, and the Panel ceased to exist as of June 30, 1991. Since then, the Commission itself reviews Licensing Board and other adjudicatory decisions, as a matter of discretion. *See* 56 Fed. 29 & 403 (1991).

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

The hardbound edition of the Nuclear Regulatory Commission Issuances is a final compilation of the monthly issuances. It includes all of the legal precedents for the agency within a six-month period. Any opinions, decisions, denials, memoranda and orders of the Commission inadvertently omitted from the monthly softbounds and any corrections submitted by the NRC legal staff to the printed softbound issuances are contained in the hardbound edition. Cross references in the text and indexes are to the NRCI page numbers which are the same as the page numbers in this publication.

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

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

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**COMMISSIONERS:**

**Dale E. Klein**, Chairman  
**Edward McGaffigan, Jr.**  
**Jeffrey S. Merrifield**  
**Gregory B. Jaczko**  
**Peter B. Lyons**

**In the Matter of**

**Docket No. 30-36974-ML**  
**(Materials License Application)**

**PA'INA HAWAII, LLC**

**July 26, 2006**

**RULES OF PRACTICE: INTERLOCUTORY REVIEW**

The Commission's rules allow discretionary interlocutory review only when a licensing board certifies a ruling or refers a question, or when an interlocutory board ruling creates "immediate and serious irreparable impact" or "affects the basic structure of the proceeding in a pervasive or unusual manner. 10 C.F.R. § 2.341(f)(1), (f)(2)(i) & (ii).

**RULES OF PRACTICE: INTERLOCUTORY REVIEW**

Settling some but not all contentions is a routine feature of NRC litigation; it does not affect the proceeding in a pervasive or unusual manner.

**RULES OF PRACTICE: APPEALS**

"[A] licensing board's [order] is final for appellate purposes where it either disposes of at least a major segment of the case or terminates a party's right to participate; rulings which do neither are interlocutory." *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-731, 17 NRC 1073, 1074 (1983), and cited authority.

**RULES OF PRACTICE: SETTLEMENTS**

The burden of a settlement with an intervenor regarding NEPA issues falls on the NRC Staff (*Wetlands Action Network v. Army Corps of Engineers*, 222 F.3d 1105, 1114 (9th Cir. 2000), *cert. denied*, 534 U.S. 815 (2001)), and thus does not compromise Pa'ina's hearing rights. It is the NRC, not licensee, that has the legal duty to perform a NEPA analysis and to issue appropriate NEPA documents. *See id.* *See also USEC Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 474 & n.144 (2006), citing 10 C.F.R. § 51.41. The Licensee complains about the resulting “extra expense [and] work,” the “procedural delays,” and the “greater uncertainty” associated with the purported bifurcation of this proceeding into an “EA track with a public meeting many months in the future” and “an evidentiary, trial-type hearing with expert opinions on the non-environmental contentions.” But these are normal accoutrements of any hearing process involving NEPA. License applicants at the NRC assume the risk of imposition of these additional burdens. *See generally Consolidated Edison Co. of New York* (Indian Point, Units 1 and 2), CLI-01-8, 53 NRC 225, 229 (2001) (observing, albeit in another context, that “litigation inevitably results in the parties’ loss of both time and money”).

**RULES OF PRACTICE: SETTLEMENTS**

Third parties have no absolute right to veto settlements that the agreeing parties find to their advantage.

**RULES OF PRACTICE: SETTLEMENTS**

Settlements that are presumably based on an analysis of litigation risk and optimum use of the NRC Staff's scarce resources are commonplace in litigation and have, in the past, received our approval. *Sequoyah Fuels Corp.* (Gore, Oklahoma Site), CLI-97-13, 46 NRC 195, 207-11 (1997).

**RULES OF PRACTICE: SETTLEMENTS**

The Commission has a longstanding policy of supporting settlements. 10 C.F.R. § 2.338. *See also Sequoyah Fuels Corp.*, CLI-97-13, 46 NRC at 205.

**RULES OF PRACTICE: SETTLEMENTS**

Administrative agencies and their adjudicators routinely approve stipulations and settlements to which fewer than all the parties in a case subscribe. We have done so ourselves, albeit in the enforcement context. *Sequoyah Fuels*, CLI-97-13, 46 NRC at 222-23. Indeed, our own regulations contemplate just such a possibility

— requiring only “the consenting parties” to file the settlement with the board. 10 C.F.R. § 2.338(g).

## MEMORANDUM AND ORDER

This adjudicatory proceeding stems from Pa’ina Hawaii, LLC’s (“Pa’ina”) application for a materials license to construct and operate an industrial irradiator at the Honolulu International Airport. On April 27, 2006, the Atomic Safety and Licensing Board (“Board”) issued an unpublished Order<sup>1</sup> accepting a Joint Stipulation of the NRC Staff and Intervenor Concerned Citizens of Honolulu settling two environmental contentions previously admitted for adjudication.<sup>2</sup> The Joint Stipulation provided that the two environmental contentions would be dismissed, that the NRC Staff would prepare an Environmental Assessment (EA) regarding those two contentions, and that the Intervenor reserved its right to file additional contentions challenging the adequacy of the Staff’s EA if the Staff were to issue a Finding of No Significant Impact (FONSI).<sup>3</sup>

On May 8th, Pa’ina filed a pleading which it entitled an “Appeal” of the Board’s April 27th Order.<sup>4</sup> Pa’ina’s “Appeal” asserts that the Staff should not be required to prepare an EA prior to (i) the conclusion of an evidentiary hearing on the two environmental contentions (Nos. 1 and 2) and also on a related safety contention (No. 7), and (ii) the Board’s subsequent issuance of findings of fact and conclusions of law.<sup>5</sup> Pa’ina characterizes the April 27th Order as “impos[ing] the EA process on Pa’ina,”<sup>6</sup> “grant[ing] summary judgment against Pa’ina on the two contentions, without notice, without any factual development, and without proper

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<sup>1</sup>Order (Confirming Oral Ruling Granting Motion To Dismiss Contentions) (Apr. 27, 2006), ADAMS Accession No. ML061170190 (“April 27th Order”). ADAMS is the acronym for the NRC’s Agencywide Documents Access and Management System, which is publicly accessible through the NRC’s Web page at <http://www.nrc.gov>.

<sup>2</sup>See LBP-06-4, 63 NRC 99 (2006). The Intervenor, in its first environmental contention, asserts that the NRC Staff failed to justify sufficiently its invocation of a categorical exclusion for Pa’ina’s proposed irradiator. In the second contention, the Intervenor argues that special circumstances (i.e., natural phenomena (hurricanes and tsunamis) and airplane crashes) require an environmental assessment or an environmental impact statement for Pa’ina’s proposed irradiator.

<sup>3</sup>NRC Staff and Concerned Citizens of Honolulu Joint Motion To Dismiss Environmental Contentions (Mar. 20, 2006) (“Joint Motion”), and Joint Stipulation attached thereto.

<sup>4</sup>Applicant Pa’ina Hawaii, LLC’s Notice of Appeal of [Board’s] April 27, 2006 Order and Accompanying Brief (“Appeal”).

<sup>5</sup>Appeal at 5.

<sup>6</sup>*Id.* See also *id.* at 11.

conclusions of law,”<sup>7</sup> and “government by *fiat*.”<sup>8</sup> Pa’ina therefore requests that the Commission vacate the Board’s approval of the settlement and also dismiss with prejudice the three contentions referenced above. Both the Intervenor and the NRC Staff oppose Pa’ina’s challenge.<sup>9</sup>

Our procedural rules grant Pa’ina no right to appeal interlocutory orders.<sup>10</sup> Thus, we treat Pa’ina’s “Appeal” instead as a petition for discretionary interlocutory review under 10 C.F.R. § 2.341(f). Because Pa’ina’s “Appeal” does not satisfy our interlocutory review standards and, in addition, lacks merit, we deny it.

## I. DISCUSSION

### A. Petition for Discretionary Interlocutory Review

Our rules allow discretionary interlocutory review only when a licensing board certifies a ruling or refers a question, or when an interlocutory board ruling creates “immediate and serious irreparable impact” or “affects the basic structure of the proceeding in a pervasive or unusual manner.”<sup>11</sup> Here, Pa’ina’s appeal meets none of these conditions. Pa’ina itself does not maintain otherwise.<sup>12</sup> The Board has not certified or referred anything; settling NEPA claims and eliminating the need for the hearing on those issues hardly amount to “immediate and serious irreparable” harm to Pa’ina; and settling some but not all contentions is a routine feature of NRC litigation — it does not affect the proceeding in a “pervasive or unusual manner.” Given this information, it is clear that Pa’ina’s “Appeal” fails to satisfy the criteria for interlocutory review.

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<sup>7</sup> *Id.* at 12.

<sup>8</sup> *Id.* at 6.

<sup>9</sup> Intervenor Concerned Citizens of Honolulu’s Opposition to Applicant Pa’ina Hawaii, LLC’s Appeal of [Board]’s April 27, 2006 Order (May 18, 2006) (“Intervenor Opposition”); NRC Staff’s Opposition to Applicant Pa’ina Hawaii, LLC’s Brief in Support of Appeal from [Board] Order dated April 27, 2006 (May 19, 2006) (“Staff Opposition”).

<sup>10</sup> “[A] licensing board’s [order] is final for appellate purposes where it either disposes of at least a major segment of the case or terminates a party’s right to participate; rulings which do neither are interlocutory.” *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-731, 17 NRC 1073, 1074 (1983), and cited authority. The April 27th Order does neither. *See also* 10 C.F.R. § 2.311.

<sup>11</sup> 10 C.F.R. § 2.341(f)(1), (f)(2)(i) & (ii).

<sup>12</sup> Pa’ina mistakenly believes that its “Appeal” is governed solely by 10 C.F.R. § 2.341(b)(4). *See* Appeal at 7-8. That rule sets forth the standards we apply when considering petitions for review of [a] “full or partial initial decision[s].” 10 C.F.R. § 2.341(b)(1). Section 2.341(b)(4) does *not* establish a right to petition for review of interlocutory orders such as the April 27th Order.

## **B. *De Facto* Petition for Reconsideration of CLI-06-13**

Pa'ina's request that we dismiss with prejudice the three contentions cited above is, in effect, an attempt to indirectly seek reconsideration of our May 15, 2006 decision, CLI-06-13, denying Pa'ina's first interlocutory appeal — where we held that we would not review contention admissibility questions at that time.<sup>13</sup> We deny this *de facto* petition because it does not satisfy our procedural and substantive requirements governing requests for reconsideration.<sup>14</sup> We see no reason to revisit our routine decision in CLI-06-13 not to entertain, prematurely, challenges to contention admissibility decisions.

## **C. Intervenor-NRC Staff Settlement of NEPA Contentions**

Pa'ina's "Appeal" fails not only on procedural grounds but on substantive grounds as well. We disagree with Pa'ina's fundamental premise that the Board's approval of the settlement between Concerned Citizens and the NRC Staff unfairly or unlawfully "impose[s]" the EA process (or anything else) on Pa'ina.<sup>15</sup> The burden of the settlement (and of the associated Joint Stipulation) falls on the NRC Staff,<sup>16</sup> and thus does not compromise *Pa'ina's* hearing rights. It is the NRC, not Pa'ina, that has the legal duty to perform a NEPA analysis and to issue appropriate NEPA documents (such as an EA).<sup>17</sup> Pa'ina complains about the "extra expense [and] work," the "procedural delays" and the "greater uncertainty" associated with the purported bifurcation of this proceeding into an "EA track with a public meeting many months in the future" and "an evidentiary, trial-type hearing with expert opinions on the non-environmental contentions."<sup>18</sup> But these are normal accoutrements of any hearing process involving NEPA. License applicants at the NRC assume the risk of imposition of these additional burdens.<sup>19</sup>

Moreover, the delay about which Pa'ina complains appears to be short — at most about 3 months. During the settlement negotiations, the Intervenor offered to modify the Joint Stipulation in such a manner as to "provide assurances against

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<sup>13</sup> CLI-06-13, 63 NRC 508 (2006).

<sup>14</sup> 10 C.F.R. §§ 2.323(e), 2.341(d), and 2.345(a)(2) & (b).

<sup>15</sup> See Appeal at 5, 11.

<sup>16</sup> See *Wetlands Action Network v. Army Corps of Engineers*, 222 F.3d 1105, 1114 (9th Cir. 2000), *cert. denied*, 534 U.S. 815 (2001).

<sup>17</sup> See *id.* See also *USEC Inc. (American Centrifuge Plant)*, CLI-06-10, 63 NRC 451, 474 & n.144 (2006), citing 10 C.F.R. § 51.41.

<sup>18</sup> Appeal at 7. See also *id.* at 12-13.

<sup>19</sup> See generally *Consolidated Edison Co. of New York* (Indian Point, Units 1 and 2), CLI-01-8, 53 NRC 225, 229 (2001) (observing, albeit in another context, that "litigation inevitably results in the parties' loss of both time and money").

unnecessary delay and duplication of effort,”<sup>20</sup> and subsequently said it would agree to imposing a firm deadline of February 19, 2007, for completion of the Staff’s EA.<sup>21</sup> Ultimately, both the Intervenor and the NRC Staff presented the Board with a proposed schedule that memorialized the February 19th date.<sup>22</sup> The NRC Staff has estimated that, even without an EA, it would still need until October 24, 2006, to complete its environmental review.<sup>23</sup> By agreeing to prepare an EA by February 19, the NRC Staff has extended the estimated review period by about 4 months (from October 24, 2006, to February 19, 2007), and delayed the hearing itself by just over 3 months (from May 21, 2007, to August 30, 2007). In the end, though, the settlement may result in expediting a final licensing decision because it takes two previously contested issues out of litigation. On balance, we see no reason to second-guess the NRC Staff’s (and the Intervenor’s) judgment — as well as the Licensing Board’s — that the settlement is sensible. Third parties — like Pa’ina — have no absolute right to veto settlements that the agreeing parties find to their advantage.

We disagree with Pa’ina’s objection that the settlement results in an impermissible dual-track proceeding.<sup>24</sup> The Board will conduct a *single hearing* following the completion of the NRC Staff’s EA — an approach fully consistent with our Model Milestones for informal hearings.<sup>25</sup> If this somehow constitutes “dual-tracking,” then we see no harm in it. In fact, all our licensing adjudications with environmental or safety issues would likewise so qualify, for each involves both the NRC Staff work — performance of separate environmental and safety reviews — and a Board hearing. Similarly, contested license transfer proceedings move simultaneously along both an adjudicatory and an administrative path.<sup>26</sup>

Finally we must take issue with Pa’ina’s complaint that the Joint Stipulation between the NRC Staff and the Intervenor was “secretly negotiated”<sup>27</sup> and that the Board’s action amounted to “government by *fiat*.”<sup>28</sup> We cannot accept Pa’ina’s implication that the negotiations between the Intervenor and the NRC Staff were improper. Parties engage in negotiations all the time. Such negotiations by their

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<sup>20</sup> Intervenor Concerned Citizens of Honolulu’s Response to Applicant’s Objections to Joint Stipulation and Order regarding Resolution of Concerned Citizens’ Environmental Contentions at 6 n.2 (Apr. 20, 2006).

<sup>21</sup> *Id.* at 6.

<sup>22</sup> See Letter from Margaret J. Bupp to the Board (Apr. 20, 2006), Attachment.

<sup>23</sup> See *id.*

<sup>24</sup> Appeal at 7. See also *id.* at 12-13.

<sup>25</sup> 10 C.F.R. Part 2, Appendix B, § II.

<sup>26</sup> See *Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station)*, CLI-00-17, 52 NRC 79, 82-83 (2000).

<sup>27</sup> Appeal at 4.

<sup>28</sup> *Id.* at 6.

very nature are almost invariably conducted in private. Moreover, parties seeking to settle all or part of an administrative proceeding often exclude other parties from the negotiations. We express no opinion on the NRC Staff's tactical decision in the negotiations to prepare an EA rather than continue to rely on a categorical exclusion provided for in our regulations. But we do observe that this kind of decision, presumably based on an analysis of litigation risk and optimum use of the NRC Staff's scarce resources, is commonplace in litigation and has, in the past, received our approval.<sup>29</sup> Our longstanding policy of encouraging settlements<sup>30</sup> adds further support to our decision to uphold the Board's acceptance of the Joint Stipulation stemming from the parties' negotiations. The settlement holds the promise of resolving two environmental issues without litigation.

As for Pa'ina's assertion regarding "government by fiat," we observe that administrative agencies and their adjudicators routinely approve stipulations and settlements to which fewer than all the parties in a case subscribe.<sup>31</sup> We have done so ourselves, albeit in the enforcement context.<sup>32</sup> Indeed, our own regulations contemplate just such a possibility — requiring only "the consenting parties" to file the settlement with the board.<sup>33</sup> Settlements of this kind do not offend the rights of an excluded party (like Pa'ina) — particularly where, as here, it has notice and an opportunity to comment on the approved stipulation.

Pa'ina had such notice and opportunity. The NRC Staff and the Intervenor negotiated for 2 weeks with Pa'ina on this issue<sup>34</sup> and offered to modify their Joint Stipulation so as "to provide assurances against unnecessary delay and duplication of effort"<sup>35</sup> about which Pa'ina had expressed concern. The Staff and the Intervenor also provided Pa'ina advance notice of their intent to file the Joint Stipulation,<sup>36</sup> and Pa'ina has repeatedly availed itself of the opportunity to object to that Stipulation.<sup>37</sup> Based on these facts, Pa'ina cannot plausibly claim unfairness or due process violations.

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<sup>29</sup> See, e.g., *Sequoyah Fuels Corp.* (Gore, Oklahoma Site), CLI-97-13, 46 NRC 195, 207-11 (1997).

<sup>30</sup> See 10 C.F.R. § 2.338. See also *Sequoyah Fuels Corp.*, CLI-97-13, 46 NRC at 205.

<sup>31</sup> See, e.g., *Maritimes & Northeast Pipeline, LLC*, 115 FERC P 61,176, ¶¶ 67-81, 2006 WL 1315789 at \*\*17-22 (FERC) (May 15, 2006).

<sup>32</sup> *Sequoyah Fuels*, CLI-97-13, 46 NRC at 222-23.

<sup>33</sup> 10 C.F.R. § 2.338(g).

<sup>34</sup> See Staff Opposition at 3, 6 n.8; Intervenor Opposition at 6 n.2.

<sup>35</sup> Intervenor Opposition at 6 n.2.

<sup>36</sup> See Joint Motion at 1.

<sup>37</sup> Applicant Pa'ina Hawaii, LLC's Objections to (1) Joint Stipulation and Order Regarding Resolution of Concerned Citizens' Environmental Contentions, and (2) Joint Motion To Dismiss Environmental Contentions (Mar. 29, 2006); Prehearing Teleconference (Apr. 26, 2006), Tr. at 29-35; Appeal, *passim*.

## II. CONCLUSION

The Commission *denies* both Pa'ina's "Appeal" of the Board's April 27th Order and Pa'ina's request for dismissal of the three admitted contentions.  
IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK  
Secretary of the Commission

Dated at Rockville, Maryland,  
this 26th day of July 2006.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**COMMISSIONERS:**

**Dale E. Klein, Chairman**  
**Edward McGaffigan, Jr.**  
**Jeffrey S. Merrifield**  
**Gregory B. Jaczko**  
**Peter B. Lyons**

**In the Matter of**

**Docket No. IA-05-052**

**DAVID GEISEN**

**July 26, 2006**

**RULES OF PRACTICE: APPEALS**

The Commission usually defers to boards' fact-based decisions. *Andrew Siemaszko*, CLI-06-12, 63 NRC 495, 501 & n.14 (2006).

**RULES OF PRACTICE: ABEYANCE**

**ENFORCEMENT PROCEEDINGS: ABEYANCE**

Given the Memorandum of Understanding (MOU) between the NRC and the U.S. Department of Justice regarding the potential need to hold NRC enforcement proceedings in abeyance pending the conclusion of DOJ's parallel criminal cases, the Commission is generally inclined to accommodate DOJ's abeyance requests. Memorandum of Understanding Between the Nuclear Regulatory Commission and the Department of Justice, 53 Fed. Reg. 50,317, 50,318 (§ II) (Dec. 14, 1988). But the MOU does *not* specify an ironclad guarantee of such accommodation. The MOU reflects a clear understanding that DOJ must provide factual justification for delaying our own adjudicatory process and for imposing on the enforcement target the additional financial, professional, emotional, and other burdens that perforce accompany a delay in the resolution of an enforcement proceeding. Indeed, the MOU expressly calls on DOJ to provide the NRC Staff with factual

support for an abeyance request — with “appropriate affidavits or testimony.” MOU, 53 Fed. Reg. at 50,319 (§ III.C.2).

## MEMORANDUM AND ORDER

The NRC Staff has filed with the Commission a petition for interlocutory review of a Licensing Board order<sup>1</sup> denying the Staff’s motion to hold this enforcement proceeding in abeyance pending the outcome of a parallel criminal proceeding against Mr. David Geisen.<sup>2</sup> We deny the Staff’s petition and affirm LBP-06-13.

### I. BACKGROUND

This proceeding stems from the NRC Staff’s enforcement order immediately suspending Mr. Geisen from performing any work in the nuclear industry for 5 years.<sup>3</sup> The Staff based its Enforcement Order on the finding that Mr. Geisen had engaged in deliberate misconduct by deliberately providing information that he knew was not complete or accurate in all material respects to the NRC, a violation of 10 C.F.R. § 50.5(a)(2).<sup>4</sup> Mr. Geisen timely requested a hearing on the enforcement order, a request the Board granted.<sup>5</sup>

At the same time that the NRC was conducting its investigation and considering enforcement action, the United States Department of Justice (“DOJ”) was investigating criminal charges against Mr. Geisen, based on the same set of facts as those underlying the Staff’s Enforcement Order. On January 19, 2006, DOJ obtained a felony indictment of Mr. Geisen from a Federal Grand Jury in the

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<sup>1</sup> LBP-06-13, 63 NRC 523 (2006).

<sup>2</sup> NRC Staff’s Petition for Interlocutory Review of Board’s Denial of Motion To Hold the Proceeding in Abeyance and for a Stay Pending Review (May 31, 2006) (“Staff’s Petition”). As the pleading’s title indicates, the NRC Staff simultaneously sought to stay the effectiveness of LBP-06-13. Today’s decision renders the Staff’s motion moot.

<sup>3</sup> See David Geisen; Order Prohibiting Involvement in NRC-Licensed Activities (Effective Immediately), 71 Fed. Reg. 2571 (Jan. 17, 2006) (“Enforcement Order”).

<sup>4</sup> *Id.* at 2575.

<sup>5</sup> Unpublished Memorandum and Order Summarizing Conference Call (Granting All Hearing Requests, Setting Oral Argument on Staff’s Abeyance Motion, and Addressing Related Matters), ADAMS Accession No. ML060860339, at 2 (Mar. 27, 2006) (“March 27 Order”). (“ADAMS” is the acronym for the NRC’s Agencywide Documents Access and Management System — a computerized storage and retrieval system for NRC documents, publicly accessible through the NRC’s Web page at <http://www.nrc.gov>.)

United States District Court for the Northern District of Ohio.<sup>6</sup> The indictment charged Mr. Geisen with concealing material information from the NRC and providing the NRC with false documents — crimes similar to the regulatory violations alleged in the Enforcement Order.

Given the similarity of the enforcement and criminal proceedings, DOJ asked the NRC Staff to request that the Board hold the enforcement case in abeyance, pending the conclusion of the criminal case. DOJ provided an affidavit from Mr. Thomas T. Ballantine (an attorney on DOJ's litigation team prosecuting Mr. Geisen) to support the requested motion.<sup>7</sup> The Staff filed the motion and affidavit, and the Board subsequently heard oral argument on the matter. On May 19, 2006, the Board issued LBP-06-13, denying the Staff's motion. The Staff submitted a Petition for Interlocutory Review of that order, Mr. Geisen filed a brief opposing the Staff's Petition, and the Staff then replied to Mr. Geisen's brief.

## II. DISCUSSION

The question whether to hold an NRC enforcement proceeding in abeyance pending a related criminal prosecution is generally suitable for interlocutory Commission review because, unlike most interlocutory questions, the abeyance issue cannot await the end of the proceeding (it becomes moot).<sup>8</sup> Hence we will consider the NRC Staff's petition for interlocutory review. But, "consistent with our usual deference to boards' fact-based decisions,"<sup>9</sup> we see no reason in the record before us to disturb the Board's carefully reasoned decision against holding this proceeding in abeyance. Like the Board, we consider this case to be quite different from our recent decision in the *Siemaszko* enforcement proceeding, where we affirmed the Board's decision holding the proceeding in abeyance.<sup>10</sup> We believe the *Geisen* Board was correct in finding that the harm to Mr. Geisen from delay outweighs the harm to DOJ from moving forward.<sup>11</sup>

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<sup>6</sup> *United States v. David Geisen*, Indictment, Case No. 3:06CR712 (N.D. Ohio Jan. 19, 2006), attached to Staff's Petition.

<sup>7</sup> Affidavit of Thomas T. Ballantine, Trial Attorney (Mar. 20, 2006) ("Ballantine Affidavit"), attached to Staff's Petition.

<sup>8</sup> See, e.g., *Andrew Siemaszko*, CLI-06-12, 63 NRC 495, 500 (2006); *Oncology Services Corp.*, CLI-93-13, 37 NRC 419, 420-21 (1993).

<sup>9</sup> See *Siemaszko*, CLI-06-12, 63 NRC at 501 & n.14.

<sup>10</sup> *Id.*, 63 NRC at 506.

<sup>11</sup> The legal standards governing hearing delays were extensively discussed by the board below. See LBP-06-13, 63 NRC at 534-44. As such, we need not repeat them here.

### **A. Harm to Mr. Geisen if the Motion for Abeyance Is Granted**

First, we consider how an abeyance order could harm Mr. Geisen, and how his potential harm differs from Mr. Siemaszko's. The answers are straightforward. Mr. Siemaszko's Enforcement Order was not immediately effective.<sup>12</sup> Mr. Geisen's was, and he lost his job as a direct result. Our regulations require that hearings regarding immediately effective enforcement orders be held expeditiously.<sup>13</sup>

Unlike Mr. Geisen, Mr. Siemaszko himself conceded that he was "effectively unemployable" in the nuclear industry due to his indictment by a Federal Grand Jury;<sup>14</sup> Mr. Siemaszko lost his job before issuance of the enforcement order of which he was the target.<sup>15</sup> By contrast, the Board noted that Mr. Geisen has been assured that his most recent nuclear employer would welcome the opportunity to discuss reemployment if the Commission's Enforcement Order is lifted.<sup>16</sup> This employment-related assurance came nearly a month *after* the Grand Jury Indictment, yet the assurance was premised solely on the lifting of the Commission's Enforcement Order, not on Mr. Geisen's winning the criminal proceeding. Hence, a direct causal nexus exists between the Enforcement Order and Mr. Geisen's firing — a nexus not present in Mr. Siemaszko's situation.

For these reasons, we agree with the Board that Mr. Geisen has a strong argument regarding harm from a delay of the enforcement proceeding — a key issue in any abeyance ruling in an NRC enforcement proceeding.<sup>17</sup>

### **B. Harm to DOJ if the Motion for Abeyance Is Denied**

DOJ's series of affidavits in *Siemaszko* — from Thomas Ballantine, a DOJ prosecutor — offered factual justifications for concluding that continuation of the NRC enforcement adjudication could at least arguably jeopardize the criminal proceeding<sup>18</sup> — a second key factor in any abeyance ruling in an NRC enforcement proceeding.<sup>19</sup> By contrast, Mr. Ballantine's single affidavit in *Geisen* does not include supporting facts — which, as we noted in *Siemaszko*, are essential in

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<sup>12</sup> *Id.*, 63 NRC at 531 n.5.

<sup>13</sup> 10 C.F.R. § 2.202(c)(1).

<sup>14</sup> *Siemaszko*, CLI-06-12, 63 NRC at 501, 504-05.

<sup>15</sup> *Id.*, 63 NRC at 505.

<sup>16</sup> LBP-06-13, 63 NRC at 531, 557, citing a February 16, 2006 letter to Mr. Geisen from an official at Dominion Energy Kewaunee.

<sup>17</sup> *Siemaszko*, CLI-06-12, 63 NRC at 500, 504-05; *Oncology Services Corp.*, CLI-93-17, 38 NRC 44, 49-50, 59-60 (1993).

<sup>18</sup> *Siemaszko*, CLI-06-12, 63 NRC at 503.

<sup>19</sup> *Id.*, 63 NRC at 500, 502-04 (reason for delay); *Oncology*, CLI-93-17, 38 NRC at 49, 53-57.

justifying an abeyance request.<sup>20</sup> Instead, the affidavit contains generalities, e.g., references to “the interests of justice”<sup>21</sup> and concerns about possible circumvention of the more “restrictive rules of criminal discovery”<sup>22</sup> and possible witness intimidation.<sup>23</sup> Were this level of generality sufficient to justify abeyance, then enforcement targets could never successfully oppose abeyance motions by the NRC Staff.

Given the Memorandum of Understanding (MOU) between the NRC and DOJ regarding the potential need to hold our enforcement proceedings in abeyance pending the conclusion of DOJ’s parallel criminal cases,<sup>24</sup> we are generally inclined to accommodate DOJ’s abeyance requests — and indeed we have recently done just that in *Siemaszko*.<sup>25</sup> But our MOU does *not* specify an ironclad guarantee of such accommodation. The MOU reflects a clear understanding (reiterated in our recent *Siemaszko* decision) that DOJ must provide factual justification for delaying our own adjudicatory process<sup>26</sup> and for imposing on the enforcement target the additional financial, professional, emotional, and other burdens that perforce accompany a delay in the resolution of an enforcement proceeding.<sup>27</sup> Indeed, the MOU expressly calls on DOJ to provide the NRC Staff with factual support for an abeyance request — with “appropriate affidavits or testimony.”<sup>28</sup>

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<sup>20</sup> *Siemaszko*, 63 NRC at 503: “[T]he weight to be given the Staff’s reason for seeking an abeyance turns on the quality of the *factual record* — i.e., DOJ’s . . . affidavits supporting this and earlier delays.” (Emphasis in original.)

<sup>21</sup> Ballantine Affidavit at 2 ¶ 6.

<sup>22</sup> *Id.* See also *id.* at 2 ¶ 7, referring generally to the possibility that Mr. Geisen will exercise his Constitutional right against self-incrimination, and that this exercise would give him “a lopsided discovery advantage.”

<sup>23</sup> Ballantine Affidavit at 2 ¶ 6: “witnesses . . . can be compelled to appear for administrative depositions . . . [which] compulsion . . . may be intimidating to witnesses who expect to testify at criminal trials.”

<sup>24</sup> Memorandum of Understanding Between the Nuclear Regulatory Commission and the Department of Justice, 53 Fed. Reg. 50,317, 50,318 (§ II) (Dec. 14, 1988).

<sup>25</sup> *Siemaszko*, 63 NRC at 504: “We do not lightly second-guess DOJ’s views on whether, and how, premature disclosure might affect its criminal prosecutions.”

<sup>26</sup> *Siemaszko*, 63 NRC at 502: “The Staff, as the party supporting abeyance (and therefore carrying the burden of proof), must make at least *some* showing of potential detrimental effect on the criminal case.” (Emphasis in original; footnotes omitted.)

<sup>27</sup> See LBP-06-13, 63 NRC at 530, 557 n.117 (referring to Mr. Geisen’s loss of his chosen profession, and his forced use of retirement savings to start a less-remunerative business that requires travel away from his wife and high-school age children), 557 n.117 (Mr. Geisen’s “income is at half its former level”), 557 (alluding to the substantial reduction in Mr. Geisen’s income, his extensive travel, and the reduction in “medical insurance needed for a child’s illness”). In *Siemaszko*, we referred to prejudice to the enforcement target’s “ability to litigate the enforcement proceeding and prejudice to his employment interests.” CLI-06-12, 63 NRC at 504. The NRC Staff appears to concede that Mr. Geisen suffers from the latter of those two prejudices. See Staff’s Petition at 8.

<sup>28</sup> MOU, 53 Fed. Reg. at 50,319 (§ III.C.2).

Despite our general willingness to accommodate DOJ, the circumstances and facts of this case provide us no basis to approve DOJ's request (through the Staff) for an abeyance order. Notwithstanding the Board's repeated and very direct prehearing comments on the lack of sufficient factual detail in the Ballantine Affidavit,<sup>29</sup> DOJ did not submit a second, more detailed affidavit. Nor did Mr. Ballantine accept the Board's invitation to attend the oral argument hearing to provide further factual details to support the assertions in his affidavit.<sup>30</sup> As a result, the NRC Staff (representing DOJ's interests) was unable to respond to the Board's questions at oral argument with the level of specificity sought by the Board.

Lacking the required factual support for DOJ's abeyance request, we, like the Board, have no choice but to reject the Staff's and DOJ's position on abeyance. We therefore uphold LBP-06-13. If, at a later point in the enforcement proceeding, the NRC Staff (at DOJ's behest) presents the Board with specific claims of harm to the ongoing criminal proceeding, the Board is free to reconsider the abeyance question.

### III. CONCLUSION

For the reasons set forth in LBP-06-13 and in today's Order, we *affirm* the Board's denial of the Staff's motion to hold this enforcement proceeding in abeyance.<sup>31</sup>

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK  
Secretary of the Commission

Dated at Rockville, Maryland,  
this 26th day of July 2006.

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<sup>29</sup> See March 27 Order at 5 (alluding to the Staff's failure "to provide *detailed and case-specific* reasons underlying a government claim that a particular factor weighs in favor of abeyance" (emphasis in original)), 42 (referring to "the paucity of particularized support for the Government's motion and strongly suggest[ing] that the Government bolster its presentation"). See also Transcript of April 11, 2006 Hearing for Oral Argument at 17-26; Transcript of March 22, 2006 Pre-Hearing Conference at 28-29.

<sup>30</sup> Transcript of March 22, 2006 Pre-Hearing Conference at 29-30, 51; March 27 Order at 5; Transcript of April 11, 2006 Hearing for Oral Argument at 5-6.

<sup>31</sup> This ruling should not be taken as prejudgment of the merits of this proceeding.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**COMMISSIONERS:**

**Dale E. Klein, Chairman**  
**Edward McGaffigan, Jr.**  
**Jeffery S. Merrifield**  
**Gregory B. Jaczko**  
**Peter B. Lyons**

**In the Matter of**

**Docket No. 52-007-ESP**

**EXELON GENERATION COMPANY, LLC**  
**(Early Site Permit for Clinton**  
**ESP Site)**

**In the Matter of**

**Docket No. 52-009-ESP**

**SYSTEM ENERGY RESOURCES, INC.**  
**(Early Site Permit for Grand Gulf**  
**ESP Site)**

**July 26, 2006**

**COMMISSION REVIEW**

The Commission accepted review under its inherent supervisory power over adjudications. Because our licensing boards are conducting the first “mandatory” hearings this agency has held in more than two decades, additional Commission guidance was deemed appropriate. *See, e.g., Duke Energy Corp.* (Catawba Nuclear Station, Units 1 and 2), CLI-04-21, 60 NRC 21, 27 (2004).

**MANDATORY HEARINGS**

The Commission vacated the Board’s demand for a complete narrative report summarizing the Staff’s review of the license application, directed the Board to

focus on specific issues, and approved the use of indexes as a means to summarize the documents on which the Staff's review relied.

#### **MANDATORY HEARINGS**

The Commission approved the Board's request for a list of all regulatory guides applicable to the Staff's analysis, together with a list of all instances where potentially applicable regulatory guides were not used.

#### **MANDATORY HEARINGS**

The Commission vacated the Board's order to the NRC Staff to provide it with information relevant to instances where the Staff reviewer disagreed with his supervisor with respect to the license application.

#### **MANDATORY HEARINGS**

The Commission held that while the Board may ask the Staff to produce ACRS documents that it reviewed in conducting its license application review, the Staff need not obtain additional ACRS documents that it never saw in conducting its review.

#### **MANDATORY HEARINGS**

Whether the NRC Staff should be required to produce four paper copies of relevant documents is a matter best left for the Board's discretion. The Commission denied the Staff's request to vacate this portion of the Board's order.

#### **MANDATORY HEARINGS**

In keeping with the Commission's expectation that the boards act promptly in concluding the hearing process, the Commission expects the boards in uncontested cases to issue their final initial decisions generally within 4, and at the most 6, months of the Staff's SER and FEIS issuances.

### **MEMORANDUM AND ORDER**

Today we consider two NRC Staff petitions seeking Commission review of Atomic Safety and Licensing Board orders relating to two separate mandatory

licensing proceedings.<sup>1</sup> The petitions raise questions concerning the Board's authority to demand that the NRC Staff turn over, and in some cases create, documents relating to its review of the application. In each case the Staff objects that the Board order improperly expands the scope of the Board's inquiry and imposes unreasonable burdens on the Staff. We accept review of the orders and direct the Boards to tailor their orders to promote efficiency and avoid imposing unnecessarily burdensome or duplicative efforts on the NRC Staff.

## I. BACKGROUND

The two orders both involve early site permit (ESP) applications by current license holders to build new nuclear power reactors on the sites of existing reactors. In 2003, Exelon Generation Company, LLC, filed an application for an ESP for a new nuclear power reactor at the site in Clinton, Illinois. Although a group of intervenors was admitted as a party to the proceeding at its onset, the group's contention was resolved through summary disposition in 2005.<sup>2</sup> After that action, the proceeding became uncontested but still subject to a mandatory hearing under the Atomic Energy Act.

System Energy Resources, Inc. filed its early site permit application for the Grand Gulf, Mississippi, site in 2003. In that proceeding, the Board found that none of the parties attempting to intervene had submitted an admissible contention.<sup>3</sup> As in *Clinton*, the licensing action then became subject to an uncontested mandatory hearing.

In each of these cases, the Board ordered the Staff to produce documents for the record, and in each case the Board narrowed its demand upon a motion for reconsideration. In the *Clinton* proceeding, the Staff has asked our review of the Board's May 3, 2006 order on reconsideration ("Clinton Order").<sup>4</sup> In the Grand

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<sup>1</sup> See *Exelon Generation Co., LLC* (Early Site Permit for the Clinton ESP site), NRC Staff Petition for Interlocutory Review of the Licensing Board's May 3, 2006 Order (May 23, 2006) ("Clinton Staff Petition"); *System Energy Resources, Inc.* (Early Site Permit for the Grand Gulf ESP Site), NRC Staff Petition for Interlocutory Review of the Licensing Board's May 31, 2006, Order (June 15, 2006) ("Grand Gulf Staff Petition").

<sup>2</sup> *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), LBP-05-19, 62 NRC 134, 183 (2005), *review denied*, CLI-05-29, 62 NRC 801 (2005).

<sup>3</sup> See *System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), LBP-04-19, 60 NRC 277 (2004), *aff'd*, CLI-05-4, 61 NRC 10 (2005).

<sup>4</sup> *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), Order (May 3, 2006) (reconsideration of April 17, 2006 order).

Gulf proceeding, the Staff disputes a May 31, 2006 Board order (“Grand Gulf Order”).<sup>5</sup>

The Board in *Clinton* (“Clinton Board”) directed the NRC Staff to create a narrative summary of its review of the application, describing, among other things, whether any guidance documents applied to the issue under consideration and whether the Staff followed or deviated from those guidance documents.<sup>6</sup> The NRC Staff in *Clinton* (the “Clinton Staff”) objects to creating such a narrative because it would be time-consuming, duplicative of material already in the safety evaluation report (SER) and environmental impact statement (EIS), and, they argue, beyond the scope of the Board’s review in a mandatory hearing.

The Grand Gulf order demands similar documents.<sup>7</sup> The NRC Staff reviewing the Grand Gulf site (“Grand Gulf Staff”) objects to portions of that order demanding that the Staff produce certain predecisional documents, specifically, any analyses that the Staff reviewer may have prepared regarding applicant responses to Staff requests for additional information (RAIs). The Grand Gulf Staff argue that the initial analyses, which may have been altered or refined considerably before they were included in the Staff SER, are not relevant to the Board’s task of assuring that each finding in the SER has “reasonable support in logic and fact.”<sup>8</sup> They also object to the Board’s asking for four paper copies of each document in addition to electronic copies. Finally, the Grand Gulf Staff objects to the Board’s instructions to produce documents authored by the Advisory Committee on Reactor Safeguards (ACRS).

Both Boards have stayed the effect of their orders pending our consideration.<sup>9</sup>

## II. DISCUSSION

The Atomic Energy Act requires the Commission to hold hearings on applications for the construction of certain production and utilization facilities, including

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<sup>5</sup> *System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), Memorandum and Order (Ruling on Reconsideration and Clarification) (May 31, 2006) (reconsideration of April 19, 2006, order).

<sup>6</sup> See *Clinton Order* at 4-6.

<sup>7</sup> In its initial (April 19, 2006) order, the Grand Gulf Board included a demand for a narrative similar to the one in the *Clinton* order, but “deferred” this requirement after the Staff stated that all requested information was already in the SER and EIS, and that in no case were applicable guidance documents not followed. *Grand Gulf Order* at 7-8.

<sup>8</sup> See *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5 (2005).

<sup>9</sup> *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), Order (Granting Motion for Stay) (May 9, 2006); *System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), Order (Granting Motion for Housekeeping Stay) (June 13, 2006).

nuclear power plants, even if the proceeding is uncontested.<sup>10</sup> Because the NRC has not seen a license application for a facility of this type in some time, it had not held a so-called “mandatory hearing” in over 20 years. The *Grand Gulf* and *Clinton* proceedings are, therefore, among the first of the modern generation of mandatory hearings.

In July 2005, we responded to six questions certified to us by the Chief Administrative Judge of the Atomic Safety and Licensing Board concerning the conduct of “mandatory hearings” (“Mandatory Hearings Order”).<sup>11</sup> Our order sought to clarify the scope and depth of the licensing boards’ “mandatory” review. We emphasized that boards were not to undertake a *de novo* review of the application, but were rather to perform merely a “sufficiency” review of the NRC Staff’s findings. We explained that a board’s task was to ensure that the Staff’s review was “adequate” and that the Staff “made findings with reasonable support in logic and fact.”<sup>12</sup> We said that a board should not reconsider the NRC Staff’s factual findings unless it first determines that the Staff’s “review [was] inadequate or its findings insufficient.”<sup>13</sup> But we also said that a board should “carefully probe” the Staff’s findings and ask appropriate questions.<sup>14</sup>

Recently, in *Louisiana Energy Services, L.P.* (National Enrichment Facility), one of our licensing boards handed down the first final partial initial decision in a mandatory hearing in over 20 years.<sup>15</sup> While we recognize that each board must have the freedom to manage the proceedings before it, the approach the Board used in *National Enrichment Facility* is informative. In that case, the Board commenced the “mandatory” portion of its proceeding in August 2005, by requesting the Staff produce certain documents, including the executive summaries of the final Staff review documents (the final Safety Evaluation Report (SER) and Environmental Impact Statement (EIS), the license application documents, Staff requests for additional information and the responses thereto, and documents relating to the ACRS review of the application).<sup>16</sup> Following the production of these documents, the Board had a series of prehearing conferences with the Staff and applicant. From the documents and prehearing conferences,

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<sup>10</sup> See Atomic Energy Act § 189a, 42 U.S.C. § 2239(a).

<sup>11</sup> See *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5 (2005).

<sup>12</sup> *Id.* at 39. See also 10 C.F.R. § 2.104(b)(2).

<sup>13</sup> *Id.* at 39-40.

<sup>14</sup> *Id.* at 40.

<sup>15</sup> *Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-06-17, 63 NRC 747 (2006).

<sup>16</sup> *Louisiana Energy Services, L.P.* (National Enrichment Facility), Memorandum and Order (Memorializing Results of Prehearing Conference) (Aug. 12, 2005).

the Board produced an order setting forth the issues for an oral hearing.<sup>17</sup> Among the items the Board asked the parties to address at the hearing was to identify any regulatory guides that were either directly or indirectly applicable to the facility and an explanation of how they were applied or adapted for the proposed enrichment facility.<sup>18</sup> It also asked the Staff to explain how it addressed issues where no regulatory guide applied.<sup>19</sup> In February 2006, the NRC Staff and the applicant submitted prefiled written testimony, and the Board heard live testimony from the Staff's and applicant's witnesses in March 2006. In April, the Staff and applicant filed proposed findings of fact and the Board closed the record. Thus, the *National Enrichment Facility* Board was able to frame the issues without requiring the Staff to generate additional, specially prepared documents at the outset, and was able to complete the mandatory hearing process, including oral testimony, expeditiously.

#### **A. Interlocutory Appellate Review**

Here, in both petitions, the NRC Staff argues that the Board's order could potentially require a lot of unnecessary work for the Staff and argues that the order "portends an expectation of [the Board's] role in an uncontested proceeding beyond that envisioned by the Commission in [the mandatory hearings order]."<sup>20</sup> The Staff argues that interlocutory review is warranted as the contested orders will have a "pervasive and unusual effect" on the litigation.<sup>21</sup>

We do not necessarily agree that the Boards' orders reflect an intent to expand their review beyond that described in our regulations and in the mandatory hearing order. The Clinton Board explained that its purpose in requesting the information was to narrow its focus to those areas which the Staff itself found problematic or where it was "plowing new ground," and to "assist the Board in the identification of areas of the Application that the Staff found difficult to resolve."<sup>22</sup> Similarly, the Grand Gulf Board reiterated that it had no intention of conducting a *de novo* review of the application,<sup>23</sup> and justified its order on the ground that in many instances the "logic and facts supporting Staff's conclusions" were not "readily apparent" from the SER and EIS prepared by the Staff.<sup>24</sup>

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<sup>17</sup> See *Louisiana Energy Services, L.P.* (National Enrichment Facility), Memorandum and Order (Memorializing Board Questions/Areas of Concern for Mandatory Hearing) (Jan. 30, 2006).

<sup>18</sup> See *id.* at 2-3.

<sup>19</sup> *Id.*

<sup>20</sup> See Clinton Staff Petition at 6; see also Grand Gulf Staff Petition at 14.

<sup>21</sup> See 10 C.F.R. § 2.341(f)(2)(i) (grounds for interlocutory Commission review).

<sup>22</sup> See Clinton Order at 6-7.

<sup>23</sup> Grand Gulf Order at 2.

<sup>24</sup> *Id.* at 3-4.

As we interpret the Boards' intention here, they plan to give a harder look at those issues that the Staff itself found problematic. That the Boards are looking for clues as to which areas these might be does not, standing alone, suggest to us that they intend to expand their role in a manner that would have a "pervasive and unusual effect on the litigation," necessitating interlocutory review.

That being said, however, the Commission does have inherent supervisory power over its adjudications and may direct our licensing boards' conduct of proceedings.<sup>25</sup> Because our licensing boards are conducting the first "mandatory" hearings this agency has held in more than two decades, we believe additional Commission guidance is necessary to ensure that the proper balance is struck between the boards' need to obtain information for their review and the burden that production of such information could impose on the NRC Staff. We therefore accept review under our inherent supervisory power over adjudications.

## **B. Documents and Information To Be Made Available**

### ***1. The Balance Between the Boards' and the NRC Staff's Needs***

We appreciate the concerns of both the Boards and the NRC Staff in this dispute. On the Staff's side, teams of technical reviewers have spent many months producing documents reflecting their analyses and conclusions. The NRC Staff has devoted extensive resources to reviewing the applications for both the Clinton and Grand Gulf sites. From the Staff's perspective, the work is finished. To go back at this point to generate additional material documenting what was done would be onerous, and, to their thinking, unnecessary.

The Boards, on the other hand, are presented with enormous technical documents and are trying to determine where to focus their attention. They have limited time to investigate, judge, and report the findings of their review. The Boards should be able to look to the Staff for assistance in understanding the basis for each major finding in the SER and EIS and in identifying appropriate areas of inquiry. In addition, the Boards are responsible for managing the proceedings before them,<sup>26</sup> and should be granted appropriate discretion to determine the best way to approach their job, particularly where, as here, they are engaged in an essentially new process where the agency lacks recent experience.

We find that a balance must be struck between Board leeway to perform its "truly independent" review,<sup>27</sup> and burdens on the NRC Staff. A "mandatory hearing" board must narrow its inquiry to those topics or sections in Staff

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<sup>25</sup> See, e.g., *Duke Energy Corp.* (Catawba Nuclear Station, Units 1 and 2), CLI-04-21, 60 NRC 21, 27 (2004).

<sup>26</sup> 10 C.F.R. § 2.319.

<sup>27</sup> See Mandatory Hearings Order, CLI-05-17, 62 NRC at 40.

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. It serves no purpose for the Staff to produce volumes of documents and information supporting facts and conclusions that are of small importance and are beyond dispute. It likewise serves no purpose for the Staff to produce copies of every document used in its review when the Board cannot possibly read through every one, let alone scrutinize them.

## **2. *Rulings on Specific Classes of Documents***

The portions of the Boards' orders that are in dispute are as follows:

### *a. Narrative Report*

The Clinton Board asked for "a detailed report setting out, subsection-by-subsection, how the relevant regulatory guidance applied by the Staff in reviewing the Application and a description of each instance where the Staff's review deviated from the guidance."<sup>28</sup> The report was also to include the name and job title of each Staff reviewer, and a list of all areas where the project manager or supervisor disagreed with proposed findings of the Staff reviewer.<sup>29</sup> In addition, it instructed the Staff to provide "a list of all areas of the application review wherein the project manager (or supervising Staff member) disagreed with the proposed finding of the Staff member charged with a portion of the review."

The Clinton Board said the purpose of its order is to require the Staff to document its logic and underlying facts.<sup>30</sup> The Clinton Board rejected the Staff's argument that this order "directs" the Staff in its review, but said the order simply requires the Staff to tell the Board what it did.<sup>31</sup>

In its initial order requesting documents, the Grand Gulf Board included a demand for a narrative similar to the one in the Clinton order,<sup>32</sup> but on reconsideration deferred this requirement in view of the Staff's assertion (in its motion for reconsideration) that all requested information was already in the SER and EIS, and that in no case were applicable guidance documents not followed.<sup>33</sup> The Grand Gulf Staff has nevertheless asked our review because the Board's

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<sup>28</sup> Clinton Order at 4.

<sup>29</sup> Clinton Board's April 17, 2006 Order at 3.

<sup>30</sup> Clinton Order at 4-5.

<sup>31</sup> *Id.* at 5 n.11.

<sup>32</sup> See *System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), Order (Request for Documents and Briefings) (Apr. 19, 2006), at 2-3.

<sup>33</sup> Grand Gulf Order at 7-8.

order “portends the Board’s expectation of its role in an uncontested proceeding beyond that envisioned by the Commission in [the mandatory hearing order].”<sup>34</sup>

As the NRC Staff maintains, the SER and EIS should already explain their conclusions, logic, and underlying facts, as well as provide references to all applicable guidance documents. A comprehensive, freshly prepared, narrative report covering the entire SER and FEIS would require an unnecessary duplication of effort. Instead, it is appropriate for the Board to review the Staff documents (together with additional materials requested), and then *tailor* its request for additional information to those areas for which it needs additional information in order to understand the Staff’s review documents. We therefore vacate the Boards’ demand for a complete narrative report, although we agree that the Boards’ request for specific information as described below should be provided. We expect that the Boards will limit their requests for information to focus on specific issues. The Boards, if they choose, may require the Staff to provide indexes, as suggested in Exelon’s pleading in *Clinton*,<sup>35</sup> as a device to simplify the review of Staff’s documents.

*b. Application and Departures from Regulatory Guides*

Among the information the two Boards specifically requested that the narrative include was a list of all regulatory guides applicable to the Staff’s analysis, together with a list of all instances where the applicable regulatory guides were not followed. In *Grand Gulf*, the Board withdrew its request after the Staff informed it that all regulatory guides used were already cited in the SER and EIS and that there were no departures from relevant regulatory guides.<sup>36</sup>

As noted above, we would expect that the SER will already contain references to applicable regulatory guides. However, if it is the case that a regulatory guide was used and not referred to in the SER and EIS, that fact may not be otherwise apparent to the Board. Likewise, if a potentially applicable guide was not used, that may not necessarily be apparent on the face of the Staff reports. We find it is reasonable for the Board to request information of this nature in order to help focus its review.<sup>37</sup> We also note that the Clinton order clarified that this information could be provided in the form of a table.<sup>38</sup> Finding the Clinton Board’s demand reasonable, we decline to direct it to modify this requirement.

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<sup>34</sup> Grand Gulf Staff Petition at 14.

<sup>35</sup> *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), Exelon Generation Company’s Answer in Support of NRC Staff’s Petition for Interlocutory Review (May 30, 2006), at 4.

<sup>36</sup> Grand Gulf Order at 8; Grand Gulf Staff Motion for Reconsideration at 6-7.

<sup>37</sup> We note, however, that provisions in regulatory guides or even a standard review plan are not a substitute for the regulations and compliance is not a requirement. *See, e.g.*, 10 C.F.R. § 50.34(h)(3).

<sup>38</sup> Clinton Order at 6.

*c. Internal Disputes and Predecisional Records*

The Clinton Board requested a “list of all areas of the application review ‘wherein the project manager (or supervising Staff member) disagreed with the proposed findings of the Staff member charged with a portion of the review, setting out the topic at issue, the ultimate resolution, and the rationale for such resolution.’”<sup>39</sup> The Clinton Staff argues that the Board “doesn’t need this level of detailed information” to perform its review.<sup>40</sup>

Similarly, the Grand Gulf Board asked for materials that the Staff claims are “predecisional” documents, including any initial analyses that a Staff member produced concerning the applicant’s response to requests for additional information.<sup>41</sup> The Grand Gulf Staff argues that these initial analyses do not necessarily reflect the Staff’s ultimate findings, which are found in the SER and EIS. Because the Board’s task is to evaluate whether the Staff’s ultimate findings have reasonable support in logic and fact, the Staff reviewer’s initial impressions are beside the point, the Staff argues. The Grand Gulf applicant, System Energy Resources, Inc. (SERI), filed a pleading supporting the Staff’s view of predecisional documents.<sup>42</sup> In addition to the objection that such documents would expand the scope of inquiry, SERI argues that it is unfair to SERI to introduce analyses that it “has never seen or had the opportunity to comment on.”<sup>43</sup>

A primary drawback to requiring the Staff to produce predecisional documents is that it burdens the Staff while providing the Board with information of potentially limited utility. There are other considerations, too, that warrant modifying the Board requirement: first, the Board’s use of nonpublic information in evaluating Staff documents may create confusion over the bases for the Board’s decisions; second, Board reliance on early Staff deliberations has the appearance of elevating them in weight to that of thoroughly vetted Staff products, such as the FEIS and SER; third, a policy of encouraging boards to explore nonfinal deliberative Staff material in making decisions may stifle the free flow of debate at the Staff level; and fourth, Board focus on early Staff views or differences diverts a Board from its task of determining whether the Staff’s ultimate determinations are reasonably supported in logic and fact.<sup>44</sup>

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<sup>39</sup> *Id.*

<sup>40</sup> Clinton Staff Petition at 8-9.

<sup>41</sup> The Grand Gulf Staff produced one such analysis of an RAI response on June 12, 2006. Because the analysis is predecisional, the analysis is not publicly available.

<sup>42</sup> See System Energy Resources, Inc., Answer in Support of NRC Staff Petition for Interlocutory Review (June 26, 2006) at 4-5.

<sup>43</sup> *Id.* at 5.

<sup>44</sup> See 10 C.F.R. § 2.104(b)(2)(i) (the Board must determine whether “the application and the record of the proceeding contain sufficient information, and the review of the application by the Commission’s staff has been adequate to support affirmative findings [by the Staff].”)

We hesitate to permit the Board to request Staff documents that overburden the Staff and pose other problems without being shown to be of significant help to the Board. As the Commission explained in its prior direction, the Board's role in an uncontested proceeding is somewhat analogous to "the function of an appellate court, applying the 'substantial evidence' test[.]"<sup>45</sup> The Board need not demand all possible views and facts be put into the record or presume preliminary views to raise matters of controversy about the bases for the final Staff determinations. Rather, the "boards should decide simply whether the safety and environmental record is 'sufficient.'"<sup>46</sup> Consistent with the Commission's regulations<sup>47</sup> the boards may probe the Staff for additional testimony or record material when necessary to ascertain whether the Staff had reasonable bases for the Staff's final determinations.<sup>48</sup> An uncontested, mandatory hearing need not, and should not, commence with a requirement to identify, explain, and resolve preliminary differences of opinion. Exceptional circumstances should not be presumed. For these reasons, we decline to uphold the Board's requirement.

*d. ACRS Documents*

The Grand Gulf Staff object to the Board's order relating to documents authored by the Advisory Committee on Reactor Safeguards (ACRS).<sup>49</sup> The Grand Gulf Board directed the Staff to produce documents that it has in its possession and those that the Staff can "readily secure," and also to identify relevant documents that the Staff is aware of but cannot readily secure.<sup>50</sup> The Grand Gulf Staff argues that it is appropriate to produce ACRS documents that it received from ACRS but that it should not be required to produce other ACRS documents.

We agree with the Grand Gulf Staff. The ACRS is an independent federal advisory committee that is not under the Staff's control. It is not apparent how

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<sup>45</sup> Mandatory Hearings Order, CLI-05-17, 62 NRC at 39 (citing *Union of Concerned Scientists v. AEC*, 499 F.2d 1069, 1076 (D.C. Cir. 1974)).

<sup>46</sup> *Id.* at 39.

<sup>47</sup> The Commission's regulations provide procedures that should assist and guide the Board in its approach in seeking testimony, additional witnesses, and documents. See, e.g., 10 C.F.R. §§ 2.709(a)(1), 2.1207.

<sup>48</sup> The Boards can be assisted in their work by indexes and tables relating to the Staff's documents as authorized in this Order. Clearly, to the extent that the Staff provides roadmaps to its conclusions and analyses in its final documents or submissions to the Board, the Board's tasks and the interests in efficient and effective proceedings are well served.

<sup>49</sup> The Clinton Board initially requested the same documents in its April 19, 2006 order. The Staff agreed to provide the Board with copies of ACRS documents in its control and copies of any materials it provided to the ACRS. The Board order stated that it would contact the ACRS directly for any additional documents it determines are necessary to its review. Clinton Order at 3.

<sup>50</sup> Grand Gulf Order at 6-7.

the Staff can readily obtain ACRS documents it does not already have, or how the Staff even would know about such documents. But most importantly, it is not clear that ACRS documents *that the Staff has not reviewed* are germane to the Board's review, given that the purpose of the Board's review is to ensure that the Staff's conclusions have "reasonable support in logic and fact." The ACRS presumably would have forwarded to the Staff records or analyses that it determined were important to the Staff's review. We find that while the Board may ask the Staff to produce relevant ACRS documents that it has reviewed, the Board should not ask the Staff to obtain additional documents of dubious significance.

*e. Four Paper Copies*

The Grand Gulf Board asked for four paper copies, in addition to electronic copies, of the materials described in its order.<sup>51</sup> While this seems like a lot of paper, we note that the Grand Gulf Staff didn't question this requirement in its motion for reconsideration of the Board's initial order, and in fact stated that it was preparing the copies of other materials.<sup>52</sup> The Commission is not in a better position than the Board to assess the Board's need for four paper copies. The Board, in fact, consists of three judges and employs supporting personnel. Providing the extra paper copies does not on its face appear unreasonable. Perhaps in future proceedings, other licensing boards will determine that such a requirement is excessive. But this is a matter we believe best left for the Boards' discretion, and therefore we deny the Staff's request.

*f. Need for a Schedule*

In their pleadings in support of the NRC Staff's petitions for review, the Applicants in both these proceedings asked the Commission to set a schedule for the Board's review. With respect to the Grand Gulf application, SERI submitted its ESP application in October 2003, and the Staff issued its final Safety Evaluation Report (SER) and Final Environmental Impact Statement (FEIS) in April 2006. The Board acted promptly upon issuance of the SER and FEIS, but did not set a hearing schedule. The Staff asked, however, that the Grand Gulf Board await the outcome of the Staff petition for review on the document-disclosure order, and the Board granted the Staff's request. In keeping with the Commission's

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<sup>51</sup> Grand Gulf April 19 Order at 3. The Board asked for only one paper copy of any classified materials.

<sup>52</sup> See NRC Staff Motion for Reconsideration and Clarification of Board Order (Request for Documents and Briefing) Dated April 19, 2006 (May 1, 2006), at 4.

expectation that the boards act promptly in concluding the hearing process, the Commission expects the boards in uncontested cases to issue their final initial decisions generally within 4, and at the most 6, months of the Staff's SER and FEIS issuances. In most cases, we expect that the time would be significantly shorter. Considering both the time that the final SER and FEIS have been available and the stay associated with the Staff's petition for the review, we expect the Grand Gulf Board to issue its decision on the mandatory hearing no later than November 30. The Grand Gulf Board should proceed to set a schedule that contains key deadlines to issue a decision by that date.

We decline to set a specific schedule with respect to the Clinton ESP proceeding in light of the fact that the Staff's FEIS has only recently been issued.<sup>53</sup> The Board should promptly establish a schedule that reflects the Commission's direction, above, regarding completion of uncontested mandatory hearings.

### III. CONCLUSION

For the foregoing reasons, the petition for review is *granted* and the Board is hereby directed to modify its order as described above to reflect the Commission's clarification of its expectations regarding the conduct of mandatory hearings.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK  
Secretary of the Commission

Dated at Rockville, Maryland  
this 26th day of July 2006.

The Dissenting Opinion of Commissioner Jaczko follows.

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<sup>53</sup>NUREG-1815, "Environmental Impact Statement for an Early Site Permit at the Clinton ESP Site," Final Report (July 2006). We note that the Clinton Board has already proceeded to propound inquiries to the Staff regarding the final Staff SER. *See Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), Order (July 20, 2006).

### **Dissenting Opinion by Commissioner Gregory B. Jaczko**

I dissent on this Order because the Order restricts the ability of the licensing boards to implement Commission guidance on mandatory hearings in an efficient manner that ensures the adequate protection of public health and safety. The Commission could ultimately conduct licensing proceedings itself under the authority set forth in the Atomic Energy Act of 1954, *as amended* (AEA).<sup>54</sup> The Commission has delegated its authority, however, to conduct licensing proceedings to the Boards as permitted by the AEA. Mandatory hearings are the Boards' substantive review of the Staff's work and, therefore, the Boards' final opportunity to review the Staff's work on the uncontested safety and environmental matters. As a result, I am not inclined to second-guess the Boards' determination about how to best conduct these hearings.

In particular, I support the Boards' determination in this case that narrative reports are needed to assist it in thoroughly and efficiently performing a sufficiency review of the Staff's findings consistent with previous Commission guidance referred to in the Order as the mandatory hearings order (*i.e.*, *Exelon Generation Co.* (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5 (2005)). The Boards' orders reflect an intent to narrow the Boards' focus to those areas the Staff found problematic and to identify those areas the Staff found difficult to resolve.

While I appreciate the concern that the Boards' document requests may require additional Staff work, I believe the Boards' request is reasonable and not unduly burdensome. The Boards are requesting the information in summary format in order to tailor the proceeding and focus on important or controversial issues, not to broaden the scope of review. The Boards should be able to make a determination about the information they deem necessary to conduct a thorough sufficiency review in an efficient and expeditious manner. The Boards, therefore, should be given some leeway in mandatory hearings, where no contested issues exist, to obtain any reasonable information they deem necessary to conduct a thorough and efficient sufficiency review consistent with their statutory authority, rules, regulations, and previous Commission guidance.

I am also dissenting because I disagree with the majority regarding setting a schedule for the Boards' review. I believe it would be premature to set a firm date for the conclusion of the mandatory hearings since the Boards have not had a opportunity to completely identify those areas where they need further information. The Commission is concerned with the Boards' expeditious completion of the review, yet the Commission denied the Boards' request to the Staff to produce information designed to expedite the review (*i.e.*, narrative reports). As indicated in the Board's Order in the *Clinton* case dated July 20, 2006,

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<sup>54</sup> AEA, 42 U.S.C. § 2241.

the Board promptly began and completed its preliminary review of the Applicant's documents and the final Staff Safety Evaluation Report (FSER). Additionally, in the *Clinton* Order, the Board noted that the preliminary review, conducted in the absence of the narrative reports and other information it requested, required the Board to expend a significant amount of resources. The obvious implication is that the Board's review would have been faster if its request had been granted. Based on the current record, there is no reason to doubt the Boards' commitment to expeditious handling of these cases.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**COMMISSIONERS:**

**Dale E. Klein, Chairman**  
**Edward McGaffigan, Jr.**  
**Jeffrey S. Merrifield**  
**Gregory B. Jaczko**  
**Peter B. Lyons**

**In the Matter of**

**Docket Nos. 50-317-LT-2, 50-318-LT-2,**  
**72-8-LT-2,**  
**50-220-LT-3, 50-410-LT-3,**  
**50-244-LT-2**  
**50-250-LT, 50-251-LT**  
**50-335-LT, 50-389-LT**  
**50-443-LT, 50-331-LT**

**FLORIDA POWER & LIGHT**  
**COMPANY,**  
**FPL ENERGY SEABROOK, LLC,**  
**FPL ENERGY DUANE ARNOLD, LLC,**  
**CONSTELLATION ENERGY GROUP, INC.**  
**(Calvert Cliffs Nuclear Power Plant,**  
**Units 1 and 2;**  
**Calvert Cliffs Independent Spent**  
**Fuel Storage Installation;**  
**Nine Mile Point Nuclear Station,**  
**Units 1 and 2;**  
**R.E. Ginna Nuclear Power Plant;**  
**Turkey Point Nuclear Generating Plant,**  
**Units 3 and 4;**  
**St. Lucie Nuclear Power Plant,**  
**Units 1 and 2;**  
**Seabrook Station;**  
**Duane Arnold Energy Center)**

**July 26, 2006**

**RULES OF PRACTICE: CONTENTIONS (LATE-FILED CONTENTIONS)**

Late-filing petitioners to intervene must satisfy not only our requirements that intervenors demonstrate standing (10 C.F.R. § 2.309(d)) and submit at least one admissible contention (10 C.F.R. § 2.309(f)(1)), but also our stringent requirements for untimely filings (10 C.F.R. § 2.309(c)) and late-filed contentions (10 C.F.R. § 2.309(f)(2)).

A petitioner’s failure to read carefully the governing procedural regulations does not constitute good cause for the Commission to accept a late-filed petition to intervene.

**RULES OF PRACTICE: CONTENTIONS**

Section 2.309(f)(1) of the NRC’s procedural regulations provides that a petitioner “must set forth with particularity the contentions sought to be raised.”

**RULES OF PRACTICE: CONTENTIONS (LABOR DISPUTES)**

Although the Commission is disinclined to “step into the middle of a labor dispute” (*Power Authority of the State of New York* (James A. FitzPatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-00-22, 52 NRC 266, 314 (2000)) or “involve [ourselves] in the personnel decisions of licensees” (*id.* at 316), the Commission has nonetheless recognized that there may be cases where employment-related contentions which are “closely tied to specific health-and-safety concerns or to potential violations of NRC rules[] can be admitted for a hearing” (*id.* at 315).

**RULES OF PRACTICE: CONTENTIONS (SPECIFICITY)**

It is not enough under our contention-pleading rules — whose “hallmark” is “specificity” — simply to say that a merger will result in personnel reductions that will adversely affect safety. *Northeast Nuclear Energy Co.* (Millstone Nuclear Power Station, Units 1, 2, and 3), CLI-00-18, 52 NRC 129, 132 (2000). General assertions, unsupported by specific facts or expert opinion, that personnel reductions may adversely affect health and safety are inadmissible. *FitzPatrick*, CLI-00-22, 52 NRC at 315.

**RULES OF PRACTICE: STANDING**

To establish standing, a petitioner must show (among other things) that its potential injury is fairly traceable to a grant of the application(s).

## MEMORANDUM AND ORDER

This proceeding stems from the Applications of FPL Group, Inc., and the Constellation Energy Group, Inc. (collectively, the “parent corporations” of various NRC licensees) for approval of the indirect transfers of the operating licenses for the captioned Turkey Point, St. Lucie, Seabrook, and Duane Arnold facilities. The parent corporations seek approval of these indirect license transfers as necessary to those corporations’ pending merger. The parent corporations also request a “threshold determination” that no indirect transfer of control over the captioned Calvert Cliffs, Nine Mile Point, and R.E. Ginna facilities requires Commission approval pursuant to 10 C.F.R. §§ 50.80 and 72.50 in connection with the merger.

On June 6, 2006, the International Brotherhood of Electrical Workers, Local 97 (“the Union”) petitioned to intervene and sought a hearing to challenge the Applications, including the request for a “threshold determination.”<sup>1</sup> We deny the Union’s hearing and intervention requests.

### I. BACKGROUND

The Union represents employees at the Nine Mile Point facility — employees whose “employment and financial well-being”<sup>2</sup> will, according to the Union, be adversely affected by the consummation of the proposed merger. The Union asserts that Nine Mile Point’s management intends to reduce the facility’s already-insufficient staffing level by 22% (more than 250 employees). According to the Union, this reduction in force would adversely affect the operation of Nine Mile Point in general and the facility’s Emergency Plan in particular.

The Union directs our attention to two specific changes which it believes to have safety implications. First, the Union claims that Constellation intends to abolish all eight existing “Chief Firefighter” positions. The occupants of these positions are trained not only as firefighters but also as emergency medical technicians. According to the Union, Constellation plans to replace them with “auxiliary operators” who have minimal firefighting and first-aid training.<sup>3</sup> Second, the Union claims that Constellation intends to run less frequently its preventive maintenance, corrective maintenance, elective maintenance, and surveillance testing programs, or move them to a “run to fail” status.<sup>4</sup>

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<sup>1</sup> The Union’s pleadings are styled “Petition To File Motion To Intervene and Protest Out-of-Time” (“Petition”) and “Motion for Hearing and Right To Intervene and Protest” (“Motion”).

<sup>2</sup> Motion at 3.

<sup>3</sup> *Id.* at 4.

<sup>4</sup> *Id.* at 5.

## II. DISCUSSION

As the Union acknowledges, its filings are untimely. Our notices of opportunity for hearing with regard to the Applications specified that potential parties must file their petitions to intervene no later than March 14, 2006.<sup>5</sup> The Union's June 6th filings are therefore nearly 3 months late. As such, they must satisfy not only our requirements that intervenors demonstrate standing (10 C.F.R. § 2.309(d)) and submit at least one admissible contention (10 C.F.R. § 2.309(f)(1)), but also our stringent requirements for untimely filings (10 C.F.R. § 2.309(c)) and late-filed contentions (10 C.F.R. § 2.309(f)(2)).

### A. Tardiness of Pleadings

The Union seeks to excuse the tardiness of its filing by explaining that it initially believed the Federal Energy Regulatory Commission was the appropriate forum for its arguments, and only belatedly realized that it could also present various operating and safety arguments before the NRC. We find this explanation insufficient. As we stated in another license transfer decision, “[w]e cannot agree that [the petitioner’s] failure to read carefully the governing procedural regulations constitutes good cause for accepting its late-filed petition.”<sup>6</sup>

In addition, the Union’s petition makes little effort to meet our requirements governing late-filed contentions. The Union does not address any of the factors in section 2.309(f)(2), which provides for consideration of late-filed new contentions “only . . . upon a showing” that:

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

Likewise, the Union does not address two of the factors specified in section 2.309(c)(1) regarding untimely filings:

- (v) The availability of other means whereby the . . . petitioner’s[ ] interest will be protected; [and]

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<sup>5</sup> 71 Fed. Reg. 9168-76 (Feb. 22, 2006).

<sup>6</sup> *North Atlantic Energy Service Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 223 (1999).

(vii) The extent to which the . . . petitioner’s participation will broaden the issues or delay the proceeding.

Section 2.309(c)(2) clearly provides that a petitioner “shall address” all eight factors set forth in section 2.309(c)(1).

The Union’s failure to comply with our pleading requirements for late filings constitutes sufficient grounds for rejecting its intervention and hearing requests.

### **B. Failure To Submit an Admissible Contention**

Section 2.309(f)(1) provides that a petitioner “must set forth with particularity the contentions sought to be raised.” The Union has not done so. Although we are disinclined to “step into the middle of a labor dispute”<sup>7</sup> or “involve [ourselves] in the personnel decisions of licensees,”<sup>8</sup> we have recognized that there may be cases where employment-related contentions which are “closely tied to specific health-and-safety concerns or to potential violations of NRC rules[] can be admitted for a hearing.”<sup>9</sup> But in this case, the Union’s health-and-safety assertions are much too general to warrant a hearing. It is not enough under our contention-pleading rules — whose “hallmark” is “specificity”<sup>10</sup> — simply to say that a merger will result in personnel reductions that will adversely affect safety. General assertions, unsupported by specific facts or expert opinion, that personnel reductions may adversely affect health and safety are inadmissible.<sup>11</sup> The Union provided no such factual or expert support, by affidavit or otherwise.

### **C. Lack of Standing**

To establish standing, the Union must show (among other things) that its potential injury is fairly traceable to a grant of the Applications (i.e., to the approval of the indirect license transfers). The Union describes no causal nexus at all between the asserted potential injury to its members’ “employment and financial well-being” and the indirect transfer of licenses for the Turkey Point, St. Lucie, Seabrook, Duane Arnold, Calvert Cliffs, and R.E. Ginna facilities. Indeed, the Union does not even claim to represent employees at those facilities.

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<sup>7</sup> *Power Authority of the State of New York* (James A. FitzPatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-00-22, 52 NRC 266, 314 (2000).

<sup>8</sup> *Id.* at 316.

<sup>9</sup> *Id.* at 315.

<sup>10</sup> *Northeast Nuclear Energy Co.* (Millstone Nuclear Power Station, Units 1, 2, and 3), CLI-00-18, 52 NRC 129, 132 (2000).

<sup>11</sup> *FitzPatrick*, CLI-00-22, 52 NRC at 315.

We therefore find that the Union lacks standing to intervene insofar as the Applications concern those six facilities.

As for the remaining facility, Nine Mile Point, the Union does assert a causal link between the proposed merger and the personnel decisions. Yet the Union provides no factual support (i.e., affidavits) for this proposition, instead resting its assertions on speculation. This shortcoming is particularly damaging given the Union's acknowledgment that the personnel actions of which it complains were "planned in late 2004 and beg[un] in earnest in January 2005"<sup>12</sup> — at least a year before the parent corporations filed their Applications. For these reasons, we find that the Union has failed to establish a link between the Nine Mile Point license transfers and safety concerns sufficient to show standing to challenge the indirect transfers.

### III. CONCLUSION

We *deny* the Union's intervention and hearing requests.  
IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK  
Secretary of the Commission

Dated at Rockville, Maryland,  
this 26th day of July 2006.

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<sup>12</sup>Motion at 4.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**COMMISSIONERS:**

**Dale E. Klein**, Chairman  
**Edward McGaffigan, Jr.**  
**Jeffrey S. Merrifield**  
**Gregory B. Jaczko**  
**Peter B. Lyons**

**In the Matter of**

**Docket No. 70-3103-ML**

**LOUISIANA ENERGY SERVICES, L.P.**  
**(National Enrichment Facility)**

**August 17, 2006**

**APPELLATE REVIEW, FINDINGS OF FACT**

We do not undertake a point-by-point review of the Board’s factual findings. While we have discretion to review all underlying factual issues *de novo*, we are disinclined to do so where the Board has weighed arguments presented by experts and rendered reasonable, record-based factual findings. We generally step in only to correct clearly erroneous findings — that is, findings not even plausible in light of the record viewed in its entirety.

**REASONABLE ASSURANCE, DECOMMISSIONING FUNDING**

The Board’s “reliability” approach is not a “new” standard. The Board did not act unreasonably when it examined LES’s estimates for “reliability” — an inquiry consistent with verifying whether the estimates provided “reasonable assurance” for decommissioning funding.

**REASONABLE ASSURANCE, DECOMMISSIONING FUNDING**

Each decommissioning situation is unique; the reasonableness of costs and estimates must be assessed on a case-by-case basis. Our precedents, as well as

NUREG-1757, call for objective, documented data, not self-serving conclusory statements.

### **REASONABLE ASSURANCE, DECOMMISSIONING FUNDING**

Obtaining an estimate from an experienced third-party vendor is not the only way for an applicant to demonstrate that its cost estimate is documented and reasonable, although it clearly is one way to reach that end. If an arm's-length third-party estimate is unavailable, the balance of an applicant's showing must be sufficiently "reliable" — documented and reasonable — to carry the day.

### **RULES OF PRACTICE: REPLY BRIEFS**

The Commission does not credit arguments made for the first time in a reply brief.

## **MEMORANDUM AND ORDER**

The Licensing Board issued its Third Partial Initial Decision<sup>1</sup> in this proceeding on May 31, 2006. This Board decision focused on safety-related "financial assurance" contentions, resolving the final piece of the contested portion of this proceeding. Two parties filed petitions for review. The Nuclear Information and Resource Service and Public Citizen ("NIRS/PC") filed the first;<sup>2</sup> Louisiana Energy Services, L.P. ("LES" or the "Applicant") filed the second.<sup>3</sup> NIRS/PC argue that the Board wrongly refused to consider a challenge to a cost estimate provided by the Department of Energy (DOE) for depleted uranium disposal. LES argues that the Board wrongly rejected LES's cost estimates for private disposal of depleted uranium.

We grant review and affirm, although we modify the basis for the Board's ruling on the DOE cost estimate. We leave the Board's decision and reasoning undisturbed in all other respects.

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<sup>1</sup> LBP-06-15, 63 NRC 591 (2006).

<sup>2</sup> Petition on Behalf of Nuclear Information and Resource Service and Public Citizen for Review of Third Partial Initial Decision on Safety-Related Contentions ("NIRS/PC Petition") (June 12, 2006).

<sup>3</sup> Applicant's Petition for Review of LBP-06-15 ("LES Petition") (June 15, 2006).

## I. BACKGROUND

The Board's decision details the complex procedural background of this portion of the contested proceeding exhaustively,<sup>4</sup> and we will not duplicate that discussion here.

The license application offers two alternative strategies for the deconversion and disposal of the depleted uranium hexafluoride ("DUF<sub>6</sub>") that LES's proposed facility, the National Enrichment Facility, will generate.<sup>5</sup> Under the "private sector strategy," LES would transfer the DUF<sub>6</sub> to a private facility for deconversion, and transport the resultant depleted yellowcake ("DU<sub>3</sub>O<sub>8</sub>") to a licensed facility for disposal. Under the "DOE strategy," LES would transfer the DUF<sub>6</sub> to DOE for deconversion and disposal. Section 3113 of the USEC Privatization Act<sup>6</sup> requires DOE to accept for disposal depleted uranium from NRC-licensed uranium enrichment facilities so long as the depleted uranium is "ultimately determined to be low-level radioactive waste."

As the Board noted,<sup>7</sup> we already have found LES's depleted uranium to be low-level waste and accordingly have declared the DOE option a "plausible strategy."<sup>8</sup> The Board found that the private sector strategy was also a plausible option, both with respect to deconversion<sup>9</sup> and disposal.<sup>10</sup> With both options defined as plausible strategies, the Board's decision addressed the question whether the cost estimates for the decommissioning funding of each option provide reasonable assurance of adequate funding. The Board found that LES had met its burden of proof with respect to the DOE strategy only. As a result, under the Board's decision, the level of decommissioning funding that LES must secure for deconversion and disposal of the DUF<sub>6</sub> will be based on the DOE strategy, at least initially.<sup>11</sup>

## II. ANALYSIS

We take review of the Board's decision to clarify two important issues raised

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<sup>4</sup> LBP-06-15, 63 NRC at 603-22.

<sup>5</sup> *See id.* at 628.

<sup>6</sup> *See* 42 U.S.C. § 2297h-11.

<sup>7</sup> LBP-06-15, 63 NRC at 626, 628.

<sup>8</sup> *See* CLI-05-5, 61 NRC 22, 36 (2005); CLI-04-3, 59 NRC 10, 22 (2004).

<sup>9</sup> LBP-06-15, 63 NRC at 637.

<sup>10</sup> *Id.* at 667.

<sup>11</sup> The Board left open the possibility that the private sector strategy might become available in the future if LES becomes able to establish a sufficiently reliable and comprehensive cost estimate for this strategy. *Id.* at 631, 684 n.82.

in the petitions.<sup>12</sup> First, we examine, and uphold, the Board’s application of our “reasonable assurance” standard (and associated guidance in NUREG-1757) to LES’s “private sector” decommissioning cost estimate. Second, we examine the Board’s application of this same standard to the DOE decommissioning cost estimate. On the DOE issue, we reject the Board’s analysis of section 3113 of the USEC Privatization Act, focus on the Board’s alternate, *correct* reasons for rejecting NIRS/PC’s proposed contentions challenging the DOE estimate, and affirm the Board’s decision to base the initial level of decommissioning funding on the DOE estimate.

We do not undertake a point-by-point review of the Board’s factual findings. As we stated in our decision on review of the Board’s Second Partial Initial Decision in this proceeding, “[w]hile [we have] discretion to review all underlying factual issues *de novo*, we are disinclined to do so where a Board has weighed arguments presented by experts and rendered reasonable, record-based factual findings. We generally step in only to correct ‘clearly erroneous’ findings — that is, findings ‘not even plausible in light of the record viewed in its entirety.’”<sup>13</sup> As in our prior decision, this is decidedly not the case here, and, as in our prior decision, we will defer to the Board’s factual findings. We see nothing in the record evidence, or in the parties’ briefs, to controvert the reasonableness of the Board’s factual findings.

#### **A. LES Petition — “Private Sector” Decommissioning Cost Estimates**

Both the NRC Staff and LES argue that, in its evaluation of the “private sector” option, the Board has significantly altered the applicable standard — discarding the traditional “reasonable assurance” standard in favor of a newly minted “reliability” standard (with two parts). Both urge the Commission to take review on that basis. The NRC Staff acknowledges that, technically, the “private sector” option is moot because the Board approved using the DOE option as a basis for setting the initial level of decommissioning funding.<sup>14</sup> Thus, the Staff points out, the Board’s rejection of the private sector option as a basis for calculating decommissioning funding did not stop LES from receiving its license. Nonetheless, the Staff argues (and LES agrees) that resolving questions regarding

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<sup>12</sup> See 10 C.F.R. § 2.341(b)(4)(iii).

<sup>13</sup> CLI-06-15, 63 NRC 687, 697 (2006), citing *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), CLI-06-1, 63 NRC 1, 2 (2006); *Anderson v. Bessemer City*, 470 U.S. 564, 573-76 (1985); and *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-03-8, 58 NRC 11, 25-26 (2003).

<sup>14</sup> NRC Staff Response to Applicant’s Petition for Review of LBP-06-15 (“NRC Staff Answer to LES”) (June 26, 2006) at 1, 9.

the applicable standard for evaluating decommissioning funding estimates is sufficiently important to justify review.

LES also argues that its “private sector cost estimate provides an independent basis for complying with the NRC’s decommissioning funding requirements,”<sup>15</sup> and seeks review and reversal of the Board’s rejection of the private disposal strategy as a foundation for calculating a decommissioning funding cost estimate. On this point, the NRC Staff disagrees with LES. The Staff, like the Board, found a lack of “sufficient funding” for the private sector option.<sup>16</sup>

In analyzing the concept of “reasonable assurance,” the Board took as its starting point language in NUREG-1757, Vol. 3, § 4.1, requiring both “documented” and “reasonable” underlying assumptions for cost estimates.<sup>17</sup> The Board melded the “documented” and “reasonable” elements into one: “the combination of these two elements reflects the overall concept of ‘reliability,’ that is, an estimate that is sufficiently trustworthy and dependable to be utilized as

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<sup>15</sup> Applicant’s Reply to Intervenor and NRC Staff Responses to Applicant’s Petition for Review of LBP-06-15 (“LES Reply”) (July 3, 2006) at 4.

<sup>16</sup> NRC Staff Answer to LES at 7.

<sup>17</sup> LBP-06-15, 63 NRC at 629. Section 4.1 of NUREG-1757, Vol. 3, provides Staff guidance for the review of cost estimates for decommissioning funding plans (and decommissioning plans). “The purpose of the review of the cost estimate is to ensure that the licensee or responsible party has developed a cost estimate for decommissioning the facility based on *documented* and *reasonable assumptions* and that the estimated cost is sufficient to allow an independent third party to assume responsibility for decommissioning the facility if the licensee or responsible party is unable to complete the decommissioning.” NUREG-1757, Vol. 3, § 4.1, p. 4-9 (emphasis added). This section also sets out the evaluation criteria NRC Staff applies to all cost estimates:

At a minimum, all cost estimates for unrestricted or restricted release must meet all nine of the following conditions:

1. The cost estimate meets the applicable regulatory requirements in 10 CFR 20.1403(c), 20.1403(e)(2)(iii), 30.35(e), 30.36(e), 30.36(g)(4)(v), 40.36(d), 40.42(e), 40.42(g)(4)(v), 70.25(e), 70.38(e), 70.38(g)(4)(v), 72.30(b), and 72.54(g)(5).
2. The cost estimate is based on *documented* and *reasonable assumptions*.
3. The unit cost factors used in the cost estimate are reasonable and consistent with NRC cost estimation reference documents.
4. The cost estimate includes costs for labor, equipment and supplies, overhead and contractor profit, sampling and laboratory analysis, and miscellaneous expenses (e.g., license fees, insurance, and taxes).
5. The cost estimate applies a contingency factor of at least 25 percent to the sum of all estimated costs.
6. The cost estimate does not take credit for (a) any salvage value that might be realized from the sale of potential assets during or after decommissioning or (b) reduced taxes that might result from payment of decommissioning costs or site control and maintenance costs.

(Continued)

a basis for making the requisite financial assurance findings.’’<sup>18</sup> The Board then applied its ‘‘reliability’’ approach to the specific facts of this case. The Board said that LES did not demonstrate the ‘‘reliability’’ of its estimate by providing ‘‘either (1) the cost a third party would charge in an arm’s-length transaction with LES to provide that service; or (2) what it would cost LES if it constructed and operated such a facility on its own.’’<sup>19</sup> The NRC Staff and LES object to this portion of the Board’s analysis, labeling the Board’s two-part ‘‘reliability’’ approach as a ‘‘new’’ standard, which they believe is inconsistent with — and more rigid than — ‘‘reasonable assurance.’’

We do not view the Board’s decision that way. The Board’s ‘‘reliability’’ approach is nothing more than a restatement of the same NRC Staff guidance — NUREG-1757 — that the Staff itself uses routinely when it analyzes decommissioning cost estimates. The Board’s focus on one (the second) of the nine criteria listed in NUREG-1757<sup>20</sup> does not invalidate its analysis. In fact, we find that the Board’s analysis was tailored to the specifics of this proceeding — as our precedent requires.<sup>21</sup> Each decommissioning situation is unique; the reasonableness of costs and estimates must be assessed on a case-by-case basis. Our precedents, as well as NUREG-1757, call for objective, documented data, not self-serving conclusory statements. Here, where there is no widescale disposal market and little prior cost experience, the Board did not act unreasonably when it examined

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7. The means identified in the DFP [Decommissioning Funding Plan] or DP [Decommissioning Plan] for adjusting the cost estimate and associated funding level over the life of the facility and any storage or surveillance period is adequate.
  8. The cost estimate reflects decommissioning under appropriate facility conditions (for a DFP, routine facility conditions should be assumed; for a DP, facility conditions at the end of licensed operations should be assumed).
  9. The cost estimate includes costs for all major decommissioning and site control and maintenance activities specified in Section A.3 of this volume, including (a) planning and preparation, (b) decontamination and/or dismantling of facility components, (c) packaging, shipment, and disposal of radioactive wastes, (d) a final radiation survey, (e) restoration of contaminated areas on facility grounds (if necessary), and (f) site stabilization and long-term surveillance (if necessary). NUREG-1757, Vol. 3, § 4.1, pp. 4-9 to 4-10 (emphasis added).

<sup>18</sup> LBP-06-15, 63 NRC at 629 n.30.

<sup>19</sup> *Id.* at 630-31.

<sup>20</sup> See note 17, *supra*.

<sup>21</sup> See *Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-04-33, 60 NRC 581, 602-03, 605-06 (2004); *Consolidated Edison Co. of New York* (Indian Point, Units 1 and 2), CLI-01-19, 54 NRC 109, 143-44 (2001); *North Atlantic Energy Service Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 220-21 (1999); *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 257, 259-60 (1996); *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-88-10, 28 NRC 573, 586 (1988).

LES's estimates for "reliability" — an inquiry consistent with verifying whether the estimates provided "reasonable assurance" for decommissioning funding.

Notably, with respect to some pieces of LES's overall cost estimate — such as landfill disposal of calcium fluoride ("CaF<sub>2</sub>")<sup>22</sup> and management of empty DUF<sub>6</sub> cylinders<sup>23</sup> — the Board found LES's estimates "sufficiently grounded in estimates of the actual cost of providing a service from experienced third parties so as to be sufficiently reliable for establishing the initial estimate of decommissioning funding associated" with those pieces.<sup>24</sup> The Board expressly stated — consistent with our precedent — that this finding did not mean "that obtaining an estimate from an experienced third-party vendor is the only way for an applicant to demonstrate that its cost estimate is documented and reasonable, although it clearly is one way to reach that end."<sup>25</sup> Thus, while the Board did not require a third-party estimate as the *only* way to demonstrate the reasonableness of a cost estimate, for some pieces of the private disposal strategy, using a third-party vendor's estimate worked to demonstrate the reliability of the estimates.

On the other hand, for the remainder of LES's estimate, where no arm's-length third-party offer was available, the Board examined the basis and support for LES's cost claims. For one piece of the overall cost estimate, namely, the cost of the deconversion of the DUF<sub>6</sub> to DU<sub>3</sub>O<sub>8</sub>, the Board found the LES estimate unreliable "in that LES has neither obtained an estimate from a qualified third party outlining what that party would charge to dispose of the DU [depleted uranium] nor conducted its own analysis to determine what that cost might be."<sup>26</sup> This finding rests on the Board's record-based factual determination that LES's showing was inadequate:

because the Board does not have confidence that the COGEMA cost estimate that is the basis for the Urenco business study accurately reflects all the variables customarily considered in establishing the cost of deconversion services (e.g., cost of capital), [the Board was] unable to conclude that the LES extrapolations from those numbers brings us to a reliable deconversion cost estimate.<sup>27</sup>

We find no reason to upset this factual determination that the proof LES provided

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<sup>22</sup> LBP-06-15, 63 NRC at 651.

<sup>23</sup> *Id.* at 654.

<sup>24</sup> *Id.* at 630.

<sup>25</sup> *Id.* at 630 n.31.

<sup>26</sup> *Id.* at 631. The Board recognized "the possibility that LES might, at some future date, establish a sufficiently reliable all-in cost estimate for a private disposition strategy . . . ." *Id.*

<sup>27</sup> *Id.* at 642. COGEMA SA is a subsidiary of AREVA Enterprises, Inc., a competitor of Urenco. *Id.* at 635 n.33. Urenco is LES's sole general partner. *Id.* at 641. The record suggests that LES did not provide adequate evidence on a significant cost component — the cost of capital for financing a deconversion facility. *See id.* at 643-46.

was insufficient to provide reasonable assurance of the validity of the estimate for purposes of setting an initial level for decommissioning costs.

LES reads too much into the Board's decision: we do not agree that the Board demanded "the preparation of a comprehensive, bottom-up cost analysis, perhaps of the sort that might be prepared by the actual provider of the relevant service as part of a business plan or pricing analysis."<sup>28</sup> The Board simply was insisting on "documented" and "reasonable" submissions, as NUREG-1757 suggests.

We also disagree with the NRC Staff's interpretation of the Board's treatment of the Waste Control Specialists (WCS) and Envirocare estimates. Even though the Board arguably looked to see if these estimates were the equivalent of arm's-length third-party offers — finding that neither estimate rose to that level — that does not mean that the Board's analysis was inflexible or lacked a case-specific focus. In fact, as the Board explicitly acknowledged in its discussion of the cost of near-surface disposal of  $DU_3O_8$  and the WCS and Envirocare estimates,

nothing in the applicable NRC regulations or guidance documents requires that LES provide a third-party estimate as a basis for its cost estimate for a particular element of decommissioning funding. But . . . an estimate from a third party certainly adds significantly to its reliability. Nonetheless, where, as here, no credible third-party estimate has been proffered, an applicant's summary showing to demonstrate the reliability of its cost estimate may well not suffice.<sup>29</sup>

In short, the Board held that if an arm's-length third-party estimate is unavailable, the balance of an applicant's showing must be sufficiently "reliable" — documented and reasonable — to carry the day. We concur. Here, the Board agreed that the record addressed possible charges to dispose of waste of different types, such as reactor decommissioning waste and bulk contaminated soil, that Envirocare might levy. The Board, however, found that the record did not adequately address the estimated cost of disposing of *the type and quantity of DU that the National Enrichment Facility will generate* (as opposed to the reactor decommissioning waste and bulk contaminated soil addressed on the record). In other words, case-specific or documented support for this particular cost component was lacking. Again, we find the Board's evaluation of the facts consistent with our flexible, case-specific approach for assessing whether an applicant has provided reasonable assurance for a decommissioning cost estimate. We find no basis for questioning the Board's analytical approach or findings of fact on this point.

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<sup>28</sup> LES Petition at 14.

<sup>29</sup> LBP-06-15, 63 NRC at 673-74.

## B. NIRS/PC Petition — DOE Cost Estimate

In its petition, NIRS/PC ask us to reverse the Board's determination on the DOE cost estimate for disposal of LES's depleted uranium. We decline to do so. NIRS/PC's various claims are unpersuasive. First, NIRS/PC raised no admissible contention challenging DOE's decommissioning cost estimate. Second, the Board's decision did not purport to determine a permanent level of decommissioning funding and left room for future adjustments. Finally, the Board did not treat the private sector and DOE options inconsistently.

### 1. *No Admissible Contention*

NIRS/PC argue that the Board's evaluation of the DOE estimate rests upon the flawed assumption that section 3113 of the USEC Privatization Act makes the estimate binding and precludes NRC review of it.<sup>30</sup> NIRS/PC are correct on the section 3113 point. According to the Board, section 3113 means that "[n]either an intervenor nor an applicant/licensee (nor seemingly the NRC) has the authority to challenge or direct DOE's *estimates* of the fees it will charge to a uranium enrichment facility that requests DOE to disposition its DU waste."<sup>31</sup> But section 3113 says nothing at all about cost "estimates," and does not purport to give such estimates binding, conclusive effect.<sup>32</sup> Section 3113 simply says that DOE must recoup its costs for disposing of any depleted uranium that it accepts. Section 3113's *cost recovery* requirement is unrelated to the *cost estimate* DOE provided here, and does not preclude our examination of DOE's estimate. The NRC Staff understood this to be the case, as it looked behind DOE's estimate, and required changes in it.<sup>33</sup> The NRC Staff was right to do so, and the Board erred in giving the DOE estimate preclusive force under section 3113.

But the Board's misunderstanding of section 3113 does not require reinstatement of NIRS/PC's challenge to the DOE estimate. In an August 2005 order,<sup>34</sup> the Board rejected NIRS/PC's lengthy contention revisions questioning the DOE estimate on grounds additional to section 3113's supposed preclusive force. As the Board noted, all of the bases for the timely portions of the proposed revised contention, with a single exception (now moot), were inadmissible:

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<sup>30</sup>NIRS/PC Petition at 15. Section 3113 of the USEC Privatization Act is codified at 42 U.S.C. § 2297h-11.

<sup>31</sup>LBP-06-15, 63 NRC at 629 (emphasis added).

<sup>32</sup>This does not mean that DOE lacked authority to give LES an estimate.

<sup>33</sup>See NRC Staff Answer to NIRS/PC at 8.

<sup>34</sup>Memorandum and Order (Ruling on Motion To Admit Late-Filed Amended and Supplemental Contentions), ASLBP No. 04-826-01-ML (Aug. 4, 2005) ("August 4th Order") (unpublished), at 21-22. We declined to take interlocutory review of this decision, on referral from the Board, in CLI-05-21, 62 NRC 538 (2005).

Were the Board to find that section 3113 did not provide a rationale for excluding this proposed amendment, we would have found it admissible to the extent it is supported by basis (F), which is sufficient to establish a genuine material dispute adequate to warrant further inquiry. On the other hand, the remaining bases (A) through (E) fail to provide sufficient support for that amendment. Basis (A) is inadmissible in that it constitutes an impermissible challenge to Commission regulations. *See* LBP-04-14, 60 NRC at 54-55 [in this same proceeding]. Relative to bases (C) and (D), NIRS/PC has failed to provide adequate factual support or expert opinion for these propositions. *See id.* at 55-56. As to bases (B) and (E), given that HF disposal costs and depleted uranium storage costs, respectively, have in fact been accounted for by DOE and/or LMI Government Consulting, these bases fail to establish a genuine material dispute with the application adequate to warrant further inquiry. *See id.* at 57.<sup>35</sup>

The one basis the Board found acceptable — basis (F) — concerned adding a “contingency” factor of at least 25% to the total estimated decommissioning costs. This basis is now moot. As the NRC Staff points out,<sup>36</sup> LES is now required to apply a 25% contingency factor to the DOE estimate as a condition of the license, so there no longer is a live controversy over whether to include a contingency factor. Significantly, NIRS/PC’s petition for review makes no argument to revive this contingency claim, nor does the petition controvert the Board’s finding that the other bases for NIRS/PC’s challenges to the DOE estimate were not admissible. Their reply brief does offer a short argument along these lines,<sup>37</sup> but the Commission does not credit arguments made for the first time in a reply brief.<sup>38</sup> Since the Board’s decision not to admit these bases rests on alternative grounds unchallenged by NIRS/PC, the Board’s mistaken reliance on section 3113 is harmless. We sustain the Board’s decision not to admit the proposed “DOE estimate” contentions, based on the alternative grounds detailed

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<sup>35</sup> August 4th Order at 22 n.15.

<sup>36</sup> NRC Staff Response to Petition on Behalf of Nuclear Information and Resource Service and Public Citizen for Review of Third Partial Initial Decision on Safety-Related Contentions (“NRC Staff Answer to NIRS/PC”) (June 22, 2006) at 8-9.

<sup>37</sup> *See* Reply on Behalf of Nuclear Information and Resource Service and Public Citizen in Support of Petition for Review of Third Partial Initial Decision on Safety-Related Contentions (“NIRS/PC Reply”) (June 27, 2006) at 3-4.

<sup>38</sup> *See, e.g., USEC Inc.* (American Centrifuge Plant), CLI-06-9, 63 NRC 433, 438-39 & n.29 (2006). The reply brief arguments are, in any case, unpersuasive. For example, NIRS/PC argue that if the proceeding is remanded to the Board, the Board will have to consider certain of these bases. Specifically with respect to basis (F), NIRS/PC argue that the 25% allowance does not make “moot” their contention that 25% is inadequate. But NIRS/PC support their position merely by referring to DOE cost overruns on unrelated prior projects. NIRS/PC Reply at 3-4.

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by the Board in its August 4th Order. As a result, the validity of DOE's cost estimate was not at issue in the contested portion of this proceeding.<sup>39</sup>

## 2. *No Permanent Level of Decommissioning Funding*

NIRS/PC characterize the Board's determination on DOE's cost estimate as follows: "the Board ruled that the cost estimate provided by DOE . . . conclusively establishes the cost of dispositioning — and thus the amount of financial assurance."<sup>40</sup> This is an overstatement. Actually, the Board did not find that the DOE cost estimate "conclusively establishe[d]" the funding required to ensure appropriate disposal of depleted uranium. Instead, the Board found "that the cost estimates provided relative to the DOE strategy are sufficiently reliable to provide the basis for an *initial estimate* of the portion of decommissioning funding for the [National Enrichment Facility] associated with disposition of the DUF<sub>6</sub> produced by the [National Enrichment Facility]."<sup>41</sup> This is a significant distinction. The Board's decision, on its face, does not purport to establish the level of decommissioning funding that the NRC will require for the life of the project, but only the starting point. Moreover, LES's decommissioning costs are subject to *annual* reevaluation.<sup>42</sup> This provides an established mechanism for frequent

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NIRS/PC's reliance on historical anecdotes — allegedly amounting to a DOE pattern of making poor cost estimates — resembles "past misbehavior" arguments we have encountered and rejected in other contexts. We refer to situations where management integrity or character has been assailed and we have found that generalized historical "bad actor" testimony, absent special circumstances, is not germane.

We have . . . placed strict limits on "management" and "character" contentions. "Allegations of management improprieties or poor 'integrity' . . . must be of more than historical interest: they must relate directly to the proposed licensing action." . . . When "character" or "integrity" issues are raised, we expect them to be directly germane to the challenged licensing action.

*Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 366-67 (2001). "[T]here must be some direct and obvious relationship between the character issues and the licensing action in dispute." *Id.* at 365, citing *Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185, 189 (1999). Similarly, we find no "direct and obvious relationship" between DOE's alleged historical failure to make valid estimates in some prior cases and the estimate DOE provided to LES here.

<sup>39</sup> Since no admitted contention challenged DOE's estimate, the Board (notwithstanding its view that section 3113 precluded review of DOE estimates) ultimately ruled on the issue in the mandatory portion of the proceeding, after the NRC Staff evaluated DOE's estimate pursuant to the relevant guidance documents (like NUREG-1757). The Board found the DOE estimate reasonable based upon the NRC Staff's evaluation — an evaluation that required DOE to update its estimate, and that resulted in the imposition of license conditions. *See* LBP-06-17, 63 NRC 747, 787-90 (2006).

<sup>40</sup> NIRS/PC Petition at 2, citing LBP-06-15, 63 NRC at 630, slip op. at 42.

<sup>41</sup> LBP-06-15, 63 NRC at 630 (emphasis added).

<sup>42</sup> LBP-06-17, 63 NRC at 788.

adjustments to the decommissioning fund, enabling the prompt correction of any underfunding that may be revealed as circumstances change and unforeseen costs arise.

As we have stressed, we do not lightly overturn the factual findings of our boards. Here we find the Board's determination reasonable based on the record. NIRS/PC point to nothing in the record to show that DOE's estimate is not a reasonable basis for setting the initial level of funding required for the disposal portion of decommissioning funding.

NIRS/PC also argue that the evaluation of the DOE estimate's utility for setting the appropriate decommissioning amount that the Board *did* make was inadequate, and that the Board should have permitted NIRS/PC to challenge the DOE estimate at hearing. But, as we already explained, NIRS/PC raised no admissible contention challenging the DOE estimate. Even as it criticizes the Board for not permitting the DOE cost estimate to be an issue addressed in the contested portion of the proceeding, NIRS/PC also recognize that the NRC Staff did scrutinize the estimate: "the DOE estimates have been tested by Staff, and even changed under their scrutiny."<sup>43</sup> Also, as LES points out, NIRS/PC did not present or solicit admissible testimony on the question whether the DOE estimate potentially left out any required decommissioning or disposal cost elements.<sup>44</sup>

### 3. *No New Two-Part 'Test'*

NIRS/PC criticize the Board for not applying the same two-part "reliability" standard to the DOE estimate as it applied to the private disposal estimate: first, did the estimate reflect what a third party would charge LES to process the anticipated waste; alternatively, was there a thorough analysis of the costs to construct and operate a facility to process the waste. NIRS/PC argue that the DOE estimate was not a reliable, binding, third-party offer and that "DOE has *no experience* with deconversion at the Paducah or Portsmouth plants, which have not been built, and DOE has *no experience* with near-surface disposal of the

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<sup>43</sup> NIRS/PC Petition at 16.

<sup>44</sup> Answer of Applicant Louisiana Energy Services, L.P. in Opposition to NIRS/PC Petition for Review of LBP-06-15 ("LES Answer to NIRS/PC") (June 22, 2006) at 18. *See* Memorandum and Order (Ruling on In Limine Motions and Motion To Dismiss) (Oct. 4, 2005) (unpublished) at 7-8 ("If, based on the LES and [S]taff prefiled testimony and exhibits, NIRS/PC identify any element of decommissioning or disposal whose costs have not been included in the estimated costs for the DOE disposal option (except those elements that have been excluded by our prior rulings) [they] may provide prefiled rebuttal testimony (or cross-examine the appropriate LES or [S]taff witnesses) regarding the failure to include those items"). The Board found the "testimony" NIRS/PC presented on rebuttal inadmissible because it reintroduced testimony previously stricken. *See* Memorandum and Order (Ruling on In Limine Motions Regarding Prefiled Exhibits and Rebuttal Testimony) (Oct. 20, 2005) (unpublished) at 2.

product of those plants.’’<sup>45</sup> Therefore, NIRS/PC argue, if the Board had applied its ‘‘reliability’’ test to DOE’s estimate, it would have found the DOE estimate wanting.

As we already explained, we do not view the Board’s decision as creating a new standard, two-part or otherwise. Nor do we agree that the Board’s evaluation of the DOE estimate was inconsistent with its evaluation of the private sector estimate. The Board reasonably viewed the DOE estimate as ‘‘analogous’’ to a third-party estimate.<sup>46</sup> One of the hallmarks of a reliable third-party estimate is that it be an arm’s-length estimate rather than, for example, an estimate provided by a parent or otherwise affiliated entity. The arm’s-length nature of a third-party estimate confers reliability on the estimate, providing ‘‘reasonable assurance’’ that the amount of decommissioning funding is being set at an appropriate initial level. The DOE estimate, unlike LES’s private sector estimate, has the required arm’s-length third-party characteristics.<sup>47</sup> Thus, even though we disagree with the Board that section 3113 of the USEC Privatization Act precludes an NRC inquiry into the reasonableness of the DOE estimate (as we explained above), we find that the Board’s acceptance of the DOE estimate for the purpose of setting the initial level of decommissioning funding was reasonable.<sup>48</sup> Moreover, as we held above, NIRS/PC have not offered admissible contentions suggesting that the DOE estimate was fraudulent, unreasonable, or otherwise not acceptable as a third-party estimate.

### **C. NIRS/PC Petition — Plausible Strategy for Disposal of Depleted Uranium**

In its petition, NIRS/PC argue that the Board erred when it decided that LES had shown a plausible ‘‘private sector’’ strategy for near-surface disposal of depleted uranium.<sup>49</sup> NIRS/PC argue that the Board’s ‘‘plausible strategy’’ decision on the disposal of depleted uranium is unsupported without a determination that depleted uranium is Class A waste, since only Class A waste can be accepted

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<sup>45</sup> NIRS/PC Petition at 14 (emphasis in original).

<sup>46</sup> See LBP-06-15, 63 NRC at 630.

<sup>47</sup> NIRS/PC’s apparent belief that a third-party ‘‘estimate’’ must also be a binding ‘‘offer’’ is incorrect. Requiring a binding offer so far in advance of the need for a waste disposal contract would be completely unrealistic — and likely insurmountable — for virtually all applicants.

<sup>48</sup> There also is a presumption that governmental officials, acting in their official capacities, have properly discharged their duties. ‘‘Clear evidence’’ is usually required to rebut this presumption. See, e.g., *National Archives and Records Administration v. Favish*, 541 U.S. 157, 174 (2004). NIRS/PC have not filed a contention alleging that the DOE official who provided the estimate to LES improperly discharged his duties, and we see no evidence in the record to suggest any impropriety in the DOE official’s actions.

<sup>49</sup> NIRS/PC Petition at 3, 25.

at the proposed disposal site, Envirocare. NIRS/PC argue further that the Board was not supposed to make a Class A determination under our remand decision,<sup>50</sup> and that the Board's decision should be reversed since it made and relied upon an unauthorized determination in reaching its decision.

In fact, the Board did not make an unauthorized determination on the Class A waste question; instead, the Board simply relied on our prior finding that "under a plain reading of the regulation, depleted uranium is a Class A waste."<sup>51</sup> As the NRC Staff points out in its brief,<sup>52</sup> our regulations currently dictate classifying depleted uranium as Class A low-level radioactive waste. In its decision, the Board explained that Envirocare's current license, issued by the state of Utah, allows Envirocare to accept depleted uranium in the quantities that would be produced by the LES facility, and that Utah's Division of Radiation Control (DRC), the relevant Agreement State regulatory agency, has explicitly verified to the NRC Staff that it would have "no reservations" about Envirocare accepting depleted uranium in an oxide form (DU<sub>3</sub>O<sub>8</sub>), without quantity limitation. Given information provided by Envirocare, the Utah DRC, and DOE, the Board concluded that near-surface disposal of depleted uranium at Envirocare, or another near-surface facility with similar characteristics, appears plausible.<sup>53</sup>

NIRS/PC also argue that our "[p]recedents establish that the 'plausible strategy' requirement is a licensing requirement that calls for a showing of compliance with the low-level waste disposal regulations, 10 CFR Part 61, Subpart C," and that "[n]o such showing has been made."<sup>54</sup> NIRS/PC argue that "[t]he record does not explain or support Utah's decision"<sup>55</sup> to allow Envirocare to accept waste of the kind that the National Enrichment Facility will generate. NIRS/PC present no arguments tailored to support this Part 61-based argument. Instead, NIRS/PC offer only a lengthy rehearsal of arguments we have considered before under the rubric of the National Environmental Policy Act (NEPA). NIRS/PC argue that "[i]t cannot be contended that the Board has correctly determined that LES met its burden of proof to show that near-surface disposal at the Envirocare site is a credible and reasonable plan for compliance with the long-term requirements of

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<sup>50</sup> CLI-05-20, 62 NRC 523 (2005).

<sup>51</sup> *Id.* at 535.

<sup>52</sup> NRC Staff Answer to NIRS/PC at 10. As the NRC Staff also points out in its brief, *id.*, we have directed our Staff to examine whether the Part 61 waste classification rules should be amended in light of the potentially large quantities of depleted uranium from enrichment facilities. We directed Staff to perform this analysis outside this proceeding. CLI-05-20, 62 NRC at 536. However, even if the Staff ultimately were to alter the general classification rules, it would not follow that LES's depleted uranium could not be classified as Class A at Envirocare or another specific near-surface facility. *See* 10 C.F.R. § 61.58.

<sup>53</sup> LBP-06-15, 63 NRC at 666-69.

<sup>54</sup> NIRS/PC Petition at 19.

<sup>55</sup> *Id.* at 22.

10 C.F.R. Part 61, Subpart C” and that “[t]he requirements of a plausible strategy determination under 10 C.F.R. 70.25(e) have not been met.”<sup>56</sup>

We reject NIRS/PC’s arguments, which seek to reopen an issue we already decided. In our recent NEPA decision, we found that “at least one near-surface disposal facility, Envirocare, may be a plausible option for disposal of the National Enrichment Facility depleted uranium. . . .”<sup>57</sup> We stressed that selecting the disposal site for LES-generated depleted uranium is not the purpose of this proceeding; a disposal site will be selected later. As we stated, “[p]rior to a final determination on disposal, we would expect that the pertinent regulatory authority will have considered both the characteristics of the waste and the site-specific features of the disposal site to assure that all radiological dose limits and safety regulations indeed can be met.”<sup>58</sup>

### III. CONCLUSION

We *accept* review of the Board’s decision, and for the reasons given above and for the reasons given by the Board, we *affirm* its conclusion that LES has shown reasonable assurance of adequate decommissioning funding for the DOE option. We also *affirm* the Board’s conclusion that LES did not show reasonable assurance of adequate decommissioning funding for the private sector option.

IT IS SO ORDERED.

For the Commission

EMILE L. JULIAN  
Acting Secretary of the Commission

Dated at Rockville, Maryland,  
this 17th day of August 2006.

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<sup>56</sup> *Id.* at 25.

<sup>57</sup> CLI-06-15, 63 NRC at 700.

<sup>58</sup> CLI-06-15, 63 NRC at 699. As we stated in our prior decision, “under the Atomic Energy Act, the NRC in its oversight role periodically reviews state radiation control programs to confirm that they remain compatible with the Commission’s programs and adequately protect public health and safety. The NRC retains authority to suspend or terminate agreements relinquishing regulatory authority to states.” *Id.* at 699-700, citing 42 U.S.C. § 2021(j).

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**ATOMIC SAFETY AND LICENSING BOARD**

**Before Administrative Judges:**

**E. Roy Hawkens**, Presiding Officer  
**Dr. Richard F. Cole**, Special Assistant  
**Dr. Robin Brett**, Special Assistant

In the Matter of

Docket No. 40-8968-ML  
(ASLBP No. 95-706-01-ML)

**HYDRO RESOURCES, INC.**  
**(P.O. Box 777, Crownpoint,**  
**New Mexico 87313)**

**August 21, 2006**

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): AGENCY  
RESPONSIBILITIES**

The National Environmental Policy Act, 42 U.S.C. §§ 4321-4370f, has two principal objectives. First, it ensures that an agency considers every significant aspect of the environmental impact of a proposed action (*Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc.* 462 U.S. 87, 97 (1983)). Second, it ensures that the agency informs the public that it has, in fact, considered environmental concerns in its decisionmaking process (*ibid.*).

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): AGENCY  
RESPONSIBILITIES**

NEPA requires a federal agency, before taking any action “significantly affecting the quality of the human environment,” to prepare a “detailed statement” (i.e., an environmental impact statement) — which must be made available to the public — discussing, *inter alia*, the environmental impact of the proposed action and possible alternatives (42 U.S.C. § 4332(2)(C) (2000)).

## **NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): AGENCY RESPONSIBILITIES**

The NRC's regulations implementing NEPA are contained in 10 C.F.R. Part 51 and provide detailed instructions governing the preparation of a draft environmental impact statement and a final environmental impact statement. The Council on Environmental Quality (CEQ) also has promulgated regulations addressing NEPA compliance (42 U.S.C. § 4342 (2000); 40 C.F.R. Parts 1500-1518). Although the Commission is "not bound by CEQ regulations that it has not expressly adopted, [it] gives those regulations 'substantial deference'" (*Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348 n.22 (2002)).

## **NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): "HARD LOOK" REQUIREMENT**

NEPA does "not require agencies to elevate environmental concerns over other appropriate considerations; rather, it require[s] only that the agency take a 'hard look' at the environmental consequences before taking a major action" (*Baltimore Gas & Elec. Co. v. NRDC*, 462 U.S. at 97). "If the adverse environmental effects 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" (*Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989)). Thus, "[NEPA] does not mandate particular results, but simply prescribes the necessary process" (*ibid.*).

## **NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): CUMULATIVE IMPACTS ANALYSIS**

Cumulative impacts analysis has two possible prongs. First, it looks to whether "the proposed action's impacts will be significantly enhanced by already existing environmental effects from prior actions" (*Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 60 (2001)). Pursuant to this approach, a "cumulative impacts review examines 'the impact on the environment which results from the incremental impact of the action, when added to other past, present, and reasonably foreseeable future actions'" (*ibid.*) (quoting 40 C.F.R. § 1508.7). Second, cumulative impacts analysis may look to whether the proposed action's impacts will have interregional synergistic effects (*id.* at 57). This approach may be implicated "[w]hen several proposals for . . . actions that will have a cumulative or synergistic environmental impact upon a region are pending concurrently before an agency" (*ibid.*) (quoting *Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976)).

**RULES OF PRACTICE: WAIVER OF UNDEVELOPED ARGUMENTS**

Arguments that an intervenor fails — in derogation of 10 C.F.R. § 2.1233(c) — adequately to develop are treated as waived. *See Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), LBP-05-17, 62 NRC 77, 98 n.14 (2005); *accord, e.g., Williams v. Eastside Lumberyard and Supply Co.*, 190 F. Supp. 2d 1104, 1114 (S.D. Ill. 2001); *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), ALAB-843, 24 NRC 200, 204 (1986).

**RULES OF PRACTICE: WAIVER OF UNDEVELOPED ARGUMENTS**

Intervenors may not blithely incorporate by reference arguments that are ill-defined or undeveloped. It is not the duty of an adjudicative body to “dig through the reams of paper which [litigants] have deposited” to construct and develop their arguments (*HRI*, LBP-05-17, 62 NRC at 99 n.14).

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): FINAL ENVIRONMENTAL IMPACT STATEMENT**

The “ ‘adjudicatory record and Board decision (and, of course, any Commission appellate decisions) become, in effect, part of the [Final Environmental Impact Statement]’ ” (*HRI*, CLI-01-4, 53 NRC at 53 (quoting *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 89 (1998))).

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): NRC STAFF REVIEW**

Although the NRC Staff inadvertently omitted information regarding background radiation from the Final Environmental Impact Statement (FEIS), since the information was made available to the public in the Draft Environmental Impact Statement and was taken into account by the Staff in performing its NEPA analysis in the FEIS, the Intervenor was not prejudiced nor was the correctness of the Staff’s analysis undermined.

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): ENVIRONMENTAL JUSTICE**

Pursuant to environmental justice principles, each agency should “identify and address, as appropriate, any ‘disproportionately high and adverse human health

or environmental effects of its programs, policies, and activities on minority populations and low-income populations’ ” (*HRI*, CLI-01-4, 53 NRC at 64).

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): “HARD LOOK” REQUIREMENT**

That the Intervenors would have preferred that the Final Environmental Impact Statement (FEIS) contain additional details on any particular issue is not, standing alone, probative of the FEIS’s adequacy. “One can always flyspeck an FEIS to come up with more specifics and more areas of discussion that conceivably could have been included” (*HRI*, CLI-01-4, 53 NRC at 71). The salient question is whether the FEIS took the required “hard look” at the relevant environmental consequences (*see ibid.*).

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): STATEMENT OF PURPOSE AND NEED**

The Final Environmental Impact Statement is required to include a description of the “underlying purpose and need” of a proposed project (40 C.F.R. § 1502.13). The benefits described by the project’s purpose and need are among the factors that are weighed against the project’s costs in striking the cost-benefit balance required by NEPA. *See Public Service Co. of Oklahoma* (Black Fox Station, Units 1 and 2), ALAB-573, 10 NRC 775, 804 (1979).

**RULES OF PRACTICE: LAW OF THE CASE**

Subject to limited exceptions, “legal determinations made on appeal in a case are controlling precedent, becoming the ‘law of the case,’ for all later decisions in the same case” (*Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), CLI-06-11, 63 NRC 483, 488 (2006)).

**RULES OF PRACTICE: LAW OF THE CASE**

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): STATEMENT OF PURPOSE AND NEED**

The statement of purpose and need is independent of any specific project area. Therefore, a prior decision of the Commission adjudicating an intervenor’s challenge to the statement of purpose and need applies with equal force to all areas of a proposed project.

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA):  
STATEMENT OF PURPOSE AND NEED**

The proper inquiry for determining the sufficiency of the purpose and need statement is whether the Final Environmental Impact Statement, read as a whole, includes a correct and adequate description of the purpose and need of the “proposed action” (10 C.F.R. Part 51, Subpart A, App. A, § 4; *see HRI*, CLI-01-4, 53 NRC at 47).

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA):  
DISCUSSION OF ALTERNATIVES**

The Final Environmental Impact Statement must contain a discussion of alternatives, which is considered to be “the heart of the environmental impact statement” (10 C.F.R. Part 51, Subpart A, App. A, § 5). This discussion shall identify “reasonable alternatives” and present the “environmental impacts of the proposal and the alternatives in comparative form” (*ibid.*). It also shall “include a final recommendation on the action to be taken” (*ibid.*).

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA):  
DISCUSSION OF ALTERNATIVES**

“When the purpose [of a proposed action] is to accomplish one thing, it makes no sense to consider the alternative ways by which another thing might be achieved” (*City of Angoon v. Hodel*, 803 F.2d 1016, 1021 (9th Cir. 1986), *cert. denied*, 484 U.S. 870 (1987)).

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA):  
DISCUSSION OF ALTERNATIVES**

Because blending down highly enriched uranium for reactor fuel would not promote the primary purpose of HRI’s project — maintaining the viability of a dwindling domestic uranium industry — it is outside the scope of reasonable alternatives that must be considered under NEPA. *See Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 808 (2005) (NEPA imposes no obligation to “examine [alternatives] that would do nothing to satisfy this particular project’s goals”).

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA):  
DISCUSSION OF ALTERNATIVES**

When an agency is asked to approve a private applicant's proposed project, the agency may — taking into account the applicant's economic goals — accord appropriate deference to the applicant's proposed siting and design plans (*HRI*, CLI-01-4, 53 NRC at 55-56).

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA):  
DISCUSSION OF ALTERNATIVES (NO-ACTION ALTERNATIVE)**

The adequacy of the no-action alternative discussion in a Final Environmental Impact Statement is governed by a rule of reason (*Claiborne*, CLI-98-3, 47 NRC at 97). The discussion “ ‘need not be exhaustive or inordinately detailed’ ” (*ibid.* (quoting *Farmland Preservation Ass'n v. Goldschmidt*, 611 F.2d 233, 239 (8th Cir. 1979))). “It is most simply viewed as maintaining the status quo” (*HRI*, CLI-01-4, 53 NRC at 54).

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA):  
DISCUSSION OF ALTERNATIVES (NO-ACTION ALTERNATIVE)**

Although the Intervenors would prefer the no-action alternative, “NEPA imposes no obligation to select the most environmentally benign alternative” (*HRI*, CLI-01-4, 53 NRC at 55 (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. at 350)).

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA):  
DISCUSSION OF ALTERNATIVES (COST-BENEFIT ANALYSIS)**

The environmental impact statement must provide a cost-benefit analysis among alternatives that, *inter alia*, “considers and weighs the environmental effects of the proposed action [and the] alternatives available for reducing or avoiding adverse environmental effects” (10 C.F.R. § 51.71(d)).

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA):  
DISCUSSION OF ALTERNATIVES (MITIGATION MEASURES)**

When preparing an environmental impact statement, in addition to considering the adverse environmental impacts of a proposed action (42 U.S.C. § 4332(C)(ii)), the NRC Staff must consider measures to mitigate such impacts by examining “alternatives available for reducing or avoiding adverse environmental effects” (10 C.F.R. § 51.71(d)). “Mitigation must be discussed in sufficient detail to

ensure that environmental consequences have been fairly evaluated” (*Neighbors of Cuddy Mountain v. United States Forest Service*, 137 F.3d 1372, 1380 (9th Cir. 1998)).

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA):  
ENVIRONMENTAL IMPACT STATEMENT (NEED FOR  
SUPPLEMENTATION)**

The NRC Staff shall supplement an environmental impact statement (EIS) if: (1) “[t]here are substantial changes in the proposed action that are relevant to environmental concerns,” or (2) “[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” 10 C.F.R. §§ 51.72(a), 51.92(a). “A Supplemental [EIS] is not necessary ‘every time new information comes to light after the EIS is finalized.’ . . . The new information must present ‘a seriously different picture of the environmental impact of the proposed project from what was previously envisioned.’ ” (*Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-99-22, 50 NRC 3, 14 (1999) (quoting *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 373 (1989), and *Sierra Club v. Froehlke*, 816 F.2d 205, 210 (5th Cir. 1987))).

**MATERIALS LICENSE UNDER PART 40: PERFORMANCE-BASED  
LICENSING**

Performance-based licensing “is fully consistent with . . . sound NEPA practice” (*HRI*, CLI-99-22, 50 NRC at 17), and “does not run counter to any agency mandate contained in the Atomic Energy Act or any established Commission regulation” (*id.* at 16). “It is simply an additional means through which the NRC can decrease the administrative burden of regulation while ensuring the continued protection of public health and safety” (*id.* at 16-17).

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA):  
DISCUSSION OF ALTERNATIVES (MITIGATION MEASURES);  
ENVIRONMENTAL IMPACT STATEMENT (NEED FOR  
SUPPLEMENTATION)**

It is well established that “the [Final Environmental Impact Statement (FEIS)], in response to comments received, may supplement, refine, or otherwise adapt the project alternatives” (*HRI*, CLI-01-4, 53 NRC at 53). The Staff’s addition of mitigation measures to an FEIS is, thus, not only permissible, it is properly viewed

as the Staff's conscientious performance of its NEPA responsibilities. *See ibid.* (“[t]he FEIS . . . might typically add ‘mitigation measures’ to an alternative”).

## **NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): ADEQUACY OF FINAL ENVIRONMENTAL IMPACT STATEMENT (FEIS)**

Although federal permits and exemptions must be mentioned in the FEIS (10 C.F.R. §§ 51.90 and 51.71(c)), the absence of such mention does not perforce render the FEIS invalid.

### **FINAL PARTIAL INITIAL DECISION (Phase II Challenges to In Situ Leach Mining Materials License Regarding Adequacy of Environmental Impact Statement)**

#### **I. INTRODUCTION**

This proceeding involves challenges by multiple intervenors to a 10 C.F.R. Part 40 license application by Hydro Resources, Inc. (HRI) to perform in situ leach (ISL) uranium mining at four sites in McKinley County, New Mexico: Sections 8 and 17 in Church Rock, and Crownpoint and Unit 1 in Crownpoint. In November 1994, the NRC Staff issued a “Notice of Opportunity for Hearing” concerning the license application, and timely requests for hearing were filed by the Eastern Navajo Diné Against Uranium Mining, the Southwest Research and Information Center, Grace Sam, and Marilyn Morris [hereinafter referred to collectively as the Intervenors]. Under the Commission’s then-existing regulations,<sup>1</sup> the Administrative Judge appointed as the Presiding Officer held the hearing requests in abeyance until the Staff completed its review of HRI’s license application.

On January 5, 1998, the Staff granted HRI’s request for a license (SUA-1508), and shortly thereafter, in May 1998, the then-Presiding Officer granted the Intervenors’ hearing requests. This protracted litigation followed.

Although HRI has held its license for 8 years, it has not yet started mining operations at any of the four sites due, in part, to profitability concerns related to the fluctuating price of uranium. This proceeding nevertheless has moved forward, focusing first — in what was characterized as Phase I — on issues

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<sup>1</sup> This case is being litigated pursuant to the NRC’s since-superseded procedural rules in 10 C.F.R. Part 2, Subpart L, which were amended in 2004. *See* Changes to Adjudicatory Process, 69 Fed. Reg. 2182 (Jan. 14, 2004). The new rules — which apply only to proceedings noticed on or after February 13, 2004 — do not apply here.

specific to mining operations at Section 8, because HRI stated that it eventually would begin mining operations there.

In February 2004, the then-Presiding Officer completed adjudicating the Intervenor's Phase I challenges to HRI's license (LBP-04-3, 59 NRC 84 (2004)), and the Commission, on appeal, sustained the validity of HRI's license insofar as it relates to prospective mining operations at Section 8 (CLI-04-33, 60 NRC 581 (2004); *see also* CLI-04-39, 60 NRC 657 (2004)).

This proceeding then entered Phase II, which involves the Intervenor's challenges to HRI's license insofar as it authorizes mining at the other three sites — Section 17, Unit 1, and Crownpoint. For litigative efficiency, the Intervenor's Phase II challenges were grouped into the following four categories and briefed separately: (1) groundwater protection and restoration, and surety estimates; (2) cultural resources; (3) radiological air emission controls; and (4) adequacy of the environmental impact statement.

This decision resolves the issues embodied in the fourth, and final, category of Phase II challenges — i.e., adequacy of the environmental impact statement.<sup>2</sup> The Intervenor's claim that HRI's license to perform ISL uranium mining at Section 17, Unit 1, and Crownpoint is invalid because the environmental impact statement prepared by the NRC Staff: (1) fails adequately to evaluate the cumulative environmental impacts; (2) contains an invalid statement of purpose and need for the project; (3) provides an insufficient analysis of alternatives; (4) fails to evaluate the impact of proposed mitigation measures; and (5) requires supplementation and recirculation for public comment. For the reasons set forth below, I find — with the concurrence of Dr. Richard Cole and Dr. Robin Brett, who have been appointed as Special Assistants — that HRI and the NRC Staff have demonstrated that the Intervenor's challenges relating to the adequacy of the environmental impact statement do not provide a basis for invalidating HRI's license.

## II. BACKGROUND

The Intervenor's contend that HRI's license to perform ISL uranium mining at Section 17, Unit 1, and Crownpoint is invalid because the environmental impact statement for those sites fails to satisfy governing statutory and regulatory requirements. To fully understand the issues, it is helpful to be acquainted

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<sup>2</sup>The claims brought by the Intervenor's in the three prior categories of Phase II challenges did not provide a basis for invalidating HRI's license. *See* LBP-05-17, 62 NRC 77 (2005) (rejecting claims pertaining to groundwater protection and restoration, and surety estimates), *petition for review denied*, CLI-06-1, 63 NRC 1 (2006); LBP-05-26, 62 NRC 442 (2005) (rejecting claims pertaining to cultural resources), *petition for review denied*, CLI-06-11, 63 NRC 483 (2006); LBP-06-1, 63 NRC 41 (rejecting claims pertaining to radiological air emission controls), *aff'd*, CLI-06-14, 63 NRC 510 (2006).

with: (1) the pertinent portions of the National Environmental Policy Act and its implementing regulations; and (2) the relevant administrative proceedings in this case. These topics are addressed below.

#### **A. The National Environmental Policy Act and Its Implementing Regulations**

The National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321-4370f, has two principal objectives. First, it ensures that an agency considers every significant aspect of the environmental impact of a proposed action (*Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc.*, 462 U.S. 87, 97 (1983)). Second, it ensures that the agency informs the public that it has, in fact, considered environmental concerns in its decisionmaking process (*ibid.*).

To effect these cardinal goals, NEPA requires a federal agency, before taking any action “significantly affecting the quality of the human environment,” to prepare a “detailed statement” (i.e., an environmental impact statement) — which must be made available to the public — discussing, *inter alia*, the environmental impact of the proposed action and possible alternatives (42 U.S.C. § 4332(2)(C) (2000)). An agency’s preparation and public dissemination of the environmental impact statement serves to fulfill NEPA’s twin aims, because the “‘detailed statement’ it requires is the outward sign that environmental values and consequences have been considered during the planning stage of agency actions” (*Andrus v. Sierra Club*, 442 U.S. 347, 350 (1979)).

The NRC’s regulations implementing NEPA are contained in 10 C.F.R. Part 51. As relevant here, these regulations provide detailed instructions governing the preparation of a draft environmental impact statement (DEIS), which must include: (1) “a preliminary analysis that considers and weighs 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” (10 C.F.R. § 51.71(d)); and (2) “a preliminary recommendation by the NRC Staff respecting the proposed action” (*id.* § 51.71(e)). Upon completing the DEIS, the NRC Staff releases it to the public and requests comments (*id.* §§ 51.73, 51.74). The NRC Staff then prepares a final environmental impact statement (FEIS), which includes responses to any comments on the DEIS (*id.* §§ 51.90, 51.91).<sup>3</sup>

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<sup>3</sup>The Council on Environmental Quality (CEQ) also has promulgated regulations addressing NEPA compliance (42 U.S.C. § 4342 (2000); 40 C.F.R. Parts 1500-1518). Although the Commission is “not bound by CEQ regulations that it has not expressly adopted, [it] gives those regulations ‘substantial deference’” (*Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, (Continued)

It bears emphasizing that NEPA does “not require agencies to elevate environmental concerns over other appropriate considerations. Rather, it require[s] only that the agency take a ‘hard look’ at the environmental consequences before taking a major action” (*Baltimore Gas & Elec. Co.*, 462 U.S. at 97 (citations omitted)). “If the adverse environmental effects 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” (*Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989)). Thus, “[NEPA] does not mandate particular results, but simply prescribes the necessary process” (*ibid.*).

## **B. The Relevant Administrative Proceedings in This Case**

In January 1998, the Staff granted HRI’s application for a license to perform ISL uranium mining at four proximately clustered sites in McKinley County, New Mexico — Sections 8 and 17 in Church Rock, and Crownpoint and Unit 1 in Crownpoint — that HRI plans to develop and mine in phases over a 20-year period, beginning with Section 8.<sup>4</sup> The Intervenors asserted that HRI’s license was not valid for operations at any of the four sites. Given HRI’s plan to begin its mining operations at Section 8, the then-Presiding Officer, in September 1998, granted HRI’s request to bifurcate this litigation, focusing initially in Phase I on

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56 NRC 340, 348 n.22 (2002) (citation omitted). *Cf. Baltimore Gas & Elec. Co.*, 462 U.S. at 99 n.12 (declining to decide whether CEQ regulations have binding effect on “an independent agency such as the [NRC]”).

<sup>4</sup>HRI’s ISL uranium mining process, briefly explained, will involve two principal steps. First, HRI will inject a leach solution called lixiviant — which is a mixture of groundwater charged with oxygen and bicarbonate — through injection wells located in a targeted zone containing uranium oxide. The uranium oxide, which occurs as small mineral grains within a sandstone host rock, dissolves when it comes into contact with the lixiviant. HRI will also operate production wells located within a pattern of injection wells. The production wells create a reduced pressure in the mined region by withdrawing slightly more water from the ground than is injected, thus controlling the horizontal spread of the pregnant lixiviant (i.e., the lixiviant that now contains dissolved uranium oxide), and causing it to flow toward the production wells where it is pumped to the surface. *See* NUREG-1508, “Final Environmental Impact Statement To Construct and Operate the Crownpoint Uranium Solution Mining Project, Crownpoint, New Mexico” (Feb. 1997), at 2-2 to 2-5 [hereinafter FEIS].

The second step of the ISL mining process occurs after the pregnant lixiviant is pumped to the surface. HRI will pipe the pregnant lixiviant through columns of ion exchange resin, during which the uranium oxide will attach to the resin. Upon leaving the ion exchanger, the now-barren lixiviant will be recharged as necessary with oxygen and bicarbonate, and it will then be reinjected into the ore zone to repeat the leaching cycle. When the ion exchange capacity of a column of resin is depleted, that column is taken offline and the uranium oxide is chemically stripped from the resin. The resulting uranium oxide slurry is filtered and dried to produce the finished product — uranium oxide concentrate, or yellowcake — which is packaged and stored for final shipment. *See* FEIS at 2-5 to 2-12.

the Intervenor's challenges relating to Section 8 and the overall validity of the license. *See* CLI-01-4, 53 NRC 31, 35-36 (2001). The Intervenor's challenges relating to operations at the other three sites (Section 17, Unit 1, and Crownpoint) would be litigated in Phase II, promptly after completion of the Phase I litigation. *See id.* at 38-44.

### ***1. The Relevant Phase I Administrative Proceedings***

As relevant here, during Phase I of this litigation, the Intervenor argued that the environmental impact statement relating to Section 8 operations contained numerous defects that rendered HRI's license to perform ISL uranium mining at Section 8 invalid. Specifically, the Intervenor alleged that (LBP-99-30, 50 NRC 77, 112-24 (1999)): (1) the FEIS contained an inadequate statement of purpose and need; (2) the FEIS failed to perform an adequate cost-benefit analysis; (3) the FEIS failed to consider the impacts that mining at Section 8 would have on groundwater; (4) the FEIS's proposed mitigation for relocating residents was inadequate; (5) the FEIS failed to consider the environmental costs of radioactive air emissions; (6) the FEIS failed to consider the environmental costs of liquid waste disposal and cultural impacts; (7) the FEIS unreasonably undervalued the costs of the proposed project; (8) the FEIS failed to evaluate the action alternatives and the no-action alternative; (9) the NRC Staff failed to supplement the FEIS and recirculate it for public comment; (10) the FEIS failed to explore the impact of measures to mitigate or reduce environmental effects; (11) the FEIS failed to consider the impact on livestock; (14) the FEIS failed to consider the secondary effects of mining; (15) the FEIS failed to consider the cumulative environmental impacts; and (16) the FEIS failed to perform an environmental justice analysis.

The then-Presiding Officer rejected the Intervenor's attacks on the adequacy of the FEIS for Section 8 (LBP-99-30, 50 NRC at 112-24). He concluded that the FEIS reflected that the NRC Staff had taken the "hard look" required for NEPA determinations, for consideration of cumulative impacts, and for environmental justice" (*id.* at 81). The Commission affirmed (CLI-01-4, 53 NRC at 44-71).<sup>5</sup>

Thereafter, the Intervenor moved to have the the NRC Staff supplement the FEIS with respect to Sections 8 and 17 (which are contiguous sites at Church Rock) based on a proposed housing development project — the Springstead Estates Project — that allegedly would be built approximately 2 miles from the southern boundary of Section 17 and would comprise up to 1000 residential single-family apartment and townhouse units (LBP-04-23, 60 NRC 441, 443-47 (2004)).

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<sup>5</sup>In 2001, at the request of the parties, this proceeding was held in abeyance for approximately 2 years while they attempted to negotiate a settlement. Unfortunately, those efforts were unsuccessful, and active litigation resumed in 2003. *See* CLI-04-33, 60 NRC at 583.

The Intervenor argued that supplementation of the FEIS was required pursuant to Commission regulations (10 C.F.R. § 51.92(a)), because the housing project allegedly constituted a significant new circumstance relevant to environmental concerns and bearing on HRI's proposed action. The then-Presiding Officer denied the Intervenor's motion (LBP-04-23, 60 NRC at 450-60). Observing that it was conjectural whether the putative housing project would ever be built (*id.* at 452), the Presiding Officer concluded in any event that "the requirements of NEPA have been satisfied, and that the Intervenor has not presented a prima facie case that the [Springstead Estates Project] represents a 'significant new circumstance' such that supplement to the existing FEIS is warranted" (*id.* at 448-49). The Commission "agree[d] with the Presiding Officer that there is no reason warranting FEIS supplementation as to [Sections 8 and 17]" and, accordingly, it denied the Intervenor's petition for review (CLI-04-39, 60 NRC 657, 658 n.2 (2004)).

With the Commission's rejection in December 2004 of the last of the Intervenor's challenges to the validity of HRI's license insofar as it authorizes mining operations at Section 8 (CLI-04-39, 60 NRC 657 (2004); CLI-04-33, 60 NRC 581 (2004)), this litigation entered Phase II.

## **2. *The Present Phase II Administrative Proceedings***

The Intervenor now argue that HRI's license to conduct ISL uranium mining operations at Section 17, Unit 1, and Crownpoint should be invalidated because the FEIS fails to satisfy NEPA and its implementing regulations. Specifically, the Intervenor contend that NEPA was violated because: (1) the FEIS fails adequately to analyze cumulative environmental impacts; (2) the statement of purpose and need in the FEIS is inadequate; (3) the FEIS inadequately analyzes alternatives; (4) the FEIS fails adequately to evaluate the impact of proposed mitigation measures; and (5) the NRC Staff improperly failed to supplement the FEIS and recirculate it for public comment. *See* Intervenor's Written Presentation in Opposition to HRI's Application for a Materials License with Respect to NEPA Issues for Church Rock Section 17, Unit 1, and Crownpoint (June 24, 2005) [hereinafter Intervenor's Written Presentation]; Intervenor's Reply to HRI's and the NRC Staff's Responses in Opposition to Intervenor's Written Presentation with Respect to NEPA Issues for Church Rock Section 17, Unit 1, and Crownpoint (Aug. 19, 2005) [hereinafter Intervenor's Reply].<sup>6</sup>

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<sup>6</sup> In a Joint Motion filed by the Intervenor and HRI, the Intervenor agreed to forgo presenting new evidence with respect to the adequacy of the FEIS relative to the three remaining sites, stating that they would instead "file a pleading incorporating by reference their arguments raised with respect to the  
(Continued)

HRI and the NRC Staff oppose the Intervenor's challenges, arguing that the FEIS for Section 17, Unit 1, and Crownpoint is compliant with NEPA and its implementing regulations and, accordingly, that HRI's license to conduct ISL uranium mining at those sites should be sustained. *See* HRI's Response in Opposition to Intervenor's Written Presentation Regarding Environmental Impact Statement Adequacy (July 28, 2005) [hereinafter HRI's Response]; NRC Staff's Response to Intervenor's Presentation on NEPA Issues (Aug. 12, 2005) [hereinafter NRC Staff's Response].<sup>7</sup>

For the reasons set forth below, I conclude that HRI and the NRC Staff have demonstrated by a preponderance of the evidence that the Intervenor's challenges relating to the adequacy of the FEIS do not provide a basis for invalidating HRI's license to perform ISL uranium mining operations at Section 17, Unit 1, and Crownpoint.

### III. ANALYSIS

#### A. There Is No Merit to the Intervenor's Claim That the FEIS Fails Adequately To Analyze Cumulative Environmental Impacts

The Intervenor's argue that HRI's license to mine at Section 17, Unit 1, and Crownpoint is invalid because the FEIS allegedly fails adequately to analyze cumulative environmental impacts that will occur as a result of the proposed mining operations at those three sites. Specifically, they claim that the analysis is deficient with respect to cumulative impacts on radioactive air emissions, groundwater, radiological levels and health effects, and land use (Intervenor's Written Presentation at 20-33).

Before I address the Intervenor's arguments, it is useful to understand the meaning of the term "cumulative impacts analysis" in the NEPA context. Cumulative impacts analysis is not concerned with the singular impacts an individual project may have on the environment. Rather, as relevant here, it looks to whether "the proposed action's impacts will be significantly enhanced by already existing environmental effects from prior actions" (*Hydro Resources*,

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adequacy of the [environmental impact statement] for Section 8, thereby preserving those arguments with respect to Section 17, Unit 1, and Crownpoint" (Intervenor's and HRI's Joint Motion for Change in Schedule of Written Presentations at 3 (Jan. 18, 2005) [hereinafter Joint Motion]).

<sup>7</sup> The parties also submitted supplemental briefs in May 2006 following the Commission's decision in CLI-06-14 (affirming LBP-06-1, which rejected the Intervenor's claims regarding HRI's radiological air emissions), because the Commission's decision touched on NEPA-related issues raised here by the Intervenor. *See* Intervenor's Supplemental Brief Regarding the Impact of CLI-06-14 on Intervenor's NEPA Claims (May 30, 2006); HRI's Supplemental Brief Regarding Final Environmental Impact Statement Adequacy for the Crownpoint Uranium Project (May 30, 2006); NRC Staff Supplemental Brief on the Intervenor's Presentation on Phase II NEPA Issues (May 30, 2006).

*Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 60 (2001)). Pursuant to this approach, a “cumulative impacts review examines ‘the impact on the environment *which results from the incremental impact of the action, when added to other past, present, and reasonably foreseeable future actions*’ ” (*ibid.* (quoting 40 C.F.R. § 1508.7)).<sup>8</sup>

With this definition in mind, I turn now to the Intervenors’ arguments. I conclude that none has merit.<sup>9</sup>

### ***1. The Intervenors’ Claims Relating to Cumulative Impacts on Radioactive Air Emissions Lack Merit***

The Intervenors contend that the cumulative impacts analysis in the FEIS pertaining to radioactive air emissions violates NEPA because (Intervenors’ Written Presentation at 22-26): (a) it misrepresents existing radiation levels at Section 17; (b) it inaccurately analyzes radiological air impacts that will result from mining operations; and (c) its air quality impacts analysis is incorrect and inadequate. I agree with HRI and the NRC Staff that these arguments are insubstantial. See HRI’s Response at 25-29; NRC Staff’s Response at 10-13.

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<sup>8</sup> Although not relevant here, cumulative impacts analysis may also look to whether the proposed action’s impacts will have interregional synergistic effects (*HRI*, CLI-01-4, 53 NRC at 57). This approach may be implicated “ [w]hen several proposals for . . . actions that will have a cumulative or synergistic environmental impact upon a region are pending concurrently before an agency ” (*ibid.* (quoting *Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976))). Because the Intervenors do not raise concerns regarding the potential interregional synergistic effects of HRI’s project, that issue is waived. See LBP-05-17, 62 NRC at 98 n.14.

There are several instances where the Intervenors purport to preserve arguments they advanced in Phase I of this proceeding by making wholesale references to prior pleadings and testimony (e.g., Intervenors’ Written Presentation at 22 (citing Bernd Franke Testimony attached to Intervenors’ Section 8 Air Brief); *id.* at 26 (citing Intervenors’ Section 8 and Section 17 Air Briefs); *id.* at 27 (citing Wallace Testimony attached to Intervenors’ Section 8 Groundwater Presentation); *id.* at 28 (citing Intervenors’ Section 8 Groundwater Presentation, Intervenors’ 2005 Groundwater Presentation, Intervenors’ Cumulative Impacts Brief)). Although the Intervenors may incorporate by reference arguments that they adequately identify and tailor to this Phase II context (*supra* note 6), they may not blithely incorporate arguments that are ill-defined or undeveloped. It is not the duty of an adjudicative body to “dig through the reams of paper which [litigants] have deposited” to construct and develop their arguments (*Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), LBP-05-17, 62 NRC 77, 99 n.14 (2005) (internal quotation marks omitted)). Indeterminate or unexplained arguments are waived (*infra* note 21).

<sup>9</sup> The Intervenors include within the rubric of their “cumulative impacts” argument claims that are more aptly characterized as challenges to the adequacy or correctness of the FEIS. Rather than second-guess the Intervenors’ claims, I adjudicate them as they are presented, because, as the Commission has instructed, an intervenor “bear[s] responsibility for any misunderstanding of . . . claims” that are unclear or indeterminate (*HRI*, CLI-01-4, 53 NRC at 46).

a. *The FEIS Properly Represents Existing Radiation Levels at Section 17*

The Intervenor claim that the FEIS misrepresents radiation levels at Section 17. This claim can be parsed into the following two arguments (Intervenor's Written Presentation at 22-25): (1) the FEIS fails adequately to take into account the previous uranium mining operations in the Church Rock area and, accordingly, fails properly to analyze the radiological impact of the ISL operations; and (2) the FEIS, insofar as it characterizes the residual radiation from the previous mining operations as background radiation, miscalculates the total effective dose equivalent (TEDE).<sup>10</sup> The first argument is incorrect as a matter of fact, and the second is incorrect as a matter of law.

Contrary to the Intervenor's assertion, the FEIS expressly acknowledges that this region in general, and Church Rock in particular, has a history of conventional underground uranium mining that adversely affected the environment (FEIS at 4-124 to 4-125):

Northwest New Mexico has a long history of uranium mining and milling. Effects of previous mining and milling operations in the area are considered here as they relate to the proposed licensing action. The Church Rock facility as proposed would mine an area previously mined by underground mining to supply ore to the Church Rock mill site. Uranium mining was a large employer in the area and many individuals worked in the mining and milling operations. Early mines and mills operated under much less stringent standards than exist today, and this resulted in large exposures to radioactive materials, especially radon and its daughters. The exposures were large enough to result in a high incidence of cancer among workers, and information gathered on these workers resulted in development of risk factors on radon.

In addition, the methods used to mine and mill the uranium (*i.e.*, "conventional" mining) resulted in very large amounts of radioactivity and chemically contaminated sands and slimes, also known as tailings. In 1978, the U.S. Congress passed the Uranium Mill Tailing Radiation Control Act, which required standards to be developed to control exposures from tailings and clean up past sites of uranium milling. In 1979, the tailings pond dam at the Church Rock site failed and approximately  $3.56 \times 10^5$  m<sup>3</sup> (94 million gal) of tailings liquid and 1100 tons of tailings solids were released into the Rio Puerco River (NRC 1981a). The area contaminated by the spill was surveyed and cleaned to standards developed by the New Mexico Environmental Improvement Division.

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<sup>10</sup> TEDE is defined as the "sum of the deep-dose equivalent (for external exposures) and the committed effective dose equivalent (for internal exposures)" (10 C.F.R. § 20.1003). Commission regulations proscribe licensed operations that will result in a TEDE to members of the public in excess of 0.1 rem per year (*id.* § 20.1301(a)(1)).

The record<sup>11</sup> shows that the previous owner of Section 17 — United Nuclear Corporation (UNC) — conducted conventional underground uranium mining on Section 17 for about 30 years before selling the land to HRI. The uranium ore that UNC withdrew from the underground mine at Section 17 was not processed at that site; rather, UNC hauled the ore to a milling site more than 3 miles from the mine. Parts of Section 17 are contaminated with mining spoil left over from UNC's underground mining operation. The contamination is in the form of fugitive dust and rocks apparently lost from trucks that hauled the ore from Section 17 to the milling site, or possibly from excavated rock used to build the road. *See* FEIS at 4-73; Draft Environmental Impact Statement To Construct and Operate the Crownpoint Uranium Solution Mining Project, Crownpoint, New Mexico, at 3-14 to 3-16, 4-13 (May 1994) [hereinafter DEIS]; LBP-06-1, 63 NRC at 52 & n.7; CLI-06-14, 63 NRC at 514.

The FEIS treats the radiological consequences of the above-described spoilage on Section 17 as background radiation that, pursuant to 10 C.F.R. § 20.1301(a)(1), is excluded from the TEDE calculation (FEIS at 4-72; CLI-06-14, 63 NRC at 516). Although the FEIS recognizes that background radiation — including “remnant radiation stemming from previous mining” operations (FEIS at 4-73) — is excluded from the TEDE calculation, it nevertheless discusses such radiation, estimating that individuals in Church Rock and Crownpoint receive about 225 mrem/year from background radiation:

The primary radiological impact to the environment in the vicinity of the project results from naturally occurring cosmic and terrestrial radiation and naturally occurring radon-222 and its daughters. The average whole-body dose rate to the population in this part of New Mexico includes a dose of 1.5 mSv/year (150 mrem/year) from local natural background radiation and 0.75 mSv/year (75 mrem/year) from medical procedures, based on national average. Therefore, total background is estimated to be about 2.25 mSv/year (225 mrem/year).

*Id.* at 4-72.<sup>12</sup>

The Intervenor claim that the FEIS ignores that background radiation levels at discrete locations in Church Rock can result in exposures to the general public of about 1000 mrem/year (Intervenor's Written Presentation at 23-24). For example,

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<sup>11</sup>The “‘adjudicatory record and Board decision (and, of course, any Commission appellate decisions) become, in effect, part of the FEIS’” (*HRI*, CLI-01-4, 53 NRC at 53 (quoting *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 89 (1998)). *Accord* 10 C.F.R. §§ 51.102 and 51.103).

<sup>12</sup>According to the FEIS, the population within a 50-mile radius of the entire project is about 76,500 persons. The population dose from natural background radiation would be about 17,000 man-rem/year (FEIS at 4-124), which the Intervenor state “is equivalent to about 222 mrem/year per individual” (Intervenor's Written Presentation at 26).

they assert that a member of the general public could receive such a radiation dose at the “eastern fence of the Section 17 restricted area, on the west side of State Route 566” (Intervenors’ Written Presentation in Opposition to HRI’s Application for a Materials License with respect to Radiological Air Emissions for Church Rock Section 17 at 19-20 (June 13, 2005) [hereinafter Intervenors’ Radiological Air Emissions Presentation]).

Contrary to the Intervenors’ assertion, however, the NRC Staff did not ignore the existence of discrete sources of higher background radiation in Church Rock. Section 3.7.1 of the DEIS shows elevated background radiation near the old mine road and State Route 566, which is “consistent with past use of the road, which was probably contaminated by the act of hauling ore from the Section 17 UNC mine to the UNC mill” (NRC Staff’s Response to Intervenors’ Presentation on Radiological Air Emissions (Aug. 5, 2005), Exh. 1, Affidavit of Christopher A. McKenney at 7-8 (Aug. 5, 2005)). *See also* HRI’s Response in Opposition to Intervenors’ Written Presentation Regarding Air Emissions (July 29, 2005), Exh. A, Affidavit of Mark S. Pelizza at 12-16 (July 28, 2005) [hereinafter Pelizza Affidavit]; *infra* note 15. Notably, however, background doses as high as 1000 mrem/year fall within the “‘typical [range of] background doses for most United States citizens in a given year’” (LBP-06-1, 63 NRC at 61 n.16 (quoting NUREG-1501, “Background as a Residual Radioactivity Criterion for Decommissioning” at 30 (Aug. 1994) (Draft Report), *in* HRI’s Response in Opposition to Intervenors’ Written Presentation Regarding Air Emissions, Annex C (July 29, 2005) [hereinafter HRI Annex C])).<sup>13</sup>

But as a practical matter, the Intervenors’ concern that a member of the general public will receive 1000 mrem/year due to background radiation near the eastern fence of Section 17 at State Route 566 appears to be illusory. The Intervenors acknowledge that for an individual to receive that level of exposure, he or she must “occupy that [particular] location for an entire year” (Intervenors’ Radiological Air Emissions Presentation at 20). Given that no residence currently exists at that location, and given that the Intervenors do not identify any evidence to support the conclusion that an individual would spend any significant time there, I find it

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<sup>13</sup>The national average dose of background radiation received by an individual is 300 mrem/year (LBP-06-1, 63 NRC at 60 n.16). However, annual doses can vary significantly from that figure depending on where a person lives. For example, a person living on sandy soil near the ocean may receive an annual background dose of 100 mrem/year, whereas a person living in a mountainous area in Colorado may receive an annual background dose of 1000 mrem/year (*ibid.*). “This range of [100 mrem/year to 1000 mrem/year] — a span factor of 10 — ‘is typical of the variation in background doses for most United States citizens in a given year’” (*ibid.* (quoting HRI Annex C at 30)). This broad range itself, moreover, is subject to variation, because the cosmic component of background radiation can vary by 10% over the 11-year solar cycle (*id.* at 61 n.16). Additionally, sporadic natural phenomena — such as volcanic eruptions, earthquakes, and floods — can contribute significant additional background doses to the environment (*ibid.*).

unlikely that an individual would occupy that area except on a transient basis. *See Pelizza Affidavit* at 18-19. Thus, on this record, I conclude that the *actual* typical background radiation level for the general public at Church Rock is closer to the 225 mrem/year estimated in the FEIS, rather than the 1000 mrem/year alleged by the Intervenors.<sup>14</sup>

Importantly, when the FEIS analyzed the cumulative radiological impact at Section 17, it took into account the background radiation — including the radiological remnants from the prior mining operations — and concluded that the radiological impacts resulting from HRI’s proposed operations will be “only slightly higher (well below a 1 percent increase) than the dose received from natural background radiation” (FEIS at 4-117; *accord id.* at 4-83). More specifically, the FEIS determined that the radiological exposure from HRI’s operations at the downwind residence closest to the Section 17 mining site will be about 0.5% of the allowable regulatory limit — that is, about 0.5 mrem/year (*id.* at 4-83, 4-85; LBP-06-1, 63 NRC at 70).

The FEIS explains that the increase in cumulative impacts resulting from HRI’s operations will be *de minimis* due to the nature of the ISL mining process and the protective technology that HRI plans to use (FEIS at 4-125):

The proposed project would result in a negligible increase in cumulative impacts in the area due to uranium mining and milling. HRI has proposed an ISL process which, by its nature, does not result in large amounts of tailings or environmental releases of radioactive particulate material. Additionally, HRI has proposed to use a vacuum dryer, which reduces the total releases of radioactive particulates to nearly zero, and a pressurized process circuit with a feedback system to return radon to the mine zone, which reduces environmental radon releases. The expected exposures from the remaining possible sources of radon are a very small fraction of the allowable limits for exposure of the public. The amount of generated tailings is very small, in the tens of cubic meters per year, and would be disposed of at an off-site licensed facility. In addition, the facility and related well fields would be required to be decontaminated and decommissioned to the appropriate State and Federal standards.

*See also id.* at 4-72 to 4-85, 4-124 to 4-125 (FEIS provides a detailed analysis of the estimated radiological impacts of the proposed ISL operations to nearby individuals); *id.* at 4-124 (FEIS states that the “proposed project would make a minor contribution to cumulative impacts in terms of health physics and radiological impacts”). The FEIS concludes that the minor addition to overall

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<sup>14</sup> It bears emphasizing that HRI will — subject to oversight by the NRC Staff — maintain a rigorous radiological monitoring program to ensure mining-related operations do not threaten public health and safety (LBP-06-1, 63 NRC at 78).

preexisting radiological impacts caused by HRI's operations poses no significant threat to public health and safety (*ibid.*; *see also* LBP-06-1, 63 NRC at 60).

Thus, consistent with 42 U.S.C. § 4332(2)(C), the FEIS provides a “detailed statement” about the history and impact of past uranium mining. And consistent with Commission case law, the FEIS adequately considers the “‘incremental impact of [the radiological consequences of HRI’s proposed mining operations], when added to other past [mining operations]’” (*HRI*, CLI-01-4, 53 NRC at 60 (quoting 40 C.F.R. § 1508.7)), determining that HRI’s project “‘would result in a negligible increase in cumulative [radiological] impacts in the area’” (FEIS at 4-125). I therefore conclude that the Intervenor’s assertion that the FEIS fails adequately to consider the history and impact of past conventional uranium mining at Section 17 is factually untenable.<sup>15</sup>

Nor is there merit to the Intervenor’s assertion that the FEIS’s characterization of radiation from the surface spoilage on Section 17 as background radiation “‘constitutes a major misrepresentation for purposes of calculating the [TEDE]’” resulting from the proposed ISL mining operations (Intervenor’s Written Presentation at 25). The Intervenor argues that — contrary to the analysis in the FEIS — such radiation is not background radiation pursuant to 10 C.F.R. § 20.1003 and, thus, should not be excluded from the TEDE calculation pursuant to 10 C.F.R. § 20.1301(a)(1). *See* Intervenor’s Written Presentation at 24-25.

This argument is foreclosed as a matter of law by the Commission’s recent decision in CLI-06-14, where it squarely ruled that radiation attributable to the preexisting radioactive residue from the prior mining on Section 17 is properly classified as background radiation that is excluded from the TEDE calculation (63 NRC at 515-20).<sup>16</sup>

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<sup>15</sup>The Intervenor complains that the FEIS does not accurately report the “[e]xisting radon levels at Church Rock” (Intervenor’s Written Presentation at 24). The Staff candidly acknowledges that “‘information regarding background radiation was inadvertently omitted from the FEIS’” (NRC Staff’s Response at 10); however, states the Staff, that information “‘was made available in the DEIS and was available to the public’” (*ibid.*) and, equally important, the FEIS took that information into account in performing its NEPA analysis (FEIS at 4-82 to 4-83; *see also* CLI-01-4, 53 NRC at 63 (Commission observes that the FEIS “‘fully recognizes’” that background radiation levels at Church Rock are “‘probably slightly elevated’” due to previous mining activities)). Although ideally this information on background radiation should have been included in the FEIS (CLI-01-4, 53 NRC at 63), I find that its absence neither prejudiced the Intervenor nor undermined the correctness of the Staff’s TEDE calculations or cumulative impacts analysis. *See ibid.* (Commission states that Intervenor were not prejudiced when information that was omitted from the FEIS was “‘made publicly available in the DEIS, was considered by the NRC Staff in its licensing decision, and was used and referenced by the intervenors in the hearing. Moreover, to the extent that the Presiding Officer’s decision in any respect differs from the FEIS, the FEIS is deemed modified by the decision.’”).

<sup>16</sup>The Commission explained that the pertinent regulation (10 C.F.R. § 20.1301(a)(1)), “‘ties the TEDE calculation to radiation from ‘licensed operations’; it expressly excludes preexisting

(Continued)

*b. The FEIS Accurately Analyzes Radiological Air Impacts*

The Intervenor asserts that — independent of their allegation that the FEIS improperly fails to include radiation from past mining operations in the TEDE calculation — the TEDE calculation is still flawed, because “HRI presented no technical schematics, engineering diagrams, or operational history for its air effluent control system” (Intervenor’s Written Presentation at 26). Because the FEIS allegedly fails to include adequate information to support the technical viability of HRI’s proposed air effluent control system, the Intervenor claims that it fails adequately to analyze the radiological air impacts of HRI’s proposed operations (*ibid.*).

The Intervenor raised this precise argument on two prior occasions, and on each occasion, it was squarely rejected by the Presiding Officer. Initially, the Intervenor raised this argument in Phase I of this proceeding with regard to operations at Section 8, and the then-Presiding Officer found it to be “without merit” (LBP-04-23, 60 NRC at 458). Next, they raised it with regard to operations at Section 17 (LBP-06-1, 63 NRC at 77), and I rejected it for two alternative reasons. First, because the system that HRI will use at Section 17 is identical to the one it will use at Section 8, I rejected the Intervenor’s challenge for the reasons articulated in “the former Presiding Officer’s well-supported” decision (*ibid.*). Second, based on a plenary review of the record, I concluded that the Intervenor’s argument was insubstantial in any event because: (1) the absence of technical documentation in the FEIS regarding HRI’s proposed system was “understandable, because the design simply implements ‘basic engineering fundamentals’ ” (*id.* at 78); and (2) HRI’s proposed system was “not unusual,” but rather was “tested and proven” and currently in use at NRC-licensed ISL sites in Wyoming and Texas (*ibid.*). Moreover, HRI will be required to implement a comprehensive radiological air emissions monitoring program to ensure its emissions “do not exceed regulatory limits and, thus, do not threaten public health and safety” (*ibid.*).<sup>17</sup>

The Intervenor presents no new evidence to support their recycled argument, nor do they identify any error in LBP-04-23 or LBP-06-1 that would warrant revisiting those decisions. Accordingly, for the reasons articulated in LBP-06-1, 63 NRC at 77-78, I reject the Intervenor’s argument.

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“background radiation” (CLI-06-14, 63 NRC at 515). In the instant case, “HRI’s bare ownership of land containing radioactive mine spoil is not part of its NRC-licensed ‘operation’ ” (*id.* at 516). Moreover, the mine spoil is not regulated by the Commission “both because Part 40 regulations exempt from regulations ‘unimportant quantities’ of source material and because the spoil is ‘unrefined and unprocessed’ ore” (*id.* at 518 n.39). See also LBP-06-1, 63 NRC at 52-71.

<sup>17</sup>The Commission declined to disturb my decision (CLI-06-14, 63 NRC at 515), or the decision of the former Presiding Officer (CLI-04-39, 60 NRC 657 (2004)). I note that HRI will use the same technology at Unit 1 and Crownpoint that it uses at Sections 8 and 17.

*c. The Air Quality Cumulative Impacts Analysis in the FEIS Is Adequate*

The Intervenor argue that the “cumulative impacts section of the FEIS . . . convey[s] the false impression that there are no existing health impacts from prior human activities that could contribute to cumulative radiological and health impacts” caused by HRI’s proposed ISL mining operations (Intervenor’s Written Presentation at 26). More specifically, they assert that the FEIS is incorrect and inadequate because it “provides no information about the . . . higher non-background [radiological] levels in the Church Rock area” caused by prior mining activities at Section 17 (*ibid.*). I disagree, essentially for the reasons already discussed *supra* Part III.A.1.a.

The Intervenor are simply incorrect in their assertion that the FEIS conveys the absence of existing health impacts from prior mining activities. To the contrary, the FEIS states that the “primary radiological impact to the environment in the vicinity of the project results from [background radiation]” (FEIS at 4-72), which includes “remnant radiation stemming from previous mining and milling activities near the Church Rock site” (*id.* at 4-73). In its cumulative impacts analysis, the FEIS recognizes that past exposures to radioactive materials in earlier uranium mines “were large enough to result in a high incidence of cancer among workers” (*id.* at 4-124).<sup>18</sup> The FEIS emphasizes, however, that HRI’s ISL mining operations will cause a “negligible increase in cumulative [radiological] impacts” (*id.* at 4-125), stating that it will (1) produce “less than 1 percent of the dose from natural background sources” (*id.* at 4-124), and (2) result in a “very small fraction of the allowable limits for exposure of the public” (*id.* at 4-125).

I find that — contrary to the Intervenor’s assertion — the FEIS is neither inadequate nor incorrect in its cumulative radiological impacts analysis of the proposed project. Rather, the FEIS adequately considers the cumulative radiological impacts of HRI’s proposed project (*see supra* pp. 68-72), and it rationally concludes that those impacts are acceptable (FEIS at 4-83).

**2. The Intervenor’s Claims Relating to Cumulative Impacts on Groundwater Resources Lack Merit**

*a. The FEIS’s Representation of Existing Water Quality Is Accurate*

The Intervenor claim that the FEIS does not accurately represent existing water quality because: (1) it “does not address the impacts of [past uranium] mining on groundwater resources” (Intervenor’s Written Presentation at 27); and

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<sup>18</sup> As the FEIS explains, individuals who worked in the earlier uranium mines operated under less stringent regulatory standards and, as a result, were exposed to radiation levels that exceed what would be allowed today (FEIS at 3-87).

(2) HRI improperly calculates the baseline water quality by combining lower quality groundwater from the ore zones with higher quality groundwater from the non-ore zones, thus “distorting the true quality of the groundwater” (*ibid.*). I agree with HRI (HRI’s Response at 29-31) and the NRC Staff (NRC Staff’s Response at 13-15) that the Intervenor’s arguments lack merit.

First, contrary to the Intervenor’s assertion, the FEIS addresses the impacts of past uranium mining on groundwater resources. In this regard, the cumulative groundwater impacts section of the FEIS states (FEIS at 4-123):

Past actions that have contributed to cumulative impacts on groundwater in the region include underground uranium mining at the Church Rock site, which would have dewatered the Westwater Canyon aquifer and the Brushy Basin “B” Sand aquifer in the area of the existing workings and may have had some dewatering effects on the Dakota Sandstone aquifer. Dewatering effects would have lowered water levels in these aquifers for some distance around the workings and may have oxidized some of the rock around the workings by exposing it to the atmosphere. When mining stopped, the workings flooded, and after several years groundwater levels returned to pre-mining levels. Water quality in the workings was probably degraded, but groundwater quality outside the mine workings does not appear to have been affected.

The above discussion of the impact of previous uranium mining, coupled with the fact that the FEIS compiles the average background concentrations of principal chemical species in the groundwater near the Church Rock and Crownpoint sites (FEIS at 4-15 to 4-16) — which reveals the *actual* impact of past mining on groundwater — refutes the Intervenor’s assertion that the FEIS fails adequately to consider the impact of past uranium mining on groundwater quality.<sup>19</sup>

Nor is there merit to the Intervenor’s claim that HRI’s procedures for establishing groundwater baselines<sup>20</sup> will “distort” the true quality of the groundwater

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<sup>19</sup>The Intervenor’s make a passing assertion that “[UNC’s] mine and milling facilities at Church Rock [have] been declared a federal Superfund site because of extensive groundwater contamination there” (Intervenor’s Written Presentation at 27). But the NRC responds — and the Intervenor does not dispute — that the above assertion is “inaccurate, because while the mill has been declared a Superfund site, the site of the old Church Rock mine on Section 17 has not been so designated. Thus, the mill tailings contamination is not relevant to any groundwater issues at Church Rock” (NRC Staff’s Response at 14) (emphasis omitted).

<sup>20</sup>Prior to commencing mining operations, and subject to NRC inspection (FEIS at 2-20), HRI will obtain baselines for over thirty groundwater chemical constituents at the mining sites (*id.* at 2-21), which will serve as restoration criteria “on a parameter-by-parameter basis, [with] the primary goal of restoration . . . to return all parameters to average pre-mining baseline conditions” (*id.* at 2-20). If water quality parameters cannot be returned to pre-mining baseline conditions, “the secondary goal would be to return water quality to the maximum concentration limits specified in EPA . . . secondary and primary drinking water regulations” (*ibid.*).

by combining lower quality groundwater from the ore zones with higher quality groundwater from the non-ore zones. The Intervenor raised the *identical* argument in Phase I of this proceeding as part of their challenge to HRI's proposed mining operations at Section 8 (LBP-99-30, 50 NRC at 93). The then-Presiding Officer ruled that the argument lacked merit (*id.* at 93, 99-100), and the Commission declined to disturb that decision (CLI-00-12, 52 NRC 1 (2000)).

Thereafter, in Phase II of this proceeding, the Intervenor raised the *same* argument as part of their challenge to HRI's proposed mining operations at Section 17, Unit 1, and Crownpoint (LBP-05-17, 62 NRC at 92-98). I rejected the argument, concluding that: (1) the Intervenor failed to present a persuasive reason for revisiting the issue (*id.* at 95); and (2) it lacked merit in any event (*id.* at 96-98). The Commission declined to disturb that decision (CLI-06-1, 63 NRC 1 (2006)).

The Intervenor's mere repetition of their argument has not improved its pedigree. For the reasons I rejected their argument in LBP-05-17, I reject it here.

*b. The FEIS Accurately Portrays the Cumulative Effects of HRI's Proposed Mining Operations on Groundwater*

The Intervenor asserts that the FEIS does not adequately analyze the combined effect of past and proposed mining activities on groundwater, because it fails to consider whether abandoned mine tunnels in Section 17 have collapsed, which could create "fractures that can transport contaminants" away from the ISL well fields (Intervenor's Written Presentation at 30). This argument lacks merit.<sup>21</sup>

The FEIS expressly states that "it [is] likely that many of the [old mine] workings [at Section 17] have collapsed, because the type of underground mining employed at the site would have caused some of the workings to collapse while the mine was in operation" (FEIS at 4-54). The FEIS nevertheless concludes that such collapsed workings, and any fractures resulting therefrom, do not pose a significant risk of horizontal or vertical excursions of contaminants (*id.* at 4-54 to 4-55).

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<sup>21</sup> Arguments that an intervenor fails — in derogation of 10 C.F.R. § 2.1233(c) — adequately to develop are treated as waived. See *HRI*, LBP-05-17, 62 NRC at 98 n.14; *accord, e.g., Williams v. Eastside Lumberyard and Supply Co.*, 190 F. Supp. 2d 1104, 1114 (S.D. Ill. 2001); *Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant)*, ALAB-843, 24 NRC 200, 204 (1986). Consistent with this principle, I treat as waived the Intervenor's passing and unexplained assertion that the FEIS "misrepresents the hydrogeology and geochemistry of the [Westwater Aquifer] and its suitability for ISL mining; the true quality of existing groundwater, and the appropriate bleed rate used for controlling excursions" (Intervenor's Written Presentation at 28). It nevertheless warrants emphasizing that I am unaware of any record evidence (and the Intervenor fails to identify any) that supports their bald assertion.

Regarding horizontal excursions, the FEIS states that the potential for such “excursions should be low with a properly balanced [ISL] well field. HRI provided aquifer modeling results that demonstrate that the project could be conducted while controlling [contaminant] migration” (FEIS at 4-54). Notably, the FEIS acknowledges that HRI’s modeling improperly failed to take into account the possibility that old mine workings might extend into an ISL well field, which “may form preferential pathways for [contaminant] movement away from the well field. Therefore, the potential for horizontal excursions could be increased in areas of existing mine workings” (*ibid.*). However, states the FEIS, HRI will use a sensitive and efficacious monitoring system whose “potential to detect horizontal excursions . . . should be high” and whose ability to detect such excursions “would not be degraded by the presence of mine workings” (*ibid.*).<sup>22</sup> Accordingly, contrary to the Intervenor’s assertion, the FEIS adequately considers the potential for horizontal excursions caused by collapsed mine workings, concluding that the risk of such excursions is not problematic, because HRI’s “monitoring program should detect any horizontal excursions and . . . HRI would be required to correct [them] if they occurred” (*ibid.*).

The FEIS likewise adequately considers the potential for vertical excursions caused by old mine workings, determining that, for several reasons, the risk of such excursions is not problematic. First, in the event that any boreholes from the old mines are open, “pre-mining hydrologic testing will be used [by HRI] to identify and locate them; and during mining, overlying monitor wells will be used to identify and locate vertical excursions should they occur” (FEIS at 4-55).<sup>23</sup> Second, “HRI does not propose to drill any wells through old mine workings” (*ibid.*). If HRI were to determine, however, that it was economically feasible to extract uranium ore from beneath old mine workings, it would employ a drilling technique — described in the FEIS — that would minimize the risk of vertical excursions (*ibid.*).

The FEIS acknowledges that ISL mining could cause additional collapsing of old mine workings. The FEIS concludes, however, that HRI’s monitoring program for vertical excursions would promptly detect any problems, and HRI would “proceed immediately to determine the cause of the leakage and reverse

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<sup>22</sup> The Intervenor’s vaguely assert that “HRI’s modeling used inappropriate analysis for Section 17” (Intervenor’s Written Presentation at 29). To the extent the Intervenor meant that the FEIS failed to consider that HRI’s modeling ignored the possibility that old mine workings might extend into an ISL well field, they are plainly in error (FEIS at 4-54). To the extent the Intervenor’s intended their assertion to mean something else, I am constrained to treat their unexplained argument as waived (*supra* note 21).

<sup>23</sup> Although HRI did not discover any faults at the Church Rock site, the potential for faults to act as vertical pathways is not nonexistent (FEIS at 4-55). “Therefore, HRI would conduct pre-mining tests to confirm aquifer confinement” (*ibid.*).

the trend” (FEIS at 4-55; *see also id.* at 4-16 to 4-17 (explaining how “ISL monitoring programs are designed to ensure that any excursion is detected long before mining solutions can seriously degrade groundwater quality outside the well field area”). As the FEIS explains (*id.* at 4-55 to 4-56):

ISL mining could increase the potential for old mine workings to collapse. Workings with walls near an injection well would experience an increase in pressure; those that were near a production well would experience a decrease in pressure. Thus, the workings as a whole might experience a range of varying pressures as mining proceeded through a well field. Vertical pathways for groundwater flow could be caused by the collapsing workings. If a collapse occurred during mining, vertical pathways could be created as the overlying rock layers collapsed into the workings or the collapse caused well casings to break. However, it should be possible to mine in the Westwater Canyon aquifer and not create a vertical excursion. This can be accomplished by sealing off the shafts or structuring well field pressures so that in the area around the shafts they are less than overlying aquifer pressures. However, HRI has not specifically demonstrated how this would be accomplished. Nevertheless, . . . HRI’s commitment to perform monitoring near the old mine workings should provide adequate detection of potential excursions associated with the old mine shafts.

*See also id.* at 4-16, Table 4.5 (showing actual impact of previous mining on groundwater quality near the Church Rock and Crownpoint sites); *id.* at 4-60 to 4-63, 4-121 to 4-123 (discussing measures to mitigate discrete and cumulative impacts of HRI’s proposed ISL operations on groundwater); *id.* at 4-123 (discussing impacts of previous mining on groundwater).<sup>24</sup>

I am satisfied that the FEIS adequately considers the cumulative impact of HRI’s proposed ISL mining operation on groundwater contamination *vis a vis* the old mine workings. I therefore reject the Intervenor’s claims to the contrary.

### ***3. The Intervenor’s Claims Relating to Cumulative Impacts on Radiological and Health Effects Lack Merit***

The Intervenor’s assert that the FEIS does not adequately address “the cumulative levels of radiation that will result if the project proceeds” (Intervenor’s Written Presentation at 30). Specifically, they allege that the FEIS’s treatment of radiological health effects is deficient because (*id.* at 30-31): (1) the FEIS fails to account for the peculiar vulnerability of the affected population; and (2) the FEIS fails to assess the effects on Navajo workers of past uranium mining coupled

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<sup>24</sup> As the above discussion shows, the Intervenor’s are manifestly incorrect when they assert that the “FEIS mentions the cumulative impacts of previous mining on groundwater in merely one paragraph at FEIS 4-123” (Intervenor’s Written Presentation at 28).

with health and socioeconomic conditions. These allegations — which appear to focus on the cumulative radiological effects of HRI’s project on “environmental justice” concerns<sup>25</sup> — lack merit. See HRI’s Response at 25; NRC Staff’s Response at 16-17.<sup>26</sup>

The FEIS expressly acknowledges that the relevant population for purposes of conducting an environmental justice analysis is the local Native American population, which “is almost entirely Navajo, and largely lives at a poverty level” (CLI-01-4, 53 NRC at 65 (citing FEIS at 4-112, 3-79, 3-56)). Their impecunious condition sometimes requires that they “rely heavily on their livestock and gardens” for subsistence (FEIS at 3-86), which “could introduce exposure pathways . . . that potentially affect a population’s exposure to — and health consequences of — contamination” (*id.* at 3-85). Accordingly, states the FEIS, the models used to predict the radiological health impacts of HRI’s ISL project “account[ ] for exposures possible from being outdoors much of the time and for consuming vegetative matter and animals affected by the project” (*id.* at 4-117, 4-75).

In addition to considering the local Navajo population’s vulnerability to radiological effects due to subsistence living, the FEIS provides extensive health data, which show that, “compared to the general U.S. population, the Navajo population suffers disproportionately from fatal accidents, alcoholism, diabetes, tuberculosis, and pneumonia” (CLI-01-4, 53 NRC at 65 (citing FEIS at 3-83 to 3-85)). Infant mortality is also higher for the Navajo population, and the FEIS “highlights that there is a significantly higher rate of congenital anomalies among Navajo infants than for U.S. infants generally” (CLI-01-4, 53 NRC at 65-66 (citing FEIS at 3-80, 3-84 to 3-85)). The higher rate of congenital anomalies is noteworthy because — although the evidence is not conclusive — the anomalies might be linked to past uranium mining operations. The FEIS explains (FEIS at 3-85 (citations omitted)):

[T]here is some evidence to indicate that radiation exposure may be related to the incidence of congenital anomalies. Researchers investigated the birth outcomes of Navajo infants born between 1964 and 1981 at the IHS hospital in Shiprock. The

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<sup>25</sup> Pursuant to environmental justice principles, each agency should “identify and address, as appropriate, any disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations” (*HRI*, CLI-01-4, 53 NRC at 64 (internal quotation marks omitted)). In the instant case, the “environmental justice analysis . . . is similar to a cumulative impacts analysis but also takes into account relevant features of the minority community” (*id.* at 69).

<sup>26</sup> The Intervenor also assert, without explanation, that the FEIS is “deficien[t]” because certain “data” — which the Intervenor never identify — is unduly “general” (Intervenor’s Written Presentation at 30). This nonspecific challenge to unidentified data is an undeveloped argument that must be treated as waived (*supra* note 21).

research concluded that there were trends in occurrences of adverse birth outcomes that lend limited support for the hypothesis that adverse genetic outcomes are related to radiation exposure. The associations were weak between unfavorable birth outcomes (including congenital anomalies and stillbirths) and radiation exposure of parents. The only statistically significant association was identified when the mother lived near uranium mill tailings or mine waste sites. However, when placing these conclusions in context, the researchers state that given the extensive uranium mining operations that have gone on for decades, including radiation exposures at levels greatly exceeding what would be allowed today, the lack of clear evidence for increased risk of adverse outcomes should be reassuring.

The FEIS also discusses the adverse consequences of prior uranium mining operations on former miners, stating that “[u]ranium mining was a large employer in the area and many individuals worked in the mining and milling operations” (FEIS at 4-124). Miners at that time “operated under much less stringent standards than exist today, and this resulted in large exposures to radioactive materials, especially radon and its daughters. The exposures were large enough to result in a high incidence of cancer among workers” (*ibid.*). See also *id.* at 3-87 (miners who worked in prior mining operations “were exposed to radiation levels greatly exceeding what would be allowed today and were poorly informed of the potential health effects of radon gas”); *id.* at 4-124 to 4-125 (discussing how prior mining operations generated large amounts of radioactivity).

Notwithstanding the “effect of the long history of uranium mining in the area and the large exposures to radon . . . that occurred primarily to miners and resulted in a high incidence of cancer among them” (FEIS at 4-117), the FEIS concludes that the cumulative radiological impacts of HRI’s ISL mining operations will be “negligible” (*id.* at 4-117, 4-125), even considering the particular circumstances of the environmental justice population (*id.* at 4-117). Accordingly, although “the local population largely lives at a poverty level, suffers disproportionately from various ailments, and may suffer from radiation-caused health effects” (CLI-01-4, 53 NRC at 69), the FEIS concludes that, because the incremental radiological effects of HRI’s mining operations will be *de minimis*, “no cumulative environmental justice impacts are anticipated” (FEIS at 4-127).

I conclude that the FEIS adequately considers the cumulative radiological health effects on the environmental justice population (i.e., the Navajo Indians), and I reject the Intervenor’s assertion to the contrary.<sup>27</sup>

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<sup>27</sup> That the Intervenor would have preferred that the FEIS contain additional details on any particular issue is not, standing alone, probative of the FEIS’s adequacy. “One can always flyspeck an FEIS to come up with more specifics and more areas of discussion that conceivably could have been included”

(Continued)

#### 4. *The Intervenors' Claims Relating to Cumulative Impacts on Land Use Lack Merit*

The Intervenors assert that the FEIS improperly fails to consider the cumulative impacts of the project on land use (Intervenors' Written Presentation at 32). More specifically, they allege that the "FEIS fails to evaluate the cumulative impacts to local residents of displaced land uses during the life of the project, or the risk that lands would be permanently closed to grazing due to the project's contamination of land or water" (*id.* at 33). Further, they assert that the proposed mitigation for any such displacement or disruption (i.e., monetary compensation) is inadequate (*id.* at 32). I agree with HRI and the NRC Staff that these arguments lack merit. *See* HRI's Response at 31; NRC Staff's Response at 17-19.

Preliminarily, I observe that the Intervenors raised this precise argument during their Phase I challenge to HRI's license to conduct mining operations at Section 8. The then-Presiding Officer rejected it, stating that the "FEIS has given adequate consideration to the relocation of individuals," and "grazing rights permittees and others who would be required to relocate will be compensated" (LBP-99-30, 50 NRC at 114 (citing FEIS at 4-118)). In this regard, the FEIS states that McKinley County — where HRI's mining sites are located — is "largely rural and consists mostly of open range grazing land . . . . Of the nearly [3.5 million acres] in McKinley County, over 85 percent [3 million acres] is used for agricultural purposes [and livestock] grazing is the predominant agriculture land use with [2.7 million acres]" (FEIS at 3-53). Given the vast amount of grazing land available, the Presiding Officer said (LBP-99-30, 50 NRC at 118):

[T]he land being removed from grazing is very small in comparison to the size of the vast desert in which it is located. I do not understand how anyone could possibly be prevented from raising livestock because ISL mining will take place on Section 8. Furthermore, there is no indication in the record that *any* family will be required to relocate. Accordingly, I find Intervenors' allegations about relocation and about grazing rights to be without merit.

The Commission affirmed (CLI-01-4, 53 NRC at 51), observing with approbation that even if HRI's mining operations disrupt grazing rights, the FEIS provides that such individuals "should be compensated accordingly" (*ibid.* (citing FEIS at 4-95, 4-118)). *See* FEIS at App. B-12, B-15 (HRI will be required to provide the compensation discussed in the FEIS).

The above rationale may logically be applied here to reject the Intervenors' argument regarding grazing rights and relocation, because: (1) the land being

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(HRI, CLI-01-4, 53 NRC at 71). The salient question is whether the FEIS took the required "hard look" at the relevant environmental consequences (*see ibid.*). Here, I have no difficulty answering that question in the affirmative.

removed from grazing due to ISL operations at Section 17, Unit 1, and Crownpoint is small in comparison to the vast desert in which it is located, and it is therefore difficult to understand why anyone would be prevented from raising livestock due to such operations; and (2) even if grazing rights are disrupted or relocation is required, individuals will receive compensation.

My independent review of the FEIS confirms that the Intervenor's argument is insubstantial in any event. They are simply incorrect in asserting (Intervenor's Written Presentation at 32) that the FEIS fails to evaluate the cumulative impacts on land use. The FEIS explicitly acknowledges that HRI's project will "have adverse impacts on existing land uses" at the mining sites, the most obvious being "on-site disturbance[s] and restriction[s] during project construction and operations" (FEIS at 4-92). The FEIS explains, however, that such disturbances will be minor and short lived (*id.* at 4-93 to 4-94):

[T]he impacts of [HRI's] land disturbance are expected to be temporary and insignificant because of the sequential nature of the project and HRI's proposals for site restoration and reclamation. During construction, land use in each well field would be restricted in only about [60 acres] at a time. Previous licensing experience indicates that well fields can be placed into production approximately [5 acres] at a time. Therefore, drilling activities would be concentrated in a small percentage of the proposed sites at any time.

In that regard, the FEIS states that HRI's operations will result in the "temporary disruption of livestock grazing at project sites," and it acknowledges that "[l]ocal residents have expressed concern that this disruption of grazing would adversely affect Navajo who have grazing permits for the land and rely on livestock as an important economic resource" (FEIS at 4-94). The FEIS observes that HRI has secured mineral leases from the entities possessing legal titles to the resources it plans to develop, and that under the Federal General Mining Law of 1872, "mineral rights owners can interrupt surface grazing permits in order to remove minerals" (*ibid.*). To mitigate this disruption, HRI will compensate individuals whose grazing rights on project lands would be interrupted during project construction and operation (*id.* at App. B-12, B-15; *id.* at 4-118).<sup>28</sup>

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<sup>28</sup>The Intervenor's are incorrect in asserting that the FEIS inadequately considers the risk that lands would be permanently closed to grazing due to the project's contamination of land or water (Intervenor's Written Presentation at 33). As shown above in text, the FEIS expressly concludes that the impact on grazing will be temporary, not permanent (*see* FEIS at 4-125 to 4-126), and it recognizes that HRI will provide fair compensation for individuals whose grazing rights are adversely affected (*see id.* at 4-118). Moreover, the FEIS recognizes that if HRI is unable to restore the groundwater to preestablished quality levels at Section 8, "mining at the Church Rock site would cease and no mining would be allowed at either the Unit 1 or Crownpoint site" (*id.* at 2-28).

Another land use impact of HRI's project addressed in the FEIS is the "potential relocation of residents within the Unit 1 site boundaries" (FEIS at 4-94). The FEIS provides the following discussion of this impact (*ibid.*):

Assuming a license were granted for [HRI's] project, it would not be possible to determine how many individuals or families might have to be relocated until well drilling began. Field interviews conducted by HRI and NRC in July 1993 indicated that there were seven residences occupied by 26 persons in the Unit 1 lease area. These persons are Navajo allottees (who own the surface and mineral rights) or their tenants. Leases for both the surface use and mineral rights on these allotted lands are administered by the BIA. The BIA and the allottees who would be affected by the proposed project have signed agreements with HRI authorizing mineral leases and surface use of the land for mining activities. In most cases, the individuals and families who would be relocated or denied access to their land were voluntary signatories to the leases negotiated by HRI. The need for relocations and access restrictions, which would be temporary (i.e., for the duration of mining operations in the lease area and until the area has been released for public access), was explained to the signatories as a condition of the leases.

The FEIS notes that "there might be some instances where individuals or families who were living on allotted lands but who were not signatories to the leases would be required to relocate" (*ibid.*). But in all such instances, the individuals will receive compensation for the disruption (*id.* at 4-118).

The FEIS concludes that — because the effects on land use will be temporary due to the nature of ISL mining operations, because HRI will compensate individuals who experience temporary disruptions related to land use, and because HRI will provide for site restoration and reclamation — "the combination of existing land disturbance, new disturbance related to the project, and disturbance from reasonably foreseeable future actions is not expected to represent a significant cumulative impact" (FEIS at 4-126; *see also id.* at 4-125 ("[t]he proposed project would not make a significant contribution to cumulative land use impacts in the region")).

I find that the FEIS's cumulative impacts analysis with respect to land use is adequate, and that the proposed mitigation measures are acceptable. I therefore reject the Intervenor's contrary arguments.

**B. The Intervenor's Challenge to the FEIS's Statement of Purpose and Need Is Barred by the Law of the Case Doctrine and Lacks Merit in Any Event**

The FEIS is required to include a description of the "underlying purpose and need" of a proposed project (40 C.F.R. § 1502.13). The benefits described by the project's purpose and need are among the factors that are weighed against the

project's costs in striking the cost-benefit balance required by NEPA. *See, e.g., Public Service Co. of Oklahoma* (Black Fox Station, Units 1 and 2), ALAB-573, 10 NRC 775, 804 (1979)). In the instant case, the Intervenor's assert that the statement of purpose and need in the FEIS "does not describe the true purpose and need" for HRI's project (Intervenor's Written Presentation at 35), and that this deficiency has "skewed the entire review process and represents a fundamental flaw in the [FEIS]" (*id.* at 36). I reject this argument for two alternative reasons. *See* HRI's Response at 32; NRC Staff's Response at 19-21.

First, this argument is barred by the law of case doctrine.<sup>29</sup> In Phase I of this proceeding, the Intervenor's raised this precise argument, contending that "the FEIS provides an inaccurate and simplistic statement of purpose and need which unreasonably distorts the entire FEIS" (LBP-99-30, 50 NRC at 112). The then-Presiding Officer rejected this argument (*id.* at 124), and the Commission affirmed, finding that (1) the FEIS "recognizes the general need for domestic uranium production" (CLI-01-4, 53 NRC at 48), and (2) the Intervenor's "have not called into question the general interest in maintaining a domestic uranium production industry or HRI's possibly significant role as a domestic uranium producer" (*ibid.*). The NRC Staff rightly observes that, although the Commission's decision in CLI-01-4 adjudicated only the Intervenor's challenge to the Section 8 site, the "statement of purpose and need is independent of any specific project area" (NRC Staff's Written Response at 20). Accordingly, I conclude that the Commission's decision in CLI-01-4 regarding the correctness and adequacy of the FEIS's statement of purpose and need applies with equal force here and precludes the Intervenor's challenge.

Second, and in any event, I conclude — based on an independent review of the record — that the Intervenor's challenge to the FEIS's statement of purpose and need lacks merit. The Intervenor's principal argument is that the FEIS is flawed because it "does not describe the true purpose and need for [HRI's proposed ISL mining project], but rather describes the purpose and need . . . as the NRC's duty to license and regulate the proposal" (Intervenor's Written Presentation at 35). The Intervenor's are incorrect.

It must be acknowledged that — as the Intervenor's point out (Intervenor's Written Presentation at 34-35) — the FEIS section entitled "Purpose of and Need for the Proposed Action" is asthenic, glibly stating (as relevant here) that the "purpose of the proposed action is to license and regulate HRI's proposal to construct and operate facilities for ISL uranium mining and processing" (FEIS

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<sup>29</sup> Subject to limited exceptions not applicable here, "legal determinations made on appeal in a case are controlling precedent, becoming the 'law of the case,' for all later decisions in the same case" (*Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), CLI-06-11, 63 NRC 483, 488 (2006)).

at 1-3).<sup>30</sup> The Intervenor, focusing exclusively on that sentence, urge me to find that the FEIS is deficient. But the myopic analysis urged by the Intervenor is inconsistent with Commission precedent, which directs that “the FEIS should be read and understood as a whole” (*HRI*, CLI-01-4, 53 NRC at 47).

Read in its entirety, the FEIS reveals that the purpose and need of HRI’s project is to promote the critical goal of maintaining a domestic uranium production capability (CLI-01-4, 53 NRC at 48). In this regard, the FEIS states that the U.S. Secretary of Energy has a statutory responsibility “to encourage [the] use of domestic uranium” (FEIS at 5-1 (quoting 42 U.S.C. § 2296b-3)). The FEIS thus recognizes that the “viability of the [domestic uranium mining] industry is a Federal concern and that there is a public interest in the uranium supply” (FEIS at 5-1). Between 1985 and 1994, states the FEIS, “annual domestic uranium production decreased by 75 percent, while annual imports of uranium increased by 300 percent” (*ibid.*). In 1994, domestic uranium production was less than 5 million pounds, while uranium imports totaled more than 35 million pounds (*ibid.*). The FEIS concludes that HRI’s “proposed project, which would produce about 1 million pounds of uranium per year at each of the . . . project sites, would have the beneficial effect of helping the United States offset this deficit in domestic production” (*ibid.*).

The FEIS thus “identifies domestic uranium production as the primary public benefit associated with this project” (CLI-01-4, 53 NRC at 47) and, relatedly, it indicates that the purpose and need of the project is — consistent with Congress’ objective (FEIS at 5-1) — to maintain the “domestic uranium mining industry” (*ibid.*), which plainly is “in the national interest” (CLI-01-4, 53 NRC at 48). I find that, contrary to the Intervenor’s assertion, the FEIS correctly and adequately identifies the purpose and need of the proposed project.

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<sup>30</sup>The FEIS section entitled “Purpose of and Need for the Proposed Action” states in its entirety (FEIS at 1-3 (citations omitted)):

The purpose of the proposed action is to license and regulate HRI’s proposal to construct and operate facilities for ISL uranium mining and processing. The NRC’s need for action is to fulfill its statutory responsibility to protect public health and safety and the environment in matters related to source nuclear material. The [Bureau of Land Management’s] and [Bureau of Indian Affairs’] need for action is to fulfill their statutory responsibilities to regulate mining activities on Federal and Indian lands.

HRI asserts that the above statement is correct to the extent it acknowledges the “NRC’s statutory responsibility to properly regulate licensed activities” (HRI’s Response at 32). HRI’s assertion, while true, is beside the point. The proper inquiry for determining the sufficiency of the purpose and need statement is whether the FEIS, read as a whole, includes a correct and adequate description of the purpose and need of the “*proposed action*” (10 C.F.R. Part 51, Subpart A, App. A, § 4 (emphasis added)), which, here, is HRI’s plan to construct and operate an ISL mining facility, not the NRC Staff’s prospective responsibility to regulate such a facility.

**C. The Intervenors' Challenges to the FEIS's Discussion of Alternatives Lack Merit**

The FEIS must contain a discussion of alternatives, which is considered to be “the heart of the environmental impact statement” (10 C.F.R. Part 51, Subpart A, App. A, § 5). This discussion shall identify “reasonable alternatives” and present the “environmental impacts of the proposal and the alternatives in comparative form” (*ibid.*). It also shall “include a final recommendation on the action to be taken” (*ibid.*). The Intervenors contend that the FEIS’s discussion of alternatives violates NEPA for the following four reasons (Intervenors’ Written Presentation at 36-40): (1) the FEIS’s improper statement of purpose and need fatally taints the discussion of alternatives; (2) the FEIS fails to explain why alternatives are rejected; (3) the FEIS fails adequately to address the “no-action” alternative; and (4) the FEIS fails to perform an ultimate cost-benefit analysis among alternatives.

I address these arguments in turn, concluding that each lacks merit. *See* HRI’s Response at 32-38; NRC Staff’s Response at 21-27.

**1. There Is No Merit to the Intervenors’ Claim That the FEIS’s Alternatives Analysis Is Fatally Tainted by an Improper Statement of Purpose and Need**

The Intervenors assert that the FEIS incorrectly identifies the purpose and need of the HRI’s proposed action and, accordingly, the discussion of alternatives is flawed because it fails to take into account the project’s true purpose and need (Intervenors’ Written Presentation at 37). I summarily reject this argument, because its premise — that the FEIS misstates the project’s purpose and need — is erroneous. As discussed *supra* Part III.B, the FEIS properly identifies the purpose and need of the project as maintaining the “domestic uranium mining industry” (FEIS at 5-1; *accord* CLI-01-4, 53 NRC at 48).

Nor is there merit to the Intervenors’ claim that the FEIS is deficient because it fails to consider the possibility of blending down highly enriched uranium (HEU) for use as reactor fuel as a reasonable alternative to HRI’s proposed mining project (Intervenors’ Written Presentation at 37). This claim ignores that the primary purpose of HRI’s proposed action is not simply to provide fuel for nuclear power plants; rather, it is “to help maintain the viability of a dwindling ‘domestic uranium mining industry’ ” (CLI-01-4, 53 NRC at 55 (quoting FEIS at 5-1)). Because blending down HEU for reactor fuel would *not* promote that goal and, hence, would *not* satisfy the primary purpose of the project, it is outside the scope of reasonable alternatives that must be considered under NEPA. *See City of Angoon v. Hodel*, 803 F.2d 1016, 1021 (9th Cir. 1986) (“When the purpose [of a proposed action] is to accomplish one thing, it makes no sense to consider the alternative ways by which another thing might be achieved”), *cert. denied*,

484 U.S. 870 (1987); *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 195 (D.C. Cir.) (same), *cert. denied*, 502 U.S. 994 (1991); *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 808 (2005) (Commission states that NEPA imposes no obligation to “examine [alternatives] that would do nothing to satisfy this particular project’s goals”).

## **2. *There Is No Merit to the Intervenors’ Claim That the FEIS Fails To Explain Why Alternatives to the Preferred Alternative Were Rejected***

The Intervenors argue that the FEIS fails adequately to explain why the alternative selected — i.e., HRI’s proposed action — was preferred to the other alternatives considered (Intervenors’ Written Presentation at 38). I disagree. *See* HRI’s Response at 34-35; NRC Staff’s Response at 23-24.

The FEIS takes a hard look at HRI’s proposal to construct and operate an ISL mining facility, and it discusses reasonable alternatives that would promote the project’s goal of “maintain[ing] the viability of a dwindling ‘domestic uranium mining industry’ ” (CLI-01-4, 53 NRC at 55 (quoting FEIS at 5-1)). At the outset, for example, the FEIS determines that conventional mining methods are not a reasonable alternative to HRI’s proposed action (FEIS at 2-1):

[S]urface and open pit mining are not reasonable alternatives because the ore bodies at the proposed sites are too deep to be extracted economically. Further, underground mining would have more significant environmental impacts than ISL mining, and the ore from underground mining would require processing at a conventional uranium mill to produce the final product. Significant quantities of tailings . . . would be produced by conventional mining, which are normally disposed of on-site at the conclusion of the mill’s operating life. . . . The environmental impacts of underground mining and conventional milling would be more severe than those of ISL mining. Consequently, underground mining and conventional milling are not evaluated in this FEIS.

The FEIS then proceeds to examine HRI’s proposed action, including a detailed description of the ISL well field procedures and equipment (FEIS at 2-2 to 2-5), the lixiviant chemistry used for the mining process (*id.* at 2-5 to 2-7), the processing facilities, including the central plant for yellowcake drying and packaging at Crownpoint (*id.* at 2-7 to 2-9), the uranium recovery process (*id.* at 2-9 to 2-12), the waste retention ponds for the storage of wastewater until treatment (*id.* at 2-12 to 2-14), the environmental and plant monitoring system (*id.* at 2-14), the control of gaseous effluents and airborne particulates (*id.* at 2-15), the control of liquid effluents (*id.* at 2-16), wastewater treatment and disposal options (*id.* at 2-16 to 2-19), aquifer restoration (*id.* at 2-20), land reclamation (*id.* at 2-20 to 2-23), and plant decontamination and decommissioning (*id.* at 2-23). Additionally, the

FEIS critically examines HRI's proposed mining sites and development plan — i.e., commencing mining operations at Sections 8 and 17 in Church Rock to be followed by operations at Crownpoint and Unit 1 in Crownpoint (*id.* at 2-26 to 2-28).

Regarding what it characterizes as “Alternative 2,” the FEIS examines using different sites for mining and processing, as well as using different liquid waste disposal methods (FEIS at 2-28 to 2-31). The FEIS states that the alternative sites for ISL mining include the Church Rock site only, the Unit 1 site only, the Crownpoint site only, the Church Rock and Unit 1 sites only, the Church Rock and Crownpoint sites only, or the Unit 1 and Crownpoint sites only (*id.* at 2-31). Because the primary difference between these alternatives and HRI's proposed project is that ISL mining would occur at only one or two of HRI's proposed sites, the FEIS addresses the “potential environmental impacts of mining at the [alternative] sites . . . as subunits of the proposed project” (*ibid.*). That is, for each type of environmental impact, the FEIS breaks its discussion down into separate sections for Church Rock, Unit 1, and Crownpoint.

The FEIS also considers alternative sites for yellowcake drying and packaging. Specifically, the FEIS examines the potential environmental impacts if drying and packaging were performed at the following sites (FEIS at 2-31): (1) Church Rock; (2) Unit 1; (3) HRI's existing ISL facility at Kingsville, Texas; and (4) the Ambrosia Lake uranium mill, located north of Milan, New Mexico.

Additionally, observing that HRI proposes to dispose of liquid wastes “through a combination of evaporation ponds, aquifer reinjection, land application, and reinjection into the Westwater Canyon sandstone outside the mining area” (FEIS at 2-31), the FEIS addresses the potential environmental consequences if HRI were to use alternative combinations of evaporation ponds, deep-well injection, land application, and surface discharge (*ibid.*).

Regarding what it characterizes as “Alternative 3,” the FEIS examines HRI's proposed action, but with additional measures required and recommended by the NRC Staff to promote safety and protect public health and the environment (FEIS at 2-32).<sup>31</sup>

The FEIS then, in Section 4, provides an in-depth discussion on how HRI's proposed action and the various alternative actions may adversely affect the environment and how these impacts may be mitigated. Specifically, the FEIS considers potential impacts on air quality and noise, geology and soils, groundwater quantity and quality, surface water quality and quantity, transportation risk, health physics and radiological exposures, existing ecological conditions, land use, socioeconomic conditions, aesthetic resources, and cultural resources (FEIS

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<sup>31</sup>The FEIS also considers the “no-action” alternative, which it characterizes as Alternative 4, and which I discuss *infra* Part III.C.3.

at 4-1 to 4-127). Based on that discussion, coupled with the discussion of the costs and benefits associated with HRI's proposed action (*id.* at 5-1 to 5-7), the FEIS concludes that the "potential significant impacts of the proposed project can be mitigated, and that HRI should be issued a . . . license from NRC" (*id.* at xxi). The license, however, "should be conditioned on the commitments made by HRI in its license application and related submittals . . . and the various NRC Staff mitigation requirements and recommendations discussed in Section 4 and Appendix B" (*ibid.*).

There is no merit to the Intervenor's assertion that the decision in *Simmons v. United States Army Corps of Engineers*, 120 F.3d 664 (7th Cir. 1997), supports their argument that the FEIS fails to show why HRI's proposed action is a "good one" (Intervenor's Written Presentation at 38 (quoting *Simmons*, 120 F.3d at 667)). The FEIS amply explains why HRI's proposed action, as modified by the Staff, is acceptable. Namely, (1) the project serves the important federal interest of maintaining the domestic uranium mining industry (FEIS at 5-1), (2) the project will provide a number of socioeconomic benefits to the local community (*ibid.*), (3) potential significant environmental impacts of the project can be mitigated (*id.* at xxi), and (4) the project is sufficiently protective of public health and safety and the environment (*id.* at xxi, 2-32).

To the extent the Intervenor complains nonspecifically that the FEIS's discussion of alternatives is inadequate (Intervenor's Written Presentation at 38), they ignore that the Commission has directed that, in situations like this where an agency is being asked to approve a private applicant's proposed project, the agency may — taking into account the applicant's economic goals — accord appropriate deference to the applicant's proposed siting and design plans (*HRI, CLI-01-4, 53 NRC at 55-56*). In the instant case, taking into account that (1) HRI is a private applicant, (2) HRI proposes to mine on sites where it has a property interest and where the uranium ore body is located, and (3) a principal purpose of HRI's proposed project is to help maintain the viability of the Nation's domestic uranium mining industry, I conclude that the scope of alternatives considered by the NRC Staff and the discussion thereof was reasonable. I further conclude that the FEIS — read as a whole — adequately discusses HRI's proposed action and alternatives to that action. Finally, I conclude that the FEIS adequately explains why HRI should be issued a license for its proposed action, as modified by the additional protective and mitigative measures required and recommended by the NRC Staff to protect public health and safety and the environment.

### ***3. There Is No Merit to the Intervenor's Claim That the FEIS Fails Adequately To Address the No-Action Alternative***

One of the alternatives generally discussed in an FEIS is the alternative of taking "no action" (*HRI, CLI-01-4, 53 NRC at 54; 10 C.F.R. Part 51, Subpart*

A, App. A, § 4). Here, the Intervenor argue that the FEIS “could not evaluate the no action alternative in an evenhanded manner since the articulated purpose and need for the project was [deficient]” (Intervenor’s Written Presentation at 39). I summarily reject this argument because its premise — that the statement of purpose and need is deficient — is erroneous (*supra* Part III.B).

Moreover, I am satisfied — based on my independent review of the FEIS — that the discussion of the no-action alternative is adequate. The adequacy of the no-action alternative discussion in an FEIS is governed by a rule of reason (*Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 97 (1998)). The discussion “‘need not be exhaustive or inordinately detailed’” (*ibid.* (quoting *Farmland Preservation Ass’n v. Goldschmidt*, 611 F.2d 233, 239 (8th Cir. 1979))). Indeed, it “‘need not [contain] much discussion. It is most simply viewed as maintaining the status quo’” (*HRI*, CLI-01-4, 53 NRC at 54 (citations omitted)).

Here, the no-action alternative would mean the nonissuance of HRI’s license. This “‘alternative would have the advantage of obviating all of the health and environmental impacts associated with the project’” (*HRI*, CLI-01-4, 53 NRC at 54), which the FEIS expressly acknowledges.<sup>32</sup> But the no-action alternative “‘also would forego uranium production [from any of the sites] and the beneficial socioeconomic impacts discussed in the FEIS’” (*ibid.* (internal quotation marks omitted)), which include long-term local employment, increased local income, growth of local businesses, the potential for local development, and additional tax revenues generated by the project for the Navajo Nation and McKinley County (FEIS at 4-96 to 4-103, 5-1 to 5-6).

The FEIS clearly, if not explicitly, rejects the no-action alternative “‘because the impacts of the project were found acceptable, while the ISL mining would yield significant quantities of domestically produced uranium as well as some local socioeconomic benefits’” (CLI-01-4, 53 NRC at 54 (citing FEIS at 4-120 to 4-127) (finding cumulative impacts either minor or, given license conditions and other mitigative measures, acceptable for, *inter alia*, air quality, radiological health, ecology, land use, transportation risk, and groundwater)).

Notwithstanding that the Intervenor — as well as some residents of McKinley County (FEIS at 4-117) — would prefer the no-action alternative, “‘NEPA imposes no obligation to select the most environmentally benign alternative’” (*HRI*, CLI-01-4, 53 NRC at 55 (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989))). I conclude that the FEIS’s treatment of the

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<sup>32</sup>The FEIS examines the impacts of the no-action alternative for each of the eleven resource categories considered in Section 4. *See, e.g.*, FEIS at 4-5, 4-14, 4-63, 4-66, 4-72, 4-88, 4-92, 4-96, 4-105, 4-109, 4-112. Thus, insofar as the Intervenor aver that the FEIS fails to consider the impacts of the no-action alternative (Intervenor’s Written Presentation at 39), they are patently incorrect.

no-action alternative comports with NEPA, and I reject the Intervenor's assertion to the contrary.

**4. *There Is No Merit to the Intervenor's Claim That the FEIS Fails To Perform an Ultimate Cost-Benefit Analysis Among Alternatives***

The environmental impact statement must provide a cost-benefit analysis among alternatives that, *inter alia*, "considers and weighs the environmental effects of the proposed action [and the] alternatives available for reducing or avoiding adverse environmental effects" (10 C.F.R. § 51.71(d)). Here, the Intervenor's claim that the FEIS's cost-benefit analysis is deficient because it fails to compare the project's costs and benefits or to draw a conclusion about whether the benefits of the project outweigh the environmental risks and harms (Intervenor's Written Presentation at 40). The Intervenor is incorrect.

Preliminarily, I find it significant that — with respect to the cost-benefit analysis for the Section 8 site — the former Presiding Officer found "no basis for disturbing the Staff's FEIS conclusion that it is desirable to initiate a project that creates minimum risks to public health and safety and to the environment and that increases local economic activity" (LBP-99-30, 50 NRC at 113 (footnote omitted)). The Commission affirmed (CLI-01-4, 53 NRC at 50), but it left open the issue of the adequacy of the cost-benefit analysis for the remaining three sites, stating that the issue's resolution may be different if a subsequent hearing reveals "any significant new finding bearing on the overall project's costs" (*ibid.*). In the instant proceeding, the Intervenor voluntarily limited themselves to the arguments and evidence they previously presented during the Section 8 adjudication. *See supra* note 6. Thus, as a matter of logic, it might reasonably be concluded that the rationale in LBP-99-30, as affirmed in CLI-01-04, governs here and mandates the rejection of the Intervenor's challenge to the cost-benefit analysis, because — given the litigative restraints the Intervenor voluntarily assumed — they cannot, and did not, present new evidence or arguments "bearing on the overall project's costs" (CLI-01-4, 53 NRC at 50). My independent review of the FEIS confirms this conclusion.

Section 5 of the FEIS — which is entitled "Costs and Benefits Associated with the Proposed Project" (FEIS at 5-1) — confutes the Intervenor's assertion that the FEIS fails to conduct a cost-benefit analysis for the project. As Section 5 states, the project will have the beneficial effects of: (1) promoting the Nation's interest in maintaining a viable domestic uranium mining industry (*ibid.*); (2) helping offset the Nation's multiyear deficit in domestic uranium production (*ibid.*); (3) generating revenues for HRI resulting from the sale of processed uranium (*ibid.*); (4) providing employment and income for the local community (*id.* at 5-1, 5-3 to 5-4); (5) providing royalty income for members of the local community who hold leases negotiated with HRI (*id.* at 5-1, 5-4); (6) possibly providing some

improvement to overgrazed lands by closing off grazing for a limited period of time while well fields are developed and operated (*id.* at 5-1); and (7) providing significant tax revenues for McKinley County and possibly for the Navajo Nation (*id.* at 5-4 to 5-5). *See also id.* at 4-96 to 4-103 (discussing socioeconomic impacts of the project).

On the debit side of the cost-benefit balance, Section 5 examines the following costs to Crownpoint, Church Rock, McKinley County, and the Navajo Nation that may be caused by HRI's project (FEIS at 5-6 to 5-7): (1) the expenses of infrastructure related to population increases induced by the project's employment; (2) the expenses related to fires and emergencies arising from potential accidents on public roads; and (3) the expenses related to the risk of contaminating or degrading public water supplies. Notably, the FEIS concludes that HRI's project will result in "no significant costs" to any segment of the local community for infrastructure growth (*id.* at 5-6). The FEIS likewise concludes that HRI's project will result in no costs to any segment of the local community due to emergencies arising from potential accidents on public roads, because "HRI would supply or pay for emergency response training and any costs for health care facility" (*ibid.*). Finally, no segment of the local community will incur costs relating to the risk of contaminating public water supplies, because HRI's project will pose "no risk to water supplies" for Church Rock, McKinley County, or the Navajo Nation (*ibid.*). As to Crownpoint, HRI will be required to "replace the town of Crownpoint water supply wells before mining at the Crownpoint site" (*id.* at 5-7). HRI will pay for "[r]eplacement wells and [the] distribution system, along with the additional annual costs of system operation and maintenance" (*ibid.*).<sup>33</sup>

In addition to considering the above monetary costs resulting from HRI's project, the FEIS considers the potentially adverse impacts in the following environmental-related areas: (1) air quality and noise (FEIS at 4-1 to 4-5); (2) geology and soils (*id.* at 4-6 to 4-14); (3) groundwater quantity and quality (*id.* at 4-15 to 4-63); (4) surface water quality and quantity (*id.* at 4-63 to 4-66); (5) transportation risk (*id.* at 4-67 to 4-72); (6) health physics and radiological exposures (*id.* at 4-72 to 4-88); (7) existing ecological conditions (*id.* at 4-88 to 4-92); (8) land use (*id.* at 4-92 to 4-96); (9) socioeconomic conditions (*id.* at 4-96 to 4-105); (10) aesthetic resources (*id.* at 4-105 to 4-109); and (11) cultural resources (*id.* at 4-109 to 4-112).

The FEIS ultimately concludes that the primary and secondary benefits of the project outweigh the costs and potential harm (FEIS at xxi), because: (1) the project promotes a federal interest (*id.* at 5-1); (2) the project provides the local community with a number of socioeconomic benefits (*ibid.*); (3) the project

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<sup>33</sup> HRI's obligation to replace the water supply wells at Crownpoint is discussed in greater detail *infra* Part III.D.1.

imposes no significant costs on the local community (*id.* at 5-6); and (4) the “potential significant impacts of the proposed project can be mitigated” (*id.* at xxi). The Intervenor thus err in asserting that the FEIS fails to perform a cost-benefit analysis or to determine whether the benefits of the project outweigh any harms.<sup>34</sup>

**D. There Is No Merit to the Intervenor’s Claim That the FEIS’s Discussion of Mitigation Measures Is Inadequate**

When preparing an environmental impact statement, in addition to considering the adverse environmental impacts of a proposed action (42 U.S.C. § 4332(C)(ii)), the NRC Staff must consider measures to mitigate such impacts by examining “alternatives available for reducing or avoiding adverse environmental effects” (10 C.F.R. § 51.71(d)). “Mitigation must be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated” (*Neighbors of Cuddy Mountain v. United States Forest Service*, 137 F.3d 1372, 1380 (9th Cir. 1998) (internal quotation marks omitted)). Here, the Intervenor contend that the FEIS’s discussion of mitigative measures is deficient because (Intervenor’s Written Presentation at 41-42): (1) it fails adequately to evaluate the mitigative measure of moving the Crownpoint water supply; (2) it improperly defers consideration of certain mitigation measures; and (3) it fails to recognize that certain land-use mitigation measures will have negative socioeconomic impacts. I agree with HRI and the NRC Staff that these arguments lack merit. *See* HRI’s Response at 33-36; NRC Staff’s Response at 27-29.

**I. There Is No Merit to the Intervenor’s Claim That the Mitigation Measure of Moving the Crownpoint Water Supply Is Not Adequately Evaluated**

HRI’s license requires that, prior to commencing mining operations at the Crownpoint site, HRI “shall replace the town of Crownpoint’s water supply wells . . . , construct the necessary water pipeline, and provide funds so the existing water supply systems of the Navajo Tribal Utility Authority (NTUA) and the Bureau of Indian Affairs (BIA) can be connected to the new wells” (SUA-1508, License Condition (LC) 10.27(A)). The Intervenor argue that this requirement to relocate the Crownpoint drinking water wells is not adequately addressed in the FEIS, because (Intervenor’s Written Presentation at 41): (1) the FEIS allegedly

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<sup>34</sup> The Intervenor are also incorrect in asserting that the FEIS fails to analyze the costs and benefits of the various alternatives (Intervenor’s Written Presentation at 40). That analysis, which is discussed in Sections 3 through 5 of the FEIS, is summarized in LBP-99-30, 50 NRC at 133-46 (Tables 4 through 15), which is properly considered “part of the FEIS” (*HRI*, CLI-01-4, 53 NRC at 53).

fails to discuss whether there are suitable locations for replacement wells; and (2) the FEIS allegedly fails to address the impacts of losing the current wells on the future needs of this growing community. These arguments do not provide a basis for invalidating HRI's license.<sup>35</sup>

First, the Intervenor is incorrect in asserting that the FEIS fails adequately to address whether there are suitable locations for replacement wells. The FEIS states that — prior to the injection of lixiviant at the Crownpoint site — HRI must replace Crownpoint's water supply wells, and must effect all necessary changes to the pumps, pipelines, and other water supply systems “so the system can continue to provide the same quantity of water” (FEIS at 4-62). The new wells “shall be located so that the water quality at each individual well head would not exceed EPA primary and secondary drinking water standards” (*ibid.*). HRI must “coordinate with the appropriate agencies and regulatory authorities, including the BIA, the Navajo Nation Department of Water Development and Water Resources, and the [Navajo Nation Environmental Protection Agency], and the NTUA” in determining the appropriate placement of the new wells (*ibid.*).

The above requirements ensure that HRI obtains significant local involvement in the process of selecting suitable locations for the replacement wells, thus guaranteeing — contrary to the Intervenor's assertion — that the selection of well location will provide drinking water of “acceptable . . . quality and quantity” (FEIS at 4-49). I find that the FEIS adequately discusses this mitigation measure. To the extent the Intervenor is concerned that HRI may not find a suitable location for replacement wells, the FEIS and LC 10.27 provide for that contingency; namely, under such circumstances, HRI would not be permitted to commence mining operations at the Crownpoint site. As the former Presiding Officer stated when the Intervenor advanced this identical concern, “[i]f there is no appropriate way to move the wells, then they will not be moved and the no-action alternative for Crownpoint will be implemented” (LBP-99-30, 50 NRC at 117).

There is likewise no merit to the Intervenor's concern that the FEIS fails adequately to consider the impacts of losing the current wells on the future needs of this growing community. The FEIS explicitly observes that the town of Crownpoint “experienced rapid population growth recently” (FEIS at 3-56). During the 1980s, the Crownpoint population nearly doubled, and by 1990, a total of 2108 persons resided there (*id.* at 3-56, 3-57). The FEIS concludes that this rapid growth was attributable to several factors, including (*id.* at 3-56): (1) the improved access to the town due to the completion of State Highway 371; (2) the

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<sup>35</sup>The purpose of moving the drinking water wells for the town of Crownpoint is twofold: (1) it avoids a cone of depression caused by the pumping of drinking water that could cause an excursion of lixiviant during mining operations (*see* FEIS at 4-43 to 4-44); and (2) it avoids the potential risk, based on conservative analysis, of contaminating drinking water wells with excessive concentrations of uranium (*id.* at 4-49).

fact that Crownpoint is a key center for Navajo Nation social services; and (3) the construction in the town of a new hospital, high school, and shopping center.

Against this factual backdrop of population growth, the FEIS states that HRI will be required “to relocate the town of Crownpoint drinking wells to an alternative location *with acceptable groundwater quality and quantity*, prior to mining at the Crownpoint site, *to ensure a continued source of high-quality water* to the town” (FEIS at 4-49 (emphasis added)). The license condition that mandates this mitigative measure commands that the replacement wells will be located so that they “can continue to provide at least the same quantity of water as the existing systems” (LC 10.27(A)). Additionally, HRI must seal the old wells so they “cannot become future pathways for the vertical movement of contaminants” (LC 10.27(B)). *See also* FEIS at 4-62.

Thus, the replacement wells for the town of Crownpoint will have at least the same capacity as its current wells and, accordingly, the loss of its existing wells will not adversely affect Crownpoint’s future water supply needs. Moreover, the sealing of Crownpoint’s current wells will ensure that its future water needs are supplied with high-quality water that is free from contamination related to HRI’s mining activities. It bears reiterating that HRI will pay for all the costs associated with the “[r]eplacement wells and distribution system, . . . along with the additional annual costs of system operation and maintenance” (FEIS at 5-6). Finally, as stated previously, if it is determined — at the time HRI prepares to commence mining operations at Crownpoint — that replacement wells will not meet Crownpoint’s future needs, the no-action alternative for Crownpoint will be implemented. I therefore conclude that the FEIS’s consideration of mitigation measures associated with the relocation of Crownpoint’s drinking water wells is adequate. The Intervenor’s contrary arguments are without merit.

## ***2. There Is No Merit to the Intervenor’s Claim That the FEIS Improperly Defers Consideration of Mitigative Measures***

The Intervenor asserts that the FEIS is flawed because, rather than discussing “other mitigative measures” at this time, it allows “HRI to submit [at a later date] additional tests or information that would normally be required in the license application” (Intervenor’s Written Presentation at 41). For example, state the Intervenor, HRI’s license “does not require HRI to submit a surety estimate or plan for the proposed mines and mill until after licensing, even though a surety is already required by NRC regulations prior to licensing of a source materials mining facility” (*ibid.*). I conclude that the Intervenor’s claim does not provide a basis for invalidating HRI’s license, because their attack on the timing of HRI’s submission of its surety estimate and financial assurance plan is an issue that already has been addressed and resolved by the Commission.

In CLI-00-8, the Commission considered the Intervenor’s claim that “HRI’s

failure to submit a financial assurance plan with cost estimates renders its [license] application in violation of [Commission] regulations” (51 NRC 227, 237 (2000)). The Commission acknowledged that “the NRC Staff’s review and approval of the financial assurance plan and its cost estimates most logically should come prior to, or be part of, the issuance of a license[, but this] was not done here” (*id.* at 238). The Commission nevertheless ruled that, in the circumstances of this case, there was “no need to set aside HRI’s already granted license” (*ibid.*). Instead, to correct the effect of this omission, the Commission imposed an additional condition on HRI’s license, which “prohibits use of the license until the required information [regarding cost estimates] is submitted and a financial assurance plan approved by the NRC Staff is in place” (*ibid.*) (emphasis omitted).<sup>36</sup>

HRI, in turn, submitted its cost estimates and financial assurance plan for the ISL project in 2001, and the NRC Staff approved the plan (LBP-04-3, 59 NRC at 88, 89 n.20). The Intervenor already have availed themselves of the opportunity to challenge that plan. *See* LBP-05-17, 62 NRC 77, 102-15 (2005), *petition for review denied*, CLI-06-1, 63 NRC 1 (2006); LBP-04-3, 59 NRC 84, 89-108 (2004), *aff’d in part and rev’d in part*, CLI-04-33, 60 NRC 581 (2004).

The Intervenor’s renewed attack on the belated submission of HRI’s financial assurance plan — which they curiously characterize as a challenge to the FEIS — lacks merit.<sup>37</sup>

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<sup>36</sup> The Commission emphasized that HRI was not required to provide the Staff with its actual surety arrangement before receiving a license. Rather, “[s]urety arrangements are matters appropriately addressed after issuance of the license, and even after completion of a hearing. Criterion 9 [of 10 C.F.R. Part 40, Appendix A] makes clear that a surety arrangement is necessary as a prerequisite to *operating*, not as a prerequisite to *licensing*” (CLI-00-8, 51 NRC at 240 n.15).

<sup>37</sup> I reject the Intervenor’s assertion that the NRC Staff improperly permits HRI to submit certain test results after the license is issued “rather than prior to licensing when they are subject to more rigorous mandatory review and licensing hearings” (Intervenor’s Written Presentation at 41). First, this undeveloped assertion fails to state a litigable claim (*see supra* note 21). Second, even if this obscure assertion were litigable, it appears to be substantially equivalent to an argument the Intervenor previously advanced with their groundwater challenges, when they argued that certain “license conditions governing the establishment of groundwater baseline conditions and upper control limits for specified groundwater parameters deprive them of their hearing rights because HRI is permitted to determine these values *after* this hearing is closed and *without* any regulatory oversight” (LBP-05-17, 62 NRC at 93 (citations and footnote omitted)). I determined that the Intervenor’s argument lacked merit, because: (1) the challenged license conditions require HRI to adhere to a prescriptive and highly detailed methodology that will provide reasonable assurance that HRI’s actions will not endanger public health and safety (*id.* at 93-94 & n.11); (2) the Intervenor had a full opportunity to identify flaws, omissions, or irregularities in the licensing methodology (*id.* at 93-94); and (3) HRI’s future actions will be subject to continuing NRC regulatory oversight and enforcement authority (*id.* at 95). The Commission declined to disturb that decision (CLI-06-1, 63 NRC at 5), and the Intervenor provide no reason to revisit it.

**3. *There Is No Merit to the Intervenors' Claim That the Mitigation Measures for Land Use Impacts Are Unacceptable***

As previously discussed (*supra* Part III.A.4), the FEIS recognizes that HRI's project will have temporary land use impacts at the mining sites, resulting in the temporary disruption of livestock grazing at project sites and the potential temporary relocation of residents within mining site boundaries (FEIS at 4-92 to 4-94). The Intervenors claim that the mitigation measure in the FEIS for ameliorating this impact — i.e., HRI's compensation of any affected individual (*id.* at 4-118) — is inadequate, because “monetary compensation cannot mitigate the damage done by forced relocation of families and livestock” (Intervenors' Written Presentation at 42).

The Intervenors raised this precise argument earlier in the context of challenging the FEIS's treatment of cumulative impacts on land use, and I rejected it (*supra* Part III.A.4). Consistent with the analysis in the FEIS (FEIS at 4-118, 4-125 to 4-126) and the rationale from relevant case law (LBP-99-30, 50 NRC 77, 117-18 (1999), *aff'd*, CLI-01-4, 53 NRC 31, 34 (2001)), I concluded that — because the effects on land use will be short-lived and because HRI will provide for site restoration and reclamation — the land use impact will not be significant and, accordingly, monetary compensation will adequately mitigate any temporary land use disruption or displacement (*supra* Part III.A.4). Absent the presentation of new facts or arguments — and the Intervenors present none — I decline to revisit that conclusion.

**E. *The Intervenors' Challenges Relating to Supplementation of the FEIS Lack Merit***

The Intervenors contend that the NRC Staff, in failing to supplement the FEIS, acted contrary to NEPA and its implementing regulations. Specifically, they argue that (Intervenors' Written Presentation at 44-51): (1) the inclusion of performance-based concepts<sup>38</sup> in HRI's license should have been discussed in a supplement to the FEIS; (2) the FEIS contains new or revised action alternatives that require supplementation; (3) the planned sequence for mining

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<sup>38</sup> Performance-based licensing in the ISL mining context is explained as follows (CLI-99-22, 50 NRC 3, 17 n.51 (1999) (internal quotation marks omitted)):

The performance-based license condition is structured such that uranium recovery licensees are required to submit applications for all license amendments, unless they can demonstrate that the provisions specified in the performance-based license condition have been satisfied. In addition, the performance-based license condition requires that a summary of all changes made under the condition be provided to NRC in an annual report. Therefore, the performance-based license condition provides the same degree of flexibility contained in the regulations and licenses for other nuclear facilities, and is consistent with established NRC policy.

operations has changed, requiring supplementation; and (4) the proposal to build a nearby housing development and the 2005 passage of the Diné Natural Resources Protection Act are factual changes requiring supplementation of the FEIS. In light of these alleged defects in the FEIS, the Intervenor request that HRI's license for Section 17, Unit 1, and Crownpoint be revoked or, in the alternative, that the NRC Staff be ordered to circulate a supplemental environmental impact statement for public comment. *See id.* at 43-44.

Preliminarily, it is useful to review the legal standards governing the mandatory supplementation of an environmental impact statement. Pursuant to 10 C.F.R. §§ 51.72(a), 51.92(a), the NRC Staff shall supplement an environmental impact statement if: (1) "[t]here are substantial changes in the proposed action that are relevant to environmental concerns," or (2) "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." The Commission has provided the following guidance for implementing these standards (CLI-99-22, 50 NRC at 14 (quoting *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 373 (1989), and *Sierra Club v. Froehle*, 816 F.2d 205, 210 (5th Cir. 1987))):

A Supplemental [EIS] is not necessary "every time new information comes to light after the EIS is finalized." As a general matter, the agency must consider whether the new information is significant enough to require preparation of a supplement. The new information must present "a seriously different picture of the environmental impact of the proposed project from what was previously envisioned."

With the above principles in mind, I now examine the Intervenor's arguments. I conclude that none provides a basis for invalidating HRI's license or ordering that the FEIS be supplemented. *See* HRI's Response at 38-47; NRC Staff's Response at 29-35.

***1. The Intervenor's Challenge to the Performance-Based Concepts in HRI's License Is Barred by the Law of the Case Doctrine***

The Intervenor argues that the performance-based concepts in HRI's license renders the license invalid for two reasons (Intervenor's Written Presentation at 44): (1) performance-based licensing violates NEPA and the Atomic Energy Act (AEA); and (2) even if performance-based licensing is not unlawful, the FEIS must be supplemented because, according to the Intervenor, the performance-based provisions in HRI's license could significantly and adversely affect human health and the environment. Both arguments are barred by the law of the case doctrine.

First, the Commission has rejected the Intervenor's claim that performance-based licensing in HRI's license violates NEPA and the AEA. The Commission

unequivocally ruled that performance-based licensing “is fully consistent with . . . sound NEPA practice” (CLI-99-22, 50 NRC at 17), and “does not run counter to any agency mandate contained in the [AEA] or any established Commission regulation” (*id.* at 16). Rather, the performance-based concepts in HRI’s license “[comport] with the Commission’s efforts over the years to allow reasonable flexibility in its regulatory framework. It is simply an additional means through which the NRC can decrease the administrative burden of regulation while ensuring the continued protection of public health and safety” (*id.* at 16-17). *See also* CLI-01-4, 53 NRC at 51-52 (Commission observes that it previously rejected the Intervenor’s claim that performance-based licensing violates NEPA and the AEA). The Intervenor’s attempt to resurrect this claim is thus barred by the law of the case doctrine.

Second, the Intervenor’s claim that HRI’s license must be supplemented to discuss the fact that HRI’s license contains performance-based provisions is likewise barred by the law of the case doctrine. When the Commission previously considered this argument, it observed that an EIS must be supplemented only when changed circumstances “‘cause effects which are significantly different from those already studied’ ” (*HRI*, CLI-01-4, 53 NRC at 52 (quoting *Davis v. Latschar*, 202 F.3d 359, 369 (D.C. Cir. 2000))). *See also* 10 C.F.R. §§ 51.72(a), 51.92(a) (Commission regulations *require* that an EIS be supplemented *only* if there are “‘substantial changes in the proposed action that are relevant to environmental concerns,’” or “‘significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts’”). Here, the plain language of HRI’s performance-based licensing provision, LC 9.4, requires it to apply for a license amendment if any “‘change, test, or experiment’” it wishes to undertake is inconsistent with the findings in the FEIS (CLI-01-4, 53 NRC at 52 (internal quotation marks omitted)). HRI is prohibited from taking any action that could “‘affect the quality of the human environment in a significant manner or to a significant extent not already considered’ ” (*ibid.* (quoting *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 374 (1989))). There is thus “‘no reason to believe that performance-based licensing, as applied to this license, will result in any increased risks to public safety or to the environment’ ” (LBP-99-30, 50 NRC at 116). Given these circumstances, the Commission had no difficulty ruling that the “‘inclusion of performance-based concepts in HRI’s license does not warrant FEIS supplementation’ ” (CLI-01-4, 53 NRC at 52). That ruling is the law of the case, and it governs here.

## ***2. The Intervenor’s Assertion That the FEIS Must Be Supplemented Based on Changes in the Action Alternatives Lacks Merit***

The Intervenor asserts that the FEIS must be supplemented because it “‘presents a set of alternatives that are substantively different than the alternatives presented

in the DEIS'' (Intervenors' Written Presentation at 45). In particular, argue the Intervenors, the second alternative in the FEIS ''proposes various arrays of alternative mining sites, alternative sites for yellowcake drying and packaging, and alternative liquid waste disposal methods[, none of which was] presented for consideration in the DEIS'' (*ibid.*), and the third alternative discusses mitigation measures that were not discussed in the DEIS (*id.* at 45-46). The Intervenors claim that the FEIS must be supplemented and made available for public comment on these alternatives (*id.* at 45). This argument is barred by the law of the case doctrine and lacks merit in any event.

During Phase I of this litigation, the Intervenors advanced the *identical* attack on the second and third alternatives in the FEIS. *See* Intervenors' Written Presentation in Opposition to HRI's Application for a Materials License with Respect to NEPA Issues at 65-66 (Feb. 19, 1999). The then-Presiding Officer rejected their argument, finding that the challenged alternatives were not substantial changes that warranted supplementing the FEIS. He explained (LBP-99-30, 50 NRC at 116):

[The second and third alternatives discussed in the FEIS do] not . . . involve any substantial change in the description of the project. What the Staff did was to pursue further analysis of the proposed project, including the evaluation of some fresh alternatives and the evaluation of some license conditions that helped to improve safety and reduce risk to the environment. Consistent with 10 C.F.R. § 51.72(a), I conclude that this further Staff analysis did not require a further circulation of the FEIS for comment. Nor was it necessary to develop further alternatives for evaluation.

The Commission affirmed (CLI-01-4, 53 NRC at 52-53), and that decision governs here.

Even if the law of the case doctrine did not preclude consideration of the Intervenors' argument, I would reject it on the merits. Regarding the Intervenors' attack on the second alternative in the FEIS, the alternative mining sites considered in the FEIS were *subsets* of HRI's proposed sites and, hence, were ''well within the 'spectrum' and 'range' of alternatives discussed in the [DEIS]'' (CLI-01-4, 53 NRC at 53 (quoting *Dubois v. United States Department of Agriculture*, 102 F.3d 1273, 1292-93 (1st Cir. 1996), *cert. denied*, 521 U.S. 1119 (1997))). The different liquid waste disposal methods considered in the second alternative likewise were within the spectrum of alternatives proposed by HRI or considered in the DEIS. *Compare* FEIS at 2-31 (''[t]he FEIS examines the impacts of HRI's proposal and alternative liquid waste disposal methods, including various combinations of evaporation ponds, deep-well injection, land application, and surface discharge'') *with ibid.* (''HRI proposes to dispose of liquid wastes through a combination of evaporation ponds, aquifer reinjection, land application, and

reinjection into the Westwater Canyon Sandstone”) and DEIS at 2-15 to 2-17 (the DEIS discusses as waste disposal methods evaporation ponds, deep-well disposal, land application, and surface discharge). Finally, the Intervenor’s challenge to the second alternative’s discussion of different sites for yellowcake drying and packaging is without merit, because the Staff simply pursued further analysis of the proposed project, which resulted in no “substantial changes . . . relevant to environmental concerns” that require supplementing the FEIS (10 C.F.R. § 51.92(a)(1)).

Nor is there merit to the Intervenor’s assertion that the third alternative in the FEIS improperly discusses mitigation measures that were not discussed in the DEIS. It is well established that “the FEIS, in response to comments received, may supplement, refine, or otherwise adapt the project alternatives” (*HRI*, CLI-01-4, 53 NRC at 53). The Staff’s addition of mitigation measures to an FEIS is, thus, not only permissible, it is properly viewed as the Staff’s conscientious performance of its NEPA responsibilities. *See ibid.* (“[t]he FEIS . . . might typically add ‘mitigation measures’ to an alternative”).

**3. *There Is No Merit to the Intervenor’s Claim That HRI’s Change in the Planned Sequence of Mining at Church Rock Requires Supplementing the FEIS***

The Intervenor contends that HRI’s decision to change the mining sequence at Church Rock by beginning mining operations at Section 8, rather than Section 17 (as stated in the DEIS), is a substantial change requiring that the FEIS be supplemented (Intervenor’s Written Presentation at 46-47). I disagree.

In Phase I of this proceeding, the then-Presiding Officer considered the Intervenor’s assertion that the above change in mining sequence at Church Rock is a substantial change requiring FEIS supplementation. He rejected the assertion insofar as it related to mining operations at Section 8, and he stated that the question was premature with regard to Section 17. He explained (LBP-99-30, 50 NRC at 116-17):

Intervenor have . . . challenged whether the change in the order of mining Section 8 and Section 17 requires supplementation of the FEIS. . . . That question need not be answered in this phase of the case. If it is inappropriate to mine Section 17 after Section 8 or if subsequent mining of Section 17 raises important questions requiring supplementation[, that question] may be reserved for a subsequent portion of this case. In that portion of the case, Intervenor will need to raise some question concerning how the change in the order of mining will *affect drinking water*. Accordingly, I do reserve the question concerning the impact of the change in the order of mining.

The Intervenor was thus on notice that — if they wished to go forward with their claim that the FEIS should be supplemented due to HRI’s decision to change the sequence of mining at Church Rock — they were required to “raise some question concerning how the change in the order of mining will affect drinking water” or some other aspect of the environment (LBP-99-30, 50 NRC at 116-17). This they failed to do. Rather, the Intervenor simply aver that the altered mining sequence is a “substantial change” (Intervenor’s Written Presentation at 47) without demonstrating why this change is significant or relevant to environmental concerns. I therefore reject their claim that the FEIS requires supplementation based on HRI’s change in the sequence of mining at Church Rock. *See* HRI’s Response at 41; NRC Staff’s Response at 32.

Notably, previously in Phase II of this proceeding, I rejected as insubstantial the Intervenor’s argument that HRI failed to show that drinking water supplies would be protected during mining operations at Section 17 (LBP-05-17, 62 NRC at 115-22). As a matter of logic, that ruling negates the Intervenor’s unsupported suggestion that HRI’s decision to change the sequence of mining operations at Church Rock will adversely affect the drinking water during Section 17 mining operations. In any event, if new and significant information comes to light showing that HRI’s mining operations adversely affect the drinking water (or any part of the environment), the Intervenor — or any member of the public — may seek to institute an action regarding HRI’s authority to operate under its NRC license (10 C.F.R. § 2.206(a)).

***4. There Is No Merit to the Intervenor’s Claim That the Proposal To Build a Nearby Housing Development and the Recent Enactment of the Diné Natural Resources Protection Act Require Supplementing the FEIS***

The Intervenor asserts that the following two events, which occurred subsequent to the issuance of the FEIS, are significant new circumstances that require supplementing the FEIS (Intervenor’s Written Presentation at 47-51): (1) the proposal to build a 1000-unit housing development, the Springstead Estates Project, which would be constructed within 2 miles of Sections 8 and 17 in Church Rock; and (2) the passage in 2005 by the Navajo Nation of the Diné Natural Resources Protection Act, which bans uranium mining and processing within Navajo Indian Country. I agree with HRI and the NRC Staff that the Intervenor’s arguments fail to provide a basis for supplementing the FEIS. *See* HRI’s Response at 42-47; NRC Staff’s Response at 33-35.

At an earlier stage of this proceeding, the Intervenor argued that the FEIS should be supplemented to discuss the impacts of mining operations at Sections 8 and 17 on the proposed Springstead Estates Project (SEP). The then-Presidenting

Officer rejected that argument. He explained (LBP-04-23, 60 NRC at 448-49 (footnotes omitted)):

[M]y determination necessarily turns upon two related questions: (1) whether there has already been a “hard look” taken at the potential environmental consequences of HRI’s mining operations affecting the proposed SEP as required by NEPA; and (2) whether the new circumstance, in this case the SEP, presents a “seriously different picture of the environmental impact of the proposed project.” In short, will the SEP be affected by HRI’s uranium mining “in a significant manner or to a significant extent not already considered.” Following an examination of all the filings on this matter, including the affidavits of proffered experts, I find that the requirements of NEPA have been satisfied, and that the Intervenor has not presented a prima facie case that the SEP represents a “significant new circumstance” such that a supplement to the existing FEIS is warranted.

In concluding that the proposed SEP did not represent a significant new circumstance that warranted supplementing the FEIS, the former Presiding Officer rejected the *identical* arguments that the Intervenor presents here (Intervenor’s Written Presentation at 48-49). In a comprehensive and compelling analysis, he examined the following issues with regard to mining operations at Sections 8 and 17: (1) the possibility of horizontal groundwater excursions that could contaminate SEP drinking water (LBP-04-23, 60 NRC at 450-53); (2) the possibility of vertical groundwater excursions due to geologic faults that could contaminate SEP drinking water (*id.* at 453-54); (3) the possibility of vertical groundwater excursions due to old mine workings that could contaminate SEP drinking water (*id.* at 454-56); (4) the possibility of radiological airborne emissions that could affect SEP residents (*id.* at 456-58); (5) the possibility of transportation risks associated with the SEP (*id.* at 459); and (6) the possibility of new environmental justice concerns resulting from the SEP (*id.* at 459-60). He concluded that the above issues were adequately discussed in the FEIS, and that the proposed SEP did not warrant supplementing the FEIS (*id.* at 448-49).

The Commission “agree[d] with the Presiding Officer that there is no reason [based on the proposed SEP] warranting FEIS supplementation as to [Sections 8 and 17],” and it therefore denied the Intervenor’s petition for review (CLI-04-39, 60 NRC at 658 n.2).

I, too, agree with the former Presiding Officer. Because the Intervenor utterly fail to show “how the additional population from the proposed housing development would make any material difference to the extensive discussion and analysis already provided in the FEIS” (CLI-04-39, 60 NRC at 661), I

reject as insubstantial their recycled argument that the proposed SEP warrants supplementing the FEIS.<sup>39</sup>

I also reject the Intervenor's argument that the Diné Natural Resources Protection Act (DNRPA), passed in 2005 by the Navajo Nation Council, is a "significant new circumstance" that requires FEIS supplementation (Intervenor's Written Presentation at 50). First, I agree with HRI and the NRC Staff that the Intervenor — having agreed to limit their NEPA-related arguments here to those they raised in the Section 8 proceeding (*supra* note 6) — are barred from raising this argument. *See* HRI's Response at 46; NRC Staff's Response at 34 n.13.

Even if the Intervenor were not precluded from raising this argument, I would conclude that it lacks merit. As previously discussed, a supplement to the FEIS is required when (10 C.F.R. § 51.92(a)): (1) there are substantial changes in the proposed action that are relevant to environmental concerns; or (2) there are significant new circumstances or information relevant to environmental concerns that bear on the proposed action or its impacts. Here, the Intervenor fails to provide evidence or argument to suggest that the DNRPA calls into question any of the environmental conclusions in the FEIS. Absent any indication that the DNRPA will result in a significantly new potential impact not considered in the FEIS, supplementation is not required.<sup>40</sup>

#### IV. CONCLUSION

For the foregoing reasons, I find — with the concurrence of Special Assistants Dr. Richard Cole and Dr. Robin Brett — that HRI and the NRC Staff have demonstrated by a preponderance of the evidence that the Intervenor's challenges relating to the adequacy of the FEIS do not provide a basis for invalidating HRI's

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<sup>39</sup> Whether the SEP ever will be built appears, on this record, to remain conjectural (LBP-04-23, 60 NRC at 452).

<sup>40</sup> HRI persuasively argues that the DNRPA does not implicate a substantial NEPA-related concern in any event. The issue to be determined under the DNRPA, states HRI, is whether the sites on which HRI proposes to conduct NRC-licensed mining operations are in "Indian country" (HRI's Response at 47). Although resolution of this issue may affect HRI's ability to mine, it does not touch on a significant environmental concern relating to the impact of its proposed mining operations. Rather, HRI states that this issue is analogous to the requirement that HRI obtain EPA underground injection control permits and aquifer exemptions prior to commencing operations. Although federal permits and exemptions must be mentioned in the FEIS (10 C.F.R. §§ 51.90 and 51.71(c)), the absence of such mention does not perforce render the FEIS invalid. *See* HRI's Response at 46-47; *cf.* FEIS at A-5 (whether an agency has authority to grant a permit "has a strong bearing on the issuance of necessary permits and the operation of HRI's proposed project, [but it] has little bearing on the identification and evaluation of environmental impacts and mitigative measures in the FEIS"); LBP-06-1, 63 NRC at 71 n.29 ("[P]ursuant to the terms of its license, HRI will be required to ensure its operations do not run afoul of [the DNRPA] prior to commencing operations. *See* LC 9.14.').

license to perform ISL uranium mining operations at Section 17, Unit 1, and Crownpoint.

Pursuant to 10 C.F.R. §§ 2.786(b) and 2.1253, a party wishing to challenge this Decision before the Commission must file a petition for review within 15 days after service of this Decision. Any other party to this proceeding may, within 10 days after service of a petition for review, file an answer supporting or opposing Commission review (*id.* § 2.786(b)(3)). The filing of a petition for review is mandatory for a party seeking to exhaust its administrative remedies before seeking judicial review (*id.* §§ 2.786(b)(1) and 2.1253). If no party files a petition for review of this Decision, and if the Commission does not *sua sponte* review it, this Decision constitutes the final action of the Commission 30 days after its issuance (*id.* § 2.1251(a)).

It is so ORDERED.

BY THE PRESIDING OFFICER<sup>41</sup>

E. Roy Hawkens  
ADMINISTRATIVE JUDGE

Rockville, Maryland  
August 21, 2006

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<sup>41</sup> Copies of this Final Partial Initial Decision were sent this date by Internet e-mail transmission to counsel for: (1) HRI, (2) the Intervenors, and (3) the NRC Staff.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**COMMISSIONERS:**

**Dale E. Klein**, Chairman  
**Edward McGaffigan, Jr.**  
**Jeffrey S. Merrifield**  
**Gregory B. Jaczko**  
**Peter B. Lyons**

**In the Matter of**

**Docket No. 72-26-ISFSI**

**PACIFIC GAS AND ELECTRIC  
COMPANY  
(Diablo Canyon Power Plant Independent  
Spent Fuel Storage Installation)**

**September 6, 2006**

**EQUITABLE RELIEF**

A factual situation where there is ongoing construction of an independent spent fuel storage installation, but no loading of spent fuel, causes no imminent or irreparable harm justifying immediate Commission action. Such harm is the *sine qua non* of the kind of equitable relief sought.

**MEMORANDUM AND ORDER**

This proceeding stems from an application by Pacific Gas and Electric Company (PG&E) to operate an independent spent fuel storage installation (ISFSI) at the site of its two Diablo Canyon nuclear power plants in California. Before us today is a “Motion by San Luis Obispo Mothers for Peace, Sierra Club, and Peg Pinard for Declaratory and Injunctive Relief with Respect to Diablo Canyon ISFSI” (July 5, 2006) (“SLOMFP motion”). The motion is an offshoot of a recent judicial decision, *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016 (9th Cir. 2006), finding our “categorical refusal to consider the environmental effects

of a terrorist attack” unreasonable under the National Environmental Policy Act (NEPA).<sup>1</sup> The court remanded the NEPA-terrorism question to the Commission for “further proceedings consistent with this opinion.”<sup>2</sup>

The SLOMFP motion seeks three forms of relief. First, it asks us to declare “invalid” PG&E’s already-granted ISFSI license.<sup>3</sup> Second, it asks us to declare that PG&E proceeds with ISFSI construction “at the risk” that the NEPA-based judicial remand may result in denying the license or in changes in “the design and construction of the ISFSI.”<sup>4</sup> And, third, the motion asks for a Commission order “enjoining” PG&E from loading spent fuel into the ISFSI pending completion of an Environmental Impact Statement discussing the environmental impacts of a terrorist attack.<sup>5</sup> We deny the motion as unnecessary and premature.

As the SLOMFP motion acknowledges, the court of appeals has not yet issued its “mandate” formally returning the ISFSI proceeding to the Commission.<sup>6</sup> So the court-ordered “remand” proceeding has not yet begun. Nor did the court impose any interim remedy, direct the Commission to impose one, or specify the procedures the Commission must follow on remand. On the contrary, the court gave the Commission maximum procedural leeway. The court stated that it was not “circumscribing the procedures that the NRC must employ,” and that “[t]here remain . . . a wide variety of actions [the NRC] may take on remand.”<sup>7</sup>

In the meantime, the Supreme Court has extended (by 30 days) the August 31 deadline for asking the Court to review the Ninth Circuit decision. Moreover, while PG&E has continued construction of the ISFSI, it has stated publicly that it will not be ready to use the ISFSI to store spent fuel “until at least November, 2007.”<sup>8</sup>

In these circumstances, notwithstanding SLOMFP’s motion, we see no urgent reason to consider now the validity of PG&E’s ISFSI license and PG&E’s right to load spent fuel into its ISFSI. Neither issue has practical significance until late in 2007 at the earliest.<sup>9</sup> As for SLOMFP’s request that we “declare” that PG&E is going forward with construction at its own risk, PG&E itself has already said

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<sup>1</sup> 449 F.3d at 1028.

<sup>2</sup> *Id.* at 1035.

<sup>3</sup> See SLOMFP Motion at 9.

<sup>4</sup> *Id.* at 9-10.

<sup>5</sup> *Id.* at 10.

<sup>6</sup> *Id.* at 2. See Fed. R. App. P. 41(b).

<sup>7</sup> *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d at 1035.

<sup>8</sup> See Answer of Pacific Gas and Electric Company to Motion for Declaratory and Injunctive Relief (“PG&E Answer”) (July 17, 2006) at 15.

<sup>9</sup> As a legal matter, PG&E does not need an NRC license for construction activity; no one argues otherwise. See generally *Nuclear Fuel Services, Inc.* (Erwin, Tennessee), CLI-03-3, 57 NRC 239, 246-50 (2003).

as much: it fully acknowledges that continuing to construct the ISFSI comes “at its own financial risk.”<sup>10</sup> Thus, in light of PG&E’s acknowledgment, there is no controversy as to who bears the financial risk of going forward with construction of the ISFSI.

The long and short of this matter is that there remains well more than a year before PG&E will be in position to use its ISFSI license to load radioactive spent fuel. In the interval, further judicial review or further administrative review, or both, may take place. And, as litigation moves forward or terminates, the “equities” that traditionally govern stays or injunctive relief may change.<sup>11</sup> The Commission can decide later, if necessary, whether it is appropriate or necessary to prohibit or postpone loading spent fuel into the Diablo Canyon ISFSI. But the current state of affairs — ongoing construction but no loading of spent fuel — causes no imminent or irreparable harm justifying immediate Commission action. Such harm is the *sine qua non* of the kind of equitable relief SLOMFP seeks.<sup>12</sup>

For these reasons, the Commission *denies* SLOMFP’s motion for declaratory and injunctive relief.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK  
Secretary of the Commission

Dated at Rockville, Maryland,  
this 6th day of September 2006.

**Commissioner Gregory B. Jaczko Respectfully Dissents**

I dissent from this Order because, as I have stated in the recent past, the NEPA terrorism issue is a significant matter that needs resolution. I believe the agency should conduct a review of the impacts of terrorist attacks on nuclear facilities as part of a NEPA analysis. More importantly, I believe continuing to refuse to consider the environmental effects of terrorist attacks will subject the agency to unnecessary judicial challenges. Thus, I am fully supportive of all efforts to give this matter the thorough and deliberate review warranted.

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<sup>10</sup> See PG&E Answer at 18.

<sup>11</sup> See generally *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), CLI-06-8, 63 NRC 235, 237-38 & nn. 4-7 (2006).

<sup>12</sup> See *id.* at 237.

In addition, I believe that the current uncertainty surrounding the impact of this issue may lead to unnecessary confusion in the review of new reactor licenses. To eliminate this uncertainty, the agency should expeditiously develop a process to review terrorism issues as part of a NEPA analysis consistent with the recent Ninth Circuit decision. This particular case presents a timely opportunity for the Commission to resolve these matters, providing clarity and certainty for the potential increase in licensing reviews the Commission may conduct in the next few years.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**COMMISSIONERS:**

**Dale E. Klein, Chairman**  
**Edward McGaffigan, Jr.**  
**Jeffrey S. Merrifield**  
**Gregory B. Jaczko**  
**Peter B. Lyons**

**In the Matter of**

**Docket No. 50-0219-LR**  
**(License Renewal)**

**AMERGEN ENERGY COMPANY, LLC**  
**(Oyster Creek Nuclear Generating**  
**Station)**

**September 6, 2006**

**LICENSE RENEWAL: SCOPE OF HEALTH AND SAFETY REVIEW**

The scope of our 10 C.F.R. Part 54 safety review is limited to “those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs”; a license renewal review does not revisit the full panoply of issues considered during review of an initial license application.

**LICENSE RENEWAL: SCOPE OF HEALTH AND SAFETY REVIEW**  
**(AGING MANAGEMENT)**

Renewal applicants must demonstrate that they will adequately manage the detrimental effects of aging for all important components and structures, with attention, for example, to “[a]dverse aging effects [resulting] from [potential] metal fatigue, erosion, corrosion, thermal and radiation embrittlement, microbiologically induced effects, creep, and shrinkage,” which “can affect a number of reactor and auxiliary systems, including the reactor vessel, the reactor coolant system pressure boundary, steam generators, electrical cables, the pressurizer, heat exchangers, and the spent fuel pool.”

**LICENSE RENEWAL: SCOPE OF HEALTH AND SAFETY REVIEW  
(TIME-LIMITED AGING ANALYSIS)**

To the extent that any health and safety analyses performed during the initial licensing process were limited to the initial 40-year license period, the applicant must show that it has reassessed these “time-limited aging analyses” and that these analyses remain valid for the period of extended operation.

**LICENSE RENEWAL: SCOPE OF HEALTH AND SAFETY REVIEW  
(CURRENT LICENSING BASIS, REGULATORY OVERSIGHT  
PROCESS)**

Review of a license renewal application does not reopen issues relating to a plant’s current licensing basis, or any other issues that are subject to routine and ongoing regulatory oversight and enforcement.

**LICENSE RENEWAL: SCOPE OF ENVIRONMENTAL REVIEW**

A Part 51 license renewal environmental review has both a generic component and a plant-specific component. In a generic environmental impact statement, the NRC has already considered certain environmental issues common to all (or to a certain category of) reactors. These issues are designated “Category 1” issues, and include such matters as onsite land use, noise, bird collisions with cooling towers, and onsite spent fuel storage. The site-specific environmental review does not routinely reconsider Category 1 issues, but requires applicants (and ultimately the NRC Staff) to assess certain site-specific, “Category 2” issues.

**LICENSE RENEWAL: SCOPE OF ENVIRONMENTAL REVIEW**

We have tailored our Part 51 environmental review requirements to provide an efficient and focused renewal-specific review, rather than duplicating the review required for an initial license.

**INTERVENTION PETITIONS**

To intervene in a Commission proceeding, including a license renewal proceeding, a person must file a petition for leave to intervene. In accordance with 10 C.F.R. § 2.309(a), this petition must demonstrate standing under 10 C.F.R. § 2.309(d), and must proffer at least one admissible contention as required by 10 C.F.R. § 2.309(f)(1)(i)-(vi).

#### **CONTENTIONS: ADMISSIBILITY**

The requirements for admissibility set out in 10 C.F.R. § 2.309(f)(1)(i)-(vi) are “strict by design,” and we will reject any contention that does not satisfy these requirements. Our rules require “a clear statement as to the basis for the contentions and the submission of . . . supporting information and references to specific documents and sources that establish the validity of the contention.” “Mere ‘notice pleading’ does not suffice.” Contentions must fall within the scope of the proceeding — here, license renewal — in which intervention is sought.

#### **APPEALS: INTERVENTION RULINGS**

Under our rules, where (as here) the NRC Staff or the license applicant argues that the Board ought to have rejected all contentions, an appeal lies. An appeal also lies where (as here) a potential intervenor claims that the Board wrongly rejected all contentions.

#### **APPEALS: INTERLOCUTORY REVIEW**

We have discretion to grant interlocutory review at the request of a party in limited circumstances. However, “[t]he Commission’s longstanding general policy disfavors interlocutory review.” We recognize “an exception where the disputed ruling threatens the aggrieved party with serious, immediate, and irreparable harm or where it will have a ‘pervasive or unusual’ effect on the proceedings below.” We grant review under the “pervasive and unusual” effect standard “only in extraordinary circumstances.”

#### **LICENSING BOARD DECISIONS: STANDARD OF REVIEW**

We give “substantial deference” to our boards’ determinations on threshold issues, such as standing and contention admissibility. We regularly affirm “Board decisions on the admissibility of contentions where the appellant ‘points to no error of law or abuse of discretion.’”

#### **CONTENTIONS: NEW ON APPEAL**

An (in effect) rewritten cumulative usage factor contention converted that contention into an impermissible new contention. Also, as formulated on appeal, another contention — “demanding an updated interconnection agreement” — did not match any of the three pieces that formed the original proposed contention. A person cannot raise new contentions for the first time on appeal to the Commission.

#### **REGULATIONS: INTERPRETATION**

Section 50.55a(a)(3) expressly states that authorization from the Director of the NRC's Office of Nuclear Reactor Regulation is required only when "alternatives" to the established requirements in subsections (c), (d), (e), (f), (g), and (h) are used. Since the Applicant's change in cumulative usage factor is "already endorsed" by subsection (g), the approval requirements of subsection (a)(3) do not apply.

#### **REGULATIONS: INTERPRETATION**

Section 2.311 is not applicable to the Board's refusal to supplement the basis of a contention or to add new contentions because the section applies only where a board decision rules on a request for hearing, petition to intervene, or selection of hearing procedures. It does not authorize appeals from an order refusing to supplement an admitted contention.

#### **REVIEW: INTERLOCUTORY**

For a viable petition for review where a decision was not a final decision on the merits, the petitioner needed to make a case for *interlocutory* review under section 2.341(f). Under section 2.341(f), a petitioner must show that the issue for which interlocutory review is sought: "(i) [t]hreatens the party adversely affected by it with immediate and serious irreparable impact which, as a practical matter, could not be alleviated through a petition for review of the presiding officer's final decision; or (ii) [a]ffects the basic structure of the proceeding in a pervasive or unusual manner."

### **MEMORANDUM AND ORDER**

In this Memorandum and Order, we consider appeals of two Atomic Safety and Licensing Board decisions: LBP-06-7 and LBP-06-11. Both concern an application filed by AmerGen Energy Company, LLC ("AmerGen") for renewal of its operating license for its Oyster Creek Nuclear Generating Station ("Oyster Creek"). The appeals come to us in a rather complicated procedural posture.

In *LBP-06-7*,<sup>1</sup> the Board considered proposed contentions contained in two petitions to intervene filed in this operating license renewal proceeding. The New Jersey Department of Environmental Protection ("New Jersey") filed one

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<sup>1</sup> 63 NRC 188 (2006).

petition,<sup>2</sup> and the Nuclear Information and Resource Service (NIRS), Jersey Shore Nuclear Watch, Inc., Grandmothers, Mothers and More for Energy Safety, New Jersey Public Interest Research Group, New Jersey Sierra Club, and New Jersey Environmental Federation (collectively, “Citizens”<sup>3</sup>) filed the second.<sup>4</sup> The Board found that New Jersey failed to submit an admissible contention, and denied New Jersey’s petition.<sup>5</sup> The Board granted Citizens’ petition, finding that a narrowed version of its proposed contention was admissible.<sup>6</sup>

New Jersey has appealed, seeking to revive its three contentions. The first of New Jersey’s contentions maintains that the National Environmental Policy Act (NEPA) requires the NRC to consider the consequences of a terrorist attack on Oyster Creek, as well as appropriate severe accident mitigation alternatives. In connection with its “NEPA-terrorism” contention, New Jersey has asked us to consider a recent Ninth Circuit decision, holding that the NRC cannot categorically refuse to perform a NEPA-terrorism review.<sup>7</sup> Also, the Supreme Court has extended (by 30 days) the August 31 deadline for asking the Court to review the Ninth Circuit decision. As a result of these factors, we postpone our consideration of New Jersey’s NEPA-terrorism arguments for now. As for New Jersey’s other two contentions, we find the reasons given by the Board for their rejection persuasive, and affirm the Board’s decision for these reasons and for the reasons we give below.

AmerGen and the NRC Staff have also appealed, seeking to eliminate Citizens’ single contention. Events have interposed themselves here as well. In response to AmerGen’s motion<sup>8</sup> to dismiss Citizens’ proposed contention as moot,<sup>9</sup> the Board found the contention indeed moot (based upon the Board’s interpretation of commitments made by AmerGen), and therefore subject to dismissal.<sup>10</sup> The Board refrained from issuing an order of dismissal for 20 days to allow Citizens

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<sup>2</sup> Request for Hearing and Petition for Leave To Intervene per 10 CFR 2 — AmerGen Oyster Creek Nuclear Generating Station License Renewal Application — (Docket 50-219) (“New Jersey Petition”) (Nov. 14, 2005).

<sup>3</sup> The Board referred to these groups collectively as “NIRS.” The groups now identify themselves collectively as “Citizens” (Citizens’ Brief in Opposition to Appeal from LBP-06-07 (“Citizens’ Appeal”) *passim* (Mar. 24, 2006)), and we will use this designation here.

<sup>4</sup> Request for Hearing and Petition To Intervene (“Citizens’ Petition”) (Nov. 14, 2005).

<sup>5</sup> LBP-06-7, 63 NRC at 194, 211.

<sup>6</sup> *Id.* at 194, 217, 225-26.

<sup>7</sup> New Jersey Department of Environmental Protection’s Notice of Pertinent New Case Law Affecting Appeal and Request for Its Consideration (June 12, 2006), citing *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016 (9th Cir. 2006).

<sup>8</sup> AmerGen’s Motions To Dismiss Drywell Contention as Moot and To Suspend Mandatory Disclosures (“AmerGen Motion To Dismiss”) (Apr. 25, 2006).

<sup>9</sup> LBP-06-16, 63 NRC 737 (2006).

<sup>10</sup> *Id.* at 739, 744.

the opportunity to file a new contention, with specific challenges regarding the new information.<sup>11</sup> Citizens did file a new contention,<sup>12</sup> accompanied by a motion seeking leave to supplement<sup>13</sup> this filing to incorporate another newly docketed AmerGen commitment regarding its drywell liner aging management program.<sup>14</sup> In response to this motion for leave to supplement, the Board permitted the parties to make certain limited new filings.<sup>15</sup> Citizens made its initial filing,<sup>16</sup> AmerGen<sup>17</sup> and the NRC Staff<sup>18</sup> filed their answers, and Citizens responded to the answers.<sup>19</sup> As a result of these developments, it is premature, and may ultimately prove unnecessary, to decide AmerGen's and the NRC Staff's appeals of LBP-06-7.

In *LBP-06-11*,<sup>20</sup> the Board denied Citizens' motion for leave either to add two contentions or to supplement the basis of its original contention.<sup>21</sup> Citizens filed an "appeal"<sup>22</sup> of this decision with the Commission simultaneously with a motion for reconsideration<sup>23</sup> before the Board; in its appeal, Citizens indicated that its brief on the motion for reconsideration before the Board also serves as the supporting brief for its appeal. The Board has since issued a decision denying

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<sup>11</sup> *Id.*

<sup>12</sup> [Citizens'] Petition To Add a New Contention (June 23, 2006).

<sup>13</sup> [Citizens'] Motion for Leave To Supplement the Petition (June 23, 2006).

<sup>14</sup> Summary of Commitments, Enclosure 2 to Supplemental Information Related to the Aging Management Program for the Oyster Creek Drywell Shell, Associated with AmerGen's License Renewal Application (TAC No. MC7624) (June 20, 2006), ADAMS Accession No. ML061740573.

<sup>15</sup> Order (Granting NIRS's [Citizens'] Motion for Leave To Submit a Supplement to Its Petition) (July 5, 2006). Per the Board's order, AmerGen and the NRC Staff had 25 days to answer, and Citizens then had 7 days to reply to the answers. *Id.* at 4.

<sup>16</sup> [Citizens'] Supplement to Petition To Add a New Contention; Preliminary Statement (July 25, 2006).

<sup>17</sup> AmerGen's Answer to Citizens' Petition To Add a New Contention and Supplement Thereto (Aug. 11, 2006).

<sup>18</sup> NRC Staff Answer to Petition To Add a New Contention and Petition Supplement (Aug. 21, 2006).

<sup>19</sup> Citizens' Reply to AmerGen's Answer to the Petition To Add a New Contention and Supplement Thereto (Aug. 18, 2006); Citizens' Reply to NRC Staff's Answer to the Petition To Add a New Contention and Supplement Thereto (Aug. 29, 2006).

<sup>20</sup> 63 NRC 391 (2006).

<sup>21</sup> Motion for Leave To Add Contentions or Supplement the Basis of the Current Contention (Citizens' Contention Motion") (Feb. 7, 2006).

<sup>22</sup> Citizens' Notice of Appeal ("Citizens' Notice") (Apr. 6, 2006).

<sup>23</sup> Motion for Reconsideration of Motion To Add New Contentions or Supplement the Basis of the Current Contention and Leave To File Such a Motion ("Citizens' Reconsideration Brief") (Apr. 6, 2006).

Citizens' motion for reconsideration, finding that Citizens had not satisfied the requirements for seeking reconsideration.<sup>24</sup>

We find that an "appeal" of LBP-06-11 does not lie under our regulations, and we deny any implicit petition for review of LBP-06-11 arguably contained in Citizens' appeal. Citizens' appeal includes no justification for granting what, under our regulations, could only be considered a petition for interlocutory review.

## I. BACKGROUND

### A. Regulatory Overview

#### 1. License Renewal Rules

As part of the NRC's review in a license renewal proceeding, the NRC Staff conducts a health and safety review under 10 C.F.R. Part 54, and an environmental review under 10 C.F.R. Part 51.

The scope of the health and safety review is limited to "those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs"; a license renewal review does not revisit the full panoply of issues considered during review of an initial license application.<sup>25</sup> Renewal applicants must demonstrate that they will adequately manage the detrimental effects of aging for all important components and structures,<sup>26</sup> with attention, for example, to "[a]dverse aging effects [resulting] from [potential] metal fatigue, erosion, corrosion, thermal and radiation embrittlement, microbiologically induced effects, creep, and shrinkage,"<sup>27</sup> which "can affect a number of reactor and auxiliary systems, including the reactor vessel, the reactor coolant system pressure boundary, steam generators, electrical cables, the pressurizer, heat exchangers, and the spent fuel pool."<sup>28</sup> Further, to the extent that any health and safety analyses performed during the initial licensing process were limited to the initial 40-year license period, the applicant must show that it has reassessed these "time-limited aging analyses" and that these analyses remain valid for the period of extended operation.<sup>29</sup> However, review of a license renewal application does

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<sup>24</sup>Memorandum and Order (Denying [Citizens'] Motion for Reconsideration) (Apr. 27, 2006) (unpublished) ("Reconsideration Decision").

<sup>25</sup>*Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 7, 9 (2001).

<sup>26</sup>*Id.* at 8, citing 10 C.F.R. § 54.21(a) and Final Rule: "Nuclear Power Plant License Renewal; Revisions," 60 Fed. Reg. 22,461, 22,462, 22,463 (May 8, 1995).

<sup>27</sup>*Turkey Point*, CLI-01-17, 54 NRC at 7.

<sup>28</sup>*Id.* at 7-8.

<sup>29</sup>*Id.* at 8, citing 60 Fed. Reg. at 22,480, 10 C.F.R. §§ 54.21(c), 54.29(a)(2).

not reopen issues relating to a plant's current licensing basis, or any other issues that are subject to routine and ongoing regulatory oversight and enforcement.<sup>30</sup>

A Part 51 license renewal environmental review has both a generic component and a plant-specific component.<sup>31</sup> In a generic environmental impact statement, the NRC has already considered certain environmental issues common to all (or to a certain category of) reactors. These issues are designated "Category 1" issues, and include such matters as onsite land use, noise, bird collisions with cooling towers, and onsite spent fuel storage.<sup>32</sup> The site-specific environmental review does not routinely reconsider Category 1 issues, but requires applicants (and ultimately the NRC Staff) to assess certain site-specific, "Category 2" issues.<sup>33</sup> As with our Part 54 review, we have tailored our Part 51 environmental review requirements to provide an efficient and focused renewal-specific review, rather than duplicating the review required for an initial license.<sup>34</sup>

## 2. *Contention Pleading Rules*

To intervene in a Commission proceeding, including a license renewal proceeding, a person must file a petition for leave to intervene. In accordance with 10 C.F.R. § 2.309(a), this petition must demonstrate standing under 10 C.F.R. § 2.309(d), and must proffer at least one admissible contention as required by 10 C.F.R. § 2.309(f)(1)(i)-(vi). The requirements for admissibility set out in 10 C.F.R. § 2.309(f)(1)(i)-(vi) are "strict by design,"<sup>35</sup> and we will reject any contention that does not satisfy these requirements. Our rules require "a clear statement as to the basis for the contentions and the submission of . . . supporting information and references to specific documents and sources that establish the validity of

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<sup>30</sup> *Turkey Point*, CLI-01-17, 54 NRC at 8-9.

<sup>31</sup> *Id.* at 11-12. The generic component is contained in NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Final Report, Vol. 1 ("GEIS") (May 1996). The conclusions of the GEIS were ultimately codified in 10 C.F.R. Part 51. *See* Final Rule: "Environmental Review for Renewal of Nuclear Power Plant Operating Licenses," 61 Fed. Reg. 66,537 (Dec. 18, 1996). The site-specific component is addressed in a Supplemental Environmental Impact Statement (SEIS) to the GEIS, prepared by the NRC Staff.

<sup>32</sup> 10 C.F.R. Part 51, Subpart A, Appendix B, Table B-1.

<sup>33</sup> *See* 10 C.F.R. § 51.53(c)(3).

<sup>34</sup> *Turkey Point*, CLI-01-17, 54 NRC at 11.

<sup>35</sup> *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001), *petition for reconsideration denied*, CLI-02-1, 55 NRC 1 (2002). *See also Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 808 (2005), citing *Millstone*, CLI-01-24, 54 NRC at 358.

the contention.’’<sup>36</sup> ‘‘Mere ‘notice pleading’ does not suffice.’’<sup>37</sup> Contentions must fall within the scope of the proceeding — here, license renewal — in which intervention is sought.<sup>38</sup>

### 3. Appeals

Under our rules, where (as here) the NRC Staff or the license applicant argues that the Board ought to have rejected all contentions, an appeal lies.<sup>39</sup> An appeal also lies where (as here) a potential intervenor claims that the Board wrongly rejected all contentions.<sup>40</sup> Finally, in cases where an ‘‘appeal’’ does not lie, we have discretion to grant interlocutory review at the request of a party in limited circumstances.<sup>41</sup> However, ‘‘[t]he Commission’s longstanding general policy disfavors interlocutory review.’’<sup>42</sup> We recognize ‘‘an exception where the disputed ruling threatens the aggrieved party with serious, immediate, and irreparable harm or where it will have a ‘pervasive or unusual’ effect on the proceedings below.’’<sup>43</sup> We grant review under the ‘‘pervasive and unusual’’ effect standard ‘‘only in extraordinary circumstances.’’<sup>44</sup>

#### B. Board Decision in LBP-06-7

The Board found that both New Jersey<sup>45</sup> and Citizens<sup>46</sup> had standing. The Board rejected all of New Jersey’s proposed contentions,<sup>47</sup> and admitted Citizens’ one proposed contention, in a form narrowed by the Board.<sup>48</sup> Judge Abramson dissented from that portion of the opinion admitting Citizens’ narrowed contention.<sup>49</sup> Since we do not decide the appeals challenging the admission of

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<sup>36</sup> *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991). *Accord Clinton*, CLI-05-29, 62 NRC at 808.

<sup>37</sup> *Clinton*, CLI-05-29, 62 NRC at 808, citing *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 428 (2003).

<sup>38</sup> See 10 C.F.R. § 2.309(f)(1)(iii).

<sup>39</sup> 10 C.F.R. § 2.311(c).

<sup>40</sup> 10 C.F.R. § 2.311(b).

<sup>41</sup> 10 C.F.R. § 2.341(f).

<sup>42</sup> *Duke Energy Corp.* (Catawba Nuclear Station, Units 1 and 2), CLI-04-6, 59 NRC 62, 70 (2004).

<sup>43</sup> *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-01-1, 53 NRC 1, 5 (2001).

<sup>44</sup> *Id.*

<sup>45</sup> LBP-06-7, 63 NRC at 194.

<sup>46</sup> *Id.* at 195.

<sup>47</sup> See *id.* at 199-211.

<sup>48</sup> See *id.* at 211-26.

<sup>49</sup> *Id.* at 228 n.39, 229-33.

Citizens' contention today, we omit any discussion of the Board's decision on that topic. We also omit any discussion of the Board's decision on New Jersey's NEPA-terrorism contention, since we also do not decide that today.

New Jersey's second and third contentions are the two relevant here:

1. Second contention: In evaluating metal fatigue at Oyster Creek, AmerGen must use a 0.8 "cumulative usage factor"<sup>50</sup> rather than the less restrictive 1.0 factor AmerGen used in its license renewal application;<sup>51</sup> and

2. Third contention: A contractual arrangement between AmerGen and FirstEnergy<sup>52</sup> does not provide adequate assurance that combustion engines Oyster Creek relies on for backup power will continue to operate, will comply with AmerGen's aging management plan, or will meet regulatory requirements should a corrective action plan ever be required.<sup>53</sup>

With respect to these two contentions, the Board held that controlling NRC regulations and industry standards render AmerGen's 1.0 "cumulative usage factor" permissible on its face,<sup>54</sup> and that New Jersey had raised no specific, nonspeculative flaws in the AmerGen-FirstEnergy contractual arrangement on backup power.<sup>55</sup>

### C. Board Decision in LBP-06-11

The Board denied Citizens' motion to add two new corrosion contentions or to supplement the basis of its originally proposed contention.<sup>56</sup> The Board based its decision on findings that the allegedly new information that prompted Citizens' motion was not, in fact, new, and that, even had the information been new, it did not satisfy our contention admissibility standards.<sup>57</sup> Citizens sought reconsideration, but the Board denied Citizens' motion.<sup>58</sup>

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<sup>50</sup> The cumulative usage factor "assists in describing the level of a component's cumulative fatigue damage — that is, damage caused by the repeated stresses of operating load cycles during the component's operating life." LBP-06-7, 63 NRC at 204 n.11.

<sup>51</sup> See New Jersey Petition at 6-9 (unnumbered).

<sup>52</sup> FirstEnergy is the owner/operator of the Forked River Combustion Turbines, which provide backup power to Oyster Creek. See LBP-06-7, 63 NRC at 207.

<sup>53</sup> See New Jersey Petition at 9-11 (unnumbered).

<sup>54</sup> See *id.* at 204-07.

<sup>55</sup> See *id.* at 207-11.

<sup>56</sup> LBP-06-11, 63 NRC at 393, 402.

<sup>57</sup> *Id.* at 396.

<sup>58</sup> Reconsideration Decision at 3-10.

## II. ANALYSIS

### A. New Jersey Appeal of LBP-06-7

We give “substantial deference” to our boards’ determinations on threshold issues, such as standing and contention admissibility.<sup>59</sup> We regularly affirm “Board decisions on the admissibility of contentions where the appellant ‘points to no error of law or abuse of discretion.’”<sup>60</sup> We find no error of law or abuse of discretion with respect to the portions of New Jersey’s appeal of LBP-06-7 under consideration here (New Jersey’s second and third contentions): the Board thoroughly analyzed the issues, the arguments, and the underlying supporting facts and expert opinions. We do not reiterate the Board’s reasoning in full below, but focus instead on certain questions raised in the appellate briefs.

#### 1. *Second Contention: Cumulative Usage Factor*

In its license renewal application, AmerGen employs a cumulative usage factor (one measure of the damage caused by the repeated stresses of operating load cycles) of 1.0.<sup>61</sup> This is less stringent than the 0.8 factor in place when the reactor was built.<sup>62</sup> New Jersey argues that the more stringent 0.8 factor, rather than the 1.0 factor, should have been used in the license renewal application.

On appeal, New Jersey concedes that under NRC rules AmerGen may update its current licensing basis to a new cumulative usage factor, but argues that AmerGen has not complied with or completed the process it must follow to effectuate the update.<sup>63</sup> Docketing a commitment with NRC Staff to update the current licensing basis to the 1.0 factor, as AmerGen has done, is insufficient, according to New Jersey. Moreover, New Jersey says, employing a cumulative usage factor of 1.0, instead of 0.8, results in a 25% increase in permitted metal fatigue, which significantly reduces the margin of safety at Oyster Creek. New Jersey asserts that NRC rules require the Director of the NRC’s Office of Nuclear

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<sup>59</sup> See, e.g., *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 324 (1999); *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-855, 24 NRC 792, 795 (1986).

<sup>60</sup> *USEC Inc.* (American Centrifuge Plant), CLI-06-9, 63 NRC 433, 439 n.32 (2006), citing *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 637 (2004). *Accord Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-00-21, 52 NRC 261, 265 (2000).

<sup>61</sup> LBP-06-7, 63 NRC at 204 n.11.

<sup>62</sup> *Id.* at 204, 206.

<sup>63</sup> New Jersey Appeal at 24-25. See 10 C.F.R. § 50.55a.

Reactor Regulation (NRR) to evaluate this reduction in the margin of safety<sup>64</sup> and that AmerGen should use the 0.8 factor until the Director has approved a different factor. For these reasons, New Jersey argues that the Board erred in refusing to admit the proposed cumulative usage factor contention.

We agree with AmerGen that on appeal New Jersey (in effect) has rewritten its proposed contention, converting it into an impermissible new contention.<sup>65</sup> New Jersey's new contention on appeal focuses on the question of NRR approval. But New Jersey's original proposed contention said nothing about any alleged failure to seek NRR approval of the change in the cumulative usage factor. Additionally, as AmerGen argues, New Jersey misconstrues the pertinent NRC rule — 10 C.F.R. § 50.55a(a)(3). Contrary to New Jersey's interpretation, section 50.55a(a)(3) expressly states that authorization from the NRR Director is required only when "alternatives" to the established requirements in subsections (c), (d), (e), (f), (g), and (h) are used. As NRC Staff puts it, "no . . . approval is required where the updated version of the Code has already been endorsed by Commission regulation."<sup>66</sup> That is the case here. As the Board pointed out, "[u]tilizing a [cumulative usage factor] of 1.0 is permitted under the current, relevant portion of the ASME [American Society of Mechanical Engineers] Code . . . . Moreover, that portion of the Code is specifically referenced in, and endorsed by, 10 C.F.R. § 50.55a(g)(4)."<sup>67</sup> Since AmerGen's change in cumulative usage factor is "already endorsed" by subsection (g), the approval requirements of subsection (a)(3) do not apply. New Jersey's argument thus fails.

Further, in recasting its contention on appeal and arguing only on the basis of that rewritten version, New Jersey does not controvert the Board's decision rejecting the originally proposed version of this contention as "unsupported as a matter of law or fact."<sup>68</sup> We reject the new, rewritten proposed contention, and affirm the Board's unchallenged rejection of the original proposed contention.

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<sup>64</sup>New Jersey Appeal at 24-26.

<sup>65</sup>See *American Centrifuge Plant*, CLI-06-10, 63 NRC at 458, citing *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-35, 60 NRC 619, 622-23 (2004), *Private Fuel Storage*, CLI-04-22, 60 NRC at 140, *Sequoyah Fuels Corp.* (Gore, Oklahoma Site), CLI-04-2, 59 NRC 5, 8 n.18 (2004), and *Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185, 194 (1999).

<sup>66</sup>NRC Staff's Brief in Opposition to Appeal from LBP-06-07 ("NRC Staff Response") (Apr. 10, 2006) at 9.

<sup>67</sup>LBP-06-7, 63 NRC at 206. As the Board notes, AmerGen's License Renewal Application provides for a cumulative usage factor of 1.0. *Id.* at 205.

<sup>68</sup>See *id.* at 204-07.

## 2. *Third Contention: Backup Power*

New Jersey also appeals the denial of one portion of its proposed contention relating to the combustion turbines that provide backup power for Oyster Creek. The contention had three components in its original formulation.<sup>69</sup> The point New Jersey appeals, which it characterizes as “included” in its original proposed contention, concerns AmerGen’s alleged failure to show the existence of an “updated” interconnection agreement requiring FirstEnergy to comply with AmerGen’s aging management plan. New Jersey argues that 10 C.F.R. § 54.21(c), which requires an applicant for a license renewal to “demonstrate that . . . (iii) [t]he effects of aging on the intended function(s) will be adequately managed for the period of extended operation,”<sup>70</sup> requires evidence of a contractual obligation to comply with the aging management plan where the alternate power source is not owned and operated by the renewal applicant.<sup>71</sup>

We agree with AmerGen that, as formulated in New Jersey’s appeal, the proposed contention — demanding an updated interconnection agreement — does not match any of the three pieces that formed its original proposed contention. Neither New Jersey’s petition as a whole nor the proposed contention as originally

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<sup>69</sup> New Jersey Petition at 7 (unnumbered).

<sup>70</sup> 10 C.F.R. § 54.21(c)(1)(iii).

<sup>71</sup> New Jersey argues that the Board erred in finding this proposed contention inadmissible for failure to provide supporting documentation. New Jersey maintains that an updated interconnection agreement has not been finalized and therefore does not exist, and that copies of the current interconnection agreement are considered by AmerGen to be confidential and proprietary and have not been made available. According to New Jersey, the NRC Staff failed to alert the Board to the existence of this confidential, proprietary interconnection agreement, and this deprived the Board of options it would otherwise have had — namely, rejecting, as impossible, the NRC Staff’s effort to impose an obligation on New Jersey to have produced the document in order to support its proposed contention; reviewing the document itself *in camera*; or issuing a protective order so that New Jersey could have access to the document. New Jersey protests the “unfairness” of requiring it to cite to or produce a document when it cannot use the Commission’s discovery processes unless and until it is allowed to intervene as a party to the proceeding. In response, AmerGen points out that the Commission’s hearing notice clearly placed the responsibility for requesting documents, and for contacting the applicant to discuss the need for a protective order with respect to any document, on petitioners. 70 Fed. Reg. 54,585, 54,586 n.1 (Sept. 15, 2005). AmerGen asserts that, to its knowledge, New Jersey made no such request at any time during the contention filing period. We agree with AmerGen that the onus of obtaining supporting documentation was on New Jersey, and further, that appropriate mechanisms were in place to enable New Jersey to obtain copies of documents necessary to support its proposed contentions. *See American Centrifuge Plant*, CLI-06-10, 63 NRC at 460 (“Under longstanding agency precedent, petitioners or intervenors may request and, where appropriate, obtain — under protective order other measures — information withheld from the general public for proprietary or security reasons”). New Jersey never requested the documents.

formulated made any reference to an “updated interconnection agreement.”<sup>72</sup> New Jersey cannot raise new contentions for the first time on appeal to the Commission.<sup>73</sup> We note in any event that AmerGen has made a commitment — which it acknowledges is binding — to ensure adherence to its aging management programs.<sup>74</sup>

Again, by rewriting its proposed contention to convert it into an impermissible new contention and arguing on appeal solely for the new version, New Jersey fails to challenge the Board’s rejection of its originally proposed contention. We agree with the Board, for the reasons it gives, that the proposed contention, as originally formulated, lacked factual or expert support, lacked an adequate basis, and did not demonstrate “a genuine issue of material fact or law.”<sup>75</sup> As the NRC Staff argues, New Jersey’s proposed contention regarding the combustion turbines “fails to reference any factual grounds for disagreement with the aging management plan or AmerGen’s assertions about its implementation.”<sup>76</sup>

We reject the new proposed contention and affirm the Board’s finding in LBP-06-7 that New Jersey’s originally proposed contention regarding the combustion turbines was inadmissible.

## **B. Citizens’ Appeal of LBP-06-11**

In LBP-06-11, the Board rejected a motion to supplement the basis of Citizens’ original contention (on corrosion of the drywell liner) or to add two new

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<sup>72</sup>The original proposed contention read:

It is [New Jersey’s] contention that th[e] arrangement [between FirstEnergy and AmerGen] will NOT assure that:

1. First Energy [*sic*] will continue to operate the combustion turbines during the proposed extended period of operation at Oyster Creek.
2. The combustion turbines will be maintained, inspected and tested in accordance with AmerGen’s aging management plan that, when developed, will become part of the license renewal commitments. There will be a reliance on a competitor to manage and perform this work with little opportunity for AmerGen to oversee any of it.
3. All deficiencies encountered by First Energy [*sic*] in the course of operating, maintaining, inspecting and testing the combustion turbines will be entered into a corrective action program that meets the requirements of 10 CFR 50 Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants.

New Jersey Petition at 7 (unnumbered).

<sup>73</sup>See note 62, *supra*.

<sup>74</sup>AmerGen Opposition at 15, quoting from AmerGen’s Brief in Response to Order Directing Supplemental Briefing on Hearing Requests at 9-10 (Jan. 17, 2006).

<sup>75</sup>LBP-06-7, 63 NRC at 209.

<sup>76</sup>NRC Staff Response at 11.

contentions. Citizens asked to add certain “previously unavailable information”<sup>77</sup> to support the initial contention; alternatively, Citizens asked to add two new contentions, one “alleging that the proposed corrosion management of inaccessible areas of the drywell liner is inadequate,”<sup>78</sup> and the second arguing that a “root cause analysis” of the source of the corrosion must be performed.<sup>79</sup>

In its notice of appeal, Citizens states that it is appealing “[o]ut of an overabundance of caution, and in order to ensure that [the group’s] rights are preserved.”<sup>80</sup> As support for its “appeal,” Citizens attaches the same brief to its notice that it filed in support of its (since denied) motion for reconsideration before the Board.<sup>81</sup> Neither the notice nor the brief includes any arguments in support of an “appeal” (as opposed to a motion for reconsideration). While Citizens makes passing reference to 10 C.F.R. §§ 2.311 and 2.341 in its notice, it ignores both the requirements for an appeal under 10 C.F.R. § 2.311, and the requirements for a petition for (discretionary) Commission review under 10 C.F.R. § 2.341.

As the NRC Staff points out, section 2.311 is not applicable to the Board’s refusal to supplement the basis of Citizens’ contention or to add new contentions because the section applies only where a board decision rules on a request for hearing, petition to intervene, or selection of hearing procedures. It does not authorize appeals from an order like LBP-06-11 refusing to supplement an admitted contention.

Although section 2.311 does not apply, 10 C.F.R. § 2.341 — the section of our regulations setting out procedures for petitions for Commission review —

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<sup>77</sup> Citizens maintained that the NRC Staff communicated certain “conclusions” during a conference call regarding the Generic Aging Lessons Learned (GALL) Report. Citizens described these alleged conclusions as decisions by the NRC Staff “that not only is corrosion of the drywell liner within the scope of license renewal proceedings, but the sources of the water which is the root cause of of this corrosion are also included.” Citizens’ Contention Motion at 10. The Board found that this information was “not new, not materially different from previously available information, and not timely presented.” LBP-06-11, 63 NRC at 402.

<sup>78</sup> Citizens’ Contention Motion at 10. Citizens argued “that the monitoring regime for inaccessible areas of the drywell liner . . . must at least include ongoing, regular, direct measurements of the thickness at all areas where corrosion could have occurred for the life of the plant and clear acceptance criteria for the measurements.” *Id.* at 11. The Board found that the information underlying this new proposed contention was “neither new . . . nor materially different than information that was previously available.” LBP-06-11, 63 NRC at 397. The Board also found that the submission of the new contention was untimely. *Id.* at 398.

<sup>79</sup> Citizens’ Contention Motion at 10-11. In addition to the root cause analysis, Citizens argued that AmerGen must “implement a verifiable program to eliminate leakage of water onto the drywell liner.” *Id.* at 13. Again, the Board found that the information underlying this new proposed contention was “neither new . . . nor materially different from previously available information.” LBP-06-11, 63 NRC at 400.

<sup>80</sup> Citizens’ Notice at 1.

<sup>81</sup> Reconsideration Decision at 3-10.

conceivably could. But Citizens makes none of the arguments required in a petition for review in either its notice of appeal or its dual-duty “motion for reconsideration” brief. For a viable petition for review — since LBP-06-11 is not a final decision on the merits — Citizens needed to make a case for *interlocutory* review under section 2.341(f).<sup>82</sup> Under section 2.341(f), a petitioner must show that the issue for which interlocutory review is sought: “(i) [t]hreatens the party adversely affected by it with immediate and serious irreparable impact which, as a practical matter, could not be alleviated through a petition for review of the presiding officer’s final decision; or (ii) [a]ffects the basic structure of the proceeding in a pervasive or unusual manner.”<sup>83</sup> Citizens asserts no immediate and irreparable impact on itself and no pervasive effect on the litigation. Nor is it obvious how Citizens could make such a showing, since it has already successfully intervened in the proceeding on the drywell liner issue.<sup>84</sup> In fact, Citizens makes absolutely no showing (and no argument) to justify interlocutory review. For these reasons, we decline to take up LBP-06-11 on interlocutory review.

### III. CONCLUSION

For the foregoing reasons and for the reasons given by the Board, we *affirm* the Board’s decisions in LBP-06-7 with respect to New Jersey’s appeal of the rejection of its second and third contentions only and *deny* review of LBP-06-11. Decisions on New Jersey’s appeal of the rejection of its first contention and on AmerGen’s and the NRC Staff’s appeals of LBP-06-7 are *postponed* until further notice.

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<sup>82</sup> Section 2.341(b)(6) expressly prohibits granting review where a petitioner has simultaneously filed for reconsideration before the Board: “A petition for review will not be granted as to issues raised before the presiding officer on a pending motion for reconsideration.” Citizens ought not have filed a simultaneous appeal and petition for reconsideration. But that procedural problem is moot, now that the Board has rejected Citizens’ reconsideration motion.

<sup>83</sup> 10 C.F.R. § 2.341(f)(2).

<sup>84</sup> See *Private Fuel Storage*, CLI-01-1, 53 NRC at 5 (“We have repeatedly held that refusal to admit a contention, where the intervenor’s other contentions remain in litigation, does not constitute a pervasive effect on the litigation calling for interlocutory review”).

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK  
Secretary of the Commission

Dated at Rockville, Maryland,  
this 6th day of September 2006.

**Commissioner Gregory B. Jaczko Respectfully Dissents, in Part**

I dissent in this Order because the NEPA terrorism issue is a significant matter that needs resolution. I believe the agency should conduct a review of the impacts of terrorist attacks on nuclear facilities as part of a NEPA analysis. More importantly, I believe continuing to refuse to consider the environmental effects of terrorist attacks will subject the agency to unnecessary judicial challenges. Thus, I am fully supportive of all efforts to give this matter the thorough and deliberate review warranted.

In addition, I believe that the current uncertainty surrounding the impact of this issue may lead to unnecessary confusion in the review of new reactor licenses. To eliminate this uncertainty, the agency should expeditiously develop a process to review terrorism issues as part of a NEPA analysis. This particular case presents a timely opportunity for the Commission to resolve these matters, providing clarity and certainty for the potential increase in licensing reviews the Commission may conduct in the next few years.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**COMMISSIONERS:**

**Dale E. Klein, Chairman**  
**Edward McGaffigan, Jr.**  
**Jeffrey S. Merrifield**  
**Gregory B. Jaczko**  
**Peter B. Lyons**

**In the Matter of**

**Docket No. 30-36974-ML**  
**(Materials License Application)**

**PA'INA HAWAII, LLC**

**September 6, 2006**

**RULES OF PRACTICE: INTERLOCUTORY APPEALS**

Appeals under 10 C.F.R. § 2.311(c) must be filed within 10 days of service of the appealed order(s). 10 C.F.R. § 2.311(a).

Section 2.311 contemplates just one opportunity for license applicants to appeal contention admissibility rulings — at the outset of a proceeding, within 10 days after a Board grants a petition to intervene, and only if the license applicant argues the petition should have been “wholly denied.”

**MEMORANDUM AND ORDER**

This adjudicatory proceeding stems from Pa'ina Hawaii, LLC's (“Pa'ina”) application for a materials license to construct and operate an industrial irradiator adjacent to the Honolulu International Airport. On January 24 and March 24, 2006, the Commission's Atomic Safety and Licensing Board issued two orders which admitted for litigation, respectively, two intertwined environmental contentions and one closely related safety contention.<sup>1</sup> On July 3, 2006, Pa'ina filed the instant

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<sup>1</sup> LBP-06-4, 63 NRC 99, 108-15 (2006); LBP-06-12, 63 NRC 403, 418-20 (2006).

appeal of the Board's two orders, asserting that the Board erred in admitting the three contentions and should instead have denied the petition to intervene in its entirety.

Pa'ina filed its instant appeal pursuant to 10 C.F.R. § 2.311(c). Appeals under that section must be filed within 10 days of service of the appealed order(s). 10 C.F.R. § 2.311(a). Pa'ina filed its instant appeal on July 3d, several months after the expiration of the 10-day filing periods for challenging the Board's January 24th and March 24th orders. We therefore dismiss Pa'ina's appeal as untimely. Section 2.311 contemplates just one opportunity for license applicants like Pa'ina to appeal contention admissibility rulings — at the outset of a proceeding, within 10 days after a Board grants a petition to intervene, and only if the license applicant argues the petition should have been "wholly denied." That was not the case when Pa'ina filed an appeal earlier in this proceeding,<sup>2</sup> and our rules give no right to appeal now. Pa'ina's grievance must abide the Board's merits decision.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK  
Secretary of the Commission

Dated at Rockville, Maryland,  
this 6th day of September 2006.

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<sup>2</sup> See CLI-06-13, 63 NRC 508 (2006).

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**ATOMIC SAFETY AND LICENSING BOARD**

**Before Administrative Judges:**

**Alex S. Karlin**, Chairman  
**Dr. Richard E. Wardwell**  
**Dr. Thomas S. Elleman**

**In the Matter of**

**Docket No. 50-271-LR**  
**(ASLBP No. 06-849-03-LR)**

**ENERGY NUCLEAR VERMONT**  
**YANKEE, LLC, and ENERGENCY**  
**NUCLEAR OPERATIONS, INC.**  
**(Vermont Yankee Nuclear Power**  
**Station)**

**September 22, 2006**

**LICENSE RENEWAL: ENVIRONMENTAL REPORT (NEW AND  
SIGNIFICANT INFORMATION REGARDING CATEGORY 1  
MATTERS)**

In construing 10 C.F.R. § 51.53(c)(3)(i) and (iv), the Commission has stated: “even where the GEIS has found that a particular impact applies generically (Category 1), the applicant must still provide additional analysis in its Environmental Report if new and significant information may bear on the applicability of the Category 1 finding at its particular plant.” *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 11 (2001) (emphasis added). Likewise, “the applicant must provide additional analysis of even a Category 1 issue if new and significant information has surfaced.” *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 290 (2002).

**LICENSE RENEWAL: ENVIRONMENTAL IMPACT STATEMENTS  
(NEW AND SIGNIFICANT INFORMATION REGARDING  
CATEGORY 1 MATTERS)**

When preparing the Supplemental EIS, the Staff must consider any significant new information related to Category 1 issues. *See* 10 C.F.R. §§ 51.92(a)(2), 51.95(c)(3); Final Rule: “Environmental Review for Renewal of Nuclear Power Plant Operating Licenses,” 61 Fed. Reg. 28,467, 28,470 (June 5, 1996).

**LICENSE RENEWAL: ENVIRONMENTAL IMPACT STATEMENTS  
(NEW AND SIGNIFICANT INFORMATION REGARDING  
CATEGORY 1 MATTERS)**

The Commission has stated that the Staff’s final Supplemental EIS must take account of public comments concerning new and significant information on Category 1 findings. *See Turkey Point*, CLI-01-17, 54 NRC at 12; *McGuire/Catawba*, CLI-02-14, 55 NRC at 290-91.

**LICENSE RENEWAL: ENVIRONMENTAL REPORT  
(LITIGABILITY OF FAILURE TO PROVIDE NEW AND  
SIGNIFICANT INFORMATION REGARDING CATEGORY 1  
MATTERS)**

Even assuming that the petitioner’s information regarding the dangers of high-density racking of spent fuel constitutes known “new and significant information,” the Commission’s decision in *Turkey Point*, CLI-01-17, 54 NRC 3, compels the Board to conclude that the failure of an applicant to include such new and significant information concerning a Category 1 issue in its environmental report, in violation of 10 C.F.R. § 51.53(c)(3)(iv), does not give rise to an admissible contention.

**LICENSE RENEWAL: ENVIRONMENTAL REPORT  
(LITIGABILITY OF FAILURE TO PROVIDE NEW AND  
SIGNIFICANT INFORMATION REGARDING CATEGORY 1  
MATTERS)**

Even assuming that petitioner’s information regarding the risks of terrorism related to the high-density racking of spent fuel in pools is “new and significant information” concerning a Category 1 matter and the failure of the applicant to include the information violates 10 C.F.R. § 51.53(c)(3)(iv), the same result obtains — the contention is not adjudicable under *Turkey Point*. If the petitioner

wants to raise its concerns on this issue, it should pursue one of the three paths specified by the Commission. *See Turkey Point*, CLI-01-17, 54 NRC at 12.

**RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY; “BALD AND CONCLUSORY”)**

The State of Vermont’s citation to specific and potentially inconsistent portions of Entergy’s documents, together with the declaration of its unchallenged expert, the State’s official nuclear engineer, that “the concrete surface behind the steel shell will closely match the drywell ambient temperature” provide us with alleged “facts or expert opinion,” which are “sufficient” to meet the requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi). The fact that Mr. Sherman’s opinion is simple, straightforward, and fact-based does not mean that it is bald or conclusory.

**RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY)**

At the contention admission stage, which is a lesser threshold than a merits determination or even a summary disposition ruling, the Board’s purpose in applying 10 C.F.R. § 2.309(f)(1) is only to “ensure that the adjudicatory process is used to address real, concrete, specific issues that are appropriate for litigation.” Final Rule: “Changes to the Adjudicatory Process,” 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004). The State of Vermont’s Contention 1 meets this criterion, and its factual allegations and attached expert opinion suffice under 10 C.F.R. § 2.309(f)(1)(v) and (vi).

**LICENSE RENEWAL: ENVIRONMENTAL REPORT (NEW AND SIGNIFICANT INFORMATION REGARDING CATEGORY 1 MATTERS)**

The State of Vermont’s contention, presenting what it characterizes as “new and significant information” related to the timeline for the opening of a federal high-level waste geologic repository such as Yucca Mountain, is inadmissible because, although 10 C.F.R. § 51.53(c)(3)(iv) requires an applicant to include any new and significant information concerning Category 1 issues that it is aware of, the failure of an applicant to do so is simply not litigable, absent a waiver under 10 C.F.R. § 2.335. We need not, and do not, decide whether the information proffered by the State of Vermont is indeed “new and significant,” or whether Entergy was, or should have been, aware of it.

**LICENSE RENEWAL: ENVIRONMENTAL REPORT (NEW AND SIGNIFICANT INFORMATION REGARDING CATEGORY 1 MATTERS; WASTE CONFIDENCE RULE)**

Issues related to the environmental impact of onsite spent fuel storage after the license renewal term are covered by NRC's Waste Confidence Rule, 10 C.F.R. § 51.23(a) which specifies that the "Commission believes there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and 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." Such issues are outside the scope of a license renewal proceeding because under 10 C.F.R. § 2.335(a) contentions may not challenge a regulation. *See Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 344-45 (1999).

**LICENSE RENEWAL: SAFETY (SECURITY AND TERRORISM ISSUES)**

The State of Vermont contention that the applicant has failed to identify non-safety-related systems, structures, and components in the security area whose failure could prevent satisfactory accomplishment of the functions of safety-related systems, structures, and components under 10 C.F.R. § 54.4(a)(2) is not admissible because, under controlling Commission rulings, security-related issues are not within the scope of a license renewal proceeding under 10 C.F.R. § 2.309(f)(1)(iii). *See Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358, 364 (2002), and *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 1 and 2), CLI-04-36, 60 NRC 631, 638 (2004).

**RULES OF PRACTICE: CONTENTIONS (NEW OR AMENDED)**

A petitioner has no right or need to request a "reservation of rights" to file additional contentions later. To the extent that the draft or final SEIS contains data or conclusions that differ significantly from the data or conclusions in the applicant's environmental report or in the GEIS, a petitioner is entitled to use 10 C.F.R. § 2.309(f)(2) as the grounds to file a new or amended contention. However, should the petitioner later file an environmental contention that is *not* based on new information, the contention can only be admitted upon a favorable balancing of the factors found in 10 C.F.R. § 2.309(c).

**NEPA: RELATION TO OTHER REQUIRED PERMITS**

NRC will consider the fact that an applicant is subject to, and compliant with, other environmental laws and permits, such as a RCRA permit, Clean Air Act permit, or NPDES permit, but this does not obviate the NEPA mandate that, prior to any major federal action significantly affecting the environment, NRC must perform an environmental impact statement assessing these subjects under 10 C.F.R. § 51.71(d).

**NEPA: RELATION TO FEDERAL WATER POLLUTION CONTROL ACT § 511**

We reject the assertion that section 511(c) of the Federal Water Pollution Control Act bars a contention alleging that the applicant or NRC failed to adequately assess water quality impacts of a proposed license amendment. While section 511(c) bars NRC from imposing or second-guessing effluent limitations or water quality certification requirements imposed by EPA or an authorized state, it does not bar NRC from addressing water quality matters in its assessment of the environmental impact of the license renewal. To the contrary, NEPA requires the NRC to do so.

**NEPA: LICENSE RENEWAL (20-YEAR PERIOD)**

The contention, which raises the question as to whether an NPDES permit that will expire before the proposed 20-year NRC license renewal would even take effect satisfies the requirements of 10 C.F.R. § 51.53(c)(3)(ii)(B), raises an admissible and material issue of law and fact.

**NEPA: CONTENTIONS (LICENSE RENEWAL)**

The contention, which raises the question as to whether requirements of 10 C.F.R. § 51.53(c)(3)(ii)(B) supplement the more general requirements of 10 C.F.R. §§ 51.45(c) and 51.53(c), or instead displace and supplant the latter requirements, raises an admissible and material issue of interpretation and construction of the regulations.

**LICENSE RENEWAL: DEMONSTRATING THAT AGING WILL BE ADEQUATELY MANAGED**

The contention, which alleges that the applicant's plan to manage metal fatigue is too vague and is really only a "plan to develop a plan," raises an admissible and material issue as to whether the applicant has met the 10 C.F.R. § 54.21(c)(1)(iii)

and (a)(3) requirement to “demonstrate that the effects of aging . . . will be adequately managed.”

**RULES OF PRACTICE: CONTENTIONS (SUFFICIENT EVIDENCE OF DISPUTE)**

The contention alleging that the applicant’s proposed monitoring techniques are not adequate because they are based on computer models that were not benchmarked, which is supported by a sworn statement by an unchallenged expert who described his professional reasoning, satisfies the requirement that the petitioner provide sufficient evidence to show that there is a genuine dispute concerning a material issue, as required by 10 C.F.R. § 2.309(f)(1)(vi) and is not “bald or conclusory.”

**RULES OF PRACTICE: CONTENTIONS (SCOPE OF REPLY)**

A reply may respond to any legal, logical, or factual arguments presented in an answer. While a petitioner who fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(1) in its initial contention submission may not use its reply to rectify those inadequacies or to raise new arguments, a petitioner may use the reply to flesh out contentions that have already met the pleading requirements.

**RULES OF PRACTICE: CONTENTIONS (SUFFICIENT EVIDENCE OF DISPUTE)**

At the contention admissibility stage, the petitioner is not required to prove its contention or to provide all the evidence for its contention that may be required later in the proceeding. Rather, a petitioner is only required to provide sufficient information that “the Applicants are sufficiently put on notice so that they will know at least generally what they will have to defend against or oppose, and that there has been sufficient foundation assigned to warrant further exploration of [the] contention.” *Kansas City Gas & Electric Co.* (Wolf Creek Generating Station, Unit 1), LBP-84-1, 19 NRC 29, 34 (1984).

**RULES OF PRACTICE: CONTENTIONS (SCOPE OF REPLY)**

The portions of the reply that respond to legal, logical, and factual arguments raised in the answers, such as Entergy’s allegation that the treatment and resolution of the flow-accelerated corrosion issue during NRC’s separate review of the extended power uprate application, are appropriate and the motion to strike them is denied.

**LICENSE RENEWAL: EMERGENCY PLANNING CONTENTIONS NOT ADMISSIBLE**

Emergency planning concerns are not within the scope of a license renewal proceeding and therefore any such contention is not admissible under 10 C.F.R. § 2.309(f)(1)(iii). *See, e.g., Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 560-61 (2005).

**SELECTION OF HEARING PROCEDURES**

The selection of appropriate hearing procedures under 10 C.F.R. § 2.310 is a contention-by-contention matter, dependent on the nature of the specific issues involved in the contention. Thus, for example, a single adjudicatory proceeding may include some contentions litigated under Subpart L and others litigated under Subpart G or N.

**SELECTION OF HEARING PROCEDURES: STATE RIGHT TO CROSS-EXAMINATION UNDER SECTION 274(l) OF THE AEA**

Section 274(l) of the AEA does not give a state an absolute right of cross-examination, but states only that “the Commission . . . shall afford *reasonable opportunity* for State representatives to . . . interrogate witnesses.” 42 U.S.C. § 2021(l) (emphasis added).

**SELECTION OF HEARING PROCEDURES: STATE RIGHT TO CROSS-EXAMINATION UNDER SECTION 274(l) OF THE AEA**

The Commission’s statement in *Citizens Awareness Network, Inc. v. United States*, 391 F.3d 338 (1st Cir. 2004), that a petitioner’s right to cross-examination (in Subpart L proceedings) whenever it “is necessary to ensure the development of an adequate record for decision,” 10 C.F.R. § 2.1204(b)(3), is equivalent to a party’s right to cross-examination under 5 U.S.C. § 556(d), leads the Board to conclude that Subpart L proceedings satisfy the AEA requirement that State representatives be given a “reasonable opportunity . . . to . . . interrogate witnesses.” 42 U.S.C. § 2021(l).

**SELECTION OF HEARING PROCEDURES: BOARD DISCRETION**

Subpart L is not the automatic default procedure for adjudicatory hearings. If the provisions of 10 C.F.R. § 2.310(c)-(j) do not mandate the use of a specific procedure, then 10 C.F.R. § 2.310(b) specifies that the Board “may” use the Subpart L procedures. In this circumstance the Board, in its sound discretion,

must determine the type of hearing procedures most appropriate for the specific contentions before it.

**SELECTION OF HEARING PROCEDURES: STATE RIGHT TO CROSS-EXAMINATION UNDER SECTION 274(l) OF THE AEA**

We reject the assertion that section 247(l) of the AEA gives a state a right to offer evidence and interrogate witnesses, even if no hearing is otherwise being held and no party has submitted an admissible contention.

**RULES OF PRACTICE: CONTENTIONS (ADOPTION)**

It is sufficient for our purposes to hold that if a notice of adoption of a contention is filed under 10 C.F.R. § 2.309(f)(3) within a reasonable time (such as 20 days) after the contention has been filed *and* admitted, then it is deemed timely and is not subject to the nontimely factors specified in 10 C.F.R. § 2.309(c). Accordingly, we find that the DPS and NEC adoption notices were timely and the adoptions are granted.

**RULES OF PRACTICE: CONTENTIONS (ADOPTION; PROOF OF INDEPENDENT ABILITY TO LITIGATE NOT REQUIRED)**

We have serious reservations about requiring the adopting party to demonstrate an independent ability to litigate a contention. No such requirement is imposed under new 10 C.F.R. § 2.309(f)(3). No such requirement is imposed on the original petitioner under 10 C.F.R. § 2.309(f)(1). Further, it is not clear how a Board could determine, in advance, whether an adopter has the “independent ability to litigate a contention” without impermissibly inquiring into the party’s finances and membership list. Any such requirement may not comport with section 189a of the AEA.

**INTERESTED STATE PARTICIPATION**

As provided in 10 C.F.R. § 2.315(c), any interested state, local governmental body, and affected, federally recognized Indian Tribe that has not been admitted as a party under 10 C.F.R. § 2.309 will be given a reasonable opportunity to participate in any hearing conducted in this proceeding. The only timing requirement for giving notice of such participation states that a “representative shall identify those contentions on which it will participate in advance of any hearing held.”

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**MEMORANDUM AND ORDER**  
**(Ruling on Standing, Contentions, Hearing Procedures, State Statutory Claim, and Contention Adoption)**

Before the Licensing Board are four petitions to intervene and requests for hearing regarding the application of Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc. (collectively, Entergy), to renew the operating license for the Vermont Yankee Nuclear Power Station in Windham County, Vermont. Entergy seeks to extend its license for an additional 20 years beyond the current expiration date of March 21, 2012. Three of the petitions were filed by governmental entities — the Vermont Department of Public Service (DPS), the Massachusetts Attorney General (AG), and the Town of Marlboro, Vermont (Marlboro). The fourth petition was filed by a nonprofit organization, the New England Coalition (NEC).

For the reasons set forth below, we find that each of the four Petitioners has standing to intervene, but only DPS and NEC have submitted an admissible contention. Accordingly, we admit DPS and NEC as parties to this proceeding. Further, we address four issues related to the petitions and hearing requests and find that (1) the informal hearing procedures of 10 C.F.R. Part 2, Subpart L are the most appropriate procedures for the admitted contentions; (2) DPS’s statutory hearing rights under section 274(l) of the Atomic Energy Act of 1954, as amended (AEA), 42 U.S.C. § 2021(l), are satisfied under the Subpart L hearing procedures; (3) DPS and NEC have adopted one another’s admitted contentions; and (4) any notice of participation by an interested state or local governmental entity may be filed within 20 days of the date of this ruling.

**I. BACKGROUND**

On January 25, 2006, Entergy filed an application pursuant to 10 C.F.R. Part 54 to renew Operating License No. DPR-28 for its Vermont Yankee Nuclear Power

Station.<sup>1</sup> Entergy seeks to extend the current operating license for the Vermont Yankee facility, which expires on March 21, 2012, for an additional 20 years. On March 27, 2006, the Commission published a notice of acceptance for docketing of the Entergy renewal application and a notice of opportunity to request a hearing on the application. 71 Fed. Reg. 15,220 (Mar. 27, 2006).

Several entities filed hearing requests/intervention petitions asking to be admitted as parties to any proceeding conducted on the application. Marlboro filed a letter requesting a hearing on its exclusion from the emergency planning zone.<sup>2</sup> The AG, DPS, and NEC each submitted a request for a hearing, a petition to intervene, and one or more contentions.<sup>3</sup> The AG proposed one contention challenging Entergy's application and also submitted a 10 C.F.R. § 50.109 petition for a backfit order. DPS proposed three contentions and NEC proposed six contentions.

Following the establishment of this Board, *see* 71 Fed. Reg. 34,397 (June 14, 2006), Entergy and the NRC Staff (Staff) submitted answers to the four hearing requests.<sup>4</sup> Although Entergy does not oppose the standing of the four Petitioners, it argues that none of the Petitioners submitted an admissible contention. The Staff agrees that each of the Petitioners has standing, but takes the position that, except for two of NEC's contentions, the proposed contentions fail to meet NRC regulatory requirements. The AG, DPS, and NEC filed replies to the Entergy

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<sup>1</sup> Vermont Yankee Nuclear Power Station License Renewal Application (Jan. 25, 2006), ADAMS Accession No. ML060300085 [Application]. Entergy has since supplemented and amended its application several times.

<sup>2</sup> Letter from Dan MacArthur, Director of Emergency Management, Town of Marlboro, to Office of the Secretary, NRC (dated Apr. 27, 2006, but postmarked on May 15, 2006) [Marlboro Hearing Request].

<sup>3</sup> [AG] Request for a Hearing and Petition for Leave To Intervene with Respect to [Entergy]'s Application for Renewal of the Vermont Yankee Nuclear Power Plant Operating License and Petition for Backfit Order Requiring New Design Features To Protect Against Spent Fuel Pool Accidents (May 26, 2006) [AG Petition]; [DPS] Notice of Intention To Participate and Petition To Intervene (May 26, 2006) [DPS Petition]; Petition for Leave To Intervene, Request for Hearing, and Contentions (May 26, 2006) [NEC Petition].

<sup>4</sup> Entergy's Answer to the [AG]'s Request for a Hearing, Petition for Leave To Intervene, and Petition for Backfit Order (June 22, 2006) [Entergy Answer to AG]; Entergy's Answer to [DPS] Notice of Intention To Participate and Petition To Intervene (June 22, 2006) [Entergy Answer to DPS]; Entergy's Answer to [NEC]'s Petition for Leave To Intervene, Request for Hearing, and Contentions (June 22, 2006) [Entergy Answer to NEC]; Entergy's Answer to the Town of Marlboro's Request for Hearing (June 14, 2006) [Entergy Answer to Marlboro]; NRC Staff Answer Opposing [AG]'s Request for Hearing and Petition for Leave To Intervene and Petition for Backfit (June 22, 2006) [Staff Answer to AG]; NRC Staff Answer to [DPS] Notice of Intention To Participate and Petition To Intervene (June 22, 2006) [Staff Answer to DPS]; NRC Staff Answer to Request for Hearing of [NEC] (June 22, 2006) [Staff Answer to NEC]; NRC Staff Answer to Town of Marlboro's Request for Hearing [Staff Answer to Marlboro].

and Staff answers.<sup>5</sup> Entergy then filed a motion to strike portions of the DPS and NEC replies, asserting that both replies sought to raise new arguments that were not included in the original petitions, while failing to address the criteria for nontimely filings.<sup>6</sup> DPS and NEC each filed an opposition to Entergy's motions to strike.<sup>7</sup> The Staff filed an answer generally supporting Entergy's motions.<sup>8</sup>

On June 5, 2006, DPS filed a notice of intent to adopt all the contentions filed by the AG and NEC, or in the alternative, moved for leave to be allowed to adopt the contentions.<sup>9</sup> On the same day, NEC made a similar filing, giving notice that it was adopting the contentions filed by the AG and DPS.<sup>10</sup> Entergy opposed both filings because DPS and NEC failed to address the criteria for nontimely contentions.<sup>11</sup> The Staff did not oppose the DPS and NEC notices, but asserted that an adopting party must demonstrate an independent ability to litigate any adopted contention.<sup>12</sup> NEC filed a motion for leave to file a reply to Entergy and

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<sup>5</sup>[AG]'s Reply to Entergy's and NRC Staff's Responses to Hearing Request and Petition To Intervene with Respect to Vermont Yankee License Renewal Proceeding (June 30, 2006) [AG Reply]; [DPS] Reply to Answer of Applicant and NRC Staff to Notice of Intention To Participate and Petition To Intervene (June 30, 2006) [DPS Reply]; [NEC]'s Reply to Entergy and NRC Staff Answers to Petition for Leave To Intervene, Request for Hearing, and Contentions (June 29, 2006) [NEC Reply]. Prior to the submission of its reply, the AG filed a letter notifying the Board of a recent decision by the U.S. Court of Appeals for the Ninth Circuit, which the AG maintains "has a direct bearing on the contention." Letter from Diane Curran, Counsel for the AG, to Alex S. Karlin et al., ASLB (June 16, 2006).

<sup>6</sup>Entergy's Motion To Strike Portions of [DPS]'s Reply (July 10, 2006) [Entergy Motion To Strike DPS Reply]; Entergy's Motion To Strike Portions of [NEC]'s Reply (July 10, 2006) [Entergy Motion To Strike NEC Reply].

<sup>7</sup>[DPS] Reply to Entergy's Motion To Strike Portions of [DPS]'s Reply (July 20, 2006) [DPS Reply to Entergy Motion To Strike DPS Reply]; [NEC]'s Opposition to Entergy's Motion To Strike Portions of [NEC]'s Reply (July 20, 2006) [NEC Opposition to Entergy Motion To Strike NEC Reply].

<sup>8</sup>NRC Staff Answer to Entergy's Motion To Strike Portions of [DPS] Reply (July 20, 2006) [Staff Answer to Entergy Motion To Strike DPS Reply]; NRC Staff Answer to Entergy Motion To Strike Portions of [NEC]'s Intervention Reply (July 20, 2006) [Staff Answer to Entergy Motion To Strike NEC Reply].

<sup>9</sup>Notice of Intent To Adopt Contentions and Motion for Leave To Be Allowed To Do So (June 5, 2006) [DPS Notice of Intent To Adopt Contentions].

<sup>10</sup>[NEC]'s Notice of Adoption of Contentions, or in the Alternative, Motion To Adopt Contentions (June 5, 2006) [NEC Notice of Adoption of Contentions].

<sup>11</sup>Entergy's Answer to [DPS] Notice and Motion To Adopt Contentions (June 15, 2006) [Entergy Answer to DPS Notice of Intent To Adopt Contentions]; Entergy's Answer to [NEC]'s Notice and Motion To Adopt Contentions (June 20, 2006) [Entergy Answer to NEC Notice of Adoption of Contentions].

<sup>12</sup>NRC Staff Answer to Vermont DPS Notice of Intent To Adopt Contentions and Motion for Leave (June 21, 2006) [Staff Answer to DPS Notice of Intent To Adopt Contentions]; NRC Staff Answer to [NEC] Notice of Adoption of Contentions or Alternative Motion To Adopt Contentions (June 15, 2006) [Staff Answer to NEC Notice of Adoption of Contentions].

the Staff answers.<sup>13</sup> Both Entergy and the Staff opposed NEC's motion for leave to file a reply.<sup>14</sup>

On August 1 and 2, 2006, the Board conducted an oral argument with the Petitioners,<sup>15</sup> Entergy, and the Staff in Brattleboro, Vermont, where we heard arguments relating to the admissibility of the proposed contentions. Tr. at 40-452.

In order for a request for hearing and petition to intervene to be granted, a petitioner must (1) establish that it has standing and (2) propose at least one admissible contention. 10 C.F.R. § 2.309(a). We address each of these two requirements in turn and find that while all of the Petitioners have standing, only DPS and NEC submitted an admissible contention.

## II. STANDING ANALYSIS

### A. Standards Governing Standing

A petition for leave to intervene must provide certain basic information supporting the petitioner's claim to standing. The required information includes (1) the nature of the petitioner's right under a relevant statute to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any decision or order that may be issued in the proceeding on the petitioner's interest. 10 C.F.R. § 2.309(d)(1)(ii)-(iv). Judicial concepts of standing are generally followed in NRC proceedings. *Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant), CLI-06-6, 63 NRC 161, 163 (2006). These require that a petitioner establish that "(1) it has suffered a distinct and palpable harm that constitutes injury-in-fact within the zone of interests arguably protected by the governing statute; (2) the injury can fairly be traced to the challenged action; and (3) the injury is likely to be redressed by a favorable decision." *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 6 (1996). In the context of a license renewal application, relevant governing statutes include the

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<sup>13</sup> NEC's Motion for Leave To File a Reply to NRC Staff Answer to [NEC]'s Notice and Motion To Adopt Contentions; to Entergy's Answer to [NEC]'s Notice and Motion To Adopt Contentions; and to Entergy's Answer to [DPS]'s Notice and Motion To Adopt Contentions (June 22, 2006) [NEC Motion for Leave To File Reply].

<sup>14</sup> Entergy's Answer to NEC's Motion for Leave To File a Reply (July 3, 2006) [Entergy Answer to NEC Motion for Leave To File Reply]; NRC Staff Answer Opposing NEC's Motion for Leave To File Replies (July 3, 2006) [Staff Answer to NEC Motion for Leave To File Reply].

<sup>15</sup> The Board did not hear oral argument from the Town of Marlboro, but did allow the representative from Marlboro to make an opening statement addressing whether the Town is an "interested . . . local governmental body" within the meaning of 10 C.F.R. § 2.315(c). Tr. at 72-74 (Aug. 1, 2006).

Atomic Energy Act of 1954, 42 U.S.C. §§ 2011 *et seq.* (AEA) and the National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321 *et seq.* (NEPA).

An organization seeking to intervene in an NRC proceeding must allege that the challenged action will cause a cognizable injury to the organization's interests or to the interests of its members. *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-94-3, 39 NRC 95, 102 n.10 (1994). If the organization seeks standing on its own behalf, it must demonstrate a discrete institutional injury to the organization itself. *International Uranium (USA) Corp.* (White Mesa Uranium Mill), CLI-01-21, 54 NRC 247, 252 (2001). When seeking to intervene in a representational capacity, an organization must identify (by name and address) at least one member who is affected by the licensing action and show that it is authorized by that member to request a hearing on his or her behalf. *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 163 (2000).

In determining whether a petitioner has met the requirements for establishing standing, the Commission has directed us to “construe the petition in favor of the petitioner.” *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995). To this end, in proceedings involving nuclear power reactors, the Commission has recognized a proximity presumption, whereby a petitioner is presumed to have standing to intervene without the need to specifically plead injury, causation, and redressability if the petitioner lives within 50 miles of the nuclear power reactor.<sup>16</sup> Meanwhile, a state or local governmental body that wishes to be a party in a proceeding that involves a facility located within its boundaries is automatically deemed to have standing. 10 C.F.R. § 2.309(d)(2)(i)-(ii).

## **B. Rulings on Standing**

### **1. Vermont Department of Public Service**

DPS satisfies the requirement for standing to intervene under section 2.309(d)(2) because the proceeding concerns the Vermont Yankee Nuclear Power Station, which is located within the boundaries of the State of Vermont. *See* DPS Petition at 3. Therefore, DPS is deemed to have standing for purposes of this proceeding and no further showing is required. 10 C.F.R. § 2.309(d)(2)(ii).

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<sup>16</sup> *See, e.g., Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989) (observing that the presumption applies in proceedings for nuclear power plant “construction permits, operating licenses, or significant amendments thereto”); *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 146-50 (2001) (applying the presumption in an operating license renewal proceeding).

## 2. *Massachusetts Attorney General*

Although the AG is a representative of a state within the meaning of 10 C.F.R. § 2.309(d)(2), the Vermont Yankee facility is not located within the boundaries of the Commonwealth of Massachusetts and therefore the AG does not qualify for standing under 10 C.F.R. § 2.309(d)(2)(ii). The AG must meet the standing requirements in some other way. The AG's petition states that the Vermont Yankee Nuclear Power Station is located within 10 miles of the Commonwealth of Massachusetts and that an accident during the license renewal period could affect the residents, the environment, and the economy of the Commonwealth. AG Petition at 5 n.1. Under the proximity presumption, a petitioner within the zone of possible harm from a reactor need not specifically plead injury, causation, and redressability. *See supra* note 16. Because the Vermont Yankee Nuclear Power Station is located within 10 miles of the Commonwealth of Massachusetts, we find that the AG has demonstrated standing to participate in this license renewal proceeding.

## 3. *New England Coalition*

NEC claims both organizational and representational standing. NEC Petition at 2. To claim standing on its own behalf, an organization must demonstrate a discrete institutional injury that is unique to the organization. *White Mesa*, CLI-01-21, 54 NRC at 252. In its petition, NEC states that its headquarters, which houses its offices, technical library, business records, and equipment, is within 10 miles of the Vermont Yankee facility, that the purpose of the organization is to oppose nuclear hazards, and that the proposed license renewal could increase the risk of an offsite radiological release, which would affect the value of its property and its ability to conduct normal operations. NEC Petition at 2-3; *id.*, Exh. 1, Decl. of Pamela Long, Clerk of the Corporation [NEC] (May 24, 2006). We find that, given the close proximity of NEC's headquarters to the Vermont Yankee plant, these interests are sufficient to demonstrate organizational standing.

With respect to its claim of representational standing, NEC's petition includes declarations from four of its members authorizing the organization to represent their interests in any proceeding regarding Entergy's license renewal application.<sup>17</sup> Each member declares that he or she lives within close proximity to the plant (at distances ranging from 4 to 25 miles of the nuclear facility) and is concerned that the proposed license extension could increase the potential for an accident and the harmful consequences resulting from an offsite radiological release from the

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<sup>17</sup> *See* NEC Petition, Exh. 2, Decl. of Sarah Kotkov (May 24, 2006); Exh. 3, Decl. of Sally Shaw (May 24, 2006); Exh. 4, Decl. of David L. Deen (May 24, 2006); Exh. 5, Decl. of Mary King (May 23, 2006).

plant.<sup>18</sup> Based on these declarations and the proximity presumption, we find that NEC satisfies the requirements for representational standing.

#### **4. Town of Marlboro**

Although Marlboro is a governmental body within the meaning of 10 C.F.R. § 2.309(d)(2), the Vermont Yankee Nuclear Power Station is not located within the Town's boundaries. Thus, Marlboro must meet the standing pleading requirements in some other way. Marlboro states that it is located within the 10-mile radius of the Vermont Yankee facility. Marlboro Hearing Request at 1. Under the proximity presumption, we find that Marlboro has standing to participate in this proceeding.

### **III. CONTENTION ADMISSIBILITY ANALYSIS**

#### **A. Standards Governing Contention Admissibility**

Under 10 C.F.R. § 2.309(f)(1)<sup>19</sup> a hearing request or petition to intervene “must set forth with particularity the contentions sought to be raised.” To satisfy this requirement, section 2.309(f)(1) specifies that each contention must:

- (i) Provide a specific statement of the issue of law or fact to be raised or controverted;
- (ii) Provide a brief explanation of the basis for the contention;
- (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;
- (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
- (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and
- (vi) Provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to

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<sup>18</sup> See, e.g., NEC Petition, Exh. 2, Decl. of Sarah Kotkov ¶ 4 (May 24, 2006).

<sup>19</sup> In 2004 the Commission revised and reordered its procedural rules. See Final Rule: “Changes to Adjudicatory Process,” 69 Fed. Reg. 2182, 2217 (Jan. 14, 2004). Much of the case law regarding contention admissibility focuses on the pre-2004 rule, 10 C.F.R. § 2.714(b)(2) (2004).

contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

10 C.F.R. § 2.309(f)(1)(i)-(vi).

The purpose of the contention rule is to “focus litigation on concrete issues and result in a clearer and more focused record for decision.” 69 Fed. Reg. at 2202. The Commission has stated that it “should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing.” *Id.* The Commission has emphasized that the rules on contention admissibility are “strict by design.” *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001). Failure to comply with any of these requirements is grounds for the dismissal of a contention. *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999). These requirements have been further developed by NRC case law, as summarized below.

**1. Brief Explanation of the Basis of the Contention — 10 C.F.R. § 2.309(f)(1)(ii)**

A “brief explanation of the basis for the contention” is a necessary prerequisite of an admissible contention. 10 C.F.R. § 2.309(f)(1)(ii). “[A] petitioner must provide some sort of minimal basis indicating the potential validity of the contention.” Final Rule: “Rules of Practice for Domestic Licensing Proceedings — Procedural Changes in the Hearing Process,” 54 Fed. Reg. 33,168, 33,170 (Aug. 11, 1989). This “brief explanation” of the logical underpinnings of a contention does not require a petitioner “to provide an exhaustive list of possible bases, but simply to provide sufficient alleged factual or legal bases to support the contention.” *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-35, 60 NRC 619, 623 (2004). The brief explanation helps define the scope of a contention — “[t]he reach of a contention necessarily hinges upon its terms coupled with its stated bases.” *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-899, 28 NRC 93, 97 (1988), *aff’d sub nom. Massachusetts v. NRC*, 924 F.2d 311 (D.C. Cir. 1991). However, it is the contention, not “bases,” whose admissibility must be determined. *See* 10 C.F.R. § 2.309(a).

**2. Within the Scope of the Proceeding — 10 C.F.R. § 2.309(f)(1)(iii)**

A petitioner must demonstrate that the issue it seeks to raise is within the scope of the proceeding. 10 C.F.R. § 2.309(f)(1)(iii). The scope of a proceeding is defined by the Commission in its initial hearing notice and order referring

the proceeding to the licensing board. *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-825, 22 NRC 785, 790-91 (1985). In addition, the Commission has provided a detailed regulatory framework setting forth the safety and environmental issues that fall within the scope of a license renewal proceeding.

Safety contentions in license renewal proceedings must focus on topics related to the detrimental effects of aging and related time-limited issues dealt within 10 C.F.R. Part 54. *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 7 (2001); 10 C.F.R. § 54.29(a)(1)-(2). Contentions that focus on safety issues that were thoroughly reviewed when the plant was initially licensed and are continually monitored as part of the NRC's ongoing oversight programs are outside of the scope of license renewal proceedings because "the Commission did not believe it necessary or appropriate to throw open the full gamut of provisions in a plant's current licensing basis to re-analysis during the license renewal review." *Turkey Point*, CLI-01-17, 54 NRC at 9; *see also* Final Rule: "Nuclear Power Plant License Renewal," 56 Fed. Reg. 64,943, 64,946 (Dec. 13, 1991). Thus, issues that are continually assessed, such as emergency planning, are not within the scope of a license renewal proceeding, *Turkey Point*, CLI-01-17, 54 NRC at 9-10. However, issues that concern age-related degradation, such as metal fatigue, corrosion, and thermal and radiation embrittlement, are within the scope of a license renewal proceeding, *id.* at 7-8. *See also* Final Rule: "Nuclear Power Plant License Renewal; Revisions," 60 Fed. Reg. 22,461, 22,464 (May 8, 1995).

Environmental contentions in license renewal proceedings are similarly limited in scope. Under 10 C.F.R. Part 51, the Commission's procedural regulations for complying with NEPA, environmental topics in license renewal proceedings are divided into two groups: (1) generic issues based on the Generic Environmental Impact Statement for License Renewal of Nuclear Plants (GEIS, NUREG-1437, May 1996), or (2) plant-specific issues. The GEIS is an extensive study of potential environmental impacts of extending the operating licenses for nuclear power plants for 20 years. *Turkey Point*, CLI-01-17, 54 NRC at 11. Generic issues, or "Category 1" issues as they are referred to in Part 51, generally need not be assessed in a license renewal application because the Commission has already concluded that they involve environmental effects that are similar at all existing plants. *Id.* (citing 10 C.F.R. § 51.53(c)(3)(i)). An applicant, however, "must still provide additional analysis in its Environmental Report if new and significant information may bear on the applicability of the Category 1 finding at its particular plant." *Id.* *See also* 10 C.F.R. § 51.53(c)(3)(iv). Plant-specific issues, or "Category 2" issues, must also be addressed in a license renewal applicant's Environmental Report. *Turkey Point*, CLI-01-17, 54 NRC at 11-12; 10 C.F.R. § 51.53(c)(3)(ii)-(iii). The Staff must then independently assess the applicant's Environmental Report, setting out its conclusions in a site-specific

draft Supplemental Environmental Impact Statement (SEIS). *Turkey Point*, CLI-01-17, 54 NRC at 12 (citing 10 C.F.R. §§ 51.70, 51.73-.74). The draft SEIS must address “significant new circumstances or information relevant” to the license renewal, 10 C.F.R. § 51.72(a)(2), including new and significant information relating to Category 1 issues. *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 290 (2002). After considering public comments on the draft SEIS, covering both plant-specific Category 2 issues and new and significant information on Category 1 issues, the Staff weighs the expected environmental impacts of license renewal and sets forth its conclusions in the final SEIS. *Id.* (citing Final Rule: “Environmental Review for Renewal of Nuclear Power Plant Operating Licenses,” 61 Fed. Reg. 28,467, 28,470 (June 5, 1996)). As with the applicant’s Environmental Report and the draft SEIS, the final SEIS must consider new and significant information on Category 1 issues. *McGuire/Catawba*, CLI-02-14, 55 NRC at 290-91; *Turkey Point*, CLI-01-17, 54 NRC at 12.

A contention that challenges a Commission rule or regulation is outside of the scope of the proceeding because, absent a waiver, “no rule or regulation of the Commission . . . is subject to attack . . . in any adjudicatory proceeding.” 10 C.F.R. § 2.335(a). Any contention that amounts to an attack on applicable statutory requirements must be rejected by a licensing board as outside the scope of the proceeding. *Philadelphia Electric Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20 (1974). A petitioner that seeks to express a personal view regarding the direction of regulatory policy is not, however, without remedy, and may submit a petition under 10 C.F.R. § 2.802 for rulemaking, or a request under 10 C.F.R. § 2.206 that the NRC Staff take enforcement action.

### **3. Materiality — 10 C.F.R. § 2.309(f)(1)(iv)**

For a contention to be admissible, a petitioner must show “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.” 10 C.F.R. § 2.309(f)(1)(iv). An issue is only “material” if “the resolution of the dispute would make a difference in the outcome of the licensing proceeding.” 54 Fed. Reg. at 33,172. This means that there must be some link between the claimed error or omission regarding the proposed licensing action and the NRC’s role in protecting public health and safety or the environment. *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), LBP-04-15, 60 NRC 81, 89 (2004), *aff’d*, CLI-04-36, 60 NRC 631 (2004).

**4. Concise Statement of Supporting Facts or Expert Opinion — 10 C.F.R. § 2.309(f)(1)(v)**

Contentions must be supported by “a concise statement of the alleged facts or expert opinions which support the . . . petitioner’s position on the issue . . . together with references to the specific sources and documents on which [it] intends to rely to support its position.” 10 C.F.R. § 2.309(f)(1)(v). It is the obligation of the petitioner to present the factual information or expert opinions necessary to support its contention adequately. *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 262 (1996). Failure to do so requires that the contention be rejected. *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155 (1991).

Determining whether a contention is adequately supported by a concise allegation of the facts or expert opinion, however, “does not call upon the intervenor to make its case at [the contention admissibility] stage of the proceeding, but rather to indicate what facts or expert opinions, be it one fact or opinion or many, of which it is aware at that point in time which provide the basis for its contention.” 54 Fed. Reg. at 33,170. A petitioner does not have to provide an exhaustive list of its experts or evidence or prove the merits of its contention at the admissibility stage.<sup>20</sup> As with a summary disposition motion, the support for a contention may be viewed in a light that is favorable to the petitioner and inferences that can be drawn from evidence may be construed in favor of the petitioner. *See Palo Verde*, CLI 91-12, 34 NRC at 155; 10 C.F.R. § 2.710(c).

Nevertheless, “[m]ere ‘notice pleading’ is insufficient under these standards. A 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.’” *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003) (quoting *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 208 (2000)). And if a petitioner neglects to provide the requisite support for its contentions, the Board should not make assumptions of fact that favor the petitioner, or supply information that is lacking. *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305 (1995); *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 422 (2001). Any supporting material provided by a petitioner, including those portions of the material that are not relied upon, is subject to Board scrutiny. *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 90 (1996), *rev’d in part on other grounds*, CLI-96-7, 43 NRC 235 (1996).

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<sup>20</sup> *National Enrichment Facility*, CLI-04-35, 60 NRC at 623; *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 139 (2004).

In short, the information, facts, and expert opinion alleged by the petitioner will be examined by the Board to confirm that it does indeed supply adequate support for the contention. *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 48 (1989), *vacated in part on other grounds and remanded*, CLI-90-4, 31 NRC 333 (1990). But at the contention admissibility stage, all that is required is that the petitioner provide “some alleged fact or facts in support its position.” 54 Fed. Reg. at 33,170.

**5. Sufficient Information To Show a Genuine Dispute — 10 C.F.R. § 2.309(f)(1)(vi)**

A properly pled contention must contain “sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact.” 10 C.F.R. § 2.309(f)(1)(vi). Specifically, a contention “must include references to specific portions of the application . . . that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner’s belief.” *Id.* In contrast to subparagraph (v), which focuses on the need for some factual support for the contention, subparagraph (vi) requires that there be a concrete and genuine dispute worth litigating. Making a “bald or conclusory allegation that such a dispute exists” is not sufficient, as a petitioner “must make a minimal showing that material facts are in dispute, thereby demonstrating that an ‘inquiry in depth’ is appropriate.” 54 Fed. Reg. at 33,171 (quoting *Connecticut Bankers Ass’n v. Board of Governors*, 627 F.2d 245, 251 (D.C. Cir. 1980)). For example, “‘an expert opinion that merely states a conclusion (e.g., the application is ‘deficient,’ ‘inadequate,’ or ‘wrong’) without providing a reasoned basis or explanation for that conclusion is inadequate because it deprives the Board of its ability to make the necessary, reflective assessment of the opinion.’” *USEC Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006) (citation omitted) (affirming Licensing Board holding that quotations from an unintelligible correspondence with purported expert, with no explanation or analysis of how the expert’s statements relate to an error or omission in the application, are insufficient to support a contention).

Although a petitioner must demonstrate that a “genuine dispute exists” at the contention admissibility stage, it need not demonstrate that it will prevail on the merits. *See* 54 Fed. Reg. at 33,170-71. Similarly, “at the contention filing stage the factual support necessary to show that a genuine dispute exists need not be in affidavit or formal evidentiary form and need not be of the quality necessary to withstand a summary disposition motion.” *Id.* at 33,171.

## **6. New Issues Raised in a Petitioner's Reply Brief**

A petitioner that fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(1) in its initial contention submission may not use its reply to rectify the inadequacies of its petition or to raise new arguments. But the reply may respond to and focus on any legal, logical, or factual arguments presented in the answers.<sup>21</sup> The amplification of statements provided in an initial petition is legitimate and permissible. *Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-04-14, 60 NRC 40, 58, *aff'd*, CLI-04-25, 60 NRC 223 (2004).

## **B. Ruling on Massachusetts Attorney General Contention**

### **1. AG Contention 1**

The Environmental Report for Renewal of the Vermont Yankee Nuclear Power Plant Fails to Satisfy NEPA Because it Does Not Address the Environmental Impacts of Severe Spent Fuel Pool Accidents.<sup>22</sup>

The essence of this contention is the AG's assertion that Entergy's environmental report (ER) "does not satisfy 10 C.F.R. § 51.53(c)(3)(iv) and NEPA . . . because it fails to address new and significant information regarding the reasonably foreseeable potential for a severe accident involving nuclear fuel stored in high-density storage racks in the Vermont Yankee fuel pool." *Id.* at 21. The AG's logic or "basis" is straightforward. First, the AG points out that NEPA and 10 C.F.R. § 51.53(c)(3)(iv) require that "new and significant information" not previously considered by the NRC in an environmental impact statement (EIS) be included in the ER.<sup>23</sup> More specifically, the AG argues that the regulation requires the ER to include new and significant information even if it concerns a Category 1 matter that was otherwise covered in the GEIS. AG Reply at 8. Second, the AG

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<sup>21</sup> See *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-25, 60 NRC 223, 225 (2004) (quoting Final Rule: "Changes to the Adjudicatory Process," 69 Fed. Reg. 2182, 2203 (Jan. 14, 2004) (reply must be "narrowly focused on the legal or logical arguments presented in the applicant/licensee or NRC Staff answer")); *Nuclear Management Co., LLC* (Palisades Nuclear Plant), CLI-06-17, 63 NRC 727, 732 (2006) ("Replies must focus narrowly on the legal or factual arguments first presented in the original petition or raised in the answers to it").

<sup>22</sup> AG Petition at 21. Unless otherwise noted, our statement of each contention is a direct quote from the text of the relevant petition.

<sup>23</sup> The AG acknowledges that the NRC issued a generic EIS (GEIS) to evaluate many of the common environmental impacts of license renewals, and therefore NRC regulations do not require the preparation of a complete ER and EIS for all aspects of each license renewal application. AG Petition at 12-13 (citing 10 C.F.R. §§ 51.53(c)(3)(i), 51.71(d)). However, the AG points to 10 C.F.R. § 51.53(c)(3)(iv), which, consistent with *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 374 (1989), requires that an ER "contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware." AG Petition at 15.

asserts that such new and significant information exists concerning the potential impact of an accident involving a high-density spent fuel pool storage facility. Third, the AG says that the ER is defective because it fails to include such new and significant information. Therefore, fourth, the AG concludes that its contention is admissible and is within the proper scope of this license renewal proceeding. AG Petition at 21-23.

The AG summarizes the key elements of his “new and significant information” relating to the risks of a spent fuel pool fire, as follows:

- (a) if the water level in a fuel storage pool drops to the point where the tops of the fuel assemblies are uncovered, the fuel will burn, (b) the fuel will burn regardless of its age, (c) the fire will propagate to other assemblies in the pool, and (c) [*sic*] the fire may be catastrophic.

*Id.* at 22. The AG supports his allegation that such new and significant information exists with five “facts or expert opinions,” *see* 10 C.F.R. § 2.309(f)(1)(v): (1) the expert declaration and report of Dr. Gordon Thompson,<sup>24</sup> (2) the expert declaration and report of Dr. Jan Beyea,<sup>25</sup> (3) excerpts from NUREG-1738, (4) the 2006 “Safety and Security of Commercial Spent Nuclear Fuel Storage” report of the National Academy of Sciences,<sup>26</sup> and (5) the terrorist attacks of September 11, 2001. AG Petition at 22.

The AG argues that NRC never considered this information in its original EIS for Vermont Yankee or in the GEIS for license renewals, and thus that Entergy’s failure to include this new and significant information in its ER contravenes 10 C.F.R. § 51.53(c)(3)(iv) and *Marsh. Id.* at 23. The AG also contends that the environmental impacts of a spent fuel pool accident must be considered by the Staff in the SEIS in order for the Staff to comply with its obligation to consider significant new information relevant to the environmental impacts of license renewal because this information has yet to be considered by the NRC in a previous EIS. *Id.* at 14-15. The AG further asserts that, when the likelihood of

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<sup>24</sup>Gordon R. Thompson, “Risks and Risk-Reducing Options Associated with Pool Storage of Spent Nuclear Fuel at the Pilgrim and Vermont Yankee Nuclear Power Plants” (May 25, 2006); AG Petition, Exh. 1, Decl. of Dr. Gordon Thompson in Support of [AG]’s Contention and Petition for Backfit Order (May 25, 2006).

<sup>25</sup>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” (May 25, 2006); AG Petition, Exh. 2, Decl. of Dr. Jan Beyea in Support of [AG]’s Contention and Petition for Backfit Order (May 25, 2006).

<sup>26</sup>Committee on the Safety and Security of Commercial Spent Nuclear Fuel Storage, Board on Radioactive Waste Management, National Research Council, *Safety and Security of Commercial Spent Nuclear Fuel Storage: Public Report* (2006).

a terrorist attack is taken into account, the estimated probability of this type of accident is within the range that must be discussed in an ER and EIS. *Id.* at 33-41.

In addition to its argument regarding new and significant information, the AG also contends that the ER is deficient because it does not consider reasonable alternatives for avoiding or mitigating the environmental impacts of a severe spent fuel pool fire. *Id.* at 23, 47. Under 10 C.F.R. § 51.53(c)(3)(ii)(L), an ER must contain severe accident mitigation alternatives (SAMAs) for some issues. *See also* 10 C.F.R. § 51.53(c)(3)(iii). According to the AG, potential SAMAs for a spent fuel pool fire are ignored, including the alternative of replacing the high-density spent fuel pool racks with low-density racks and transferring any remaining spent fuel to dry storage. AG Petition at 47.

Entergy opposes the AG's contention, claiming that the environmental impacts of spent fuel storage are codified as Category 1 environmental issues, and thus are beyond the scope of this license renewal proceeding. Entergy Answer to AG at 11-12 (citing 10 C.F.R. Part 51, App. B, Table B-1; 10 C.F.R. §§ 51.53(c) and 51.95(c)). According to Entergy, the AG's attempt to bring these issues within the scope of the proceeding by invoking section 51.53(c)(3)(iv) falls short because the generic Category 1 findings resulting from the analysis of the GEIS are NRC rules and, as such, may only be challenged or altered upon the granting of a waiver or rulemaking petition. *Id.* at 12-13. Moreover, Entergy argues that the recent decision in *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016 (9th Cir. 2006), is inapplicable here because Commission case law establishes that, even if terrorism issues require analysis under NEPA, the GEIS concluded that "if such an event were to occur, the resultant core damage and radiological release would be no worse than those expected from internally initiated events." Entergy Answer to AG at 25-26 (quoting *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358, 365 n.24 (2002)). Entergy also challenges the AG's claim that new and significant information exists, arguing that the risks associated with high-density racking in spent fuel pools were known and considered by NRC long ago and that nothing new is contained in the AG's exhibits. *See id.* at 13-25.

The Staff likewise argues that Category 1 environmental issues are outside of the scope of license renewal proceedings, citing 10 C.F.R. § 51.53(c)(2) and *Turkey Point*, CLI-01-17, 54 NRC at 6-13, for the proposition that a license renewal ER need not provide information regarding the storage of spent fuel. Staff Answer to AG at 11-12. The Staff also relies on *Turkey Point*, CLI-01-17, 54 NRC at 21-22, in arguing that an ER need not address SAMAs for mitigating spent fuel pool accidents. Staff Answer to AG at 12-13. According to the Staff, by asking the Board to address a spent fuel storage issue, the AG is essentially seeking to have the Board treat spent fuel pool issues as a Category 2 issue, which runs counter to the prohibition against challenging a regulation in an adjudicatory proceeding without seeking a waiver. *Id.* at 14. The Staff also argues that the

information in the AG petition is not new and, therefore, need not be included in the Entergy's ER as it has already been presented to the NRC. *Id.* at 16-22. Finally, the Staff asserts that, to the extent the AG's contention attempts to raise terrorism issues, these issues are also outside of the scope of the proceeding. *Id.* at 22-23.

In its reply, the AG argues that the case law and regulatory history make clear that "Category 1 impacts are included in the scope of the new and significant impacts that must be discussed in an ER pursuant to 10 C.F.R. § 51.53(c)(3)(iv)." AG Reply at 8. The AG maintains that the alternative procedures suggested in *Turkey Point* (e.g., the filing of a waiver petition or a rulemaking petition) are inconsistent with NEPA as construed by the Supreme Court in *Marsh. Id.* at 9-10. Further, the AG asserts that *Turkey Point* is inapposite because it did not deal with a contention alleging new and significant information, and that its discussion of issues relating to new and significant information is dicta. *Id.* at 11. The AG goes on to explain that the information in its petition is indeed "new and significant." *Id.* at 12-27. Finally, the AG asks the Board to rule that NEPA requires that Entergy and the Staff consider the environmental impacts of an intentional attack on the Vermont Yankee spent fuel pool, and then to refer its ruling to the Commission to determine the applicability of the *Mothers for Peace* decision. *Id.* at 27-28.

The Board rules that, even if the AG has presented new and significant information related to the risks and environmental impacts of high-density racking in spent fuel pools, as a matter of law the contention is not admissible because the Commission has already decided, in *Turkey Point*, that licensing boards cannot admit an environmental contention regarding a Category 1 issue.

Starting from the proposition that onsite spent fuel management is a Category 1 issue,<sup>27</sup> the first step in our reasoning is to confront the apparent conflict between 10 C.F.R. § 51.53(c)(3)(i) and (iv). Subsection (i) states that an applicant's ER "is not required to contain analyses of the environmental impacts of the license renewal issues identified as Category 1 issues in Appendix B." Meanwhile, subsection (iv) specifies that the ER must include "any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware." What if there is "new and significant" information regarding a Category 1 issue? Must the ER include it? The answer, provided by the Commission, is clearly yes.

In construing 10 C.F.R. § 51.53(c)(3) the Commission has stated: "even where the GEIS has found that a particular impact applies generically (Category 1), the applicant *must* still provide additional analysis in its Environmental Report if new and significant information may bear on the applicability of the Category 1 finding

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<sup>27</sup> 10 C.F.R. Part 51, App. B, Table B-1.

at its particular plant.” *Turkey Point*, CLI-01-17, 54 NRC at 11 (emphasis added). Likewise, “the applicant must provide additional analysis of even a Category 1 issue if new and significant information has surfaced.” *McGuire/Catawba*, CLI-02-14, 55 NRC at 290. Both Entergy, Tr. at 95, and the NRC Staff, Tr. at 113-14 and 168, acknowledge that the ER *must* include any new and significant information (that the applicant is aware of) regarding the environmental impacts of *Category 1 issues*.

Similarly, when preparing the SEIS, the Staff must consider any significant new information related to Category 1 issues. See 10 C.F.R. §§ 51.92(a)(2), 51.95(c)(3); Final Rule: “Environmental Review for Renewal of Nuclear Power Plant Operating Licenses,” 61 Fed. Reg. 28,467, 28,470 (June 5, 1996). “The final SEIS also takes account of public comments, including . . . new information on generic findings.” *Turkey Point*, CLI-01-17, 54 NRC at 12; see also *McGuire/Catawba*, CLI-02-14, 55 NRC at 290-91. Therefore, if the information that the AG presents is indeed new and significant, the Staff’s SEIS needs to address it.

The second step in our reasoning confronts a more problematic issue: assuming *arguendo* that an ER fails to include new and significant information (known to the applicant) relating to a Category 1 environmental issue and thus fails to comply with 10 C.F.R. § 51.53(c)(3)(iv), does this give rise to an admissible contention? Normally, the answer would be yes. Indeed, the essence of virtually all admissible contentions is an allegation that the applicant has failed to address, or has inadequately addressed, some legally required matter. In this case, however, the Commission has answered this question in the negative. The AG’s contention is therefore inadmissible.

Our conclusion — that the failure of an ER to include known new and significant information concerning a Category 1 issue as required in 10 C.F.R. § 51.53(c)(3) cannot give rise to an admissible contention — derives from the Commission’s ruling in *Turkey Point*. First, the Commission identified three options for addressing new and significant information that might arise after the GEIS on Category 1 issues was finalized:

The Commission recognizes that even generic findings sometimes need revisiting in particular contexts. Our rules thus provide a number of opportunities for individuals to alert the Commission to new and significant information that might render a generic finding invalid, either with respect to all nuclear power plants or for one plant in particular. In the hearing process, for example, petitioners with new information showing that a generic rule would not serve its purpose at a particular plant may seek a waiver of the rule. Petitioners with evidence that a generic finding is incorrect for all plants may petition the Commission to initiate a fresh rulemaking. Such petitioners may also use the SEIS notice-and-comment process to ask the

NRC to forgo use of the suspect generic finding and to suspend license renewal proceedings, pending a rulemaking or updating of the GEIS.

*Turkey Point*, CLI-01-17, 54 NRC at 12 (citations omitted).

The implication of this passage is that a citizen does *not* have the (fourth) option of filing a contention to challenge the ER's failure to include new and significant information concerning a Category 1 issue. The Commission confirmed this later in the *Turkey Point* ruling when it stated that "Part 51 treats all spent fuel pool accidents, whatever their cause, as generic, Category 1 events not suitable for case-by-case adjudication." *Id.* at 22. The Commission added that "[a]s we hold in the text, it is Part 51, with its underlying GEIS, that precludes the litigation of that issue." *Id.* at 23 n.14. As the NRC Staff pointed out, the fourth option (e.g., filing a contention) would obviate the other three, because a logical petitioner would always opt for it and skip the extra burdens associated with the other three (e.g., requesting a waiver of the regulations from the Commission). *Tr.* at 165.

Our reading of *Turkey Point* is consistent with the regulatory history of section 51.53(c)(3)(iv). This requirement — that the ER include any new and significant information — was not part of the proposed rule.<sup>28</sup> It was added in the final rule in response to objections from the Council on Environmental Quality (CEQ), the U.S. Environmental Protection Agency (EPA), and members of the public, as follows:

Federal and State agencies questioned how new scientific information could be folded into the GEIS findings because the GEIS would have been performed so far in advance of the actual renewal of an operating license. . . . A group of commenters, including CEQ and EPA noted that the rigidity of the proposed rule hampers the NRC's ability to respond to new information or to different environmental issues not listed in the proposed rule.

61 Fed. Reg. at 28,470.

In response, NRC added 10 C.F.R. § 51.53(c)(3)(iv) to expand "the framework for consideration of significant new information." *Id.* The Statement of Considerations to the final rule refers to SECY-93-032, a Staff memorandum to the Commission reporting that the addition of section 51.53(c)(3)(iv) resolved the CEQ and EPA concerns.<sup>29</sup> The memorandum explained that the addition of section 51.53(c)(3)(iv) would have little impact on license renewal adjudications because "[I]itigation of environmental issues in a hearing will be limited to unbounded

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<sup>28</sup> See Proposed Rule: "Environmental Review for Renewal of Operating Licenses," 56 Fed. Reg. 47,016, 47,027-28 (Sept. 17, 1991).

<sup>29</sup> SECY-93-032, Memorandum from James M. Taylor, EDO, to the Commissioners (Feb. 9, 1993), ADAMS Accession No. ML051660667.

category 2 and category 3 issues unless the rule is suspended or waived.” SECY-93-032 at 4. (Category 2 and 3 issues were eventually combined into Category 2. *See* 61 Fed. Reg. at 28,474.) The Commission approved the modifications in the proposed rule and specifically endorsed SECY-93-032.<sup>30</sup> Commission approval of SECY-93-032 demonstrates that, when the Commission adopted the final rule, it contemplated that Category 1 issues could only be litigated after the granting of a waiver petition pursuant to 10 C.F.R. § 2.335.

The Commission’s intent is also demonstrated by the dialogue that occurred when the Commission was deliberating the final rule and discussing SECY-93-032. The briefing covered the resolution of the CEQ and EPA objections and included an exchange between Commissioner James R. Curtiss and Martin Malsch, the Deputy General Counsel for Licensing and Regulation. Twice the Commissioner asked whether, under 10 C.F.R. § 51.53(c)(3)(iv) or any other part of the license renewal regulations, a petitioner could litigate a Category 1 issue on the claim that there was new and significant information on the issue. Twice the Deputy General Counsel of NRC answered no, not without first obtaining a waiver or other approval from the Commission itself.<sup>31</sup> With this understanding of the regulations, the Commission approved and finalized section 51.53(c)(3)(iv). Given this regulatory history, it is clear that an allegation of new and significant

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<sup>30</sup>Memorandum from Samuel J. Chilk, Secretary, to James M. Taylor, EDO (Apr. 22, 1993), ADAMS Accession No. ML003760802.

<sup>31</sup>Commissioner Curtiss: “[A]ssume for the sake of discussion that the staff says, ‘This is not significant new information,’ is that kind of issue subsequently one that can be or you intend to be cognizable before the board?”

Mr. Malsch: “Well, it would depend. If the information is — the basic answer is they have to come to the Commission first. If the information is considered significant by the interested party and staff says, ‘Now, this is not significant.’ If it’s generic information, then the remedy is a petition for rulemaking and that usually comes to the Commission. Before the Commission would grant a petition for rulemaking, it would consider the merits of the information. If the information is site specific, then they’d need to petition for a waiver. But after being screened by the board, the board is referred to the Commission and only the Commission can grant waivers. So, again it comes before the Commission.

So, the procedural route is somewhat different, but no matter how it gets there, the Commission would be looking at the staff judgment, looking at what other parties say about it, and making its own determination about significance.”

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Commissioner Curtiss: “So, there’s no circumstance, in other words, where you envision that once a determination is made under the procedures that you’ve described with regard to the significance of the information by the Commission upon the Staff’s recommendation, that we would then in turn need to litigate before the board the significance of that information, whether it was or wasn’t significant?”

Mr. Malsch: “Not without the Commission’s approval.”

Public Meeting, “Briefing on Status of Issues and Approach to GEIS Rulemaking for Part 51” (Feb. 19, 1993), at 14-15, ADAMS Accession No. ML051660665.

information relating to a Category 1 issue may not form the basis of a contention in a license renewal proceeding, absent a waiver.

Based on *Turkey Point* and the regulatory history that underlies it, the Board must rule that a petitioner may not challenge an ER's failure to consider new and significant information for a Category 1 environmental impact without first seeking a waiver of the generic rule. The environmental impacts of onsite spent fuel storage are codified in Appendix B to Subpart A of Part 51 and listed as a Category 1 issue. 10 C.F.R. Part 51, App. B, Table B-1. As the Commission has stated, if a party such as the AG believes that there is significant new information relating to Category 1 license renewal issues, the AG has several options, including filing a petition for rulemaking, providing the information to the NRC Staff (which can then seek Commission approval to suspend the application of the rules or delay the license renewal proceeding), or petitioning the Commission to waive the application of the rule. 61 Fed. Reg. 28,740. The Commission has ruled that its reliance on such GEIS tiering comports with NEPA. *Turkey Point*, CLI-01-17, 54 NRC at 13-14 (citing *Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc.*, 462 U.S. 87 (1983)). Thus, absent a waiver, a contention seeking to litigate an ER's failure to include required new and significant information is not admissible.<sup>32</sup>

Before concluding this section of the analysis, we note that the parties have expended substantial effort in debating the factual question as to whether "new and significant information" exists concerning the risks and impacts of high-density spent fuel pool storage. The AG cites to the declarations from Dr. Thompson and Dr. Beyea, NUREG 1738, the NAS 2006 Report, and the events of September 11, 2001, as providing such new and significant information. Entergy and the Staff respond, at length, that there is nothing new in these reports. Staff Answer at 16-21; Entergy Answer at 13-25.

The Board has three general responses to this factual debate. First, we note that the risks and effects of high-density racking of spent fuel in pools have been studied and debated since 1979, *see* AG Petition at 21 (acknowledging that the

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<sup>32</sup>The Commission's ruling in *Turkey Point* (that an applicant's failure to provide new and significant information relating to a Category 1 issue cannot be adjudicated in a license renewal proceeding) seems inconsistent with its statement that "[a]djudicatory hearings in individual license renewal proceedings will share the *same scope of issues as our NRC Staff review.*" *Turkey Point*, CLI-01-17, 54 NRC at 10 (emphasis added). On the one hand, the ER must include new and significant information relating to Category 1 issues, 10 C.F.R. § 51.53(c)(3)(iv), the Staff must review this information and include any "significant new circumstances or information" relating to Category 1 issues in supplements to the draft SEIS, 10 C.F.R. § 51.72(a)(2), and the Staff's final SEIS will cover any "significant new circumstances or information" relating to Category 1 issues, 10 C.F.R. § 51.92(a)(2). On the other hand, absent a waiver of the regulations, those issues cannot be heard in an adjudicatory hearing. Under the *Turkey Point* holding, the permissible scope of a license renewal adjudicatory hearing is *narrower* than the scope of the Staff's review.

issue was recognized as early as 1979), and have been the subject of substantial litigation. *See Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant) LBP-00-19, 52 NRC 85 (2000), *aff'd*, CLI-01-11, 53 NRC 370 (2001), and other cases cited in Staff Answer at 16 n.10. This ground is well trod. Second, we note that, for purposes of admissibility, the AG need not prove that the various documents actually contain new and significant information, but instead need only “[p]rovide a concise statement of the alleged facts or expert opinions which support” the contention and “[p]rovide sufficient information to show that a genuine dispute exists” on this point. 10 C.F.R. § 2.309(f)(1)(v) and (vi). A contention may be plausible enough to meet the admission standards even if it is ultimately denied on the merits. *See* Final Rule: “Rules of Practice for Domestic Licensing Proceedings — Procedural Changes in the Hearing Process,” 54 Fed. Reg. 33,168, 33,170 (Aug. 11, 1989). Third, because we conclude that, as a matter of law, the failure of an ER to include new and significant information relating to a Category 1 issue is not litigable,<sup>33</sup> we need not determine whether the multiple declarations and documents proffered by the AG in fact provide sufficient information to at least support the admissibility of this contention.

In addition to basing its contention on new and significant information relating to the risks of high-density racking of spent fuel in pools, the AG alleges that the ER is defective because it fails to address new and significant information relating to the risks of terrorism (e.g., the terrorist attacks of September 11, 2001). Although this is a different category of “new and significant information,” the same result obtains — the contention is not adjudicable under *Turkey Point*. If the AG wants to raise its concerns that new and significant information relating to terrorism needs to be considered, it should pursue one of the three paths specified by the Commission. *See Turkey Point*, CLI-01-17, 54 NRC at 12.

We also note that in *McGuire/Catawba*, the Commission held that there is no need to address terrorism issues in license renewal proceedings because “it is sensible not to devote resources to the likely impact of terrorism during the license renewal period, but instead to concentrate on how to prevent a terrorist attack in the near term at the already licensed facilities.” *McGuire/Catawba*, CLI-02-26, 56 NRC at 365. We agree with the AG that this holding is undercut by the Ninth Circuit’s decision in *Mothers for Peace*, 449 F.3d at 1016. The Commission, however, gave another reason for rejecting terrorism contentions in license renewal proceedings. In holding that the GEIS adequately addresses terrorism issues generically, the Commission stated:

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<sup>33</sup>We also note that 10 C.F.R. § 51.53(c)(3)(iv) only requires the ER to include such new and significant information “of which the applicant is aware.” Given our legal conclusion, we need not delve into the mind of Entergy to determine the factual question as to whether it was aware of, or should have been aware of, the information proffered by the AG.

Even if we were required by law to consider terrorism under NEPA, the NRC has already issued a . . . GEIS that considers sabotage in connection with license renewal. . . . The GEIS concluded that, if such an event were to occur, the resultant core damage and radiological releases would be no worse than those expected for internally initiated events.

*McGuire/Catawba*, 56 NRC at 365 n.24 (citations omitted). This component of *McGuire/Catawba*, combined with *Turkey Point*, leads us to conclude that terrorism concerns, even assuming new and significant information is presented, are not litigable in a license renewal proceeding and must be handled via rulemaking or a waiver petition.

Finally, we note that the AG's arguments regarding severe accident mitigation alternatives (SAMAs) also fail to establish an admissible issue. The requirement for a SAMA analysis is found in 10 C.F.R. § 51.53(c)(3)(ii)(L), which states that "[i]f the staff has not previously considered severe accident mitigation alternatives for the applicant's plant in an environmental impact statement or related supplement or in an environmental assessment, a consideration of alternatives to mitigate severe accidents must be provided." An applicant, however, only needs to provide this analysis "for those issues identified as Category 2 issues in Appendix B to subpart A of this part." 10 C.F.R. § 51.53(c)(3)(ii). Spent fuel pool storage issues are Category 1 issues. 10 C.F.R. Part 51, App. B, Table B-1. Therefore, the regulations clearly indicate that in a license renewal, SAMAs are not required for spent fuel pool accidents and this challenge is not admissible. See *Turkey Point*, CLI-01-17, 54 NRC at 21-22.

For the reasons discussed above, AG Contention 1 is inadmissible and the AG's hearing request is denied.<sup>34</sup> We also note in passing that the AG has already filed a Petition for Rulemaking under 10 C.F.R. § 2.802 to address this issue.<sup>35</sup> In this petition, the AG argues that

[r]evocation of 10 C.F.R. §§ 51.53(c)(2) and 51.95(c) and Table B-1 of Appendix A to 10 C.F.R. Part 51 will be necessary to ensure NEPA compliance in the Pilgrim and Vermont Yankee license renewal cases if the ASLB or the Commission interprets those regulations to bar the consideration of significant new information . . . .

*Id.* at 7. In this petition, the AG repeats his claims that new and significant information justifies revisiting the issue at this time. *Id.* at 8-10. Thus we see that the AG has already begun to pursue the alternative remedies specified in *Turkey Point*. CLI-01-17, 54 NRC at 12.

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<sup>34</sup> Although the AG is not admitted to the proceeding as a party, it may still participate as an interested state. See Section VI.B.

<sup>35</sup> [AG] Petition for Rulemaking To Amend 10 C.F.R. Part 51 (Aug. 25, 2006).

## **2. AG Backfit Petition Under 10 C.F.R. § 50.109**

In addition to its intervention petition, the AG submitted a petition requesting the imposition of a backfit order pursuant to 10 C.F.R. § 50.109(a). AG Petition at 48-50. According to the AG, when the Vermont Yankee facility was initially licensed, it used open low-density racks that stored smaller quantities of spent fuel and thus there was no need to consider or design against pool fire accidents. *Id.* at 49. Now, however, the Vermont Yankee pool includes high-density storage racks which, the AG asserts, pose an undue safety risk of pool fire. *Id.* Based on this undue risk, the AG asserts that the Commission should require a backfit order returning the Vermont Yankee spent fuel pool to its original low-density storage configuration and using dry storage for any excess fuel. *Id.* Entergy opposes the backfit order because such a request is beyond the scope of a license renewal proceeding. Entergy Answer to AG at 26-27. The Staff contends that the petition for backfit should be dismissed because the petition is still properly before the Commission, not the Board, and because NRC regulations do not permit an adjudicatory hearing on backfit issues. Staff Answer to AG at 24. In its reply, the AG acknowledges that non-aging-related safety issues are outside the scope of license renewal proceedings, and it was for this reason that the AG separately petitioned the Commission for the backfit order. AG Reply at 31. Thus, according to the AG, the backfit petition is still before the Commission. *Id.*

We conclude that the backfit petition is not currently before the Board. The Commission's referral says nothing regarding the backfit petition and only mentions the hearing requests "submitted in response to a notice issued by the NRC staff that provided an opportunity for hearing on the license renewal application." Letter from Annette L. Vietti-Cook, Secretary, NRC, to G. Paul Bollwerk, III, Chief Administrative Judge, ASLBP (June 7, 2006). All parties agree that the backfit petition is before the Commission and not this Board. Entergy Answer to AG at 26-27; Staff Answer to AG at 24; AG Reply at 31. Therefore, we take no action on the AG's petition for backfit.

## **C. Ruling on DPS Contentions**

### **1. DPS Contention 1 (Safety)**

The Application must be denied because the Applicant has failed to provide the necessary information with regard to age management of primary containment concrete in accordance with 10 C.F.R. § 54.21 such that the Commission cannot find that 10 C.F.R. § 54.29(a) is met.<sup>36</sup>

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<sup>36</sup>DPS Petition at 10.

This contention questions whether Entergy has shown that it should be exempt from management of the aging of the primary containment concrete wall that surrounds most of the reactor steel containment vessel or “drywell.” DPS states, as the “basis” for this contention, that Entergy’s aging management program improperly excludes the “reduction of strength and modulus of the primary [concrete] containment structure due to elevated temperature” even though the “primary containment normal operating temperature limit is above the limit for excluding this attribute.” *Id.* at 10. As supporting evidence, DPS points to an alleged conflict within the application. First, DPS notes that the application states that the relevant ASME<sup>37</sup> code specifies that “aging due to elevated temperature exposure is not significant as long as concrete general area temperatures do not exceed 150°F.” *Id.* (citing Application at 3.5-8). The application goes on to state that “[d]uring normal operation, areas within primary containment are within [this] temperature limit[.]” and therefore, the application concludes that aging management of primary containment concrete is not needed. *Id.* at 10-11 (citing Application at 3.5-8). DPS then points out that, elsewhere in the application, Entergy states that the “[n]ormal environment in the drywell during plant operation is . . . an ambient temperature of about 135°F to 165°F.” *Id.* at 11 (citing Application at 2.4-3, which references the VYNPS Updated Final Safety Analysis Report (UFSAR) at 5.2-8). DPS notes that the application states that the steel drywell containment shell is enclosed in the reinforced concrete. *Id.* at 11 (citing UFSAR at 5.2-7).

In further evidentiary support, DPS provides the declaration of the Vermont State Nuclear Engineer, Mr. William K. Sherman, who states:

Since the normal environmental maximum of 165°F is above the cut off limit of 150°F, and since the concrete surface behind the steel shell will closely match the drywell ambient temperature, the statement at 3.5-8 of the LRA is not accurate, and reduction of strength and modulus of concrete structures due to elevated temperatures is an aging effect requiring management.

DPS Petition, Decl. of William K. Sherman (May 26, 2006) ¶ 8 [Sherman Decl.]. In sum, DPS contends that the application must be denied because it fails to provide the information (showing that the primary containment concrete “general area temperatures” do not exceed 150°F) necessary to prove that Entergy should be excused from managing the aging of the primary containment concrete. DPS Petition at 10-11.

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<sup>37</sup>The American Society of Mechanical Engineers (ASME) is an association that develops codes and standards related to materials performance that are commonly accepted by designers and regulatory bodies.

Entergy responds that DPS Contention 1 is “inadmissible because it is vague and unsupported by an adequate basis” and because it “fails to demonstrate the existence of a genuine dispute concerning a material issue.” Entergy Answer to DPS at 11. Entergy asserts that there is no inconsistency between the UFSAR statement that the normal drywell temperature will be between 135°F and 165°F and the application statement that “[d]uring normal operation, [general] areas within the primary containment” do not exceed 150°F. *Id.* at 12. This, says Entergy, is because the drywell is cooled by four cooling units. *Id.* at 13. Entergy concludes that DPS provides “no basis” for the “bald claim” by Mr. Sherman that “the concrete surface behind the steel shell will closely match the drywell ambient temperature.” *Id.* at 14. Entergy does not challenge Mr. Sherman’s expertise and does not provide declarations or documentation to rebut Mr. Sherman’s assessment.

The Staff agrees with Entergy that Mr. Sherman’s declaration that “the concrete surface behind the steel shell will closely match the drywell ambient temperature” is an “assumption” and is “impermissibly speculative and conclusory and, as such, cannot provide an adequate basis for a contention.” Staff Answer to DPS at 11. The Staff complains that Mr. Sherman provides “no data or detailed opinion on heat profile changes.” *Id.* The Staff cites a prior Licensing Board case that states that “neither mere speculation nor bare or conclusory assertions, even by an expert, alleging that a matter should be considered will suffice to allow the admission of a proffered contention.”<sup>38</sup>

This Board concludes that DPS Contention 1 satisfies the 10 C.F.R. § 2.309(f)(1) requirements for an admissible contention. First, DPS has provided us with a “specific statement of the issue of law or fact to be raised or controverted.” 10 C.F.R. § 2.309(f)(1)(i). In short, DPS asserts that Entergy has failed to show that the “general area temperatures” of the primary containment concrete do not exceed 150°F, and thus fails to show that it qualifies for an exemption from aging management. There is nothing “vague” about this contention.

Second, DPS has certainly provided us with a “brief explanation of the basis” for this contention. DPS’s logic is that Entergy’s decision not to establish an aging management program for the primary containment concrete is not justified because Entergy has not shown that the concrete general area temperatures do not exceed 150°F. This explanation is based on an alleged inconsistency within the license renewal application, together with the simple logic that when one material is in close proximity to another, the temperature of one may be similar to the temperature of the other. This rationale, whether ultimately shown to be true in

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<sup>38</sup> *Id.* at 12 (citing *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), LBP-04-17, 60 NRC 229, 241 (2004), which cites *Fansteel*, CLI-03-13, 58 NRC at 203). In both of the cited cases, the quoted statement was dicta.

this case or not, provides a sufficient explanation of the basis for the contention. *See* 10 C.F.R. § 2.309(f)(1)(ii).

Third, there is no doubt that this safety contention, which alleges that Entergy fails to supply information that is related to the effects of aging and that is required by the license renewal regulations (10 C.F.R. § 54.21), is within the scope of a license renewal proceeding. *See* 10 C.F.R. § 2.309(f)(1)(iii). Likewise, DPS has demonstrated that this contention is material to the findings that Staff must make under 10 C.F.R. § 54.29(a) in evaluating the license renewal application. *See* 10 C.F.R. § 2.309(f)(1)(iv).

The real dispute over the admissibility of DPS Contention 1 relates to whether Mr. Sherman's declaration, including the statement that "the concrete surface behind the steel shell will closely match the drywell ambient temperature" is "bald" or "conclusory." *See* Entergy Answer to DPS at 14; Staff Answer to DPS at 11. It is not entirely clear to the Board whether this alleged defect is purported to constitute a failure of DPS to provide "a concise statement of the alleged facts or expert opinions" that support its position, 10 C.F.R. § 2.309(f)(1)(v), or a failure to provide "sufficient information to show that a genuine dispute exists with applicant/licensee on a material issue of law or fact." 10 C.F.R. § 2.309(f)(1)(vi). *See* Tr. at 191-92, 202-04 (Aug. 1, 2006). In any event, Entergy and the Staff agree that Mr. Sherman's statement is bald and conclusory and therefore that the contention cannot stand.

We disagree, and find that DPS's citation to specific and potentially inconsistent portions of Entergy's documents, together with the declaration of Mr. Sherman that "the concrete surface behind the steel shell will closely match the drywell ambient temperature" provide us with alleged "facts or expert opinion," which are "sufficient" to meet the requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi). Mr. Sherman's opinion is supported by a simple, fact-based argument. DPS points out that the concrete surrounding the primary steel containment would require an aging management when the "general areas" of concrete exceed 150°F. DPS Petition at 10-11. DPS then points to another portion of the application stating that the ambient temperature in the drywell is between 135°F and 165°F. *Id.* at 11. Given that the concrete is separated from the steel drywell by a relatively small gap, Mr. Sherman concludes that "the concrete surface behind the steel shell will closely match the drywell ambient temperature." Sherman Decl. ¶ 8. Given the simple logical inference on which this argument rests, no more explanation is required to raise a dispute, and clearly a genuine one, regarding the general area temperature of the primary containment concrete.

This is not a case of "mere speculation nor bare or conclusory assertions, even by an expert, alleging that a matter *should be considered*." Staff Answer to DPS at 12 (citing the dicta in *Clinton*, LBP-04-17, 60 NRC at 241, and *Fansteel*, CLI-03-13, 58 NRC at 203) (emphasis added). Instead, DPS has clearly pointed out specific portions of the application that show temperatures higher

than 150°F and that reveal a potential inconsistency. DPS's expert does not make bare assertions that the contention "should be considered." Instead, Mr. Sherman, whose expertise is never questioned, provides a "concise statement," identifying relevant portions of the application and USFAR and indicating that "the temperature of the concrete surface behind the steel shell will closely match the drywell ambient temperatures." This is a facially reasonable proposition that warrants the review of supporting and opposing evidence that an adjudicatory hearing will provide.

Nor is this case like the situation in *USEC*, which was cited by the Staff at oral argument. Tr. at 280 (citing *American Centrifuge*, CLI-06-10, 63 NRC at 472). In that case the petitioner cited garbled and virtually incomprehensible statements by one Sergio Edwardovich Pashenko,<sup>39</sup> such as "I think that officials information about radiation situation is very poor and very unconcrete," and "It's a very bad model. We must know what wind velocity and what condition in atomospheric (it about 6\*8 = 48) were in this model. The work (play as little children) only with average result — very bad!! We must understood it!"<sup>40</sup> In response, the Commission noted, with some understatement, that "it is unclear just what Mr. Pashenko reviewed," that "Mr. Pashenko's brief remarks are difficult to comprehend" and that even PRESS, the sponsor of this witness, did not seem to understand Mr. Pashenko's statements. *American Centrifuge*, CLI-06-10, 63 NRC at 472.

In contrast, the factual material provided by DPS is clear, concise, and sufficient to create a reasonable (and litigable) concern that the "general area" temperatures of the Vermont Yankee Nuclear Power Station primary containment concrete may exceed 150°F. The facts proffered by DPS include several relevant sections of the Application and UFSAR and a careful declaration by the Nuclear Engineer of the State of Vermont that, due to the proximity of the drywell shell and the primary containment concrete, the temperature of the latter will closely match the temperature of the former (135°F–165°F). At the contention admission stage, which is a lesser threshold than a merits determination or even a summary disposition ruling, the Board's purpose in applying 10 C.F.R. § 2.309(f)(1) is only to "ensure that the adjudicatory process is used to address real, concrete, specific issues that are appropriate for litigation." Final Rule: "Changes to the Adjudicatory Process," 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004). DPS Contention

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<sup>39</sup>The expertise of Mr. Pashenko was never clear. He labeled himself as an "ecologist." The total statement of his education (in his resume) specified "Highest level of education with a degree in both Nuclear Physics and Atomospheric Aerosols." Petition To Intervene by Portsmouth/Piketon Residents for Environmental Safety and Security (PRESS) at 71.

<sup>40</sup>Petition To Intervene by Portsmouth/Piketon Residents for Environmental Safety and Security (PRESS) (Feb. 28, 2006) at 37.

1 meets this criterion, and its factual allegations and attached expert opinion suffice under 10 C.F.R. § 2.309(f)(1)(v) and (vi).<sup>41</sup>

## 2. *DPS Contention 2 (Environmental)*

The Application must be denied because Applicant has failed to comply with the requirements of 10 CFR § 51.53(c)(3)(iv) by failing to include new and significant information regarding the substantial likelihood that spent fuel will have to be stored at the Vermont Yankee site longer than evaluated in the GEIS and perhaps indefinitely and thus has failed to provide the necessary environmental information with regard to onsite land use in accordance with 10 C.F.R. § 54.23 such that the Commission cannot find that the applicable requirements of Subpart A of 10 C.F.R. Part 50 have been satisfied (10 C.F.R. § 54.29(b)).<sup>42</sup>

As the “basis” for this contention, DPS cites 10 C.F.R. § 51.53(c)(3)(iv) for the proposition that the ER must contain any “new and significant information” regarding the environmental impacts of the license renewal and alleges that although the GEIS indicates that the (Category 1) impacts of onsite land use are “small,” this allegation is based on assumptions that are no longer valid due to new and significant information that DPS proffers. DPS Petition at 13-14. DPS argues that such new and significant information shows that “the commitment of onsite land for storage/disposal of spent nuclear fuel from license renewal will be substantially longer than assumed in the GEIS, and may be indefinite,” resulting “in an irretrievable commitment of onsite land with a moderate or large impact.” *Id.* at 15. According to DPS, the GEIS finding of a small impact is based on “the assumption that the land used for storage of nuclear waste at the reactor site will not exceed 30 years after the end of the license term,” i.e., the spent fuel at the Vermont Yankee facility will be removed by 2062. *Id.* at 13 (citing GEIS at 3-1 to 3-2). DPS asserts that this “assumption, in turn, relies upon the assumption that a permanent high level waste repository, and perhaps even a second repository, will be in place by that time to receive the reactor wastes.” *Id.* (citing GEIS at 6-79 to 6-81).

DPS presents six points as new and significant information that it claims invalidate the assumption that spent fuel will be removed from the Vermont Yankee facility by 2062. These are: (1) technical problems at Yucca Mountain and changes in national policy make it unlikely that a permanent high-level waste

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<sup>41</sup> In admitting this contention, we find it unnecessary to rely on the portions of the DPS reply that Entergy argues improperly raise new arguments or claims not found in the original petition. *See* Entergy Motion To Strike DPS Reply at 10, 14. Therefore, we deny Entergy’s motion to strike the portions of the DPS reply that relate to DPS Contention 1.

<sup>42</sup> DPS Petition at 12-13.

repository will be in place by 2062; (2) Yucca Mountain cannot accommodate the quantity of spent fuel expected to be produced through the end of the Vermont Yankee license renewal term; (3) there are currently no plans to build a second high-level waste repository; (4) current changes in the national high-level waste disposal policy make prior schedules unreliable; (5) the federal government (or a third party) is unlikely to take title for and remove spent fuel generated during the license renewal term; and (6) given these uncertainties, it is reasonable to assume that spent fuel generated during the license renewal term will remain at the Vermont Yankee facility past 2062, and perhaps indefinitely. *Id.* at 14.

As “supporting evidence” for this allegedly new and significant information, DPS provides references to the Bush Administration’s Global Nuclear Energy Partnership (GNEP) initiative; to the comments of a U.S. Senator concerning the relationship between GNEP and Yucca Mountain; to a Department of Energy presentation concerning technical problems with Yucca Mountain; to evidence of the Western Governors’ Association opposition to Yucca Mountain; to an NRC news release addressing the added security threat following the terrorist attacks of September 11, 2001; to the statutory waste limit for Yucca Mountain; and to past failures in establishing an interim waste storage facility. *Id.* at 15-21. DPS points out that these delays have a special impact in Vermont because the State places a high value on its land use. *Id.* at 21-24. DPS also asserts that its prior attempts to comment on the impropriety of the small impact conclusion in the GEIS were either ignored or were not adequately addressed by the NRC. *Id.* at 24-30.

Entergy argues against admitting DPS Contention 2, saying that it impermissibly challenges the Commission’s regulations and raises issues that are outside the scope of a license renewal proceeding. Entergy Answer to DPS at 14. Specifically, Entergy views this contention as a direct challenge to the Waste Confidence Rule (10 C.F.R. § 51.23(a)-(b)), the license renewal regulations, and the generic findings of the GEIS. *Id.* at 14-15. According to Entergy, challenges such as these are barred by 10 C.F.R. § 2.335. *Id.* at 16. Entergy asserts that the requirement that it provide new and significant information in accordance with 10 C.F.R. § 51.53(c)(3)(iv) is inapposite because that regulation only requires Entergy to provide information “of which the applicant is aware” and does not require that it provide information that some other party believes is new or significant. *Id.* at 16. If some other party, such as DPS, is aware of new and significant information bearing on a generic finding, Entergy asserts that the party may raise that information in a hearing only by seeking a waiver of the generic rule pursuant to 10 C.F.R. § 2.335(b). *Id.* at 17. However, because DPS has not complied with section 2.335, Entergy concludes that the Board may not consider this contention. *Id.* at 18. Additionally, Entergy attempts to refute DPS’s claim that the information supporting its contention is new and significant by showing that the Commission already considered these issues when promulgating the Waste Confidence Rule. *Id.* at 19-23.

The Staff also views this contention as a challenge to the Waste Confidence Rule and thus opposes its admission. Staff Answer to DPS at 14-15. According to the Staff, the Waste Confidence Rule eliminates the need to discuss the environmental impacts of spent fuel storage following the license renewal period in the GEIS, an SEIS, or an ER, meaning these issues are beyond the scope of a license renewal proceeding. *Id.* at 15-16. The Staff contends that the requirement to address new and significant information pursuant to 10 C.F.R. § 51.53(c)(3)(iv) only applies to issues within the scope of a license renewal proceeding, and that this regulation therefore does not require an applicant to provide new and significant information relating to the long-term storage of spent fuel. *Id.* at 16-17. If a petitioner wishes to challenge issues covered by the Waste Confidence Rule, the Staff argues that the petitioner must seek a waiver of that regulation pursuant to 10 C.F.R. § 2.335. *Id.* at 17. The Staff points out, however, that DPS has not filed a petition for waiver, and thus the Waste Confidence Rule must stay in effect in this proceeding. *Id.*

In its reply, DPS argues that its contention properly focuses on Entergy's failure to provide information that is required to be included in the ER. DPS Reply at 18. DPS points out that there is no dispute that Entergy failed to address the environmental impacts of indefinitely storing spent fuel at the Vermont Yankee facility. *Id.* Further, DPS asserts the "real issue at this stage of the proceeding is whether [Entergy] is legally required to provide such new and significant information regarding on-site land use." *Id.* DPS rejects the suggestion by Entergy and the Staff that it can only raise a contention alleging new and significant information if it files a petition for waiver pursuant to 10 C.F.R. § 2.335(b) because that position "ignores the extensive administrative history confirming that the Commission intends that claims of the existence of new and significant information warranting modifications to the GEIS are to be part of the SEIS and ASLB decision-making process." *Id.* at 39.

We find that DPS Contention 2 is inadmissible for the same reason that the AG contention is inadmissible. While 10 C.F.R. § 51.53(c)(3)(iv) requires an applicant to include any new and significant information concerning Category 1 issues that it is aware of, the failure of an applicant to do so is simply not litigable, absent a waiver under 10 C.F.R. § 2.335. *See* Section III.B.1. We need not, and do not, decide whether the information proffered by DPS is indeed "new and significant," or whether Entergy was, or should have been, aware of it.<sup>43</sup>

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<sup>43</sup>The storage of spent nuclear fuel is discussed in the GEIS at 6-70 to 6-86 and is listed as a Category 1 issue in Appendix B to Part 51. Specifically, Table B-1 of the regulation states that "[t]he expected increase in the volume of spent fuel from an additional 20 years of operation can be safely accommodated on site with small environmental effects through dry or pool storage at all plants if a

*(Continued)*

We also conclude that issues related to the environmental impact of onsite spent fuel storage after the license renewal term are outside the scope of a license renewal proceeding because contentions may not challenge the NRC's Waste Confidence Rule. *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 344-45 (1999). In relevant part, the Waste Confidence Rule states:

The Commission has made a generic determination that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor at its spent fuel storage basin or at either onsite or offsite independent spent fuel storage installations. Further, the Commission believes there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and 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.

10 C.F.R. § 51.23(a). Under 10 C.F.R. §§ 51.53(c)(2) and 51.95(c)(2), in a license renewal, the ER and the SEIS do not need to discuss spent fuel storage issues related to this generic determination. DPS's attempt to challenge the storage of spent fuel after the license renewal term amounts to an impermissible attack on these regulations. Therefore, for the above-stated reasons, we find that DPS Contention 2 is inadmissible.<sup>44</sup>

### **3. *DPS Contention 3 (Safety)***

The Application must be denied because the Applicant has failed to fully identify plant systems, structures and components that are non-safety-related systems, structures, and components in the security area whose failure could prevent satisfactory accomplishment of any of the functions of safety-related systems, structures and

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permanent repository or monitored retrievable storage is not available." 10 C.F.R. Part 51, App. B, Table B-1. Therefore, issues related to the environmental impact of onsite spent fuel storage during the license renewal term are outside of the scope of this license renewal proceeding.

<sup>44</sup> Entergy filed a motion to strike portions of the DPS reply, claiming it seeks to raise new arguments that were not included in the original petition but fails to address the criteria for nontimely filings. *See* Entergy Motion To Strike DPS Reply at 11-12, 14. Even if we were to consider the purported illicit information relating to the reply that relates to DPS Contention 2, it would not change our conclusion that the issues DPS seeks to raise in this contention are outside of the scope of this proceeding. Therefore, we deny Entergy's motion to strike the portions of the DPS reply that relate to DPS Contention 2 because the motion is now moot.

components in accordance with 10 C.F.R. § 54.4(a)(2), such that the Commission cannot find that 10 C.F.R. § 54.29(a) is met.<sup>45</sup>

As the “basis” of this contention, DPS states that Entergy did not include “security systems, structures and components required by 10 C.F.R. Part 73,” which “provide physical security and protect against terrorist activities” as part of Entergy’s aging management review. DPS Petition at 31. DPS acknowledges that these security systems, structures, and components (SSCs) are not safety SSCs, but explains that their failure “could result in the prevention of safety [SSCs] to perform their safety functions” and therefore asserts that the security SSCs require aging management review. *Id.* According to DPS, the absence “of this screening and aging management review prevents the Commission from completing its review of the requested license renewal in accordance with 10 C.F.R. § 54.29(a).” *Id.*

Under the heading “supporting evidence,”<sup>46</sup> DPS alleges that the application fails to identify security-related SSCs for screening despite the fact that the SSCs of 10 C.F.R. Part 73 fit within the scope of a license renewal as defined in 10 C.F.R. § 54.4(a)(2).<sup>47</sup> *Id.* at 31-32. DPS asserts that the failure of these physical security SSCs could allow terrorists to successfully enter the Vermont Yankee facility and to disable safety-related SSCs.<sup>48</sup> *Id.* at 32. Accordingly, DPS contends that Entergy must perform a screening and an aging management review for these systems. *Id.*

Entergy opposes the admission of DPS Contention 3, asserting that security issues are not within the scope of a license renewal proceeding. *See* Entergy Answer to DPS at 24-28. Entergy points out that the Commission has repeatedly stated that security issues are not among the aging-related questions that are relevant in license renewal review. *Id.* at 24 (citing *Millstone*, CLI-04-36, 60 NRC at 638, and *McGuire/Catawba*, CLI-02-26, 56 NRC at 364). Given the Commission’s clear intent regarding the exclusion of security issues from the scope of license renewal proceedings, Entergy contends that it is inappropriate to interpret Part 73 SSCs as being covered by 10 C.F.R. § 54.4(a)(2). *Id.* at 25. Entergy further argues that, while some nonsafety SSCs are included under

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<sup>45</sup> DPS Petition at 30-31.

<sup>46</sup> The supporting information regarding DPS Contention 3 is taken essentially verbatim from the statements appearing in Mr. Sherman’s declaration. *See* Sherman Decl. ¶¶ 44-50.

<sup>47</sup> Section 54.4(a)(2) states that plant SSCs within the scope of Part 54 include “[a]ll nonsafety-related [SSCs] whose failure could prevent satisfactory accomplishment of any of the functions identified in paragraphs (a)(1)(i), (ii), or (iii) of this section.” Paragraphs (a)(1)(i), (ii), and (iii) identify the safety-related SSCs that must remain functional during and following design-basis events.

<sup>48</sup> In an effort to avoid a safeguards information designation, DPS does not identify specific SSCs that are problematic at the Vermont Yankee facility, but instead cites several general provisions in Part 73 that involve SSCs.

section 54.4(a)(2), security SSCs are not included because a security SSC failure would not directly prevent proper functioning of safety SSCs. Rather Entergy asserts such a failure could only impact safety SSCs as the result of an intervening act (e.g., a terrorist intrusion). *Id.* at 25-27.

Citing the same case law as Entergy, the Staff also argues against the admission of this contention on the ground that it is outside the scope of a license renewal proceeding. Staff Answer to DPS at 19. The Staff asserts that, even if some security SSCs are within the scope of section 54.4(a)(2), Commission precedent establishes that these SSCs are not subject to aging management review and therefore, by the terms of 10 C.F.R. § 54.21, are beyond the scope of a license renewal. *Id.* at 20-21. Additionally, the Staff argues that by failing to identify specific SSCs that fit the definition of section 54.4(a)(2), DPS fails to provide the necessary factual support for its contention. *Id.* at 21.

In its reply, DPS reiterates that Part 73 physical barriers and structures are within the scope of section 54.4(a)(2). DPS Reply at 40-42. Giving the examples of vehicle barriers and bullet-resistant enclosures, DPS maintains that security equipment is directly linked to safety functions. *Id.* DPS also argues that the terrorist attacks of September 11, 2001, and the decision by the U.S. Court of Appeals for the Ninth Circuit in *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016 (9th Cir. 2006), have made the regulatory history for the license renewal rules stale. Therefore, says DPS, the 10 C.F.R. § 73.55(g) maintenance rule does not adequately manage the effects of aging for security SSCs, as the Commission maintained in the 1991 Statement of Considerations. *Id.* at 43-47.

The Board concludes that DPS Contention 3 is not admissible because, under controlling Commission rulings, security-related issues are not within the scope of a license renewal proceeding under 10 C.F.R. § 2.309(f)(1)(iii). The Commission has repeatedly stated that security-related issues are beyond the scope of a license renewal review. In *McGuire/Catawba*, the Commission examined whether terrorism contentions are “sufficiently related to the effects of plant aging to fall within the scope of the” safety portion of a license renewal proceeding. CLI-02-26, 56 NRC at 364. Upon examining the regulatory history to the license renewal rules,<sup>49</sup> the Commission concluded that “[t]errorism contentions are, by

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<sup>49</sup> In addressing this issue, the Commission examined the regulatory history for the license renewal regulations and focused on two key rulemakings. First, the Statement of Considerations for the 1995 license renewal rule states:

[T]he portion of the CLB that can be impacted by the detrimental effects of aging is limited to the design-bases aspects of the CLB. All other aspects of the CLB, e.g., . . . physical protection (security), . . . are not subject to physical aging processes that may cause noncompliance with those aspects of the CLB.

Final Rule: “Nuclear Power Plant License Renewal; Revisions,” 60 Fed. Reg. 22,461, 22,475 (May 8, 1995) (Continued)

their very nature, directly related to security and are therefore, under our rules, unrelated to ‘the detrimental effects of aging.’ Consequently, they are beyond the scope of, not ‘material’ to, and inadmissible in, a license renewal proceeding.’’ *McGuire/Catawba*, CLI-02-26, 56 NRC at 364. The Commission repeated this principle in *Millstone* when it affirmed a Licensing Board decision ruling that terrorism issues are not within the scope of license renewal proceedings. CLI-04-36, 60 NRC at 638. In doing so, the Commission specifically stated “‘security issues at nuclear power reactors, while vital, are simply not among the aging-related questions at stake in a license renewal proceeding.’” *Id.*

These two cases make clear that security issues are outside the scope of license renewal proceedings. The only attempt that DPS makes to address this adverse precedent is to argue that the license renewal rules predate the September 11, 2001, terrorist attacks and the *Mothers for Peace* decision. See DPS Reply at 43-47. This argument is unpersuasive on both counts. First, the *Millstone* and *McGuire/Catawba* cases were decided *after* the September 11th attacks. The Commission emphasized that it “‘takes its security responsibilities seriously and has taken numerous regulatory steps to enhance security at nuclear power reactors.’” *Millstone*, CLI-04-36, 60 NRC at 638.<sup>50</sup>

Second, the *Mothers for Peace* decision is a NEPA decision that is not relevant to the current discussion of whether a security-related safety (i.e., AEA-related) contention may be admitted in a license renewal proceeding. In *Mothers for Peace*, the Ninth Circuit held that, given NRC’s substantial consideration of terrorist attack scenarios under the AEA, NRC is not entitled to refuse categorically to consider the environmental effects of a terrorist attack on a nuclear facility under NEPA. *Mothers for Peace*, 449 F.3d at 1035. DPS Contention 3 is not based on NEPA. Instead, it is a safety contention based on the AEA. Accordingly, *Millstone* and *McGuire/Catawba*, not *Mothers for Peace*, are controlling. Given

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1995). Second, the Statement of Considerations for the 1991 license renewal rule “concludes that a review of the adequacy of existing security plans is not necessary as part of the license renewal review process.” Final Rule: “Nuclear Power Plant License Renewal,” 56 Fed. Reg. 64,943, 64,967 (Dec. 13, 1991).

<sup>50</sup> It is because of the importance of security systems that the Commission does not wait until the license renewal stage to address the aging of security systems, but rather actively manages them under the current licensing basis. See, e.g., 10 C.F.R. §§ 73.46(g)(1), 73.55(g)(1). As the Commission explained in the 1991 Statement of Considerations for the license renewal rule:

The requirements of 10 CFR part 73, notably the testing and maintenance requirements of 10 CFR 73.55(g), include provisions for keeping up the performance of security equipment against impairment due to age-related degradation or other causes. Once a licensee establishes an acceptable physical protection system, changes that would decrease the effectiveness of the system cannot be made without filing an application for license amendment in accordance with 10 CFR 50.54(p)(1).

56 Fed. Reg. at 64,967.

this precedent, we find that security SSCs do not fall within the scope of section 54.4(a)(2). The issues raised are beyond the scope of this license renewal proceeding, and therefore DPS Contention 3 is not admissible.<sup>51</sup>

#### **4. *DPS “Reservation” of Right to File Contentions on Energy Alternatives***

In addition to submitting the three contentions discussed above, DPS states that because the Staff has yet to develop an SEIS, DPS cannot file contentions related to energy alternatives at this time, but it reserves the right to do so should subsequent filings by Entergy or the Staff require such an action. DPS Petition at 9. Under NRC rules, a petitioner must file contentions based on the documents and information available at the time the petition is filed. 10 C.F.R. § 2.309(f)(2). With regard to NEPA issues, the regulation states “the petitioner shall file contentions based on the applicant’s environmental report” but “may amend those contentions or file new contentions if there are 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 documents.” 10 C.F.R. § 2.309(f)(2). Therefore, no “reservation of rights” is necessary. To the extent that the draft or final SEIS contains data or conclusions that differ significantly from the data or conclusions in Entergy’s environmental report or in the GEIS, DPS is entitled to use 10 C.F.R. § 2.309(f)(2) as the grounds to file a new or amended contention. However, should DPS file an energy alternatives contention that is *not* based on new information, i.e., data or conclusions that differ significantly from data or conclusions in Entergy’s ER or the GEIS, the contention can only be admitted upon a favorable balancing of the factors found in 10 C.F.R. § 2.309(c).<sup>52</sup>

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<sup>51</sup> Entergy filed a motion to strike portions of the DPS reply, claiming it seeks to raise new arguments that were not included in the original petition but fails to address the criteria for nontimely filings. *See* Entergy Motion To Strike DPS Reply at 12, 14. Considering the purported illicit information relating to the reply that relates to DPS Contention 3 would not change our conclusion that the issues DPS seeks to raise in this contention are outside of the scope of this proceeding. Therefore, we deny Entergy’s motion to strike the portions of the DPS reply that relate to DPS Contention 3 as the controversy is moot.

<sup>52</sup> Any new, amended, or nontimely contentions would also have to meet the requirements of 10 C.F.R. § 2.309(f)(1). *See Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-06-14, 63 NRC 568 (2006).

## D. Ruling on NEC Contentions

### 1. NEC Contention 1 (Environmental)

Entergy Failed to Assess Impacts to Water Quality.<sup>53</sup>

In its only contention filed under NEPA, NEC asserts that Entergy's environmental report (ER) failed to "sufficiently assess[]" the environmental impacts of the license renewal, specifically the impacts of increased thermal discharges into the Connecticut River over the 20-year license extension period. NEC Petition at 10, 13. NEC points out that Entergy acknowledges that the continuing thermal discharge effects from the renewal are classified as a Category 2 issue. *Id.* at 11 (citing ER at 4-16). However, NEC argues that Entergy's effort to address the issue in its ER is flawed because it relies on a National Pollutant Discharge Elimination System (NPDES) permit<sup>54</sup> issued by the state. *Id.* Rather than providing an assessment of the environmental impacts of its thermal discharges, "Entergy simply concludes that the impact of this increased discharge is small because an NPDES permit may be issued." NEC Petition at 11. NEC objects to the failure of the ER to address the environmental impact of its thermal discharges and states that extended use of the once-through cooling system at Vermont Yankee would result in a one-degree increase in water temperature, which may have significant impacts on the biota in the river. *Id.* NEC argues that Entergy's reliance solely on its NPDES permit is not sufficient because the permit is under appeal and, even if issued, will only be valid for 5 years (2006-2011), and thus will not cover the cumulative impacts of thermal discharges over the 20-year period of the license renewal term (2012-2032). *Id.* NEC asserts that Entergy's ER fails to provide a sufficient basis for the "hard look" at environmental impacts that NEPA requires. *Id.* at 12. Furthermore, says NEC, by failing to provide a convincing rationale for its statement that the impacts of its thermal discharge are small, Entergy has failed to comply with NRC regulations requiring it to include "adverse information" in its environmental report. *Id.* (citing 10 C.F.R. § 51.45(e)).

NEC submits the declaration of Dr. Ross T. Jones, a researcher in ecology and evolutionary biology who specializes in aquatic species, in support of the contention. Dr. Jones asserts that the populations of some native species found in the Connecticut River have declined in recent years, and he cites several studies that show how temperature increases can affect the behavior and physiology of such species. NEC Petition, Exh. 6, Decl. of Dr. Ross T. Jones, Ph.D. (May 24,

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<sup>53</sup> NEC Petition at 10.

<sup>54</sup> NPDES permits are issued by the U.S. Environmental Protection Agency (EPA) or by authorized states, pursuant to section 402 of the Federal Water Pollution Control Act of 1972 (FWPCA, Clean Water Act, or CWA), 33 U.S.C. § 1251 *et seq.* NPDES permits impose effluent limitations and other requirements on facilities that discharge pollutants into the waters of the United States.

2006), ¶ 10 [Jones Decl.]. He concludes that a 1-degree temperature increase could have a significant impact on heat-sensitive native species, and that understanding this impact is “even more important if the thermal discharge is going to be occurring for a twenty-year period.” *Id.* ¶¶ 11-12.

Entergy responds with the claim that NEC Contention 1 is inadmissible as a challenge to NRC’s license renewal rules and “barred” by the FWPCA. Entergy Answer to NEC at 11. First, Entergy asserts that NEC’s petition is a “mischaracterization of the Application” in that it implies that the temperature increase is related to the license renewal, which is not the case. *Id.* Entergy claims that 10 C.F.R. § 51.53(c)(3)(ii)(B) expresses Entergy’s only obligations here. *Id.* at 12. This regulation specifies that applicants with plants that have once-through cooling water systems

shall provide a copy of current Clean Water Act 316(b) determinations and, if necessary, a 316(a) variance in accordance with 40 CFR part 125, or equivalent State permits and supporting documentation. If the applicant can not provide these documents, it shall assess the impact of the proposed action on fish and shellfish resources resulting from heat shock and impingement and entrainment.

10 C.F.R. § 51.53(c)(3)(ii)(B). Entergy argues that the NPDES permit it will provide is Vermont’s 316(a) determination, and that “[t]herefore, under NRC rules, no further analysis [is] required” and NEC’s contention is barred. Entergy Answer to NEC at 12.

Entergy points out that section 511(c) of the FWPCA specifies that nothing in NEPA authorizes NRC to review or impose any “effluent limitation or other [FWPCA] requirement” as a condition of a license. *Id.* at 13. If “the EPA or an authorized state has approved a plant’s cooling water system,” says Entergy, the NRC must “weigh the overall project in light of the conclusions of the EPA or authorized state” and “must take that assessment at face value.” *Id.* at 14. Additional analysis is not appropriate. *Id.* (citing *Tennessee Valley Authority* (Yellow Creek Nuclear Plant, Units 1 and 2), ALAB-515, 8 NRC 702, 712-13, 715 (1978)). According to Entergy, the NPDES permit and its supporting documentation provide an assessment that “is dispositive in this proceeding.” *Id.* at 16.

In addition, Entergy argues, the contention should be rejected on the ground that “it is not supported by a basis indicating any genuine dispute concerning a material issue.” Entergy Answer to NEC at 11. NEC’s expert does not assert that thermal discharges will cause declines in aquatic species, says Entergy, but rather that such declines may occur and that additional studies are needed. *Id.* at 17. The example of adverse effects on the shad population were due to temperature changes of 9 to 18 degrees, far larger than permitted under the Vermont Yankee NPDES permit. *Id.* at 18. Entergy asserts that such “bare or conclusory assertions,

even by an expert” are not sufficient to support admission of a contention. *Id.* (citing *System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), LBP-04-19, 60 NRC 277, 289 (2004)). Because NEC has not provided sufficient support, says Entergy, Contention 1 fails to meet the contention admissibility standards of 10 C.F.R. § 2.309(f)(1) and should be rejected.

The NRC Staff does not object to admitting Contention 1 provided that it is limited to considering the effects of a 1-degree temperature increase on the American shad population during the license renewal period. Staff Answer to NEC at 8. However, the Staff goes on to complain that NEC’s expert does not provide any information to explain why the impacts of a 1-degree increase in the river temperature would be any different from the impacts under a prior permit and why Entergy’s characterization of the impacts as “small” is incorrect. *Id.* In the absence of such a showing, says the Staff, NEC has failed to show a genuine dispute with the Applicant as required by NRC regulations. *Id.* Accordingly, the Staff urges the rejection of “any basis challenging the *adequacy* of Entergy’s assessment” and asserts that the only contention basis that remains is the “alleged *absence* of an assessment of the impacts of the discharge temperature increase, which can be cured by the submission of the amended [NPDES] permit.” *Id.* at 9 (emphasis added). The Staff also notes that, to the extent that NEC seeks to have the NRC impose environmental monitoring conditions, the contention must be rejected as beyond NRC’s authority. *Id.*

In its reply, NEC disputes the claim that the NPDES permit — “an expired permit that, if renewed, may not be renewed under the same terms and would expire before any license renewal issues” — disposes of Entergy’s NEPA obligations during the license renewal term. NEC Reply at 2. NEC asserts that Entergy is also obligated to obtain a state water quality certification under section 401 of the FWPCA, 33 U.S.C. § 1341, and that Entergy has not done so. *Id.* at 3. Furthermore, says NEC, the NPDES permit that Entergy submitted with its answer expired the day after it was signed and is therefore not current. *Id.* at 4. Whatever the status of the permit, however, NEC claims that the extensive monitoring requirements contained therein “underscore[] Entergy’s failure to provide a sufficient assessment of its discharge’s impacts.” *Id.* at 5. NEC also points out Entergy’s statement that there is a 1-degree temperature increase related to an increase as *measured at a specific point* in the Connecticut River — Station 3 — 1.4 miles downstream from the discharge point, and notes that the temperature increases will be greater than 1 degree *above* that point. *Id.* at 11-12. Finally, NEC rejects the proposition that FWPCA § 511 precludes NEPA review from looking beyond an NPDES permit and states:

Entergy misreads this provision. It only states that NEPA shall not be deemed to authorize federal agencies to review a state’s water quality standards (effluent limitations) established under the [FWPCA] or the adequacy of a § 401 water quality

certification. *Id. See also S.D. Warren*, 547 U.S. at \_\_\_, 126 S.Ct. at 1852, n.8. Requiring an adequate assessment is not a challenge to Vermont’s Water Quality standards or the effluent limitations they establish.

*Id.* at 14.

Entergy’s motion to strike portions of NEC’s reply challenges those portions of the argument that related to section 401 of the FWPCA and others that relate to temperature increases of greater than 1 degree on the grounds that these matters exceed the scope of the original contention. Entergy Motion To Strike NEC Reply at 9-12, 14. NEC argues that all of its reply is permissible and asserts that references to section 401 of the FWPCA merely add support to its claim that no NPDES permit could ever demonstrate compliance with the Act for the entire 20-year license renewal period. NEC Opposition to Entergy Motion To Strike NEC Reply at 6. With regard to Entergy’s arguments that NEC must limit its contention to a 1-degree temperature increase, NEC states that it is a “truism” that “[h]eating the Connecticut River by 1°F a mile and one-half downstream from the plant obviously requires a much higher discharge temperature that will heat portions of the River closer to the point of discharge by much more than one degree,” and there was nothing objectionable in NEC’s pointing this out in its reply. *Id.* at 8.

The Board concludes that NEC Contention 1 is admissible under 10 C.F.R. § 2.309(f)(1). As an initial matter, 10 C.F.R. § 2.309(f)(1)(i) is met because NEC has provided a “concise statement of the law or fact to be raised or controverted” — “whether Entergy’s [ER] sufficiently assesses the impacts of increased thermal discharges over the requested twenty-year license extension.”<sup>55</sup> NEC has satisfied 10 C.F.R. § 2.309(f)(2)(ii) by providing a “brief explanation of the basis” or logic underlying the contention — that the ER contains an insufficient analysis of the thermal impacts in the Connecticut River and merely refers to an NPDES permit, which is under appeal, of allegedly uncertain status, and does not cover the 20 years covered by the proposed license renewal. *Id.* at 11. The issue of whether the ER complies with the provisions of 10 C.F.R. Part 51 relevant to Category 2 environmental matters is certainly “within the scope” of a license renewal proceeding and “material,” as required by 10 C.F.R. § 2.309(f)(1)(iii) and (iv),

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<sup>55</sup> NEC Petition at 13. With regard to the NRC Staff’s argument that the contention can be admitted if limited to a 1-degree increase, we believe that the contention must be read reasonably. For example, we do not believe that NEC is alleging that Entergy is planning to increase the temperature of the Connecticut River by 1 degree for the entire length of the river, both upstream and downstream of the discharge point, from the river’s source to the sea. Instead, it appears that the 1-degree increase is measured at some specific point downstream of the place where the plant’s outfall pipe discharges heated water into the Connecticut River. Above that measuring point (and below the outfall) there will be a mixing zone where the temperature increase in the river will be greater than 1 degree. Below that measuring point, the temperature increase in the river will likely be less than 1 degree.

respectively. The declaration of Dr. Jones is the type of “concise statement of the alleged facts or expert opinions” required by section 2.309(f)(1)(v). Suggestions that Dr. Jones’ declaration is “bare or conclusory,” Entergy Answer to NEC at 18, are without merit. He has provided extensive information to support his conclusions, and efforts to refute that information on substantive grounds are inappropriate at the contention admissibility stage of the proceeding. And the challenges to NEC’s petition indicate that questions of both law and fact are sharply disputed, satisfying the requirement that a genuine dispute exist. 10 C.F.R. § 2.309(f)(1)(vi).

The main focus of the pleadings thus far seems to concern several substantive and merits-related issues. Although it is not this Board’s intent to resolve all questions related to this contention at this early stage in the proceeding, some discussion of our reasoning in this matter is appropriate at this point.

First, we reject Entergy’s assertion that this contention is barred by section 511(c) of the FWPCA. This is apparent both from the basic structure of NEPA and from the literal language of section 511(c). The basic scheme of NEPA is to require federal agencies to analyze the environmental impacts of each major federal action significantly affecting the environment. NEPA is procedural only and does not specify that the agency must take the least environmentally damaging course of action. NEPA assumes, but does not impose or require, that the action under environmental study is subject to other laws, regulations, and licenses, such as water, air, hazardous waste, zoning, and traffic regulations and permits. While the NEPA environmental impact statement process considers information regarding such other legal requirements, the fact that the applicant is subject to, and complying with, them does not obviate the NEPA mandate that the federal agency perform an EIS covering these topics. Thus, NRC’s NEPA regulations state:

Due consideration will be given to compliance with environmental quality standards and requirements that have been imposed by Federal, State, regional, and local agencies having responsibility for environmental protection . . . The environmental impact of the proposed action will be considered in the analysis with respect to matters covered by such standards and requirements irrespective of whether a certificate or license from the appropriate authority has been obtained.

10 C.F.R. § 51.71(d). More importantly for purposes of NEC Contention 1, the NRC regulations flatly state that

[c]ompliance with the environmental quality standards and requirements of the Federal Water Pollution Control Act . . . is not a substitute for and does not negate the requirement for NRC to weigh all environmental effects of the proposed action,

including the degradation, if any, of water quality, and to consider alternatives to the proposed action that are available for reducing adverse effects.

10 C.F.R. § 51.71(d) n.3.

Turning to the specific language of section 511 of the FWPCA, nowhere does it relieve NRC, or any federal agency, from the basic NEPA duty to do an EIS covering “all environmental effects . . . including water quality.” Section 511 merely states that NRC cannot second-guess or impose its own effluent limitations, or other water quality requirements that EPA or the State may impose under the FWPCA. The statutory language specifies that

Nothing in [NEPA] shall be deemed to —

(A) authorize any Federal agency . . . to review any effluent limitation or other requirement established pursuant to this Act or the adequacy of any certification under section 401 of this Act; or

(B) authorize any such agency to impose as a condition precedent to the issuance of any license or permit, any effluent limitation other than any such limitation established pursuant to this Act.<sup>56</sup>

In an early case, the Appeal Board construed section 511(c) as follows: “This Commission still must consider any adverse environmental impact that would accrue from the operation of the facility in compliance with EPA-imposed [FWPCA] standards; but it cannot go behind either those standards or the determination by EPA or the state that the facility would comply with them.” *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-366, 5 NRC 39, 52 (1977). The Commission subsequently quoted this decision with approval, adding that “[t]he relationship of EPA and this Commission in the present setting may be summarized thus: EPA determines what cooling system a nuclear power facility may use and NRC factors the impacts resulting from the use of that system into the NEPA cost-benefit analysis.” *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1, 26 (1978).

Thus, we reject Entergy’s assertion that section 511(c) of the FWPCA bars NEC Contention 1. Certainly, section 511(c) bars NRC from reviewing or imposing effluent limitations, water quality certification requirements, or other FWPCA requirements. But it does not bar NRC from including water quality matters in its assessment of the environmental impact of the license renewal. To

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<sup>56</sup> 33 U.S.C. § 1371(c)(2). A recent Supreme Court case has taken note of this prohibition in its analysis. *S.D. Warren Co. v. Maine Board of Environmental Protection*, 126 S. Ct. 1843, 1853 n.8 (2006).

the contrary, NEPA requires the NRC to do so. The required EIS, including water quality matters, then becomes a basis for NRC's ultimate NEPA determination of "whether or not the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable at the license renewal stage." 10 C.F.R. § 51.95(c)(4); *see also* 10 C.F.R. § 51.71(d) n.3.

Turning to the specifics of NEC Contention 1 and the pleadings, we see that they focus on a second set of regulatory issues that are narrower and more difficult than the section 511(c) issue. For example, a key issue raised by the pleadings is whether Entergy has satisfied the requirement that renewal applicants with plants with once-through cooling water systems

shall provide a copy of current Clean Water Act 316(b) determinations and, if necessary, a 316(a) variance in accordance with 40 CFR part 125, or equivalent State permits and supporting documentation. If the applicant cannot provide these documents, it shall assess the impact of the proposed action on fish and shellfish resources resulting from heat shock and impingement and entrainment.

10 C.F.R. § 51.53(c)(3)(ii)(B). Entergy points to the March 30, 2006, amendment to its NPDES permit that was issued by the State of Vermont and claims that this document satisfies the first prong of section 51.53(c)(3)(ii)(B).<sup>57</sup> But the meaning and status of that amendment to the NPDES permit are unclear, given that the permit expired on March 31, 2006, is the subject of an appeal, and was recently stayed. *Entergy Nuclear/Vermont Yankee Thermal Discharge Permit Amendment* (State of Vermont Env'tl. Court, Docket No. 89-4-06 Vtec, August 28, 2006) (Appeal of Connecticut River Watershed Council, *et al.*). If the NPDES permit, which addresses the increased thermal impact of the Vermont Yankee facility, is valid and effective, then the first prong of 10 C.F.R. § 51.53(c)(3)(ii)(B) is satisfied. If not, then the second prong requires Entergy to "assess the impact on fish and shellfish resources resulting from heat shock." 10 C.F.R. § 51.53(c)(3)(ii)(B). Presumably, as specified by the NRC Staff, these factual issues will be confronted in the litigation of NEC Contention 1.

Another issue concerning thermal impacts on aquatic systems is whether 10 C.F.R. § 51.53(c)(3)(ii)(B) is the *only* requirement the applicant must meet. The regulation focuses only on "heat shock." Does NEPA require an assessment of all environmental impacts of thermal discharges into a river or only the "heat shock" impacts? Are the general ER requirements found at 10 C.F.R. §§ 51.45(c) and 51.53(c) displaced, or instead merely supplemented, by the more narrow 10

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<sup>57</sup> Letter from Ted A. Sullivan, Site Vice President, Vermont Yankee Nuclear Power Station, to Nuclear Regulatory Commission (License Renewal Application, Amendment No. 6) (July 27, 2006), ADAMS Accession No. ML062130080.

C.F.R. § 51.53(c)(3)(ii)(B)? This is a matter of regulatory interpretation we need not reach today.<sup>58</sup>

Likewise, NEC Contention 1 raises the issue of the dichotomy of the time periods covered by the respective permits. Entergy is asking for license renewal that will cover the period from 2012 to 2032. In order to comply with NEPA, NRC must assess the environmental impacts, including thermal water impacts, for the 20 years in question. Meanwhile, Entergy's NPDES permit (and/or FWPCA 316(b) determination), even once it is final and effective, will expire in 5 years. Under these circumstances, does Entergy satisfy 10 C.F.R. § 51.53(c)(3)(ii)(B) and Part 51 in general, and does NRC satisfy its NEPA duties, by simply attaching a copy of an NPDES permit that will expire before the NRC license renewal even takes effect? Again, this is a legal and factual issue squarely raised by NEC Contention 1.

Turning to another aspect of this contention, in its motion to strike, Entergy takes particular umbrage at those portions of NEC's reply that make reference to certification under section 401 of the FWPCA. Entergy Motion To Strike NEC Reply at 9-11. According to Entergy, "the original contention does not relate to whether a 401 certification is required," and "NEC's new claims regarding 401 certification [are not] related to the purported bases for the original contention." *Id.* at 9-10. Entergy also takes exception to NEC's reference to temperature increases of greater than 1 degree in certain parts of the river. *Id.* at 11. NEC responds that all of its reply "contains only permissible argument and information directly responsive to Entergy and the NRC Staff answers." NEC Opposition to Entergy Motion To Strike NEC Reply at 5.

The Board grants in part and denies in part Entergy's motion to strike portions of NEC's reply. We agree with Entergy that NEC's attempt to introduce an entirely new argument regarding the alleged need for a section 401 certification is not permissible in a reply. *See* Section III.A.6. We therefore strike those portions of NEC's reply that relate to certification under section 401 of the CWA: the last eight lines of page 3, the first two lines of page 4, the first and second full paragraphs on page 6, and the last five lines of the first full paragraph on page 14. We deny Entergy's motion with respect to all other portions of the reply related to NEC Contention 1, for reasons already stated above.<sup>59</sup> *See supra* note 55.

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<sup>58</sup> As a general matter, an applicant's environmental report must include "a discussion of the status of compliance with applicable environmental quality standards and requirements including, but not limited to, . . . *thermal and other water pollution limitations* or requirements which have been imposed by Federal, State, regional, and local agencies." 10 C.F.R. § 51.45(d) (emphasis added). The question, then, is not whether Entergy must provide any information on the effects of thermal effluents in its ER, but rather whether the materials Entergy has submitted satisfy *all* obligations in this area.

<sup>59</sup> The Board will address NEC's motion to amend this contention at a later date. *See* NEC's Late Contention or, Alternatively, Request for Leave To Amend or File a New Contention (Aug. 7, 2006).

## 2. *NEC Contention 2 (Safety)*

Entergy's License Renewal Application does not include an adequate plan to monitor and manage the effects of aging [due to metal fatigue] on key reactor components that are subject to an aging management review, pursuant to 10 C.F.R. § 54.21(a) and an evaluation of time limited aging analysis, pursuant to 10 C.F.R. § 54.21(c).<sup>60</sup>

NEC's first safety contention alleges that section 4.3 of Entergy's application acknowledges that "key [reactor] components will crack and/or fail due to metal fatigue during the proposed renewed license term" but that Entergy has failed to demonstrate that these aging effects will be adequately managed. NEC Petition at 14-15. The regulations specify that each renewal application must contain "an evaluation of time-limited aging analyses (TLAAs<sup>61</sup>)" wherein:

The applicant shall demonstrate that —

- (i) The analyses remain valid for the period of extended operation;
- (ii) The analyses have been projected to the end of the period of extended operation; or
- (iii) The effects of aging on the intended function(s) will be adequately managed for the period of extended operation.

10 C.F.R. § 54.21(c)(1)(i)-(iii). NEC also cites 10 C.F.R. § 54.21(a)(3) (the application must "demonstrate that the effects of aging will be adequately managed"). NEC Petition at 16.

According to NEC, Table 4.3.3 of the application shows that Entergy does not meet the first two requirements of the regulation, i.e., subsections (i) and (ii). *Id.* at 15. NEC alleges that Entergy's own data show that the "cumulative use factors (CUFs) that identify which plant component is likely to develop cracks (CUF > 1.0) during the extended period of operation" is greater than 1.0 for a number of key reactor components and piping. *Id.*, Exh. 7, Decl. of Dr. Joram Hopenfeld (May 12, 2006) ¶¶ 8-10 [Hopenfeld Decl.]. NEC asserts that these data indicate that Entergy's time-limited aging analyses (TLAAs) for metal fatigue are not valid for the entire period of license renewal and cannot be projected to the

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<sup>60</sup> NEC Petition at 14. This is a direct quote of the first sentence of NEC's section on Contention 2, and more accurately captures the thrust of the petition than does the title of the section.

<sup>61</sup> NRC license renewal regulations define time-limited aging analyses as "licensee calculations and analyses" that (1) "[i]nvolve systems, structures, and components within the scope of a license renewal"; (2) "[c]onsider the effects of aging"; (3) [i]nvolve time-limited assumptions defined by the current operating term"; (4) "[w]ere determined to be relevant by the licensee in making a safety determination"; (5) "[i]nvolve conclusions . . . related to the capability of the system, structure, or component to perform its intended function"; and (6) "[a]re contained or incorporated by reference in the [current licensing basis]" for the plant. 10 C.F.R. § 54.3.

end of that period, and therefore that Entergy has not complied with 10 C.F.R. § 54.21(c)(1)(i) and (ii). NEC Petition at 15.

Turning to 10 C.F.R. § 54.21(c)(1)(iii), NEC asserts that Entergy failed to “demonstrate that . . . the effects of aging . . . will be adequately managed.” NEC points out that Entergy’s demonstration that the effects of aging will be adequately managed consists entirely of Entergy’s statement that it will implement one or more of the following:

- (1) further refinement of the fatigue analyses to lower the predicted CUFs to less than 1.0
- (2) management of fatigue at the affected locations by an inspection program that has been reviewed and approved by the NRC (e.g., periodic non-destructive examination of the affected locations at inspection intervals to be determined by a method acceptable to NRC);
- (3) repair or replacement of the affected locations.

NEC Petition at 16 (citing the license renewal application at 4.3-7).

NEC alleges that Entergy’s proposal is “vague, incomplete, and lacking in transparency” and does not constitute a demonstration that the effects of aging will be adequately managed. NEC Petition at 16. NEC asserts that Entergy’s compliance plan does not explain how the CUFs for plant components will be recalculated to yield acceptable values and does not contain either a clear inspection schedule or specific information on how Entergy will repair or replace affected components. NEC Petition at 16; Hopenfeld Decl. ¶¶ 11-13. In the absence of more specific information, says NEC, Entergy’s aging management plan for metal fatigue amounts to nothing more than a “plan to develop a plan” and consequently does not meet the requirements of NRC license renewal regulations. NEC Petition at 16-17.

Entergy argues that Contention 2 “is inadmissible because it fails to provide a factual basis demonstrating the existence of any genuine, material dispute with the Application.”<sup>62</sup> Entergy alleges that the Application includes a strategy

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<sup>62</sup>Entergy Answer to NEC at 18. Entergy uses essentially the same broad objection — that the contention “fails to provide a *factual basis* demonstrating the existence of any *genuine, material dispute*” (emphasis added) — in response to many of the contentions. See Entergy Answer to NEC at 18, 25, 30, and 36. But throughout its discussion as to why NEC Contention 2 fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(i)-(vi), Entergy does not cite the regulation or its pertinent subsections. Perhaps Entergy is complaining that the contention lacks a brief explanation of its “basis,” as required by 10 C.F.R. § 2.309(f)(1)(ii). Or perhaps Entergy is asserting that the issue raised in the contention is not “material” as required by subsection (iv). Alternatively, it may be that the contention lacks the factual support required by subsection (v), or that there is no showing of a

(Continued)

for managing metal fatigue that combines 10 C.F.R. § 54.21(c)(1)(i) and 10 C.F.R. § 54.21(c)(1)(iii) — Entergy will either refine the CUF calculation for a given component until it comes out to the right number, or it will show how aging of that component will be managed during that period. *Id.* at 18-19. According to Entergy, only the problem of environmentally assisted fatigue — metal fatigue due to exposure to water in the plant — has been raised in this contention, and NEC has failed to challenge any of the specific elements of Entergy’s proposed plan in this area. *Id.* at 20-21. Entergy also suggests that any such challenge would fail. The analyses presented in the Application sections relevant to environmentally assisted fatigue are conservative, says Entergy, and recalculating CUFs is therefore feasible at Vermont Yankee. *Id.* at 22. Entergy also claims that it has omitted certain elements of its management plan for plant components affected by environmentally assisted fatigue because it is waiting for new, NRC-approved guidance that is due out at the end of this year. *Id.* at 24.

The NRC Staff does not object to admitting NEC Contention 2 provided it is limited to questioning “whether Entergy has provided information on how CUF values are calculated” and “whether Entergy’s aging management plan includes a monitoring plan with an inspection schedule and criteria for inspection frequency.” Staff Answer to NEC at 11. The contention is “supported by a thin basis,” according to the Staff, and does not provide information to support its challenges to information that does appear in the Application. *Id.* Therefore, says the Staff, the contention should be limited to alleged omissions from the Application and may be rendered moot by subsequent submissions by Entergy. *Id.*

In its reply, NEC repeats its claim that Entergy’s defense of its program for managing environmentally assisted fatigue is “vague, incomplete and lacking in transparency.” NEC Reply at 15. Entergy fails to provide a technical basis for its claim that the CUF values in the Application are conservative, says NEC, and fails to provide enough information for anyone to evaluate its proposed reanalysis of these values. *Id.* at 17. According to NEC, Entergy’s plan to wait for new guidance before issuing its inspection schedule proves that the Application is deficient and premature at this time. *Id.* at 17-18. NEC also objects to the Staff’s proposal to limit the contention to items of omission, saying that such a plan “puts NEC in quite a ‘Catch 22’ situation — *i.e.*, NEC’s contention is insufficiently supported because NEC fails to address specifics of Entergy’s aging management plan that Entergy has not provided, and apparently has not developed.” *Id.* at 19.

In its motion to strike portions of NEC’s reply, Entergy alleged that the expert witness declaration attached to the reply contained two new allegations that are

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“genuine dispute” as required by subsection (vi). It would be helpful if Entergy tied its analysis to the pertinent regulation and specified which subsections of 10 C.F.R. § 2.309(f)(1) allegedly support its objection.

beyond the scope of the original contention and that therefore should be stricken. Entergy Motion To Strike of NEC Reply at 14. Specifically, Entergy claims that the original contention did not include a challenge to “(1) how the CUF values were calculated and adjusted for environmentally assisted fatigue; and (2) whether Entergy could rely on generic correction factors for certain components.” *Id.* (citations omitted). NEC responds by claiming that the original contention challenged Entergy’s entire plan for managing environmentally assisted fatigue, including the methods used to calculate the CUF values in the Application. NEC Opposition to Entergy Motion To Strike NEC Reply at 9-10. The second declaration by NEC’s expert merely provides additional support for the original contention and is therefore admissible. *Id.* at 11.

The Board finds NEC Contention 2 to be admissible. NEC has identified an aging management issue that is clearly within the scope of a license renewal proceeding and has provided the threshold level of explanation and support required by 10 C.F.R. § 2.309(f)(1). NEC’s explanation of the logic underlying its contention, in particular its description of how alleged shortcomings in the Application may result in violations of specific NRC license renewal regulations if not addressed, satisfies the basis requirement of 10 C.F.R. § 2.309(f)(1)(ii). NEC has also provided, in the form of a declaration by its expert, a “concise statement of the alleged facts or expert opinions which support the requestor’s/petitioner’s position.” 10 C.F.R. § 2.309(f)(v).

NEC demonstrates a genuine, material dispute with the Application, as required by 10 C.F.R. § 2.309(f)(1)(iv) and (vi), by raising the question of whether Entergy’s “plan to develop a plan” to manage environmentally assisted fatigue is sufficient to meet the license renewal requirements of 10 C.F.R. § 54.21(c)(1)(i)-(iii). Because Entergy itself has stated that it is relying on subsection (iii) of this regulation (i.e., the requirement to *demonstrate* that the effects of aging *will* be adequately managed) in the case of environmentally assisted fatigue, Entergy Answer to NEC at 19, a legitimate challenge to Entergy’s aging management plan constitutes a genuine dispute.

Although we do not intend to address the merits of the contentions in this decision on admissibility, a quick glance at Entergy’s brief presentation of this issue in its Application, Application at 4.3-6 to 4.3-7, suggests that NEC’s challenge has sufficient legitimacy to warrant further exploration in this proceeding. Entergy does specify the plant locations at which environmentally assisted fatigue is most likely to cause a problem, but the description of Entergy’s plans to manage any problems that occur takes up only half a page and appears to *summarize options for future plans* rather than *demonstrating* compliance. *Id.* Efforts by Entergy’s attorneys to justify the options presented in the Application, for example, by claiming that reanalyzing the CUF factors is a feasible option, fail to address NEC’s concern that the brief presentation in the Application provides no information at all about *how* Entergy intends to reanalyze the CUF factors if

it should become necessary to do so. Where such reanalysis does not produce a CUF less than 1, Entergy's statement that it will implement "management of fatigue at the affected locations by an inspection program that has been reviewed at and approved by the NRC (e.g., periodic non-destructive examination of the affected locations at inspection intervals to be determined by method acceptable to NRC)," *id.* at 4.3-7, is a bit vague. The nature of the inspection program, the type of examination, the inspection locations, the intervals and the methods of inspection have all been left entirely open. Is this a "demonstration" that the effects of aging will be effectively managed, or just a promise or "plan to develop a plan"? We recognize that it may not be possible for Entergy to specify in advance every detail of its aging management program for metal fatigue — future events will inevitably determine some of the actions that Entergy will have to take. However, there is a range of possibilities between a fully elaborated management, analysis, and inspection program and the extremely abbreviated presentation that Entergy has provided here. Presenting sufficient information in the application to "demonstrate that . . . the effects of aging on the intended function(s) will be adequately managed for the period of extended operation," is required by 10 C.F.R. § 54.21(c)(1)(iii) and 10 C.F.R. § 54.21(a)(3), and there is a legitimate legal and factual question as to whether Entergy has met this requirement. We therefore conclude that NEC has raised a genuine, material dispute with the Application and has therefore met the remaining contention admissibility requirements of 10 C.F.R. § 2.309(f)(1).<sup>63</sup>

### 3. *NEC Contention 3 (Safety)*

Entergy's License Renewal Application Does Not Include an Adequate Plan to Monitor and Manage Aging of the Steam Dryer During the Period of Extended Operation.<sup>64</sup>

In Contention 3, NEC challenges Entergy's plan to monitor and manage aging of the steam dryer, saying that "Entergy's proposed monitoring techniques are not adequate to detect crack propagation and growth because they are not based on actual measurement of crack initiation and growth, but instead rely on theoretical calculations of computer models — the Computational Fluid Dynamic [CFD] Model and Acoustic Circuit [AC] Model." NEC Petition at 17. NEC avers that "[p]redictions based on these models are subject to large uncertainties, and must

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<sup>63</sup> In admitting this contention, we find it unnecessary to rely on the portions of the NEC reply that Entergy argues improperly raise new arguments or claims not found in the original petition. *See* Entergy Motion To Strike NEC Reply at 14. Therefore, we deny Entergy's motion to strike the portions of the NEC reply that relate to NEC Contention 2 because the issue is now moot.

<sup>64</sup> NEC Petition at 17.

be confirmed by ‘hands-on’ assessment.’’ *Id.* NEC acknowledges that Entergy has indicated it will manage cracking in the steam dryer in accordance with the NRC’s Generic Aging Lessons Learned (GALL) Report, NUREG-1801, and with General Electric’s Services Information Letter on BWR steam dryer integrity, GE-SIL-644, but says that, even so, Entergy’s monitoring techniques are not adequate because they are based on “unproven computer models,” i.e, the CFD Model and AC Model, neither of which “were benchmarked against properly scaled dryer structure.” Hopenfeld Decl. ¶¶ 18-19.

The steam dryer at Vermont Yankee is prone to accelerated aging, says NEC, because the recent 20% power uprate has “increased flow-induced vibrations (FIV), which markedly increase cyclic loads on the steam dryer.” NEC Petition at 18. These stresses may cause the dryer to break, and loose parts may create safety hazards if they interfere with important components of the reactor system. *Id.* NEC’s expert, Dr. Hopenfeld, recommends that the existing cracks in the steam dryer be monitored continuously by a competent engineer. Hopenfeld Decl. ¶ 18.

Entergy argues that Contention 3 is inadmissible because it is “not supported by a basis demonstrating a material dispute with the Application.” Entergy Answer to NEC at 25. Entergy says that NEC “fail[s] to take issue with documentation available on the docket,” *id.* at 26, and cites to the Vermont Yankee’s application to NRC for an extended power uprate (EPU) which includes a separate adjudication before a different Board,<sup>65</sup> to demonstrate that the steam dryer monitoring program at Vermont Yankee includes visual inspection and monitoring by instrument in addition to the predictions generated by the models NEC contests. Entergy Answer to NEC at 27-30. Entergy asserts that NEC has an “ironclad obligation” to examine this information and use it to support its contention. *Id.* at 26 (citing *Duke Power Co. (Catawba Nuclear Station, Units 1 and 2)*, ALAB-687, 16 NRC 460, 468 (1982)). Entergy also alleges that Contention 3 is merely an attempt to revive steam dryer contentions that were rejected as late in the EPU proceeding. Entergy Answer to NEC at 26.

The NRC Staff admits that Contention 3 is within the scope of the proceeding “to the extent that it questions whether the two computer models provide an adequate basis for monitoring of crack propagation and growth . . . during the renewal period,” but argues that the contention is not supported adequately because Dr. Hopenfeld’s opinions are “conclusory.” Staff Answer to NEC at 12. The Staff quotes the familiar dicta that “neither mere speculation nor bare or conclusory assertions, even by an expert, . . . will allow admission of a proffered contention.” *Id.* at 13 (citing *Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site)*, LBP-04-17, 60 NRC 229, 241 (2004)). The

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<sup>65</sup> *Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station)*, Docket No. 50-271-OLA, ASLBP No. 04-832-02-OLA.

Staff therefore argues that Contention 3 lacks an adequate basis and fails to demonstrate a genuine dispute, and should therefore be rejected for failing to meet the contention admissibility standards of 10 C.F.R. § 2.309(f)(1).

In its reply, NEC emphasizes that

Entergy's program to monitor its steam dryer during the remaining six years of its current license term, developed in the EPU proceeding, does not address NEC's concern that Entergy has not developed an adequate program to monitor aging of the steam drying [*sic*] during the additional twenty years of its requested second license term.

NEC Reply at 21. Aging management of the steam dryer was not an issue in the EPU proceeding, says NEC, and the EPU proceedings did not "establish[] the technical basis for life extension." *Id.* NEC asserts that the duration of Entergy's visual monitoring program is finite,<sup>66</sup> and that the application in *this* proceeding does not extend the current program for the full 20 years of the license renewal term. *Id.* at 22. NEC attaches a second declaration by Dr. Hopenfeld and certain testimony from a proceeding before the Vermont Public Service Board in further support of the contention. Entergy's motion to strike portions of NEC's reply specifically challenge the portions that make these assertions, as well as related attachments. Entergy Motion To Strike NEC Reply at 13, 17.

As a threshold matter, the Board notes that since Entergy's existing license continues until 2012, its application for a license renewal necessarily only involves aging management matters *after* that date. Steam dryer monitoring and inspection plans for the time period prior to 2012 are not directly relevant to, or dispositive of, our ruling on NEC Contention 3 except to the extent that Entergy's license renewal application, or other materials properly before *this* Board at this stage in the proceeding, indicates a commitment to continue existing programs. Entergy's apparent assertion that the history of the steam dryer issue in the separate EPU proceeding should resolve the issue in this proceeding is therefore without foundation. As demonstrated by Entergy's own pleading, steam dryer issues were addressed in the EPU proceeding primarily in regard to the power ascension program toward EPU levels and the first few operating cycles thereafter. Entergy Answer to NEC at 28-30. The Board in the EPU proceeding denied several contentions related to steam dryer cracking because they were not timely, but noted that one of the steam dryer contentions "may satisfy the six basic criteria of 10 C.F.R. § 2.309(f)(1)." *Vermont Yankee*, LBP-06-14, 63 NRC at 589 n.35.

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<sup>66</sup> At oral argument, NEC's attorney emphasized that NEC is aware of Entergy's inspection and monitoring program for the current license period, and that the organization's main concern is visual inspection and monitoring during the license renewal term. Tr. at 331-32.

The rulings on contentions in other proceedings are not particularly relevant to the decision this Board must make on NEC Contention 3.

Taking these limits into account, the Board finds that NEC has demonstrated a “genuine dispute” under the standards of 10 C.F.R. § 2.309(f)(1)(vi) by raising a challenge to Entergy’s plans for aging management of the steam dryer beyond 2012. Dr. Hopenfled states his analysis and expert opinion as follows:

[T]he management of cracking at the steam dryer will be in accordance with current guidance per NUREG 1801, GE-SIL-644 and possibly future guidance from BWRRVIP-139, if approved by NRC. No matter which guidance Entergy follows, the status of the existing dryer cracks must be continuously monitored and assessed by a competent engineer.

Entergy’s proposed monitoring techniques are not adequate to detect crack propagation and growth because they are not based on actual measurements of crack initiation and growth. Instead, Entergy relies on unproven computer models and moisture monitors which only indicate that the dryer was already damaged. The estimated fatigue loads on the dryer are based on theoretical calculations of two computer models: the [CFD] Model and the [AC] Model. Neither the CFD nor the ACM were benchmarked against properly scaled dryer structure and therefore their predictions are subject to large uncertainties.

Hopenfeld Decl. ¶¶ 18-19.

The Board rejects the argument that these statements are “bald or conclusory.” We agree that NRC case law does not permit admission of contentions when petitioners “offer[] no tangible information, no experts, no substantial affidavits,” but instead submit only “bare assertions and speculation.” *Oyster Creek*, CLI-00-6, 51 NRC at 208. But this is not the case here, where Petitioners present sworn statements by an unchallenged expert who describes his professional reasoning and arrives at recommendations and conclusions based on that reasoning. Full evidentiary presentations are not required at the contention admissibility stage. NEC is not required to prove its contention at this time, but merely to identify the alleged shortcomings in Entergy’s application with enough specificity to ensure that “the Applicants are sufficiently put on notice so that they will know at least generally what they will have to defend against or oppose, and that there has been sufficient foundation assigned to warrant further exploration of [the] contention.”<sup>67</sup> We find that NEC has met this requirement.

We also reject the notion that NEC, in contending that Entergy’s reliance on the CFD Model and AC Model is problematic, has ignored the other monitoring activities that Entergy has proposed for the next 6 years, and therefore has

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<sup>67</sup> *Kansas City Gas & Electric Co.* (Wolf Creek Generating Station, Unit 1), LBP-84-1, 19 NRC 29, 34 (1984) (citing *Philadelphia Electric Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20-21 (1974)).

raised no genuine dispute. To the contrary, Dr. Hopenfeld specifically notes that “management of cracking at the steam dryer will be in accordance with current guidance per NUREG-1801 [and] GE-SIL-644.” As we see it, NEC is arguing that, even with such monitoring, reliance on the models during the renewal period that starts in 2012 is inappropriate.<sup>68</sup>

In admitting this contention, this Board grants in part and denies in part Entergy’s motion to strike portions of NEC’s reply. Specifically, the Board strikes the first paragraph on page 21 of the reply, the first full paragraph on page 23, all portions of the second Hopenfeld declaration concerning this contention (¶¶ 11-15), and all of the attached testimony from the proceeding before the Vermont Public Services Board. These portions of the reply and of its attachments include new arguments and factual information that were not included in the initial petition and do not directly address challenges in the answers, and that therefore exceed the permissible scope of a reply. *See* Section III.A.6.

The Board denies Entergy’s motion to strike relating to NEC Contention 3 with respect to all other portions of the reply. The paragraphs in question respond to legal, logical, and factual arguments raised in the answers, and emphasize the obvious — that, given that this is a license renewal proceeding, NEC is challenging the aging management of the steam dryer during the license renewal period, not during the preceding 6 years. NEC Reply at 21-22. While NRC practice does not permit petitioners to use reply briefs to provide the threshold level of support required for contention admissibility, petitioners may use replies to flesh out contentions that have already met the pleading requirements of 10 C.F.R. § 2.309(f)(1). *National Enrichment Facility*, CLI-04-35, 60 NRC at 623.

The Board also emphasizes that it is not ruling on the factual material Entergy presents in its answer at this time. Entergy’s answer appears to challenge NEC’s petition on the merits by making extensive reference to documents in another proceeding which, when examined more fully, may or may not turn out to support Entergy’s position in this matter. The contention admissibility stage of a proceeding is not the appropriate time for this examination. Furthermore, assurances offered by Entergy’s counsel, whether in pleadings or at oral argument, are not in evidence before this Board and cannot be granted the same weight as sworn testimony or exhibits. We conclude that NEC has identified sufficient ambiguity in Entergy’s aging management plan for the steam dryer to meet the requirements for contention admissibility.

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<sup>68</sup> We also note that NEC has drawn attention to some ambiguities regarding Entergy’s commitments and plans for steam dryer monitoring and inspection during the license renewal term. Specifically, while the Application makes reference to Entergy’s current program for managing steam dryer cracking due to FIV, future commitments in this area appear tentative and unspecific. *See* Application at 3.1.2.2.11.

#### 4. *NEC Contention 4 (Safety)*

Entergy's License Renewal Application Does Not Include an Adequate Plan to Monitor and Manage Aging of Plant Piping Due to Flow-Accelerated Corrosion During the Period of Extended Operation.<sup>69</sup>

NEC Contention 4 alleges that Entergy's plan for managing flow-accelerated corrosion (FAC) in plant piping fails to meet the requirements of 10 C.F.R. § 54.21(a)(3), i.e., "fails to demonstrate that the effects of aging will be adequately managed so that the intended function(s) will be maintained consistent with the CLB during the period of extended operations." NEC Petition at 18. NEC takes particular exception to Entergy's proposal to use "a computer model called CHECWORKS to determine the scope and frequency of inspections of components that are susceptible to FAC." *Id.* NEC alleges that Entergy cannot rely on CHECWORKS because the recent power uprate has changed plant parameters, including coolant flow rates, and that the model cannot generate accurate recommendations because it has not been benchmarked with data reflecting these new parameters. *Id.* at 19. For that reason, says NEC, "Entergy cannot assure the public that the minimum wall thickness of carbon steel piping and valve components will not be reduced by FAC to below . . . code limits during the period of extended operation." *Id.* See also Hopenfeld Decl. ¶¶ 21-27.

Entergy argues that Contention 4 is "vague and not supported by an adequate basis demonstrating the existence of a genuine material dispute" and that NEC has not identified specific pipes and valves that are vulnerable to FAC. Entergy Answer to NEC at 30. Entergy claims that "NEC fails to demonstrate that its concerns about CHECWORKS have any basis or would materially affect the adequacy of the FAC program" at Vermont Yankee. *Id.* at 31. Entergy points out that CHECWORKS is only one of many "factors considered in planning future inspections," and that "[t]he inspection scope is determined not only by the use of the CHECWORKS tool, but also is based on past VYNPS inspections, engineering judgment and industry operating experience." *Id.* at 32. Entergy also argues that NEC fails to provide "any real basis indicating that CHECWORKS cannot be used after EPU, other than Dr. Hopenfeld's bald assertion that it would take '10-15 years' before CHECWORKS can be benchmarked by inspection data." *Id.* Dr. Hopenfeld "provides absolutely no support for this assertion," says Entergy, and "unsupported conclusory assertions, even by an expert, cannot support the admission of a contention." *Id.* at 32-33. Finally, Entergy claims that the factual information on predicting FAC that was presented in the EPU proceeding should be considered part of this proceeding, which would bar NEC's contention if NEC "makes no effort to discuss or identify any error in the

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<sup>69</sup>NEC Petition at 18.

consideration of FAC in that proceeding.” *Id.* at 36. NEC has failed to consider the record of the EPU proceeding, according to Entergy, and has therefore failed to demonstrate a genuine material dispute. *Id.*

The NRC Staff repeats Entergy’s argument that Dr. Hopenfeld’s claim about benchmarking CHECWORKS is unsupported and therefore provides no basis for Contention 4. Staff Answer to NEC at 14. The Staff asserts that the Generic Aging Lessons Learned (GALL) Report indicates that CHECWORKS was benchmarked using data from many plants, and that it is appropriate to use the model in this condition in connection with a comprehensive FAC management program such as that proposed by Entergy. *Id.* (citing GALL Report § XI.M17). Using CHECWORKS in this way “provides a bounding analysis,” and an inspection schedule based on this analysis will “provide[] reasonable assurance that structural integrity will be maintained between inspections.” *Id.*

In its reply, NEC emphasizes that resolution of the FAC issue in the EPU proceeding does not resolve it over the much longer time period the Board must consider in the license renewal proceeding. NEC asserts that “[t]he possibility of undetected wall thinning increases substantially with age,” and “it may be necessary to modify the FAC program as the plant ages.” NEC Reply at 26. NEC argues that Entergy has not explained how it will use CHECWORKS in an aging management program that covers the license renewal period, nor has Entergy provided support for its claim that the wear rate in pipes is proportional to the velocity increase at EPU conditions and therefore presents no prediction problems. *Id.* at 26-27. Finally, NEC argues that Dr. Hopenfeld’s statement that it will take 10-15 years to benchmark CHECWORKS at EPU conditions is based on his extensive professional experience and is therefore not conclusory. *Id.* at 27. The declaration by Dr. Hopenfeld that accompanies the reply includes statements related to Contention 4. Entergy’s motion to strike portions of the NEC reply seeks to have the second Hopenfeld declaration and all references to it stricken on the grounds that it represents an effort to “recast” the contention and is therefore impermissible under the rules governing reply briefs. Entergy Motion To Strike NEC Reply at 14; *see also* Section III.A.6.

As we did for Contention 3, the Board begins by pointing out that since Entergy’s existing license continues until 2012, its Application for a license renewal necessarily involves only aging management matters after that date. FAC monitoring and inspection plans during the current license period are not directly relevant to, or dispositive of, our ruling on NEC Contention 4, except to the extent that Entergy’s license renewal application, or other materials properly before *this* Board at this stage in the proceeding, indicates a commitment to continue existing programs. Resolution of this issue for the period up to 2012 does not necessarily resolve the issue for the years from 2012 to 2032, especially when the phenomenon in question may have cumulative effects.

Taking this limitation into account, the Board finds that NEC Contention 4

meets the admissibility standards of 10 C.F.R. § 2.309(f)(1). It raises a challenge to Entergy's plans for aging management of plant components subject to FAC, and it supports that challenge adequately. NEC's expert states his analysis and expert opinion in the following words:

The theoretical basis of FAC is not completely understood; however, it is well established that turbulence intensity, steam quality, material compositions, oxygen content and coolant pH are the main variables that affect FAC. The CHECWORKS computer code is not a mechanistic code; it is an empirical code that must be updated continuously with plant-specific data. Inspection results are routinely used as inputs to the code. The code can be used to predict pipe wall thinning as long as plant parameters (velocity, coolant chemistry, etc.) do not change drastically and the data have been collected for a long period of time. It is important to realize that wall thinning rate from FAC is not necessarily consistent with time, and therefore a considerable number of cycles are needed to establish the FAC rate on a given component at a particular plant. Since Vermont Yankee has recently increased the coolant flow rate by 20%, which also significantly accelerates local wall thinning, it would take at least 10-15 years before CHECWORKS can be benchmarked with the Vermont Yankee inspection data.

Hopenfeld Decl. ¶ 24.

The Board does not agree that such statements are “bald” or “conclusory.” As we stated above, NRC regulations do not permit admission of a contention when petitioners offer *no* documentary or expert support for their positions. *See* Section III.D.3. But NEC has done considerably more here — Dr. Hopenfeld has submitted a sworn statement describing his professional reasoning and conclusions, and his qualifications to speak as an expert on this subject matter have not been challenged. As we have already stated, NEC is not required to prove its contention at this point or to provide all the evidence for its contention that may be required later in the proceeding. *See* Section III.A.4. Rather, it is required only to provide sufficient information that “the Applicants are sufficiently put on notice so that they will know at least generally what they will have to defend against or oppose, and that there has been sufficient foundation assigned to warrant further exploration of [the] contention.” *Wolf Creek*, LBP-84-1, 19 NRC at 34. We find that NEC has met this requirement.<sup>70</sup>

We also reject the notion that NEC's challenge to Entergy's use of CHECWORKS in its aging management program for FAC is barred because similar issues were discussed during the NRC review of Entergy's EPU application. As NEC has claimed,

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<sup>70</sup> We do not elevate Dr. Hopenfeld's reference to “10-15 years” as dispositive here. His point seems to be that benchmarking will take longer than the 6-year period covered by the EPU.

FAC is an aging phenomenon; the EPU proceedings assumed that the plant would operate six years, not 26 years at the high EPU velocities. The possibility of undetected wall thinning increases substantially with age. Therefore, it may be necessary to modify the FAC program as a plant ages. Entergy's license renewal application does not explain how it proposes to use CHECWORKS as an aging management tool during the period of extended operation, or how it will overcome the problem of establishing valid trends at higher EPU velocities . . . .

NEC Reply at 26. We have previously stated that materials submitted as part of the EPU proceeding are not dispositive in this proceeding except to the extent that Entergy's license renewal application, or other materials properly before *this* Board at this stage in the proceeding, indicates a commitment to continue existing programs. *See* Section III.D.3. At the moment we do not see any such clear and binding commitment in the record. Furthermore, even if such a commitment were made, the very nature of a license renewal proceeding prevents NEC from contesting the adequacy of Entergy's current FAC program to deal with the extent of corrosion that is likely over the coming 6 years. Rather, NEC is limited to contesting aging management plans for the next 20 years — in this case by questioning whether a program similar to the current one will be adequate to address the amount of corrosion that may occur during the 20 years of extended operation.

In ruling to admit this contention, this Board grants in part and denies in part Entergy's motion to strike portions of NEC's reply. Specifically, the Board strikes the second Hopenfeld declaration concerning this contention (§§ 16-22). This attachment to the reply includes new arguments and factual information that were not included in the initial petition and that do not directly address challenges in the answers, and that therefore exceed the permissible scope of a reply brief. *See* Section III.A.6.

The Board denies Entergy's motion to strike with respect those portions of the reply itself that deal with Contention 4. The portions in question merely respond to legal, logical, and factual arguments raised in the answers, in particular to Entergy's allegation that the treatment and resolution of the FAC issue during NRC review of the EPU application should be dispositive in the license renewal proceeding. As we see it, the argument in NEC's reply restates the obvious — NEC is challenging aging management plans during the license renewal period, not during the preceding 6 years.

As we did in our discussion of Contention 3, the Board also emphasizes that it is not ruling on the factual material Entergy presents in its answer at this time. Entergy's answer appears to challenge NEC's petition on the merits by making extensive reference to documents in the EPU proceeding which may or may not turn out to support Entergy's position in this matter. The contention admissibility stage of a proceeding is not the appropriate time to evaluate this information.

Additionally, given the differing natures of the EPU license amendment and a license renewal request, such materials may not be sufficient to resolve the issue in this proceeding even at the evidentiary stage. As we have already stated, assurances offered by Entergy's counsel, whether in pleadings or at oral argument, are not in evidence before this Board and cannot be granted the same weight as sworn testimony or exhibits. We conclude that NEC has identified sufficient ambiguity in Entergy's aging management plan related to FAC to meet the requirements for contention admissibility.

#### 5. *NEC Contention 5 (Safety)*

The License Renewal Application Does Not State an Adequate Plan to Manage and Monitor Aging of the Condenser.<sup>71</sup>

NEC Contention 5 challenges Entergy's assertion that "main condenser integrity is continually verified during normal plant operation and no aging management program is required to assure the post accident intended function." Application at 3.4-26, Table 3.4.2-1. NEC contends that the plant condenser is "a key plant component necessary to mitigate the release of radioactive gases during an accident at the plant." NEC Petition at 19. Based on his review of the Application, Arnold Gunderson, NEC's expert, claims that "the applicant has not adequately addressed the actual condition of the condenser" and notes that this plant component is likely to withstand neither "the stresses of [EPU]" nor "the pressure of continual operation for the additional 20 years Entergy would like to extend Vermont Yankee's operation." *Id.*, Exh. 8, Decl. of Arnold Gunderson Supporting [NEC Petition] (May 26, 2006) ¶¶ 9-10. NEC's expert cites several documents provided during discovery in a proceeding before the Vermont Public Service Board in support of his opinion that the condenser is in poor condition and requires both additional inspections and preventive measures such as epoxy coating of certain condenser components if it is to remain in service. *Id.* ¶¶ 13-25. Following his review of these documents, Mr. Gunderson concludes that "it is not logical to assume that a deficient condenser with six-foot cracks with poor welds, which is lucky to withstand gravity, will be adequate protection to the public by preventing the flow of radioactive gases in the event it is required to mitigate an accident." *Id.* ¶ 33.

Entergy responds with the claim that Contention 5 fails because it "is entirely predicated on the erroneous unsupported assumption that the condenser must retain its integrity (*i.e.*, must remain intact) in order to perform its post-accident

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<sup>71</sup> NEC Petition at 19.

function.” Entergy Answer to NEC at 36. Entergy argues that, under the terms of its license renewal application,

[c]ondenser integrity required to perform the *post-accident intended function (holdup and plateout of MSIV leakage)* is continuously confirmed by normal plant operation. *This intended function does not require the condenser to be leak-tight*, and the post-accident conditions in the condenser will be essentially atmospheric. Since the normal plant operation assures adequate condenser pressure boundary integrity, the post-accident intended function to provide holdup volume and plateout surface is assured.

*Id.* at 37 (citing Application at 3.4-26) (first emphasis added). Entergy points out that the condenser is not a safety-related component, and that even though the alternative source term analysis credits the condenser for some “hold-up and plate-out of gases<sup>72</sup> that might, in the event of a [LOCA], leak past the main steam isolation valve,” this post-accident function of the condenser does not require the condenser to be leaktight. Entergy Answer to NEC at 37 n.19. In short, says Entergy, the fact that the condenser works properly during normal operations is sufficient to demonstrate that it remains capable of performing the more limited functions required of it during an accident. According to Entergy, NEC has failed both to provide sufficient information to challenge this part of the Application and to explain any plausible scenario in which the condenser would be unable to perform its post-accident function. *Id.* at 38-39. In Entergy’s words, “[a]ll NEC shows is that the condenser may eventually have to be replaced.” *Id.* at 40.

The NRC Staff argues that Contention 5 lacks a sufficient basis to the extent that it expresses concerns about the performance of the condenser during any license renewal period, and that it falls outside the scope of the proceeding to the extent that it makes allegations regarding the performance of the condenser during the current license term. Staff Answer to NEC at 16. According to the Staff, the documents referred to by NEC’s expert were written in a different context and “do[] not indicate a dispute concerning an Application pending before the NRC.” *Id.* Furthermore, says the Staff, “NEC ignores the fact that the application (at 3.4-2) . . . states that the Main Condenser and MSIV Leakage Pathway components will be under aging management programs” and therefore demonstrates that it has failed to fulfill “its obligation to examine publically available information.” *Id.*

The Board concludes that NEC Contention 5 is not admissible because NEC has failed to show that the issue raised — the integrity of the condenser — is

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<sup>72</sup>The phrase “hold-up and plate-out of gases” means that the condenser physically slows the release of gases (and by implication, the nongaseous daughter fission products) and that the surface areas of its plates capture or absorb some of the fission products.

“within the scope of” or “material to the findings NRC must make to support” a license renewal decision. 10 C.F.R. § 2.309(f)(1)(iii) and (iv). NEC has not provided any supporting information as to how the failure of the condenser would negatively affect its ability to perform its limited post-accident function — the hold-up and plate-out of some gases and solid daughter fission products. For example, even if the condenser cracked or broke into pieces at the same time a LOCA or other accident occurred, NEC has not given us facts, evidence, or any reason to think that the condenser surfaces would not be equally able to retard the flow of, or absorb, gases that may leak through the MSIVs.

NEC’s attempt to rehabilitate its contention by focusing its reply on the “unusual accident” scenario — an accident that destroys the condenser just at the same time the condenser’s post-accident function becomes important — fails both substantively and procedurally. In their initial submission to the Board, NEC and its expert mention this scenario but provide no discussion of how it might come about. NEC Petition at 20. However, they expand their arguments in this area in their reply, in which they make reference to an event at Entergy’s Grand Gulf plant in which the condenser “imploded” and caused an emergency shutdown. NEC Reply at 29. NEC’s pleading does not allege that any radioactive gases were released during the Grand Gulf event. Undeterred, NEC argues that the event demonstrates the possibility of a single incident that “simultaneously cause[s] both implosion of the condenser and a release of radioactive gas.” *Id.* NEC’s reply also includes a second declaration in which its expert, Arnold Gundersen, provides additional detail regarding scenarios that, in his opinion, might lead to such an outcome. *Id.*, Exh. 2, Decl. of Arnold Gundersen Supporting [NEC Reply] (Jun. 29, 2006) ¶¶ 6.3.1-6.3.2. Entergy’s motion to strike portions of NEC’s reply specifically addresses the sections in question here. Entergy Motion To Strike NEC Reply at 15-16.

As a substantive matter, the Board finds that NEC’s reply, while suggesting events that could trigger NEC’s postulated “unusual scenario,” fails to explain how it makes any difference — i.e., how such an event would prevent a broken condenser from performing its limited post-accident function of hold-up and plate-out of gases and other fission products from an MSIV leak. In addition, as a procedural matter, the relevant portions of NEC’s reply, including those paragraphs of the expert’s second declaration that provide accident scenarios, exceed what is permissible in a reply brief and therefore should be seen as an attempt to rehabilitate and to amend the original contention. The Commission has stated clearly that such attempts to amend contentions are impermissible

in reply briefs.<sup>73</sup> NEC makes no effort to address the criteria for amended and new contentions in 10 C.F.R. § 2.309(f)(2). The Board therefore strikes Mr. Gundersen's second declaration and those portions of NEC's reply brief that refer to it.

For the reasons stated, NEC Contention 5 is not admissible.

#### **6. NEC Contention 6 (Safety)**

The License Renewal Application does not include an adequate plan to monitor and manage aging of the primary containment boundary adequate to assure public health and safety for the twenty-year term of the proposed license extension (renewal), as required pursuant to 10 C.F.R. § 54.21(a)(3).<sup>74</sup>

NEC Contention 6 is a safety contention focusing on the adequacy of Entergy's aging management plan for the reactor primary containment. NEC states that "Entergy has not provided an aging management plan for areas of the primary containment which are difficult to inspect, maintain and repair because of limited access, and which may harbor conditions conducive to general, pitting and crevice corrosion." NEC Petition at 21. NEC alleges that Entergy has not demonstrated that the steel drywell shell is protected from moisture by its concrete encasement, saying instead that contact areas and narrow spaces between the concrete and the steel are the places "most likely to harbor undetected moisture and corrosion." *Id.* at 23. To support this contention, NEC cites two in-service inspection reports for the plant that made reference to corrosion and loss of coating in the drywell shell. *Id.* at 23-24. NEC also cites the NRC Staff's Proposed Interim Staff Guidance LR-ISG-2006-01: Plant Specific Aging Management Program for Inaccessible Areas of Boiling Water Reactor Mark I Steel Containment Drywell Shell.<sup>75</sup> NEC Petition at 25, Exh. 9.

Entergy responds that Contention 6 is inadmissible because it "fails to identify any deficiency in the discussion of this issue in the application" and therefore fails to demonstrate a genuine dispute with the applicant. Entergy Answer to NEC at 41. Specifically, Entergy asserts that NEC made no effort to show why Entergy's

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<sup>73</sup> *National Enrichment Facility*, CLI-04-25, 60 NRC at 224-25 ("[W]e concur with the Board that the reply briefs constituted a late attempt to reinvigorate thinly supported contentions by presenting entirely new arguments in the reply briefs. . . . In Commission practice, and in litigation practice generally, new arguments may not be raised for the first time in a reply brief.').

<sup>74</sup> The topic heading of NEC Contention 6 ("Primary Containment Corrosion Including, But Not Limited to the Dry Well") does not contain a specific statement of the issue that NEC seeks to raise. The statement of the issue NEC seeks to raise appears in the first sentence of the body of the petition and thus we view this sentence as the specific contention. *See* Tr. at 430-31.

<sup>75</sup> 71 Fed. Reg. 27,101 (May 9, 2006).

May 15, 2006, amendment to its license renewal application,<sup>76</sup> which describes Entergy's monitoring plan for the steel drywell shell, its approach to determining whether corrosion is occurring in the inaccessible areas of the structure, and the methods it has used to deal with the corrosion mentioned in the in-service inspection reports, is inadequate. *Id.* at 41-44. The NRC Staff echoes Entergy's argument, saying that NEC has failed to demonstrate a genuine dispute with the applicant or to address why Amendment 2 is inadequate. Staff Answer to NEC at 18.

NEC first addressed Amendment 2 in its reply, arguing that it "does not alleviate NEC's concerns regarding the condition of the lower drywell shell, and the adequacy of Entergy's plans to monitor and inspect less accessible areas."<sup>77</sup> Specifically, says NEC, the amendment fails to address any "historically reported leaks" that might lead to moisture near the drywell, aging management of gaskets and seals where leakage might affect the primary containment, or maintenance activities and other stresses that might induce corrosion. *Id.* at 32. NEC also claims that Entergy fails to provide sufficient detail to allow reviews to evaluate its plans for ultrasonic testing of the drywell shell. *Id.*

The Board concludes that NEC Contention 6 fails to satisfy the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi) in that NEC has failed to "[p]rovide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue" or to "show that a genuine dispute exists with the applicant/licensee." Specifically, we have little or no idea why NEC believes that Entergy's May 15, 2006, plan for aging management of the drywell shell is inadequate. The in-service inspection reports that NEC cites deal with events in 1999 and 2001 that have apparently been resolved and do not indicate that similar events will happen in the future. The only other support NEC offers for its contention is a meeting notice for a June 2006 meeting involving the NRC Office of Nuclear Reactor Regulation, at which the known corrosion problems at the Oyster Creek Generating Station were discussed, and the NRC Staff proposed guidance document. NEC Petition at 25-26. Neither is relevant to the question of whether corrosion of the drywell shell has been a significant problem at Vermont Yankee in the past or is likely to be so in the future, and neither provides support for NEC's argument that Entergy's plans to manage corrosion of the drywell shell are inadequate. Given the absence of documentary or expert support for NEC's position, this contention fails to

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<sup>76</sup>Letter from Ted A. Sullivan, Site Vice President, Vermont Yankee Nuclear Power Station, to Nuclear Regulatory Commission (License Renewal Application, Amendment No. 2) (May 15, 2006), ADAMS Accession No. ML061380079 [Amendment 2].

<sup>77</sup>NEC Reply at 31. During the oral argument, it became clear that NEC was not aware of Amendment 2 when NEC filed its petition on May 26, 2006. Tr. at 433. This is understandable, because Amendment 2 did not become publicly available on ADAMS until May 26, 2006. Tr. at 446.

demonstrate that a genuine dispute exists. Under these conditions, the Board finds that NEC Contention 6 is inadmissible.

**E. Ruling on Marlboro Request (Exclusion from Emergency Planning Zone)**

The Town of Marlboro, Vermont, contends that it was erroneously excluded from the emergency planning zone (EPZ) surrounding the Vermont Yankee Nuclear Power Station. Marlboro Hearing Request at 1. According to Marlboro, the State of Vermont has a “whole-town inclusion policy,” meaning every town with any property within a 10-mile radius must be included in evacuation and notification planning. *Id.* Marlboro further claims that, despite the fact that it is not included in the EPZ, the evacuation plan involves a travel route through Marlboro, which will require the assistance of volunteers from the Town and the use of Town resources. *Id.* Entergy and the Staff both argue that Marlboro’s request must be denied because it does not contain a specific contention and because emergency planning issues are outside the scope of license renewal proceedings. Entergy Answer to Marlboro at 1; Staff Answer to Marlboro at 3.

We find that Marlboro has failed to submit an admissible contention. A petitioner must demonstrate that the issues raised in its contention are within the scope of the proceeding. 10 C.F.R. § 2.309(f)(1)(iii). Marlboro, however, has not demonstrated that emergency planning issues are within the scope of this proceeding. To the contrary, it is well established that concerns regarding emergency planning are beyond the scope of license renewal proceedings. *See, e.g., Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 560-61 (2005). Therefore, the Town of Marlboro hearing request is denied.<sup>78</sup>

**IV. SELECTION OF HEARING PROCEDURES**

**A. Standards Governing Selection of Hearing Procedures**

NRC regulations provide for a number of different procedural formats for adjudicatory hearings, two of which are relevant here. These are (1) the “Rules for Formal Adjudications,” 10 C.F.R. Part 2, Subpart G, and (2) the rules for “Informal Hearing Procedures for NRC Adjudications,” 10 C.F.R. Part 2, Subpart L. The formal adjudicatory procedures of Subpart G allow the parties to propound interrogatories, take depositions, and cross-examine witnesses without

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<sup>78</sup> Although the Town of Marlboro is not admitted to the proceeding, it may still participate as an interested local governmental body. *See* Section VI.B.

leave of the Board. In contrast, under the “informal” adjudicatory procedures of Subpart L, discovery is prohibited except for certain mandatory disclosures, the Board conducts oral hearings during which it interrogates the witnesses, and cross-examination by the parties is permitted only if the Board deems it necessary for the development of an adequate record.

The Commission’s rule governing the selection of hearing procedures states that upon granting a hearing request in a license renewal proceeding, a licensing board must determine the specific hearing procedures to be used in this proceeding as follows:

(a) Except as determined through the application of paragraphs (b) through (h) of this section, proceedings . . . *may be* conducted under the procedures of subpart L of this part.

. . . .

(d) In proceedings . . . where the presiding officer by order finds that resolution of the contention or contested matter 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, the hearing for resolution of that contention or contested matter *will be* conducted under subpart G of this part.

10 C.F.R. § 2.310(a), (d) (emphasis added). Additionally, a petitioner requesting a Subpart G hearing pursuant to section 2.310(d) “must demonstrate, by reference to the contention and the bases provided and the specific procedures in subpart G of this part, that resolution of the contention necessitates resolution of material issues of fact which may be best determined through the use of the identified procedures.” 10 C.F.R. § 2.309(g).

The selection of appropriate hearing procedures is a contention-by-contention matter, dependent on the nature of the specific issues involved in the contention. Thus, for example, a single adjudicatory proceeding may include some contentions litigated under Subpart L and others litigated under Subpart G or N.

## **B. Selection of Hearing Procedures**

DPS asserts that it is entitled to an adjudicatory hearing under the formal procedures specified in Subpart G. DPS Petition at 2. NEC, the other admitted party in this proceeding, does not specify a preference for the hearing procedures. Entergy and the Staff oppose the DPS request for Subpart G hearing procedures and argue that the informal procedures set forth in Subpart L should govern this proceeding. Entergy Answer to DPS at 29-30; Staff Answer to DPS at 5-6.

Although DPS states that it is “entitled” to a Subpart G proceeding, DPS

Petition at 2, DPS did not attempt to demonstrate that its contentions meet the criteria of 10 C.F.R. § 2.310(d). DPS Petition at 4 n.4. In its request for a Subpart G hearing, DPS fails to reference its contentions and bases and does not show that resolution of its contentions require resolution of material issues of fact which may be best determined through the use of Subpart G procedures. *See* 10 C.F.R. § 2.309(g). Therefore, we conclude that DPS has not demonstrated that any of the admitted contentions meet the criteria of 10 C.F.R. § 2.310(d), mandating the use of Subpart G procedures.

We also reject the assertion by DPS that section 274(l) of the AEA, 42 U.S.C. § 2021(l), obviates the need for it to demonstrate that the Subpart G procedures are applicable to the admitted contentions. *See* DPS Petition at 4 & n.4. Essentially, DPS argues that because section 274(l) grants a State interrogation rights, a Subpart G proceeding is mandated. Its reasoning is based on the fact that, in Subpart G proceedings, the parties are allowed to cross-examine witnesses without leave of the Board, whereas in a Subpart L proceeding cross-examination is only permitted “if the presiding officer determines that cross-examination by the parties is necessary to ensure the development of an adequate record for decision,” 10 C.F.R. § 2.1204(b)(3). *See* DPS Petition at 3-5.

DPS’s brief fails to address *Citizens Awareness Network, Inc. v. United States* [*CAN v. United States*], 391 F.3d 338 (1st Cir. 2004). In that case the First Circuit upheld the validity of the Subpart L regulations on the basis of NRC’s representation that the opportunity for cross-examination under 10 C.F.R. § 2.1204(b)(3) of Subpart L is equivalent to the opportunity for cross-examination under the Administrative Procedure Act (APA), 5 U.S.C. § 556(d), i.e., that cross-examination is available whenever it is “required for a full and fair adjudication of the facts.”<sup>79</sup> Section 556(d) of the APA is a relatively generous standard.

DPS also failed to address the only decision concerning the relationship between Section 274(l) of the AEA and the right to a Subpart G proceeding. *See Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-04-31, 60 NRC 686, 710-11 (2004). In that proceeding, the Board held that *CAN v. United States* could be extended to apply to a State’s cross-examination under the AEA. *Id.* Specifically, the Board found that since “the opportunity for cross-examination under Subpart L is equivalent to the opportunity for cross-examination under the APA, . . . [it] is likewise consistent with the State’s ‘reasonable opportunity . . . to interrogate witnesses’ under 42 U.S.C. § 2021(l).” *Id.* at 710. We agree with this logic. Accordingly, we find that section 274(l) of the AEA does not give a State an absolute right of cross-examination, but states only that “the Commission . . . shall afford

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<sup>79</sup> 391 F.3d at 351. The Commission represented to the First Circuit that “the standard for allowing cross-examination under [10 C.F.R. § 2.1204(b)(3)] [is] equivalent to the APA standard.” *Id.*

*reasonable opportunity* for State representatives to . . . interrogate witnesses.’’ 42 U.S.C. § 2021(l) (emphasis added). The Subpart L grant of cross-examination to situations where it “is necessary to ensure the development of an adequate record for decision,’’ 10 C.F.R. § 2.1204(b)(3), is consistent with the AEA requirement that State representatives be given a “reasonable opportunity . . . to . . . interrogate witnesses.’’ 42 U.S.C. § 2021(l).

Entergy and the Staff suggest that our determination that DPS failed to meet its burden under 10 C.F.R. § 2.309(g) to show that Subpart G procedures are mandated by 10 C.F.R. § 2.310(d) ends the matter, and *requires* that Subpart L procedures be used for each admitted contention in this proceeding. This is not correct. If a specific hearing procedure is not mandated, the plain language of 10 C.F.R. § 2.310(a) uses the term “may’’ in describing our options in selecting the appropriate hearing procedures. The use of the permissive “may’’ instead of the mandatory “shall’’ indicates that even if a petitioner fails to demonstrate that Subpart G procedures are required, the Board “may’’ still find that the use of Subpart G procedures is more appropriate than the use of Subpart L procedures for a given contention. “In such a circumstance, the Board, in its sound discretion, must determine the type of hearing procedures most appropriate for the specific contentions before it.’’ *Vermont Yankee*, LBP-04-31, 60 NRC at 705. In adopting this approach we acknowledge the Commission’s statement that, unless otherwise provided in 10 C.F.R. § 2.310, Subpart L proceedings should “ordinarily’’ be used. *See* Final Rule: “Changes to the Adjudicatory Process,’’ 69 Fed. Reg. 2182, 2222 (Jan. 14, 2004). Furthermore, at this point we see no particular reason why the additional discovery mechanisms of Subpart G are necessary for the full and fair disclosure of the facts. Nor do we see any reason why the moderate limits on cross-examination under a Subpart L proceeding would hinder the development of an adequate record. Weighing these considerations and based on currently available information, we conclude that the procedures of Subpart L are appropriate for the adjudication of admitted contentions.

## V. STATUTORY RIGHT TO HEARING

We now turn to the DPS argument that, because it is a State, section 274(l) of the AEA, 42 U.S.C. § 2021(l), gives it the right to offer evidence and interrogate witnesses even if a hearing would otherwise not be required and even if no contentions are admitted. *See* DPS Petition at 3-5. The Commission’s regulations give a State two ways to participate in adjudicatory proceedings. First, an

“interested State” is given “a reasonable opportunity to participate in a hearing” under 10 C.F.R. § 2.315(c).<sup>80</sup> This allows a State to

introduce evidence, interrogate witnesses where cross-examination by the parties is permitted, advise the Commission without requiring the representative to take a position with respect to the issue, file proposed findings in those proceedings where findings are permitted, and petition for review by the Commission under § 2.341 with respect to the admitted contentions.

10 C.F.R. § 2.315(c). Second, a State that wishes to raise specific concerns may submit contentions complying with the 10 C.F.R. § 2.309(f)(1) requirements and become a party to the adjudication. As a party, a State may offer evidence and, where necessary to ensure the development of an adequate record, may be allowed to interrogate witnesses. 10 C.F.R. §§ 2.1204(b)(3), 2.1208. *See also* Section IV.B, *supra*. A State that has been admitted as a party is also given the additional opportunity to participate on another party’s contentions. *See LES*, CLI-04-35, 60 NRC at 627.

We conclude that the two options that NRC affords to an interested State, when viewed in combination, comply with the section 274(l) mandate that a State, such as DPS, be given a “reasonable opportunity” to participate on the Vermont Yankee license renewal application. We reject the assertion that section 247(l) gives DPS a right to offer evidence and interrogate witnesses, even if no hearing is otherwise being held and no party has submitted an admissible contention. Federal case law recognizes that NRC’s requirement that a petitioner identify specific contentions and the particular bases for the contentions is not inconsistent with section 189a of the AEA, which provides that a hearing shall be granted upon the request of any person whose interest may be affected by the proceeding. *See, e.g., Business and Professional People for the Public Interest v. AEC*, 502 F.2d 424, 426-29 (D.C. Cir. 1974). Given that the Commission’s rules granting a hearing request only upon the submission of an admissible contention does not violate section 189a, we likewise find that limiting a State’s participation to situations where at least one party submits an admissible contention does not violate the section 274(l) requirement that a State be given a “reasonable opportunity” to participate in a hearing. Therefore, we find that DPS’s rights under section 247(l) are satisfied by the Commission regulations governing Subpart L proceedings.

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<sup>80</sup>This regulation implements section 274(l) of the AEA. The Commission has held that the opportunity to participate as an interested state is available only if the State has not been admitted as a party under 10 C.F.R. § 2.309. *National Enrichment Facility*, CLI-04-35, 60 NRC at 626-27.

## VI. CONTENTION ADOPTION AND INTERESTED STATE PARTICIPATION

### A. Adoption

Shortly after all the hearing requests were submitted, DPS and NEC each filed a notice of intent to adopt the AG's contention and the contentions of one another. Although DPS and NEC took the position that a simple notice of adoption is sufficient, both also sought, in the alternative, to adopt the other's contentions by motion. *See* DPS Notice of Intent To Adopt Contentions at 1 n.1; NEC Notice of Adoption of Contentions at 1 n.1. Entergy opposed both filings because DPS and NEC failed to address the criteria for nontimely contentions. Entergy Answer to DPS Notice of Intent To Adopt Contentions at 1-2; Entergy Answer to NEC Notice of Adoption of Contentions at 1-3. The Staff does not oppose DPS and NEC adopting contentions, so long as each party demonstrates an independent ability to litigate any contention for which it becomes the primary sponsor should the initial contention sponsor withdraw from the proceeding. Staff Answer to DPS Notice of Intent To Adopt Contentions at 3; Staff Answer to NEC Notice of Adoption of Contentions at 3.

The Commission's regulations allow a petitioner to adopt the contention of a different petitioner if the adopting petitioner (1) agrees that the sponsoring petitioner will act as the representative with respect to that contention; or (2) if the sponsoring and adopting petitioners jointly agree and designate which one of them will have the authority to act for the petitioners on that contention. 10 C.F.R. § 2.309(f)(3). These are the only substantive regulatory requirements for adoption. When the procedures for adopting contentions were codified in 2004, the Commission explained that by adopting a contention, the adopting party preserves the right to litigate a contention that another party originally proposed if the original sponsoring party leaves the proceeding prior to the resolution of the contention. 69 Fed. Reg. at 2221.

Section 2.309(f)(3), which was added in 2004, is entirely new. Nevertheless, Entergy cites prior case law for the proposition that the nontimely factors should be applied when one intervenor seeks to adopt the contentions of a sponsoring intervenor that seeks to *withdraw* from a proceeding. Entergy Answer to DPS Notice of Intent To Adopt Contentions at 2. *See also Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), ALAB-799, 21 NRC 360, 381-82 (1985). Entergy seeks to extend the old *South Texas* decision to support the proposition that the section 2.309(c) nontimely factors are applicable *whenever* a party seeks to adopt contentions after the initial contention filing deadline. *See, e.g.,* Entergy Answer to DPS Notice of Intent To Adopt Contentions at 2.

We disagree and conclude that the circumstances in the *South Texas* proceeding are very different from the facts involved in the current contention adoption

requests. In that case, the adoption request came only after the sponsoring intervenor withdrew from the proceeding as part of a settlement agreement. *South Texas*, ALAB-799, 21 NRC at 381. That adoption attempt came several years after the Board admitted the contentions at issue. See *Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), LBP-80-11, 11 NRC 477 (1980); *Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), LBP-79-10, 9 NRC 439 (1979). As the Board termed it, the case involved an attempt to adopt “abandoned contentions.” *Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), LBP-82-91, 16 NRC 1364, 1369 (1982).

In contrast, the DPS and NEC adoption notices came very early in this proceeding, only a few weeks after the contentions were due and before we ruled on the admissibility of the contentions. Absent prior consultation between the various petitioners *before* the contentions were filed, consultation which we will not presume, it would have been *impossible* for DPS or NEC to adopt each other’s contentions prior to the date they were filed on May 26, 2006. Entergy’s position, that all adoptions filed after the original deadline for filing contentions are *automatically* “nontimely” (and thus must go through the eight-factor hoops of 10 C.F.R. § 2.309(c)), would create an illogical and unfair exclusionary wall to adoption. 10 C.F.R. § 2.309(f)(3) imposes no such requirements. It is sufficient for our purposes to hold that if a notice of adoption of a contention is filed within a reasonable time (such as 20 days) after the contention has been filed *and* admitted, then it is deemed timely and is not subject to the nontimely factors specified in 10 C.F.R. § 2.309(c). Accordingly, we find that the DPS and NEC adoption notices were timely.<sup>81</sup>

Next, we turn to the Staff’s position. Although the Staff does not oppose the adoption notice, the Staff states that if the initial contention sponsor withdraws from the proceeding, an adopting party must demonstrate an independent ability to litigate each contention it wishes to adopt. See, e.g., Staff Answer to DPS Notice of Intent To Adopt Contentions at 3 (citing *Consolidated Edison Co. of New York* (Indian Point, Units 1 and 2), CLI-01-19, 54 NRC 109, 131-33 (2001)). In *Indian Point*, the Commission granted a petitioner’s request to incorporate another petitioner’s contentions by reference and stated “if the primary sponsor of an issue later withdraws from this proceeding, the remaining sponsor must then demonstrate to the Presiding Officer its independent ability to litigate this issue. A failure to do so renders the issue subject to dismissal prior to the hearing.” *Id.* at 132. The Commission cited no regulation or precedent for this requirement. Nor did the Commission indicate whether it intended to impose this requirement in future adjudications.

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<sup>81</sup>The 10-day motions deadline of 10 C.F.R. § 2.323(c) does not apply because the adoption of contentions does not require a motion, as simple notice suffices.

If the Commission did intend to create an additional adoption requirement in *Indian Point*, we would expect that this requirement would appear in the 2004 codification of the procedures for contention adoption, or would have been discussed in that rule's Statement of Considerations. Both 10 C.F.R. § 2.309(f)(3) and the Statement of Considerations, however, are entirely silent on whether the adopting party must demonstrate an independent ability to litigate a contention it seeks to adopt. Perhaps this silence is an expression of the fact that the Commission did not intend that this element be included in the new rule.<sup>82</sup>

We have serious reservations about requiring the adopting party to demonstrate an independent ability to litigate an issue. *Id.* at 132. First, what does it mean? Must the adopting petitioner provide us with its financial statements? Perhaps its membership lists? Amounting to much the same thing, must it hire separate and independent (duplicative?) experts and lawyers? Do we need to see the written retainer agreements, or are pro-bono volunteers sufficient? What level of investigation do we conduct, and what objective criteria do we use, to decide whether the adopting party satisfactorily "demonstrated its independent ability to litigate" the contention? Second, how can we impose this requirement on the adopting party, when there is no such requirement imposed on the original sponsoring petitioner? Surely the Staff is not suggesting that the fact that the original sponsoring party is able to meet the strict but minimal requirements for admission of a contention demonstrates that it has an independent ability to litigate the full merits of the contention. Section 2.309(f) lists many reasons for excluding a contention, but "demonstrating an independent ability to litigate an issue" is not one of them. Third, how does this requirement comport with section 189a of the AEA, which states that the "Commission shall grant a hearing upon the request of any person whose interest may be affected by the proceeding"? 42 U.S.C. § 2239(a)(1)(A). No plaintiff in any federal court faces such a hurdle.

Happily, we need not decide the issue now. NEC and DPS have adopted each other's contentions and neither one of them is withdrawing. Therefore, the current notices of adoption are timely and are granted to the extent that the DPS and NEC contentions have been admitted.<sup>83</sup>

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<sup>82</sup>To the extent that the Staff has concerns that an adopting party would be unable to litigate an adopted contention after the withdrawal of the initial contention sponsor, we note that the regulations already provide a remedy for dealing with a party that cannot adequately litigate a contention. *See* 10 C.F.R. § 2.320.

<sup>83</sup>NEC also filed a motion for leave to file a reply to Entergy and the Staff answers on the adoption issue, a motion which Entergy and the Staff oppose. Having accepted NEC's notice, we deny its motion for leave to file a reply as moot.

## **B. Interested State Participation**

As provided in 10 C.F.R. § 2.315(c), any interested State, local governmental body, and affected, federally recognized Indian Tribe that has not been admitted as a party under 10 C.F.R. § 2.309 will be given a reasonable opportunity to participate in any hearing conducted in this proceeding. The only timing requirement for giving notice of such participation states that a “representative shall identify those contentions on which it will participate in advance of any hearing held.” 10 C.F.R. § 2.315(c). Accordingly, the AG for the Commonwealth of Massachusetts, the Town of Marlboro, Vermont, and any other interested state, local governmental body, or affected, federally recognized Indian Tribe that wishes to participate in this hearing shall notify us of same within 20 days of this Order.<sup>84</sup>

## **VII. CONCLUSION**

For the reasons set forth above, the Board concludes that the Vermont Department of Public Service and the New England Coalition both have standing and have each proffered an admissible contention meeting the requirements of 10 C.F.R. § 2.309(f). Accordingly, their requests for hearing are granted. Although the Massachusetts Attorney General and the Town of Marlboro both have standing, neither has proffered an admissible contention and therefore their hearing requests are denied.

The Board rules that the procedures of Subpart L shall be used for these contentions. Within fifteen (15) days of the issuance of service of this Order, the Staff shall notify the Board whether it desires to participate in this proceeding as a party pursuant to 10 C.F.R. § 2.1202. Within thirty (30) days of the service of this Order, the parties shall make their initial disclosures pursuant to 10 C.F.R. § 2.336(a), the Staff shall make its initial disclosures pursuant to 10 C.F.R. § 2.336(b), and the Staff shall file the hearing file pursuant to 10 C.F.R. § 2.1203.

As provided under 10 C.F.R. § 2.311(c), a party, other than a hearing requestor with at least one admitted contention, may appeal this Order to the Commission. All such appeals must be filed within ten (10) days following service of this Order and conform to the provisions of 10 C.F.R. § 2.311(a). Those parties opposing the appeal may file a brief in opposition within ten (10) days of service of the appeal.

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<sup>84</sup> As with the adoption of contentions, the 10-day motions deadline does not apply to interested state participation because such participation does not require a motion, as a simple notice suffices.

It is so ORDERED.

THE ATOMIC SAFETY AND  
LICENSING BOARD<sup>85</sup>

Alex S. Karlin, Chairman  
ADMINISTRATIVE JUDGE

Richard E. Wardwell<sup>86</sup> (by E. Roy Hawkens)  
ADMINISTRATIVE JUDGE

Thomas S. Elleman (by E. Roy Hawkens)  
ADMINISTRATIVE JUDGE

Rockville, Maryland  
September 22, 2006

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<sup>85</sup> Copies of this Order were sent this date by Internet e-mail transmission to counsel or a representative for (1) Applicant Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.; (2) Petitioners Town of Marlboro, Vermont, the Massachusetts Attorney General, the Vermont Department of Public Service, and the New England Coalition; and (3) the NRC Staff.

<sup>86</sup> Judge Wardwell joins in all of this decision except for his dissent on NEC Contention 1, which follows.

**DISSENTING OPINION OF JUDGE WARDWELL  
ON ADMISSIBILITY OF NEW ENGLAND COALITION'S  
CONTENTION 1 (ENVIRONMENTAL)**

**A. Introduction**

I join my colleagues in the issues presented in this Order, except for my dissent with the discussion on NEC's only environmental contention. In this contention, NEC asserts that Entergy's Environmental Report (ER) failed to sufficiently assess the impacts of increased thermal discharges into the Connecticut River over the 20-year license extension period.<sup>1</sup>

In accordance with NRC regulations, it seems clear that Entergy has adequately addressed the impacts to water quality required by the rules in their ER and subsequent amendments to their License Renewal Application (LRA). Based on this, I concluded that NEC's contention is inadmissible because it fails to show that a genuine dispute exists with the Applicant. I agree with the NRC Staff, however, that this contention would be admissible on the limited grounds that Entergy's approved NPDES permit from the State of Vermont Agency of Natural Resources (VANR) was not included with the application because the permit had not yet been approved when Entergy submitted their LRA in January 2006. The amended NPDES permit was approved on March 30, 2006. On July 27, 2006, Entergy submitted a copy of the approved amended permit as Amendment 6 to the LRA, thus resolving this issue. While this permit has been appealed, its ongoing status does not have a bearing on my opinion for the reasons presented herein.

**B. Discussion**

In evaluating NEC Contention 1, I reviewed the regulations to determine what an Applicant is explicitly required to provide in its ER for their LRA. In addition, I reviewed the Staff's responsibilities in preparing their Supplemental Environmental Impact Statement (SEIS) to indicate whether it would be reasonable for an Applicant to provide any additional information that might assist the Staff in performing their NEPA review. These explicit and implicit requirements for an ER during license renewal are discussed in the next two sections. The impacts of the increased thermal discharge (including cumulative impacts) are discussed in Section B.3. The status of the NPDES permit and its effect on this opinion are summarized in Section B.4. Much of the NEC argument accepted by the majority

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<sup>1</sup> NEC Petition at 13. For this dissent, I have also reviewed NEC's initial petition (May 26, 2006), and the Entergy and NRC Staff answers (June 22, 2006). While I have also reviewed NEC's reply (June 29, 2006) and note that nothing in it changes my opinion, I believe that most of their response is entirely new, inadmissible argument.

opinion implies that a NEPA analysis, as reflected in an EIS, will not be prepared for the proposed action. This issue is discussed in Section B.5, along with the consistencies between NRC regulations, NEPA, and the Federal Water Pollution Control Act (FWPCA), i.e., the Clean Water Act (CWA).

### ***1. Explicit ER Requirements***

As required by NRC regulations, 10 C.F.R. § 2.309(f)(2), initial contentions at this stage must be based on the Applicant's Environmental Report (ER). In part, NEC Contention 1 questions the completeness of the portion of Entergy's ER dealing with thermal discharges.

For license renewal applications, section 51.53(c)(2) of the regulations requires that the following general information be included in an applicant's ER: (1) a description of the proposed action, (2) a detailed description of modifications directly affecting the environmental or plant effluents, and (3) a discussion of the environmental impacts of alternatives to the license renewal. Specific requirements for the ER are presented in 10 C.F.R. § 51.53(c)(3) and may be summarized as follows: (1) an applicant's ER is not required to contain an analysis of the environmental impacts identified as Category 1 issues<sup>2</sup> in Appendix B to Subpart A of the Generic Environmental Impact Statement (GEIS); and (2) for a plant with once-through cooling system (which is one of the operating modes at Vermont Yankee), the applicant must include analyses for the three Category 2 issues<sup>3</sup> related to thermal discharges in their SEIS. The Category 2 thermal issues include entrainment of fish and shellfish in early life stages, impingement of fish and shellfish, and heat shock.<sup>4</sup>

It seems apparent that the increase in thermal discharge limits during the license renewal period (i.e., the water quality issues that NEC argues are not assessed in Entergy's application) does not relate to any of these Category 2 issues.<sup>5</sup>

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<sup>2</sup>Category 1 issues are those: (1) that apply to all plants having specified plant or site characteristics, (2) that have a small impact, and (3) whose alternatives analyses demonstrate that additional plant-specific mitigation measures are likely not to be sufficiently beneficial to warrant implementation. 10 C.F.R. Part 51, Subpart A, Appendix B.

<sup>3</sup>Category 2 issues are plant- or site-specific environmental impacts which must be evaluated in the SEIS. 10 C.F.R. Part 51, Subpart A, Appendix B; 10 C.F.R. § 51.71(d).

<sup>4</sup>Section 51.53(c)(3) of 10 C.F.R. also requires that the ER contain any new and significant information regarding the impacts of license renewal of which the applicant is aware; this is not an issue here since NEC has not argued that the applicant failed to present new and significant information.

<sup>5</sup>Heat shock occurs when aquatic biota that have been acclimated to cooler water are exposed to sudden temperature increases when artificial heating commences. While the temperature of the thermal plume is certainly higher near the discharge point, this is not considered to be heat shock as long as changes in the plume temperature are gradual.

This alone is sufficient reason to reject this contention. But continuing on, the regulations state that an applicant may address Category 2 thermal issues in one of two ways. They may include a copy of the current CWA § 316(b) determination (relating to the location, design, construction, and capacity of the cooling water system to minimize impingement and entrainment), and, if necessary, a section 316(a) demonstration (or equivalent State permits and supporting documentation) to minimize impact of effluent discharges. Alternatively, if the applicant cannot provide the relevant documents, it must assess the impact of the license renewal on fish and shellfish resources resulting from heat shock, impingement, and entrainment. 10 C.F.R. § 51.53(c)(3)(ii)(B).

For its section 316(b) determination, Entergy evaluated the environmental impacts on aquatic resources from entrainment, impingement, and heat shock in their ER (in sections 4.2 to 4.4). It also included a detailed section 316(a) demonstration in its application to amend its NPDES permit. Therefore, it is evident that Entergy has provided all of the information that is explicitly required in the regulations. The amended permit is under an ongoing appeal. The impact of this appeal on my decision is discussed in Section B.4.

## ***2. Implicit ER Requirements***

While Entergy has clearly met the explicit requirements of the regulations, the next question to address is whether the requirements of section 51.53(c)(3)(ii)(B) are inclusive of all the information needed in an ER. To resolve this issue, I turn to the discussion of the analyses that must be performed by the Staff in preparing the SEIS, using section 51.71(d) and section 51.95(c) of the NRC regulations for guidance. The former section states that the draft SEIS for a license renewal will rely on conclusions presented in the GEIS for Category 1 issues, but must contain an analysis of those issues identified as Category 2. As mentioned above, the only Category 2 issues related to this contention (i.e., thermal impacts on aquatic ecology) are entrainment, impingement, and heat shock. These impacts are addressed in the requirements of a CWA § 316(a) demonstration and the section 316(b) determination. As referenced by VANR's NPDES permit, Entergy has submitted these analyses in their ER and in their application to amend their NPDES permit.

Besides the Category 2 issues, section 51.71(d) does not require any other specific analyses for license renewals in the draft SEIS. Likewise, section 51.95(c) does not require any other new analyses from the Staff in the final SEIS that might affect the contents of the Applicant's ER. Therefore, the ER requirements listed in section 51.53(c)(3)(ii)(B) appear to be inclusive, since the regulations do not require the Staff to evaluate any other specific analyses in preparing their SEIS.

The information required by the regulations is now included in the LRA. Therefore, there is no material dispute and the contention should be rejected. To

require the Applicant to do more is an impermissible challenge to a Commission regulation and outside the scope of the license renewal proceeding. *See* 10 C.F.R. § 2.335(a).

### ***3. Addressing Impacts of Increased Thermal Discharge Limits***

With the granting of a NPDES permit, the State has done a thorough review of the environmental impacts of the increased thermal limits on aquatic ecology. With additional limitations, VANR concluded that there will be no significant impact from the proposed thermal discharge on aquatic biota.

NEC has specifically raised the issue of cumulative impacts from the thermal increase on the aquatic biota in the adjacent river. While there are several Category 1 issues that are potentially associated with this issue,<sup>6</sup> cumulative impacts are not identified as a separate listed category in the GEIS. The Commission has already decided that a board cannot admit a contention regarding a Category 1 issue. Also, cumulative impacts of the thermal increase do not directly relate to the limited Category 2 issues of entrainment, impingement, and heat shock. Therefore, the NRC regulations do not allow a contention on this additional environmental issue, since it is beyond those delineated in the GEIS. Any contention that attempts to do so is a direct challenge to a Commission regulation and outside the scope of the license renewal proceeding. *See* 10 C.F.R. § 2.335(a). A petitioner has two options available to expand the scope of the relevant issues, including: (1) submitting a petition for rulemaking under 10 C.F.R. § 2.802, or (2) requesting a waiver of the regulations from the Commission under 10 C.F.R. § 2.335(b). To the best of my knowledge, NEC has not initiated either of these options.

While not directly required as part of the GEIS, cumulative impacts from effluent discharges have been addressed by Entergy in their application to amend the NPDES permit. VANR notes that the section 316(a) demonstration has considered cumulative impacts and it showed that the alternative effluent limitations will assure the protection and propagation of the aquatic habitat. As discussed in the Responsiveness Summary (RS), these conclusions were based on more than 30 years of monitoring and using predicative analysis by a calibrated computer simulation modeling of the Vernon pool and the tailwater reach below the dam (RS for Permit No. 3-1199, at p. 2-3). Therefore, Entergy has addressed the issue of this contention, even though it is not specifically required to do so by the NRC regulations.

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<sup>6</sup>These include, but are not necessarily limited to, accumulation of contaminants in sediments or biota; cold shock; thermal plume barrier to migrating fish; distribution of aquatic organisms; premature emergence of aquatic insects; gas supersaturation; low dissolved oxygen; losses from predation, parasitism, and disease among organisms exposed to sublethal stresses; and stimulations of nuisance organisms. 10 C.F.R. Part 51, Subpart A, Appendix B.

VANR has the opportunity to re-address these effluent limits every 5 years during renewal of the NPDES permit, and to modify the parameters, if necessary, to protect the aquatic biota. In essence, the NPDES renewal period provides an ongoing assessment of cumulative impacts throughout the life of the plant. Based on this, cumulative impacts have been addressed for this issue.

#### **4. NPDES Permit Status**

The amendment to Entergy's NPDES permit (authorizing the temperature increase to the thermal discharges under question in this contention) was approved on March 30, 2006, and expired the next day. However, NEC admits that permit remains in effect until the review of the renewal application is complete. NEC Reply at 4; Tr. at 291-92.

The approved amendment was appealed and, in fact, was recently stayed by the State of Vermont Environmental Court on August 28, 2006. I considered the option of admitting this contention as one of omission until this case is decided. However, I ruled out this option as pointless. If the appeal is upheld and the NPDES permit is revoked, the effluent limitations revert back to the previous values and there will be no increase in thermal discharge, rendering this contention moot. If the appeal is denied and the NPDES permit is reinstated, it is my opinion that the contention is inadmissible for the reasons presented in Sections B.1 and B.2. If the NPDES permit is reinstated with modifications, the petitioner may request leave to amend their contention or file a new contention under 10 C.F.R. § 2.309(f)(2).

The petitioner also argues two other points: (1) that the permit will expire in 5 years, before the license renewal period even starts, and (2) that there is no valid section 316 determination since only part of the period was approved for the increased temperatures. In regards to the first issue, the 5-year renewal period for the NPDES permit seems to provide additional assurances that thermal increases will not affect aquatic biota by providing ongoing reassessment on the response of the steam to the higher discharge limits. As mentioned in Section B.3, the NPDES renewal period essentially provides a rolling assessment of cumulative impacts throughout the life of the plant.

In approving Entergy's amendment application, VANR agreed that the CWA § 316(a) demonstration was conclusive for the period from June 16 to October 14, but was inconclusive for the period from May 16 to June 15. As is their right under the CWA, VANR placed additional limitations on the thermal discharge by not approving them for the first portion of the request period (i.e., May 16 to June 15) and only approving the increased temperatures for the second part of the requested period (i.e., June 16 to October 14). These limits may be modified in the future if additional site monitoring indicates that the observed impact on aquatic biota warrants an alternation to these time periods. NEC's environmental

contention does not apply to the first period since the temperatures will remain at the previous values. The contention applies to the second period, but should be rejected for the reasons discussed in Sections B.1 and B.2.

#### **5. Consistency within NRC Regulations, CWA, and NEPA**

Contrary to what is alleged by NEC and the majority opinion, it is not a question of whether NRC is required to perform a NEPA analysis. The regulations make it clear that, under NEPA, the Commission must analyze the environmental impacts from the proposed action, i.e., license renewal in this case. The Commission has met its NEPA requirements by assessing the environmental impacts associated with license renewal applications in the GEIS. 10 C.F.R. Part 51, Subpart A, Appendix B.

The real dispute related to how the CWA effluent limitations relating to thermal discharge (i.e., sections 316, 401, and 402) are handled in the EIS. In accordance with 10 C.F.R. § 51.71(d), the Staff is required to rely on the conclusions of the GEIS for Category 1 issues and is required to augment the GEIS by evaluating Category 2 site-specific alternative analyses in the SEIS. As mentioned, the three Category 2 issues related to thermal discharge impacts on aquatic biota from once-through cooling systems have been addressed by Entergy's section 316 demonstrations and determinations. In accordance with 10 C.F.R. § 51.71(d), the water pollution limitations imposed pursuant to FWPCA for thermal discharges at Vermont Yankee (i.e., section 316 analyses) must be relied upon in the overall assessment of environmental impacts from the licensed renewal period.

These restrictive requirements in the NRC regulations are consistent with section 511(c)(2) of the CWA, which states that nothing in NEPA authorizes any federal agency to: (1) review any effluent limitation or other requirement established pursuant to the CWA, or (2) impose any effluent limitations other than those established pursuant to FWPCA. Therefore, water pollution limitations or requirements promulgated or imposed pursuant to the FWPCA must be followed as a compliance limitation in the analysis of the overall environmental impacts from the proposed activity. *See* 10 C.F.R. § 51.71(d).

Having said this, it is important to note that the Commission is not exempt from assessing the overall environmental impacts of the project in accordance with NEPA requirements. As noted in footnote 3 of section 51.71(d) of the NRC regulations, "compliance with the environmental water quality standards and requirements of FWPCA . . . is not a substitute for and does not negate the requirement for NRC to weight all environmental effects of the proposed action."

Here, as in other sections of the regulations (e.g., sections 51.45(c) and 51.53(c)), the proposed action is the license renewal, not the effluent discharge.<sup>7</sup>

What these regulations and accompanying footnote say is that a NEPA analysis must be performed on all environmental effects of the license renewal, but, with regards to thermal discharge (or other CWA requirements), the effluent limitations (e.g., section 316 for thermal discharges) or other requirements imposed by the State (as part of the CWA § 401 water quality certification and CWA § 402 NPDES permit) cannot be altered. In a case such as this where the State of Vermont has assessed the aquatic impacts in approving the plant's cooling system, the NRC must take their evaluation at face value and may not undercut their judgment by undertaking an independent analysis or establishing its own standards. *Carolina Power and Light Co.* (H.B. Robinson, Unit 2), ALAB-569, 10 NRC 557, 562 (1979); *Tennessee Valley Authority* (Yellow Creek Nuclear Plant, Units 1 and 2), ALAB-515, 8 NRC 702, 712-13, 715 (1978). However, the Agency must still perform a NEPA analysis for the license renewal, taking a hard look at other alternatives but not altering CWA effluent limitations.

In addition to not usurping the authority of other permitting agencies, NRC recognized that the "permit process authorized by the FWPCA is an adequate mechanism for control and mitigation of potential aquatic impacts." Proposed Rule: "Environmental Review for Renewal of Operating Licenses," 56 Fed. Reg. 47,016, 47,019 (Sept. 17, 1991). To require another analysis of alternatives on effluent limitations under NEPA would amount to an unnecessary and repetitive review of the water quality impacts already addressed by another permitting agency. However, when no assessment of aquatic impacts has been performed by any other permitting authority, NRC regulations require the Commission to establish the magnitude of potential impacts. *See* 10 C.F.R. § 51.71(d) n.3. This NRC requirement is also consistent with the CWA since section 511(c) would no longer apply.

### C. Summary

Entergy has provided all the ER information required by the regulations. The applicant has addressed the section 316(b) determination in their ER, and cumulative impacts (as well as a section 316(a) demonstration) in their application

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<sup>7</sup>To accept much of the argument in the NEC petition and the majority opinion, it seems that one would have to define the proposed action as the effluent discharge. With this definition, the requirements to "weigh all environmental effects" would specifically apply to the effluent discharge and not to the overall license renewal. This clearly is not the case, because to accept this position would make the NEPA mandate of weighing all environmental effects incompatible with section 511(c)(2) of FWPCA which prohibits an agency from using NEPA to impose other effluent limitations besides those authorized by FWPCA.

to amend their NPDES permit. While the NPDES amendment application was not yet approved when the LRA was submitted, the omission of the permit authorizing the thermal increase was rectified with Entergy's July 27, 2006, submittal. This contention is inadmissible on the grounds of lacking a real dispute, because the applicant has addressed the specific environmental concerns raised by NEC and done so in accordance with NRC regulations.

The approved NPDES permit amendment is presently being appealed and has recently been stayed by the State of Vermont Environmental Court. The future status of the permit does not affect the opinion presented herein. Specifically, NEC's contention deals solely with the impacts from the increased thermal limits desired by Entergy. If the approved NPDES permit is overturned, the license reverts back to the original effluent limitations in the previous permit, and the increased thermal discharges will not take place, rendering this contention moot.

There is no procedural way in a license renewal proceeding before this Board to further evaluate cumulative impacts from thermal discharge. To require an applicant to address this impact beyond the limited Category 2 issues of entrainment, impingement, and heat shock would inappropriately challenge a Category 1 issue. The cumulative impacts from the thermal discharge during the license renewal period that NEC tried to raise are not among the Category 2 issues. Moreover, the inability to review and alter the effluent limitations that have been built into the NRC regulations is consistent with CWA § 511(c). Consequently, NEC's contention in this license renewal proceeding, based solely on their undifferentiated claim that the Applicant has failed to analyze the cumulative effects of thermal discharge during the license renewal period would be a direct challenge to the NRC regulations and should be rejected.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**ATOMIC SAFETY AND LICENSING BOARD**

**Before Administrative Judges:**

**Michael C. Farrar**, Chairman  
**E. Roy Hawkens**  
**Nicholas G. Trikouros**

**In the Matter of**

**Docket No. IA-05-053**  
**(ASLBP No. 06-846-02-EA)**

**DALE L. MILLER**

**September 29, 2006**

In this challenge to an NRC Staff immediately effective enforcement order prohibiting a former Davis-Besse employee from working in NRC-licensed activities for 5 years, the Licensing Board finds a proposed settlement to be in the public interest, so that no adjudication is required.

**ENFORCEMENT ACTIONS: SETTLEMENT OF PROCEEDINGS**

In approving a proposed settlement between the NRC Staff and the subject of a very stringent enforcement order, the Board found no reason — where Staff had taken aggressive enforcement action in related respects — to look behind the Staff's newly emerged judgment that lesser measures as to this individual are now seen as adequate for compliance and enforcement purposes.

**ORDER**

**(Approving Proposed Settlement and Dismissing Proceeding)**

The parties to this enforcement proceeding, which arose out of the Davis-Besse reactor vessel head problems of several years ago, have entered into a

formal Settlement Agreement and submitted a joint motion asking this Board to issue their proposed settlement order and thereby to dismiss the proceeding. In rejecting without prejudice an earlier joint motion seeking the same relief, we had anticipated this “early submittal of a renewed motion which meets the form and provides the substance required by the Agency’s regulations.” See p. 3 of our Order (Requiring Additional Information . . .), September 13, 2006 (unpublished). The motion now before us meets those conditions.

Given the longstanding NRC policy of encouraging parties’ settlement efforts, we are pleased to announce our approval of the settlement as proposed. In its current form, that agreement not only complies with agency regulations, including 10 C.F.R. §§ 2.203 and 2.338, but also is plainly seen to be in “the public interest.” *Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 71 (1994); see also 10 C.F.R. § 2.203 (settlement “shall be subject to approval by” the Board, which “may order such adjudication of the issues as [it] may deem to be required in the public interest”); *id.* § 2.338(i) (to same effect).

Given the showing made by the joint motion and its accompanying documents, the substance of which we adopt, the public interest does not require the adjudication of any issues herein. In particular, we concur with the Staff’s judgment that the talks Mr. Miller would give to particular audiences under the terms of the agreement are calculated to have a remarkable educational effect upon employees in the regulated nuclear industry who provide information that makes its way to the NRC Staff. And, given that the Staff (1) had, at an earlier juncture, acted forcefully on its then-belief that a far more onerous sanction had to be imposed on Mr. Miller to protect the public health and safety, and (2) is still actively prosecuting enforcement cases against others involved in the Davis-Besse matter, we have no reason to look behind the Staff’s current judgment — based on the interceding “voluminous discovery and interactions between the parties” (Joint Motion at 2) — that, insofar as Mr. Miller is concerned, lesser measures are now seen as adequate for compliance and enforcement purposes.

With those prefatory observations, it is appropriate for us to rely upon the jointly submitted proposed order by incorporating its terms — consisting of eight numbered paragraphs (which include reference to the “Exhibit A” Settlement Agreement that we append hereto) — in this Order, as follows:

1. On January 4, 2006, the Staff issued an Order (Effective Immediately) Prohibiting Involvement in NRC Licensed Activities to Mr. Dale Miller, a former employee of Davis-Besse Nuclear Power Plant.
2. On February 23, 2006, Mr. Miller properly and timely answered the Order, denied the allegations in the Order, and requested an expedited hearing.
3. On March 16, 2006, this Licensing Board was established.

4. On March 20, 2006, the Staff answered the hearing request, and agreed that Mr. Miller was entitled to a hearing.
5. On March 27, 2006, the Board granted Mr. Miller's hearing request.
6. The Order issued on January 4, 2006 to Mr. Dale Miller is superceded by this Order.
7. The Settlement Agreement, attached as Exhibit A to this Order, is hereby incorporated into this Order.
8. Upon review of the Settlement Agreement, the Licensing Board is satisfied that its terms reflect a fair and reasonable settlement of this matter, in keeping with the objectives of the NRC's Enforcement Policy, and that no further adjudication of any matter is required in the public interest.

With all matters that were subject to adjudication herein having thus been amicably resolved in the public interest, the relief sought by the joint motion is hereby GRANTED, the controversy before us is TERMINATED in accordance with the Settlement Agreement (Exhibit A hereto), and the proceeding is DISMISSED. It is so ORDERED.

THE ATOMIC SAFETY AND  
LICENSING BOARD

Michael C. Farrar, Chairman  
ADMINISTRATIVE JUDGE

E. Roy Hawkens  
ADMINISTRATIVE JUDGE

Nicholas G. Trikouros  
ADMINISTRATIVE JUDGE

Rockville, Maryland  
September 29, 2006

Copies of this Order were sent this date by e-mail transmission to counsel for the parties.

**“EXHIBIT A”**  
**to**  
**September 29, 2006 Licensing Board Order:**  
**SETTLEMENT AGREEMENT**

1. On January 4, 2006, the Staff issued an Order (Effective Immediately) Prohibiting Involvement in NRC Licensed Activities to Mr. Dale Miller, a former employee of Davis-Besse Nuclear Power Plant.
2. On February 23, 2006, Mr. Miller properly and timely answered the Order, denied the allegations in the Order, and requested an expedited hearing.
3. On March 16, 2006, the Atomic Safety and Licensing Board with jurisdiction over Mr. Miller’s hearing request was established.
4. On March 20, 2006, the Staff answered the hearing request, and agreed that Mr. Miller was entitled to a hearing.
5. On March 27, 2006, the Board granted Mr. Miller’s hearing request.
6. The Order issued on January 4, 2006, to Mr. Dale Miller will be superceded by an Order approving and incorporating this Agreement.
7. Within forty-five days of the date of the Order approving and incorporating this agreement, Mr. Miller agrees to provide to the Director, Office of Enforcement, a letter explaining his understanding of the significance of the role of the Compliance Supervisor in ensuring that all communications with the NRC contain complete and accurate information. The letter will further explain what Mr. Miller has learned from his experiences at Davis-Besse in the Fall of 2001 about the duties, responsibilities of, and expectations for, a Compliance Supervisor to ensure that the licensee’s actions are consistent with its responsibility to ensure that consideration of the public’s health and safety is paramount in all situations and communications, especially those that may involve potential financial or business conflicts. The content of this letter will be coordinated with Agency Enforcement staff.
8. Mr. Miller agrees to make every effort to be a presenter at the next meeting of the North American Young Generation in Nuclear (an organization of individuals age 35 and younger, working throughout the fields of nuclear science and technology). His presentation will be consistent with the letter addressed in Paragraph 7. The NRC agrees to assist Mr. Miller with becoming a presenter if necessary.
9. Mr. Miller agrees to be a presenter at the next practicable Licensing Forum (an annual, widely attended, forum sponsored by the Nuclear Energy Institute to discuss opportunities to improve the effectiveness and efficiency of the NRC licensing process). His presentation will be consistent with the letter addressed in paragraph 7.

10. In consideration of the above terms, and in light of new information developed both during the discovery process and during the confidential Alternative Dispute Resolution session on September 8, 2006, the NRC Staff acknowledges that it no longer has a concern about the reliability and trustworthiness of Mr. Miller and believes that the health and safety of the public will be adequately protected if Mr. Miller is allowed to resume involvement in licensed activities. In the parties' view, Mr. Miller's presentations as provided in items 8 and 9 will convey both his personal experiences and the lessons learned to a large group of individuals within the regulated community that would not otherwise have had the benefit of such detailed highlighting of important regulatory principles and required actions for persons representing regulated entities. Such communications will have a positive benefit to achieving the regulatory goals embodied in NRC's enforcement policy.

11. In light of the above agreements, the parties agree that all further procedural steps before the Licensing Board and any right to challenge or contest the validity of the order entered into in accordance with the agreement, and all rights to seek judicial review or otherwise to contest the validity of the order are expressly waived.

12. The parties further agree that the order accepting the settlement agreement has the same force and effect as an order made after a full hearing.

13. It is also agreed by the parties that all matters required to be adjudicated as part of this proceeding have been resolved upon the Licensing Board's approval of this agreement and the parties agree that the proceeding, ASLB-06-846-02-EA, should be dismissed upon the Licensing Board's approval of this agreement.

*[As submitted to the Board, the foregoing Settlement Agreement was subscribed to by Counsel for the NRC Staff and Counsel for Mr. Miller.]*

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**COMMISSIONERS:**

**Dale E. Klein, Chairman**  
**Edward McGaffigan, Jr.**  
**Jeffrey S. Merrifield**  
**Gregory B. Jaczko**  
**Peter B. Lyons**

**In the Matter of**

**Docket No. 50-293-LR**

**ENTERGY NUCLEAR OPERATIONS, INC.**  
**(Pilgrim Nuclear Power Station)**

**In the Matter of**

**Docket No. 50-271-LR**

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

**October 10, 2006**

The Commission denies “petitions” for a “backfit order” filed by the Massachusetts Attorney General, noting that they amount to a request for enforcement action, and not a matter within the scope of a license renewal adjudication.

**RULES OF PRACTICE: ADJUDICATIONS**

A request for an order to modify a license based upon an allegedly hazardous condition in the current spent fuel pool amounts to a request for agency enforcement action. Such a request is not suitable for a license renewal adjudication, but perhaps suitable for consideration under 10 C.F.R. § 2.206.

## ORDER

In these license renewal proceedings, the Massachusetts Attorney General (Massachusetts AG) has filed a request for hearing and petition for leave to intervene. The hearing requests included a “Petition for Backfit Order.” By these petitions, the Massachusetts AG requests the Commission to initiate proceedings to change the current storage configuration in the Pilgrim Nuclear Power Station and Vermont Yankee Nuclear Power Station spent fuel pools. In June 2006, the Secretary of the Commission referred the Massachusetts AG’s hearing requests to the Atomic Safety and Licensing Board Panel, without any reference to or distinction drawn for a “Petition for a Backfit Order.”<sup>1</sup> The Licensing Boards in these proceedings do not appear to contemplate taking action on the backfit petitions, and counsel for the Massachusetts AG seemingly believes that the backfit petitions remain pending before the Commission.<sup>2</sup>

Our rules governing adjudicatory proceedings, found in 10 C.F.R. Part 2, do not provide for the filing of a “Petition for Backfit Order” with the Commission. The Massachusetts AG’s petitions take issue with the current storage configuration in the Pilgrim and Vermont Yankee spent fuel pools, configurations authorized by earlier license amendments. The petitions request the Commission to require each of the spent fuel pools to return “to its original low-density storage configuration and [to] us[e] dry storage for any excess fuel.”<sup>3</sup> The action that the Massachusetts AG effectively seeks in each case — an order modifying the license based upon an alleged potential hazardous condition in the current spent fuel pool — amounts to a request for agency enforcement action, a request not suitable for

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<sup>1</sup> See Memorandum (June 6, 2006) (re: Requests for Hearing with Respect to the License Renewal Application for the Pilgrim Nuclear Power Station); Memorandum (June 7, 2006) (re: Requests for Hearing with Respect to the License Renewal Application for the Vermont Yankee Nuclear Power Station).

<sup>2</sup> See, e.g., Mass AG’s Reply to Entergy’s and NRC Staff’s Responses to Hearing Request and Petition To Intervene with Respect to Pilgrim License Renewal Proceeding (June 29, 2006) at 3. Mass AG’s Reply to Entergy’s and NRC Staff’s Responses to Hearing Request and Petition To Intervene with Respect to Vermont Yankee License Renewal Proceeding (June 30, 2006) at 3.

<sup>3</sup> See Massachusetts AG’s Request for a Hearing and Petition for Leave To Intervene with Respect to Entergy Nuclear Operations Inc.’s Application for Renewal of the Pilgrim Nuclear Power Plant Operating License and Petition for Backfit Order Requiring New Design Features To Protect Against Spent Fuel Pool Accidents (May 26, 2006) at 50; Massachusetts AG’s Request for Hearing and Petition for Leave To Intervene with Respect to Entergy Nuclear Operations Inc.’s Application for Renewal of the Vermont Yankee Nuclear Power Plant Operating License and Petition for Backfit Order Requiring New Design Features To Protect Against Spent Fuel Pool Accidents (May 30, 2006) at 49.

a license renewal adjudication but perhaps suitable for consideration under 10 C.F.R. § 2.206.<sup>4</sup>

Accordingly, the Commission *denies* the Massachusetts AG's petitions for backfit order. If the Massachusetts AG wishes to pursue this matter, he may file a request for NRC action under section 2.206, pursuant to the requirements outlined in that section.<sup>5</sup>

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK  
Secretary of the Commission

Dated at Rockville, Maryland,  
this 10th day of October 2006.

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<sup>4</sup> Section 2.206 allows "any person" to "file a request to institute a proceeding pursuant to § 2.202 to modify, suspend, or revoke a license, or for any other action as may be proper." Section 2.206 specifies that such requests must be filed with the NRC's Executive Director of Operations, who will refer the request to the appropriate NRC office director.

<sup>5</sup> We note that the Massachusetts AG recently filed a petition for rulemaking, raising related spent fuel pool arguments under the National Environmental Policy Act.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**ATOMIC SAFETY AND LICENSING BOARD**

**Before Administrative Judges:**

**E. Roy Hawkens**, Chairman  
**Dr. Paul B. Abramson**  
**Dr. Anthony J. Baratta**

**In the Matter of**

**Docket No. 50-0219-LR**  
**(ASLBP No. 06-844-01-LR)**

**AMERGEN ENERGY COMPANY, LLC**  
**(Oyster Creek Nuclear Generating**  
**Station)**

**October 10, 2006**

**RULES OF PRACTICE: NEW OR AMENDED CONTENTIONS**  
**(NEW INFORMATION)**

Petitioners who seek to introduce a new or amended contention based on allegedly new information that was previously unavailable must show that: (1) the information upon which the amended or new contention is based was not previously available; (2) the information upon which the amended or new contention is based is materially different than information previously available; and (3) 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)).

**RULES OF PRACTICE: CONTENTIONS (NONTIMELY FILINGS)**

A petitioner's failure to satisfy 10 C.F.R. § 2.309(f)(2) will mandate the rejection of a late-filed contention as nontimely, unless the petitioner demonstrates that the eight-factor balancing test in 10 C.F.R. § 2.309(c) militates in favor of considering the admissibility of the nontimely contention.

**RULES OF PRACTICE: CONTENTIONS (NONTIMELY FILINGS, WAIVER)**

A petitioner who without reason fails to argue that a nontimely contention satisfies the eight-factor balancing test in 10 C.F.R. § 2.309(c) may be deemed as having waived that argument.

**MEMORANDUM AND ORDER  
(Granting Petition To File a New Contention)**

**I. INTRODUCTION**

On February 27, 2006, this Board granted a Petition To Intervene submitted by six groups<sup>1</sup> — hereinafter referred to collectively as Citizens — opposing an application by AmerGen Energy Company, LLC (“AmerGen”) to renew its operating license for the Oyster Creek Nuclear Generating Station (“Oyster Creek”) for 20 years beyond the current expiration date of April 9, 2009. *See* LBP-06-7, 63 NRC 188 (2006). This Board admitted one contention for litigation — namely, Citizens’ challenge to AmerGen’s aging management program for measuring corrosion in the sand bed region of Oyster Creek’s drywell liner to the extent that the program “fails to include periodic [ultrasonic testing (“UT”)] measurements in that region throughout the period of extended operation” (LBP-06-7, 63 NRC at 217).

Subsequently, on June 6, 2006, this Board issued a Memorandum and Order in which we concluded that Citizens’ contention, as admitted by the Board, was a contention of omission that had been cured as a result of an April 4, 2006 docketed commitment by AmerGen to perform periodic UT measurements in the sand bed region of the drywell liner throughout the period of extended operation (LBP-06-16, 63 NRC 737, 742-44 (2006)). Instead of dismissing the proceeding, this Board gave Citizens the opportunity to file, within 20 days of the date of our Order, a new contention raising one or more specific substantive challenges to AmerGen’s new periodic UT program for the sand bed region (*id.* at 744). Citizens were instructed to address the relevant factors in 10 C.F.R. § 2.309(f)(2) regarding the admission of contentions based on newly available information, as well as the admissibility factors in 10 C.F.R. § 2.309(f)(1).

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<sup>1</sup>The six groups are: Nuclear Information and Resource Service (“NIRS”); Jersey Shore Nuclear Watch, Inc.; Grandmothers, Mothers and More for Energy Safety; New Jersey Public Interest Research Group; New Jersey Sierra Club; and New Jersey Environmental Federation. In previous decisions, this Board referred to these groups collectively as NIRS. These groups now identify themselves collectively as “Citizens,” and we will use that designation here.

On June 23, 2006, Citizens filed their new contention. Contemporaneously, Citizens filed a motion seeking leave to supplement their new contention on the basis of AmerGen's June 20, 2006 docketing of a new commitment concerning its aging management program for the Oyster Creek drywell liner. This Board granted Citizens' request, instructing that any "new bases or contention(s) [Citizens] seek[ ] to add to [their] June 23 Petition . . . must be limited to AmerGen's UT program for the sand bed region as reflected in AmerGen's docketed commitment of June 20, and be based on *new* information in that commitment" (Licensing Board Order (Granting [Citizens'] Motion for Leave To Submit a Supplement to Its Petition) at 3 (July 5, 2006) (unpublished) [hereinafter July 5 Order]).

Citizens submitted a supplement to their June 23 Petition. AmerGen and the NRC Staff answered, arguing, respectively, that Citizens' new contention was not admissible, and that Citizens' new contention was admissible in part.

For the reasons discussed below, we conclude that Citizens' new contention is admissible in part.

## II. BACKGROUND

AmerGen's License Renewal Application ("LRA") for Oyster Creek, as originally submitted, contained no provision for future UT measurements in the sand bed region of the drywell liner.<sup>2</sup> The LRA omitted such measurements because AmerGen had concluded that corrosion in that region had been arrested, and that periodic visual inspections — which AmerGen planned to perform throughout the 20-year renewal period — would be adequate to identify the effects of age-related corrosion (Oyster Creek Generating Station, License Renewal Application at 3.5-19 to 3.5-21 (July 22, 2005) [hereinafter LRA]). Since submitting its LRA, however, AmerGen's position on the need for UT measurements during the period of extended operation has changed. On three occasions — in December 2005,

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<sup>2</sup>The drywell liner, also known as the drywell shell, is a steel pressure vessel surrounding the reactor system that is "designed to contain and control the release of fission products to the reactor building in the event of a Design Basis Accident including a Loss-Of-Coolant-Accident . . . so that the offsite radiation dose consequences to surrounding populations would be within the postulated acceptable limits" (LBP-06-7, 63 NRC at 212) (internal quotation marks omitted). Shaped like an inverted lightbulb, the drywell liner is about 100 feet tall, measuring about 70 feet in diameter at the spherical base and 30 feet in diameter in the upper cylinder region (*ibid.*). The spherical base is partially embedded in reinforced concrete up to about the 9-foot level, and the non-embedded portion of the liner is enclosed by a reinforced concrete shield wall, separated by an annular gap of 3 inches that allows for expansion of the liner during reactor operation (*ibid.*). The sand bed region (which originally was filled with sand) is on the lower portion of the spherical base, and it extends from about the 9-foot level to the 13-foot level (*ibid.*). Oyster Creek removed the sand from the sand bed region in 1993 after determining that it contained residual moisture that caused continuing corrosion (*id.* at 214 & n.22).

April 2006, and June 2006 — AmerGen formally docketed with the NRC Staff additional commitments regarding its testing regime for the sand bed region of the drywell liner.

First, on December 9, 2005 — while Citizens’ Petition To Intervene was pending before this Board — AmerGen docketed a commitment to perform a set of one-time UT thickness measurements in the sand bed region prior to the period of extended operation (LBP-06-7, 63 NRC at 216). Second, on April 4, 2006 — after this Board concluded that Citizens proffered an admissible contention<sup>3</sup> — AmerGen docketed a commitment to perform periodic UT measurements in the sand bed region throughout the period of extended operation. *See* Enclosure to Letter from Michael P. Gallagher, AmerGen, to NRC (Apr. 4, 2006) [hereinafter April 4 Commitment].<sup>4</sup> Specifically, AmerGen committed to perform UT measurements in the sand bed region every 10 years following the measurements taken prior to the renewal period. “The UT measurements will be taken . . . at the same locations where UT measurements were performed in 1996. The inspection results will be compared to previous results [and any] [s]tatistically significant deviations from the 1992, 1994, and 1996 UT results will result in [a series of] corrective actions” (*id.* at 1).<sup>5</sup>

On June 20, 2006, AmerGen docketed its third commitment, in which it declared that — after performing the initial set of UT measurements in the sand bed region prior to the period of extended operation — it would perform an additional set of measurements two refueling outages later, with “[s]ubsequent inspection frequency . . . established as appropriate, not to exceed 10-year intervals” (Letter from Michael P. Gallagher, AmerGen, to NRC, Encl. 2, at 2 (June 20, 2006) [hereinafter June 20 Commitment]). In addition, AmerGen

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<sup>3</sup> Citizens’ contention, as reframed by the Board, read as follows (LBP-06-7, 63 NRC at 217):

AmerGen’s [LRA] fails to establish an adequate aging management plan for the sand bed region of the drywell liner, because its corrosion management program fails to include periodic UT measurements in that region throughout the period of extended operation and, thus, will not enable AmerGen to determine the amount of corrosion in that region and thereby maintain the safety margins during the term of the extended license.

<sup>4</sup> AmerGen’s April 4 commitment also included the following changes to its aging management plan for the sand bed region: (1) prior to the period of extended operation and every 10 years during that period, AmerGen will perform additional visual inspections of the epoxy coating applied to the exterior surface of the drywell shell in the sand bed region in accordance with ASME Section XI, Subsection IWE; and (2) on a periodic basis the drywell sand bed region drains will be monitored for water leakage. *See* April 4 Commitment at 1-2.

<sup>5</sup> The corrective actions that will be taken prior to restarting operations from the outage include (April 4 Commitment at 1-2): (1) performing confirmatory UT measurements; (2) notifying the NRC within 48 hours of confirmation of the identified condition; (3) conducting visual inspections of the external surface in the sand bed region; (4) assessing the extent of the condition to determine if additional inspections are required to assure drywell integrity; and (5) performing “operability determination and justification for operation until next inspection.”

committed to monitor the sand bed region drains daily during refueling outages and quarterly during the plant operating cycle throughout the period of extended operation. If leakage is detected, “procedures will be in place to determine the source of leakage and [to] investigate and address the impact of leakage on the drywell shell” (*id.* at 3). These procedures include verifying the condition of the drywell shell coating and moisture barrier seal in the sand bed region, performing UT examinations on the upper regions of the shell as well as “on any areas in the sand bed region where visual inspection indicates the coating is damaged and corrosion has occurred,” and repairing any degraded coating or moisture barrier (*id.* at 3-4).

Pending before this Board is Citizens’ new contention, as set forth in their July 25 Supplement. The contention reads as follows ([Citizens’] Supplement to Petition To Add a New Contention at 7 (July 25, 2006) [hereinafter Citizens Supplement]):

AmerGen must provide an aging management plan for the sand bed region of the drywell shell that ensures that safety margins are maintained throughout the term of any extended license, but the proposed plan fails to do so because the acceptance criteria are inadequate, the scheduled UT monitoring frequency is too low in the absence of adequate monitoring for moisture and coating integrity and is not sufficiently adaptive to possible future narrowing of the safety margins, the monitoring for moisture and coating integrity is inadequate, the response to wet conditions and coating failure is inadequate, the scope of the UT monitoring is insufficient to systematically identify and sufficiently test all the degraded areas of the shell in the sand bed region, the quality assurance for the measurements is inadequate, and the methods proposed to analyze the UT results are flawed.

AmerGen and the NRC Staff each filed Answers. AmerGen opposes the admission of Citizens’ new contention on two principal grounds: (1) Citizens fail to comply with the Board’s July 5 Order; and (2) Citizens fail to satisfy the requirements of 10 C.F.R. § 2.309(f)(1) and (f)(2). *See* AmerGen’s Answer to Citizens’ Petition To Add a New Contention and Supplement Thereto (Aug. 11, 2006) [hereinafter AmerGen Answer]. The NRC Staff, on the other hand, supports admitting Citizens’ new contention in part. *See* NRC Staff Answer to Petition To Add a New Contention and Petition Supplement (Aug. 21, 2006) [hereinafter NRC Staff Answer]. Citizens filed a Reply to each Answer. *See* Citizens’ Reply to AmerGen’s Answer to the Petition To Add a New Contention and Supplement Thereto (Aug. 18, 2006) [hereinafter Citizens Reply to AmerGen]; Citizens’ Reply to NRC Staff’s Answer to the Petition To Add a New Contention and Supplement Thereto (Aug. 29, 2006) [hereinafter Citizens Reply to NRC Staff].

### III. ANALYSIS

#### A. Legal Standards Governing the Admissibility of Citizens' Newly Proffered Contention

Because Citizens seek to introduce a new or amended contention based on allegedly new information that was previously unavailable, they must show that (10 C.F.R. § 2.309(f)(2)):<sup>6</sup>

- (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.

Failure to satisfy any of these requirements will mandate the rejection of Citizens' contention as nontimely.<sup>7</sup>

Citizens' contention must also satisfy the following six requirements to be deemed admissible (10 C.F.R. § 2.309(f)(1)):

- (i) Provide a specific statement of the issue of law or fact to be raised or controverted;
- (ii) Provide a brief explanation of the basis for the contention;
- (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;
- (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
- (v) Provide a concise statement of the alleged facts or expert opinions which support the . . . petitioner's position on the issue and on which the petitioner intends

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<sup>6</sup>To gain party status in an NRC adjudicative proceeding, a petitioner must — in addition to submitting at least one admissible contention — satisfy standing requirements (10 C.F.R. § 2.309(a), (d)). At a previous stage of this proceeding, this Board concluded that Citizens have standing (LBP-06-7, 63 NRC at 195-97).

<sup>7</sup>A nontimely contention is not per se inadmissible. However, a petitioner must demonstrate that admission of a nontimely contention is warranted pursuant to the eight-factor balancing test in 10 C.F.R. § 2.309(c). Because Citizens fail to address section 2.309(c) in their filings, this Board must reject nontimely aspects of Citizens' contention. Contrary to Citizens' belief (Citizens Supplement at 14, 24), they may not belatedly attempt to rehabilitate nontimely aspects of their contention. We have, on several occasions, put Citizens on notice that nontimely contentions must satisfy section 2.309(c). *See* LBP-06-16, 63 NRC at 745 n.12; LBP-06-11, 63 NRC 391, 396 n.3 (2006). In these circumstances, Citizens should have addressed the section 2.309(c) factors for any contention that reasonably might be viewed as nontimely. We treat Citizens' failure to address those factors as a waiver, which forecloses them hereafter from making an untimely attempt to satisfy section 2.309(c).

to rely at hearing, together with references to the specific sources and documents on which the . . . petitioner intends to rely to support its position on the issue; and

(vi) Provide sufficient information to show that a genuine dispute exists with the . . . licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

These contention requirements are "strict by design" (*Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001)). A contention that fails to comply with any of these requirements will not be admitted for litigation (*Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC at 318, 325 (1999); Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2221 (Jan. 14, 2004)).

Because this proceeding involves a license renewal application, its scope is cabined by 10 C.F.R. Part 54, which limits the scope of the NRC's public health and safety review in license renewal proceedings to "'a review of the plant structures and components that will require an *aging* management review for the period of extended operation and the plant's systems, structures, and components that are subject to an evaluation of time-limited *aging* analyses'" (*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) (quoting *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-20, 54 NRC 211, 212 (2001)). See also *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 10 (2001) (license renewal reviews focus "'on plant systems, structures, and components for which current [regulatory] activities and requirements may not be sufficient to manage the effects of aging in the period of extended operation'" (emphasis omitted) (quoting Nuclear Power Plant License Renewal, 60 Fed. Reg. 22,461, 22,469 (May 8, 1995)). Issues relating to a plant's current licensing basis ("CLB") are ordinarily beyond the scope of a license renewal review, because "those issues already [are] monitored, reviewed, and commonly resolved as needed by ongoing regulatory oversight" (*Turkey Point*, CLI-01-17, 54 NRC at 8).<sup>8</sup>

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<sup>8</sup>The term "current licensing basis," or CLB, is defined as (10 C.F.R. § 54.3(a)):

the set of NRC requirements applicable to a specific plant and a licensee's written commitments for ensuring compliance with and operation within applicable NRC requirements and the plant-

(Continued)

## B. Citizens' Contention Is Admissible in Part

Citizens' proposed contention, which is set out verbatim *supra* p. 233, may — for convenience of analysis — be divided into the following seven discrete challenges:<sup>9</sup>

1. AmerGen's acceptance criteria are inadequate to ensure adequate safety margins.
2. AmerGen's scheduled UT monitoring frequency in the sand bed region is insufficient to maintain an adequate safety margin.<sup>10</sup>
3. AmerGen's monitoring in the sand bed region for moisture and coating integrity is inadequate.
4. AmerGen's response to wet conditions and coating failure in the sand bed region is inadequate.
5. AmerGen's scope of UT monitoring is insufficient to systematically identify and sufficiently test all the degraded areas in the sand bed region.
6. AmerGen's quality assurance for the measurements in the sand bed region is inadequate.
7. AmerGen's methods for analyzing UT results in the sand bed region are flawed.

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specific design basis (including all modifications and additions to such commitments over the life of the license) that are docketed and in effect. The CLB includes the NRC regulations contained in 10 CFR parts 2, 19, 20, 21, 26, 30, 40, 50, 51, 54, 55, 70, 72, 73, 100 and appendices thereto; orders; license conditions; exemptions; and technical specifications. It also includes the plant-specific design-basis information defined in 10 CFR 50.2 as documented in the most recent final safety analysis report (FSAR) . . . and the licensee's commitments remaining in effect that were made in docketed licensing correspondence such as licensee responses to NRC bulletins, generic letters, and enforcement actions, as well as licensee commitments documented in NRC safety evaluations or licensee event reports.

<sup>9</sup>The proposed contention in Citizens' July 25 Supplement is a slightly expanded and edited version of the proposed contention in their June 23 filing. *Compare* Citizens Supplement at 7-8 (supplemented new contention) *with* [Citizens'] Petition To Add a New Contention at 4 (June 23, 2006) [hereinafter Citizens Petition] (new contention). For simplicity, we will analyze the contention as framed by Citizens in their July 25 Supplement.

<sup>10</sup>To the extent that challenge number 2, as originally framed by Citizens (*supra* p. 233), raises a question regarding the adequacy of AmerGen's plan to monitor for moisture and coating integrity, it is duplicative of the question raised in challenge number 3. For simplicity and efficiency, we have reframed challenge number 2, as shown above in text. *See Andrew Siemaszko*, CLI-06-16, 63 NRC 708, 720 (2006) (Board has discretion to reframe contention "for purposes of clarity, succinctness, and a more efficient proceeding") (quoting *Virginia Electric and Power Co.* (North Anna Power Station, Units 1 and 2), LBP-84-40A, 20 NRC 1195, 1199 (1984)). We address the admissibility of Citizens' challenge to AmerGen's plan to monitor for moisture and coating integrity in the context of considering the admissibility of challenge number 3.

As discussed below, we conclude that challenge number 2 is an admissible contention. We conclude that the remaining challenges are not admissible.<sup>11</sup>

***1. Citizens' Assertion That AmerGen's Acceptance Criteria Are Inadequate To Ensure Adequate Safety Margins Is Not an Admissible Contention***

Citizens assert that AmerGen's "acceptance criteria" — i.e., the minimum required thickness for the drywell shell to ensure its structural integrity — are inadequate to ensure that the safety margins will be maintained throughout any period of extended operation, because it does "not fully reflect the limitations in the modeling that was used to derive the results" (Citizens Petition at 7).

The "modeling" Citizens refer to is an analysis that is based on a 36-degree section model — known as a bay — that "takes advantage of symmetry of the drywell" and that "assume[s] that the shell thickness in the entire sand bed region has been reduced uniformly to a thickness of 0.736 inches" (Citizens Petition, Exh. 1, AmerGen Response to NRC Aging Management Program ("AMP") Questions, at 8 (AMP-210 (April 5, 2006) [hereinafter AMP-210])). Although actual UT measurements in the sand bed region revealed "isolated, localized areas where the . . . thickness is less than 0.736 inches" (*ibid.*), the shell will reportedly remain within the safety margins, so long as "one contiguous area of one square foot in each bay . . . [is] thicker than 0.536 inches" and any area 2.5 inches in diameter measures at least 0.49 inches in thickness (Citizens Petition at 7) (citing Exh. 3, GPU Nuclear Corp., Calculation Sheet C-1302-187-5320-024, Rev. 0, at 9 (Apr. 16, 1993) [hereinafter GPU Nuclear Calculation Sheet]; Exh. 1, AMP-210, at 9).

Citizens' first challenge to the modeling is that it wrongly assumes that only one area in each bay is thinner than 0.736 inches, whereas, in one bay alone there are reportedly at least nine areas measuring thinner than 0.736 inches (Citizens Petition at 7-8) (citing Exh. 3, GPU Nuclear Calculation Sheet at 26). In fact, Citizens state, "AmerGen has recently reported that over 20 areas in total are now thinner than 0.736 inches" (*id.* at 8) (citing Exh. 1, AMP-210, at 10). Second, Citizens contend that the modeling failed to calculate the "minimum required linear distances between thin areas," did not provide any estimates of uncertainty,

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<sup>11</sup> Because we find that challenges number 1 and 3 through 7 are inadmissible on other grounds, we need not address AmerGen's argument that those challenges are beyond the scope of our directive "to limit any new contention to AmerGen's 'new' UT program as reflected in its April 4 and June 20 docketed commitments" (AmerGen Answer at 4), aside from observing that AmerGen's argument appears to be based on an unduly confining interpretation of our directive. We reject, however, AmerGen's suggestion (*id.* at 4-5) that our directive imposed a limit on Citizens' exercise of their regulatory right to proffer any new or supplemented contentions, provided that they complied with the requirements of 10 C.F.R. § 2.309(c) or (f)(2), and also satisfied section 2.309(f)(1).

and did not “look at whether other geometries . . . would lead to failure even if the thin area is less than [the allowable amount of] one square foot” (*ibid.*).

These alleged failures and omissions demonstrate, Citizens argue, that “AmerGen’s current approach to assessing the continued integrity of the drywell shell . . . may not properly capture the behavior of the shell in its degraded state” (Citizens Supplement at 18). Further, state Citizens, AmerGen acknowledges that one of the code sections it is using to derive its acceptance criteria “is not directly applicable to the issues involved” (*id.* at 19). Citizens’ expert, Stress Engineering Services, Inc., opines that “much better techniques than those used by AmerGen are now available and are code compliant . . . and provide the most accurate assessment of vessel integrity possible” (*id.* at 18).

Citizens maintain that their challenge is timely because it is based on the new and previously unavailable information contained in AmerGen’s April 4 and June 20 commitments and supporting documentation. Citizens assert that these documents — which were not available when Citizens filed their Petition To Intervene — clarified “how AmerGen had changed the acceptance criteria for measurements that showed that the steel shell was already thinner than the initial 0.736 inch criterion” (Citizens Petition at 16). Furthermore, Citizens assert, the June 20 commitment “set[s] forth new information and assertions regarding the derivation of the acceptance criteria” (Citizens Supplement at 17) and as such, constitutes AmerGen’s “formal[] adopt[ion] [of] the old acceptance criteria for use in the future monitoring, . . . [which] filled the prior omission of acceptance criteria” (Citizens Reply to AmerGen at 14-15).

AmerGen and the NRC Staff both contend that Citizens’ challenge is not based on new and previously unavailable information and, thus, is nontimely pursuant to 10 C.F.R. § 2.309(f)(2), because “nothing in AmerGen’s April 4 or June 20 commitments . . . adds to, or modifies, the acceptance criteria that have been in effect for years and have been used to assess the actual 1992, 1994, and 1996 UT results” (AmerGen Answer at 7; *accord* NRC Staff Answer at 12). We agree.

Contrary to Citizens’ assertion, the *information* contained in AmerGen’s April 2006 responses to the NRC Staff’s AMP Questions is by no means new, nor was it previously unavailable. First, in its original Petition To Intervene, Citizens indicated that the “as designed” and “minimum required” thicknesses for the sand bed region are 1.154 and 0.736 inches, respectively. *See* [Citizens’] Request for Hearing and Petition To Intervene at 9 (Nov. 14, 2005) [hereinafter Citizens Petition To Intervene]; *see also* Combined Reply of [Citizens] at 7 (Dec. 19, 2005) (AmerGen’s “analysis for code required remaining wall thicknesses . . . establishes the critical minimum required drywell wall thickness at 0.736 inches to prevent buckling”) [hereinafter Citizens 2005 Reply]. Had Citizens wished to challenge the methodology used to determine this acceptance criterion for the

sand bed region, it had an obligation — once it became aware of that criterion — to obtain the information necessary to advance such a challenge.<sup>12</sup>

In fact, Citizens' allegation that this information was previously unavailable to them is belied by the record. First, AmerGen's LRA clearly states that its aging management program for the drywell shell — which "is consistent with the ten elements of aging management program XI.S1, '[American Society of Mechanical Engineers ("ASME")] Section XI, Subsection IWE,' specified in NUREG-1801" (LRA, App. B, at B-75) — will "[d]emonstrate that the minimum required shell thickness is in accordance with ASME code" (LRA at 3.5-18; *accord id.* at 3.5-20; *see also id.* at 4-55). Second, Citizens' own exhibits to its Petition To Intervene make repeated specific references to AmerGen's (and its predecessor's) use of the ASME Code for establishing the acceptance criteria for the drywell shell. *See* Citizens Petition To Intervene, Exh. 4, Summary of May 5, 1993, Meeting with GPU Nuclear Corp., Encl. 2, at 12 (drywell shell was "evaluated using ASME local acceptance criteria"); *id.*, Exh. 3, Evaluation Report on Structural Integrity of the Oyster Creek Drywell at 3 (Apr. 24, 1992) (discussing then-licensee's application of ASME Section III, Subsection NE-3213.10 for the localized discontinuity of corrosion). Third, Citizens directly challenged the adequacy of AmerGen's acceptance criteria in their February 2006 motion to add new contentions. *See* [Citizens'] Motion for Leave To Add Contentions or Supplement the Basis of the Current Contention at 12 (Feb. 7, 2006) ("new acceptance criteria must be developed") [hereinafter Citizens Motion To Add Contentions]. Finally, Citizens' exhibits attached in support of their June 23 Petition demonstrate that the analyses in effect at Oyster Creek for deriving the acceptance criteria have long been publicly available. *See* Citizens Petition, Exh. 1, AMP-210, at 7 ("engineering analys[es] that demonstrated compliance to ASME Code requirements [for vessel thickness] . . . are documented in GE Reports [and] were transmitted to the NRC Staff in December 1990 and in 1991").

To the extent Citizens seek to create the impression that, because the NRC Staff sought clarification of AmerGen's methods for deriving the acceptance criteria, these methods were previously unknown to the Staff or were otherwise altered, such an impression is demonstrably incorrect. AmerGen's response to the Staff's AMP questions makes clear that the analyses currently in effect for Oyster Creek are the same as those documented in the early 1990s. *See* Citizens Petition, Exh. 1, AMP-210, at 7-10. Because Citizens fail to show that these analyses have changed in any significant way, they are simply incorrect when they state that there was a "prior omission of acceptance criteria" (Citizens Reply to AmerGen at 15) or that "[n]either [the] NRC Staff, nor Citizens knew what statistical

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<sup>12</sup> It is well established that the "onus of obtaining . . . copies of documents necessary to support its proposed contentions" is on the petitioner (CLI-06-24, 64 NRC 111, 123 n.71 (2006)).

technique AmerGen would employ to analyze the future UT measurements’’ (*id.* at 16; *see also* Citizens Reply to NRC Staff at 5). Thus, any challenge to the adequacy of AmerGen’s acceptance criteria should have been made at the time Citizens filed their initial Petition To Intervene. It cannot be submitted at this late juncture.

**2. *Citizens’ Assertion That AmerGen’s Scheduled UT Monitoring Frequency in the Sand Bed Region Is Insufficient To Maintain an Adequate Safety Margin Is an Admissible Contention***

In this contention as we have reframed it (*supra* note 10), Citizens argue that — because the corrosion rate in the sand bed region is unknown due to the uncertain corrosive environment — AmerGen’s proposed plan to perform UT tests prior to the period of extended operations, two refueling outages later, and thereafter at an appropriate frequency not to exceed 10-year intervals, is insufficient to maintain an adequate safety margin (Citizens Supplement at 8-10).

AmerGen does not challenge the timeliness of this contention (AmerGen Answer at 6), but it asserts that this contention should be rejected for lack of an adequate basis and failure to present a genuine dispute of material fact or law (*id.* at 13-16). In the NRC Staff’s view, on the other hand, this contention satisfies both the timeliness requirements of 10 C.F.R. § 2.309(f)(2) and the admissibility requirements of section 2.309(f)(1). *See* NRC Staff Answer at 10, 13-14.

We agree with Citizens and the NRC Staff that this contention is admissible.

First, we agree with the undisputed averments of Citizens (Citizens Supplement at 23-24) and the NRC Staff (NRC Staff Answer at 11) that the contention satisfies the timeliness requirements of 10 C.F.R. § 2.309(f)(2)(i)-(iii), because: (1) the information on which the new contention is based — i.e., AmerGen’s new UT testing plan of April 4, 2006, and June 20, 2006 — was not previously available; (2) the new UT testing plan challenged by Citizens is materially different than the prior plan; and (3) Citizens submitted the new contention in a timely fashion.

Similarly, we agree with Citizens (Citizens Supplement at 8-10) and the NRC Staff (NRC Staff Answer at 13-14) that the contention satisfies the admissibility requirements of 10 C.F.R. § 2.309(f)(1). First, Citizens’ contention provides a “specific statement of the issue of . . . fact to be raised” (10 C.F.R. § 2.309(f)(1)(i)). The issue presented is whether, in light of the uncertainty regarding the existence *vel non* of a corrosive environment in the sand bed region and the correlative uncertainty regarding corrosion rates in that region, AmerGen’s UT monitoring plan is sufficient to ensure adequate safety margins. *See* Citizens Supplement at 9-10; Citizens Petition at 5-6, 8-10.

Second, Citizens provide a “brief explanation of the basis for the contention” (10 C.F.R. § 2.309(f)(1)(ii)). Citizens explain that “the drywell shell is 0.026 inches or less from violating AmerGen’s acceptance criteria. Under corrosive

conditions, long-term corrosion rates of more than 0.017 inches per year have been observed. Thus, if corrosive conditions are possible, a UT monitoring frequency of once per year or more would be necessary” to prevent violation of the acceptance criteria (Citizens Supplement at 9; *accord* Citizens Petition at 9). Moreover, state Citizens, “if the next scheduled UT monitoring that is to occur before the end of the licensing period shows that these safety margins have narrowed, even more frequent monitoring would be needed” (Citizens Supplement at 9).<sup>13</sup>

Third, Citizens’ contention “is within the scope of the proceeding” (10 C.F.R. § 2.309(f)(1)(iii)). This license renewal proceeding encompasses a “‘review of the plant structures and components that will require an aging management review for the period of extended operation and the plant’s systems, structures, and components that are subject to an evaluation of time-limited aging analyses’” (*McGuire*, CLI-02-26, 56 NRC at 363-64) (emphasis omitted) (quoting *McGuire*, CLI-01-20, 54 NRC at 212); *accord* Notice of Opportunity for Hearing, 70 Fed. Reg. 54,585 (Sept. 15, 2005). The Commission’s regulations (10 C.F.R. §§ 54.4, 54.21(a)) require AmerGen to include in its LRA an aging management review for the drywell shell, and there is no dispute that AmerGen performed such a review. *See* LRA at 3.5-18 to 3.5-21, 4-54 to 4-55, B-75 to B-76, B-89 to B-90. Citizens’ contention — which alleges that AmerGen’s aging management plan for the sand bed region may not be sufficient to identify and control the effects of aging (i.e., corrosion) that will occur during the period of extended operations — fits squarely within the scope of this proceeding. *See Turkey Point*, CLI-01-17, 54 NRC at 7-8 (license renewal inquiry includes “age-related degradation” of components that, left unmitigated, can “unacceptably reduce safety margins, and lead to the loss of required plant functions . . . with a potential for offsite exposures”); *accord* LBP-06-7, 63 NRC at 222-25.

Fourth, Citizens demonstrate that the issue raised in their contention “is material to the findings the NRC must make to support the action that is involved in the proceeding” (10 C.F.R. § 2.309(f)(1)(iv)). To approve AmerGen’s license renewal request, the NRC Staff must find that AmerGen “demonstrate[s] that the effects of aging [of Oyster Creek’s drywell shell] will be adequately managed so that the intended function(s) [i.e., structural support and pressure boundary] will be maintained . . . for the period of extended operation” (*id.* § 54.21(a)(3)). Citizens’ contention — which raises the issue of whether AmerGen is taking sufficiently frequent UT measurements in the sand bed region to maintain adequate safety

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<sup>13</sup> AmerGen argues that, contrary to this Board’s direction (July 5 Order at 3), Citizens improperly “incorporate by reference the bases [for their contention] from their June 23 Petition” (AmerGen Answer at 13). AmerGen misreads the July 5 Order. The Order directs Citizens to “set forth any *new* bases or contention(s) [they] seek[ ] to *add* to [their] June 23 Petition” (July 5 Order at 3) (emphasis added). We believe that Citizens are in substantial compliance with our directive.

margins — plainly is material to the finding the NRC Staff must make to approve AmerGen’s license renewal request.

Fifth, Citizens provide a “concise statement of the alleged facts or expert opinions which support . . . [their] position . . . together with references to the specific sources and documents on which [they] intend[ ] to rely” (10 C.F.R. § 2.309(f)(1)(v)). Relying on the expert opinion of Dr. Rudolf H. Hausler,<sup>14</sup> Citizens state that (Citizens Supplement at 9): (1) portions of the drywell shell are 0.026 inches or less from violating AmerGen’s acceptance criteria (Citizens Petition, Memorandum from Dr. Rudolf H. Hausler to Richard Webster, at 7 (June 23, 2006) [hereinafter Dr. Hausler June 2006 Memo]); (2) long-term corrosion rates of more than 0.017 inches per year have been observed (*id.* at 6); and, thus (3) if corrosive conditions are possible, a UT monitoring frequency of once per year is necessary (*id.* at 7). Moreover, if the UT monitoring that is scheduled to occur before the end of the licensing period reveals that the sand bed region has suffered additional corrosion, the UT testing frequency would have to be increased accordingly (*ibid.*). Citizens also state that such UT monitoring is necessary even where visual inspections of the epoxy coating do not reveal that the coating has deteriorated, because corrosion may occur under the epoxy coating in the absence of visible deterioration due to nonvisible holidays, or pinholes. *See* Citizens Supplement at 12; *accord* Citizens Supplement, Memorandum from Dr. Rudolf H. Hausler to Richard Webster, at 5-6 (July 25, 2006) [hereinafter Dr. Hausler July 2006 Memo].

Finally, Citizens’ contention provides “sufficient information to show that a genuine dispute exists . . . on a material issue of law or fact” (10 C.F.R. § 2.309(f)(1)(vi)). Specifically, we find that — given the asserted minimal safety margin in the sand bed region due to prior corrosion, coupled with the uncertainty of the corrosive environment and corrosion rate in that region — Citizens have shown that a genuine dispute exists as to whether AmerGen’s scheduled UT monitoring frequency for that region is sufficient to maintain an adequate safety margin. *See* NRC Staff Answer at 13-14 (Citizens’ claim that “UT measurements should be taken yearly based on current acceptance criteria . . . raises a genuine dispute regarding whether the . . . frequency of monitoring is sufficient to identify degradation”).

AmerGen asserts that Citizens fail to raise a genuine dispute regarding the adequacy of the UT program for the following two reasons (AmerGen Answer at 14): (1) Citizens have not shown that the sand bed region is exposed to a corrosive environment; and (2) even if a corrosive environment exists, Citizens

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<sup>14</sup>This Board previously concluded that, for present purposes, Dr. Hausler is qualified to provide an expert opinion with regard to matters relating to corrosion of the drywell shell (LBP-06-7, 63 NRC at 220 n.33).

have not shown that such an environment would affect the sand bed region, which is protected by an epoxy coating. We are not persuaded by AmerGen's arguments.

First, contrary to AmerGen's apparent understanding, Citizens need not — at this stage of the proceeding — definitively show that the sand bed region is exposed to a corrosive environment. Rather, Citizens need simply proffer "some minimal factual . . . foundation" sufficient to raise a genuine dispute regarding the existence of a corrosive environment (*Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999)). This they have done. *See, e.g.*, LBP-06-7, 63 NRC at 224 (a majority of this Board found that Citizens made a sufficient showing to raise a genuine dispute as to whether "a corrosive environment exists in the drywell liner that may result in continuing degradation during the renewal period"); Dr. Hausler July 2006 Memo at 5 ("water leaks continue to occur, or at least could occur, both during refueling outages as well as during normal operations").

Second, AmerGen errs in asserting that, even if a corrosive environment exists, Citizens' contention must be rejected because they have not shown that such an environment would affect the sand bed region, "which is covered by a robust multi-layered epoxy coating" (AmerGen Answer at 14). This assertion, like the previous assertion, misperceives the amount of factual support that Citizens must proffer at the contention-admissions stage. Citizens need simply proffer sufficient information to raise a genuine factual dispute regarding the efficacy of the epoxy coating in preventing corrosion. Citizens have satisfied this requirement. *See, e.g.*, LBP-06-7, 63 NRC at 219 n.29 (a majority of this Board found that Citizens "provided an adequate factual basis to support its assertion that corrosion-causing moisture continues to occur in the sand bed region, which may be especially problematic if such moisture seeps into pinhole leaks in the epoxy coating"); Dr. Hausler June 2006 Memo at 6 ("corrosion behind the coating could occur and not be noted visually"); Dr. Hausler July 2006 Memo at 6 ("pinholes in the coating cannot be assessed by 'visual examination'").<sup>15</sup>

Finally, AmerGen argues that this Board should reject Citizens' contention, because AmerGen's dynamic UT measurement program, coupled with the corrective actions AmerGen will take if statistically significant deviations from the prior UT results occur, is "sufficiently adaptive to possible future narrowing of the safety margins" (AmerGen Answer at 15) (internal quotation marks omitted). This argument is unavailing. It is premised on the notion that, after AmerGen takes a set of UT measurements before the period of extended operation, it may — consistent with safety standards — wait until the second refueling outage (between 3 to 4 years) to take the next set of measurements. Citizens, on the

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<sup>15</sup> AmerGen's conclusory characterization of the epoxy coating as "robust" (AmerGen Answer at 14) seems to discount entirely the fact that the coating exceeded its rated lifetime 4 to 6 years ago (LBP-06-7, 63 NRC at 215 n.26; Dr. Hausler June 2006 Memo at 12).

other hand, argue that UT measurements must be taken at least yearly to ensure adequate safety margins. To accept AmerGen's argument would require us to adjudicate the merits of Citizens' contention, which is beyond the scope of our adjudicatory function at this juncture. See *Mississippi Power and Light Co.* (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-130, 6 AEC 423, 426 (1973) ("in passing upon the question as to whether an intervention petition should be granted, it is not the function of a licensing board to reach the merits of any contention contained therein"). The sole question before us is whether Citizens have submitted the requisite "minimal factual . . . foundation" (*Oconee*, CLI-99-11, 49 NRC at 334) to support the admission of their contention that AmerGen's UT monitoring program in the sand bed region is insufficient to maintain an adequate safety margin. We conclude that they have.<sup>16</sup>

**3. *Citizens' Assertion That AmerGen's Monitoring in the Sand Bed Region for Coating Integrity and Moisture Is Inadequate Is Not an Admissible Contention***

Citizens assert that AmerGen's plan for monitoring the sand bed region for integrity of the epoxy coating and for moisture is inadequate. With regard to monitoring the epoxy coating, Citizens assert that AmerGen's most recent commitment — which calls for (1) visual inspection of the coating during a refueling outage if leakage from the sand bed drains is found during the outage, and (2) visual inspection of the coating at the next refueling outage if leakage is detected during the operating cycle — is inadequate, because visual inspections may not reveal deficiencies in the coating, and, moreover, such inspections should be conducted when moisture is detected, and quarterly, while wet conditions exist (Citizens Supplement at 11) (citing Dr. Hausler July 2006 Memo at 6). With regard to monitoring for moisture, Citizens state that the current plan — which calls for "daily monitoring of the drains from the sand bed region during refueling

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<sup>16</sup>In admitting this contention, we accept Citizens' uncontroverted assertion that the "drywell shell is 0.026 inches or less from violating AmerGen's acceptance criteria [of 0.736 inches]" (Citizens Supplement at 9). This acceptance criterion is based on buckling concerns, not containment concerns. *But cf.* LBP-06-7, 63 NRC at 214 n.23 (this Board observes that, *on the present record*, "we [do not] perceive the [corrosion in the sand bed region] as a uniform and uninterrupted ring encircling the [drywell shell] that puts it at risk of buckling failure"). If the record, upon further development, shows that the pattern of corrosion in the sand bed region does not present a buckling risk, but rather presents a risk of localized containment failure (i.e., inability of the drywell shell to contain radioactive gases under pressurized conditions), then the safety margin would be much larger, thus undercutting the foundation of Citizens' argument that UT measurements must be taken at least annually because the historical corrosion rate has been such that, if corrosion were to resume at that rate, the safety margin would be eliminated within 2 years. This is an issue that may ultimately be a proper topic for summary disposition.

outages and quarterly monitoring of the drains during the plant operating cycle” (*id.* at 5) — is inadequate, because it “does not suggest continuous monitoring or monitoring of moisture in the drywell proper” (*ibid.*).

AmerGen argues that this contention should be rejected as nontimely pursuant to 10 C.F.R. § 2.309(f)(2), because “it is based on previously available information” (AmerGen Answer at 10). The NRC Staff likewise argues that this contention should be rejected as nontimely, arguing that Citizens may not challenge the adequacy of the moisture and coating integrity monitoring program based on AmerGen’s June 20 commitment, because Citizens have not shown that information about the program “is materially different from information previously available” (NRC Staff Answer at 11). We agree with AmerGen and the NRC Staff that this contention is not admissible.

It is clear to us that the contention is nontimely to the extent it challenges AmerGen’s monitoring program for epoxy coating integrity. Although Citizens’ contention does not specifically reference AmerGen’s Protective Coating Monitoring and Maintenance Program (“PCMMP”), we conclude that the contention — which attacks the adequacy of AmerGen’s inspection program for the epoxy coating — effectively challenges the PCMMP, which is described in AmerGen’s LRA.

As AmerGen’s LRA states, the PCMMP “is an existing program that provides for aging management of . . . Service Level II coatings for the external drywell shell in the area of the sand bed region” (LRA, App. A, at A-19 to A-20). It “provides for inspections, assessment, and repairs for any condition that adversely affects the ability of . . . sand bed region Service Level II coatings, to function as intended” (LRA, App. A, at A-20). Notably, AmerGen’s discussion of the PCMMP in its LRA (LRA, App. B, at B-89 to B-90) states that the protective coating monitoring program is consistent with NUREG-1801, Vol. 2, Rev. 1, “Generic Aging Lessons Learned (GALL) Report” (Sept. 2005). NUREG-1801, in turn, indicates that ASTM D 5163-05 — which is entitled “Standard Guide for Establishing Procedures To Monitor the Performance of Coating Service Level I Coating Systems in an Operating Nuclear Power Plant” (Apr. 2005) — “provides guidelines that are acceptable to the NRC Staff for establishing an in-service coatings monitoring program” (NUREG-1801, at XI S-25) (quoting Regulatory Guide 1.54, Rev. 1, “Service Level I, II, and III Protective Coatings Applied to Nuclear Plants,” at C4 (July 2000) [hereinafter RG 1.54]).<sup>17</sup>

ASTM D 5163-05 provides detailed guidance for establishing a program to monitor the integrity of protective coatings. As relevant here, it states that the owner/operator shall develop an inspection plan consisting of a “general visual in-

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<sup>17</sup>RG 1.54 indicates that ASTM D 5163-05 is also acceptable “for establishing an in-service coatings monitoring program . . . for Service Level II and other areas outside containment” (RG 1.54, at C4).

spection . . . on all readily accessible coated surfaces during a walk-through. After the walk-through, thorough visual inspections shall be carried out on previously designated areas noted as deficient during the walk-through” (ASTM D 5163-05, at 2-3, § 10.1). Additionally, ASTM D 5163-05 authorizes the owner/operator to restrict the frequency of such inspections “to major maintenance outages or refueling outages” (*id.* at 2, § 6.1).

AmerGen’s PCMMP, as set forth in its LRA, thus establishes a monitoring program for the epoxy coating that authorizes visual inspections and provides periodicity parameters for such inspections. If Citizens wished to raise a contention challenging these aspects of the PCMMP, they should have done so in their original Petition To Intervene. Their present attempt to do so is nontimely.<sup>18</sup>

That AmerGen — since its submission of the LRA — has enhanced the PCMMP does not render Citizens’ challenge timely. First, as a matter of law and logic, if — as Citizens allege — AmerGen’s *enhanced* monitoring program is inadequate, then AmerGen’s *unenanced* monitoring program embodied in its LRA was *a fortiori* inadequate, and Citizens had a regulatory obligation to challenge it in their original Petition To Intervene. *Cf. International Uranium (USA) Corp.* (White Mesa Uranium Mill), CLI-01-21, 54 NRC 247, 251 (2001) (“Since a license amendment involves a facility with ongoing operations, a petitioner’s challenge must show that the amendment will cause a distinct new harm or threat apart from the activities already licensed”) (internal quotation marks omitted). Second, as a matter of policy, an applicant’s decision to improve an existing program to promote health and safety or to boost public support and confidence ought not ordinarily be viewed as conferring petitioners with an automatic opportunity to advance a new contention; a contrary conclusion could have the perverse effect of discouraging applicants from enhancing safety, health, and environmental programs on a voluntary basis. In short, for reasons grounded in law, logic, and policy, we conclude that Citizens’ challenge to AmerGen’s June 20 commitment to conduct visual inspections of the epoxy coating at prescribed times is a nontimely attack on AmerGen’s PCMMP.<sup>19</sup>

Moreover, Citizens’ challenge to the PCMMP is inadmissible as an impermissible challenge to NRC regulations. Section 2.335 bars petitioners from challenging in adjudicatory proceedings any “rule or regulation of the Commission, or any

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<sup>18</sup>That Citizens’ current attempt to challenge AmerGen’s inspection program for the epoxy coating is nontimely is further evidenced by the fact that Citizens attempted — unsuccessfully — to raise a similar contention in their December 2005 Reply. *See* LBP-06-7, 63 NRC at 226-27.

<sup>19</sup>Although Citizens are prohibited from launching a nontimely attack on AmerGen’s PCMMP, the fundamental concern underlying contention number 3 — which is that corrosion of the drywell shell may not be detected in time to maintain an adequate safety margin — is assuaged by the admission of contention number 2, whose adjudication will resolve whether the frequency of UT measurements will be sufficient to assure that the safety margin will be maintained.

provision thereof” (10 C.F.R. § 2.335(a)). During the course of the NRC Staff’s review of the Oyster Creek LRA, AmerGen committed to enhance its PCMMP, declaring that it will “monitor the protective coating in the exterior surfaces of the drywell in the sand bed region in accordance with the requirements of ASME Section XI, Subsection IWE during the period of extended operation” (Citizens Petition, Exh. 1, at 32 (AMP-141 (Apr. 5, 2006)) (referencing AmerGen’s response to NRC AMP Question 188 (Letter from Michael P. Gallagher, AmerGen, to NRC at 11 (April 17, 2006) [hereinafter AMP-188]), which explains that additional requirements will be included in Oyster Creek’s current inspection specifications for Service Level II protective coating in the sand bed region to satisfy the requirements of ASME Section XI, Subsection IWE)).<sup>20</sup> The requirements set forth in ASME Section XI, Subsection IWE are imposed on licensees under 10 C.F.R. § 50.55a(g)(4), (g)(6)(ii)(B). Because AmerGen has committed to a program that incorporates the requirements of an ASME Code that is specifically referenced by 10 C.F.R. § 50.55a, Citizens are prohibited from challenging its adequacy.

Nor is Citizens’ attempt to challenge AmerGen’s plan for monitoring for moisture an admissible contention. The instant record indicates that AmerGen’s moisture monitoring program dates back over a decade. Letters from the then-licensee of Oyster Creek to the NRC Staff dated December 15, 1995, and February 15, 1996, document the existence of this program, in which the licensee committed to monitor for water leakage during power operation as well as during refueling activities (Citizens 2005 Reply, Exh. 10, Letter from R.W. Keaten, GPU Nuclear, to NRC (Dec. 15, 1995); *id.*, Exh. 11, Letter from Alexander W. Dromerick, NRC, to Michael B. Roche, GPU Nuclear (Feb. 15, 1996)). *See also* Citizens Petition To Intervene, Exh. 4, Encl. 2, at 14 (explaining that the licensee will “monitor for water leakage during operating cycles and refueling outages [and] take corrective action”). If Citizens wished to argue that AmerGen’s moisture monitoring program was inadequate and should be replaced with a “continuous

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<sup>20</sup>The specific requirements that will be included in IS-328227-004 (“Functional Requirements for Drywell Containment Vessel Thickness Examination”), the current inspection specification for Oyster Creek Service Level II protective coatings, are (AMP-188 at 11):

- Sand bed Region external coating inspections will be per Examination Category E-C (augmented examination) and will require VT-1 visual examinations per IWE-3412.1.
- a. The inspected area shall be examined (as a minimum) for evidence of flaking, blistering, peeling, discoloration, and other signs of distress.
  - b. Areas that are suspect shall be dispositioned by engineering evaluation or corrected by repair or replacement in accordance with IWE-3122.
  - c. Supplemental examinations in accordance with IWE-3200 shall be performed when specified as a result of engineering evaluation.

monitoring” plan (Citizens Supplement at 5), they should have done so in their original Petition To Intervene. Their failure to do so renders their newly presented contention nontimely.

To the extent that AmerGen’s June 20 commitment to perform daily monitoring of the drains from the sand bed region during refueling outages and quarterly monitoring during the plant operating cycle improved AmerGen’s moisture monitoring program, it does not — for the reasons explained *supra* p. 246 — provide Citizens with an excuse to raise a nontimely challenge.<sup>21</sup>

**4. *Citizens’ Assertion That AmerGen’s Response to Wet Conditions and Coating Failure in the Sand Bed Region Is Inadequate Is Not an Admissible Contention***

Citizens argue that AmerGen’s “proposed response to the detection of moisture and coating failure,” as contained in its June 20 commitment, is inadequate (Citizens Supplement at 12). Specifically, when failure in the coating is found, instead of repairing only the coating that is damaged, as AmerGen proposes, Citizens assert that “the entire coating [must] be removed and replaced because failure of the coating in one area would indicate that it could also rapidly fail in other areas” (*ibid.*).

This contention, like contention number 3, effectively challenges the adequacy of AmerGen’s PCMMP. For the same reasons we found contention number 3 to be nontimely, we find this contention to be nontimely. As explained *supra* Part III.B.3, the PCMMP is a longstanding program that — as described in AmerGen’s LRA — “provides for inspections, assessment, and repairs for any condition that adversely affects the ability of . . . sand bed region Service Level II coatings, to function as intended” (LRA, App. A, at A-20). That program — including the corrective action component — satisfies the procedures in ASTM D 5163-05, none of which requires the indiscriminate removal and replacement of an entire protective coating based on the discovery of minor, localized damage or deterioration. Rather, those procedures provide for “[a] prioritization of the repair *areas* into areas that must be repaired during the same outage and areas where

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<sup>21</sup> We also conclude that Citizens’ challenge to AmerGen’s monitoring program for coating integrity and moisture is inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi). Citizens fail to reference, much less discuss the scope of, AmerGen’s PCMMP, either as it was originally presented in the LRA or as amended by AmerGen’s April 4 commitment. *See* April 4 Commitment at 1. Nor do Citizens discuss AmerGen’s long-established moisture monitoring program, despite the fact that the existence of this program is obvious from Citizens’ own exhibits (Citizens 2005 Reply, Exhs. 10 & 11). Having failed to discuss the very programs that they are attacking, we conclude that Citizens have failed to “[p]rovide sufficient information to show that a genuine dispute exists [regarding] a material issue of . . . fact” (10 C.F.R. § 2.309(f)(1)(vi)).

repair can be postponed to future outages, keeping the coating under surveillance in the interim period” (ASTM D 5163-05, at 4, § 11.1.2) (emphasis added). In addition, ASTM D 5163-05 requires that a “recommended corrective plan of action must be provided for the major defective area so that the plant can repair these areas, if appropriate during the same outage” (*id.* at 4, § 12.1).

If Citizens wished to argue that the corrective action component of AmerGen’s PCMMP was inadequate, they should have done so in their original Petition To Intervene. Their belated attempt to raise this challenge is nontimely, and their contention is thus inadmissible.<sup>22</sup>

We also conclude that — in addition to being nontimely — Citizens’ challenge to the corrective action component of AmerGen’s PCMMP is inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi). Citizens fail to mention, much less discuss, AmerGen’s PCMMP. Having failed to discuss the very program that they are attacking, we conclude that Citizens have failed to “[p]rovide sufficient information to show that a genuine dispute exists [regarding] a material issue of . . . fact” (10 C.F.R. § 2.309(f)(1)(vi)).

Finally, Citizens’ contention is inadmissible pursuant to 10 C.F.R. § 2.335(a) as an impermissible challenge to NRC regulations. In enhancing its PCMMP to comply with the requirements of ASME Section XI, Subsection IWE, AmerGen equally enhanced its corrective action program for the epoxy coating. As discussed *supra* Part III.B.3, because AmerGen has committed to a program that incorporates the requirements of an ASME Code that is specifically referenced by 10 C.F.R. § 50.55a, Citizens are prohibited from challenging its adequacy.

**5. *Citizens’ Assertion That AmerGen’s Scope of UT Monitoring Is Insufficient To Systematically Identify and Sufficiently Test All the Degraded Areas in the Sand Bed Region Is Not an Admissible Contention***

Citizens assert that the “spatial scope” of AmerGen’s UT monitoring program — which will monitor “twelve 6 inch by 6 inch areas and seven 6 inch by 1 inch areas,” or approximately 1% of the “300 square feet in the sand bed region”

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<sup>22</sup> Citizens also assert that AmerGen’s commitment to take UT measurements “on ‘any areas in the sand bed region’ where water is found, the coating is defective, and ‘corrosion has occurred,’” is “totally illogical” because corrosion could occur below the damaged coating without being observed visually (Citizens Supplement at 12-13). In our view, this assertion also is an untimely attack on AmerGen’s PCMMP. However, to the extent this assertion may be viewed as a contention that AmerGen’s UT monitoring frequency for the sand bed region is not sufficient to maintain an adequate safety margin, it is embodied in Citizens’ second contention as we reframed it and has been admitted. *Cf.* NRC Staff Answer at 12 (NRC Staff does not object to this assertion on the basis of timeliness, “to the extent [it] can be considered part of a UT program and limited to its nexus with the performance of UTs in the sand bed region per the June 20 commitment”).

— is too narrow “to allow meaningful comparison with the acceptance criteria” (Citizens Petition at 10). More specifically, Citizens state that the monitoring regime fails to include areas of the sand bed region known to be less than 0.736 inches, and it “fails to systematically survey the shell for new thin areas” (*ibid.*). Citizens maintain that this challenge is timely under 10 C.F.R. § 2.309(f)(2) because AmerGen’s April 4 commitment “filled the omission of a specified spatial scope in AmerGen’s monitoring plan for the future [and is therefore] materially different new information regarding the aging management regime that would be employed for any operations after the existing license expires” (Citizens Reply to AmerGen at 15).<sup>23</sup>

AmerGen objects to the admission of Citizens’ challenge because it is not based on any material new information. According to AmerGen, neither the April 4 nor the June 20 commitment changed the spatial scope of its UT monitoring program, because “[f]uture UT [will] be conducted at the same locations and using templates with the same dimensions as those used in tests performed in 1992, 1994 and 1996” (AmerGen Answer at 11). The NRC Staff, on the other hand, does not view Citizens’ challenge to the spatial scope of AmerGen’s UT monitoring program as untimely, “given that additional specificity regarding where measurements would be taken was provided in the April 4 commitment” (NRC Staff Answer at 11). We agree with AmerGen that Citizens’ challenge is nontimely and, therefore, is inadmissible.

On December 9, 2005, AmerGen docketed a commitment to “perform a set of one-time thickness measurements in . . . the ‘sand bed region’ ” at “a sample of areas previously inspected (in the 1990s) and identified as having exhibited corrosion” (Letter from C.N. Swenson, AmerGen, to NRC at 3 (Dec. 9, 2005) [December 9 Commitment]). In the letter attached to this formal commitment, AmerGen elaborated that the “one-time UT measurements will be taken from inside the drywell *at locations tested in the 1990s such that the new measurements can be compared with the earlier testing results*” (*id.* at 1) (emphasis added). As shown below, the record is clear that, contrary to Citizens’ assertion, they were aware — even prior to submitting their Petition To Intervene — of the locations within the drywell liner that were tested during the 1990s.

The exhibits included with Citizens’ Petition To Intervene explicitly discuss the fact that UT measurements were taken in select locations in the sand bed region during the refueling outages in 1992 and 1994, and that the then-licensee of Oyster Creek had committed to taking an additional round of measurements in 1996. *See* Citizens Petition To Intervene, Exh. 6, Letter from R.W. Keaten,

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<sup>23</sup> Citizens also assert, without explanation, that AmerGen must add “another type of UT testing” to its testing program (Citizens Petition at 10). We summarily reject this claim, concluding that Citizens’ vague, one-sentence assertion falls far short of satisfying any of the six admissibility factors in 10 C.F.R. § 2.309(f)(1).

GPU Nuclear, to NRC at 2 (Sept. 15, 1995); *id.*, Exh. 9, Letter from Alexander W. Dromerick, NRC, to John J. Barton, GPU Nuclear at 3 (Nov. 1, 1995)). Additionally, Citizens' exhibits make clear where precisely the UT measurements were taken. *See id.*, Exh. 4, at 1 (providing the thickness measurements of the individual bays in the sand bed region, as measured during the 1992 refueling outage); *id.*, Exh. 4, Encl. 2, at 10 (explaining how the selection of locations to perform the UT measurements was determined). Given that Citizens knew well before AmerGen docketed its December 9 commitment when and where the UT measurements were taken, and given further that the December 9 commitment made clear that the one-time set of UT measurements would be taken at the same locations as previously performed, the appropriate time for a challenge by Citizens to the spatial scope of AmerGen's UT measurements was promptly after AmerGen had docketed its December commitment.<sup>24</sup>

Thus, we do not accept Citizens' claim that the December 9 commitment "did not specify . . . where the measurements would be carried out" (Citizens Reply to AmerGen at 23). We therefore reject as nontimely Citizens' challenge to the spatial scope of AmerGen's UT monitoring regime.

**6. *Citizens' Assertion That AmerGen's Quality Assurance for the Measurements in the Sand Bed Region Is Inadequate Is Not an Admissible Contention***

Citizens assert that AmerGen's "quality assurance plans" for the UT measurements in the sand bed region are inadequate and must be revised "to identify flawed data soon after it is taken" and to "carry out replacement measurements if it finds that the original measurements are questionable" (Citizens Petition at 11).

We agree with AmerGen (AmerGen Answer at 11-12) and the NRC Staff (NRC Staff Answer at 12-13) that this contention is nontimely (10 C.F.R. § 2.309(f)(2)). Additionally, we find that this contention is beyond the scope of this proceeding (*id.* § 2.309(f)(1)(iii)) and fails to demonstrate that a genuine dispute exists with AmerGen on a material issue of fact (*id.* § 2.309(f)(1)(vi)).

First, this contention is nontimely. AmerGen's LRA contains a quality assurance program that "implements the requirements of [10 C.F.R. Part 50, Appendix B] and is consistent with the summary in Appendix A.2 . . . of NUREG-1800[, Rev. 1, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants" (Sept. 2005)]" (LRA, App. B, at B-

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<sup>24</sup>In fact, Citizens could have incorporated a challenge to the spatial scope of AmerGen's UT monitoring program with its February 2006 motion, in which they sought to add a contention regarding AmerGen's testing of the inaccessible area of the sand bed region. *See* Citizens Motion To Add Contentions at 11-13.

4).<sup>25</sup> AmerGen’s program includes “elements of corrective action, confirmation process, and administrative controls, and [it] is applicable to the safety-related and non-safety related systems, structures, and components . . . that are subject to [Aging Management Review]” (*ibid.*). Had Citizens wished to contest any aspect of that program, they should have done so in their original Petition To Intervene.

Citizens respond that their contention is timely, asserting that they neither knew, nor could have known, that AmerGen’s quality assurance program was inadequate until April 2006, when they learned that the set of UT measurements taken in 1996 produced anomalous results (Citizens Reply to AmerGen at 16). This assertion ignores that — as the Commission recently reiterated (CLI-06-24, 64 NRC at 123 n.71) — petitioners have an affirmative obligation to obtain documentation in support of a proffered contention to the extent such documentation is part of the LRA or contained in the LRA as an attachment or supporting document. *Accord* Notice of Opportunity for Hearing, 70 Fed. Reg. 54,585, 54,586 n.1 (Sept. 15, 2005). Consistent with the Commission’s rationale in CLI-06-24, it may fairly be concluded here that the 1996 UT results are supporting documentation to the LRA, because: (1) the LRA expressly states that the then-licensee of Oyster Creek established a corrosion monitoring program in 1987 that included “periodic UT inspection of the shell thickness” (LRA at 3.5-18); and (2) the LRA references supporting documentation, which states that UT inspections were, or would be, performed in 1992, 1994, and 1996 (*id.* at 4-55) (referencing Letter from GPU Nuclear to NRC, Drywell Corrosion Monitoring Program (Sept. 15, 1995)). In these circumstances, we conclude that the 1996 UT results (which, like the 1992 and 1994 results, are nonproprietary)<sup>26</sup> constitute supporting documentation to the LRA, and Citizens had a duty — if they wished to use these results to challenge the adequacy of AmerGen’s longstanding quality assurance program — to “contact [AmerGen] or [AmerGen’s] counsel” (70 Fed. Reg. at 54,586 n.1) to obtain these documents prior to submitting their original Petition To Intervene.<sup>27</sup>

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<sup>25</sup> Licensees are required to develop a quality assurance program that is “documented by written policies, procedures or instructions and [it] shall be carried out throughout plant life” (10 C.F.R. Part 50, App. B, § II).

<sup>26</sup> Significantly, Citizens obtained the 1992 and 1994 testing results before submitting their Petition To Intervene (Citizens Petition To Intervene at 9-10).

<sup>27</sup> It should be understood that this Board is not attempting to define the universe of materials that constitute LRA “supporting documents.” We simply decide that the facts of this particular case — viewed through the prism of the rationale in CLI-06-24 — support the conclusion that the 1996 UT results are LRA supporting documents and, accordingly, the “onus of obtaining [that] supporting documentation was on [Citizens]” (CLI-06-24, 64 NRC at 123 n.71).

Citizens allege for the first time in their reply brief to AmerGen, but without any supporting or explanatory affidavit, that AmerGen “consistently refused to provide the 1996 data to Citizens”

(*Continued*)

Even if Citizens' contention were timely, it would still be inadmissible, because it is beyond the scope of this proceeding. As discussed *supra* Part III.A, the scope of the Commission's health and safety review in license renewal proceedings does not include issues related to a plant's CLB that "already [are] monitored, reviewed, and commonly resolved as needed by ongoing regulatory oversight" (*Turkey Point*, CLI-05-17, 54 NRC at 8). A licensee's CLB includes "the NRC regulations contained in 10 C.F.R. parts . . . 50 . . . and appendices thereto" (10 C.F.R. § 54.3). Because AmerGen is required by Appendix B to Part 50 to establish a quality assurance program, it is clearly included within its CLB. Further, the Commission made clear in its 1995 Statement of Consideration that a licensee's quality assurance program is excluded from license renewal review. In an effort to clarify the license renewal rules, the Commission explained that "the portion of the CLB that can be impacted by the detrimental effects of aging is limited to the design-bases aspects of the CLB. *All other aspects of the CLB, e.g., quality assurance, physical protection (security), and radiation protection requirements, are not subject to physical aging processes that may cause noncompliance with [the design-bases aspects] of the CLB*" (Nuclear Power Plant License Renewal, 60 Fed. Reg. 22,461, 22,475 (May 8, 1995) (emphasis added)). Thus, Citizens' attack on AmerGen's quality assurance program is outside the scope of this proceeding and, therefore, is inadmissible.

Citizens' challenge is also inadmissible because it fails "to show that a genuine dispute exists with [AmerGen] on a material issue of law or fact" (10 C.F.R. § 2.309(f)(1)(vi)). Citizens' Petition contains nothing more than a broad unsupported assertion that "AmerGen must revise its quality assurance plans" (Citizens Petition at 11). Citizens fail, however, to make any "reference[] to [the] specific portion[] of the application . . . that [they] dispute[] and the supporting reasons for each dispute" (10 C.F.R. § 2.309(f)(1)(vi)). "[B]ald or conclusory allegation[s]" that a licensee's application is deficient, without more, are insufficient (*Millstone*, CLI-01-24, 54 NRC at 358) (internal quotation marks omitted). Therefore, Citizens' contention challenging the adequacy of AmerGen's quality assurance program is inadmissible.

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(Citizens Reply to AmerGen at 16). Notably, Citizens' nonspecific allegation does not indicate that they timely asked AmerGen for this data and were rebuffed. Such an allegation, if properly supported, would be probative of whether an applicant improperly thwarted a petitioner's effort to obtain supporting documentation and, hence, whether such documentation was "not previously available" (10 C.F.R. § 2.309(f)(2)(i)). In any event, Citizens' unsupported and unexplained allegation here is simply too late. If Citizens wanted to advance such an argument, they should have done so when they submitted their Petition To Intervene.

**7. *Citizens' Assertion That AmerGen's Methods for Analyzing UT Results in the Sand Bed Region Are Flawed Is Not an Admissible Contention***

Citizens also assert that AmerGen's statistical techniques for assessing the corrosion rate in the sand bed region are "inadequate" for finding "either the worst case baseline from which corrosion could occur, or the worst case corrosion rate" (Citizens Petition at 11). Specifically, Citizens list six "key flaws" with AmerGen's chosen statistical method (*id.* at 11-12): (1) it fails to use extreme value statistics to estimate the minimum current thickness of the drywell shell; (2) corrosion is assumed to be linear, even though corrosion rates can increase in a nonlinear fashion; (3) the average of the individual measurements taken in each grid is used to analyze the corrosion rates, leading to artificially low estimates of uncertainty; (4) it omits from the mean some of the thinnest points in the grids, leading to artificially high estimates of the current mean thickness; (5) the estimated corrosion rate is not sufficiently conservative for safety-critical issues; (6) it ignores previous analysis that shows at least four valid measurements are required in order to make a valid estimate of the corrosion rate and the confidence limits. Citizens maintain that their contention is timely under 10 C.F.R. § 2.309(f)(2) because prior to AmerGen's April 2006 response to a Staff-issued Request for Additional Information — which was then specified in AmerGen's June 20 commitment — "[n]either [the] NRC Staff, nor Citizens knew what statistical technique AmerGen would employ to analyze the future UT measurements . . . because AmerGen's then-proposed regime failed to specify how this would be done" (Citizens Reply to AmerGen at 16).

AmerGen and the NRC Staff argue that Citizens' contention is not based on new or materially different information, and is therefore inadmissible (AmerGen Answer at 12; NRC Staff Answer at 12-13). We agree with AmerGen and the NRC Staff that Citizens' challenge is nontimely under 10 C.F.R. § 2.309(f)(2) and is, therefore, inadmissible.

We are unpersuaded by Citizens' claim that neither they nor the NRC Staff had any knowledge — prior to April 2006 — of AmerGen's statistical techniques for analyzing the UT measurements. First, AmerGen's LRA clearly states that elements of its corrosion monitoring program, established in 1987, have been incorporated into its aging management program, and provide for "[c]alculations which establish conservative corrosion rates" (LRA at 3.5-18). More specifically, the LRA indicates that its "ASME Section XI, Subsection IWE aging management program . . . [p]erforms calculations to track corrosion rates [and] [p]rojects vessel thickness based on conservative[ ] corrosion rates" (*id.* at 4-55). Second, Citizens attached to their Petition To Intervene a 1991 NRC Staff Information Notice, which indicated that "[s]ince drywell corrosion was detected in 1986 . . . [t]he most severe corrosion was found in the sand bed region [and] [t]he highest corrosion rate determined was  $35.2 \pm 6.8$  mils per year" (Citizens Petition To

Intervene at 5) (quoting Exh. 2, NRC Information Notice No. 86-99, Supp. 1: Degradation of Steel Containments at 1 (Feb. 14, 1991)).

This demonstrates that when Citizens submitted their Petition To Intervene, they knew that: (1) AmerGen had an established corrosion management program that included calculations to assess the corrosion rate; (2) the corrosion rate calculations were incorporated into AmerGen's ASME Section XI, Subsection IWE aging management program; and (3) these calculations yielded an actual corrosion rate for the sand bed region. Thus, Citizens cannot now contend that prior to April 2006 they had no way of knowing how that rate was calculated. This is particularly so given that Citizens retained a qualified expert, Dr. Hausler, who could have consulted the ASME Code and NUREG-1801 (*see supra* p. 239) to determine how the corrosion rate they cite in their Petition To Intervene was derived.<sup>28</sup> If Citizens wished to challenge AmerGen's statistical methods for determining the corrosion rate, they should have done so in their Petition To Intervene. Their present attempt to raise this challenge is nontimely.

Nor is there any support for Citizens' statement that the NRC Staff was not aware of the statistical techniques AmerGen would use to analyze the UT results. The record is clear that as early as 1990, the then-licensee of Oyster Creek, GPU Nuclear, transmitted to the NRC Staff clarification on its method for determining the rate of corrosion (June 20 Commitment, Encl. 1, at 2-3) (explaining that statistical techniques currently employed by AmerGen are based on engineering specification 15-328227-004 and Calculation No. C-1302-187-5300, both of which "were submitted to the NRC in a letter dated November 26, 1990"); *accord* Citizens Petition, Exh. 1, at 16 (noting that a copy of the November 26, 1990 letter was provided to the NRC Staff during the Aging Management Plan/Aging Management Review Audit). Citizens fail to provide any evidence that these stated statistical techniques have changed as a result of AmerGen's April 4 or June 20 commitments. Citizens' challenge to AmerGen's methodology for assessing the corrosion rate is therefore nontimely and, hence, inadmissible.<sup>29</sup>

#### IV. CONCLUSION

For the foregoing reasons, we *grant* Citizens' Petition To File a New Contention and we *admit* Citizens' contention that, in light of the uncertain corrosive

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<sup>28</sup>Notably, Citizens quote directly from the very pages of the LRA that discuss AmerGen's aging management program and its inclusion of calculations for tracking corrosion rates (Citizens 2005 Reply at 6-7).

<sup>29</sup>Citizens' challenge to AmerGen's statistical techniques for assessing the corrosion rate in the sand bed region is also inadmissible, because Citizens fail to reference, much less discuss, the "specific portions of the application" that they dispute, nor do they adequately identify a "material issue of . . . [disputed] fact" (10 C.F.R. § 2.309(f)(1)(vi)).

environment and the correlative uncertain corrosion rate in the sand bed region of the drywell shell, AmerGen's proposed plan to perform UT tests prior to the period of extended operations, two refueling outages later, and thereafter at an appropriate frequency not to exceed 10-year intervals is insufficient to maintain an adequate safety margin. We *reject* as inadmissible Citizens' other contentions.

This proceeding shall continue to be governed by the Initial Scheduling Order and Administrative Directives contained in our Memorandum and Order of April 19, 2006. Additionally, as we previously ruled, the hearing shall be conducted in accordance with the informal adjudicatory procedures prescribed in Subpart L of 10 C.F.R. Part 2. See LBP-06-7, 63 NRC at 228; Memorandum and Order (Denying [Citizens'] Motion To Apply Subpart G Procedures) (June 5, 2006) (unpublished).

It is so ORDERED.

THE ATOMIC SAFETY AND  
LICENSING BOARD<sup>30</sup>

E. Roy Hawkens, Chairman  
ADMINISTRATIVE JUDGE

Dr. Paul B. Abramson  
ADMINISTRATIVE JUDGE

Dr. Anthony J. Baratta (by E. Roy Hawkens)  
ADMINISTRATIVE JUDGE

Rockville, Maryland  
October 10, 2006

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<sup>30</sup> Copies of this Memorandum and Order were sent this date by e-mail to counsel for: (1) AmerGen; (2) Citizens; (3) the NRC Staff; and (4) New Jersey.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**ATOMIC SAFETY AND LICENSING BOARD**

**Before Administrative Judges:**

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

**In the Matter of**

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

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

**October 16, 2006**

In this license renewal proceeding the Licensing Board rules that the public interest organization, Pilgrim Watch, and the Massachusetts Attorney General, both of which have petitioned to intervene, have standing to participate in the proceeding; that Pilgrim Watch has submitted two admissible contentions and is therefore admitted as a party; but that the Attorney General has failed to submit an admissible contention and is therefore not admitted as a party to the proceeding.

**RULES OF PRACTICE: STANDING TO INTERVENE;  
INTERVENTION**

A petitioner's standing, or right to participate in a Commission licensing proceeding, is grounded in section 189a of the Atomic Energy Act (AEA), which requires the NRC to provide a hearing "upon the request of any person whose interest may be affected by the proceeding," and which has been implemented in Commission regulations at 10 C.F.R. § 2.309.

**RULES OF PRACTICE: STANDING TO INTERVENE;  
INTERVENTION**

Judicial concepts of standing, to which licensing boards are to look in ruling on standing, provide the following guidance in determining whether a petitioner has established the necessary “interest” under 10 C.F.R. § 2.714(d)(1): To qualify for standing a petitioner must allege (1) a concrete and particularized injury that is (2) fairly traceable to the challenged action and (3) likely to be redressed by a favorable decision, criteria commonly referred to, respectively, as “injury in fact,” causality, and redressability. The injury may be either actual or threatened, but must lie arguably within the “zone of interests” protected by the statutes governing the proceeding — here, either the AEA or the National Environmental Policy Act (NEPA).

**RULES OF PRACTICE: STANDING TO INTERVENE;  
INTERVENTION**

Individual petitioners living within 50 miles of a nuclear power plant may establish standing based on a longstanding “proximity presumption” principle in NRC adjudicatory proceedings, under which the elements of standing will be presumed to be satisfied if an individual lives within the zone of possible harm from a significant source of radioactivity, in the geographical area that might be affected by an accidental release of fission products, which has been defined in proceedings involving nuclear power plants as being within a 50-mile radius of such a plant.

**RULES OF PRACTICE: STANDING TO INTERVENE;  
INTERVENTION**

An organization that wishes to establish standing to intervene may do so by demonstrating either organizational standing or representational standing. In order to establish organizational standing it must show that the interests of the organization will be harmed by the proceeding. To establish representational standing it must (1) demonstrate that the interests of at least one of its members may be affected by the licensing action and would have standing to sue in his or her own right, (2) identify that member by name and address, and (3) show that the organization is authorized to request a hearing on behalf of that member. Public interest group Petitioner Pilgrim Watch is found to have established representational standing under these criteria.

**RULES OF PRACTICE: STANDING TO INTERVENE;  
INTERVENTION**

Under 10 C.F.R. § 2.309(d)(2) a State that wishes to be a party in a proceeding for a facility located within its boundaries need not address the standing requirements, and the Massachusetts Attorney General is therefore found to have standing to participate as the representative of the State of Massachusetts.

**RULES OF PRACTICE: CONTENTIONS**

To intervene in an NRC proceeding, a petitioner must, in addition to demonstrating standing, submit at least one contention meeting the requirements of 10 C.F.R. § 2.309(f)(1). Failure of a contention to meet any of the requirements of section 2.309(f)(1) is grounds for its dismissal.

**RULES OF PRACTICE: CONTENTIONS**

The “strict contention rule serves multiple interests,” including, first, focusing the hearing process on real disputes susceptible of resolution in an adjudication (for example, a petitioner may not demand an adjudicatory hearing to attack generic NRC requirements or regulations, or to express generalized grievances about NRC policies); second, by requiring detailed pleadings, putting other parties in the proceeding on notice of the petitioner’s specific grievances and thereby giving them a good idea of the claims they will be either supporting or opposing; and, third, helping to ensure that full adjudicatory hearings are triggered only by those able to proffer at least some minimal factual and legal foundation in support of their contentions.

**RULES OF PRACTICE: CONTENTIONS**

Although the February 2004 revision of the NRC procedural rules no longer incorporates provisions formerly found in 10 C.F.R. § 2.714(a)(3), (b)(1), which permitted the amendment and supplementation of petitions and filing of contentions after the original filing of petitions, they contain essentially the same substantive admissibility standards for contentions, which are now found in 10 C.F.R. § 2.309(f), and which are discussed in an Appendix to the Memorandum and Order that also addresses various case law interpreting the requirements in question.

**LICENSE RENEWAL: SCOPE**

The regulatory authority relating to license renewal is found in 10 C.F.R.

Parts 51 and 54. Part 54 concerns the “Requirements for Renewal of Operating Licenses for Nuclear Power Plants,” and addresses safety-related issues in license renewal proceedings. Part 51, concerning “Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions,” addresses the environmental aspects of license renewal.

#### **LICENSE RENEWAL: SCOPE**

As described by the Commission in the license renewal adjudicatory proceeding of *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3 (2001), the NRC license renewal safety review is focused “upon those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs,” which the Commission considers “the most significant overall safety concern posed by extended reactor operation,” and on “plant systems, structures, and components for which current [regulatory] activities and requirements may not be sufficient to manage the effects of aging in the period of extended operation.” An issue can be related to plant aging and still not warrant review at the time of a license renewal application, if an aging-related issue is “adequately dealt with by regulatory processes” on an ongoing basis. For example, if a structure or component is already required to be replaced “at mandated, specified time periods,” it would fall outside the scope of license renewal review.

#### **LICENSE RENEWAL: SCOPE**

The regulatory provisions relating to the environmental aspects of license renewal arise out of the requirement that the National Environmental Policy Act (NEPA), 42 U.S.C. § 4332(C), places on federal agencies to “include in every recommendation or report on . . . major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on . . . the environmental impact of the proposed action . . .” As noted by the Supreme Court in *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989), the “statutory requirement that a federal agency contemplating a major action prepare such an environmental impact statement [EIS] serves NEPA’s ‘action-forcing’ purpose in two important respects. . . . It ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision.”

#### **LICENSE RENEWAL: SCOPE**

Although the requirements of NEPA are directed to federal agencies and thus the primary duties of NEPA fall on the NRC Staff in NRC proceedings, the initial requirement to analyze the environmental impacts of an action, including license renewal, is directed to applicants, and 10 C.F.R. § 51.53(c) requires a license renewal applicant to submit with its application an environmental report (ER), which “must contain a description of the proposed action, including the applicant’s plans to modify the facility or its administrative control procedures as described in accordance with § 54.21,” and “describe in detail the modifications directly affecting the environment or affecting plant effluents that affect the environment.”

#### **LICENSE RENEWAL: SCOPE**

Environmental issues identified as “Category 1,” or “generic,” issues in Appendix B to Subpart A of Part 51 are not within the scope of a license renewal proceeding. On these issues the Commission found that it could draw generic conclusions that are applicable to nuclear power plants generally. Thus these issues need not be repeatedly assessed on a plant-by-plant basis, and license renewal applicants may in their ERs refer to and adopt the generic environmental impact findings found in Table B-1, Appendix B, for all Category 1 issues, with the following exception: as required by 10 C.F.R. § 51.53(c)(3)(iv), ERs must also contain “any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware,” even if this concerns a Category 1 issue.

#### **LICENSE RENEWAL: SCOPE**

The Commission was not able to make generic environmental findings on issues identified as “Category 2,” or “plant specific,” issues in Appendix B to Subpart A, and thus these issues are within the scope of license renewal, and applicants must provide a plant-specific review of them. These issues are characterized by the Commission as involving environmental impact severity levels that could differ significantly from plant to plant, or impacts for which additional plant-specific mitigation measures should be considered.

#### **LICENSE RENEWAL: SCOPE**

As required under 10 C.F.R. § 51.95(c), the Commission in 1996 adopted a “Generic Environmental Impact Statement for License Renewal of Nuclear Plants” (GEIS), published as NUREG-1437, which provides data supporting the

table of Category 1 and 2 issues in Appendix B. Issuance of the 1996 GEIS was part of an amendment of the requirements of Part 51 undertaken by the Commission to establish environmental review requirements for license renewals “that were both efficient and more effectively focused.”

#### **LICENSE RENEWAL: SCOPE**

Section 51.103 of 10 C.F.R. defines the requirements for the “record of decision” relating to any license renewal application, including the standard that the Commission, in making such a decision pursuant to Part 54, “shall determine whether or not the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable.”

#### **RULES OF PRACTICE: CONTENTIONS; LICENSE RENEWAL**

Contentions that the Applicant’s ER fails to satisfy NEPA because it does not address the environmental impacts of severe spent fuel pool accidents, and fails to address severe accident mitigation alternatives (SAMAs) that would reduce the potential for spent fuel pool water loss and fires, are found inadmissible, on two grounds, neither of which is addressed by relevant rules, but both of which are mandated by relevant Commission precedent in the *Turkey Point* license renewal proceeding. First, the Commission interpreted the term, “severe accidents,” to encompass only reactor accidents and not spent fuel pool accidents, which fall within the analysis of the generic Category 1 issue of onsite storage of spent fuel. Second, the Commission has stated, notwithstanding the responsibility of an applicant in its ER (and the NRC Staff in the supplemental EIS that it must prepare) to address “new and significant information” relating even to Category 1 issues, that an alleged failure to address such “new and significant information” does not give rise to an admissible contention, absent a waiver of the rule in 10 C.F.R. § 51.53(c)(3)(i) that Category 1 issues need not be addressed in a license renewal, and no waiver was requested, because the matters at issue were not considered to involve “special circumstances with respect to the subject matter of the particular proceeding,” as required by 10 C.F.R. § 2.335(b).

#### **RULES OF PRACTICE: CONTENTIONS; LICENSE RENEWAL**

A contention, that Applicant’s aging management program is inadequate with regard to aging management of buried pipes and tanks that contain radioactively contaminated water because it does not provide for monitoring wells that would detect leakage, is admitted, based on its being within the scope of license renewal,

and sufficiently supported as required under the contention admissibility standards of 10 C.F.R. § 2.309(f)(1). In litigation of this contention, scientific articles and reports, as well as the existence of leaks at other facilities and the response to those leaks, may, along with whatever other evidence and expert testimony is provided, be relevant evidence on the factual issues of whether Applicant's aging management program for underground pipes and tanks is satisfactory or deficient, and whether as a result the sort of monitoring wells that Petitioner seeks should be included in this program.

#### **RULES OF PRACTICE: CONTENTIONS; LICENSE RENEWAL**

A contention, that Applicant's aging management program fails to adequately assure the continued integrity of the drywell liner for the requested license extension, is denied, because it fails to meet the requirement of 10 C.F.R. § 2.309(f)(vi) that sufficient information be shown to demonstrate that a genuine dispute exists with the Applicant on a material issue of law or fact. Applicant provided a detailed application amendment on how it addressed the matter, and Petitioner failed to state with any specificity or provide information showing how the actions and proposed actions of the Applicant do not comply with the Interim Staff Guidance that Petitioner relied on in support of its contention. A licensing board is not permitted to draw any inferences on behalf of a petitioner, and in the absence of any more specific statement than has been provided, showing how the specific actions of Applicant fall short, or some nexus with problems at other plants, the contention is found to be lacking in its failure to show any genuine dispute on a material issue of fact relating to the matters at issue.

#### **RULES OF PRACTICE: CONTENTIONS**

A contention, that Applicant's severe accident mitigation alternatives (SAMA) analysis for the plant is deficient regarding input data on evacuation times, economic consequences, and meteorological patterns, resulting in incorrect conclusions about the costs versus benefits of possible mitigation alternatives such that further analysis is called for, is admitted. SAMAs are within the scope of license renewal as a Category 2 issue; Petitioner is found to have raised questions about input data that are material in these three areas because they concern significant health and safety issues that affect the outcome of the proceeding; and Petitioner is found to have adequately supported its contention under the contention admissibility standards of 10 C.F.R. § 2.309(f)(1).

That some of the information provided by Petitioner on evacuation-related issues is apparently in conflict with some of the data taken by Applicant from the plant's emergency plan is found not to preclude its being considered, because,

while emergency planning has been found in the *Turkey Point* proceeding to be “one of the *safety issues* that need not be re-examined within the context of license renewal,” what is challenged in this contention is whether particular bits of information taken from such a plan are sufficiently accurate for use in computing the health and safety consequences of an accident, as an *environmental issue*. Because this challenge is focused upon the accuracy of certain assumptions and input data used in the SAMA computations and how they affect the validity of the SAMA analysis under NEPA, it is found to be appropriate in the three areas admitted.

**RULES OF PRACTICE: CONTENTIONS; LICENSE RENEWAL**

A contention, that new and significant information about cancer rates in communities around the plant shows that another 20 years of operations may result in greater offsite radiological impacts on human health than was previously known, is denied, because it attempts to challenge both generic findings made in the GEIS, and NRC dose limit rules, without a waiver. Petitioner conceded that it was not suggesting that radiological releases from the plant are greater than currently allowed by the NRC regulations, and thus its contention regarding radiological releases must necessarily be construed as a challenge to the current NRC dose limit regulations found in 10 C.F.R. Part 20, and without a waiver under 10 C.F.R. § 2.335, no request for which was submitted, such a challenge is impermissible in an adjudication proceeding.

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**MEMORANDUM AND ORDER**  
**(Ruling on Standing and Contentions of Petitioners**  
**Massachusetts Attorney General and Pilgrim Watch)**

**I. INTRODUCTION**

This proceeding involves the application of Entergy Nuclear Operations, Inc., to renew its operating license for the Pilgrim Nuclear Power Station for an additional 20-year period. The Massachusetts Attorney General and the nonprofit citizens' organization, Pilgrim Watch, have filed petitions to intervene, in which they submit contentions challenging various safety and environmental aspects of the proposed license renewal. In addition, the Town of Plymouth, Massachusetts, where the Pilgrim plant is located, is participating in this proceeding as an interested local governmental body, pursuant to 10 C.F.R. § 2.315(c).

In this Memorandum and Order we find that both Petitioners have shown standing to participate in the proceeding and that Pilgrim Watch has submitted two admissible contentions. We therefore grant the hearing request of Pilgrim Watch as to Contentions 1 and 3, to the extent discussed and defined below. These contentions relate, respectively, to the aging management program for the Pilgrim plant with regard to inspection for corrosion of buried pipes and tanks and detection of leakage of radioactive water that might result from undetected corrosion and aging; and to certain input data that Pilgrim Watch asserts should have been considered by the Applicant in its "severe accident mitigation alternatives," or "SAMA," analysis.

**II. BACKGROUND**

Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc. ("Entergy" or "Applicant") submitted its application requesting renewal of the Pilgrim Nuclear Power Station (PNPS, or "Pilgrim") operating license on January 25, 2006.<sup>1</sup> In response to a March 27, 2006, *Federal Register* notice of opportunity for hearing on the proposed license renewal,<sup>2</sup> timely requests for a hearing and petitions to intervene were filed by Petitioners Pilgrim Watch

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<sup>1</sup> See 71 Fed. Reg. 15,222 (Mar. 27, 2006); see also Pilgrim Nuclear Power Station License Renewal Application, ADAMS Accession No. ML060300028 [hereinafter Application]. In addition to other appendices, the Pilgrim Application includes the Applicant's Environmental Report for Operating License Renewal Stage, ADAMS Accession No. ML060830611 [hereinafter Environmental Report or ER].

<sup>2</sup> See 71 Fed. Reg. at 15,222.

(PW)<sup>3</sup> and the Massachusetts Attorney General (AG),<sup>4</sup> on May 25 and 26, 2006, respectively. Pilgrim Watch's Petition included five contentions; the Petition filed by the Attorney General proffered a single contention. Subsequently, on June 5, 2006, Pilgrim Watch gave notice pursuant to 10 C.F.R. §§ 2.309(f)(3) and 2.323 of its adoption of the contention filed by the Attorney General,<sup>5</sup> and on June 16 the Attorney General filed a letter requesting that the Licensing Board apply the June 2, 2006, decision of the U.S. Court of Appeals for the Ninth Circuit in the case, *San Luis Obispo Mothers for Peace v. Nuclear Regulatory Commission*, in ruling on its contention.<sup>6</sup>

Meanwhile, on June 7, 2006, a Licensing Board constituted of Judges Young, Cole, and Nicholas Trikouros was established to preside over this proceeding, and on June 14 the Board issued a scheduling order, providing guidance for the

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<sup>3</sup> See Request for Hearing and Petition To Intervene by Pilgrim Watch (May 25, 2006) [hereinafter Pilgrim Watch Petition or PW Petition].

<sup>4</sup> See Massachusetts Attorney General's Request for a Hearing and Petition for Leave To Intervene with Respect to Entergy Nuclear Operation's Inc.'s Application for Renewal of the Pilgrim Nuclear Power Plant Operating License and Petition for Backfit Order Requiring New Design Features To Protect Against Spent Fuel Pool Accidents (May 26, 2006) [hereinafter Attorney General Petition or AG Petition].

As indicated by its title, the AG in its Petition also requests the Commission "to initiate a proceeding for the backfitting of the Pilgrim nuclear power plant to protect against a design-basis accident involving a fire in the spent fuel pool." Attorney General Petition at 50; *see id.* at 48-50. As this part of the petition is directed to the Commission and not this Licensing Board, we have not ruled on it. *See* Tr. at 157; *see also* Massachusetts Attorney General's Reply to Entergy's and NRC Staff's Responses to Hearing Request and Petition To Intervene with Respect to Pilgrim License Renewal Proceeding (June 29, 2006) at 31 [hereinafter Attorney General Reply or AG Reply]. We note that on October 10, 2006, the Commission issued an order denying the Attorney General's petitions for backfitting in this and the *Vermont Yankee* proceeding (in which the AG filed an essentially identical contention to that filed in this proceeding, *see* Massachusetts Attorney General's Request for a Hearing and Petition for Leave To Intervene with Respect to Entergy Nuclear Operations Inc.'s Application for Renewal of the Vermont Yankee Nuclear Power Plant Operating License and Petition for Backfit Order Requiring New Design Features To Protect Against Spent Fuel Pool Accidents (May 26, 2006), ADAMS Accession No. ML061640065), and advising that if the AG wishes to pursue the matter he may file a request for NRC enforcement action under 10 C.F.R. § 2.206. *See* CLI-06-26, 64 NRC 225, 226-27 (2006).

In addition, the Attorney General on August 25, 2006, filed with the Commission a Petition for Rulemaking To Amend 10 C.F.R. Part 51 with respect to issues relating to spent fuel storage, which likewise is not before this Licensing Board. *See* Massachusetts Attorney General's Petition for Rulemaking To Amend 10 C.F.R. Part 51 (Aug. 25, 2006), ADAMS Accession No. ML062640409.

<sup>5</sup> See Notice of Adoption of Contention by Pilgrim Watch (June 5, 2006).

<sup>6</sup> Letter from Diane Curran to Licensing Board (June 16, 2006), providing Recent Decision by U.S. Court of Appeals for the Ninth Circuit (June 16, 2006), ADAMS Accession No. ML061740349 [hereinafter AG Letter]. The *Mothers for Peace* decision was subsequently published at 449 F.3d 1016 (9th Cir. 2006).

conduct of the proceeding.<sup>7</sup> The Board subsequently, on June 20, 2006, held a telephone conference to address various prehearing matters,<sup>8</sup> and, in an Order issued June 21, among other things scheduled, in response to the requests of the Petitioners and the Town of Plymouth, a limited appearance session to hear comments from the public pursuant to 10 C.F.R. § 2.315(a), to be held in early July in conjunction with oral argument on Petitioners' contentions.<sup>9</sup>

The NRC Staff responded to Pilgrim Watch's Notice of Adoption on June 15, 2006,<sup>10</sup> and to the Petitions of Pilgrim Watch and the Attorney General on June 19 and 22, 2006, respectively.<sup>11</sup> Entergy filed its Answer to the Attorney General's Petition on June 22, and responded to the Pilgrim Watch Petition on June 26, 2006, including therein its response to Pilgrim Watch's Notice of Adoption of Contention.<sup>12</sup> On June 29, 2006, the Massachusetts Attorney General filed a combined reply to the Answers of Entergy and the NRC Staff.<sup>13</sup> Pilgrim Watch filed its Replies to the Answers of the NRC Staff and Entergy on June 27 and July 3, 2006, respectively.<sup>14</sup>

On July 6 and 7, 2006, the Board held oral argument on the admissibility of the Petitioner's contentions, with the Petitioners, the NRC Staff, Entergy, and the Town of Plymouth participating, in Plymouth, Massachusetts.<sup>15</sup> Following oral argument, the Board required the participants to file supplemental briefs on

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<sup>7</sup> See 71 Fed. Reg. 34,170 (June 13, 2006); Licensing Board Order (Regarding Schedule and Guidance for Proceedings) (June 14, 2006) (unpublished).

<sup>8</sup> See Transcript at 1-42.

<sup>9</sup> See Licensing Board Order and Notice (Regarding Oral Argument and Limited Appearance Statement Sessions) (June 21, 2006) (unpublished); Request of Town of Plymouth To Participate as of Right Under 2.315(c) (June 16, 2006).

<sup>10</sup> See NRC Staff Answer to Notice of Adoption of Contentions by Pilgrim Watch (June 15, 2006).

<sup>11</sup> See NRC Staff's Response to Request for Hearing and Petition To Intervene Filed by Pilgrim Watch (June 19, 2006) [hereinafter Staff Response to PW Petition]; NRC Staff Answer Opposing Massachusetts Attorney General's Request for Hearing and Petition for Leave To Intervene and Petition for Backfit Order (June 22, 2006) [hereinafter Staff Response to AG Petition].

<sup>12</sup> See Entergy's Answer to the Massachusetts Attorney General's Request for a Hearing, Petition for Leave To Intervene, and Petition for Backfit Order (June 22, 2006) [hereinafter Entergy Answer to AG Petition]; Entergy's Answer to the Request for Hearing and Petition To Intervene by Pilgrim Watch and Notice of Adoption of Contention (June 26, 2006) [hereinafter Entergy Answer to PW Petition].

<sup>13</sup> See Attorney General Reply.

<sup>14</sup> See Pilgrim Watch Reply to NRC Answer to Request for Hearing and Petition To Intervene by Pilgrim Watch (June 27, 2006) [hereinafter PW Reply to NRC Staff]; Pilgrim Watch Reply to Entergy Answer to Request for Hearing and Petition To Intervene by Pilgrim Watch (July 3, 2006) [hereinafter PW Reply to Entergy].

<sup>15</sup> See Tr. at 40-456. While in Plymouth the Board also conducted the previously scheduled limited appearance session, hearing statements of members of the public pursuant to 10 C.F.R. § 2.315(a). Limited Appearance Transcript at 1-36.

material insufficiently addressed by the participants to that point.<sup>16</sup> The parties submitted these briefs on July 21,<sup>17</sup> and the Attorney General filed a reply to the briefs filed by Entergy and the NRC Staff on July 26, 2006.<sup>18</sup> On July 27, 2006, the Board held a teleconference to discuss the supplemental briefs and topics regarding two of the proffered NEPA-based contentions.<sup>19</sup>

Additionally, at the conclusion of the July 27 teleconference, Judge Trikouros read into the record a disclosure statement outlining work that was previously performed by a consulting company of which he was a principal, which included certain analytical services for Entergy regarding a spent fuel pool for another pressurized water reactor owned and operated by Entergy.<sup>20</sup> This was followed by the August 4 filing, by the Attorney General and Pilgrim Watch, of Motions for Disqualification of Judge Trikouros, which were opposed by Entergy in a Response filed August 14, 2006.<sup>21</sup> Acting on the Motions, Judge Trikouros recused himself from the proceeding on August 30, 2006; on the same date, the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel reconstituted the Licensing Board by appointing Administrative Judge Paul B. Abramson to sit in place of Judge Trikouros.<sup>22</sup> The deliberations that have led to the rulings herein stated have been among the members of the Board as currently constituted.

### **III. BOARD RULINGS ON STANDING OF PETITIONERS TO PARTICIPATE IN PROCEEDING**

A petitioner's standing, or right to participate in a Commission licensing proceeding, is derived from section 189a of the Atomic Energy Act (AEA), which

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<sup>16</sup> See Licensing Board Order (Regarding Need for Further Briefing on Definition of "New and Significant Information" as Addressed in Participants' Petitions, Answers and Replies Relating to Massachusetts Attorney General Contention and Pilgrim Watch Contention 4) (July 14, 2006) (unpublished).

<sup>17</sup> See Entergy's Brief on New and Significant Information in Response to Licensing Board Order of July 14, 2006 (July 21, 2006); Massachusetts Attorney General's Brief Regarding Relevance to This Proceeding of Regulatory Guide's Definition of "New and Significant Information" (July 21, 2006); NRC Staff's Response to July 14, 2006 Licensing Board Order (July 21, 2006).

<sup>18</sup> See Massachusetts Attorney General's Reply Brief Regarding Relevance to This Proceeding of Regulatory Guide's Definition of "New and Significant Information" (July 26, 2006).

<sup>19</sup> See Tr. at 457-93.

<sup>20</sup> See Tr. at 489-92.

<sup>21</sup> See Massachusetts Attorney General's Motion for Disqualification of Judge Nicholas Trikouros (Aug. 4, 2006); Motion on Behalf of Pilgrim Watch for Disqualification of Judge Nicholas Trikouros in the Pilgrim Nuclear Power Station Re-licensing Proceeding (Aug. 4, 2006); Entergy's Response to Motions for Disqualification of Judge Nicholas Trikouros (Aug. 14, 2006).

<sup>22</sup> See Notice of Reconstitution (Aug. 30, 2006), 71 Fed. Reg. 52,590 (Sept. 6, 2006).

requires the NRC to provide a hearing “upon the request of any person whose interest may be affected by the proceeding.”<sup>23</sup> The Commission has implemented this requirement in its regulations at 10 C.F.R. § 2.309.<sup>24</sup>

When determining whether a petitioner has established the necessary “interest” under Commission rules, licensing boards are directed by Commission precedent to look to judicial concepts of standing for guidance.<sup>25</sup> Under this authority, in order to qualify for standing a petitioner must allege “(1) a concrete and particularized injury that is (2) fairly traceable to the challenged action and (3) likely to be redressed by a favorable decision” — three criteria commonly referred to as “injury in fact,” causality, and redressability.<sup>26</sup> The requisite injury may be either actual or threatened,<sup>27</sup> but must arguably lie within the “zone of interests” protected by the statutes governing the proceeding — here, either the AEA or the National Environmental Policy Act (NEPA).<sup>28</sup> Additionally, Commission case law has established a “proximity presumption,” whereby an individual may satisfy these standing requirements by demonstrating that his or her residence is within the geographical area that might be affected by an accidental release of fission products, and in proceedings involving nuclear power plants this area has been defined as being within a 50-mile radius of such a plant.<sup>29</sup> Accordingly, it will be presumed that the elements of standing are satisfied if an individual lives within the zone of possible harm from the significant source of

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<sup>23</sup> 42 U.S.C. § 2239(a)(1)(A) (2000).

<sup>24</sup> Subsection (d)(1) of section 2.309 provides in relevant part that the Board shall consider three factors when deciding whether to grant standing to a petitioner: the nature of the petitioner’s right under the AEA to be made a party to the proceeding; the nature and extent of the petitioner’s property, financial, or other interest in the proceeding; and the possible effect of any order that may be entered in the proceeding on the petitioner’s interest. 10 C.F.R. § 2.309(d)(1)(ii)-(iv). The provisions of 10 C.F.R. § 2.309 were formerly found in 10 C.F.R. § 2.714, prior to a major revision of the Commission’s procedural rules for adjudications in 2004.

<sup>25</sup> See, e.g., *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 195 (1998); *Quivira Mining Co.* (Ambrosia Lake Facility, Grants, New Mexico), CLI-98-11, 48 NRC 1, 5-6 (1998); *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995).

<sup>26</sup> *Yankee*, CLI-98-21, 48 NRC at 195 (citing *Steel Co. v. Citizens for a Better Environment*, 523 U.S. 83, 102-04 (1998); *Kelley v. Selin*, 42 F.3d 1501, 1508 (6th Cir. 1995)).

<sup>27</sup> *Id.* (citing *Wilderness Society v. Griles*, 824 F.2d 4, 11 (D.C. Cir. 1987)).

<sup>28</sup> *Id.* at 195-96 (citing *Ambrosia Lake Facility*, CLI-98-11, 48 NRC at 6).

<sup>29</sup> See *Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989); *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 146-50 (2001); *Virginia Electric and Power Co.* (North Anna Nuclear Power Station, Units 1 and 2), ALAB-522, 9 NRC 54, 56 (1979) (“close proximity [to a facility] has always been deemed to be enough, standing alone, to establish the requisite interest” to confer standing).

radioactivity, without requiring a party to specifically plead injury, causation, and redressability.<sup>30</sup>

An organization, such as Pilgrim Watch, that wishes to establish standing to intervene may do so by either demonstrating organizational standing or representational standing. In order to establish organizational standing it must show that the interests of the organization will be harmed by the proceeding, while an organization seeking representational standing must demonstrate that the interests of at least one of its members will be harmed by the proceeding.<sup>31</sup> For an organization to establish representational standing, the organization must: (1) show that at least one of its members may be affected by the licensing action and, accordingly, would have standing to sue in his or her own right; (2) identify that member by name and address; and (3) show that the organization is authorized to request a hearing on behalf of that member.<sup>32</sup> Further, the Commission's regulations explain that a State "that wishes to be a party in a proceeding for a facility located within its boundaries need not address the standing requirements." 10 C.F.R. § 2.309(d)(2).

Entergy does not challenge either the Massachusetts Attorney General's or Pilgrim Watch's standing to participate in this proceeding.<sup>33</sup> The NRC Staff does not contest the standing of the Massachusetts Attorney General to intervene in this proceeding,<sup>34</sup> and because Pilgrim Watch's representative, Mary Lampert, meets the longstanding "proximity presumption" principle in NRC adjudicatory proceedings, the NRC Staff does not dispute that Pilgrim Watch has demonstrated representational standing.<sup>35</sup>

We agree, based on the physical proximity of their representative to the Pilgrim Nuclear Power Station, and because the affected member has authorized the Petitioner organization to represent her in this proceeding, that the Pilgrim Watch has demonstrated representational standing to participate under AEA § 189a and the Commission's rules.<sup>36</sup> Further, we find that the Massachusetts Attorney General has standing to participate in this proceeding as a representative of the State of Massachusetts as outlined by the Commission in 10 C.F.R. § 2.309(d)(2).

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<sup>30</sup> See *id.*

<sup>31</sup> See *Yankee*, CLI-98-21, 48 NRC at 195.

<sup>32</sup> See *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 202 (2000).

<sup>33</sup> See Entergy Answer to AG Petition at 2; Entergy Answer to Pilgrim Watch at 2.

<sup>34</sup> See NRC Staff Answer to AG Petition at 3.

<sup>35</sup> See NRC Staff Answer to Pilgrim Watch at 5.

<sup>36</sup> See *Yankee*, CLI-98-21, 48 NRC at 195; *Georgia Tech*, CLI-95-2, 42 NRC at 115; *Turkey Point*, LBP-01-6, 53 NRC at 146-50.

## IV. STANDARDS FOR ADMISSIBILITY OF CONTENTIONS IN LICENSE RENEWAL PROCEEDINGS

### A. Regulatory Requirements on Contentions

To intervene in an NRC proceeding, a petitioner must, in addition to demonstrating standing, submit at least one contention meeting the requirements of 10 C.F.R. § 2.309(f)(1).<sup>37</sup> Failure of a contention to meet any of the requirements of section 2.309(f)(1) is grounds for its dismissal.<sup>38</sup> Heightened standards for the admissibility of contentions originally came into being in 1989, when the Commission amended its rules to “raise the threshold for the admission of contentions.”<sup>39</sup> The Commission has more recently stated that the “contention rule is strict by design,” having been “toughened . . . in 1989 because in prior years ‘licensing boards had admitted and litigated numerous contentions that appeared to be based on little more than speculation.’ ”<sup>40</sup>

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<sup>37</sup> See 10 C.F.R. § 2.309(a). Section 2.309(f)(1) states that:

(1) A request for hearing or petition for leave to intervene must set forth with particularity the contentions sought to be raised. For each contention, the request or petition must:

(i) Provide a specific statement of the issue of law or fact to be raised or controverted;

(ii) Provide a brief explanation of the basis for the contention;

(iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;

(iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;

(v) Provide a concise statement of the alleged facts or expert opinions which support the requestor’s/petitioner’s position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and

(vi) Provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to the specific portions of the application (including the applicant’s environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner’s belief.

<sup>38</sup> See *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999); *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991).

<sup>39</sup> Rules of Practice for Domestic Licensing Proceedings — Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,168 (Aug. 11, 1989); see also *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999).

<sup>40</sup> *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001) (citing *Oconee*, CLI-99-11, 49 NRC at 334).

The Commission has explained that the “strict contention rule serves multiple interests.”<sup>41</sup> These include the following (quoted in list form):

First, it focuses the hearing process on real disputes susceptible of resolution in an adjudication. For example, a petitioner may not demand an adjudicatory hearing to attack generic NRC requirements or regulations, or to express generalized grievances about NRC policies.

Second, the rule’s requirement of detailed pleadings puts other parties in the proceeding on notice of the Petitioners’ specific grievances and thus gives them a good idea of the claims they will be either supporting or opposing.

Finally, the rule helps to ensure that full adjudicatory hearings are triggered only by those able to proffer at least some minimal factual and legal foundation in support of their contentions.<sup>42</sup>

In February 2004 a new revision of the procedural rules came into effect.<sup>43</sup> Although these rules no longer incorporate provisions formerly found in 10 C.F.R. § 2.714(a)(3), (b)(1), which permitted the amendment and supplementation of petitions and the filing of contentions after the original filing of petitions,<sup>44</sup> and contain various changes to provisions relating to the hearing process,<sup>45</sup> they contain essentially the same substantive admissibility standards for contentions. In its Statement of Considerations adopting the new rules, the Commission reiterated the same principles that previously applied, namely, that “[t]he threshold standard is necessary to ensure that hearings cover only genuine and pertinent issues of concern and that the issues are framed and supported concisely enough at the outset to ensure that the proceedings are effective and focused on real, concrete issues.”<sup>46</sup> Additional guidance with respect to each of the requirements now found in subsections (i) through (vi) of section 2.309(f)(1) is found in NRC case law.

Although we do not recount this guidance in any detail in the body of this Memorandum, primarily in view of the sheer size of this body of law, we

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<sup>41</sup> *Oconee*, CLI-99-11, 49 NRC at 334.

<sup>42</sup> *Id.* (citations omitted).

<sup>43</sup> Changes to Adjudicatory Process, 69 Fed. Reg. 2182 (Jan. 14, 2004).

<sup>44</sup> Under the current rules, contentions must be filed with the original petition, within 60 days of notice of the proceeding in the *Federal Register* (unless another period is therein specified). See 10 C.F.R. § 2.309(b)(3)(iii).

<sup>45</sup> In this connection we note that a challenge to the new rules by several public interest groups (supported by several states including Massachusetts) was overruled in the case of *Citizens Awareness Network, Inc. v. NRC* [*CAN v. NRC*], 391 F.3d 338 (1st Cir. 2004). The Court denied the petitions for review, finding that the new procedures “comply with the relevant provisions of the APA and that the Commission has furnished an adequate explanation for the changes.” *Id.* at 343.

<sup>46</sup> 69 Fed. Reg. at 2189-90.

have — because of its critical importance in determining whether petitioners are granted evidentiary hearings in NRC adjudicatory proceedings — attached as an Appendix to our Memorandum and Order a more detailed and in-depth discussion highlighting the contention admissibility standards as they have been interpreted in various NRC adjudication proceedings. Our rulings herein are informed by these requirements and principles.

## **B. Scope of Subjects Admissible in License Renewal Proceedings**

One of the contention admissibility standards limits contentions to issues demonstrated to be “within the scope” of a proceeding.<sup>47</sup> Commission regulations and case law address in some detail the scope of license renewal proceedings, which generally concern requests to renew 40-year operating licenses for additional 20-year terms.<sup>48</sup> The regulatory authority relating to license renewal is found in 10 C.F.R. Parts 51 and 54. Part 54 concerns the “Requirements for Renewal of Operating Licenses for Nuclear Power Plants,” and addresses safety-related issues in license renewal proceedings.<sup>49</sup> Part 51, concerning “Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions,” addresses the environmental aspects of license renewal.<sup>50</sup> The Commission has interpreted these provisions in various adjudicatory proceedings, probably most extensively in a decision in the 2001 *Turkey Point* proceeding.<sup>51</sup>

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<sup>47</sup> See 10 C.F.R. § 2.309(f)(1)(iii).

<sup>48</sup> Section 54.31(b) of 10 C.F.R. provides that:

[a] renewed license will be issued for a fixed period of time, which is the sum of the additional amount of time beyond the expiration of the operating license (not to exceed 20 years) that is requested in a renewal application plus the remaining number of years on the operating license currently in effect. The term of any renewed license may not exceed 40 years.

Section 50.51(a) of 10 C.F.R. states in relevant part that “[e]ach [original] license will be issued for a fixed period of time to be specified in the license but in no case to exceed 40 years from date of issuance.”

<sup>49</sup> See 10 C.F.R. Part 54.

<sup>50</sup> See 10 C.F.R. Part 51.

<sup>51</sup> See *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 11-13 (2001); see also *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); *Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-14, 48 NRC 39, 41 (1998), *motion to vacate denied*, CLI-98-15, 48 NRC 45 (1998); *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-98-17, 48 NRC 123, 125 (1998); *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-00-23, 52 NRC 327, 329 (2000); *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), LBP-04-15, 60 NRC 81, 90, *aff’d*, CLI-04-36, 60 NRC 631 (2004).

## 1. *Safety-Related Issues in License Renewal Proceedings*

Various sections of Part 54 speak to the scope of safety-related issues in license renewal proceedings. First, 10 C.F.R. § 54.4, titled “Scope,” specifies the plant systems, structures, and components that are within the scope of this part.<sup>52</sup> Sections 54.3 (containing definitions), 54.21 (addressing technical information to be included in an application and further identifying relevant structures and components), and 54.29 (stating the “Standards for issuance of a renewed license”) provide additional definition of what is encompassed within a license renewal review, limiting the scope to aging-management issues and some “time-limited aging analyses” that are associated with the functions of relevant plant systems, structures, and components.<sup>53</sup> Applicants must “demonstrate how their programs will be effective in managing the effects of aging during the proposed period of extended operation,” at a “detailed . . . ‘component and structure level,’ rather than at a more generalized ‘system level.’”<sup>54</sup>

The Commission in *Turkey Point* stated that, in developing 10 C.F.R. Part 54 beginning in the 1980s, it sought “to develop a process that would be both efficient, avoiding duplicative assessments where possible, and effective, allowing the NRC Staff to focus its resources on the most significant safety concerns at issue during the renewal term.”<sup>55</sup> Noting that the “issues and concerns involved in an extended 20 years of operation are not identical to the issues reviewed when a reactor facility is first built and licensed,” the Commission found that

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<sup>52</sup> Section 54.4(a) describes those “systems, structures, and components” that are within scope as:

(1) Safety-related systems, structures, and components which are those relied upon to remain functional during and following design-basis events (as defined in 10 CFR 50.49 (b)(1)) to ensure the following functions —

(i) The integrity of the reactor coolant pressure boundary;

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

(iii) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in § 50.34(a)(1), § 50.67(b)(2), or § 100.11 of this chapter, as applicable.

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

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

<sup>53</sup> See Final Rule: “Nuclear Power Plant License Renewal; Revisions,” 60 Fed. Reg. 22,461, 22,463 (May 8, 1995).

<sup>54</sup> *Turkey Point*, CLI-01-17, 54 NRC at 8 (quoting 60 Fed. Reg. at 22,462).

<sup>55</sup> *Id.* at 7.

requiring a full reassessment of safety issues that were “thoroughly reviewed when the facility was first licensed” and continue to be “routinely monitored and assessed by ongoing agency oversight and agency-mandated licensee programs” would be “both unnecessary and wasteful.”<sup>56</sup> Nor did the Commission “believe it necessary or appropriate to throw open the full gamut of provisions in a plant’s current licensing basis to re-analysis during the license renewal review.”<sup>57</sup>

The Commission chose, rather, to focus the NRC license renewal safety review “upon those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs,” which it considered “the most significant overall safety concern posed by extended reactor operation.”<sup>58</sup> The Commission in *Turkey Point* described some of the “Detrimental Effects of Aging and Related Time-Limited Issues” as follows:

By its very nature, the aging of materials “becomes important principally during the period of extended operation beyond the initial 40-year license term,” particularly since the design of some components may have been based explicitly upon an assumed service life of 40 years. *See* [Final Rule: “Nuclear Power Plant License Renewal,” 56 Fed. Reg. 64,943, 64,946 (Dec. 13, 1991)]; *see also* Final Rule, “Nuclear Power Plant License Renewal; Revisions,” 60 Fed. Reg. 22,461, 22,479 (May 8, 1995). Adverse aging effects can result from metal fatigue, erosion, corrosion, thermal and radiation embrittlement, microbiologically induced effects, creep, and shrinkage. Such age-related degradation can affect a number of reactor and auxiliary systems, including the reactor vessel, the reactor coolant system pressure boundary, steam generators, electrical cables, the pressurizer, heat exchangers, and the spent fuel pool. Indeed, a host of individual components and structures are

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<sup>56</sup> *Id.*

<sup>57</sup> *Id.* at 9. “Current licensing basis” (CLB) is described by the Commission in *Turkey Point* as follows:

[“CLB” is] a term of art comprehending the various Commission requirements applicable to a specific plant that are in effect at the time of the license renewal application. The current licensing basis consists of the license requirements, including license conditions and technical specifications. It also includes the plant-specific design basis information documented in the plant’s most recent Final Safety Analysis Report, and any orders, exemptions, and licensee commitments that are part of the docket for the plant’s license, i.e., responses to NRC bulletins, generic letters, and enforcement actions, and other licensee commitments documented in NRC safety evaluations or licensee event reports. *See* 10 C.F.R. § 54.3. The current licensing basis additionally includes all of the regulatory requirements found in Parts 2, 19, 20, 21, 30, 40, 50, 55, 72, 73, and 100 with which the particular applicant must comply. *Id.*

. . . . The [CLB] represents an “evolving set of requirements and commitments for a specific plant that are modified as necessary over the life of a plant to ensure continuation of an adequate level of safety.” 60 Fed. Reg. at 22,473. It is effectively addressed and maintained by ongoing agency oversight, review, and enforcement.

*Id.*

<sup>58</sup> *Turkey Point*, CLI-01-17, 54 NRC at 7.

at issue. *See* 10 C.F.R. § 54.21(a)(1)(i). Left unmitigated, the effects of aging can overstress equipment, unacceptably reduce safety margins, and lead to the loss of required plant functions, including the capability to shut down the reactor and maintain it in a shutdown condition, and to otherwise prevent or mitigate the consequences of accidents with a potential for offsite exposures.<sup>59</sup>

The Commission has also framed the focus of license renewal review as being on “plant systems, structures, and components for which current [regulatory] activities and requirements *may not* be sufficient to manage the effects of aging in the period of extended operation.”<sup>60</sup> An issue can be related to plant aging and still not warrant review at the time of a license renewal application, if an aging-related issue is “adequately dealt with by regulatory processes” on an ongoing basis.<sup>61</sup> For example, if a structure or component is already required to be replaced “at mandated, specified time periods,” it would fall outside the scope of license renewal review.<sup>62</sup>

## 2. *Environmental Issues in License Renewal Proceedings*

Regulatory provisions relating to the environmental aspects of license renewal arise out of the requirement that the National Environmental Policy Act (NEPA) places on federal agencies to “include in every recommendation or report on . . . major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on [ ] the environmental impact of the proposed action . . . .”<sup>63</sup> As has been noted by the Supreme Court, the “statutory requirement that a federal agency contemplating a major action prepare such an environmental impact statement [EIS] serves NEPA’s ‘action-forcing’ purpose in two important respects”:

It ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision.<sup>64</sup>

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<sup>59</sup> *Id.* at 7-8.

<sup>60</sup> *Id.* at 10 (citing 60 Fed. Reg. at 22,469) (alteration in original).

<sup>61</sup> *Id.* at 10 n.2.

<sup>62</sup> *Id.*

<sup>63</sup> 42 U.S.C. § 4332; *see Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348 (1989).

<sup>64</sup> *Robertson*, 490 U.S. at 349. Of course, as the Court also noted, “NEPA itself does not mandate particular results, but simply prescribes the necessary process. . . . If the adverse environmental effects 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.” *Id.* at 350 (citations omitted). As

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Part 51 of 10 C.F.R. contains NRC's rules relating to and implementing relevant NEPA requirements, and section 51.20(a)(2) requires an environmental impact statement for issuance or renewal of a nuclear reactor operating license. Other sections relating to license renewal include, most significantly, 10 C.F.R. §§ 51.53(c), 51.95(c), and 51.103(a)(5), and Appendix B to Subpart A.

Although the requirements of NEPA are directed to federal agencies and thus the primary duties of NEPA fall on the NRC Staff in NRC proceedings,<sup>65</sup> the initial requirement to analyze the environmental impacts of an action, including license renewal, is directed to applicants under relevant NRC rules.<sup>66</sup> Accordingly, section 51.53(c) requires a license renewal applicant to submit with its application an environmental report (ER), which "must contain a description of the proposed action, including the applicant's plans to modify the facility or its administrative control procedures as described in accordance with § 54.21," and "describe in detail the modifications directly affecting the environment or affecting plant effluents that affect the environment."<sup>67</sup> The report is not required to contain analyses of environmental impacts identified as "Category 1," or "generic," issues in Appendix B to Subpart A of Part 51, but "must contain analyses of the environmental impacts of the proposed action, including the impacts of refurbishment activities, if any, associated with license renewal and the impacts of operation during the renewal term," for those issues identified as "Category 2," or "plant specific," issues in Appendix B to Subpart A.<sup>68</sup>

As required under 10 C.F.R. § 51.95(c), the Commission in 1996 adopted a "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (GEIS), an extensive study of the potential environmental impacts of extending the operating licenses for nuclear power plants, which was published as NUREG-1437 and provides data supporting the table of Category 1 and 2 issues in Appendix B.<sup>69</sup> Issuance of the 1996 GEIS was part of an amendment of the requirements of Part 51 undertaken by the Commission to establish environmental

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the Court also observed, in the companion case of *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 371 (1989), "by focusing Government and public attention on the environmental effects of proposed agency action," NEPA "ensures that the agency will not act on incomplete information, only to regret its decision after it is too late to correct."

<sup>65</sup> See, e.g., 10 C.F.R. § 51.70(b), which states among other things that "[t]he NRC staff will independently evaluate and be responsible for the reliability of all information used in the draft environmental impact statement."

<sup>66</sup> See 10 C.F.R. § 51.41.

<sup>67</sup> 10 C.F.R. § 51.53(c)(2); see § 51.53(c)(1).

<sup>68</sup> 10 C.F.R. § 51.53(c)(3)(i), (ii).

<sup>69</sup> See NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (May 1996) [hereinafter GEIS]; Final Rule: "Environmental Review for Renewal of Nuclear Power Plant Operating Licenses," 61 Fed. Reg. 28,467 (June 5, 1996), amended by 61 Fed. Reg. 66,537 (Dec. 18, 1996); 10 C.F.R. Part 51, Subpart A, App. B n.1.

review requirements for license renewals “that were both efficient and more effectively focused.”<sup>70</sup>

Issues on which the Commission found that it could draw “generic conclusions applicable to all existing nuclear power plants, or to a specific subgroup of plants,” were, as indicated above, identified as “Category 1” issues.<sup>71</sup> This categorization was based on the Commission’s conclusion that these issues involve “environmental effects that are essentially similar for all plants,” and thus they “need not be assessed repeatedly on a site-specific basis, plant-by-plant.”<sup>72</sup> Thus, under Part 51, license renewal applicants may — with an exception relevant in this case that we discuss further below, requiring that ERs contain “any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware”<sup>73</sup> — in their site-specific ERs refer to and adopt the generic environmental impact findings found in Table B-1, Appendix B, for all Category 1 issues.<sup>74</sup>

On the other hand, environmental issues for which the Commission was not able to make generic environmental findings are designated as Category 2 matters, and applicants must provide plant-specific analyses of the environmental impacts of these.<sup>75</sup> These issues are characterized by the Commission as involving environmental impact severity levels that “might differ significantly from one plant to another,” or impacts for which additional plant-specific mitigation measures should be considered.<sup>76</sup> For example, the “impact of extended operation on endangered or threatened species varies from one location to another,” according to the Commission, and is thus included within Category 2.<sup>77</sup> Another example, relevant in this proceeding, is the requirement that “alternatives to mitigate severe accidents must be considered for all plants that have not [previously] considered such alternatives.”<sup>78</sup> Again, although the initial requirement falls upon applicants,

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<sup>70</sup> *Turkey Point*, CLI-01-17, 54 NRC at 11.

<sup>71</sup> *Id.* at 11 (citing 10 C.F.R. Part 51, Subpart A, App. B).

<sup>72</sup> *Id.*

<sup>73</sup> 10 C.F.R. § 51.53(c)(3)(iv).

<sup>74</sup> *Turkey Point*, CLI-01-17, 54 NRC at 11 (citing 10 C.F.R. § 51.53(c)(3)(i)).

<sup>75</sup> *Id.* (citing 10 C.F.R. Part 51, Subpart A, App. B).

<sup>76</sup> *Id.*

<sup>77</sup> *Id.* at 12.

<sup>78</sup> 10 C.F.R. Part 51, Subpart A, Appendix B; *see* § 51.53(c)(3)(ii)(L). This requirement arises out of “NEPA’s ‘demand that an agency prepare a detailed statement on ‘any adverse environmental effects which cannot be avoided should the proposal be implemented,’ 42 U.S.C. § 4332(C)(ii),” implicit in which “is an understanding that the EIS will discuss the extent to which adverse effects can be avoided.” *Robertson*, 490 U.S. at 351-52. The basis for the requirement is that “omission of a reasonably complete discussion of possible mitigation measures would undermine the ‘action-forcing’ function of NEPA. Without such a discussion, neither the agency nor other interested groups or individuals can properly evaluate the severity of the adverse effects.” *Id.* at 352.

the ultimate responsibility lies with the Staff, who must address these issues in a Supplemental Environmental Impact Statement (SEIS)<sup>79</sup> that is specific to the particular site involved and provides the Staff's independent assessment of the applicant's ER.<sup>80</sup>

Finally, section 51.103 defines the requirements for the "record of decision" relating to any license renewal application, including the standard that the Commission, in making such a decision pursuant to Part 54, "shall determine whether or not the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable."<sup>81</sup>

## **V. PETITIONERS' CONTENTIONS, PARTY ARGUMENTS, AND LICENSING BOARD ANALYSIS AND RULINGS**

With the preceding general contention admissibility requirements and license renewal scope principles in mind, we turn now to the Petitioners' contentions.

### **A. Massachusetts Attorney General's Contention and Pilgrim Watch Contention 4 (Regarding Spent Fuel Pool Accidents)**

Because of their similarity, and because Pilgrim Watch has also sought to adopt the Attorney General's Contention, we consider this contention together with Pilgrim Watch Contention 4. Our discussion addresses the points raised in support of both, and the arguments raised in opposition to both. Because we do not admit either contention, it is not necessary that we rule on Pilgrim Watch's motion to adopt the AG's contention, and therefore we do not address it herein.

The contentions here at issue state as follows:

AG Contention: The Environmental Report for Renewal of the Pilgrim Nuclear Power Plant Fails to Satisfy NEPA Because it Does Not Address the Environmental Impacts of Severe Spent Fuel Pool Accidents.<sup>82</sup>

Pilgrim Watch Contention 4: The Environmental Report Fails to Address Severe Accident Mitigation Alternatives (SAMAs) Which Would Reduce the Potential for Spent Fuel Pool Water Loss and Fires.<sup>83</sup>

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<sup>79</sup> See 10 C.F.R. § 51.95(c).

<sup>80</sup> See *Turkey Point*, CLI-01-17, 54 NRC at 12 (citing 10 C.F.R. §§ 51.70, 51.73-.74).

<sup>81</sup> 10 C.F.R. § 51.103(a)(5).

<sup>82</sup> AG Petition at 21.

<sup>83</sup> PW Petition at 50.

Pilgrim Watch in its contention centers on the SAMA argument, stating as follows:

The Environmental Report [ER] is inadequate because it fails to address the environmental impacts of the on-site storage of spent fuel assemblies which, already densely packed in the cooling pool, will be increased by fifty percent during the renewal period. A severe accident in the spent fuel pool should have been considered in Applicant's SAMA review just as accidents involving other aspects of the uranium fuel cycle were. In addition, new information shows spent fuel will remain on-site longer than was anticipated and is more vulnerable than previously known to accidental fires and acts of malice and insanity. The ER should address [SAMAs] that would substantially reduce the risks and the consequences associated with on-site spent fuel storage. Petitioners have outlined some of these alternatives.<sup>84</sup>

Pilgrim Watch argues that "[a]ny exemption in the [GEIS] and 10 C.F.R. § 51.53 for spent fuel storage covers normal operations only, not severe accidents," and therefore severe accidents involving the spent fuel pool should also be considered to be a Category 2 issue.<sup>85</sup> PW also claims to have brought forth "new and significant information that makes consideration of the spent fuel pool necessary under NEPA."<sup>86</sup> Pilgrim Watch suggests that an adjudicatory hearing is the "only way to properly address Petitioners' concerns,"<sup>87</sup> arguing that other means such as a petition for enforcement under 10 C.F.R. § 2.206 or a rulemaking petition under 10 C.F.R. § 2.802 could not realistically address their concerns in a timely fashion.<sup>88</sup>

Among other arguments offered as basis to support Contention 4, PW urges that new information, relating to questions about national storage of high-level waste, indicates that spent fuel "will remain on-site longer than anticipated" at the time either the GEIS or the Waste Confidence Rule was adopted.<sup>89</sup> In PW's view, "it makes more sense and is more protective of the environment to assess the impacts of on-site spent fuel storage *before* permission is given to generate more waste."<sup>90</sup> PW also contends that new information suggests a greater risk of

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<sup>84</sup> *Id.*

<sup>85</sup> *Id.*; *see id.* at 52.

<sup>86</sup> *Id.* at 50.

<sup>87</sup> *Id.* at 54.

<sup>88</sup> *See id.* at 55.

<sup>89</sup> *Id.* at 56; *see id.* at 56-61.

<sup>90</sup> *Id.* at 61-62; *see also* 10 C.F.R. § 51.23. We note that the U.S. Court of Appeals for the D.C. Circuit recently dismissed a challenge to the Waste Confidence Rule brought by the State of Nevada, finding, in an unpublished decision, that Nevada did not have standing because it "can point to no injury in fact as a legal or practical consequence of the rule," and that "[t]he rule has no legal effect in the anticipated Yucca Mountain proceeding." *Nevada v. NRC*, No. 05-1350, 2006 WL 2828864, at \*1 (D.C. Cir., Sept. 22, 2006).

accidental fires in spent fuel pools than previously thought, in part because the fuel is more densely packed than originally planned; in part because an accident or act of malice or insanity could lead to loss of water from the pool; in part because the spent fuel pools of boiling-water Mark I and Mark II reactors like Pilgrim are particularly vulnerable to attack, being above ground; and in part because terrorist attacks on nuclear plants are asserted to be reasonably foreseeable threats in the wake of September 11, 2001.<sup>91</sup>

Emphasizing the SAMA aspect of its contention, PW argues that the consequences of water loss as a result of any of several causes could be catastrophic and suggests several mitigation alternatives for consideration, including: using a combination of low-density, reconfigured storage of spent fuel assemblies and moving older assemblies to dry cask storage; installing a spray cooling system; and limiting the frequency of full core offloads.<sup>92</sup> Finally, PW suggests that dry cask storage makes sense from an economic, cost-benefit perspective, and calls for further analysis on SAMAs.<sup>93</sup>

Using some of the same arguments and supporting its contention as well with expert reports and other sources, the AG in his sole contention also argues that the ER fails to satisfy 10 C.F.R. § 51.53(c)(3)(iii) because it does not consider SAMAs for a severe spent fuel pool accident.<sup>94</sup> His primary argument, however, essentially consists of the assertion that Entergy's ER "does not satisfy the requirements of 10 C.F.R. § 51.53(c)(3)(iv) and NEPA . . . because it fails to address new and significant information regarding the reasonably foreseeable potential for a severe accident involving nuclear fuel stored in high-density storage racks in the Pilgrim fuel pool."<sup>95</sup> As with PW's contention, the AG points out that NEPA and 10 C.F.R. § 51.53(c)(3)(iv) require that "new and significant information" not previously considered by the NRC in an environmental impact statement (EIS) be included in the ER.<sup>96</sup> More specifically, the AG argues that the regulation requires the ER to include new and significant information even if it concerns a Category 1 matter otherwise covered in the GEIS.<sup>97</sup> Also, just as PW

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<sup>91</sup> PW Petition at 62-71.

<sup>92</sup> *See id.* at 73-75.

<sup>93</sup> *See id.* at 75-77.

<sup>94</sup> AG Petition at 23.

<sup>95</sup> *Id.* at 21.

<sup>96</sup> *Id.* at 15. The AG acknowledges that the NRC issued a generic EIS (GEIS) to evaluate many of the common environmental impacts of license renewals and therefore NRC regulations do not require the preparation of a complete ER and EIS for all aspects of each license renewal application. AG Petition at 12-13 (citing 10 C.F.R. §§ 51.53(c)(3)(i), 51.71(d)). However, the AG points to 10 C.F.R. § 51.53(c)(3)(iv), which, consistent with the Court's decision in *Marsh*, 490 U.S. at 374, requires that an ER "contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware." AG Petition at 15.

<sup>97</sup> AG Petition at 15; AG Reply at 8.

does, the AG asserts that such new and significant information exists concerning the potential impact of an accident involving a high-density spent fuel pool storage facility, and that the ER is deficient because it fails to include such new and significant information.<sup>98</sup> The AG argues that he has presented “sufficient information to create a ‘genuine material dispute of fact or law adequate to warrant further inquiry’ into the question of whether the likelihood of a pool fire falls within the range of probability considered reasonably foreseeable by the NRC.”<sup>99</sup>

The AG summarizes the key principles arising out of the “new and significant information” he submits, relating to the risks of a spent fuel pool fire, as follows:

- (a) if the water level in a fuel storage pool drops to the point where the tops of the fuel assemblies are uncovered, the fuel will burn, (b) the fuel will burn regardless of its age, (c) the fire will propagate to other assemblies in the pool, and [d] the fire may be catastrophic.<sup>100</sup>

The AG supports his allegation that such new and significant information exists with five “facts or expert opinion[s]”<sup>101</sup>: (1) the expert declaration and report of Dr. Gordon Thompson,<sup>102</sup> (2) the expert declaration and report of Dr. Jan Beyea,<sup>103</sup> (3) excerpts from NUREG-1738, (4) the 2006 “Safety and Security of Commercial Spent Nuclear Fuel Storage” report of the National Academy of Sciences,<sup>104</sup> and (5) the terrorist attacks of September 11, 2001.<sup>105</sup>

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<sup>98</sup> See AG Petition at 22; PW Petition at 50.

<sup>99</sup> AG Petition at 23 (citing *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), LBP-00-19, 52 NRC 85, 97-98 (2000)).

<sup>100</sup> *Id.* at 22.

<sup>101</sup> See *id.*

<sup>102</sup> AG Petition, Exh. 1, Decl. of Dr. Gordon Thompson in Support of [AG]’s Contention and Petition for Backfit Order (May 25, 2006).

<sup>103</sup> AG Petition, Exh. 2, Decl. of Dr. Jan Beyea in Support of [AG]’s Contention and Petition for Backfit Order (May 25, 2006).

<sup>104</sup> AG Petition, Exh. 4, Committee on the Safety and Security of Commercial Spent Nuclear Fuel Storage, Board on Radioactive Waste Management, National Research Council, Safety and Security of Commercial Spent Nuclear Fuel Storage: Public Report (Washington, DC: National Academies Press, 2006). This report is also cited by PW in support of its Contention 4. See PW Petition at 65.

<sup>105</sup> See, e.g., AG Petition at 22, 33-40. As indicated above, the Attorney General also, on June 16, 2006, filed a letter requesting the Licensing Board to apply the June 2, 2006, decision of the U.S. Court of Appeals for the Ninth Circuit in the case, *San Luis Obispo Mothers for Peace v. Nuclear Regulatory Commission*, “by ruling that the environmental impacts of an intentional attack on the Pilgrim fuel storage pool must be addressed in an EIS, or seek appropriate guidance from the Commission.” AG Letter at 2. (In *Mothers for Peace*, the Court reversed the Commission’s determination that NEPA does not require an analysis of the environmental impact of terrorism, in that the NRC’s “categorical refusal to consider the environmental effects of a terrorist attack” is unreasonable under NEPA. Thus,

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The AG argues that NRC never considered this information in its original EIS for Pilgrim or in the GEIS for license renewals, and that Entergy's failure to include this new and significant information in its ER thus contravenes 10 C.F.R. § 51.53(c)(3)(iv) and the Supreme Court decision in the *Marsh* case.<sup>106</sup> The AG also contends that the environmental impacts of a spent fuel pool accident must be considered by the Staff in the SEIS in order for the Staff to comply with its obligation to consider significant new information relevant to the environmental impacts of license renewal because this information has not been considered by the NRC in a previous EIS.<sup>107</sup> Further, the AG asserts, when the likelihood of a terrorist attack is taken into account, the estimated probability of this type of accident is within the range that must be discussed in an ER and EIS.<sup>108</sup>

With respect to its argument that the ER is deficient because it does not consider reasonable alternatives for avoiding or mitigating the environmental impacts of a severe spent fuel pool fire, the AG contends that a combination of two potential SAMAs "would virtually eliminate the vulnerability of the Pilgrim fuel pool to attack": low-density racking of fuel assemblies in the pool, and dry storage in casks.<sup>109</sup>

#### ***1. Entergy Answer to Massachusetts AG Contention and Pilgrim Watch Contention 4***

Entergy opposes both the AG's contention and Pilgrim Watch Contention 4, claiming that the environmental impacts of spent fuel storage are codified as Category 1 environmental issues, and thus are beyond the scope of this license renewal proceeding.<sup>110</sup> According to Entergy, the attempt to bring these issues within the scope of the proceeding by invoking section 51.53(c)(3)(iv) falls short because the generic Category 1 findings resulting from the analysis of the GEIS

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the Court found, the "EA [environmental assessment] prepared in reliance on that determination is inadequate and fails to comply with NEPA's mandate." 449 F.3d at 1028, 1035. The Court denied the petition for review with regard to additional claims by the petitioner that the NRC's actions had violated the Atomic Energy Act and the Administrative Procedure Act, noting among other things that NRC's "reliance on its own prior opinions in its decision in this case does not violate the APA's notice and comment provisions," and that "[t]he agency has the discretion to use adjudication to establish a binding legal norm." *Id.* at 1027.)

<sup>106</sup> See AG Petition at 23, 24-30.

<sup>107</sup> *Id.* at 15, 21.

<sup>108</sup> *Id.* at 33-41.

<sup>109</sup> *Id.* at 41; see also *id.* at 23, 47. As discussed above, see *supra* pp. 281-82, PW also suggests these same two mitigation alternatives. See PW Petition at 73.

<sup>110</sup> See Entergy Answer to AG Petition at 11-13 (citing 10 C.F.R. Part 51, App. B, Table B-1, 10 C.F.R. §§ 51.53(c), 51.95(c)); Entergy Answer to PW Petition at 46-48 (citing 10 C.F.R. Part 51, App. B, Table B-1, 10 C.F.R. §§ 51.53(c), 51.95(c); GEIS at 6-72-6-75).

are NRC rules and, as such, may only be challenged or altered upon the granting of a waiver or rulemaking petition.<sup>111</sup> Moreover, Entergy argues that the recent decision in *San Luis Obispo Mothers for Peace v. NRC* is inapplicable here because Commission case law establishes that, even if terrorism issues require analysis under NEPA, the GEIS concluded that “if such an event were to occur, the resultant core damage and radiological release would be no worse than those expected from internally initiated events.”<sup>112</sup>

Entergy challenges the AG’s claim that new and significant information exists, arguing that the risks associated with high-density racking in spent fuel pools were known and considered by NRC long ago and that nothing new is contained in the AG’s exhibits.<sup>113</sup> In any event, Entergy asserts, none of the sources cited by the Attorney General contain new or significant information, or “controvert[] the conclusion in the GEIS that the occurrence of a zirconium spent fuel pool fire is ‘highly remote.’”<sup>114</sup> In addition, the NRC “has fully considered the NAS report and found no basis, even in the context of a terrorist attack, to change its conclusion regarding the risks of spent fuel pool fires stated in the GEIS,”<sup>115</sup> and has concluded that the Alvarez report cited in the Thompson and Beyea reports “suffer[s] from excessive conservatisms, with the result that its recommendations do not have a sound technical basis.”<sup>116</sup> Entergy characterizes the claims of the Thompson report as being “broad, unsupported claims,” and argues that the Attorney General’s contention is “not supported by any credible basis establishing the probability of a spent fuel fire or demonstrating that it is sufficiently foreseeable to warrant consideration under NEPA.”<sup>117</sup>

Entergy also argues that SAMAs are limited to nuclear reactor accidents and do not include spent fuel storage accidents,<sup>118</sup> that the challenge to the Waste Confidence rule is based upon information that is neither new nor significant,<sup>119</sup> and that PW’s remaining arguments provide insufficient support to admit the contentions at issue.<sup>120</sup>

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<sup>111</sup> Entergy Answer to AG Petition at 13; Entergy Answer to PW Petition at 49-50.

<sup>112</sup> Entergy Answer to AG Petition at 26 (quoting *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358, 365 n.24 (2002)); Entergy Answer to PW Petition at 54.

<sup>113</sup> See Entergy Answer to AG Petition at 14-15.

<sup>114</sup> *Id.* at 15; see *id.* at 15-16.

<sup>115</sup> *Id.* at 15-16.

<sup>116</sup> See *id.* at 16, 17.

<sup>117</sup> *Id.* at 19, 25; see *id.* at 17-25.

<sup>118</sup> See Entergy Answer to PW Petition at 48-49.

<sup>119</sup> *Id.* at 51 (citing *Oconee*, CLI-99-11, 49 NRC at 344-45).

<sup>120</sup> See *id.* at 51-56.

## **2. NRC Staff Response to Massachusetts AG Contention and Pilgrim Watch Contention 4**

The Staff likewise argues that Category 1 environmental issues are outside of the scope of license renewal proceedings, citing 10 C.F.R. § 51.53(c)(2) and *Turkey Point*<sup>121</sup> for the proposition that a license renewal ER need not provide information regarding the storage of spent fuel.<sup>122</sup> The Staff also relies on *Turkey Point* in arguing that an ER need not address SAMAs for mitigating spent fuel pool accidents.<sup>123</sup> According to the Staff, by asking the Board to address a spent fuel storage issue, the AG and PW essentially seek to have the Board treat spent fuel pool issues as a Category 2 issue, which runs counter to the prohibition against challenging a regulation in an adjudicatory proceeding without seeking a waiver.<sup>124</sup> The Staff also argues that the information in the AG petition is not new and, therefore, need not be included in Entergy's ER as it has already been presented to the NRC.<sup>125</sup> Finally, the Staff asserts that, to the extent the AG's contention attempts to raise terrorism issues, these issues are also outside of the scope of the proceeding.<sup>126</sup>

## **3. Massachusetts AG and Pilgrim Watch Replies to Entergy and NRC Staff**

In its reply to Entergy and the Staff, the AG argues that the case law and regulatory history make clear that "Category 1 impacts are included in the scope of the new and significant impacts that must be discussed in an ER pursuant to 10 C.F.R. § 51.53(c)(3)(iv)."<sup>127</sup> The AG maintains that the alternative procedures suggested in *Turkey Point* (e.g., the filing of a waiver petition or a rulemaking petition) are inconsistent with NEPA as construed by the Supreme Court in *Marsh*.<sup>128</sup> Further, the AG asserts that *Turkey Point* is inapposite because it did

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<sup>121</sup> *Turkey Point*, CLI-01-17, 54 NRC at 6-13.

<sup>122</sup> See Staff Response to AG Petition at 10-12; Staff Response to PW Petition at 34-36; see also *Turkey Point*, CLI-01-17, 54 NRC at 6-13.

<sup>123</sup> See Staff Response to AG Petition at 9-11; Staff Response to PW Petition at 34-36 (citing *Turkey Point*, CLI-01-17, 54 NRC at 21-22).

<sup>124</sup> See Staff Response to AG Petition at 10-11, 14; Staff Response to PW Petition at 36.

<sup>125</sup> See Staff Response to PW Petition at 37; Staff Response to AG Petition at 15-18.

<sup>126</sup> See Staff Response to AG Petition at 19-20; Staff Response to PW Petition at 38.

<sup>127</sup> AG Reply at 8.

<sup>128</sup> See *id.* at 9-10. The Attorney General has also argued that, "in order to get a hearing and in order to raise a legitimate contention," the "one door" open to it was to file a contention, Tr. at 87, in part because it did not believe it met the requirements for a waiver under 10 C.F.R. § 2.335 that "special circumstances with respect to the subject matter of the particular proceeding [must be] such

(Continued)

not deal with a contention alleging new and significant information, and that its discussion of issues relating to new and significant information is dicta.<sup>129</sup> The AG goes on to explain how in its view the information in its petition is indeed “new and significant.”<sup>130</sup> Finally, the AG asks the Board to rule that NEPA requires that Entergy and the Staff consider the environmental impacts of an intentional attack on the Pilgrim spent fuel pool, and then to refer its ruling to the Commission to determine the applicability of the *Mothers for Peace* decision.<sup>131</sup>

Pilgrim Watch replies that the inclusion of onsite spent fuel as a Category 1 issue under “Uranium Fuel Cycle” in Appendix B to Subpart A of Part 51 relates only to normal operations and “does not prevent it from being a Category 2 issue for the purposes of ‘Severe Accidents.’”<sup>132</sup> PW cites the Licensing Board’s decision in *Turkey Point* as distinguishing SAMAs when it denied a contention relating only to “severe accidents” and not SAMAs,<sup>133</sup> and argues that the alternative procedural avenues of waiver and rulemaking petitions are inconsistent with *Marsh* and NEPA’s requirement for supplementation of EISs.<sup>134</sup> It further argues that the issue it has raised is site-specific rather than generic, and that it has “submitted new and significant information which casts doubt on the current generic treatment of this issue and supports its contention that NEPA requires that this issue be reviewed as part of the license renewal process.”<sup>135</sup> PW makes similar arguments in its Reply to the Staff,<sup>136</sup> and also cites the *Mothers for Peace* decision<sup>137</sup> in support of its contention insofar as it raises terrorist attacks as a new and significant issue.<sup>138</sup>

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that application of the rule . . . would not serve the purposes for which the rule . . . was adopted,” or as characterized by the Commission in *Turkey Point*, in which it stated that “[i]n the hearing process . . . petitioners with new information showing that a generic rule would not serve its purpose at a particular plant may seek a waiver of a rule,” but “[p]etitioners with evidence that a generic finding is incorrect for all plants may petition [for a] rulemaking.” *Turkey Point*, CLI-01-17, 54 NRC at 12; see Tr. at 88-90, 109-115, 138-40. The AG argues that the “new and significant information” at issue concerns not only the Pilgrim plant but also others. Tr. at 88. As indicated above, see *supra* note 4, the AG has filed a rulemaking petition.

<sup>129</sup> AG Reply at 11.

<sup>130</sup> See *id.* at 12-27.

<sup>131</sup> *Id.* at 27-28.

<sup>132</sup> PW Reply to Entergy at 25.

<sup>133</sup> *Id.* at 26-27.

<sup>134</sup> *Id.* at 27-28.

<sup>135</sup> *Id.* at 30; see *id.* at 28-30.

<sup>136</sup> PW Reply to NRC Staff at 19-20.

<sup>137</sup> See *id.* at 20.

<sup>138</sup> *Id.* at 20-21.

#### **4. Licensing Board Ruling on Massachusetts AG Contention and PW Contention 4**

We find these contentions to be inadmissible, on two separate grounds. We address first the Petitioners' arguments (primarily espoused by Pilgrim Watch) that the contentions should be admitted because they raise matters relating to "severe accidents" and "severe accident mitigation alternatives," or "SAMAs," a site-specific Category 2 issue<sup>139</sup> that must be addressed in a license renewal under 10 C.F.R. § 51.53(c)(ii)(L) and Appendix B to Subpart A of 10 C.F.R. Part 51. For reasons we set forth in some detail below, we find that these arguments fail because of Commission precedent interpreting the term, "severe accidents," to encompass only reactor accidents and not spent fuel pool accidents, which fall within the analysis of the generic Category 1 issue of onsite storage of spent fuel.

Next, we address the Petitioners' arguments (indeed, the Attorney General's central argument) that the contentions should be admitted because they challenge the Applicant's failure to address various matters that they contend constitute "new and significant information," which must be addressed under 10 C.F.R. § 51.53(c)(3)(iv), *even if* they concern a Category 1 issue. Again, these arguments fail in the face of Commission precedent, in this instance establishing that, notwithstanding the responsibility of an applicant in its ER (and the NRC Staff in the SEIS) to address "new and significant information" relating even to Category 1 issues, an *alleged failure to address* such "new and significant information" does not give rise to an admissible contention, absent a waiver of the rule in 10 C.F.R. § 51.53(c)(3)(i) that Category 1 issues need not be addressed in a license renewal.

We would note with regard to both of these issues that the analysis that brings us to our conclusions regarding them does not follow an entirely straight path, primarily because relevant rules in neither instance directly resolve the issues in question. However, Commission precedent in the *Turkey Point* license renewal proceeding, interpreting the rules in question and the regulatory framework within which they fall, mandates our rulings on both issues.

We note further that we do *not* rule herein on two other questions relating to the contentions at issue. First, in light of our rulings on the preceding two primarily legal issues, we need not, and do not, go into the question whether either Petitioner has sufficiently supported either contention insofar as it alleges as a factual matter that there exists "new and significant information" that should have been addressed by the Applicant, relating to the risks and environmental impacts of high-density racking in, and accidents involving, spent fuel pools. Nor

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<sup>139</sup> See *supra* Section IV.B, discussion of "Category 1," or "generic" issues, and "Category 2," or "site-specific" issues.

should our rulings herein be interpreted as suggesting a finding on this in either direction.

Second, regarding the Petitioners' arguments based on the Ninth Circuit's decision in *Mothers for Peace v. NRC*, we again follow Commission precedent, in this instance declining to rule on such matters at this time in light of the procedural posture of that case. We recognize, as another Licensing Board has recently observed (ruling in the *Vermont Yankee* license renewal proceeding on a virtually identical contention filed by the Massachusetts Attorney General in that case), that the *Mothers for Peace* decision might impact our rulings herein.<sup>140</sup> However, a majority of the Commission has recently issued two rulings declining to apply the Court's decision in *Mothers for Peace* in NRC proceedings at this time. First, in the NRC proceeding from which the *Mothers for Peace* decision arose, it denied Petitioners' motion for various relief based on the Court's decision, finding it "unnecessary and premature," and noting as well that the Court's ruling did not "circumscrib[e] the procedures that the NRC must employ" for addressing terrorism in the NEPA context and thus the Commission has "maximum procedural leeway" to address the issue.<sup>141</sup> Second, it postponed addressing a request of the State of New Jersey in the *Oyster Creek* license renewal proceeding that it consider the Ninth Circuit's decision in ruling on the State's appeal of the Licensing Board's denial of its contention relating, *inter alia*, to SAMAs and spent fuel pool vulnerability.<sup>142</sup> Based upon this authority, we also will refrain from issuing a ruling based on the *Mothers for Peace* decision at this time, without, however, foreclosing the possibility that future pleadings may be filed based on future developments in that case, as appropriate at such time.

*a. Ruling on "Severe Accident"- and SAMA-Related Arguments*

As indicated above, the critical determinative issue relating to severe accidents and SAMAs is what the term "severe accident" encompasses, thus defining what accidents are to be examined in the context of a "severe accident mitigation alternatives," or "SAMA," analysis. At first blush, the arguments of PW and the AG, to the effect that severe accidents include spent fuel pool accidents and that a SAMA analysis must therefore address such accidents, seem plausible. The Licensing Board in *Turkey Point* indeed distinguished SAMAs in denying contentions concerning "severe accidents" that contained no mention of "mitigation

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<sup>140</sup> *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-06-20, 64 NRC 131, 160 (2006) (citing 449 F.3d at 1016).

<sup>141</sup> See *Pacific Gas and Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-06-23, 64 NRC 107, 108 (2006).

<sup>142</sup> See *Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 115 (2006).

alternatives,” which is the crux of a SAMA.<sup>143</sup> In addition, NRC regulations offer little guidance, providing neither a definition of the term “severe accident,” nor stating explicitly whether the “severe accidents” to be examined in SAMA analyses include or exclude spent fuel pool accidents.

Section 51.53(c)(3)(ii) states that the environmental report must contain analyses of the environmental impacts of the proposed action that are identified as Category 2 issues in Appendix B to Subpart A of Part 50, and then goes on to recount in narrative form the same issues identified as Category 2 issues in Appendix B (with SAMAs addressed in section 51.53(c)(3)(ii)(L)). It does not, however, define “severe accidents” or “SAMAs,” or limit SAMAs in any way other than as stated in subsection (L) — i.e., “a consideration of alternatives to mitigate severe accidents must be provided” only “[i]f the staff has not previously considered severe accident mitigation alternatives for the applicant’s plant in an [EIS] or related supplement or in an environmental assessment.” And the entry in Appendix B, Table B-1, likewise provides no assistance on the question before us, stating merely as follows:

Severe accidents — 2 — SMALL. 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. However, alternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives. See § 51.53(c)(ii)(L).

Certainly, “severe accidents” is a term of art long used in the nuclear industry and incorporated into Commission guidance documents, including NUREG-1150, which is focused singularly upon accidents involving damage to the

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<sup>143</sup> *Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4)*, LBP-01-6, 53 NRC 138 (2001). That Licensing Board stated:

[S]ection 51.53 does not require the Applicant broadly to consider severe accident risks. Rather, it only requires the Applicant to consider ‘severe accident mitigation alternatives’ (SAMAs). 10 C.F.R. § 51.53(c)(3)(ii)(L). The Commission, therefore, has left consideration of SAMAs as the only Category 2 issue with respect to severe accidents, but this portion of Ms. Lorion’s contention does not seek to raise any issue related to severe accident mitigation alternatives. Her contention neither identifies any mitigation alternatives that should be considered nor challenges the Applicant’s evaluation of SAMAs in its environmental report.

*Id.* at 160-61. Further:

Mr. Oncavage’s allegation that an accident involving spent fuel is a Category 2 issue does not make the contention admissible. As discussed earlier (*see supra* p. 160), only severe accident mitigation alternatives may be considered for license renewal severe accident Category 2 issues, and Mr. Oncavage has not raised any issue involving mitigation alternatives.

*Id.* at 165.

reactor core.<sup>144</sup> But the rules themselves contain no such reference or limitation.

The most on-point source on the issue is Commission case law in the *Turkey Point* proceeding. It must be noted that, when it considered the question of severe accidents and SAMAs, on the appeal of one of the petitioners in that proceeding, the Commission endorsed the distinction made by the Licensing Board, between the need to propose a SAMA and the more substantive question of risk associated with severe accidents.<sup>145</sup> It then went on, however, to focus upon what is essentially an alternative, and ultimately more significant, rationale for its ruling upholding the denial of the contention in question — that SAMAs apply only to reactor accidents, not to spent fuel pool accidents.<sup>146</sup>

It is argued that the Commission's language in this regard is "gratuitous," on an issue that did not need to be decided directly.<sup>147</sup> The length and specificity of the Commission's discussion, however, belies such an interpretation, and suggests that the Commission saw this second ground for its ruling as being more important than, and indeed in effect rendering irrelevant, the question whether that petitioner mentioned SAMAs in his "severe accident" contention. We quote at length from this discussion in order to illustrate this:

*a. Onsite Storage of Spent Fuel Is a Category I Issue*

Our rules explicitly conclude that "[t]he expected increase in the volume of spent fuel from an additional 20 years of operation can be safely accommodated on site with small environmental effects through dry or pool storage at all plants if a permanent repository or monitored retrievable storage is not available." Table B-1, Subpart A, Appendix B to Part 51. See *Oconee*, CLI-99-11, 49 NRC at 343-44. The GEIS provides the background analyses and justification for this generically applicable finding. See GEIS at 6-70 to 6-86. It finds "ample basis to conclude that continued storage of existing spent fuel and storage of spent fuel generated during the license renewal period can be accomplished safely and without significant environmental impacts." *Id.* at 6-85. The GEIS takes full account of "the total accumulated volumes of spent fuel after an additional 20 years of operation." *Id.* at 6-79; see also *id.* at 6-80 to 6-81.

*The GEIS's finding encompasses spent fuel accident risks and their mitigation.* See GEIS, at xlvi, 6-72 to 6-76, 6-86, 6-92. The NRC has spent years studying in great detail the risks and consequences of potential spent fuel pool accidents,

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<sup>144</sup> NUREG-1150, "Severe Accident Risks: An Assessment for Five U.S. Nuclear Power Plants" (Dec. 1990). See also Policy Statement on Severe Reactor Accidents Regarding Future Designs and Existing Plants, 50 Fed. Reg. 32, 138 (Aug. 1985).

<sup>145</sup> *Turkey Point*, CLI-01-17, 54 NRC at 21-22.

<sup>146</sup> *Id.*

<sup>147</sup> See PW Reply to NRC Staff at 19.

and the GEIS analysis is rooted in these earlier studies. NRC studies and the agency's operational experience support the conclusion that onsite reactor spent fuel storage, which has continued for decades, presents no undue risk to public health and safety. Because the GEIS analysis of onsite spent fuel storage encompasses the risk of accidents, Contention 2 falls beyond the scope of individual license renewal proceedings.

Mr. Oncavage argues, however, that a "catastrophic radiological accident at a spent fuel facility would be a severe accident which is a category 2 issue." Amended Petition at 2. Part 51 does provide that "alternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives." See Appendix B to Subpart A of Part 51; see also GEIS at 5-106 to 5-116. But Mr. Oncavage's Contention 2 says nothing about mitigation alternatives. And, *in any event, Part 51's reference to "severe accident mitigation alternatives" applies to nuclear reactor accidents, not spent fuel storage accidents. Not only Mr. Oncavage, but also the NRC Staff and FPL, apparently was confused on this point, for no one raised the important distinction between reactor accidents and spent fuel accidents.* As we have seen, the GEIS deals with spent fuel storage risks (including accidents) generically, and concludes that "regulatory requirements already in place provide adequate mitigation." GEIS at 6-86, 6-92, xlviii; see also *id.* at 6-72 to 6-76.

*On the issue of onsite fuel storage, then, the GEIS rejects the need for further consideration of mitigation alternatives at the license renewal stage. Id.* Indeed, for all issues designated as Category 1, the Commission has concluded that additional site-specific mitigation alternatives are unlikely to be beneficial and need not be considered for license renewal. See 61 Fed. Reg. at 28,484; GEIS at 1-5, 1-9.

The NRC customarily has studied reactor accidents and spent fuel accidents separately. For instance, our "*Policy Statement on Severe Reactor Accidents Regarding Future Designs and Existing Plants*" discusses only reactor accidents and defines "[s]evere nuclear accidents [as] those in which substantial damage is done to the reactor core whether or not there are serious offsite consequences." 50 Fed. Reg. 32,138 (Aug. 1985) (emphasis added). Similarly, the various NRC studies on severe accidents typically focus upon potential damage to the reactor core of nuclear power plants.<sup>10</sup> A different set of studies altogether is devoted to spent fuel pool accidents, and has concluded that the risk of accidents is acceptably small.<sup>11</sup> Hence, Part 51 and the GEIS treat the matter generically. Indeed, the events that could lead to a severe reactor accident vary significantly from plant to plant, thereby requiring plant-specific consideration, whereas accidents involving spent fuel pools or dry casks are more amenable to generic consideration.

[Discussion of possibility of spent fuel pool accidents caused by hurricanes.] Mr. Oncavage did not seek a waiver of the Category 1 determination for spent fuel issues, nor did his hurricane discussions raise any information that might render the GEIS's Category 1 finding inapplicable to the Turkey Point facility. Nothing in Mr. Oncavage's "hurricane" claim renders it litigable under our license renewal rules.

*In short, Part 51's license renewal provisions cover environmental issues relating*

to onsite spent fuel storage generically.<sup>14</sup> All such issues, including accident risk, fall outside the scope of license renewal proceedings.

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[FN10] *See, e.g.*, NUREG-1150, “Severe Accident Risks: An Assessment for Five U.S. Nuclear Power Plants (Dec. 1990) (examining core meltdown risks); NUREG/CR-5042, “Evaluation of External Hazards to Nuclear Power Plants in United States” (Dec. 1987) (examining the risk of core damage from external events).

[FN11] *See, e.g.*, NUREG-1353, “Regulatory Analysis for the Resolution of Generic Issue 82, ‘Beyond Design Basis Accidents in Spent Fuel Pools’ (April 1989); NUREG/CR-4982, “Severe Accidents in Spent Fuel Pools in Support of Generic Safety Issue 82” (July 1987); NUREG/CR-5281, “Value/Impact Analyses of Accident Preventive and Mitigative Options for Spent Fuel Pools” (Mar. 1989); NUREG/CR-5176, “Seismic Failure and Cask Drop Analysis of the Spent Fuel Pools at Two Representative Nuclear Power Plants (Jan. 1989). A recent study of spent fuel storage risks at decommissioning reactors finds the risk of accident somewhat greater than originally believed, but still very low. *See* NUREG-1738, “Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants (Feb. 2001).

[FN14] [Discussion noting that Waste Confidence rule applies only to storage of spent fuel after a reactor ceases operation.] As we hold in the text, it is Part 51, with its underlying GEIS, that precludes litigation of that issue.<sup>148</sup>

The Commission in the preceding passage clearly did not address merely in passing the issue of whether the severe accidents to be addressed in a SAMA analysis under 10 C.F.R. Part 51 include spent fuel pool accidents. Rather, it explicitly noted that all participants in that proceeding had overlooked the “important distinction between reactor accidents and spent fuel accidents,” going into great detail discussing the differences between reactor and spent fuel pool accidents, and explaining why it found that SAMAs do not apply to accidents involving spent fuel pools. It cited the GEIS extensively in support of its statements to this effect. The passage indeed may be read as emphasizing that, even were the contention in question there to have been read as implicitly bringing SAMAs into play, it would not have been deemed admissible. In this light, and taking into account the references to the cited portions of the GEIS, noted by the Commission as underlying Part 51 of the regulations, while we might observe that it would have been preferable to include specific language in the actual SAMA rule limiting SAMAs to reactor accidents if that is what was intended, the Commission is hardly equivocal in the interpretation provided in the passage quoted above.

On this basis, we are constrained to find the Massachusetts AG Contention and PW Contention 4 to be inadmissible insofar as they are based on the SAMA-related arguments summarized above.

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<sup>148</sup> *Turkey Point*, CLI-01-17, 54 NRC at 21-23 (emphasis added).

b. *Ruling on Legal Issues Involved in “New and Significant Information”-Related Arguments*

We likewise must find the contentions at issue to be inadmissible insofar as they are based on the requirement of 10 C.F.R. § 51.53(c)(3)(iv) that the ER “must contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware.”

Again, the rule itself does not dictate this ruling. Indeed, section 51.53(c)(3)(iv) may be read as in effect creating an exception to section 51.53(c)(3)(i)’s allowance that an applicant’s ER “is not required to contain analyses of the environmental impacts of the license renewal issues identified as Category 1 issues in Appendix B.” Commission precedent supports this reading that the requirement of section 51.53(c)(3)(iv) applies not only to Category 2 issues but also to Category 1 issues — at least to the extent that it applies to the responsibilities of the Applicant and the Staff. In *Turkey Point* the Commission stated that, “[e]ven where the GEIS has found that a particular impact applies generically (Category 1), the applicant *must still provide* additional analysis in its Environmental Report if new and significant information may bear on the applicability of the Category 1 finding at its particular plant.”<sup>149</sup> Later, in the *McGuire* proceeding, the Commission reinforced this ruling, stating again that “the applicant must provide additional analysis of even a Category 1 issue if new and significant information has surfaced.”<sup>150</sup> Similarly, the Commission has indicated in its rulemaking that the Staff must, when preparing the SEIS, consider any significant new information related to Category 1 issues.<sup>151</sup>

On the basis of the foregoing, one might read subsection (c)(3)(iv) of section 51.53 as an exception to subsection (c)(3)(i) also in an adjudication context, particularly in light of the Commission’s statement in *Turkey Point* that “[a]djudicatory hearings in individual license renewal proceedings will share the same scope of issues as our NRC Staff review.”<sup>152</sup> Thus the Petitioners’ argument, that an alleged failure of an applicant to comply with the requirement of section 51.53(c)(3)(iv) may give rise to an admissible contention (assuming proper support under the contention admissibility rules), might also be persuasive — but for other statements of the Commission in *Turkey Point* that lead to a contrary conclusion.

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<sup>149</sup> *Id.* at 11 (emphasis added).

<sup>150</sup> *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 290 (2002).

<sup>151</sup> See 10 C.F.R. §§ 51.92(a)(2), 51.95(c)(3); 61 Fed. Reg. at 28,470. In addition, in *Turkey Point* the Commission stated that the “final SEIS also takes account of public comments, including . . . new information on generic findings.” *Turkey Point*, CLI-01-17, 54 NRC at 12; see also *McGuire/Catawba*, CLI-02-14, 55 NRC at 290-91.

<sup>152</sup> *Turkey Point*, CLI-01-17, 54 NRC at 10.

In these other statements, the Commission has indicated that any new and significant information on matters designated as Category 1 issues in Part 51 may be initiated by petitioners only through means other than the submission of contentions. First, the Commission identified three specific options that individuals and petitioners might pursue to address new and significant information that may have arisen after the GEIS on Category 1 issues was finalized:

The Commission recognizes that even generic findings sometimes need revisiting in particular contexts. Our rules thus provide a number of opportunities for individuals to alert the Commission to new and significant information that might render a generic finding invalid, either with respect to all nuclear power plants or for one plant in particular. In the hearing process, for example, petitioners with new information showing that a generic rule would not serve its purpose at a particular plant may seek a waiver of the rule. . . . Petitioners with evidence that a generic finding is incorrect for all plants may petition the Commission to initiate a fresh rulemaking. . . . Such petitioners may also use the SEIS notice and comment process to ask the NRC to forgo use of the suspect generic finding and to suspend license renewal proceedings, pending a rulemaking or updating of the GEIS. *See* 61 Fed. Reg. at 28,470; GEIS at 1-10 to 1-11.<sup>153</sup>

Later in its decision, in the specific context of spent fuel pool accidents (which, as indicated above, it found to fall within the Category 1 issue of onsite storage of spent fuel<sup>154</sup>), the Commission made clear that its intent was that these options were to be the exclusive options open to members of the public on the issue, stating that “Part 51 treats all spent fuel accidents, whatever their cause, as generic, Category 1 events *not suitable for case-by-case adjudication*.”<sup>155</sup> Further, removing any doubt as to its intent, the Commission added, “As we hold in the text, it is part 51, with its underlying GEIS, that *precludes the litigation* of that issue.”<sup>156</sup>

As the *Vermont Yankee* Licensing Board noted in its decision in that license renewal proceeding, the preceding reading of *Turkey Point* is consistent with the regulatory history of 10 C.F.R. § 51.53(c)(3)(iv).<sup>157</sup> The requirement that the ER include any new and significant information was not part of the original proposed

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<sup>153</sup> *Turkey Point*, CLI-01-17, 54 NRC at 12. We note that the Commission’s language referring to the waiver process when information relates to “a particular plant” supports the AG’s argument that it would need to show some special circumstances relating to the Pilgrim plant in particular in order to qualify for a waiver. *See supra* note 128.

<sup>154</sup> *See Turkey Point*, CLI-01-17, 54 NRC at 21-23; 10 C.F.R. Part 51, App. B, Table B-1.

<sup>155</sup> *Id.* at 22 (emphasis added).

<sup>156</sup> *Id.* at 23 n.14 (emphasis added).

<sup>157</sup> *See Vermont Yankee*, LBP-06-20, 64 NRC at 157-59.

rule.<sup>158</sup> It was added in the final rule in response to objections from the Council on Environmental Quality (CEQ), the U.S. Environmental Protection Agency (EPA), and members of the public. As the Commission noted:

Federal and State agencies questioned how new scientific information could be folded into the GEIS findings because the GEIS would have been performed so far in advance of the actual renewal of an operating license. . . . A group of commenters, including CEQ and EPA noted that the rigidity of the proposed rule hampers the NRC's ability to respond to new information or to different environmental issues not listed in the proposed rule.<sup>159</sup>

The Commission in response added 10 C.F.R. § 51.53(c)(3)(iv), to expand “the framework for consideration of significant new information.”<sup>160</sup> The Statement of Considerations to the final rule refers to SECY-93-032, a Staff memorandum to the Commission proposing certain rule changes, including the addition of the provision in 10 C.F.R. § 51.53(c)(3)(iv), to resolve the CEQ and EPA concerns.<sup>161</sup> One of the proposed changes was that “[l]itigation of environmental issues in a hearing will be limited to unbounded category 2 and category 3 issues unless the rule is suspended or waived.”<sup>162</sup> The Commission approved modification of the proposed rule and specifically endorsed SECY-93-032.<sup>163</sup> Commission approval of SECY-93-032 may thus be read as demonstrating that, when the Commission adopted the final rule, it contemplated that Category 1 issues could be litigated only after the granting of a waiver petition pursuant to 10 C.F.R. § 2.335, suspending the provision in 10 C.F.R. § 51.53(c)(3)(i) that an ER need not address “Category 1” issues and thus allowing Petitioners to challenge a failure of the ER to address alleged “new and significant information” with regard to such an issue.<sup>164</sup>

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<sup>158</sup> See Proposed Rule: “Environmental Review for Renewal of Operating Licenses,” 56 Fed. Reg. 47,016, 47,027-28 (Sept. 17, 1991).

<sup>159</sup> 61 Fed. Reg. at 28,470.

<sup>160</sup> *Id.*

<sup>161</sup> See *id.*; SECY-93-032, Memorandum from James M. Taylor, EDO, to the Commissioners (Feb. 9, 1993) (ADAMS Accession No. ML051660667).

<sup>162</sup> SECY-93-032 at 4. We note that Category 2 and 3 issues were eventually combined into Category 2. See 61 Fed. Reg. at 28,474.

<sup>163</sup> Memorandum from Samuel J. Chilk, Secretary, to James M. Taylor, EDO (Apr. 22, 1993) (ADAMS Accession No. ML003760802).

<sup>164</sup> The additional change to the rule combining “category 2” and “category 3” issues into, simply, “category 2,” would itself not appear to alter this conclusion, as the pertinent distinction being drawn was between those issues that were generic and those that were plant-specific, which would not affect the procedures contemplated vis a vis members of the public who might want to challenge an applicant’s failure to address “new and significant information” about an otherwise “category 1” issue.

The failure to adopt an actual rule provision stating that “litigation of environmental issues in a hearing will be limited to category 2 issues unless the rule is suspended or waived” might well, as argued by Petitioners, be taken to indicate that the Commission ultimately decided against such a provision, except for subsequent indications of the Commission’s intent to the contrary, both at the rulemaking stage and in its later *Turkey Point* decision, as discussed above. With respect to the former, we consider a dialogue that occurred when the Commission was deliberating the final rule and discussing SECY-93-032.<sup>165</sup> The briefing covered the resolution of the CEQ and EPA objections and included an exchange between Commissioner James R. Curtiss and Martin Malsch, the Deputy General Counsel for Licensing and Regulation. Twice the Commissioner asked whether, under 10 C.F.R. § 51.53(c)(3)(iv) or any other part of the license renewal regulations, a petitioner could litigate a Category 1 issue on the claim that there was new and significant information on the issue.<sup>166</sup> The Deputy General Counsel of NRC answered that such a claim could not be litigated without first obtaining approval, in the form of a waiver, from the Commission itself.<sup>167</sup> With

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<sup>165</sup> See Public Meeting, “Briefing on Status of Issues and Approach to GEIS Rulemaking for Part 51” (Feb. 19, 1993) (ADAMS Accession No. ML051660665).

<sup>166</sup> *Id.* at 14.

<sup>167</sup> See *id.* The discussion in question was as follows:

Commissioner Curtiss: “[A]ssume for the sake of discussion that the staff says, “This is not significant new information,” is that kind of issue subsequently one that can be or you intend to be cognizable before the board?

Mr. Malsch: Well, it would depend. If the information is — the basic answer is they have to come to the Commission first. If the information is considered significant by the interested party and staff says, “Now, this is not significant.” If it’s generic information, then the remedy is a petition for rulemaking and that usually comes to the Commission. Before the Commission would grant a petition for rulemaking, it would consider the merits of the information. If the information is site specific, then they’d need to petition for a waiver. But after being screened by the board, the board is referred to the Commission and only the Commission can grant waivers. So, again it comes before the Commission.

So, the procedural route is somewhat different, but no matter how it gets there, the Commission would be looking at the staff judgment, looking at what other parties say about it, and making its own determination about significance.

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Commissioner Curtiss: So, there’s no circumstance, in other words, where you envision that once a determination is made under the procedures that you’ve described with regard to the significance of the information by the Commission upon the staff’s recommendation, that we would then in turn need to litigate before the board the significance of that information, whether it was or wasn’t significant?

Mr. Malsch: Not without the Commission’s approval.

*Id.*

this understanding of the regulations, the Commission approved and finalized section 51.53(c)(3)(iv).<sup>168</sup>

With regard to whether the NRC's resolution of the matters raised by the CEQ and EPA commenters — requiring applicants and the NRC Staff to address any “new and significant information” but taking the position that any alleged lack of such information could *not* be the subject of an admissible contention absent a waiver — satisfies NEPA and case law interpreting it including the *Marsh* case, we find that this would not contravene such law, given that other means are provided for public participation in the SEIS process. It is not required that the public participation aspect of NEPA be accomplished in an adjudicatory proceeding.<sup>169</sup>

Again, while it might have been preferable to have written into the rule itself the prohibition on allowing contentions based on the exception to section 51.53(c)(3)(i) found in section 51.53(c)(3)(iv) and on allegations of “new and significant information” as therein provided, we must, based on the Commission precedent in *Turkey Point* and the preceding analysis, and as in the *Vermont Yankee* proceeding, rule in this proceeding that Petitioners Massachusetts Attorney General and Pilgrim Watch may not challenge in a contention the Applicant's ER for any alleged failure to consider new and significant information with regard to the Category 1 issue of onsite storage of spent fuel, without seeking and obtaining a waiver of the generic rule.<sup>170</sup> Although the Attorney General has recently filed

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<sup>168</sup> See 61 Fed. Reg. at 28,467.

<sup>169</sup> This public participation aspect of NEPA arises from the “informational role” played by the EIS, in “giv[ing] the public the assurance that the agency ‘has indeed considered environmental concerns in its decisionmaking process,’ . . . and, perhaps more significantly, provid[ing] a springboard for public comment.” *Robertson*, 490 U.S. at 349 (quoting *Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc.*, 462 U.S. 87, 97 (1983)). The court in *Robertson* noted relevant Council on Environmental Quality (CEQ) regulations requiring agencies to request and consider comments from “other federal agencies, appropriate state and local agencies, affected Indian tribes, any relevant applicant, the public generally, and, in particular, interested or affected persons or organizations.” *Id.* at 350 n.13 (citing 40 C.F.R. § 1503.1). Other CEQ regulations specifically address “Public involvement,” and “public hearings or public meetings,” but do not require adjudicatory hearings. 40 C.F.R. § 1506.6c. The Court also noted, in *Marsh*, that the required dissemination of information “permits the public . . . to react to the effects of a proposed action at a meaningful time.” *Marsh*, 490 U.S. at 371. See also 10 C.F.R. § 51.92(d)(1).

<sup>170</sup> We note the Attorney General's argument in his reply that a “plain reading” of section 51.53(c)(3)(iv) leads not only to the conclusion that the “new and significant information” a licensee must provide includes information regarding Category 1 issues, but also to a finding that petitioners are entitled to challenge the adequacy of the ER in this regard in contentions. AG Reply at 9; see *id.* at 5-9. We note also his argument to the effect that any limitation associated with SECY-93-032, so as to exclude *litigation* of Category 1 issues without a waiver, should not be followed because it was “never codified in the final rule.” *Id.* at 8 n.7. However, the AG also relies on regulatory  
(Continued)

a Petition for Rulemaking with regard to the matters at issue in its Contention,<sup>171</sup> neither the AG nor Pilgrim Watch has sought a waiver,<sup>172</sup> and thus the contention must be ruled inadmissible insofar as it seeks to challenge the absence of alleged new and significant information in the Applicant's ER.<sup>173</sup>

Absent future developments in the *Mothers for Peace* case to the contrary,<sup>174</sup> this would include the matter of the alleged potential for terrorist attacks on the

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history in arguing that its interpretation of the rule — i.e., that Entergy is required under section 51.53(c)(3)(iv) to address “new and significant information” even relating to Category 1 issues — should be followed. *See id.* at 6. Indeed, we agree with the AG on this interpretation, as evidenced in our discussion in the text. And, as we also discuss in the text, to construe section 51.53(c)(3)(iv) as an exception to section 51.53(c)(3)(i) also in a litigation context is a reasonable reading of the rule.

However, our inquiry cannot end so quickly, because, although “interpretation of any regulation must begin with the language and structure of the provision itself,” *see Wrangler Laboratories*, ALAB-951, 33 NRC 505, 513 (1991) (cited by the AG in his Reply at 6), “administrative history and other available guidance may be consulted for . . . the resolution of ambiguities in a regulation’s language[, so long as an] interpretation [does] not conflict with the plain meaning of the wording used in [a] regulation.” *Wrangler*, ALAB-951, 33 NRC at 513-14. Section 51.53(c)(3)(iv) may well be viewed as being ambiguous, in that it clearly conflicts with section 51.53(c)(3)(i) and there is no “plain language” explicitly stating that section 51.53(c)(3)(iv) creates an exception to section 51.53(c)(3)(i) — in any context. From this perspective, the Commission — which, “[a]bsent constitutional constraints or extremely compelling circumstances . . . ‘should be free to fashion [its] own rules of procedure and to pursue methods of inquiry capable of permitting [it] to discharge [its] multitudinous duties,’ ” *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*, 435 U.S. 519, 543 (1978) (citations omitted), and which may choose, “in its informed discretion,” to proceed “by general rule or by individual, ad hoc litigation,” *SEC v. Chenery Corp.*, 332 U.S. 194, 203 (1947) — may be viewed as having the discretion to state its interpretation of these regulatory provisions as it did in *Turkey Point*. And thus this Licensing Board would appear to be bound by the Commission’s interpretation of section 51.53(c)(3)(iv) in *Turkey Point*, to the effect that section 51.53(c)(3)(iv) creates an exception to section 51.53(c)(3)(i) in the context of the requirements for ERs and EISs but *not* with regard to the scope of issues permitted to be raised in contentions in a license renewal adjudication context, absent a waiver, as discussed in the text. *See also CAN v. NRC*, 391 F.3d at 349, 360-61; *Mothers for Peace*, 449 F.3d at 1027.

<sup>171</sup> *See* Massachusetts Attorney General’s Petition for Rulemaking To Amend 10 C.F.R. Part 51 (Aug. 25, 2006) (ADAMS Accession No. ML062640409).

<sup>172</sup> With respect to a petitioner who alleges “new and significant information” that applies not only to a particular plant or plants involved in a proceeding, but is more broadly applicable and thus raises a more “generic” issue, it would seem that the only recourse is indeed, as discussed at oral argument, *see supra* note 128, a petition for rulemaking, such as that filed by the Attorney General. We note that the AG and the City of Plymouth have both indicated that they are less concerned about *how* the matters at issue are addressed than that they *are* in fact addressed, not merely generically but in a manner that assures that the situation at Pilgrim is in fact addressed and not overlooked, as might be the case were any rulemaking not to become effective until *after* this license renewal proceeding is completed. *See Tr.* at 140, 144-47; *see id.* at 148-56.

<sup>173</sup> Thus we need not address, and have not addressed herein, the question whether there is indeed new and significant information in this instance.

<sup>174</sup> *See supra* p. 289.

spent fuel pool. In *McGuire*, the Commission held that there is no need to address terrorism issues in license renewal proceedings because “it is sensible not to devote resources to the likely impact of terrorism during the license renewal period, but instead to concentrate on how to prevent a terrorist attack in the near term at the already licensed facilities.”<sup>175</sup> The Commission also, in holding that the GEIS adequately addresses terrorism issues generically, stated:

Even if we were required by law to consider terrorism under NEPA, the NRC has already issued a . . . GEIS that considers sabotage in connection with license renewal. . . . The GEIS concluded that, if such an event were to occur, the resultant core damage and radiological releases would be no worse than those expected for internally initiated events.<sup>176</sup>

This authority supports a conclusion that terrorism concerns, even assuming new and significant information is presented, are not litigable in a license renewal proceeding without a waiver.

In conclusion, based on the preceding analysis, the Massachusetts Attorney General’s Contention and Pilgrim Watch Contention 4 must be ruled inadmissible and are consequently denied.

**B. Pilgrim Watch Contention 1: The Aging Management Plan Does Not Adequately Inspect and Monitor for Leaks in All Systems and Components That May Contain Radioactively Contaminated Water**

Petitioner Pilgrim Watch in this contention states:

The Aging Management program proposed in the Pilgrim application for license renewal is inadequate because (1) it does not provide for adequate inspection of all systems and components that may contain radioactively contaminated water and (2) there is no adequate monitoring to determine if and when leakage from these areas occurs. Some of these systems include underground pipes and tanks which the current aging management and inspection programs do not effectively inspect and monitor.<sup>177</sup>

As basis for this contention, Pilgrim Watch states that:

. . . recent events around the country have demonstrated that leaks of underground pipes and tanks can result in the release of massive amounts of radioactive materials into the ground water. Exposure to this radiation can be a threat to human health, and

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<sup>175</sup> *McGuire/Catawba*, CLI-02-26, 56 NRC at 361.

<sup>176</sup> *Id.* at 365 n.24.

<sup>177</sup> PW Petition at 4.

is a violation of NRC regulations. Because older plants are more likely to experience corrosion and leakage problems, and low energy radionuclides can speed up the rate of corrosion, Pilgrim should be required, as part of its Aging Management Program, to adequately inspect and monitor any systems and components that carry radioactive water. The Aging Management Plan should be revised to include this inspection and monitoring before a license renewal is granted.<sup>178</sup>

Relying on the requirement for an aging management program that addresses structures and components including pipes, and referring to the provision for inspection of buried pipes and tanks in section B.1.2 of Entergy's Application, PW argues that deficiencies in the aging management plan for such pipes and tanks that contain radioactive water could "endanger the safety and welfare of the public"<sup>179</sup> and "significantly impact health,"<sup>180</sup> and therefore this contention is within the scope of this license renewal proceeding and material to the findings that must be made to support the action at issue in this proceeding.<sup>181</sup>

Pilgrim Watch has submitted exhibits produced by the Union of Concerned Scientists documenting leaks of radioactively contaminated water at eight nuclear facilities,<sup>182</sup> and also supports its contention by reference to various other documents. These include, with regard to health concerns related to radioactive material in groundwater, statements by Arjun Makhijani, Ph.D.,<sup>183</sup> scholarly and newspaper articles,<sup>184</sup> and the "BIER VII report."<sup>185</sup> Cited with regard to plant aging and corrosion are additional publications of the Union of Concerned Scien-

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<sup>178</sup> *Id.* at 6.

<sup>179</sup> *Id.* at 5.

<sup>180</sup> *Id.* at 6.

<sup>181</sup> *Id.* at 4-6 (citing *Turkey Point*, CLI-00-23, 52 NRC at 329; *Turkey Point*, CLI-01-17, 54 NRC at 7; 10 C.F.R. § 54.21; Application at B-17; *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), 60 NRC 81 (2004); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 179-80 (1998), *aff'd in part*, CLI-98-13, 48 NRC 26 (1998)).

<sup>182</sup> PW Petition, Exh. A, Contaminated Water Leakage, A-1, Union of Concerned Scientists et al, Petition Pursuant to 10 CFR 2.206 — Enforcement Action — Longstanding Leakage of Contaminated Water, Appendix A, January 25, 2006; A-1, NRC Preliminary Notification of Event or Unusual Occurrence — PNP-III-06-004B, Byron NPS, April 20, 2006; A-3, NRC Event Number 42381, Palo Verde, NRC: Event Notification Report of March 3, 2006.

<sup>183</sup> PW Petition at 8 nn.2 & 3.

<sup>184</sup> *Id.* at 8 n.3 (citing J.D. Harrison, A. Khursheed, & B.E. Lambert, "Uncertainties in Dose Coefficients for Intakes of Tritiated Water and Organically Bound Forms of Tritium by Members of the Public," *Radiation Protection Dosimetry*, Vol. 98, No. 3, 2002, pp. 299-311); *id.* at 9 (*Indian Point Officials Zero in on Leak: Source of Radioactive Strontium 90 Turning Up in Groundwater Believed To Be from Spent Fuel Rod Pool*, Associated Press (May 12, 2006)).

<sup>185</sup> *Id.* at 9 (citing National Academy of Sciences, *Health Risks from Exposure to Low Levels of Ionizing Radiation: BEIR VII Phase 2* (2006)).

tists<sup>186</sup> and NASA,<sup>187</sup> on the greater likelihood of aging-related problems in later phases of life,<sup>188</sup> and a book by G. Bellanger on low-energy radionuclides inducing corrosion through degradation of the passive oxide layers that protect metals.<sup>189</sup> On the Pilgrim plant's asserted vulnerability to undetected leaks, PW cites a U.S. Government Accounting Office report discussing suspected counterfeit or substandard pipe fittings at the plant.<sup>190</sup> In support of its assertion that monitoring wells should be placed between the plant and the ocean, PW submits the final EIS for the original licensing of the plant, in which it is noted that "[s]urface topography is such that surface drainage from the station is seaward . . . ."<sup>191</sup>

Pilgrim Watch refers to Appendices A and B of Entergy's Application, including specifically Appendix A, § A.2.1.2 at A-14, and Appendix B, § B.1.2 at B-17, in support of its challenge to the Applicant's stated plans regarding its "Buried Pipes and Tanks Inspection Program."<sup>192</sup> The former describes the "Buried Piping and Tanks Inspection Program" as including "(a) preventive measures to mitigate corrosion and (b) inspections to manage the effects of corrosion on the pressure-retaining capability of buried carbon steel, stainless steel, and titanium components"; states that "[b]uried components are inspected when excavated during maintenance"; and states further that, "[i]f trending within the corrective action program identifies susceptible locations, the areas with a history of corrosion problems are evaluated for the need for additional inspection, alternate coating, or replacement."<sup>193</sup> The cited section from Appendix B, also titled "Buried Piping and Tanks Inspection," states that this program "is comparable to the program described in NUREG-1801, Section XI.M34, Buried Piping and Tanks Inspection," and provides that "[b]uried components are inspected

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<sup>186</sup> *Id.* (citing David Lochbaum, Union of Concerned Scientists, *U.S. Nuclear Plants: The Risk of a Lifetime* (2004)).

<sup>187</sup> *Id.* at 9-10 (citing National Aeronautics and Space Administration (NASA), *Using Reliability-Centered Maintenance as the Foundation for an Efficient and Reliable Overall Maintenance Strategy* (2001)).

<sup>188</sup> PW cites the NASA-originated example of the "Bathtub Curve" graph, used in the Union of Concerned Scientists publication to illustrate that "after a relatively stable (bottom of the bathtub) period in the middle life of [a] subject, a steep rise in age-related failures occurs towards the end of its life." *Id.* at 10 (citing Lochbaum at 4).

<sup>189</sup> *Id.* at 10-11 (citing G. Bellanger, *Corrosion Induced by Low Energy Radionuclides: Modeling of Tritium and Its Radiolytic and Decay Products Formed in Nuclear Installations* (Elsevier Publications, 2006)).

<sup>190</sup> *Id.* at 11 (citing U.S. GAO, *Nuclear Safety and Health Counterfeit and Substandard Products Are a Government-wide Concern* (Oct. 1990)).

<sup>191</sup> *Id.* at 13 n.5 (quoting Atomic Energy Commission, *Pilgrim Nuclear Power Station Final EIS* (May 1972)).

<sup>192</sup> *Id.* at 11-12.

<sup>193</sup> Application, Appendix A, § A.2.1.2, at A-14.

when excavated during maintenance” and that a “focused inspection will be performed within the first 10 years of the period of extended operation, unless an opportunistic inspection (or an inspection via a method that allows assessment of pipe condition without excavation [such as ‘phased array’ ultrasonic, or ‘UT,’ technology]) occurs within this ten-year period.”<sup>194</sup>

PW argues that the preceding “are insufficient if there is a potential leak of radioactive water from corroded components that could be migrating off-site,”<sup>195</sup> that the plan to use “opportunistic inspections” gives the “appearance [of] the matter of discovering leaks [] being left to chance,” that the UT technology in question is untested by plant operating experience, and that instead there should be “regular and frequent inspections of all components that contain radioactive water.”<sup>196</sup>

Emphasizing that small leaks, “if undetected, can eventually result in much larger releases of radioactive liquid into the ground, PW notes that smaller leaks are also more difficult to detect with measures such as noting drops in water levels in tanks.<sup>197</sup> Thus, according to PW, also relying on the fact that some of the recent cases of leaked radioactive water were detected through the use of monitoring wells, the “only effective way to monitor for [radioactive water being drained into the ground and then the ocean] would be to have on-site monitoring wells located between Pilgrim and the ocean,” which would be suitably arrayed and sampled regularly, and used to supplement the Applicant’s planned visual and ultrasonic tests.<sup>198</sup> Citing 10 C.F.R. § 20.1302 and Part 50, Appendix A,<sup>199</sup> for the proposition that licensees such as the Applicant are required to “demonstrate that effluents, including those from ‘anticipated operational occurrences,’ do not expose members of the public to excessive radiation doses,”<sup>200</sup> PW argues:

While leaks of radioactively contaminated water into the ground for extended periods of time may not have been operational occurrences anticipated when the facilities were initially designed and licensed, they can scarcely be ‘unanticipated’ following the series of occurrences summarized in Exhibit A. As those events demonstrated, unless nuclear facilities aggressively monitor for leaks both off-site and on-site, a

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<sup>194</sup> *Id.*, Appendix B, § B.1.2 at B-17.

<sup>195</sup> PW Petition at 12.

<sup>196</sup> *Id.*

<sup>197</sup> *Id.* at 13.

<sup>198</sup> *Id.*

<sup>199</sup> *Id.* at 14 nn.6 & 7.

<sup>200</sup> *Id.* at 14. PW quotes 10 C.F.R. § 20.1302, which requires licensees to survey radiation levels so as to “demonstrate compliance with the dose limits for individual members of the public,” and 10 C.F.R. Part 50, Appendix A, which refers, *inter alia*, to the requirement to “control suitably the release of radioactive materials . . . produced during normal reactor operation, including anticipated operational occurrences.”

leak can go undetected for years, and potentially life threatening releases of radiation can migrate off-site before any problem is detected.<sup>201</sup>

PW concludes by asserting that “[m]anagement to detect possible leaks is a site specific safety issue which has not been properly addressed in the [Application] and has not been adequately dealt with by the [NRC] in a generic way at this time,” and that, because of the potential for harm to public health and safety, the Applicant should be required to address this issue “more thoroughly . . . before a license extension for Pilgrim is granted.”<sup>202</sup>

### ***1. Entergy Answer to Pilgrim Watch Contention 1***

Applicant Entergy argues that Pilgrim Watch’s first contention “is inadmissible because (1) the Contention is overbroad and unduly vague and impermissibly challenges Commission regulation; (2) the Contention provides no basis to dispute the adequacy of aging management program for underground pipes and tanks; and (3) the Contention is beyond the scope of this proceeding.”<sup>203</sup>

The Applicant insists that PW’s claim, that the “Aging Management Plan does not adequately inspect and monitor for leaks in all systems and components that may contain radioactively contaminated water,” is impermissibly overbroad because the scope of license renewal proceedings, as confined by 10 C.F.R. § 54.4, “does not encompass ‘all systems and components that may contain radioactive water,’”<sup>204</sup> and “[m]any plant systems and components that may contain radioactively contaminated water do not fall within this defined scope of 10 C.F.R. Part 54.”<sup>205</sup> Furthermore, the Applicant asserts, because the Commission has explicitly rejected a petition for rulemaking of the Union of Concerned Scientists, seeking to expand the scope of the license renewal rule to include “liquid and gaseous radioactive management systems,” the contention “directly challeng[es] the Commission’s contrary determination.”<sup>206</sup> Thus, “[a]s such, the Contention impermissibly challenges Commission regulation, and to the extent the Contention encompasses systems and components that are not subject to the license renewal requirements of 10 C.F.R. Part 54, the Contention must be rejected as beyond the scope of this proceeding.”<sup>207</sup>

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<sup>201</sup> PW Petition at 15.

<sup>202</sup> *Id.* at 15-16.

<sup>203</sup> Entergy Answer to PW Petition at 11.

<sup>204</sup> *Id.*

<sup>205</sup> *Id.* at 12.

<sup>206</sup> *Id.* (citing Union of Concerned Scientists; Denial of Petition for Rulemaking, 66 Fed. Reg. 65,141 (Dec. 18, 2001)).

<sup>207</sup> *Id.*

Attacking PW's asserted failure to identify "specific PNPS systems or components within the scope of the rule that will not be adequately managed for aging, or that contain radioactive water that might be released,"<sup>208</sup> Applicant argues that the contention "fails to provide a factual basis to support *any* claim challenging the adequacy of the Application."<sup>209</sup> Citing PW's reference to reports of radioactive water leaks at other nuclear power plants, the Applicant avers that PW fails to provide a basis to link those leaks "to any in-scope license renewal systems and components or to any claimed inadequacy of the Pilgrim aging management plan for buried piping and tanks."<sup>210</sup> Applicant distinguishes the Pilgrim plant, among other things as being a boiling water reactor with an elevated, above-grade spent fuel pool, unlike examples cited by PW,<sup>211</sup> and charges that PW has failed to provide support either for its allegations of "site specific attributes due to [the Pilgrim plant's] history and location which makes leaks from components and systems . . . more likely and more difficult to detect,"<sup>212</sup> or for its claims regarding inadequate "current methods for monitoring systems and components such as buried piping and underground tanks."<sup>213</sup> Additionally, the Applicant argues that PW's references to expected failures over the life of a component or structure, and to the past use of "counterfeit or substandard pipe fittings and flanges," provide no support for the contention because the former is not site-specific to Pilgrim and the latter would be covered by a current design and licensing basis and is not an aging issue.<sup>214</sup>

Addressing claims regarding inspection and potential leaks of radioactive water from corroded components, Applicant argues that PW has provided nothing more than unsupported allegations regarding the adequacy of the inspection and aging management programs for underground pipes and tanks.<sup>215</sup> According to the Applicant, "[n]o facts or expert opinion are provided to support the claimed inadequacy of the aging management program," and "[n]o basis is offered to suggest that components are corroding nor is any information offered indicating the appropriateness of any other inspection period."<sup>216</sup>

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<sup>208</sup> *Id.* at 13.

<sup>209</sup> *Id.* (emphasis in original).

<sup>210</sup> *Id.* at 13-14.

<sup>211</sup> *See id.* at 14.

<sup>212</sup> *Id.* at 15-16 (quoting Pilgrim Watch Petition at 8).

<sup>213</sup> *Id.* at 16 (quoting Pilgrim Watch Petition at 9).

<sup>214</sup> *Id.* at 16-17 (quoting Pilgrim Watch Petition at 11).

<sup>215</sup> *See id.* at 17.

<sup>216</sup> *Id.* Applicant cites *Georgia Tech*, LBP-95-6, 41 NRC at 305, and *Turkey Point*, LBP-90-16, 31 NRC at 521 & n.12, for the propositions that a petition must provide "[t]echnical analyses and expert opinion" or other factual information "showing why its bases support its contention," and that "an

(Continued)

The Applicant suggests that the contention's "real focus is not on aging management, but on the adequacy of the PNPS radiological monitoring program, which is beyond the scope of this proceeding."<sup>217</sup> Asserting that what PW is really requesting is an expanded radiological monitoring program at the site,<sup>218</sup> the Applicant contends that this concerns a current operational program that is "not properly part of this license renewal proceeding."<sup>219</sup>

## 2. NRC Staff Response to PW Contention 1

The NRC Staff agrees with Petitioner PW that Contention 1 is within the scope of license renewal proceedings, but argues that it is inadmissible, first, because it fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(vi) that it demonstrate that a genuine dispute exists with the Applicant regarding a material issue of law or fact, and that it challenge either specific portions of or alleged omissions from the Application, and instead relies on "vague or generalized studies and unsubstantiated assertions without reference to the LRA [and thus] fails to demonstrate that there are material issues of fact in dispute."<sup>220</sup> In addition, the Staff argues, the asserted bases for the contention "lack sufficient facts and contain no supporting expert opinion" as required under 10 C.F.R. § 2.309(f)(1)(v), and instead "impermissibly rel[y] on generalized suspicions and vague references to alleged events at other plants and equally unparticularized portions of general studies for providing a factual basis."<sup>221</sup>

Following the outline headings used by PW in its petition and treating the various outline points of PW's Contention 1 and its basis essentially as separate bases, the Staff challenges each separately.<sup>222</sup> According to the Staff, PW's references to leaks at other facilities do not support the contention's admissibility, because

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allegation that some aspect of a license application is 'inadequate' or 'unacceptable' does not give rise to a genuine dispute unless it is supported by facts and a reasoned statement of why the application is unacceptable in some material respect." *Id.* at 18.

<sup>217</sup> *Id.* at 18.

<sup>218</sup> *Id.* at 18-19.

<sup>219</sup> *Id.* at 20.

<sup>220</sup> NRC Staff Response to PW Petition at 10.

<sup>221</sup> *Id.*

<sup>222</sup> We note that the Staff approaches this and other contentions by addressing the information under different headings in the bases separately, without appearing to draw any connections between the various sections. We find it more appropriate to consider, and have considered, the basis for each contention as a whole, taking into account any logical connections between sections as well as any supporting material in one section for the point(s) made in any other section or sections.

no site-specific facts relevant to the Pilgrim plant have been provided.<sup>223</sup> Nor, according to the Staff, does that part of the basis for the contention in which PW asserts that “[e]xposure to this radiation can be a threat to human health[ ] and is a violation of NRC regulations” pass muster “because Petitioner has failed to demonstrate that there is a genuine dispute as a matter of law or fact . . . and fails to provide an adequate basis in fact or expert opinion to support its assertion.”<sup>224</sup> No deficiency or dispute with the Application is cited, according to the Staff, “that would lead to like releases,” and the reference to the BEIR VII Report for the proposition that “there is no safe dose of radiation” is an “impermissible challenge to the Commission’s regulations.”<sup>225</sup>

Regarding the studies cited by PW related to aging and corrosion, the Staff argues that these are too general to support an admissible contention,<sup>226</sup> and with respect to the studies cited on low-energy radiation and corrosion, asserts that any suggestion that the Pilgrim plant suffers from the same effects constitutes “mere speculation” and “bare assertions” insufficient to support a contention.<sup>227</sup> The Staff also notes that PW mentions neither the NRC’s response to the GAO study on counterfeit or substandard pipe fittings, nor subsequent actions taken in response to it, and suggests that this should be taken as a failure “to provide a reason why the GAO study is significant to this proceeding” and as “impermissibly seek[ing] the Licensing Board to make erroneous assumptions of fact.”<sup>228</sup> The Staff considers PW’s references to ultrasonic testing to be asking the Board to “make an impermissible assumption of fact,” and its call for “regular and frequent inspections of all components that contain radioactive water” to be unsupported by any “factual or expert support.”<sup>229</sup>

Finally, the Staff suggests PW has provided no expert or factual support for its challenge to the adequacy of the monitoring provided in the Application, or for its assertion that the monitoring program at Pilgrim must be improved.<sup>230</sup> According to the Staff, PW bases its arguments relating the purported need for monitoring

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<sup>223</sup> See *id.* at 11. The Staff notes PW’s statement that the Pilgrim plant has “site-specific attributes due to its history and location which make leaks from components and systems such as underground piping more likely and difficult to detect,” but argues that “Petitioner does not provide site-specific facts to support this assertion nor identify with any specificity how purported leaks at other plants are relevant to Pilgrim.” *Id.* (quoting PW Petition at 7-8).

<sup>224</sup> Staff Response to PW Petition at 12 (citations omitted).

<sup>225</sup> *Id.* at 12-13.

<sup>226</sup> See *id.* at 13-14.

<sup>227</sup> *Id.* at 14.

<sup>228</sup> *Id.* at 15.

<sup>229</sup> *Id.* at 15-16.

<sup>230</sup> *Id.* at 16.

to the discoveries of leaks at other facilities on speculation and “generalized suspicion,” and cites no part of the Application with which it has a dispute.<sup>231</sup>

### 3. *Pilgrim Watch Replies to Entergy and NRC Staff*

In its replies to Entergy and the Staff, Pilgrim Watch charges both with attempting to hold it to an incorrect standard of having to prove its contention at this stage of this proceeding, relying on the Commission’s 1989 rulemaking statement to the effect that this is not part of the contention admissibility requirements.<sup>232</sup> Citing in addition the Commission’s advice that the factual support necessary to show that a genuine dispute exists in relation to a contention “need not be of the quality necessary to withstand a summary disposition motion,” PW states that, while it has not yet formally engaged the services of an expert, it “has provided the board with extensive sources as the basis for its contentions, gleaned from scientific, technical, public policy and government reports.”<sup>233</sup> PW avers that the Staff also purports to make the rule stricter than it already is when it argues that expert opinion is always required, whereas the actual requirement is for “facts *or* expert opinion.”<sup>234</sup>

In response to Entergy and Staff challenges to that part of the basis for Contention 1 that concerns leaks at other facilities, PW points out that, in reading the Application, it looked for assurances “that such an event at Pilgrim would be quickly detected and remedied and discovered that the Aging Management Plan does not give this assurance.”<sup>235</sup> PW asserts that “[t]his is exactly the sort of ‘deficiency or error’ in an Application that has ‘independent health and safety significance’ that is material to these proceedings, and Petitioners referred directly to the Application sections as was required.”<sup>236</sup> PW notes that the significance of the leaks at other facilities has been shown by the fact that the NRC has appointed a special tritium task force to address the problem.<sup>237</sup>

In response to Entergy’s argument that the contention is overbroad in referring generally to pipes and other components, PW points out that its discussion is focused on those systems, including pipes and tanks, that are addressed in the

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<sup>231</sup> *Id.* at 17-18.

<sup>232</sup> PW Reply to Entergy at 3; PW Reply to NRC Staff at 3 (citing, in each, 54 Fed. Reg. 33,170 (Aug. 11, 1989)).

<sup>233</sup> PW Reply to NRC Staff at 4-5; PW Reply to Entergy at 4.

<sup>234</sup> PW Reply to NRC Staff at 4.

<sup>235</sup> *Id.* at 5; *see also* PW Reply to Entergy at 6.

<sup>236</sup> PW Reply to NRC Staff at 5.

<sup>237</sup> *See id.*; PW Reply to Entergy at 6.

Application, § B.1.2, at B-17, and that it is these pipes and tanks that are at issue in the contention.<sup>238</sup>

PW further notes that it included a discussion of the “site-specific” fact of the coastal topography of the Pilgrim plant in the basis for the contention, and cites its references to the various reports discussed in its Petition, provided to support the various “pieces” of its basis — noting that each piece is but a part of its overall basis.<sup>239</sup> With regard to the reports in question, PW points out that the issues they address — health, aging and corrosion of components, and low-energy radionuclides and corrosion — would be applicable to Pilgrim, even though they might not be specifically about the Pilgrim plant.<sup>240</sup>

PW emphasizes that the deficiency with regard to inspection that it alleges is the schedule of an inspection within the first 10 years, or “opportunistically.”<sup>241</sup> PW notes that it highlighted the novelty of ultrasonic testing to support its “claim that additional monitoring is necessary to complement it,”<sup>242</sup> a proposal that is intended as an “adjunct to inspections, and as an integral part of the Aging Management Program at Pilgrim, not as part of its operational radiological monitoring program.”<sup>243</sup> PW notes that “it was through monitoring wells that leaks at other facilities were discovered, and yet Pilgrim does not currently have monitoring wells that would detect leaks of radioactive water before that water was washed into Cape Cod Bay,” and asserts that “[o]n-site wells in strategic locations could alert Licensee about possible problems in a more timely way.”<sup>244</sup> Maintaining that it has shown “why it is unrealistic to expect to happen upon a leaking pipe during routine maintenance activities, particularly if those activities only take place every ten years,” PW continues to argue that the “only effective way to monitor for such an occurrence would be to have on-site monitoring wells located between Pilgrim and the ocean.”<sup>245</sup> According to PW, “[t]he genuine and material issue in dispute is whether or not the Licensee’s application sufficiently deals with th[e] safety issue” presented in its contention.<sup>246</sup>

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<sup>238</sup> See PW Reply to Entergy at 5.

<sup>239</sup> PW Reply to NRC Staff at 6-7.

<sup>240</sup> See *id.* at 6-8; PW Reply to Entergy at 7-8. PW observes that “[f]or the Staff to imply that Petitioners cannot even rely on pertinent scientific studies conducted in other parts of the country to support our basis in Massachusetts raises the bar very high indeed.” PW Reply to NRC Staff at 8.

<sup>241</sup> *Id.*

<sup>242</sup> *Id.*

<sup>243</sup> PW Reply to Entergy at 8.

<sup>244</sup> PW Reply to NRC Staff at 8.

<sup>245</sup> PW Reply to Entergy at 8.

<sup>246</sup> *Id.*; see PW Reply to NRC Staff at 9.

#### **4. Licensing Board Ruling on Pilgrim Watch Contention 1**

We find this contention, as limited below, admissible, based upon the following analysis.

We turn first to the question of whether this contention falls within the scope of a license renewal proceeding. We agree with the Staff in its concession that Pilgrim Watch's first contention is within this scope, as defined at 10 C.F.R. Part 54.<sup>247</sup> Indeed, the fact that the Application itself contains sections concerning "Buried Piping and Tanks Inspection," both cited by Petitioner, indicates that Entergy implicitly agrees that this subject, insofar as it concerns those buried pipes and tanks in its aging management program, is within the scope of license renewal.<sup>248</sup> Obviously, if there are some pipes or tanks that do not for one reason or another individually fall within the scope of license renewal, issues concerning such pipes and/or tanks may not be litigated in this proceeding. But this is a different matter than whether any buried pipes and tanks are within scope, as some undisputedly are. While it is true that the contention's mention of "all systems and components" may, on its face, implicate systems and components that are not within the scope of a license renewal as defined in 10 C.F.R. Part 54, such language does not remove the entire contention from the scope of this proceeding.

We find that Pilgrim Watch, among other things by referencing the Application's aging management plan regarding buried pipes and tanks, has supported its contention "sufficient to establish that it falls directly within the scope" of this proceeding,<sup>249</sup> and therefore satisfies the requirements of 10 C.F.R. § 2.309(f)(1)(iii), to the extent that the contention concerns underground pipes and tanks that fall within the Pilgrim aging management plan. We further find that the contention — again, insofar as it concerns underground pipes and tanks that are part of Pilgrim's aging management program — does not improperly challenge any Commission rule or regulation.

We find that PW has fulfilled the requirements of 10 C.F.R. § 2.309(f)(1)(i) and (ii) by providing a sufficiently specific statement of the issue raised in the contention and the requisite brief explanation of the basis for the contention. Briefly summarized, PW in Contention 1 challenges Pilgrim's aging management program relating to the inspection of buried pipes and tanks for corrosion, and to detection of leakage of radioactive water that might result from undetected corrosion and aging. The essence of the contention is that the aging management

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<sup>247</sup> See our discussion above in section IV.B of this Memorandum and Order.

<sup>248</sup> Application §§ A.2.1.2, B.1.2.

<sup>249</sup> *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), LBP-91-19. 33 NRC 397, 412 (1991), *appeal denied on other grounds*, CLI-91-12, 34 NRC 149 (1991). See PW Petition at 5.

plan incorporates no mechanism for early detection of leaks, and should do so, through the use of appropriately placed monitoring wells.<sup>250</sup> The basis for the contention includes two factors: First, the infrequency of inspections for corrosion of relevant pipes and tanks that are underground, viewed in light of recent discoveries of leaks at various nuclear facilities, supported by various factual arguments and sources; and second, the fact that the plan contains no mechanism for monitoring for leaks.

With regard to whether, as required at 10 C.F.R. § 2.309(f)(1)(iv), the issue raised in the contention is material to the findings that must be made to support the sought license renewal, we find that this requirement has been met. Obviously, the adequacy of the aging management program as it relates to underground pipes and tanks has health and safety significance<sup>251</sup> and is material to whether the license renewal may be granted.

We also find that PW has satisfied the requirements of 10 C.F.R. § 2.309(f)(1)(v) for a concise statement of the alleged facts or expert opinion supporting the contention, including references to sources and documents to be relied upon. PW has raised significant factual allegations about the matters at issue and provided various support for its contention. Petitioner alleges as fact that the aging management plan for buried pipes and tanks that is in the Application is deficient in limiting inspections to focused inspections within 10 years of the license renewal, “opportunistic inspections,” and inspections during excavations for maintenance (along with additional inspections if “trending . . . identifies susceptible locations,” and the possibility of some ultrasonic testing).<sup>252</sup> It points out that the plan does not include any monitoring wells, and urges that in addition to “regular and frequent inspections,” the aging management program should include “monitoring wells in suitable locations . . . to supplement visual and ultrasonic tests.”<sup>253</sup> Moreover, PW has referred to a number of scientific articles and reports in support of this contention, and we note that, according to some of these reports, discovery of some of the recently found leaks in various facilities was achieved through use of monitoring wells.<sup>254</sup>

In litigation of this contention, various scientific articles and reports referenced by PW, as well as the existence of leaks at other facilities and the response to those leaks, may, along with whatever other evidence and expert testimony is provided, be relevant evidence on the factual issue of whether Pilgrim’s aging

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<sup>250</sup> PW Reply to NRC Staff at 8-9; PW Reply to Entergy at 8.

<sup>251</sup> See *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), LBP-04-15, 60 NRC 81, 89 (2004); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 179-80 (1998), *aff’d in part*, CLI-98-13, 48 NRC 26 (1998).

<sup>252</sup> PW Petition at 12-13.

<sup>253</sup> *Id.* at 11-14.

<sup>254</sup> See *id.* at 13-14; PW Petition, Exh. A.

management program for underground pipes and tanks is satisfactory or deficient, and whether as a result — again, as a factual matter — the sort of monitoring wells that PW seeks should be included in this program.<sup>255</sup> No doubt there will be

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<sup>255</sup> As with many scientific reports and studies, and as with many factual circumstances that are discovered at a number of locations, each of these may be quite relevant to conditions at an individual facility. The NRC’s “lessons learned” approach to analyzing a problem at one or more facilities in a manner so as to prevent future occurrences at other facilities illustrates this. Indeed, we note the recent issuance of the Liquid Radioactive Release Lessons Learned Task Force Final Report (Sept. 1, 2006; issued publicly Oct. 4, 2006), available at <http://www.nrc.gov/reactors/operating/ops-experience/tritium/lr-release-lessons-learned.pdf> [hereinafter Tritium Report]. In this report, although the task force “did not identify any instances where the health of the public was impacted,” *id.* at Executive Summary I, it did conclude that “under the existing regulatory requirements the potential exists for unplanned and unmonitored releases of radioactive liquids to migrate offsite into the public domain undetected,” based on several elements, including the fact that some components such as buried pipes are not physically visible, the general absence of NRC requirements for monitoring groundwater onsite, and the possibility of migration of groundwater contamination offsite undetected. *Id.* at ii; *see id.* at 50. The report mentions the relevance of the 10 C.F.R. Part 54 license renewal requirements to the matters at issue, *id.* at 22; notes that buried systems and structures such as pipes are “particularly susceptible to undetected leakage,” *id.* at 26; and recommends that the Staff verify that the license renewal process “reviews degradation of systems containing radioactive material” as discussed in the report, *id.* at 27. (We would further note that, as the report does not appear to be accompanied by any planned rulemaking at this time, it does not raise any questions about litigation of the matters at issue in this contention in this proceeding, which, in any event, as with the instances discussed in the report, involve various site-specific elements in addition to more generally relevant considerations that may be informed by the report, as well as by other relevant documents and sources. *See Oconee*, CLI-99-11, 49 NRC at 345 (quoting *Potomac Electric Power Co.* (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79, 85 (1974) (“It has long been agency policy that Licensing Boards ‘should not accept in individual license proceedings contentions which are (or are about to become) the subject of general rulemaking by the Commission’ ”)); *see also Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-813, 22 NRC 59, 86 (1985); *Private Fuel Storage*, LBP-98-7, 47 NRC at 179; PW Petition at 7).

We would note that any NRC guidance documents on subjects related to Contention 1, while not controlling, may be relevant evidence on subjects relating to Contention 1. In this regard we observe as well that Entergy has, in support of its assertions that its aging management program for buried pipes and tanks is sufficient, directed us to the “GALL Report,” which provides the NRC Staff’s regulatory guidance on aging management of buried piping and tanks. NUREG-1801, “Generic Aging Lessons Learned (GALL) Report,” Vol. 2, Rev. 1 at XI-M-95; *see* Entergy Answer to PW at 18 n.9; Tr. at 325-26. Without making any determination on the merits of this contention, it does appear that the Applicant’s proposed program likely complies with the minimum standards of the guidance therein set out.

However, several factors with regard to the GALL Report are particularly noteworthy in the context of Contention 1 and the arguments regarding it. First, of course, the GALL Report represents general guidance for the Staff’s review, and does not specify the only acceptable way to satisfy the requirements of 10 C.F.R. § 54.21. *Curators of the University of Missouri* (TRUMP-S Project), CLI-95-8, 41 NRC 386, 397 (1995) (“NUREGs and Regulatory Guides are advisory by nature and

*(Continued)*

argument about the extent to which various items of evidence are relevant and do or do not establish various facts. But Petitioners are not required to prove alleged facts at the contention admissibility stage. In addition, although PW has indicated

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do not themselves impose legal requirements on either the Commission or its licensees”). Second, the guidance of the report focuses primarily upon ensuring the continuing effectiveness of external coatings and wrappings to manage the effects of corrosion, rather than on any methods to detect failure other than by physical inspection. Third, while the report states that “inspections performed to confirm that coating and wrapping are intact are an effective method to ensure that corrosion of external surfaces has not occurred and the intended function is maintained,” NUREG-1801, GALL Report, Vol. 2, Rev. 1 at XI-M-III, it goes on to indicate that, “because the inspection frequency is plant-specific and depends on the plant operating experience, the applicant’s plant specific operating experience is further evaluated for the extended period of operation.” *Id.* at point 10. Thus, the report implicitly contemplates that an acceptable plan will be plant-specific and depend on operating experience.

In this instance, Applicant has proposed to comply with the suggested general guideline for frequency of inspection — “an opportunistic inspection” within a 10-year period — that is the *minimum* suggested in the guidance (wherein it is stated that “it is anticipated that one *or more* opportunistic inspections may occur within a ten year period” and that “prior to entering the period of extended operation, the applicant is to verify that there is *at least one* opportunistic or focused inspection . . . performed within the past ten years”). *Id.* at XI-M-111–112 No party here argues that the applicant has failed to follow this guidance; rather, insofar as the report is viewed as providing guidance on an acceptable plan, at issue here is *sufficiency* of a plan that complies *only* with the *minimum* requirements thereof — which may or may not be sufficient based on circumstances including site-specific factors.

Pilgrim Watch questions whether visual inspection at the proposed intervals, together with possible use of ultrasonic testing (at only a selected sample of locations) is sufficient to manage the effects of aging by detecting *incipient* failure of the buried pipes and tanks (whether by incipient failure of coatings and wrappings or otherwise), and suggests that the plan should include leak detection mechanisms (such as monitoring wells) to discover any actual failure, rather than rely only on the proposed periodic visual inspections and potential use of ultrasonic testing. *See* PW Petition at 11-14.

We find that this challenge raises factual issues from two perspectives: First, it can be viewed, in its most direct form, as a challenge to the adequacy of the proposed interval of inspection. Second, it can be viewed, in its pointing out of the lack of monitoring for leaks that would be indicative of pipe or tank failure, as a challenge to the adequacy of a plan which merely satisfies the minimum requirements of regulatory guidance which, in and of itself, appears to contemplate some plant-specific elements. With regard to the first perspective, it is unclear at this point whether or not this proposed periodicity is sufficient for *this* plant, and with regard to the second, it is likewise premature to say whether or not monitoring for leaks is properly part of an aging management plan designed to prevent leaks. Thus, insofar as the Applicant may be viewed as arguing that it has complied with the requirements of NUREG-1801, we find such argument to be insufficient, for the purposes of contention admissibility considerations, to overcome such factual challenges. These are matters that are properly addressed on the merits at the appropriate stage of the proceeding for such consideration.

that it will have an expert to support its admitted contention(s),<sup>256</sup> it is not required to have such an expert at this time.<sup>257</sup>

We would also note that the subject of “monitoring” is not irrelevant merely because some monitoring may be part of operational activities on a continuing basis. The fact that some “monitoring” may occur as part of ordinary plant operations does not exclude it from license renewal, as illustrated, for example, by section A.2.1.10 of the Application, concerning the “Diesel Fuel Monitoring Program.” PW alleges that the aging management program of inspection for corrosion and leakage from underground pipes and tanks at Pilgrim is insufficient, supported by various facts, documents, sources, and a reasoned fact-based argument, and asserts that the best way to address this deficiency (based on topographical facts set forth in the original FEIS for the Pilgrim plant) is to add leak detection through monitoring wells between the plant and Cape Cod Bay. Whether the addition of such wells may be appropriate and necessary, as part of Pilgrim’s aging management plan for underground pipes and tanks, is, as indicated above, a factual matter, the answer to which depends upon whether the plan, absent such monitoring, is adequate to detect and remedy any corrosion or other potential for leakage, and any leakage that may actually occur, in a timely and effective manner. If a plan is found as a factual matter to be inadequate in this regard, and that additional inspection and other measures are unduly difficult or expensive such that monitoring wells or other leak detection devices may be the most efficient and cost-effective way of addressing the inadequacy, then they might well be called for, as a factual matter, to augment existing parts of the aging management plan.

Finally, with respect to the requirement at 10 C.F.R. § 2.309(f)(1)(vi) that PW provide sufficient information to show a genuine dispute on a material issue of law or fact, including specific references to portions of the Application it disputes and the reasons for the dispute, there is no doubt that Petitioners must provide something more than bare allegations or “unsubstantiated assertions.” We find that PW has done more, and has satisfied the requirements of section 2.309(f)(1)(vi), insofar as the contention asserts that the aging management plan is inadequate in not including leak detection methods (such as monitoring wells) as a part of it, to supplement existing provisions. In support of this, PW has made a reasoned argument supported, as we note above, by facts, exhibits, scientific reports, and by reference to Appendices A and B of the Application, more

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<sup>256</sup> Tr. at 300.

<sup>257</sup> If the remainder of the basis and support for a contention were so sparse as to preclude admission of the contention based solely on such other support, then the presence or absence of an expert might come into play in ruling on the admissibility of the contention. But this is not the situation with PW’s Contention 1, which we find to be sufficiently supported, without indication of a retained expert at this point.

specifically to section A.2.1.2, at A-14, and section B.1.2, at B-17. It challenges the absence of monitoring wells to serve as leak detection devices, strategically placed between the plant and the coast toward which all water that may be released through any leaks from such pipes and tanks would flow. It asserts that such wells are a necessary part of a system to manage the aging of buried pipes and tanks, particularly where the plan is to inspect only once within the first 10 years of the new license unless an opportunistic occasion arises. It is clear that the participants are genuinely in dispute on this material issue of fact, which we find Petitioner PW has raised and supported sufficiently to admit Contention 1.

In admitting this contention, however, we limit it in two respects. First, the contention is limited to those underground pipes and tanks that do fall within those described in 10 C.F.R. Part 54,<sup>258</sup> which is an issue that may require further clarification as this proceeding progresses. Second, although PW in its basis for Contention 1 has specifically referenced “violation[s] of 10 C.F.R. § 20.1302 and § 50 Appendix A”;<sup>259</sup> the basis also contains certain suggestions that doses *not in violation* of NRC regulations might be harmful to health.<sup>260</sup> The former may be litigated with respect to this contention; the latter may not. With such limitations, the contention we admit states as follows:

The Aging Management program proposed in the Pilgrim Application for license renewal is inadequate with regard to aging management of buried pipes and tanks that contain radioactively contaminated water, because it does not provide for monitoring wells that would detect leakage.<sup>261</sup>

**C. Pilgrim Watch Contention 2: The Aging Management Plan at Pilgrim Fails To Adequately Monitor for Corrosion in the Drywell Liner**

Pilgrim Watch in their second contention states:

The Aging Management program proposed in the Pilgrim application for license renewal fails to adequately assure the continued integrity of the drywell liner, or shell, for the requested license extension. The drywell liner is a safety-related containment component, and its actual wall thickness should be confirmed by periodic ultrasonic testing (UT) measurements at all critical areas, including those

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<sup>258</sup> See 10 C.F.R. § 54.21(a)(1)(i) (“These structures and components *include, but are not limited to, . . . piping . . .*” (emphasis added)); *see also* PW Petition at 4.

<sup>259</sup> PW Petition at 8.

<sup>260</sup> *See id.* at 8-9.

<sup>261</sup> With respect to exactly which pipes and tanks do fall within Pilgrim’s aging management program, this is addressed to an extent in the Application, although further definition may be required as the adjudication of this case proceeds forward.

which are inaccessible for visual inspection. The current plan does not adequately monitor for corrosion in these inaccessible areas, nor does it include a requirement for a root cause analysis when corrosion is found.<sup>262</sup>

As basis for this contention, Pilgrim Watch states that:

A contention about a matter not covered by a specific rule need only allege that the matter poses a significant safety problem. *Duke Power Co. (Catawba Nuclear Station, Units 1 and 2)*, LBP-82-116, 16 NRC 1937, 1946 (1982). The drywell liner has been identified by the NRC and the Applicant as a safety-related structure to be maintained both as a pressure-related boundary and for structural support. It is required to contain and control the release of fission products to the Reactor Building in the event of a Design Basis Accident, including a Loss-Of-Coolant-Accident (LOCA) so that the off-site radiation dose to the surrounding communities remains within NRC designated limits. This structure is therefore vital to the protection of the health, safety and welfare of the public and Petitioners' members. Recent events cited herein have demonstrated that the corrosion of Mark I Drywells is a major safety issue that is not addressed by current NRC Guidance Documents. Pilgrim has a history of corrosion in different areas of the drywell and there has been a reduction in drywell wall thickness. Despite this fact, the Aging Management Program does not adequately monitor for corrosion in the drywell and drywell wall thickness. The Aging Management Program should address this issue, and perform root cause analysis where any corrosion is found, before a license renewal is granted.<sup>263</sup>

To support its allegation that corrosion of Mark I drywells is a major safety-related issue, Pilgrim Watch has referenced a 1986 NRC Information Notice (IN 86-99) acknowledging the potential for corrosion, as well as a 1992 NRC Safety Evaluation of drywell integrity at the Oyster Creek Nuclear Generating Station — also a Mark I reactor — discussing corrosion detected by UT measurements.<sup>264</sup> In conjunction with its discussion of known corrosion problems at Mark I steel containment shells, PW also notes a January 31, 2006, meeting held by NRC “to discuss the proposed interim staff guidance [ISG] for license renewal associated with Mark I steel containment drywell shell[s].”<sup>265</sup> Citing sentiments expressed by the NRC Staff in the meeting, PW argues that the NRC has recognized that a relevant “Generic Aging Lesson Learned” (GALL) report “does not provide

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<sup>262</sup> PW Petition at 17.

<sup>263</sup> *Id.* at 18-19.

<sup>264</sup> *Id.* at 19-20.

<sup>265</sup> *Id.* at 20 n.9 (citing “NRC Conference Call January 31, 2006 to discuss the proposed interim staff guidance for license renewal association with Mark I steel containment drywell shell. Power point Presentation and discussion by Ms. Linh Tran” (see NIRS Oyster Creek Motion for Leave To Add Contentions or Supplement (Feb. 7, 2006), ADAMS Accession No. ML0604705540).

sufficient guidance for detecting and monitoring potential corrosion in the drywell shell, particularly in inaccessible areas,” and that “all Mark I reactors have a potential problem and require evaluation.”<sup>266</sup> Pilgrim Watch cites, and includes as an attachment to its Petition, a 2006 *Federal Register* notice entitled “Proposed License Renewal Interim Staff Guidance LR-ISG-2006-01: Plant-Specific Aging Management Program for Inaccessible Areas of Boiling Water Reactor Mark I Steel Containment Drywell Shell”<sup>267</sup>; PW explains that it seeks to intervene on the drywell corrosion issue “because the license renewal process for Pilgrim has already begun and will likely be completed before a final Staff Guidance on this problem is issued.”<sup>268</sup>

Petitioners argue that unless they are allowed to intervene on this issue — in effect, if this contention is not admitted — “these concerns will not be adequately addressed as part of the Pilgrim license renewal.”<sup>269</sup> Conceding that the issue clearly now has the attention of the NRC, PW argues that the possibility of a future Staff Guidance being issued “should not preclude Petitioners’ intervention on this issue,” citing case law for the principle that “[p]articipation of the NRC Staff in a licensing proceeding is not equivalent to participation by a private intervenor.”<sup>270</sup>

According to Pilgrim Watch, in addition to the evidence regarding all Mark I Steel Containment Drywell Shells, the Pilgrim Nuclear Power Station “has a history of corrosion in different areas of the drywell, and there has been a reduction in drywell wall thickness.”<sup>271</sup>

Pointing to Appendix B of the Application, PW asserts that the Applicant has identified specific instances of corrosion that were discovered and remedied and that the Applicant incorrectly suggests that such discovery and remedy is evidence of a successful aging management program.<sup>272</sup> Instead, PW argues, this demonstrates that corrosion is occurring and does not prove that all corrosion and degradation is being detected and remedied.<sup>273</sup> To further support its assertions that corrosion and degradation are occurring or will occur at Pilgrim, Petitioner references the same “bathtub curve” risk profile it cited in support of its first contention as applying to aging nuclear power plants, again claiming that in the

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<sup>266</sup> PW Petition at 20.

<sup>267</sup> 71 Fed. Reg. 27,010 (May 9, 2006).

<sup>268</sup> PW Petition at 21.

<sup>269</sup> *Id.*

<sup>270</sup> *Id.* (citing *Washington Public Power Supply System* (WPPSS Nuclear Project No. 3), ALAB-747, 18 NRC 1167, 1175-76 (1983)).

<sup>271</sup> *Id.* at 22.

<sup>272</sup> *Id.*

<sup>273</sup> *Id.*

renewal period Pilgrim will be in the “wear-out” phase, making degradation more likely.<sup>274</sup>

Turning to the specifics of the Aging Management Program at Pilgrim, Pilgrim Watch argues that an inspection of the drywell liner every 10 years is not adequate, nor is the primary reliance on visual examinations of the drywell because such inspections cannot monitor inaccessible areas.<sup>275</sup> Assessing the procedures set forth in Appendix A.2.1.17 of the Application, and the Aging Management Program’s reference to the use of ultrasonic testing of drywell thickness, Pilgrim Watch states that it is “not clear from the Application where and how often” the drywell thickness would be measured using such tests.<sup>276</sup> Pilgrim Watch cites the work of Dr. Rudolf H. Hausler for the proposition that reliance on visual inspections would be of “limited usefulness.”<sup>277</sup> Thus, PW asserts, noting the overall difficulty of inspecting inaccessible areas, visually or by UT, “the Aging Management Plan should require a root cause analysis any time water leakage into the drywell region has been found.”<sup>278</sup>

Concluding, Pilgrim Watch contends that the Pilgrim aging management plan “should include regular UT measurements of all critical areas of the drywell liner and a root cause analysis of any drywell areas where water has been found before license renewal is granted.”<sup>279</sup> PW advocates frequent enough UT measurements “to confirm that the actual corrosion measurement results are as projected”; that the measurements should be expanded into areas not previously inspected, including multiple measurements to determine “crevice corrosion” in the liner that is submerged in the concrete floor as well as those areas identified by a root cause analysis that may have caused leakage; submission of results to the NRC as publicly available documents in this license renewal proceeding; concurrence with relevant ASME standards; and immediate incorporation of the NRC Staff Interim Staff Guidance into the Aging Management Program.<sup>280</sup>

### ***1. Entergy Answer to Pilgrim Watch Contention 2***

The Applicant argues that Contention 2 is inadmissible because “it does not address and therefore fails to identify any deficiency in the discussion of this issue in the Application[,] . . . provides no basis to dispute the adequacy of aging management program for the drywell liner[, and t]herefore, fails to establish

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<sup>274</sup> *Id.* at 22-23.

<sup>275</sup> *Id.* at 23.

<sup>276</sup> *Id.*

<sup>277</sup> *Id.* at 24.

<sup>278</sup> *Id.*

<sup>279</sup> *Id.*

<sup>280</sup> *Id.* at 24-25.

any genuine dispute concerning a material issue.”<sup>281</sup> Turning first to Pilgrim Watch’s references to the “Proposed License Renewal Interim Staff Guidance LR-ISG-2006-01: Plant-Specific Aging Management Program for Inaccessible Areas of Boiling Water Reactor Mark I Steel Containment Drywell Shell,”<sup>282</sup> the Applicant states that Pilgrim Watch has failed to acknowledge or “address the amendment to the license renewal application that Entergy submitted on May 11, 2006, to provide additional information responsive to this proposed guidance.”<sup>283</sup> The Applicant argues that the contention “does not directly controvert [the] position taken by the applicant,” in its application amendment, and thus, the “contention is subject to dismissal.”<sup>284</sup>

The Applicant claims that “the proposed interim staff guidance does not support Pilgrim Watch’s allegation that Entergy’s aging management program does not adequately monitor for corrosion in inaccessible areas.”<sup>285</sup> Insisting that the proposed guidance does not require monitoring in the inaccessible areas, Applicant argues that it instead “recommends development of a corrosion rate that can be inferred from past UT examinations.” Pointing to Amendment No. 1 of its license renewal application, Applicant states that it “has addressed this issue in the manner recommended in the NRC proposed guidance.”<sup>286</sup> The Applicant challenges other of PW’s allegations as well, including those asserting inadequacies in the aging management program for the drywell liner. Applicant notes that PW has failed to contradict or assess the programs outlined in the Amendment to the Application, which include “[a] host of actions . . . not limited to ‘inspection of the drywell liner every 10 years’ as alleged in the Contention.”<sup>287</sup> Applicant states that no basis has been shown for PW’s allegation of a history of corrosion, and, finally, argues that PW has failed to address the root cause discussion in section B.0.3 of Appendix B to the Application when it asserts that the aging management program for the drywell shell impermissibly omits a requirement for root cause analysis when corrosion is found.<sup>288</sup>

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<sup>281</sup> Entergy Answer to PW Petition at 20.

<sup>282</sup> 71 Fed. Reg. 27,010.

<sup>283</sup> Entergy Answer to PW Petition at 21 (citing Letter from S. Bethay to U.S. Nuclear Regulatory Commission, License Renewal Application, Amendment No. 1 (May 11, 2006), ADAMS Accession No. ML061380549).

<sup>284</sup> *Id.* at 21.

<sup>285</sup> *Id.*

<sup>286</sup> *Id.* at 22.

<sup>287</sup> *Id.* at 22-23.

<sup>288</sup> *Id.* at 24.

## 2. *NRC Staff Response to Pilgrim Watch Contention 2*

The NRC Staff does not dispute that the contention falls within the scope of the license renewal proceeding, but, like the Applicant, argues that it is inadmissible because it fails to present a genuine issue of law or fact as required by 10 C.F.R. § 2.309(f)(1)(vi), and also asserts that “it lacks a basis in fact or expert opinion” as required by section 2.309(f)(1)(v).<sup>289</sup> Instead, the Staff asserts, the “Petitioner impermissibly attempts to piggyback on to the Staff’s dialogue with industry and the public relative to forthcoming Interim Support Guidance (ISG) . . . as a substitute for Petitioner’s obligation to provide facts or technical expertise in support of its assertions.”<sup>290</sup> PW has failed, Staff argues, to provide “independent facts or expert opinion beyond Staff dialogue with industry.”<sup>291</sup> Further, the Staff faults Pilgrim Watch for making only vague references to the Application, and thus failing to include any challenge to specific deficiencies in the application.<sup>292</sup> With regard to the allegations of a “history of corrosion in different areas of the drywell” at Pilgrim, the Staff argues that the contention’s reference to the “torus bays and drywell spray header” is misdirected, stating that these “are entirely distinct features from the drywell shell.”<sup>293</sup> Similarly, the Staff contends that the Union of Concerned Scientists Report cited by Pilgrim Watch fails to provide a factual basis for the contention because it “makes no mention of Pilgrim, the LRA or drywell shell region.”<sup>294</sup> Finally, regarding PW’s argument that the Pilgrim Aging Management Plan is deficient for failing to provide for sufficient inspection of the drywell, the Staff also faults PW for failing to address the May amendment to the Application and urges that as a result PW’s argument does not support admission of the contention because it fails to present a genuine dispute of law or fact.<sup>295</sup>

## 3. *Pilgrim Watch Replies to Entergy and NRC Staff*

In its reply to the Applicant, Pilgrim Watch concedes that it did not mention the Applicant’s License Amendment regarding drywell monitoring in its Petition, but insists that the Applicant did not notify the Petitioner as to its existence, nor was the Amendment made part of the Application “on the Pilgrim I License Renewal

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<sup>289</sup> Staff Response to PW Petition at 19.

<sup>290</sup> *Id.* (citations omitted).

<sup>291</sup> *Id.*

<sup>292</sup> *See id.* at 21.

<sup>293</sup> *Id.*

<sup>294</sup> *Id.* at 22.

<sup>295</sup> *Id.*

Site.’’<sup>296</sup> However, having now assessed the Amendment, Pilgrim Watch argues that the Applicant fails to satisfy the standards in the recently released proposed guidance regarding this issue.<sup>297</sup> The guidance, according to Pilgrim Watch, requires the development of a plant-specific aging management plan to address corrosion in the inaccessible areas of the drywell shell, and a development of “corrosion rates” for these areas.<sup>298</sup> Pilgrim Watch faults the Applicant because “it appears that measurements have only been taken twice in the inaccessible embedded areas, and these measurements have been discontinued”; according to PW, “[t]his does not appear to conform with the proposed ISG.’’<sup>299</sup>

Responding to the Staff, PW disputes the argument that it “impermissibly attempts to piggyback” on the Staff’s dialogue with industry as the basis for its contention.<sup>300</sup> According to PW, unlike instances where a Petitioner relies wholly on the “existence of RAIs to establish deficiencies in the application,” as cited by the Staff, here Pilgrim Watch is simply arguing that Pilgrim should “at least meet the new standards outlined in [the] ISG.’’<sup>301</sup> Petitioner further contends that its contention and basis “directly refer to sections of the Licensee’s Aging Management Program for the drywell liner,’’<sup>302</sup> and, based on the inadequacies that it has shown in this program, again requests incorporation of the proposed NRC requirements into the Pilgrim aging management program before any license renewal is granted.<sup>303</sup>

#### **4. Licensing Board Ruling on Contention 2**

We find this contention, though within the scope of license renewal and meeting other relevant requirements of 10 C.F.R. § 2.309(f), to be inadmissible because it fails to meet the requirement of 10 C.F.R. § 2.309(f)(1)(vi) that sufficient information be shown to demonstrate that a genuine dispute exists with the applicant on a material issue of law or fact. In this contention, as argued by Staff, PW essentially relies on the interim Staff guidance, seeking to require Applicant to comply with the guidance. Moreover, particularly with regard to the May 11, 2006, amendment to the Application, PW does not state with any specificity or provide information showing *how* the actions and proposed actions

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<sup>296</sup> Pilgrim Watch Reply to Entergy at 10-11.

<sup>297</sup> *Id.* at 12; see LR-ISG-2006-01, Plant-Specific Aging Management Program for Inaccessible Areas of Boiling Water Reactor Mark I Steel Containment Drywell Shell.

<sup>298</sup> PW Reply to Entergy at 12.

<sup>299</sup> *Id.*

<sup>300</sup> PW Reply to NRC Staff at 10.

<sup>301</sup> *Id.*

<sup>302</sup> *Id.*

<sup>303</sup> See *id.* at 11.

of the Applicant do not comply with the Staff guidance, stating only, in its reply, that “[t]his does not *appear* to conform with the proposed ISG.”<sup>304</sup> The Board is not permitted to draw any inferences on behalf of a petitioner, and in the absence of any more specific statement than has been provided, showing how the specific actions of Applicant fall short, or some nexus with problems at other plants, we find the contention fails to show any genuine dispute on a material issue of fact relating to the matters at issue.

Applicant Entergy has detailed in its amendment how it has in fact done UT testing of the drywell shell, both at points adjacent to the inaccessible sand cushion region and also, on two occasions, of the shell immediately above the sand cushion area, by chipping away the concrete above the points of testing.<sup>305</sup> It has stated that the result of this testing has been that the thickness of the shell at the areas tested is “essentially as-built.”<sup>306</sup> It has explained that it ceased doing UT measurements in the inaccessible sand cushion region, based on satisfactory results from monitoring for leakage from the annulus air gap drains (which provide for drainage from the sand cushion area); satisfactory thickness at the 9-foot elevation sand cushion region (and upper drywell); the existence of high radiation in the areas where the sand cushion UT exams were performed; and the potential for damage to the drywell shell from the tools used to chip away concrete when UT testing of the sand cushion area was performed.<sup>307</sup> With no more specific information being provided to show that these are not acceptable reasons for ceasing the UT testing or that other measures taken by Applicant are unsatisfactory than that it “does not appear” that these satisfy the ISG, we see no genuine dispute being raised about the actions taken by the Applicant and whether they satisfy the ISG. Whether the Applicant’s actions and procedures do or do not satisfy the ISG will be determined by the Staff in the course of their license renewal review, and Staff has indicated that it will assure compliance with the ISG.<sup>308</sup> In order for a petitioner to have a contention admitted on

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<sup>304</sup> PW Reply to Entergy at 12.

<sup>305</sup> See Pilgrim License Renewal Application, Amendment 1 (May 11, 2006) at 3, ADAMS Accession No. ML061380549 [hereinafter Amendment].

<sup>306</sup> *Id.*

<sup>307</sup> See *id.* at 2-3.

<sup>308</sup> At oral argument, the Staff stated that they “intend to apply the elements of the draft ISG to the renewal application. The extent to which those amendments address the ISG is just going to be a matter of review.” Tr. at 353. The Staff responded affirmatively to questioning from the Licensing Board Chair as to whether they would “make sure the ISG is complied with completely.” *Id.* Entergy counsel stated that, although Entergy would “like to see the finalized ISG before I commit to say[,] I would assume that if it’s along the lines of the proposed ISG that we would [commit to complying with the ISG].” Tr. at 356.

this subject, however, more information must be shown than has been shown here.<sup>309</sup>

**D. Pilgrim Watch Contention 3: The Environmental Report Is Inadequate Because It Ignores the True Offsite Radiological and Economic Consequences of a Severe Accident at Pilgrim in Its Severe Accident Mitigation Alternatives (SAMA) Analysis**

Pilgrim Watch here contends:

The Environmental Report inadequately accounts for off-site health exposure and economic costs in its SAMA analysis of severe accidents. By using probabilistic modeling and incorrectly inputting certain parameters into the modeling software, Entergy has downplayed the consequences of a severe accident at Pilgrim and this has caused it to draw incorrect conclusions about the costs versus benefits of possible mitigation alternatives.<sup>310</sup>

Pilgrim Watch's argument that this contention is within the scope of license renewal<sup>311</sup> is not disputed;<sup>312</sup> severe accidents, and alternatives to mitigate severe accidents, are listed as a "Category 2" issue in 10 C.F.R. Part 51, Subpart A, Appendix B. Petitioner also cites Council on Environmental Quality (CEQ) regulatory authority for the proposition that environmental impacts that are "reasonably foreseeable" and have "catastrophic consequences, even if their probability of occurrence is low," must still be considered in an EIS;<sup>313</sup> and

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<sup>309</sup> Reference may be made to the information provided by a petitioner in the *Oyster Creek* proceeding for comparison purposes. In that case, for example, among other facts shown by petitioners in their first contention relating to drywell corrosion, it was demonstrated that 60 out of 143 UT measurements at the 11-foot level of the sand cushion region indicated a reduction of more than 1/4 inch from the original design thickness of 1.154 inches at that point. *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), LBP-06-7, 63 NRC 188, 213 (2006). By contrast, no reason has been provided to doubt Entergy's statement that UT measurements in the sand cushion region indicated essentially no reduction in thickness.

In a second contention on drywell corrosion, admitted in part after the first contention on the subject was ruled moot based on actions taken by that Applicant to address a deficiency alleged in that contention, *see AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), LBP-06-22, 64 NRC 229, 230-31 (2006), the Petitioners provided a relatively detailed argument in contrast to the contention before us. For example, that portion of the contention that was admitted concerned a very specific assertion that the drywell shell at Oyster Creek was "0.026 inches or less from violating AmerGen's acceptance criteria" in the sand bed region "due to prior corrosion." *Id.* at 240, 242.

<sup>310</sup> PW Petition at 26.

<sup>311</sup> *See id.*

<sup>312</sup> *See* Staff Response to PW Petition at 25; Entergy Answer to PW Petition at 25-46.

<sup>313</sup> PW Petition at 26 (quoting 40 C.F.R. § 1502.22(b)(1)).

NRC regulatory authority for the proposition that difficulty in quantification does not excuse inclusion in the EIS, because, “to the extent that there are important qualitative considerations that cannot be quantified, these considerations or factors will be discussed in qualitative terms.”<sup>314</sup>

Petitioner argues that this contention is material because it alleges a deficiency in the Application that “could significantly impact health and safety”<sup>315</sup> — it is asserted that the use of “probabilistic modeling and incorrect parameters in its SAMA analysis” results in a downplaying of the likely consequences of a severe accident at Pilgrim, which “thus incorrectly discounts possible mitigation alternatives” that might prevent or reduce the impact of an accident.<sup>316</sup>

As basis for Contention 3, PW notes that the Appendix B requirement on SAMAs provides that, even though “[t]he 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,” alternatives to mitigate severe accidents must still be considered.<sup>317</sup> Petitioner suggests that by virtue of Entergy’s use of probabilistic modeling, the deaths, injuries, and economic consequences of an accident can be underestimated, citing various legal and technical authority.<sup>318</sup>

Further, PW asserts, Applicant used outdated versions of the MACCS2<sup>319</sup> Code and MACCS2 User Guide, ignoring warnings about the code’s limitations and using incorrect input parameters.<sup>320</sup> Citing criticisms of the code, PW points to, among other things, limitations on the code’s failure to “model dispersion close to the source . . . or long range dispersion,” and to a user’s “ability to affect the output from the code by manipulating the inputs and choosing parameters.”<sup>321</sup> Stating that it is impossible for PW to fully evaluate the SAMA conclusions of the Applicant, “[w]ithout knowing what parameters were chosen by the Applicant,” PW posits several “reasons that Entergy’s described consequences of a severe accident at Pilgrim look so small,” based on the ER, and discusses several specific categories of what it contends are incorrect input data to the SAMA analysis.<sup>322</sup> These alleged errors relate to meteorological data (including wind

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<sup>314</sup> *Id.* at 27 (citing 10 C.F.R. § 51.71).

<sup>315</sup> *Id.* at 28 (citing *Millstone*, LBP-04-15, 60 NRC at 89).

<sup>316</sup> *Id.* at 28.

<sup>317</sup> *Id.* at 29-30 (citing 10 C.F.R. Part 51, Subpart A, Appendix B).

<sup>318</sup> *Id.* at 30-31.

<sup>319</sup> MACCS stands for “MELCOR Accident Consequence Code System”; see PW Petition at 31.

<sup>320</sup> See PW Petition at 31.

<sup>321</sup> *Id.* at 33; see *id.* at 31-34 & nn.13, 14 (citing D.E. Chanin and M.L. Young, *Code Manual for MACCS2: Vol. 1, User’s Guide* (Sandia Nat. Lab., 1997); *MACCS2 Computer Code Application Guidance for Documented Safety Analysis* (DOE, 2004).

<sup>322</sup> PW Petition at 34.

speed, wind direction, and dispersion), demographic and emergency response data relating to evacuation delay time and speed, and economic data.<sup>323</sup> PW alleges that the Applicant's undercounting of the costs of a severe accident could have led to erroneous rejection of mitigation alternatives, and that further analysis is necessary.<sup>324</sup>

Pilgrim Watch challenges the modeling of the Application's atmospheric dispersion of a point release of radionuclides because it allegedly does not take into account meteorological conditions such as wind speed and direction changes, the sea breeze phenomenon, and coastal topography.<sup>325</sup> Citing various authority in support of its arguments, including a Massachusetts Department of Public Health report on the "Feasibility of Exposure Assessment for the Pilgrim Nuclear Power Plant," and NRC Regulatory Guide 1.194,<sup>326</sup> PW contends that the data used in the Application — taken from the reactor site and the Plymouth airport — should be replaced with more specific data that take into account the specific characteristics of the Plymouth area.<sup>327</sup>

Pilgrim Watch challenges the demographic and other data used in the Application, arguing that, because of the unpredictability and complexity of the winds at the Pilgrim site, a larger, more inclusive population, located "within rings around the plant," should be used when calculating offsite dose costs.<sup>328</sup> Noting that the sensitivity analysis used in the Application does not include the most current information on emergency evacuation needs,<sup>329</sup> and suggesting that it does include a faulty assumption "that the longest likely delay before residents begin to evacuate is 2 hours," PW proposes that the analysis should take into account phenomena such as the need for some who cannot evacuate to shelter in place, special events that bring large numbers of the public onto the roads at times, and "shadow evacuation," or voluntary evacuation by persons not within the formal evacuation area.<sup>330</sup> Petitioner suggests the need for greater realism and accuracy

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<sup>323</sup> See *id.* at 34-45.

<sup>324</sup> See *id.* at 48-49.

<sup>325</sup> See *id.* at 34-38.

<sup>326</sup> See *id.* (citing J.D. Spengler and G.J. Keeler, Feasibility of Exposure Assessment for the Pilgrim Nuclear Power Plant (1988); NRC Regulatory Guide 1.194 (June 2003); Edwin S. Lyman, Union of Concerned Scientists, "Chernobyl on the Hudson? The Health and Economic Impact of a Terrorist Attack at the Indian Point Nuclear Plant," at 16 (2004)).

<sup>327</sup> See *id.* at 37-38.

<sup>328</sup> *Id.* at 38.

<sup>329</sup> PW indicates that a later report prepared for Entergy than that used in the Pilgrim SAMA analysis "relies on newer census data and newer roadway geometric data." PW Petition at 39-40 (citing "Pilgrim Nuclear Power Station Development of Evacuation Time Estimates," KLD TR-382, Rev. 6 (Oct. 2004)); *cf.* KLD, "Pilgrim Station Evacuation Time Estimates and Traffic Management. Plan Update," Rev. 5 (Nov. 1998).

<sup>330</sup> PW Petition at 41-43.

in the evacuation analysis, as well as assumption of “the worst case scenario.”<sup>331</sup> PW supports these arguments with a factual discussion, along with references to specific sections of the Application and various other documents and studies.<sup>332</sup>

Noting “[o]ne of the cited criticisms of the MACCS2 Code — ‘i.e., “that ‘the economic model included in the code models only the economic cost of mitigative actions’ ” — PW points out that, although costs of decontamination, condemnation of property that cannot be sufficiently decontaminated, and compensation to persons forced to relocate as a result of an accident are included, not accounted for is any resulting loss of economic activity in Plymouth County or other neighboring counties with significant tourism (including the Cape Cod area), travel to which is through Plymouth County.<sup>333</sup> One example provided is that of Plimoth Plantation, which is “less than five miles from the plant [and] brings in almost \$10 million per year.”<sup>334</sup> PW also attaches as an exhibit to this contention a study on the economic impact of travel on Massachusetts counties, prepared for the Massachusetts Office of Travel and Tourism.<sup>335</sup>

Finally, PW provides an example of an alternative that it contends the Applicant wrongly dismissed as a result of its SAMA analysis — namely, adding a filter to the Direct Torus Vent.<sup>336</sup>

### ***1. Entergy Answer to Pilgrim Watch Contention 3***

The Applicant argues that Contention 3 is inadmissible “because (1) the Contention impermissibly challenges Commission regulation, and (2) the Contention provides no basis to establish a material dispute of fact regarding the adequacy of the SAMA analysis in the ER.”<sup>337</sup> In its first argument, Applicant asserts that Pilgrim Watch has “misread,” thus misapplied, and in effect challenged Commission regulations regarding SAMA analysis.<sup>338</sup> The root of this problem, according to the Applicant, is Pilgrim Watch’s assertion that SAMA analysis should be focused on severe accident mitigation alternatives and not severe acci-

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<sup>331</sup> *Id.* at 40.

<sup>332</sup> *See id.* at 39-42 (citing KLD-TR-382, Rev. 6, Rev. 5; Calculation of Reactor Accident Consequences (CRAC-2) (Sandia Nat. Lab., 1982); NAS, *The Safety & Security of Commercial Spent Nuclear Fuel Storage Public Report* (2005); Donald Ziegler and James Johnson, Jr., Evacuation Behavior in Response to Nuclear Power Plant Accidents, *The Professional Geographer* (May 1984)).

<sup>333</sup> *Id.* at 43-44 (internal quotations omitted).

<sup>334</sup> *Id.* at 44.

<sup>335</sup> *See* PW Petition, Exhibit D, The Economic Impact of Travel on Massachusetts Counties, 2003, prepared for the Massachusetts Office of Travel and Tourism by the Research Department of the Travel Industry Association of America, Washington, D.C. (January 2005).

<sup>336</sup> PW Petition at 45-48.

<sup>337</sup> Entergy Answer to PW Petition at 25.

<sup>338</sup> *See id.*

dent risks.<sup>339</sup> Pointing to the Third Circuit decision in *Limerick Ecology Action, Inc. v. NRC*,<sup>340</sup> and the Commission decision in *Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2)*, CLI-02-17,<sup>341</sup> the Applicant argues that the Commission and reviewing courts have endorsed the position that “the evaluation of risk is at the heart of a SAMA analysis,” that “only by considering risk can one determine those alternatives that provide the greatest benefit for the dollars expended,” and that PW is in error in suggesting that a SAMA analysis is “to focus solely on mitigation of consequences without regard to the likelihood of their occurrence.”<sup>342</sup> Applicant emphasizes the centrality of the risk calculation by describing the Third Circuit’s discussion of how the probability of a risk may change with population density,<sup>343</sup> and the Commission’s statement that reductions in risk are “assessed in terms of the total *averted risk*: averted public exposure (health risk converted into dollars to estimate the cost of the public health consequence), averted onsite cleanup cost, averted offsite property damage costs, averted exposure costs, and averted power replacement costs.”<sup>344</sup> Applicant also quotes from a Commission decision in the *McGuire/Catawba* license renewal proceeding:

Whether a SAMA may be worthwhile to implement is based upon a cost-benefit analysis — a weighing of the cost to implement the SAMA with the *reduction in risks* to public health, occupational health, and offsite and onsite property.<sup>345</sup>

Applicant characterizes PW’s argument as being that “risk is to be ignored [in a SAMA analysis] and that only consequences are to be considered,” and argues that this approach is contrary to the SAMA rule.<sup>346</sup> Applicant concludes its argument that Contention 3 “impermissibly challenges Commission Regulation” with the following statement:

In short, Pilgrim Watch’s claim that the Pilgrim SAMA analysis erroneously focuses

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<sup>339</sup> *Id.* at 25-26.

<sup>340</sup> 869 F.2d 719 (3d Cir. 1989).

<sup>341</sup> CLI-02-17, 56 NRC 1 (2002).

<sup>342</sup> Entergy Answer to PW Petition at 26.

<sup>343</sup> *Id.* at 27; see *Limerick*, 869 F.2d at 738-39.

<sup>344</sup> Entergy Answer to PW Petition at 27 n.15 (citing *McGuire/Catawba*, CLI-02-17, 56 NRC at 8 n.14). Applicant notes as well the Commission’s prediction that it would be “unlikely that any site-specific consideration of severe accident mitigation alternatives for license renewal will identify *major plant design changes or modifications* that will prove to be cost-beneficial for reducing severe accident frequency or consequences.” *Id.* at 28 (citing 61 Fed. Reg. 28,467, 28,481 (June 5, 1996) (emphasis added by Applicant)).

<sup>345</sup> Entergy Answer to PW Petition at 26 (quoting *McGuire/Catawba*, CLI-02-17, 56 NRC at 7-8).

<sup>346</sup> *Id.* at 27.

on risk so as to improperly minimize the consequences of a SAMA is not supported. The reduction of risk (likelihood of occurrence times severity of consequences) is *the* fundamental tenet of SAMA analysis. Moreover, because the impacts from severe accidents as determined by the Commission are “SMALL” the Commission does not expect a properly conducted SAMA analysis “to identify *significant* [plant] modifications that are cost-beneficial” . . . , which is exactly counter to the underlying premise of Contention 3.<sup>347</sup>

In its second argument, Applicant urges that Contention 3 fails to raise any material dispute of fact, insisting that it lacks any “factual basis to show that the different modeling assumptions and estimates that it claims should have been used in the SAMA analysis would have any material impact on the results of the analysis.”<sup>348</sup> Asserting that the “contention rests on several faulty premises,” Applicant reiterates its argument described above and claims that the “mischaracterization of the SAMA analysis” has tainted its contention and “provides no basis for an admissible contention.”<sup>349</sup> Applicant notes that, “[a]s would be expected by the Commission,” its SAMA analysis “does not identify any significant modification to mitigate severe accidents to be cost-beneficial,” but does find five alternatives to be “potentially cost beneficial” and recommends further evaluation and consideration of these.<sup>350</sup> In addition, it points out that it identified benefits for more than fifty of the fifty-nine SAMAs it did evaluate, contrary to Petitioner’s assertion of “zero” benefits identified.<sup>351</sup>

Applicant argues that “Contention 3 impermissibly presumes the materiality of its asserted deficiencies and pleads no facts to establish their materiality.”<sup>352</sup> According to the Applicant, “the Contention sets forth nothing to establish that the asserted deficiencies would, if corrected as claimed by the Contention, alter the *result* of the SAMA evaluations.”<sup>353</sup> Applicant suggests that:

In light of the large conservatisms inherent in the [SAMA] analyses, the significant differences between the cost and benefit of implementing the various SAMAs, and the sensitivity analyses showing that the results are not sensitive to changes in assumptions, it is behoven for Pilgrim Watch to have pled facts to establish the materiality of its asserted deficiencies, [which is] necessary to avoid a meaningless “EIS editing session[.]” of the type that the Commission has warned against.<sup>354</sup>

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<sup>347</sup> *Id.* at 29.

<sup>348</sup> *Id.* at 29-30.

<sup>349</sup> *Id.* at 30.

<sup>350</sup> *Id.* (citing Application, ER at E.4-49).

<sup>351</sup> *Id.* at 30-31.

<sup>352</sup> *Id.* at 31.

<sup>353</sup> *Id.* (emphasis in original).

<sup>354</sup> *Id.* at 32-33 (citations omitted).

The Applicant also takes issue with the Contention's assertion that the "severe accident analysis should assume the worst case scenario."<sup>355</sup> Arguing that "NEPA's 'Rule of Reason' provides no exception for SAMA analysis," the Applicant claims that Pilgrim Watch has no legal basis for its proposition.<sup>356</sup> Therefore, according to the Applicant, only "reasonable scenarios" need be considered, "limited to effects which are shown to have some likelihood of occurring."<sup>357</sup> Applicant cites both Commission and Supreme Court case law suggesting that the SAMA analysis "requires no different level of consideration or evaluation than that employed for analyzing mitigation generally under NEPA,"<sup>358</sup> and quotes the Commission's statement in *McGuire/Catawba* that "[u]nder NEPA, mitigation (and the SAMA issue is one of mitigation) need only be discussed in 'sufficient detail to ensure that environmental consequences [of the proposed project] have been fairly evaluated.'"<sup>359</sup>

In the Applicant's view, PW has also failed to establish a factual basis for its challenges regarding (1) the Applicant's use of an "outdated" version of MACCS2 Code and User Guide and analysis performed with such tools; (2) the Applicant's meteorological data analysis; (3) the Applicant's demographic and emergency response data and analysis; or (4) its economic data and analysis.<sup>360</sup> With regard to the MACCS2, the Applicant asserts that the code is "state-of-the-art," and that "Pilgrim Watch [does not] provide any basis whatsoever for its allegations that Entergy 'ignored warnings about the limitations of the model,'"<sup>361</sup> or "any basis to show that any of the inherent limitations of the MACCS2 Code are of any significance and would in any way alter the outcome of the SAMA analysis with respect to determining potentially cost beneficial SAMAs."<sup>362</sup>

While Applicant agrees that "additional data may always be desirable," it again argues that Petitioner has not made any showing that the alleged deficiencies in any way materially affect the SAMA analysis.<sup>363</sup> In addition, Applicant suggests that Regulatory Guide 1.194 does not support the need for more than the year's

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<sup>355</sup> *Id.* at 33.

<sup>356</sup> *Id.*

<sup>357</sup> *Id.* (quoting *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), LBP-04-23, 60 NRC 441, 447 (2004)).

<sup>358</sup> *See id.* at 35 (citing *Robertson*, 490 U.S. at 344-47).

<sup>359</sup> *Id.* (citing *McGuire/Catawba*, CLI-03-17, 58 NRC at 431).

<sup>360</sup> *Id.* at 36-46.

<sup>361</sup> *Id.* at 36.

<sup>362</sup> *Id.* at 37.

<sup>363</sup> *Id.* at 38.

worth of meteorological data it utilized in its analysis,<sup>364</sup> and states that “[PW] makes *no* claim that the 12 month period of meteorological data used for the Pilgrim SAMA analysis is unrepresentative of the Pilgrim site’s meteorology in any respect.”<sup>365</sup> Noting PW’s suggestion that “‘measurements from multiple sites in the field’ are needed to ‘*better* characterize meteorological conditions,’” Applicant suggests that the “‘real thrust’” of PW’s claim is “‘an asserted need for an expanded radiological monitoring program for the Pilgrim plant, which is an operational issue beyond the scope of this license renewal proceeding,’” just as with Contention 1.<sup>366</sup>

The Applicant suggests a similar lack of basis to show that different data would materially affect the outcome of the SAMA analysis with respect to population demographics and emergency response data, noting that the latter were derived from the Pilgrim Emergency Plan, and suggesting that Petitioner has not shown that use of more recent data “‘would have exceeded the bounds of . . . sensitivity analyses [performed by Applicant] or altered the outcome of the analysis in any material way.’”<sup>367</sup> In addition, Applicant notes that it evaluated “‘a wide range of scenarios for which evacuation time estimates were developed,’” including varying weather conditions, times of day and year, and amounts of traffic.<sup>368</sup>

Finally, with regard to emergency response data, Applicant argues that these should not be subject to challenge in this proceeding, citing Commission precedent for the principle that “[e]mergency planning . . . is one of the safety issues that need not be re-examined within the context of license renewal.”<sup>369</sup> Applicant suggests that it follows from this precedent that “‘assumptions that are consistent with the established emergency plan should be accepted as reasonable in this proceeding,’” and that PW’s suggestion that the evacuation zone should be greater than the 10 miles provided for in “‘applicable NRC requirements’” is “‘a direct, impermissible

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<sup>364</sup> *Id.* Applicant notes that by its terms Regulatory Guide 1.194 does not apply for modeling offsite accident radiological consequences. Instead, according to Applicant, the applicable NRC guidance is found in Regulatory Guide 1.145, which points to Regulatory Guide 1.23, “‘which provides for the use of ‘data gathered on a continuous basis for a representative 12 month period’ (although ‘[t]wo full cycles of data are desirable’).” *Id.* (citing Reg. Guide 1.194 at 1.194-1–1.194-3; Reg. Guide 1.145 at 1.145-2; Reg. Guide 1.23 at 23.2). Applicant also notes that Edwin Lyman, one of Petitioner’s sources, has recognized that the MACCS2 Code cannot process more than a year’s worth of data. *Id.* (citing Lyman, *supra*, at 26, 33).

<sup>365</sup> Entergy Answer to PW Petition at 38.

<sup>366</sup> *Id.* at 39.

<sup>367</sup> *Id.* at 41; *see id.* at 40-41.

<sup>368</sup> *Id.* at 42. Again, however, Applicant in its pleadings offers no quantification of either the range of scenarios investigated or the effects of the variation in assumptions.

<sup>369</sup> Entergy Answer to PW Petition at 43 (quoting *Turkey Point*, CLI-01-17, 54 NRC at 9); *see id.* at 42-43.

challenge to the Commission's emergency planning requirements."<sup>370</sup> In any event, according to Applicant, its analysis takes into account dose to the public within a 50-mile radius "and thus fully accounts for the risk beyond 10 miles."<sup>371</sup> With respect to "shadow evacuation," Applicant views this as a call by PW for an impermissible "worst case scenario," and asserted in oral argument that local law enforcement will assure absence of shadow evacuation<sup>372</sup>; and, with respect to the need of some to "shelter in place," Applicant points out that the existing emergency plan provides for state and local governments to provide assistance to immobile and handicapped persons in the evacuation zone.<sup>373</sup>

Applicant defends its sensitivity analysis as incorporating "large conservatisms" such as using the 2-hour time prior to beginning of evacuation rather than the 40-minute time in the base case, which it says "show a maximum change in the population dose estimates of 'less than 2%.'"<sup>374</sup> Applicant argues to the effect that using larger changes in the evacuation times would still produce only negligible changes in the result, and that the Contention provides no basis to show that its challenges would alter the outcome of the analysis.<sup>375</sup> Finally, Applicant asserts (without quantification of its sensitivity analysis results) that the same conclusion must be drawn regarding the economic data suggested by Petitioner, and that "even with its asserted limitations, the MACCS2 code is state-of-the-art and can be properly applied to yield valid results."<sup>376</sup>

## 2. NRC Staff Response to Contention 3

The Staff's position is that, while the subject of SAMAs is clearly within the scope of a license renewal proceeding, this contention is inadmissible.<sup>377</sup> The Staff challenges the contention as raising issues that are "not material to the findings that must be made in this matter" and "not supported by expert opinion

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<sup>370</sup> *Id.* at 43.

<sup>371</sup> *Id.*

<sup>372</sup> *See* Tr. at 426-27.

<sup>373</sup> Entergy Answer to PW Petition at 44.

<sup>374</sup> *Id.* at 45 (internal quotation omitted).

<sup>375</sup> *See id.* at 45-46.

<sup>376</sup> *Id.* at 46. We also note Entergy's concession at oral argument that "the one insightful aspect of the petition was that we made a mistake in one of our SAMAs." Tr. at 399. With respect to the direct filtered vent, which was cited by PW as evidence of faulty SAMA analyses, the applicant stated that it made an "error in inputting the appropriate source term," but that the error was not indicative of code errors or incorrect economic inputs, evacuation time estimates, or meteorological data. Tr. at 400. Furthermore, according to the Applicant the error was corrected in a response to a Staff Request for Additional Information. *See id.*

<sup>377</sup> *See* Staff Response to PW Petition at 25.

or sufficient facts, as required by 10 CFR § 2.309(f)(1)(v).<sup>378</sup> The Staff insists that SAMA analysis is a “technical area” and that a Petitioner “cannot rely on its own assertions.”<sup>379</sup> The Staff also defends the use of “probability risk analysis” (PRA) as utilized in the SAMAs, arguing that “[u]se of the PRA in this manner is an essential and widely accepted part of the cost-benefit methodology as described in Section 5.6 of NUREG/BR-0184.”<sup>380</sup>

Regarding Pilgrim Watch’s assertion that probabilistic modeling can underestimate the true consequences of a severe accident, the Staff notes that the Applicant followed accepted NRC and industry practice by comparing the costs and benefits of each identified SAMA, used the correct definition of risk (“the product of consequence and frequency of accidental release”), and properly discarded SAMA candidates not found to be viable.<sup>381</sup> Staff suggests that the fact that the Applicant evaluated 281 SAMAs negates any implication that Applicant “did not consider a full range of SAMAs.”<sup>382</sup>

The Staff dismisses PW’s concerns regarding the alleged use of “an outdated version of the MACCS2 Code” as “mere speculation,” citing PW’s statement that “Entergy may have ‘minimized consequences by using incorrect input parameters.’”<sup>383</sup> In addition, the Staff counters PW’s suggestion that the Code and/or its user guide are out of date or contain known flaws, asserting that Pilgrim Watch has “insufficient basis” for its claims.<sup>384</sup> The Staff also argues that Pilgrim Watch’s related claim that the applicant used incorrect input data in the models (including meteorological, demographic, emergency response, and regional economic data) is not supported and is not material in that it has not been “established that any of these alleged shortcomings of MACCS2 are, in fact,

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<sup>378</sup> *Id.*

<sup>379</sup> *Id.*

<sup>380</sup> *Id.* at 26. The Staff explains that, in determining whether any of the 281 possible SAMAs Entergy identified for Pilgrim (from a number of sources, including the Pilgrim PRA analysis) should be implemented,

the licensee performed a cost-benefit analysis using a methodology that is consistent with the NRC Regulatory Analysis Technical Evaluation Handbook (NUREG/BR-0184). This analysis is designed to identify and estimate the relevant values and impacts of a each proposed change, and provides a structured approach for balancing benefits and costs in determining whether implementation is justified. The PRA is used within this analysis to evaluate the reduction in probabilities (core damage frequency) and consequences (population dose) that would be associated with implementation of each alternative. Use of the PRA in this manner is an essential and widely accepted part of the cost-benefit methodology, as described in Section 5.6 of NUREG/BR-0184.

*Id.*

<sup>381</sup> See Staff Response to PW Petition at 27-28.

<sup>382</sup> *Id.* at 28.

<sup>383</sup> *Id.* at 28-29 (emphasis supplied by Staff).

<sup>384</sup> *Id.* at 29.

deficiencies, or that they impact the results of the SAMA analysis.’’<sup>385</sup> Noting that the MACCS2 code ‘‘has been previously evaluated and found to be sufficient to support regulatory analyses and cost-benefit analyses’’ in NUREG/BR-0184 and NUREG/CR-6853, Staff contends that PW’s challenge of the use of the code is unsupported.<sup>386</sup>

The Staff also argues that there is ‘‘no legal support for the position that the Applicant should be required to provide the complete inputs,’’ and that the failure to do so ‘‘is not a sufficient basis for asserting or concluding that the input is flawed, or that the applicant has inappropriately manipulated the input.’’<sup>387</sup> Noting that ‘‘a summary description of the site-specific input parameters in each of the major modeling areas is provided in Section E.1.5.2 of the ER,’’ the Staff faults PW for ‘‘not [having] taken issue with any of these specific inputs, other than raising more general concerns . . . .’’<sup>388</sup> The Staff states that the ‘‘request for a complete input listing appears to be designed to obtain discovery to be used as a basis for additional contentions, and as such, is specifically prohibited by the Commission.’’<sup>389</sup>

The Staff challenges PW’s claims about the sea breeze phenomenon, asserting that PW has not sufficiently shown that:

- (1) the phenomenon is unique to the Pilgrim site and not present at many other coastal sites where MACCS2 has been utilized, (2) the Applicant did not, in fact, model this phenomenon, or (3) the claimed failure to fully characterize or model the phenomenon would result in any meaningful difference in results of the SAMA evaluation or render the site-specific MACCS2 data inadequate.<sup>390</sup>

Arguing in a vein similar to that of Entergy, the Staff maintains that Pilgrim Watch has not shown that Regulatory Guide 1.194, cited by PW as authority for the argument that more data may be required, is applicable to SAMA analysis, nor has it shown ‘‘that additional data is necessary or that the one year of data is insufficient.’’<sup>391</sup> Further, Staff insists:

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<sup>385</sup> *Id.* at 31.

<sup>386</sup> *Id.* (citing NUREG/BR-0184, ‘‘NRC Regulatory Analysis Technical Evaluation Handbook,’’ at 5.38; NUREG/CR-6853, ‘‘Comparison of Average Transport and Dispersion Among a Gaussian, a Two-dimensional, and a Three-dimensional Model, Lawrence Livermore National Laboratory,’’ at 5 (October 2004)).

<sup>387</sup> *Id.* at 30.

<sup>388</sup> *Id.*

<sup>389</sup> *Id.*

<sup>390</sup> *Id.* at 32.

<sup>391</sup> *Id.* (citing Regulatory Guide 1.194, § C.1 at 1.194-3, 1.194-5, and 6; NUREG/CR-6613, Vol. 1, App. A, § A.1 at a-1).

[T]he Petitioner fails to establish why the applicant’s approach is inadequate, and that the petitioner’s “more realistic approach” would have any impact on SAMA results. . . . Nowhere does the petition establish why Entergy’s approach is inadequate or that an alternative approach would have any impact on the SAMA results. Thus, Petitioner has failed to show that the issue is material to the findings or that a genuine dispute exists on a material issue of law or fact.<sup>392</sup>

Finally, regarding PW’s suggestion that Entergy wrongly dismissed the SAMA of adding a filter to the Direct Torus Vent, the Staff argues that Petitioner “fails to establish that a more appropriate treatment of the benefits of the filtered vent would result in the filtered vent becoming cost-beneficial.”<sup>393</sup>

### **3. *Pilgrim Watch Replies to Entergy and NRC Staff***

Pilgrim Watch states that Entergy has “misconstrued the substance of the Petitioner’s contention completely.”<sup>394</sup> PW denies that it challenges NRC regulations, noting that, to the contrary, it quoted and relied on the SAMA regulation.<sup>395</sup> PW notes that it does not argue that mitigation alternatives must be adopted, only that they must be “considered,” as required in the regulation.<sup>396</sup> Regarding its argument that “multiplying the probability of an accident by the consequences of an accident . . . can distort the analysis by making even reasonable mitigation appear more costly than the costs of an accident,” PW points out that this argument is “not central to [its] Contention, which focuses mainly on the input parameters used in the accident modeling software.”<sup>397</sup>

Petitioner suggests further that some of Entergy’s arguments actually support the contention, including its reliance on the *Limerick* decision.<sup>398</sup> It is asserted that the Third Circuit’s recognition in *Limerick* of different risk profiles for plants in densely populated areas as compared to areas of low population actually supports PW’s argument “that the consequences of a severe accident are the important consideration in evaluating the costs and benefits of implementing SAMAs,” and posits that, because Pilgrim is in a densely populated area, the emergency response inputs used for Pilgrim “underestimate evacuation delay times.”<sup>399</sup>

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<sup>392</sup> *Id.* at 33 (footnote omitted).

<sup>393</sup> *Id.*

<sup>394</sup> Pilgrim Watch Reply to Entergy at 12.

<sup>395</sup> *Id.* at 13.

<sup>396</sup> *Id.*

<sup>397</sup> *Id.* at 14.

<sup>398</sup> *Id.* at 14-15.

<sup>399</sup> *Id.*

Petitioner questions Entergy's argument that significant plant modifications are not expected as a result of a SAMA analysis, suggesting that "this is not the 'hard look' required by NEPA," and reiterates that what it is calling for is "further analysis," not, as Entergy suggests, that NEPA requires implementation of particular SAMAs.<sup>400</sup> The bulk of the contention, PW emphasizes, highlights "input data that were incorrect, incomplete or inadequate."<sup>401</sup> Since it does not have access to the input parameters used by Entergy, it cannot show what impact any one defect might have on the results of the SAMA analysis, as Entergy argues it must do, but this is not, PW contends, the same as showing an impact on the outcome of a proceeding, which, along with showing that an alleged deficiency has "some independent health and safety significance," is the correct standard for materiality.<sup>402</sup> PW argues that it has met the requirement of materiality by demonstrating "that there are deficiencies in Applicant's SAMA analysis that, by minimizing the true consequences of severe accidents, could have independent health and safety significance."<sup>403</sup> It cites authority for the principle that "further analysis" is a "valid and meaningful remedy" to call for under NEPA, given that, "[w]hile NEPA does not require agencies to select particular options, it is intended to 'foster both informed decision-making and informed public participation, and thus to ensure the agency does not act on incomplete information, only to regret its decision after it is too late to correct.'"<sup>404</sup>

Petitioner further supports its arguments on the allegedly faulty assumptions in the Pilgrim SAMA analysis, including the sensitivity analysis, by referring to the significant underestimations of evacuation times with regard to Hurricane Katrina (also alluded to in its Petition<sup>405</sup>), suggesting that the Pilgrim assumptions "could be wrong by orders of magnitude."<sup>406</sup> "If the bounding assumption used by the Applicant in its sensitivity analysis underestimates the upper limits of the emergency response data," PW argues, "it is no wonder negligible differences were seen," and it is with regard to the sensitivity analyses that its argument regarding "worst case scenario" is made — not, PW argues, to flout NEPA's rule of reason or to "[distort] the decision making process by overemphasizing highly speculative harms," but "in order to get meaningful results [from] the modeling software and SAMA analysis."<sup>407</sup>

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<sup>400</sup> *Id.* at 15-16.

<sup>401</sup> *Id.* at 16.

<sup>402</sup> *Id.* at 17.

<sup>403</sup> *Id.*

<sup>404</sup> *Id.* at 18 (citing *McGuire/Catawba*, CLI-02-17, 56 NRC at 10).

<sup>405</sup> See PW Petition at 39 n.16.

<sup>406</sup> PW Reply to Entergy at 19; see also PW Petition at 39 n.16.

<sup>407</sup> PW Reply to Entergy at 20 (internal quotations omitted).

With regard to the MACCS2 Code and its limitations, PW argues to the effect that this does not excuse ignoring real issues:

Even though *the software* cannot include the impact of terrain effects, long range dispersion or economic costs beyond mitigative actions, this does not mean that the NRC Regulations allow a proper SAMA analysis to ignore these. If adding in the true economic costs of a severe accident, for example (as discussed in [PW Petition at 43-45] . . . ), would result in a consequence cost several orders of magnitude greater than that from simply the costs of mitigative actions, these costs should be estimated and taken into account.<sup>408</sup>

Pilgrim Watch argues that it has supported its contention with a demonstration that significant input data (meteorological, economic, evacuation-related) that were used for the code may be materially in error, and with reports and other documents that back up the contention.<sup>409</sup>

With respect to Applicant's argument that data from the Pilgrim emergency plan should not be subject to challenge in this proceeding, PW argues that, without challenging the plan itself, "Petitioners can and do challenge the evacuation data used by Applicant in its SAMA analysis," noting a report cited in its original Petition, on the TMI accident, that found that the average distance traveled in evacuation was 85 miles, significantly more than the 10 miles utilized by Entergy in the Pilgrim SAMA analysis.<sup>410</sup> "While the emergency plan may not extend beyond 10 miles," PW suggests, "a realistic input for a SAMA analysis should."<sup>411</sup>

In response to Entergy's argument that PW has not provided any basis to show that the lack of certain economic data in the SAMA analysis would alter the outcome of the analysis, Petitioner notes that it provided a study showing "that tourism accounts for \$11.2 billion in revenues for Massachusetts and the region within 50 miles of Pilgrim is highly dependent on tourism," which is asserted to demonstrate "that just the tourist sector alone would account for costs that

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<sup>408</sup> *Id.* at 21.

<sup>409</sup> *See id.* at 21-23. Noting that both a report offered by PW in the original contention and recent information on the Katrina evacuation suggest high rates of voluntary ("shadow") evacuation and greater distance evacuation than predicted, and noting further that "evacuation from a nuclear plant accident would likely be even more chaotic than evacuation from the path of a hurricane," PW again suggests that "[i]t is therefore very likely that the upper bounds of Applicant's evacuation data are optimistic," and "[t]he fact that a negligible effect was seen in the sensitivity analyses would seem to bear this out rather than confirm Applicant's assumptions." *Id.* at 23.

<sup>410</sup> *See id.* at 23-24.

<sup>411</sup> *Id.* at 24.

dwarf those cited in Applicant's SAMA analysis and would very likely alter the determination of potentially cost beneficial SAMAs."<sup>412</sup>

Pilgrim Watch replies to the Staff's assertion that the contention is not material to these proceedings by insisting, again, that they "have highlighted a deficiency in the application that could have independent health and safety significance" in that "an insufficient SAMA analysis 'could have enormous implications for public health and safety because a potentially cost effective mitigation alternative might not be considered that could prevent or reduce the impacts of that accident.'"<sup>413</sup> Arguing that the Staff has inappropriately focused its attention on PW's lack of an expert to support the admission of its contention, PW notes that it has supported the contention with "facts, sources, and documents," including "experts and reports in the fields of accident modeling, accident modeling software, meteorology, evacuations, and economics."<sup>414</sup> Emphasizing that "whether or not the contention is true is left to be decided at the hearing," PW argues that it has met the requirements of the contention admissibility rule.<sup>415</sup>

On the code, PW quotes the following language from NUREG/BR-0184, the NRC Regulatory Analysis Technical Evaluation Handbook:

Formal methods cannot completely remove subjectivity, guarantee that all factors affecting an issue are considered, produce unambiguous results in the face of closely valued alternatives and/or large uncertainties, or be used without critical appraisal or results. *To use a decision analysis method as a black box decision-maker is both wrong and dangerous.*<sup>416</sup>

Noting that the handbook goes on to observe that the TMI core-damage scenario had not been specifically identified in the PRAs until it had actually occurred, and describes seven categories and levels of uncertainty, PW argues that it has raised areas of uncertainty in data input and modeling, and supported its arguments with expert reports and papers.<sup>417</sup>

PW further argues that Staff has misinterpreted Contention 3 in several respects, including characterizing PW's reference to not having all the Pilgrim SAMA input data as seeking discovery improperly, when PW was merely explaining "why a thorough evaluation by Petitioners of the MACCS2 conclusions is not possible"

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<sup>412</sup> *Id.*

<sup>413</sup> PW Reply to NRC Staff at 11-12 (quoting PW Petition at 28).

<sup>414</sup> *Id.* at 12-13. We note Petitioner's statement at oral argument that it intends to have an expert at a hearing on this contention, if admitted. *See* Tr. at 424.

<sup>415</sup> PW Reply to NRC Staff at 13; *see id.* at 12-13.

<sup>416</sup> *Id.* at 13 (citing NUREG/BR-0184 at 5.1) (emphasis added by PW).

<sup>417</sup> *See id.* at 13-14.

at this point.<sup>418</sup> Pointing out that it cannot be more specific in alleging “an error in the SAMA analysis without having all of the parameters that were used,”<sup>419</sup> and noting with regard to both Entergy’s and the Staff’s responses to Contention 3 that it is not required to prove its contention at this point in the proceeding, PW argues that it has shown “that the Applicant used incorrect meteorological, evacuation, and economic input data to analyze severe accident consequences in a way that caused it to ignore the true radiological and economic consequences of severe accidents and may have caused it to dismiss cost effective mitigation alternatives.”<sup>420</sup>

#### **4. Licensing Board Ruling on Pilgrim Watch Contention 3**

We find this contention, as limited below, to be admissible, based upon the following analysis:

First, SAMAs are clearly within the scope of a license renewal proceeding. Next, to the extent we describe below regarding those portions of the contention we find admissible, PW has provided the required specific statement of the issue raised, along with a sufficient explanation of the basis for the contention, statement of alleged facts that support it, references to specific and relevant sources and documents, and information to show a genuine dispute with the Applicant on a material issue of combined law and fact. While it has not had the benefit of a detailed accounting of the input data used by Applicant in its SAMA analysis, PW has raised questions about certain specific input data to the analysis that are material in three areas, in that they raise significant health and safety issues that affect the outcome of this proceeding. PW seeks further analysis on these points, and if it is determined on the merits that such additional analysis is needed on these points, the renewed license would not be granted until and unless this were provided.

PW has supported its call for further analysis by raising relevant and significant questions about the input data that appears (from the Application) to have been used in the Pilgrim SAMA analysis regarding (1) the evacuation time estimates, (2) the meteorological data that govern the movement of the plume, and (3) the economic impact data; and it has supported arguments to the effect that including

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<sup>418</sup> *Id.* at 14. PW quotes from its Petition as follows:

Without knowing what parameters were chosen by the Applicant, it is not possible to fully evaluate the correctness of the conclusion about [SAMAs]. However, from what is included in the ER, Petitioners have been able to piece together some possible reasons that Entergy’s described consequences of a severe accident at Pilgrim look so small.

PW Petition at 34.

<sup>419</sup> *Id.* at 16.

<sup>420</sup> PW Reply to Entergy at 25; PW Reply to NRC Staff at 17.

more realistic input data might change the SAMA analysis, with information indicating, to the level necessary for contention admissibility, that these particular data may be materially incorrect. Given the limited amount of detail presented in the Application regarding the actual input and assumptions for this analysis, PW cannot reasonably be expected to present specific error margins in computational results.<sup>421</sup> Instead, we find their contention, that use of more accurate input data in these three areas could materially impact the computed outcome, to be reasonable and the possibility intuitively obvious in the absence of actual computations definitively demonstrating otherwise.<sup>422</sup> That is not to say that we find PW has raised admissible challenges as to *all* input data. We do, however, find that the contention, insofar as it challenges the data on these three points and proposes the use of more accurate data relating to evacuation times, economic impacts, and meteorologic plume behavior has been sufficiently raised and supported for the purposes of contention admissibility. Whether or not Pilgrim Watch could ultimately prevail on the issues it raises, we find it has sufficiently supported them to admit this contention.

In particular, the evacuation and economic information provided by Pilgrim Watch would seem reasonably to indicate that different results might have been reached in the SAMA analysis, and the same applies, to an extent, to the

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<sup>421</sup> See Application, ER, Attachment E, § E.1.5.2. We disagree with the Staff that PW in noting the absence of all the input data is improperly seeking discovery, and do not permit, by this ruling, anything of the sort at this point. See Staff Response to PW Petition at 30. In noting this absence, PW is merely pointing out a relevant circumstance that explains its inability to describe to any significant extent the impacts of utilizing different input data.

<sup>422</sup> We note the Applicant's references to the "large conservatisms" in the SAMA analyses and to the results of sensitivity analyses. See *supra* text accompanying note 354. With regard to the former, we note further that the magnitude and effects of these conservatisms are not set out in other than summary fashion. See, e.g., Pilgrim Application, ER at 4-33-4-49. The Applicant has described certain conservative assumptions with regard to the amount of core damage and concomitant release levels; however, the actual impacts of an accident would also be influenced by evacuation information, weather conditions, and the actual localized economic impacts, each of which we find has been appropriately challenged by Pilgrim Watch to a level and with support sufficient to admit this contention with regard to these three areas.

With regard to the sensitivity analyses, Entergy would have us believe that these demonstrate that variation in the input data would have no significant impact on the outcome of the alternatives evaluation. See, e.g., Application, ER, Appendix E at E.1-66-1-68, E.2-11-2.12; Tr. at 378-79, 383-84, 428-29. Those sensitivity analyses, however, were performed only with respect to a few parameters, and the results thereof are only summarized in the Application, so as to make challenge or confirmation impossible in the absence of more detailed information. Moreover, these provide insufficient information or grounds to warrant a finding of no genuine dispute on a material fact, as Applicant urges. Finally, Applicant's assertion brings into play questions of how and to what extent the input used in various computations drive the results, in the context of a fairly complex analysis. These are factual matters inappropriate for determination in the contention admissibility stage of the proceeding.

meteorological data. The merits of these arguments will be tested at future points in the adjudication process; but the merits cannot be considered at this point. The support offered by PW, however, appears to raise reasonable factual questions.

That some of the information provided by PW with regard to evacuation times and related issues of new population numbers and traffic patterns, and the phenomena of “shadow evacuation” and “sheltering in place,” is apparently in conflict with some of the data taken by Applicant from the Pilgrim emergency plan does not, we find, mean that it cannot be considered in the NEPA context in which it is raised in this proceeding. While “emergency planning . . . is one of the *safety issues* that need not be re-examined within the context of license renewal,”<sup>423</sup> what is challenged here is whether particular bits of information taken from such a plan are sufficiently accurate for use in computing the health and safety consequences of an accident, as an *environmental issue*. Such a challenge is not a challenge to existing emergency planning for this plant or to the plan itself, but is instead focused upon the accuracy of certain assumptions and input data used in the SAMA computations and how they affect the validity of the SAMA analysis under NEPA — and as such, we find PW’s challenge to the accuracy of the input data to be appropriate, in the three areas we have noted.

With respect to Entergy’s characterization of PW’s contention as being that “risk is to be ignored [in a SAMA analysis],” to the extent that any part of the contention or basis may be construed as challenging on a generic basis the use of probabilistic techniques that evaluate risk, we find any such portion(s) to be inadmissible. The use of probabilistic risk assessment and modeling is obviously accepted and standard practice in SAMA analyses.<sup>424</sup> In any event, as PW points out in its Reply to Entergy,<sup>425</sup> the focus of the contention, and that part that we admit, is on what input data should be utilized in the SAMA analysis with regard to evacuation times, economic realities, and meteorological patterns, and whether the input data used by the Applicant accurately reflect the respective conditions at issue.

We find that Pilgrim Watch has provided sufficient alleged facts, supported by several expert studies and reports, to demonstrate a genuine dispute with the Applicant on the material factual issues of whether in its SAMA analysis the Applicant has adequately taken into account relevant and realistic data with respect to evacuation times in the area surrounding the Pilgrim plant, economic consequences of a severe accident in the area, and meteorological patterns that would carry the plume in the event of such an accident; and whether as a result the Applicant has drawn “incorrect conclusions about the costs versus benefits of

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<sup>423</sup> *Turkey Point*, CLI-01-17, 54 NRC at 9.

<sup>424</sup> See Entergy Answer to PW Petition at 25-26 (citing *Limerick*, 869 F.2d at 738; *McGuire/Catawba*, CLI-02-17, 56 NRC at 7-8).

<sup>425</sup> See PW Reply to Entergy at 14.

possible mitigation alternatives,”<sup>426</sup> such that further analysis is called for. These are factual questions appropriate for resolution in litigation of this contention.

Based upon the preceding, we admit that part of Contention 3 having to do with the input data for evacuation, economic, and meteorological information. As so limited, the admitted contention reads as follows:

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

**E. Contention 5: New Information Shows That Another 20 Years of Operations at Pilgrim May Result in Greater Offsite Radiological Impacts on Human Health Than Were Previously Known**

Pilgrim Watch in their final contention states as follows:

New and significant information about cancer rates in the communities around Pilgrim and the demographics of these communities has become available. In addition, new studies show that even low doses of ionizing radiation can be harmful to human health. Epidemiological studies of cancer rates in the communities around Pilgrim show an increase of radiation-linked disease that can be attributed to past operations of the plant. The demographics of the population immediately surrounding the plant, including its age and geographical distribution, make this population more susceptible to radiation linked damage than was contemplated when the plant was licensed. Pilgrim does not currently have off-site monitoring capabilities that can properly track releases of radiation into the community.<sup>427</sup>

As with its Contention 4, Pilgrim Watch asserts that the Commission’s regulations implementing NEPA, at 10 C.F.R. Part 51, require Entergy “to provide an analysis of the impacts on the environment that will result if it is allowed to continue beyond the initial license,”<sup>428</sup> thus bringing a contention challenging the Applicant’s Environmental Report within the scope of a license renewal proceeding.<sup>429</sup> PW argues that “[t]he deficiency highlighted in this contention has enormous independent health and safety significance,” thus establishing the materiality of the contention.<sup>430</sup>

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<sup>426</sup> See PW Petition at 26.

<sup>427</sup> *Id.* at 79.

<sup>428</sup> *Id.*

<sup>429</sup> *Id.* at 79-80.

<sup>430</sup> *Id.* at 80.

As bases for its contention PW insists that the contention presents new and significant information that additional years of operations will be harmful to public health.<sup>431</sup> PW refers to various alleged facts and sources, including an NAS report on low-dose radiation risk, *Health Risks from Exposure to Low Levels of Ionizing Radiation: BEIR VII Phase 2* (June 2005) [BEIR VII]; information regarding radiation-linked diseases in communities around Pilgrim; projected demographic data suggesting that the population is at a greater risk; information suggesting that “the documented radionuclide releases from Pilgrim in the past have long half-lives and bioaccumulate in the environment”; and that “the current systems in place to monitor releases are inadequate and should be improved.”<sup>432</sup>

Addressing changing demographics surrounding the Pilgrim Plant, PW argues that the population “abutting Pilgrim is increasing substantially and the population is older and thus more susceptible to radiation damage,” and contends that it will demonstrate “that the dose effect on the population will be far greater than originally anticipated when the plant was licensed.”<sup>433</sup> To support its allegation regarding a projected increase in total population and the population of the aging, PW cites “The Boston Metropolitan Area Planning Council Report on Population and Employment Projections 2010-2030.”<sup>434</sup> An increase in the proportion of the population that is over 55 is relevant, according to PW, because “studies have shown an increased sensitivity to low levels of ionizing radiation in older populations,” and PW has included citations to multiple scholarly works on the topic including a publication titled “Leukemia near nuclear power plant in Massachusetts.”<sup>435</sup> Listed as a coauthor on that publication is Richard Clapp, who PW states could provide expert testimony to support its contention.<sup>436</sup>

PW points to the 1972 FEIS and the current application’s environmental report (stating that radiological releases from PNPS are monitored and comply with NRC regulations), and challenges the proposition that releases do not pose a threat to the public health by insisting that it has “[brought] forward new and significant information that demonstrates that there has *already* been documented radiation linked disease in communities near PNPS.”<sup>437</sup> PW argues that “new information since Pilgrim began operations in 1972 [ ] shows increases in radiation-linked diseases in the communities around Pilgrim,” and states that the increases “were in part attributed to operating with defective fuel; operating without off-gas

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<sup>431</sup> *Id.* at 81.

<sup>432</sup> *Id.*

<sup>433</sup> *Id.* at 82.

<sup>434</sup> *Id.* at 83.

<sup>435</sup> *Id.*

<sup>436</sup> *See id.* at 81.

<sup>437</sup> *Id.* at 84 (emphasis in original).

treatment system in the first years; poor management and practices . . . .”<sup>438</sup> To support its assertion, PW cites studies performed by the Massachusetts Department of Health, an epidemiological study published in the scholarly journal *Lancet* in 1987, and additional analyses performed by Dr. Clapp, founder and former director of the Massachusetts Cancer Registry.<sup>439</sup> These studies, according to PW, demonstrate elevated rates of myelogenous leukemia, thyroid cancer, prostate cancer, and multiple myeloma.<sup>440</sup> Again, PW references the NAS BEIR VII study to insist that no amount of radiation is safe and thus “it is not surprising that radiation-linked disease rates are higher than expected in communities exposed to Pilgrim’s past [radiation] releases.”<sup>441</sup> Building on its claims that the BEIR VII study represents new information regarding the dangers of ionizing radiation at any exposure level, PW claims that the previous standards set by the NRC for offsite radiation do not protect the community surrounding Pilgrim.<sup>442</sup>

Petitioner insists that because the effects of radiation exposure are cumulative, because some radionuclides have extremely long half-lives, and because releases can enter biological food chains and accumulate in the environment, radioactive substances can “remain active in the local environment for the foreseeable future and should be taken into account when actual ongoing doses to the public are evaluated.”<sup>443</sup> PW also argues that the use of allegedly “defective fuel” further exacerbates radiation exposure rates.<sup>444</sup> To support its position PW cites a 1990 report by the Massachusetts Department of Health, concerning the period 1978-1986, as well as statements made in 2005 by NRC Commissioner Merrifield and an NRC Information Notice regarding “Control of Hot Particle Contamination at Nuclear Plants.”<sup>445</sup>

Concluding, PW states that “if Applicant disputes a causal link between the radiation released by Pilgrim and the cancers seen in its neighboring towns, the current systems in place to monitor release are inadequate and should be improved.”<sup>446</sup> In an attached exhibit PW documents some of the perceived deficiencies in the monitoring system currently used by Pilgrim, and states that increased monitoring would allow “state and federal authorities to confidently measure radiation releases.”<sup>447</sup>

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<sup>438</sup> *Id.* at 85.

<sup>439</sup> *See id.* at 85-86.

<sup>440</sup> *See id.*

<sup>441</sup> *Id.* at 87.

<sup>442</sup> *See id.* at 88.

<sup>443</sup> *Id.* at 89.

<sup>444</sup> *Id.*

<sup>445</sup> *See id.* at 89-90.

<sup>446</sup> *Id.* at 90.

<sup>447</sup> *Id.* at 91.

### 1. *Entergy Answer to Pilgrim Watch Contention 5*

Entergy challenges the admission of Pilgrim Watch's Contention #5 by asserting that it is beyond the scope of the license renewal proceeding and challenges the license renewal rules. Further, Entergy insists that the contention fails to provide any "basis demonstrating the existence of a genuine dispute."<sup>448</sup>

At the outset, Entergy insists that the contention "represents a challenge to the scope of the environmental review in 10 C.F.R. § 51.53(c), and to the NRC's generic environmental findings in the GEIS and Appendix B to 10 C.F.R. Part 51," because it is attempting to litigate Category 1 issues for which the Commission has generically addressed in the GEIS.<sup>449</sup> Entergy points to the Commission's generic findings regarding "offsite radiological impacts" incorporated in the regulations in 10 C.F.R. Part 51, App. B, Table B-1, and argues that, absent a waiver, the Petitioner may not challenge these generic findings, regardless of the allegation of "new and significant information." As with PW's Contention 4 and the contention proffered by the Massachusetts Attorney General, Entergy directs the board to the Commission's decision in *Turkey Point*, CLI-01-17, 54 NRC at 17, to support its position that the contention is "excluded from consideration in this proceeding."<sup>450</sup>

Notwithstanding its argument that the contention is an impermissible challenge of Commission regulations, Entergy proceeds to dispute Pilgrim Watch's claims that new and significant information exists regarding the issue of offsite radiological impacts "that would alter the Commission's generic, Category 1 finding."<sup>451</sup> Addressing the BIER VII report, cited by Pilgrim Watch, Entergy claims that because the report "concludes that radiation protection decisions should be based on linear-no threshold hypothesis of dose relationship" and the NRC regulations addressing the issue are also based on the same linear-no threshold hypothesis, the report "provides no basis to alter the generic findings."<sup>452</sup> Turning to Pilgrim Watch's claims regarding a change in the demographics surrounding the plant since the original licensing, Entergy asserts that the argument is irrelevant because the radiological impacts for the period of extended operation are assessed in the GEIS, and thus, the EIS prepared when the plant was originally licensed is not at issue.<sup>453</sup> Next, Entergy asserts that because the 1990 Southeastern Massachusetts Health Study and the Meteorological Analysis of Radiation Releases for the Coastal Areas of the State of Massachusetts for June 3d to June 20th, 1982,

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<sup>448</sup> See Entergy Answer to PW Petition at 56.

<sup>449</sup> *Id.*

<sup>450</sup> *Id.*

<sup>451</sup> *Id.* at 57.

<sup>452</sup> *Id.*

<sup>453</sup> *Id.*

both “predate the GEIS, they are obviously not new information.”<sup>454</sup> Further, Entergy argues, “Pilgrim Watch provides no information suggesting that the studies support a [*sic*] risk estimates that are greater than those used by the NRC in the GEIS.”<sup>455</sup> Continuing, Entergy insists that Pilgrim Watch has provided nothing more than speculation regarding its concerns about the bioaccumulation of radiation at Pilgrim or alleged failures in the Pilgrim radiation monitoring program.<sup>456</sup>

## 2. NRC Staff Response to Contention 5

The Staff contests the admission of Pilgrim Watch’s Contention 5 on the same basic grounds as Entergy; specifically, the Staff argues that the contention is outside the scope of a license renewal proceeding and that the contention represents an impermissible challenge of the Commission’s generic Category 1 findings with respect to public radiation exposure during the license renewal term.<sup>457</sup> As was the case in Entergy’s Response, the Staff also argues that each alleged example of “new and significant information” listed as bases by Pilgrim Watch fails to satisfy the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1).<sup>458</sup>

Although the Staff argues that the “overarching difficulty” with Contention 5 is that it presents a challenge that is outside the scope of the license renewal proceeding, the bulk of its response is focused on refuting each individually listed basis on other grounds.<sup>459</sup> The Staff argues that the PW’s bases and their reliance on the NAS BEIR VII study to argue that “no amount of radiation is safe” represent challenges to the NRC regulations establishing radiation limits in violation of 10 C.F.R. § 2.335.<sup>460</sup> With respect to PW’s arguments that the environmental report is inadequate in that it does not account for changing demographics in the surrounding population, the Staff claims that PW has failed to demonstrate that a genuine dispute exists, as required by 10 C.F.R. § 2.309(f)(1)(vi).<sup>461</sup> This is so, according to the Staff, because Pilgrim Watch’s only *direct* reference to the environmental report is a statement that the ER fails to “highlight” the population and demographic data.<sup>462</sup> What is lacking, according to the Staff, is any direct

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<sup>454</sup> *Id.* at 58.

<sup>455</sup> *Id.*

<sup>456</sup> *See id.*

<sup>457</sup> *See* NRC Staff Response to Pilgrim Watch at 40.

<sup>458</sup> *See id.* at 40-41.

<sup>459</sup> *Id.* at 40-49.

<sup>460</sup> *Id.* at 42, 44-45.

<sup>461</sup> *See id.* at 41.

<sup>462</sup> *Id.*

reference or challenge to a specific aspect of the ER.<sup>463</sup> A similar argument is made in regard to PW's discussion of radiation-linked diseases in communities near Pilgrim and allegations regarding defective fuel.<sup>464</sup>

### 3. *Pilgrim Watch Replies to Entergy and NRC Staff*

Pilgrim Watch reiterates its position that although the contention challenges findings that were part of a generic Category 1 issue, its challenge is not outside the scope of the license renewal proceeding or a challenge to Commission regulations because it has “submitted new information that casts doubt on the generic conclusions regarding off-site radiological exposure as they apply to Pilgrim.”<sup>465</sup> Thus, according to Pilgrim Watch, the new information submitted — including the National Academies *Health Risks from Exposure to Low Levels of Ionizing Radiation: BEIR VII Phase II*, 2005 study, demographic changes in the Pilgrim area, and case-controlled and statistical studies of radiation-linked disease in communities around Pilgrim — obviates its obligation to petition for a waiver under 10 C.F.R. § 2.335(b) before it may challenge generic findings in the GEIS under NEPA.<sup>466</sup>

Next, Pilgrim Watch defends its asserted new and significant information bases.<sup>467</sup> Pilgrim Watch argues that its arguments are supported by “numerous scientific sources” including the NAS, Massachusetts Department of Public Health Commission, epidemiologists from multiple universities, and even the NRC, and thus, the Staff's claims that it lacks a basis in fact or expert opinion are “groundless.”<sup>468</sup> Pilgrim Watch argues that the BEIR VII report presents new information about cancer incidence risk figures and that the studies related to changing demographics and radiation risks demonstrate that the changing population around Pilgrim will have an increased sensitivity to low levels of ionizing radiation.<sup>469</sup> Further, Pilgrim Watch insists that the SMHS presents new information because it was published after the FEIS for Pilgrim, and that the methodology for the study — which Pilgrim Watch argues demonstrates an increased leukemia risk for those individuals with the highest potential for exposure to Pilgrim emissions — has been peer reviewed and approved.<sup>470</sup> Continuing, Pilgrim Watch argues that Entergy has failed to address all the data it has proffered regarding increased can-

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<sup>463</sup> *Id.*

<sup>464</sup> *See id.* 43-44, 47.

<sup>465</sup> PW Reply to Entergy at 30.

<sup>466</sup> *See id.* at 30-31; *see also* PW Reply to NRC Staff at 23.

<sup>467</sup> *See* PW Reply to NRC Staff at 22-26; PW Reply to Entergy at 31-34.

<sup>468</sup> PW Reply to NRC Staff at 22.

<sup>469</sup> *See* PW Reply to Entergy at 32.

<sup>470</sup> *See id.* at 32-33.

cer incidences near Pilgrim, nor has Entergy satisfactorily disputed its assertions regarding bioaccumulation of radionuclides.<sup>471</sup> Addressing its claims regarding deficiencies in Pilgrim’s radiation monitoring program, Pilgrim Watch states that it has provided “sufficient detail about deficiencies in Pilgrim’s monitoring program and reports to demonstrate that Pilgrim cannot provide the necessary data to assure that public health and safety have been, or will be, protected.”<sup>472</sup>

Turning to the BEIR VII report, and the Staff’s assertion that PW’s argument that the report demonstrates there is no safe level of radiation exposure is tantamount to a challenge of Commission regulations, Pilgrim Watch argues that the report was cited as a means to demonstrate “that the radiation that is released on a regular basis from Pilgrim Nuclear Power Plant cannot be assumed to be safe,” not as a challenge of Commission regulations.<sup>473</sup> According to Pilgrim Watch, each of its asserted bases is relevant to whether there are greater offsite radiological impacts than previously assumed and whether the Applicant has adequately addressed the issues raised.<sup>474</sup> Thus, it argues, it has demonstrated that a genuine dispute exists and presented new and significant information that warrant NEPA review.

#### **4. Licensing Board Ruling on Pilgrim Watch Contention 5**

We find that this contention incorporates two related but distinct arguments, neither of which we find to be admissible.

First, Contention 5 reflects the same legal logic as its Contention 4 and the Massachusetts Attorney General’s contention, in that it attempts to challenge generic findings made in the GEIS without a waiver by asserting that it has provided “new and significant information” on the issue. As we rule on Contention 4, such a contention is inadmissible without a waiver of the relevant rule. Here, PW admits that the contention’s challenge regarding the offsite radiological consequences “presents a Category 1 issue,”<sup>475</sup> and we see no need to repeat our analysis regarding the scope of license renewal proceedings and challenges to generic findings for Category 1 issues here. Nor is there any need to reach the question whether PW has proffered “new and significant information” on the issue. For the same reasons as stated with regard to Contention 4 with regard to Category 1 issues, we find Pilgrim Watch Contention 5 to be inadmissible.

In addition to the NEPA-related issues, Contention 5 appears to challenge the

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<sup>471</sup> *See id.*

<sup>472</sup> *Id.*

<sup>473</sup> PW Reply to NRC Staff at 23.

<sup>474</sup> PW Reply to Entergy at 34.

<sup>475</sup> *See id.* at 21.

NRC's dose limit rules found in 10 C.F.R. Part 20 as they apply to Pilgrim. PW's reliance on the BEIR VII conclusion that the all levels of ionizing radiation are harmful, along with its references to the increased vulnerability of the population surrounding Pilgrim, implicates an entirely different regulatory challenge than that found in Contention 4. This argument suggests that, as a matter of safety, the levels of radiation released by PNPS are inappropriate when considered in light of the findings in the BEIR VII report, the studies regarding cancer rates surrounding PNPS, and the increased susceptibility of a growing aged population surrounding PNPS. When pressed at the oral argument, PW conceded that it was not suggesting that radiological releases from Pilgrim are greater than are currently allowed by the NRC regulations.<sup>476</sup> In such circumstances, its contention regarding the radiological releases must necessarily be construed as a challenge to the current NRC dose limit regulations found in 10 C.F.R. Part 20. Again, without a waiver under 10 C.F.R. § 2.335, no request for which has been submitted, such a challenge is impermissible in an adjudication such as this one.

## **VI. CONCLUSION**

In conclusion, although both Petitioners have established standing to participate in this proceeding, the Licensing Board finds that under current controlling law and regulation the Massachusetts Attorney General has not filed an admissible contention and therefore is not admitted as a party in this proceeding. The Licensing Board does, however, find that Pilgrim Watch has filed two admissible contentions and therefore admits it as a party to this proceeding. Should any further developments occur with respect to the pending rulemaking or any other matters that might lead to any different conclusion in this proceeding on the Attorney General's Petition, such that another petition may be timely filed regarding any such matters, any such petition will be considered as may be appropriate at such time.

## **VII. ORDER**

Based, therefore, upon the preceding rulings, findings, and conclusion, it is, this 16th day of October 2006, ORDERED as follows:

A. Pilgrim Watch is admitted as a party and its Request for Hearing and Petition To Intervene is granted in part and denied in part. A hearing is granted with respect to Pilgrim Watch Contentions 1 and 3, as limited and modified in the following form:

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<sup>476</sup> Tr. at 452.

1. The Aging Management program proposed in the Pilgrim Application for license renewal is inadequate with regard to aging management of buried pipes and tanks that contain radioactively contaminated water, because it does not provide for monitoring wells that would detect leakage.
2. Applicant's SAMA analysis for the Pilgrim plant is deficient in that the input data concerning (1) evacuation times, (2) economic consequences, and (3) meteorological patterns are incorrect, resulting in incorrect conclusions about the costs versus benefits of possible mitigation alternatives, such that further analysis is called for.

B. The hearing will be conducted in accordance with the informal adjudicatory procedures prescribed in Subpart L of 10 C.F.R. Part 2. Our ruling in this regard is based on the absence of any request or demonstration, pursuant to 10 C.F.R. § 2.309(g) and in reliance on the provisions of 10 C.F.R. § 2.310(d), that resolution of any admitted contention necessitates the utilization of the procedures set forth in Subpart G of 10 C.F.R. Part 2. Upon an appropriate request, pursuant to 10 C.F.R. § 2.1204(b) and in accordance with the schedule to be set as indicated below, the Licensing Board will allow cross-examination as necessary to ensure the development of an adequate record for decision.<sup>477</sup>

C. The Massachusetts Attorney General's Request for Hearing and Petition To Intervene is denied.

D. The Town of Plymouth may participate in the hearing pursuant to 10 C.F.R. § 2.315(c), through its designated representative, Sheila S. Hollis. The Town shall identify the contention or contentions on which it will participate within twenty (20) days of this Memorandum and Order, or by *November 6, 2006*.

E. Any other interested State, local governmental body, and affected, federally recognized Indian Tribe that wishes to participate in the hearing pursuant to 10 C.F.R. § 2.315(c) shall file a Request and Notice of such intent within twenty (20) days, or by *November 6, 2006*. Any such notice shall, as required by section 2.315(c), contain a designation of a single representative for the hearing, and an identification of the contention or contentions on which it will participate.

F. In the near future the Licensing Board will issue a Memorandum setting forth a schedule of deadlines and events for this proceeding.

G. 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

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<sup>477</sup> See *CAN v. NRC*, 391 F.3d at 351, wherein the First Circuit upheld the validity of the Subpart L regulations on the basis of NRC's representation that the opportunity for cross-examination under 10 C.F.R. § 2.1204(b)(3) of Subpart L is equivalent to the opportunity for cross-examination under the Administrative Procedure Act (APA), 5 U.S.C. § 556(d), i.e., that cross-examination is available whenever it is "required for a full and fair adjudication of the facts."

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

Ann Marshall Young, Chair  
ADMINISTRATIVE JUDGE

Dr. Paul B. Abramson  
ADMINISTRATIVE JUDGE

Dr. Richard F. Cole  
ADMINISTRATIVE JUDGE

Rockville, Maryland  
October 16, 2006<sup>478</sup>

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<sup>478</sup> Copies of this Order were sent this date by Internet e-mail transmission to all participants or counsel for participants.

## APPENDIX

### SUMMARY OF GOVERNING CASE LAW ON CONTENTION ADMISSIBILITY STANDARDS

We address herein how the contention admissibility standards now found in 10 C.F.R. § 2.309(f)(1)<sup>1</sup> have been interpreted by a number of licensing boards and by the Commission, in various NRC adjudicatory proceedings. As indicated in the body of our Memorandum and Order, because a petitioner-intervenor must submit at least one contention meeting these requirements in order to be admitted as a party in an NRC proceeding, how the standards have been interpreted in various NRC case law can be of central, and often determinative, importance in deciding whether petitioners are granted evidentiary hearings in NRC adjudicatory proceedings. Failure of a contention to meet any of the requirements of section 2.309(f)(1) is grounds for its dismissal, and failure of a petitioner — even one found to have standing to proceed under the criteria discussed above — to submit an admissible contention will result in dismissal of its petition and request for hearing.<sup>2</sup> Thus a full understanding of the standards and how they have been applied in prior cases can be critical in any NRC proceeding.

Although we do not represent the following to be an exhaustive consideration of all relevant case law addressing the contention admissibility standards, it does

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<sup>1</sup> Section 2.309(f)(1) states that:

- (1) A request for hearing or petition for leave to intervene must set forth with particularity the contentions sought to be raised. For each contention, the request or petition must:
  - (i) Provide a specific statement of the issue of law or fact to be raised or controverted;
  - (ii) Provide a brief explanation of the basis for the contention;
  - (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;
  - (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
  - (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and
  - (vi) Provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to the specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

<sup>2</sup> See *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999); *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991).

provide a summary of some of the more significant principles that licensing boards are to apply in making determinations on the admission of contentions.

As indicated above, the origin of the current contention admissibility standards was the Commission's determination in 1989 that licensing boards prior to that time had "admitted and litigated numerous contentions that appeared to be based on little more than speculation."<sup>3</sup> On this basis the Commission amended its rules to "raise the threshold for the admission of contentions."<sup>4</sup> More recently the Commission again revised the rules, with a version that became effective in February 2004. These rules contain essentially the same substantive admissibility standards for contentions, but no longer incorporate provisions, formerly found in 10 C.F.R. § 2.714(a)(3), (b)(1), that permitted the amendment and supplementation of petitions and the filing of contentions after the original filing of petitions.<sup>5</sup> The new 10 C.F.R. Part 2 NRC Rules of Practice also contain various changes to provisions relating to the hearing process.<sup>6</sup>

The underlying purposes of the contention admissibility requirements include, as we note above, focusing the adjudication process on disputes "susceptible of resolution" in such context, providing notice of the "specific grievances" of petitioners, and "ensur[ing] that full adjudicatory hearings are triggered only by those able to proffer at least some minimal factual and legal foundation in support of their contentions."<sup>7</sup> In its Statement of Considerations adopting the latest revision of the rules, the Commission reiterated that the standards are "necessary to ensure that hearings cover only genuine and pertinent issues of concern and that the issues are framed and supported concisely enough at the outset to ensure that the proceedings are effective and focused on real, concrete issues."<sup>8</sup>

Considering the various standards individually, along with a section at the end relating to limitations on the content of petitioners' replies to applicant and NRC Staff responses to their contentions, we provide the following summary of some of the case law interpreting subsections (i) through (vi) of 10 C.F.R. § 2.309(f)(1).

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<sup>3</sup> *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001) (citing *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999)).

<sup>4</sup> Rules of Practice for Domestic Licensing Proceedings — Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,168 (Aug. 11, 1989); see also *Oconee*, CLI-99-11, 49 NRC at 334.

<sup>5</sup> Under the current rules, contentions must be filed with the original petition, within 60 days of notice of the proceeding in the *Federal Register* (unless another period is specified). See 10 C.F.R. § 2.309(b)(3)(iii).

<sup>6</sup> As noted above, the First Circuit denied a challenge to the new rules by several public interest groups (supported by several states including Massachusetts) in *CAN v. NRC*, 391 F.3d 338 (1st Cir. 2004), finding that the new procedures "comply with the relevant provisions of the APA and that the Commission has furnished an adequate explanation for the changes." *Id.* at 343.

<sup>7</sup> *Oconee*, CLI-99-11, 49 NRC at 334.

<sup>8</sup> 69 Fed. Reg. 2182, 2189-90 (Jan. 14, 2004).

#### **10 C.F.R. § 2.309(f)(1)(i), (ii)**

Sections 2.309(f)(1)(i) and (ii) require that a petitioner must, for each contention, “[p]rovide a specific statement of the issue of law or fact to be raised or controverted,” and “[p]rovide a brief explanation of the basis for the contention.” The Commission has stated that an “admissible contention must explain, with specificity, particular safety or legal reasons requiring rejection of the contested [application].”<sup>9</sup> It has also been observed that a contention must demonstrate “that there has been sufficient foundation assigned for it to warrant further exploration.”<sup>10</sup> The contention rules “bar contentions where petitioners have only ‘what amounts to generalized suspicions, hoping to substantiate them later.’”<sup>11</sup>

In other words, a petitioner must “provide some sort of minimal basis indicating the potential validity of the contention.”<sup>12</sup> This “brief explanation” of the logical underpinnings of a contention does not, however, require a petitioner “to provide an exhaustive list of possible bases, but simply to provide sufficient alleged factual or legal bases to support the contention.”<sup>13</sup> The brief explanation helps define the scope of a contention — “[t]he reach of a contention necessarily hinges upon its terms coupled with its stated bases.”<sup>14</sup> However, it is the contention, not “bases,” whose admissibility must be determined.<sup>15</sup>

#### **10 C.F.R. § 2.309(f)(1)(iii)**

Petitioners must also, as required by section 2.309(f)(1)(iii), “[d]emonstrate that the issue raised in the contention is within the scope of the proceeding.” A contention must allege facts “sufficient to establish that it falls directly within the scope” of a proceeding.<sup>16</sup> Contentions are necessarily limited to issues that are germane to the application pending before the Board,<sup>17</sup> and are not cognizable unless they are material to matters that fall within the scope of the proceeding

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<sup>9</sup> *Millstone*, CLI-01-24, 54 NRC at 359-60.

<sup>10</sup> See *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-942, 32 NRC 395, 428 (1990) (footnote omitted).

<sup>11</sup> *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 424 (2003) (citing *Oconee*, CLI-99-11, 49 NRC at 337-39).

<sup>12</sup> 54 Fed. Reg. at 33,170.

<sup>13</sup> *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-35, 60 NRC 619, 623 (2004).

<sup>14</sup> *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-899, 28 NRC 93, 97 (1988), *aff'd sub nom. Massachusetts v. NRC*, 924 F.2d 311 (D.C. Cir. 1991).

<sup>15</sup> See 10 C.F.R. § 2.309(a).

<sup>16</sup> *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), LBP-91-19, 33 NRC 397, 412 (1991), *appeal denied on other grounds*, CLI-91-12, 34 NRC 149 (1991).

<sup>17</sup> See *Yankee*, CLI-98-21, 48 NRC at 204 & n.7.

for which the licensing board has been delegated jurisdiction as set forth in the Commission's notice of opportunity for hearing and order referring the proceeding to the Board.<sup>18</sup> A discussion of relevant regulatory and case law on the scope of license renewal proceedings is found in section IV.B, *supra*.

A contention that challenges a Commission rule or regulation is outside of the scope of the proceeding because, absent a waiver, "no rule or regulation of the Commission . . . is subject to attack . . . in any adjudicatory proceeding."<sup>19</sup> Also, any contention that amounts to an attack on applicable statutory requirements must be rejected by a licensing board as outside the scope of the proceeding.<sup>20</sup> A petitioner may, however, within the adjudicatory context submit a request for waiver of a rule under 10 C.F.R. § 2.335. Outside the adjudicatory context, one may also file a petition for rulemaking under 10 C.F.R. § 2.802, or a request that the NRC Staff take enforcement action under 10 C.F.R. § 2.206.

#### **10 C.F.R. § 2.309(f)(1)(iv)**

With regard to the requirement now stated in section 2.309(f)(1)(iv), that a petitioner must "[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," the Commission has defined a "material" issue as meaning one in which "resolution of the dispute would make a difference in the outcome of the licensing proceeding."<sup>21</sup> This means that there must be some link between the claimed error or omission regarding the proposed licensing action and the NRC's role in protecting public health and safety or the environment.<sup>22</sup> The standards defining the "findings the NRC must make to support" a license renewal in this proceeding are set forth at 10 C.F.R. § 54.29.<sup>23</sup>

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<sup>18</sup> See *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-825, 22 NRC 785, 790-91 (1985); *Public Service Co. of Indiana* (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 NRC 167, 170-71 (1976); see also *Commonwealth Edison Co.* (Zion Station, Units 1 and 2), ALAB-616, 12 NRC 419, 426-27 (1980); *Commonwealth Edison Co.* (Carroll County Site), ALAB-601, 12 NRC 18, 24 (1980).

<sup>19</sup> 10 C.F.R. § 2.335(a).

<sup>20</sup> *Philadelphia Electric Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20 (1974).

<sup>21</sup> 54 Fed. Reg. at 33,172.

<sup>22</sup> *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), LBP-04-15, 60 NRC 81, 89 (2004), *aff'd*, CLI-04-36, 60 NRC 631 (2004).

<sup>23</sup> Section 54.29 provides:

§ 54.29 Standards for issuance of a renewed license.

A renewed license may be issued by the Commission up to the full term authorized by § 54.31 if the Commission finds that:

(Continued)

## 10 C.F.R. § 2.309(f)(1)(v)

Contentions must also, as now stated in section 2.309(f)(1)(v):

[p]rovide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue[.]

The requirements of section 2.309(f)(1)(v) have been interpreted to require a petitioner “to provide the analyses and expert opinion showing why its bases support its contention,”<sup>24</sup> and to “provide documents or other factual information or expert opinion that set forth the necessary technical analysis to show why the proffered bases support its contention.”<sup>25</sup> Mere “‘notice pleading’ is insufficient under these standards. A 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.’”<sup>26</sup> Further, a licensing board “may not make factual inferences on [a] petitioner’s behalf,” or supply information that is lacking,<sup>27</sup> but must examine the information, alleged facts, and expert opinion proffered by the petitioner to confirm that it does indeed supply adequate support for the contention.<sup>28</sup> Any supporting material provided by a

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(a) Actions have been identified and have been or will be taken with respect to the matters identified in paragraphs (a)(1) and (a)(2) of this section, such that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB, and that any changes made to the plant’s CLB in order to comply with this paragraph are in accord with the Act and the Commission’s regulations. These matters are:

(1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under § 54.21(a)(1); and

(2) time-limited aging analyses that have been identified to require review under § 54.21(c).

(b) Any applicable requirements of subpart A of 10 CFR part 51 have been satisfied.

(c) Any matters raised under § 2.335 have been addressed.

<sup>24</sup> *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305, *vacated in part and remanded on other grounds*, CLI-95-10, 42 NRC 1, and *aff’d in part*, CLI-95-12, 42 NRC 111 (1995).

<sup>25</sup> *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 180, *aff’d*, CLI-98-13, 48 NRC 26 (1998).

<sup>26</sup> *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003) (quoting *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 208 (2000)).

<sup>27</sup> *Georgia Tech*, LBP-95-6, 41 NRC at 305 (citing *Palo Verde*, CLI-91-12, 34 NRC 149); *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 422 (2001).

<sup>28</sup> *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 48 (1989), *vacated in part on other grounds and remanded*, CLI-90-4, 31 NRC 333 (1990).

petitioner, including portions of the material that are not relied upon, is subject to Board scrutiny.<sup>29</sup>

It is the obligation of the petitioner to present the factual information or expert opinions necessary to support its contention adequately, and failure to do so requires that the contention be rejected.<sup>30</sup> A contention is not to be admitted “where an intervenor has no facts to support its position and where the intervenor contemplates using discovery or cross-examination as a fishing expedition which might produce relevant supporting facts.”<sup>31</sup> As the Commission has explained:

It is surely legitimate for the Commission to screen out contentions of doubtful worth and to avoid starting down the path toward a hearing at the behest of Petitioners who themselves have no particular expertise — or expert assistance — and no particularized grievance, but are hoping something will turn up later as a result of NRC Staff work.<sup>32</sup>

The Commission has also, however, explained that the requirement of section 2.309(f)(1)(v) “does not call upon the intervenor to make its case at [the contention] stage of the proceeding, but rather to indicate what facts or expert opinions, be it one fact or opinion or many, of which it is aware at that point in time which provide the basis for its contention.”<sup>33</sup> A petitioner does not have to provide a complete or final list of its experts or evidence or prove the merits of its contention at the admissibility stage.<sup>34</sup> And, as with a summary disposition motion, the support for a contention may be viewed in a light that is favorable to the petitioner — so long as the admissibility requirements are found to have been met.<sup>35</sup> The requirement “generally is fulfilled when the sponsor of an otherwise acceptable contention provides a brief recitation of the factors underlying the contention or references to documents and texts that provide such reasons.”<sup>36</sup>

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<sup>29</sup> *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 90 (1996), *rev'd in part on other grounds*, CLI-96-7, 43 NRC 235 (1996).

<sup>30</sup> *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 262 (1996); *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155 (1991).

<sup>31</sup> 54 Fed. Reg. at 33,171.

<sup>32</sup> *Oconee*, CLI-99-11, 49 NRC at 342.

<sup>33</sup> 54 Fed. Reg. at 33,170.

<sup>34</sup> *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-35, 60 NRC 619, 623 (2004); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 139 (2004).

<sup>35</sup> See *Palo Verde*, CLI-91-12, 34 NRC at 155; 10 C.F.R. § 2.710(c).

<sup>36</sup> 54 Fed. Reg. at 33,170 (citing *Texas Utilities Electric Co.* (Comanche Peak Steam Electric Station, Unit 1), ALAB-868, 25 NRC 912, 930 (1987)).

**10 C.F.R. § 2.309(f)(1)(vi)**

Finally, Petitioners must, as stated at 10 C.F.R. § 2.309(f)(1)(vi), with each contention:

[p]rovide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

A petitioner must "read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report, state the applicant's position and the petitioner's opposing view," and explain why it disagrees with the applicant.<sup>37</sup> If a petitioner does not believe these materials ad-

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<sup>37</sup> 54 Fed. Reg. at 33,170; *Millstone*, CLI-01-24, 54 NRC at 358. Also, under 10 C.F.R. § 2.309(f)(2):

Contentions must be based on documents or other information available at the time the petition is to be filed, such as the application, supporting safety analysis report, environmental report or other supporting document filed by an applicant or licensee, or otherwise available to a petitioner. On issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant's environmental report. The petitioner may amend those contentions or file new contentions if there are 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 documents. Otherwise, contentions may be amended or new contentions filed after the initial filing only 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.

Other portions of 10 C.F.R. § 2.309 address late-filing and other criteria for contentions and petitions to intervene. Section 2.309(c) provides as follows:

(c) Nontimely filings. (1) Nontimely requests and/or petitions and contentions will not be entertained absent a determination by the Commission, the presiding officer or the Atomic Safety and Licensing Board designated to rule on the request and/or petition and contentions that the request and/or petition should be granted and/or the contentions should be admitted based upon a balancing of the following factors to the extent that they apply to the particular nontimely filing:

- (i) Good cause, if any, for the failure to file on time;

*(Continued)*

dress a relevant issue, the petitioner is to “explain why the application is deficient.”<sup>38</sup>

In contrast to subparagraph (v) of section 2.309(f)(1), which focuses on the need for some factual support for the contention, subparagraph (vi) requires that there be a concrete and genuine dispute appropriate for litigation. A contention that does not directly controvert a position taken by the applicant in the application is subject to dismissal.<sup>39</sup> For example, an allegation that some aspect of a license application is “inadequate” or “unacceptable” does not give rise to a genuine dispute unless it is supported by facts and a reasoned statement of why the application is unacceptable in some material respect.<sup>40</sup> Similarly, an expert opinion that “‘merely states a conclusion (e.g., the application is ‘deficient,’ ‘inadequate,’ or ‘wrong’) without providing a reasoned basis or explanation for that conclusion is inadequate because it deprives the Board of its ability to make the necessary, reflective assessment of the opinion.’”<sup>41</sup>

Although it has been stated that “technical perfection is not an essential element of contention pleading,”<sup>42</sup> and that the “[s]ounder practice is to decide issues

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(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.

<sup>38</sup> 54 Fed. Reg. at 33,170; *Palo Verde*, CLI-91-12, 34 NRC at 156.

<sup>39</sup> See *Texas Utilities Electric Co.* (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 NRC 370, 384 (1992).

<sup>40</sup> See *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-90-16, 31 NRC 509, 521 & n.12 (1990).

<sup>41</sup> *USEC Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006) (citation omitted) (affirming Licensing Board holding that quotations from an unintelligible correspondence with purported expert, with no explanation or analysis of how the expert’s statements relate to an error or omission in the application, are insufficient to support a contention).

<sup>42</sup> *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-3, 53 NRC 84, 99 (2001) (citing *Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), ALAB-549, 9 NRC 644, 649 (1979), in which it is stated that “[i]t is neither Congressional nor Commission policy to exclude parties because the niceties of pleading were imperfectly observed”).

on their merits, not to avoid them on technicalities,”<sup>43</sup> it has also been observed that “a protestant does not become entitled to an evidentiary hearing merely on request, or on a bald or conclusory allegation that . . . a dispute exists. The protestant must make a minimal showing that material facts are in dispute, thereby demonstrating that an ‘inquiry in depth’ is appropriate.”<sup>44</sup> Nonetheless, the strict contention admissibility requirements for a sufficient factual basis “do[] not shift the ultimate burden of proof from the applicant to the petitioner.”<sup>45</sup> Explaining the level of support necessary for an admissible contention, the Commission observed in *Yankee*:

Nor [do the contention admissibility rules] require a petitioner to prove its case at the contention stage. For factual disputes, a petitioner need not proffer facts in “formal affidavit or evidentiary form,” sufficient “to withstand a summary disposition motion.” . . . On the other hand, a petitioner “must present sufficient information to show a genuine dispute” and reasonably “indicating that a further inquiry is appropriate.”<sup>46</sup>

#### **Scope of Petitioner’s Reply Brief**

The Commission has indicated that, under the most recent revision of the contention admissibility rule, a petitioner that fails to satisfy the requirements of the admissibility standards in its initial contention submission may not use its reply to rectify the inadequacies of its petition or to raise new arguments.<sup>47</sup> A petitioner may, however, respond to and focus on any legal, logical, or factual arguments presented in the answers, and the “amplification” of statements provided in an initial petition is legitimate and permissible.<sup>48</sup>

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<sup>43</sup> *South Texas*, ALAB-549, 9 NRC at 649.

<sup>44</sup> *Connecticut Bankers Ass’n v. Board of Governors*, 627 F.2d 245, 251 (D.C. Cir. 1980); see 54 Fed. Reg. at 33,171.

<sup>45</sup> *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 249 (1996) (citing 54 Fed. Reg. at 33,171).

<sup>46</sup> *Id.* (citing *Georgia Tech*, CLI-95-12, 42 NRC at 118); see also *Gulf States Utilities Co.* (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 51 (1994).

<sup>47</sup> See *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-25, 60 NRC 223, 225 (2004) (quoting Final Rule: “Changes to the Adjudicatory Process,” 69 Fed. Reg. 2182, 2203 (Jan. 14, 2004) (reply must be “narrowly focused on the legal or logical arguments presented in the applicant/licensee or NRC Staff answer”)); *Nuclear Management Co., LLC* (Palisades Nuclear Plant), CLI-06-17, 63 NRC 727, 732 (2006). See text accompanying note 5 *supra*.

<sup>48</sup> *Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-04-14, 60 NRC 40, 58, *aff’d*, CLI-04-25, 60 NRC 223 (2004).

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**ATOMIC SAFETY AND LICENSING BOARD**

**Before Administrative Judges:**

**Alex S. Karlin**, Chairman  
**Dr. Thomas S. Elleman**  
**Dr. Richard F. Cole**

**In the Matter of**

**Docket No. 52-008-ESP**  
**(ASLBP No. 04-822-02-ESP)**

**DOMINION NUCLEAR NORTH**  
**ANNA, LLC**  
**(Early Site Permit for North Anna**  
**ESP Site)**

**October 24, 2006**

**SUMMARY DISPOSITION**

Given the Applicant's amendment to its environmental report whereby it changed its cooling method for the proposed reactor from a once-through cooling water system that discharges heated water into the receiving water body to a no-discharge cooling system that uses a combination of wet and dry cooling towers, there remains no genuine dispute that there will be essentially no discharge of heated water, and therefore the Applicant is entitled to summary disposition as a matter of law.

**CONTESTED PROCEEDINGS: TERMINATION; MANDATORY HEARING**

The grant of the motion for summary disposition on the Intervenor's sole remaining contention terminates the contested portion of this proceeding for an Early Site Permit under Part 52. As an ESP permit is a type of construction

permit, a mandatory hearing is required by Atomic Energy Act § 189a and thus the case will continue as an uncontested proceeding.

**MEMORANDUM AND ORDER**  
**(Granting Summary Disposition and Terminating Contested Proceeding)**

Before the Board is a request by Dominion Nuclear North Anna, LLC (Dominion) for summary disposition of Contention EC 3.3.2, “Impacts on Striped Bass in Lake Anna.”<sup>1</sup> For the reasons set forth below, the motion is granted.

**I. BACKGROUND**

**A. Procedural History**

On September 25, 2003, Dominion filed an early site permit (ESP) application, seeking approval to site two new nuclear reactors (Units 3 and 4) at the North Anna nuclear power station in Louisa County, Virginia, where two nuclear power plants have existed and operated since 1978. An ESP is a special type of NRC permit, authorized under 10 C.F.R. Part 52, Subpart A, that can resolve certain environmental, safety, and emergency planning issues related to a proposed site for a reactor. The ESP can be issued long before an applicant actually decides to build, and chooses the specific design of, the nuclear power reactor for that site. If an ESP is granted, the applicant still needs to obtain a construction permit or combined operating license before it can build the nuclear power reactor.

On November 25, 2003, the NRC published a notice of hearing and opportunity for petition for leave to intervene regarding Dominion’s ESP application.<sup>2</sup> The Blue Ridge Environmental Defense League, the Nuclear Information and Resource Service, and Public Citizen (collectively, North Anna Intervenors or Intervenors), filed a timely request for hearing and petition to intervene.<sup>3</sup> The Board, as originally constituted, concluded that the Intervenors had standing and had submitted two admissible contentions.<sup>4</sup> One of those contentions was settled

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<sup>1</sup> Dominion’s Second Motion for Summary Disposition Contention EC 3.3.2 — Impacts on Striped Bass in Lake Anna (Aug. 7, 2006) [Dominion Motion].

<sup>2</sup> 68 Fed. Reg. 67,489 (Dec. 2, 2003).

<sup>3</sup> Hearing Request and Petition To Intervene by [North Anna Intervenors] (Jan. 2, 2004).

<sup>4</sup> LBP-04-18, 60 NRC 253, 270-72, 276 (2004). As originally constituted, the Board consisted of the then-Chief Administrative Judge G. Paul Bollwerk, III, Associate Chief Administrative Judge Anthony J. Baratta (Technical), and Special Associate Chief Administrative Judge Paul B. Abramson (Technical/Legal), 69 Fed. Reg. 15,910 (Mar. 26, 2004). The Board was later reconstituted with its current members. 69 Fed. Reg. 49,916 (Aug. 12, 2004).

in early 2005, leaving Contention EC 3.3.2 as the sole remaining contention in this proceeding.<sup>5</sup> On April 22, 2005, Dominion moved for summary disposition of Contention EC 3.3.2, and on June 16, 2005, the Board granted the motion in part, and denied it in part.<sup>6</sup>

On April 13, 2006, Dominion submitted Revision 6 to its ESP application and environmental report, changing its cooling method for proposed reactor Unit 3 from once-through cooling water to a closed-cycle cooling system using a combination of wet and dry cooling towers. Dominion Motion at 3. On July 6, 2006, the NRC Staff made its supplemental draft environmental impact statement, NUREG-1811, Supp. 1 (July 2006) (SDEIS) available to the public.

## **B. Dominion's Motion**

On August 7, 2006, Dominion filed the current motion for summary disposition pursuant to 10 C.F.R. § 2.1205, claiming that because Dominion had switched to the use of a closed-cycle cooling system for Unit 3 (using a combined wet/dry cooling tower), there will be negligible thermal discharge to Lake Anna and therefore Contention EC 3.3.2 should be dismissed.<sup>7</sup> Dominion Motion at 4. Contention EC 3.3.2 reads as follows:

The 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.

LBP-04-18, 60 NRC at 276. Dominion asserted that the closed-cycle cooling system would reduce or eliminate its discharge of heated water to virtually nil, resulting in no greater than 12.4 cubic feet per second (cfs) discharge of blowdown water. Dominion Motion at 4. This blowdown water would be mixed with 4246

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<sup>5</sup> Contention 3.3.4, "Failure To Provide Adequate Consideration of the No-Action Alternative," was settled and dismissed. Licensing Board Order (Approving Settlement and Dismissal of Contention EC 3.3.4) (Jan. 6, 2005) (unpublished).

<sup>6</sup> 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) [June 2005 Summary Disposition Order]. Summary disposition was granted with regard to proposed Unit 4 because Dominion plans to use a dry cooling system for it and, therefore, it will have no thermal discharge. June 2005 Summary Disposition Order at 10-11.

<sup>7</sup> The early site permit application covers two reactors — Units 3 and 4. Because Dominion's original application specified a dry cooling system for Unit 4 that would have no thermal discharge to Lake Anna, we granted Dominion's motion for summary disposition of Contention EC 3.3.2 with regard to Unit 4. June 2005 Summary Disposition Order at 11.

cfs of circulating water from existing Units 1 and 2, and have a thermal impact of less than 0.1 degree Fahrenheit at the end of the discharge canal. *Id.* Dominion further stated that the reduced evaporation resulting from the reduction in lake surface area associated with the proposed cooling method would produce a lake temperature increase of less than 0.1 degree Fahrenheit. *Id.* at 5. Dominion's motion includes a statement of material facts on which it asserts no genuine dispute exists, and a supporting affidavit from Dr. Patrick J. Ryan.<sup>8</sup>

The North Anna Intervenors oppose the motion for summary disposition.<sup>9</sup> The Intervenors "commend" Dominion for its new closed-cycle cooling system for Unit 3 and acknowledge that the new system "would likely have only insignificant effects on the temperature of water within Lake Anna." Intervenors Response at 2. Further, "[wi]th respect to downstream impacts, Dominion's revised proposal would likely eliminate increases in the temperature of water released over the Lake Anna Dam . . . to the North Anna River."<sup>10</sup>

The Intervenors seek to sustain Contention EC 3.3.2 by arguing that its reference to the impacts of "increased water temperature" are not limited to the impact of discharging warm water, but also include the "increased evaporation of lake water [that] would still occur as a direct result of the operation of the revised cooling system." *Id.* The Intervenors characterize the increased evaporation (and the concomitant decreased volume of discharged water) that would be caused by converting the Unit 3 cooling system from once-through discharges to a closed-cycle cooling system using a combination of wet and dry (evaporation), as a "thermal impact" covered by EC 3.3.2. *Id.*

In support of this proposition, Intervenors cite a footnote in our June 2005 ruling where we stated that the "synergistic impacts of flow and temperature are within the scope of this contention." June 2005 Summary Disposition Order at 10 n.15. Intervenors assert that "[t]o limit consideration of 'thermal impacts' to water temperature increases alone, as Dominion suggests, would preclude consideration of other impacts that are the direct result of steps taken to dissipate the additional thermal load created by operation of Unit 3." Intervenors Response at 6. The Intervenors posit that at the earlier stages of this proceeding, the phrase "thermal impacts" included "the release of heated wastewater into the Lake [that] would have induced evaporative water losses from the Lake, reducing the volume of water in the Lake." *Id.* at 6-7. Now, with the elimination of once-through cooling water and the use of a closed-loop cooling system, the Intervenors accept that the water returned to the lake will not have elevated temperatures, but assert that EC

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<sup>8</sup> Dominion Motion, Patrick J. Ryan Affidavit in Support of Dominion's Motion for Summary Disposition of Contention EC 3.3.2 (July 28, 2006).

<sup>9</sup> Intervenors' Response to Dominion's Second Motion for Summary Disposition of Contention 3.3.2 (Aug. 28, 2006) [Intervenors Response].

<sup>10</sup> *Id.* at 3. As we understand it, water is discharged through the dam, rather than over it.

3.3.2 should include the evaporative water losses caused by the cooling towers. *Id.* at 7. Intervenor's Response includes a statement of material facts that it asserts are in dispute, two supporting affidavits, and two letters from the Commonwealth of Virginia.<sup>11</sup>

On August 28, 2006, the NRC Staff filed an answer supporting Dominion's motion,<sup>12</sup> and on September 6, 2006, Dominion filed an unopposed motion for leave to file a reply and a reply.<sup>13</sup>

## II. LEGAL STANDARD FOR SUMMARY DISPOSITION

The legal standards for summary disposition were described in our June 2005 Summary Disposition Order and need not be reiterated here. *See* June 2005 Summary Disposition Order at 4-6.

## III. ANALYSIS

The Board concludes 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 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. *See* 10 C.F.R. §§ 2.1205(c) and 2.710(d)(2).

The material facts are not in dispute. First, the Intervenor's complained about Dominion's plan to use a once-through cooling system for Unit 3 because of the environmental impacts of discharging heated water into Lake Anna and, thence into the North Anna River. In response, Dominion modified its application to eliminate the discharge of virtually all heated water. The Intervenor's agree that Dominion's revised proposal will likely have "only insignificant effects on the temperature of the water within Lake Anna" and "eliminate increases" downstream. Intervenor's Response at 2.

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<sup>11</sup> Intervenor's Response; Second Affidavit by Dr. Shawn Paul Young, dated August 25, 2006; Declaration by Barry W. Sulkin, dated August 24, 2006; and two letters, dated February 15, 2005, and July 7, 2006, from the Department of Game and Inland Fisheries of the Commonwealth of Virginia to Mr. Charles H. Ellis, III of the Department of Environmental Quality of the Commonwealth of Virginia.

<sup>12</sup> NRC Staff Answer Supporting Dominion's Second Motion for Summary Disposition of Contention EC 3.3.2 (Aug. 28, 2006) [Staff Answer].

<sup>13</sup> Dominion's Motion for Leave To Reply to Intervenor's Response to Dominion's Second Motion for Summary Disposition of Contention EC 3.3.2 (Sept. 6, 2006); Dominion's Reply to Intervenor's Response to Dominion's Second Motion for Summary Disposition of Contention EC 3.3.2 (Sept. 6, 2006).

Turning to Contention EC 3.3.2, it is our firm conclusion that it focuses on environmental “impacts . . . arising *from* increased water temperature” (emphasis added), not the impacts arising from the removal (and evaporation) of water. The contention was founded on the proposition that Dominion’s discharge of water with an increased temperature will have environmental impacts, including higher water temperatures, in Lake Anna and the North Anna River. Footnote 15 in our June 2005 Summary Disposition Ruling merely acknowledges that one of these impacts might include greater evaporation of, and thus less, water in the lake and river. But to say that the discharge of warm water may cause greater evaporation in the lake is not to say that the discharge of less water may cause the lake to warm. Now, the situation has fundamentally changed. Revision 6 to Dominion’s ESP application abandons Dominion’s original approach for cooling Unit 3 and replaces it with a system that will have essentially no thermal impact on Lake Anna. Contention EC 3.3.2 never contemplated, and does not cover, this factual situation.

#### IV. CONCLUSION

For the foregoing reasons, Dominion’s motion for summary disposition on Contention EC 3.3.2, which is the sole remaining contention in this proceeding, is granted.<sup>14</sup> Once final and effective, this Order terminates (1) the contested portion of this proceeding; (2) the party status of the Intervenors, the Blue Ridge Environmental Defense League, the Nuclear Information and Resource Service, and Public Citizen; and (3) the duty of the parties and the NRC Staff to update mandatory disclosures and the hearing file under 10 C.F.R. §§ 2.336 and 2.1203. The mandatory hearing portion of this proceeding will proceed, and awaits the NRC Staff issuance of its final (supplemental) safety evaluation report and final (supplemental) environmental impact statement.

The Intervenors have fifteen (15) days after service of this Order upon them, to file a petition for review with the Commission. 10 C.F.R. §§ 2.1212 and 2.341(b). Otherwise, absent *sua sponte* or other discretionary action by the Commission, this Order shall be final and effective, and constitute the final decision of the Commission with regard to the contested portion of this proceeding, forty (40) days after the date of issuance of this Order. 10 C.F.R. § 2.1210.

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<sup>14</sup> Dominion’s September 6, 2006, motion for leave to file a reply (and the reply itself) were unnecessary and are denied.

It is so ORDERED.

THE ATOMIC SAFETY AND  
LICENSING BOARD<sup>15</sup>

Alex S. Karlin, Chairman  
ADMINISTRATIVE JUDGE

Thomas S. Elleman (by E. Roy Hawkens)  
ADMINISTRATIVE JUDGE

Richard F. Cole  
ADMINISTRATIVE JUDGE

Rockville, Maryland  
October 24, 2006

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<sup>15</sup> Copies of this Order were sent this date by Internet e-mail transmission to counsel for (1) Applicant Dominion, (2) the North Anna Intervenors, and (3) the NRC Staff.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**ATOMIC SAFETY AND LICENSING BOARD**

**Before Administrative Judges:**

**Michael C. Farrar**, Chairman  
**E. Roy Hawkens**  
**Nicholas G. Trikouros**

**In the Matter of**

**Docket No. IA-05-052**  
**(ASLBP No. 06-845-01-EA)**

**DAVID GEISEN**

**October 31, 2006**

The NRC barred David Geisen, a former employee of the Davis-Besse Nuclear Power Station, from engaging in NRC-licensed activities for 5 years, effective immediately. After Mr. Geisen requested a hearing before the Licensing Board to contest the validity of that enforcement order, the NRC Staff gave him a copy of the Office of Investigations (OI) 2003 Report regarding the incident at issue, but redacted parts of the report, claiming “deliberative process” and law enforcement “personal privacy” privileges. On Mr. Geisen’s motion to compel the Staff to produce the full, unredacted version, the Board (1) upholds the Staff’s claim with respect to the deliberative process privilege but (2) rejects it as to the personal privacy privilege (because a protective order can fully preserve the modest privacy interests implicated).

**RULES OF PRACTICE: DISCOVERY**

Parties in NRC adjudications are generally entitled to obtain, through discovery and other pretrial activities, “the fullest possible knowledge of the issues and facts before trial.” *Hickman v. Taylor*, 329 U.S. 495, 501 (1947). *See also* 10 C.F.R. § 2.705(b)(1).

**RULES OF PRACTICE: DISCOVERY**

Qualified privilege materials may be excluded from discovery, depending on the particular circumstances presented. The greater the interest protected by the privilege, the more compelling the need and the other circumstances must be to overcome it.

**RULES OF PRACTICE: CLAIMING OF PRIVILEGE**

An assertion that material can be withheld must expressly state the specific privilege being claimed. A privilege which is not claimed is waived.

**RULES OF PRACTICE: CLAIMING OF PRIVILEGE**

When materials are withheld from discovery, “sufficient information for assessing the claim of privilege or protected status of the documents” must be provided to the requesting party. 10 C.F.R. § 2.336(b)(5). Failure to do so in the future might well lead to consideration of rejection of the claimed privilege.

**RULES OF PRACTICE: DELIBERATIVE PROCESS PRIVILEGE**

The general purpose of the deliberative process privilege is to protect frank agency deliberations from public scrutiny and thus to “prevent injury to the quality of agency decisions.” *National Labor Relations Board v. Sears, Roebuck & Co.*, 421 U.S. 132, 151 (1975).

**RULES OF PRACTICE: DELIBERATIVE PROCESS PRIVILEGE**

Purely factual material is not generally protected by the deliberative process privilege, but exceptions exist. These include (1) factual materials too intertwined with deliberative discussions and (2) summaries of factual materials compiled to assist in agency decisionmaking.

**RULES OF PRACTICE: DELIBERATIVE PROCESS PRIVILEGE**

In order to earn recognition for the deliberative process privilege, a sufficiently high-ranking person must sign the affidavit asserting the privilege.

**RULES OF PRACTICE: DELIBERATIVE PROCESS PRIVILEGE**

The affidavit asserting the deliberative process privilege should provide the basis for the withholding and a statement of specific harm, applicable to the circumstances of the case, that would result from disclosure.

**RULES OF PRACTICE: PERSONAL PRIVACY PRIVILEGE**

The NRC's regulatory scheme for balancing privacy interests (arising in a law enforcement context) against the need for party discovery combines elements of both FOIA and the Federal Rules of Civil Procedure. Privacy interests are defined using FOIA's language but their weight is tempered by the capability in the discovery process of making limited disclosure to a litigant under a protective order instead of public disclosure. The privacy interest that would remain threatened after surrounding it with a protective order is weighed against the other party's need for disclosure.

**DUE PROCESS: EMPLOYMENT-RELATED LICENSES**

The subject of the enforcement action has a property interest in his employment-related license sufficient to invoke the procedural protections of the Due Process Clause, the vindication of which invokes a public interest. *See Barry v. Barchi*, 443 U.S. 55, 64 (1979).

**ENFORCEMENT ACTION: PUBLIC INTEREST**

There is an important public interest in the proper resolution of all aspects of what occurred at a nuclear facility when serious safety and communication issues are involved.

**RULES OF PRACTICE: PERSONAL PRIVACY PRIVILEGE**

Although an initial position of protecting privacy may be founded on mere theoretical constructs, when a fact-based challenge is made, concrete or specific analysis is needed to effectively counter the challenge and to establish the privacy interests involved.

**RULES OF PRACTICE: PERSONAL PRIVACY PRIVILEGE**

Where a protective order precludes public disclosure, the strength of the privacy interest diminishes because any threatened harm in releasing the information can be virtually eliminated.

#### **RULES OF PRACTICE: PROTECTIVE ORDERS**

With a confidential protection order in place, weighing the privacy invasion from public disclosure against a party's need for the materials is no longer appropriate. Instead, there is an assumption that disclosure only to the other parties will only minimally, if at all, harm that interest.

#### **RULES OF PRACTICE: PROTECTIVE ORDERS**

Both federal courts and NRC Boards will normally assume that protective orders will not be breached; to counter that assumption, the withholding party must show evidence of the likelihood of a breach.

#### **RULES OF PRACTICE: DISCOVERY**

The universal understanding of relevance, applicable to the NRC Staff and others, includes matters that "appear[] reasonably calculated to lead to the discovery of admissible evidence." 10 C.F.R. § 2.705(b)(1). *See also* Fed. R. Civ. P. 26(b)(1).

#### **RULES OF PRACTICE: DELIBERATIVE PROCESS PRIVILEGE**

The chilling effect upon frank government discussions can be just as great when the release is limited only to those involved in particular litigation as when the documents are released publicly.

#### **RULES OF PRACTICE: DELIBERATIVE PROCESS PRIVILEGE**

Deliberative process protects several strong interests, including an agency's interest in preserving the integrity of its consultative functions and the public's interest in good government. These protected interests are so strong that federal courts and NRC adjudicators are generally unwilling to compel discovery of deliberative materials unless there is a particular and compelling reason for the privilege to be suspended.

#### **RULES OF PRACTICE: PERSONAL PRIVACY**

The law generally recognizes a personal privacy interest not to have allegations of unlawful activity publicly disseminated after they have been shown to be insubstantial. But a privacy interest does not exist as a generalized theory; instead, it depends on such specific factors as the impact of the information's disclosure upon particular individuals and in particular circumstances.

**RULES OF PRACTICE: PERSONAL PRIVACY**

When the investigation is open and notorious, the interview transcripts are not confidential, and the public has constructive knowledge that those interviewed had a sufficient relationship to the root problem to warrant being interviewed, the right of personal privacy being asserted is weak compared to the privacy rights in other “unsubstantiated allegation” circumstances.

**RULES OF PRACTICE: PROTECTIVE ORDER**

The privacy interests for which protection is sought can be amply preserved by a protective order that limits the disclosures to those involved in this litigation and thus having a need to know.

**RULES OF PRACTICE: PRIVILEGE**

Where the privilege and the need may be equally weak, but the privilege can be protected by other means, we return to the norms of full and open discovery, so that relevancy, not need, becomes the determinative standard.

**ENFORCEMENT ACTION: DISCOVERY**

The subject of an enforcement order may benefit from more knowledge and perspective about others’ roles in an incident because it might help him put his actions in a transactional context that would lessen or eliminate his responsibility for any missteps.

**ENFORCEMENT CASES: FIFTH AMENDMENT**

Although the subject of an NRC enforcement proceeding may attempt to take advantage of his discovery rights in the civil proceeding to obtain information also useful in his criminal proceeding, that is no reason to deny him that discovery because he asserted his Fifth Amendment right not to respond to discovery requests directed to him, even if other procedural consequences might flow from that action.

**MEMORANDUM AND ORDER**  
**(Ruling on Motion To Compel Production)**

This enforcement proceeding, brought against David Geisen, a former employee of the Davis-Besse Nuclear Power Station in northwestern Ohio, stems from events of several years ago involving a serious safety problem at that facility and the accuracy of information regarding that problem that the Licensee filed with this agency. After a detailed inquiry into those events, the NRC Staff's Office of Investigations (OI) compiled for the agency's internal use a report, dated August 22, 2003, about the Licensee's handling of the safety and informational aspects of the matter.

Over 28 months later, the NRC Staff issued an Enforcement Order against Mr. Geisen, charging him, in essence, with contributing to the filing of false reports with the NRC about the safety problem at Davis-Besse. Based on those charges, the immediately effective Order debarred Mr. Geisen from any work in the regulated nuclear industry for 5 years, thus resulting in his removal from his then-current job at another nuclear power plant.

As did two other individuals charged contemporaneously, Mr. Geisen requested a hearing before this Board to contest the validity of the Enforcement Order. In the course of the ongoing discovery process that is leading up to an eventual hearing, the Staff made available to him a redacted copy of the 2003 OI Report, in which it had blacked-out numerous passages on the theory that those redactions involved matters covered by either a "deliberative process" privilege or a "personal privacy" privilege and were thus protected from discovery. After discussions between the parties failed to resolve their dispute over the applicability of the asserted privileges, Mr. Geisen filed with us a motion to compel the Staff to produce the full, unredacted version of the 2003 OI Report.

The matter has been fully briefed, and we heard oral argument on September 6, 2006 (Tr. at 176-284). As agreed, on August 28 the Staff had provided this Board the *unredacted* version of the OI Report for *in camera* inspection prior to the argument. Being thus fully advised in the premises, and in light of the precise nature of the respective redacted passages, we: (1) *uphold* the Staff's claim with respect to the *deliberative process privilege* (the objectives of that privilege are served by the redactions and are not overcome by any overriding need of Mr. Geisen's for the redacted passages); but (2) *reject* it as to the *personal privacy privilege* (a protective order can fully preserve the modest privacy interests implicated, and thus Mr. Geisen's litigative interest in receiving the redacted passages carries the day).

Our reasons for taking this action are explained below. We start in Part I by providing factual information about the setting in which the issues arise. In Part II, we provide the legal background by addressing briefly the tension that generally

exists between the open flow of information achieved through discovery and the restrictions on that flow imposed by privileges. Then, using broad, nonrevealing terms, we describe in Part III the nature of the redactions that were made to the OI Report.

Against that background, we set out in Part IV the legal standards that govern the invocation of the specific privileges at issue here. In Part V, we balance the factors that determine whether the needs of the party seeking disclosure outweigh the privileges claimed by the party opposing disclosure. We state formally in Part VI the result thus reached.

## I. THE SETTING

On August 3, 2001, the NRC issued Bulletin 2001-001, setting out the agency's approach to responding to the emerging problem of "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles." The Bulletin required the licensee of each pressurized water reactor to submit information under oath about its reactor pressure vessel (RPV), including reactor head penetration nozzle leakage and cracking, and to shut down for a special reactor head inspection by year-end.<sup>1</sup>

In response to the Bulletin, employees of the licensee FirstEnergy Nuclear Operating Company (FENOC) at the Davis-Besse Nuclear Power Station supplied certain information to the NRC and, on the basis thereof, requested a 3-month delay of the required inspection until the plant's planned February-March 2002 shutdown.<sup>2</sup> The NRC Staff consented to the delay.<sup>3</sup>

On approximately March 6, 2002, during the scheduled shutdown, FENOC's employees identified a large cavity in the Davis-Besse reactor vessel head, apparently caused by corrosive boric acid released through a crack in or near a control rod guide mechanism nozzle.<sup>4</sup> The corrosion had eaten through the entire 6.63-inch-thick low-alloy steel portion of the head, leaving — as the sole reactor cooling system pressure boundary — certain material not intended to serve that purpose, i.e., the less-than 1/3-inch-thick stainless steel cladding.<sup>5</sup>

Over the next year and a half, the NRC conducted an extensive investigation as

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<sup>1</sup> See David Geisen; Order Prohibiting Involvement in NRC-Licensed Activities (Effective Immediately), 71 Fed. Reg. 2571, 2571-72 (Jan. 17, 2006) [hereinafter Geisen Enforcement Order].

<sup>2</sup> *Id.* at 2572.

<sup>3</sup> *Id.*

<sup>4</sup> See Nuclear Regulatory Commission Office of Investigations, Report of Investigation Re: Davis-Besse Nuclear Power Plant at 29 (Aug. 22, 2003) [hereinafter OI Report]; Geisen Enforcement Order, 71 Fed. Reg. at 2572.

<sup>5</sup> Geisen Enforcement Order, 71 Fed. Reg. at 2572.

to the causes of the reactor head corrosion and the accuracy of the information the company had provided.<sup>6</sup> The OI report, comprising some 250 pages exclusive of exhibits, was issued on August 22, 2003.<sup>7</sup> Among its many conclusions was that FENOC personnel, including Mr. Geisen, had “deliberately provided inaccurate and incomplete information to the NRC in response to NRC Bulletin 2001-01.”<sup>8</sup>

The NRC Staff took no action against Mr. Geisen until 2½ years later, in January of 2006, when it issued an order barring him (and two others) from engaging in NRC-licensed activities for 5 years.<sup>9</sup> That enforcement order, which was immediately effective, alleged that Mr. Geisen had knowingly made incomplete and inaccurate statements to the agency regarding the extent of inspections FENOC was able to make of the vessel head,<sup>10</sup> the number of leaking RPV flanges,<sup>11</sup> and the corrosion of the RPV head due to boric acid.<sup>12</sup> The order further alleged that these statements were material to the agency’s decision to allow Davis-Besse to continue operating for an additional 3 months without shutting down to inspect the head.<sup>13</sup>

Mr. Geisen filed an answer to the enforcement order in February of 2006, denying its primary allegations and requesting a hearing before a Licensing Board.<sup>14</sup> At the outset of the proceeding, on May 19, 2006, this Board rejected the government’s request that Mr. Geisen’s hearing be delayed pending the outcome of the similarly based criminal charges (*see* note 9, above) filed against him by

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<sup>6</sup> See OI Report at 29; *see also* the page of that Report cited in note 7, below.

<sup>7</sup> *Id.* at added unnumbered Nov. 3, 2003 transmittal page (Bates # 30237).

<sup>8</sup> *Id.* at 135.

<sup>9</sup> See Geisen Enforcement Order, 71 Fed. Reg. at 2575. See also Steven Moffitt, Order Prohibiting Involvement in NRC-Licensed Activities (Effective Immediately), 71 Fed. Reg. 2581 (Jan. 17, 2006); Dale Miller, Order Prohibiting Involvement in NRC-Licensed Activities (Effective Immediately), 71 Fed. Reg. 2579 (Jan. 17, 2006). The agency had pursued other individual FENOC employees and a \$5.45 million civil fine against the company itself. See *In the Matter of Andrew Siemaszko*, Order Prohibiting Involvement in NRC-Licensed Activities, 70 Fed. Reg. 22,719 (May 2, 2005); Tom Henry, *FirstEnergy Is Slapped with \$5.45M Fine*, Toledo Blade, Apr. 22, 2005; *FirstEnergy To Pay \$5.45M Fine*, Toledo Blade, Sept. 15, 2005.

For its part, the Department of Justice (1) obtained \$28 million in penalties, restitution, and community service projects from FENOC, as part of an agreement to defer criminal prosecution of the company (News Release, DOJ, “FirstEnergy Nuclear Operating Company To Pay \$28 Million Relating to Operation of Davis-Besse Nuclear Power Station” (Jan. 20, 2006)) and (2) brought criminal charges against Mr. Geisen and other former FENOC employees. See *Indictment, United States v. David Geisen, Rodney Cook, and Andrew Siemaszko*, Case No. 3:06CR712 (N.D. Ohio Jan. 19, 2006).

<sup>10</sup> Geisen Enforcement Order, 71 Fed. Reg. at 2573.

<sup>11</sup> *Id.* at 2574.

<sup>12</sup> *Id.*

<sup>13</sup> *Id.* at 2575.

<sup>14</sup> See [Geisen] Answer and Demand for an Expedited Hearing (Feb. 23, 2006).

the Department of Justice. LBP-06-13, 63 NRC 523 (2006). The Board's decision that the case should move forward was affirmed by the Commission some 2 months later. CLI-06-19, 64 NRC 9 (2006).

While the appeal to the Commission was pending, the discovery process began. Early on in that process, on June 5, 2006, the NRC Staff provided Mr. Geisen and his attorney with some 13,000 documents, including unredacted transcripts of all the interviews, and unredacted copies of all the other exhibits, referenced in the OI Report.<sup>15</sup> The Staff also provided Mr. Geisen with the OI Report itself, but a number of portions were redacted. The Staff asserted that doing so was necessary to protect the Staff's internal deliberative process and the personal privacy of Mr. Geisen's former co-workers.<sup>16</sup>

After corresponding with the NRC Staff regarding the redactions,<sup>17</sup> Mr. Geisen filed a motion to compel production of the unredacted OI Report, or alternatively for the Board to conduct an *in camera* inspection of the report.<sup>18</sup> Prior to oral argument, the parties agreed that we should have the complete report before us to aid our consideration of the matter.<sup>19</sup>

## II. THE TENSION

For well over 60 years, it has been a cornerstone of modern American jurisprudence that civil trials “no longer need to be carried on in the dark.” *Hickman v. Taylor*, 329 U.S. 495, 501 (1947). Instead, parties are entitled to obtain, through discovery and other pretrial activities, “the fullest possible knowledge of the issues and facts before trial.” *Id.* The basic philosophy underlying this requirement is that “prior to trial every party to a civil action is entitled to the disclosure of all relevant information in the possession of any

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<sup>15</sup> See NRC Staff's Answer to David Geisen's Motion To Compel (Aug. 21, 2006) at 1-2 [hereinafter NRC Staff Answer].

<sup>16</sup> *Id.* See also Geisen Motion To Compel (note 18, below) Exhibit 4, Letter from Richard A. Hibey, Counsel to David Geisen, to Sara Brock and Michael Spencer, Office of General Counsel, NRC (June 20, 2006).

<sup>17</sup> See, e.g., exhibits to Geisen Motion To Compel (note 18, below): Exhibit 6, Letter from Michael Spencer, Office of General Counsel, NRC, to Richard A. Hibey, Counsel to David Geisen (July 12, 2006); and Exhibit 7, Letter from Richard A. Hibey, Counsel to David Geisen, to Michael Spencer, Office of General Counsel, NRC (July 19, 2006).

<sup>18</sup> See David Geisen's Motion To Compel the Production, or Alternatively the In Camera Inspection of, the Office of Investigation's Report Dated August 22, 2003 (Aug. 11, 2006) [hereinafter Geisen Motion To Compel]. The Staff filed a responsive brief on August 21 (see note 15, above), to which Mr. Geisen replied on August 28, thus setting the stage for the September 6 oral argument.

<sup>19</sup> See Licensing Board Order (Summarizing Conference Call, Setting Time of Oral Argument, Invoking *In Camera* Review, and Suggesting Discussions Among Counsel) at 2 (Aug. 25, 2006); NRC Staff Notice of Filing Under Seal (Aug. 28, 2006).

person.’’<sup>20</sup> Using the same language as the Federal Rules of Civil Procedure, this agency’s “Subpart G” regulations — which, per 10 C.F.R. § 2.310(b), govern this proceeding — reflect a similar approach to the scope of discovery. *See* 10 C.F.R. § 2.705(b)(1).

There exists one large exception to this foundational principle — matters that are protected by an applicable “privilege.” From the outset, Rule 26 of the Federal Rules of Civil Procedure has specifically excluded privileged materials from the scope of discovery.<sup>21</sup> These privileges “are designed to protect weighty and legitimate competing interests.” *United States v. Nixon*, 418 U.S. 683, 709 (1974).

In the course of applying these privileges, courts have been cognizant that protecting privileged material is in tension with the general principles of discovery. As the Supreme Court explained in *United States v. Nixon*, “these exceptions to the demand for every man’s evidence are not lightly created nor expansively construed, for they are in derogation of the search for truth.” *Id.* at 710. A few years later, the Court again discussed this tension, writing that “evidentiary privileges in litigation are not favored, and even those rooted in the Constitution must give way in proper circumstances.” *Herbert v. Lando*, 441 U.S. 153, 175 (1979).

Reflecting this approach, most privileges today — including those protecting deliberative process<sup>22</sup> and privacy interests<sup>23</sup> — are not absolute. Rather, they are “qualified” and, depending on the particular circumstances of the litigation, may be overcome if the interests on the other side are particularly weighty, or the privilege claim is particularly weak.<sup>24</sup>

Courts often engage in fact-specific balancing to determine the applicability, strength, and persuasiveness of qualified privileges, examining the nature of the

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<sup>20</sup> *See* Charles Alan Wright, Arthur R. Miller, and Richard L. Marcus, *Federal Practice and Procedure* § 2001 (2d ed. 1994). *See also* Fed. R. Civ. P. 26(b)(1).

<sup>21</sup> Fed. R. Civ. P. 26(b)(1) (“Parties may obtain discovery regarding any matter, not privileged, that is relevant to the claim or defense of any party”).

<sup>22</sup> *See United States v. Nixon*, 418 U.S. at 707-11; *In re Sealed Case*, 121 F.3d 729, 737 (D.C. Cir. 1997).

<sup>23</sup> *See Judicial Watch, Inc. v. Food and Drug Administration*, 449 F.3d 141, 153 (D.C. Cir. 2006) (“the privacy interest at stake may vary depending on the context in which it is asserted”); *Armstrong v. Executive Office of the President*, 97 F.3d 575, 582 (D.C. Cir. 1996).

<sup>24</sup> *See United States v. Nixon*, 418 U.S. at 709 (no absolute privilege for the President and other executive branch officials when information is needed for a criminal trial); *Herbert*, 441 U.S. at 175-77 (no absolute privilege for journalists); *Federal Open Market Committee of Federal Reserve System v. Merrill*, 443 U.S. 340, 362 (1979) (no absolute privilege for trade secrets or confidential information).

proceeding,<sup>25</sup> how broadly or narrowly the privilege is being asserted,<sup>26</sup> the need of the parties for the information,<sup>27</sup> and the issues being raised in the trial.<sup>28</sup> The greater the interest protected by the privilege, the more compelling the need and the other circumstances must be to overcome it.<sup>29</sup> In the following Parts of this opinion, we undertake this same type of analysis.

### III. THE REDACTIONS

Our *in camera* review of the OI Report confirmed that, as the Staff had represented, the redactions made were readily traceable to one of the two general privileges the Staff had invoked, one involving deliberative process and the other personal privacy. A word about the general content of each of the two categories of redactions is appropriate at this juncture.

The OI portions redacted under the deliberative process rubric, which protects government decisionmaking, contain factual summaries, analyses, and evaluations. All are predecisional, having been written before any enforcement action was taken against Mr. Geisen and for the purpose of assisting in the decision whether to take such action.<sup>30</sup> Depending on how successive redactions are counted, the deliberative process redactions number close to twenty; some consist of just a paragraph but others cover a page or more. They typically come at the end of sections devoted to one of the several allegations into which the Staff

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<sup>25</sup> See, e.g., *Cheney v. U.S. District Court for District of Columbia*, 542 U.S. 367, 384 (2004) (upholding executive privilege and distinguishing *Nixon* because the proceeding was a civil case, not a criminal one).

<sup>26</sup> Privileges are looked upon more favorably when asserted narrowly and when specific information is given about what is being protected and why. See, e.g., *Resolution Trust Corp. v. Diamond*, 773 F. Supp. 597, 604 (S.D.N.Y. 1991); *United States v. O'Neill*, 619 F.2d 222, 227 (3d Cir. 1980); *United States v. Nixon*, 418 U.S. at 707.

<sup>27</sup> See, e.g., *In re Motion To Unseal Electronic Surveillance*, 965 F.2d 637, 642 (8th Cir. 1992) (“Much of the discovery done in civil suits implicates confidentiality and privacy interests, and courts are often asked to carefully balance these interests with the compelling need for discovery”).

<sup>28</sup> See, e.g., *In re Subpoena Duces Tecum Served on the Office of the Comptroller of the Currency*, 145 F.3d 1422, 1424 (D.C. Cir. 1998) (noting that “if the plaintiff’s cause of action is directed at the government’s intent . . . it makes no sense to permit the government to use the privilege as a shield”); *North Pacifica, LLC v. City of Pacifica*, 274 F. Supp. 2d 1118, 1124 (N.D. Cal. 2003) (the fact that the city government was accused of serious Constitutional violations made use of the deliberative process privilege inappropriate).

<sup>29</sup> See *In re Sealed Case* [1997], 121 F.3d at 737. For instance, a far greater showing of need is required to overcome the presidential communications privilege than must be shown to overcome the deliberative process privilege, because the interest in protecting presidential communications is stronger than the interest in protecting communications among executive branch subordinates. *Id.* at 755.

<sup>30</sup> See NRC Staff’s Answer at 8.

divided the Licensee's overall response to the matter and contain the investigator's analysis and understanding of the incident relating to that allegation and a summary of related interviews.

The personal privacy redactions are premised on the law-enforcement-related notion that individuals who have been the focus of an investigation because of informal allegations should have their identity protected if those allegations are later shown to have been unsubstantiated.<sup>31</sup> Taking this "unsubstantiated allegations" approach, the Staff redacted, we estimate, approximately 30 pages of the 250-page report. In total, then, the personal privacy redactions covered more material than did the deliberative process ones.

We pause to note here, as we did at the oral argument (Tr. at 207), that it appears that some portion of the personal privacy redactions might have also come under the deliberative process umbrella. That is, portions of them appear to include an investigator's summary of an interview; it might conceivably have been claimed, had those at the requisite agency management level provided the proper review and documentation,<sup>32</sup> that such summaries, reflecting the investigator's judgment about which parts of the interview deserved mention and emphasis, were part of the deliberative process.<sup>33</sup> Be that as it may, the Staff did not initially claim that type of privilege for the summaries (nor did it attempt to invoke such a claim belatedly, after we raised the matter at argument), and — in accord with settled principles — any such privilege was thereby waived.<sup>34</sup> Accordingly, we analyze the summaries only in light of the personal privacy privilege that the Staff did claim.

In that regard, although the summaries constitute the bulk of the material redacted, the personal privacy privilege was also invoked to cover much smaller portions in which the name of the person who had been the subject of any unsubstantiated allegations is redacted from wrap-up sentences or paragraphs. Because those portions are essentially *de minimis* (both in volume and in significance) in the context of this proceeding, we do not analyze them separately; instead, we will let the Staff's withholding of them stand or fall along with our resolution

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<sup>31</sup> See *id.* at 12. We note that the Staff also included within the "unsubstantiated" rubric those instances where allegations *were* substantiated but a decision was made not to bring charges. Geisen Motion To Compel at 8, 19 and materials there cited; NRC Staff's Answer at 5 n.9. We address this definitional anomaly later herein (*see* note 121 and p. 395, below).

<sup>32</sup> See discussion at pp. 383-84, below.

<sup>33</sup> See *Montrose Chemical Corp. of California v. Train*, 491 F.2d 63, 70 (D.C. Cir. 1974).

<sup>34</sup> See Fed. R. Civ. P. 26(b)(5) (claims of privilege must be made expressly); Fed. R. Civ. P. 26(b)(5), comments, 1993 amendments (a party's failure to notify the other parties it is withholding materials under a certain privilege is viewed as a waiver). See also *United States v. Anderson*, 79 F.3d 1522, 1531 n.15 (9th Cir. 1996) (noting that it is a party's responsibility to assert the privilege and that the court will not raise the privilege itself).

of the larger “unsubstantiated allegation” personal privacy redactions to which they are logically connected.

#### IV. THE STANDARDS

In this Part, we set out the legal standards that define and limit the reach of the qualified privileges being invoked by the Staff here,<sup>35</sup> including the nature of the showing that must be made if those privileges are to be overcome and disclosure thus obtained. As we do in the next Part as well, we discuss each of the two privileges separately.

##### A. The Deliberative Process Privilege

As with any qualified privilege, determining whether “deliberative process”

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<sup>35</sup> Although we do not rely upon this shortcoming in reaching our decision, the manner by which the NRC Staff asserted both the deliberative process and the personal privacy privileges has raised concern. NRC regulations require that when materials are withheld from discovery, “sufficient information for assessing the claim of privilege or protected status of the documents” be provided to the requesting party. 10 C.F.R. § 2.336(b)(5). It is hard to imagine how a party could accurately assess the privileges asserted from the Staff’s merely indicating that, “Unsubstantiated Allegations Withheld To Protect Personnel [*sic*] Privacy” and “agency’s analysis withheld.” Geisen Motion To Compel, Exhibit 3, Personal Privacy Log (June 5, 2006) and Exhibit 2, Deliberative Process Log (June 5, 2006). Similarly, which areas are redacted and for what reasons was not indicated. *See id.*

The Staff’s argument (*see* NRC Staff Answer at 10, 11-12) that both logs had sufficient detail because Mr. Geisen was able to compile a table regarding the redactions is simply incorrect. That table was simply an index that lacked a log’s descriptive information; that opposing counsel was able to prepare even that much, drawing on information from related cases (*see* Tr. at 196-97), does not excuse the party claiming a privilege from the obligations imposed on it (*cf. Vaughn v. Rosen*, 484 F.2d 820, 825-27 (D.C. Cir. 1973), *cert. denied*, 415 U.S. 977 (1974) (expressing no doubt as to which entity should bear those burdens).

In that regard, another Licensing Board addressed similar inadequacies in the past, writing last year that “[t]he fact that the Staff puts a document on a privilege log, and thus labels a document as deliberative is not sufficient to assess whether it is.” *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-05-33, 62 NRC 828, 839 (2005). *See also* Second Case Management Order (Pre-License Application Phase Document Discovery and Dispute Resolution), ASLBP No. 04-829-01-PAPO (July 8, 2005), Appendix C, D (specifying the many pieces of information required in the deliberative process and privacy privilege logs).

We remind the Staff, the party claiming privilege here, of the need to comply with section 2.336(b)(5) by presenting at the outset adequate privilege logs, including more detailed information regarding the location of and reason for any redactions. (*See also* the illuminating discussion, in an analogous context, in *Vaughn v. Rosen*, above, 484 F.2d at 827-28.) Failure to do so in the future might well lead to consideration of rejection of the claimed privilege. *Cf., e.g., Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-35, 60 NRC 619, 621-23 (2004) (strictly applying other regulatory requirements regarding the content of party pleadings).

redactions in a government document, like the OI Report, may be withheld from the discovery process involves a two-step analysis. There must first be an inquiry into whether the redactions qualify for the privilege, so as to be exempt from public disclosure under the applicable provision of the NRC's Rules of Practice, 10 C.F.R. § 2.390 (which tracks the language of the Freedom of Information Act (FOIA)).<sup>36</sup> We conduct that analysis in this Section of Part IV.

If the redacted portions would be exempt from disclosure under FOIA to a member of the public, then the analysis turns to the three other factors found in 10 C.F.R. § 2.709(d) — and the “overriding need” test (specific to the deliberative process privilege) reflected in Commission precedents — to evaluate whether the documents should be released as discoverable despite the privilege.<sup>37</sup> We defer that analysis to Part V of this opinion.

The NRC Staff has argued that parts of the OI report are excluded from public disclosure under 10 C.F.R. § 2.390(a)(5), which exempts from public disclosure NRC “interagency or intra-agency memoranda or letters which would not be available by law to a party.”<sup>38</sup> This exemption is identical to Exemption 5 in FOIA; it is meant to encompass the common-law discovery exemptions for attorney work product (not involved here) and government deliberative process.<sup>39</sup>

The general purpose of the deliberative process privilege is “to prevent injury to the quality of agency decisions”<sup>40</sup> and to do so by “ensur[ing] that the mental processes of decision-makers are not subject to public scrutiny.”<sup>41</sup> In creating the FOIA exemptions, Congress acted on a belief that government decisions are better made when staff members are able to share ideas and opinions frankly, rather than operating “in a fishbowl.”<sup>42</sup> The Supreme Court summarized the privilege’s rationale in the following fashion:

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<sup>36</sup> Both Licensing and Appeal Boards have noted this similarity and looked to FOIA cases and the balancing tests they employ for guidance on issues of public disclosure. *See, e.g., Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-773, 19 NRC 1333, 1341 n.30 (1984); *Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit 1), LBP-81-50, 14 NRC 888, 892 (1981).

<sup>37</sup> *See* 10 C.F.R. § 2.709(d); *Georgia Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), CLI-94-5, 39 NRC 190, 198 (1994) (discussing the “overriding need” test with respect to deliberative process materials). *See also* 10 C.F.R. § 2.700 (“The provisions of this subpart apply to and supplement the provisions set forth in subpart C of this part with respect to enforcement proceedings initiated under subpart B of this part . . .”).

<sup>38</sup> *See* NRC Staff Answer at 6.

<sup>39</sup> *See* *Vogtle*, CLI-94-5, 39 NRC at 197. *See also* 5 U.S.C. § 552(b)(5) (FOIA exceptions).

<sup>40</sup> *National Labor Relations Board v. Sears, Roebuck & Co.*, 421 U.S. 132, 151 (1975).

<sup>41</sup> *Montrose Chemical*, note 33, above, 491 F.2d at 70.

<sup>42</sup> *Hinckley v. United States*, 140 F.3d 277, 285 (D.C. Cir. 1998). *See also* *First Eastern Corp. v. Mainwaring*, 21 F.3d 465, 468 (D.C. Cir. 1994).

The deliberative process privilege rests on the obvious realization that officials will not communicate candidly among themselves if each remark is a potential item of discovery and front page news, and its object is to enhance the quality of agency decisions, by protecting open and frank discussion among those who make them within the Government.<sup>43</sup>

Rooted in common law, variations on the deliberative process privilege doctrine are thought to have been used in American courts since “the beginnings of our nation.”<sup>44</sup> Federal courts “have long recognized the sanctity of the decision-making process, absent discernible likely gross abuse.”<sup>45</sup> Similarly, all levels of adjudicators in this agency — the Commission, the former Appeal Board, and the Licensing Board — have consistently applied the deliberative process privilege.<sup>46</sup>

Precedents under both FOIA’s Exemption 5 and the NRC’s section 2.390(a)(5) require that a document be predecisional and deliberative to be categorized as deliberative process.<sup>47</sup> A document is predecisional when it was “prepared *before* the adoption of an agency decision and specifically prepared to assist the decisionmaker in arriving at his or her decision.”<sup>48</sup> Materials “are deliberative if they reflect a consultative process.”<sup>49</sup> Early in FOIA’s existence, the Supreme Court gave a general definition to the exemption’s scope:

Exemption 5, properly construed, calls for disclosure of all opinions and interpretations which embody the agency’s effective law and policy, and the withholding of all papers which reflect the agency’s group thinking in the process of working out its policy and determining what its law shall be.<sup>50</sup>

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<sup>43</sup> *Department of Interior v. Klamath Water Users*, 532 U.S. 1, 8-9 (2001).

<sup>44</sup> See *In re Sealed Case* [1997], 121 F.3d at 736.

<sup>45</sup> *Montrose Chemical*, 491 F.2d at 69. The primary exception to the privilege is waiver: if the agency has chosen “expressly to adopt or incorporate by reference [a] . . . memorandum previously covered by Exemption 5 in what would otherwise be a final opinion,” that voluntary change of status would waive the exemption. See *National Council of La Raza v. Department of Justice*, 411 F.3d 350, 356-57 (2d Cir. 2005). It has not been argued that such circumstances apply here.

<sup>46</sup> See, e.g., *Vogtle*, CLI-94-5, 39 NRC at 197; *Shoreham*, ALAB-773, 19 NRC at 1341-42; *Consumers Power Co.* (Midland Plant, Units 1 and 2), ALAB-634, 13 NRC 96 (1981); *Vermont Yankee*, LBP-05-33, 62 NRC at 839.

<sup>47</sup> See *Renegotiation Board v. Grumman Aircraft Engineering Corp.*, 421 U.S. 168, 186 (1975) (FOIA); *Vogtle*, CLI-94-5, 39 NRC at 197 (§ 2.390).

<sup>48</sup> *Vogtle*, CLI-94-5, 39 NRC at 197.

<sup>49</sup> *Id.* at 198. See also *Vermont Yankee*, LBP-05-33, 62 NRC at 843; *Playboy Enterprises, Inc. v. Department of Justice*, 677 F.2d 931, 937 (D.C. Cir. 1982) (“conclusions, recommendations, opinions, or advice” may properly be withheld).

<sup>50</sup> *NLRB v. Sears, Roebuck & Co.*, 421 U.S. at 153 (internal citations omitted).

In this context, policy and lawmaking are not narrow terms; instead, depending on the circumstances, they can be viewed as including “most decisions of government agencies.”<sup>51</sup>

Purely factual material is not generally protected by the deliberative process privilege,<sup>52</sup> but exceptions to this general rule exist.<sup>53</sup> For example, where the factual material “is so inextricably intertwined with the deliberative sections of documents that its disclosure would inevitably reveal the government’s deliberations,” that material is protected by the privilege.<sup>54</sup>

Similarly, *summaries* of factual information may be protected in certain circumstances.<sup>55</sup> In *Montrose Chemical* (note 33, above), the D.C. Circuit held that summaries of a hearing record prepared for the EPA Administrator (to aid him in making a decision at the end of a lengthy adjudication on the continued registration of the pesticide DDT) were protected because “[t]o probe the summaries of record evidence would be the same as probing the decision-making process itself.”<sup>56</sup> Other Courts of Appeals have likewise found summaries to be covered by the privilege when the disputed documents are “factual summaries that were written to assist the making of a discretionary decision”<sup>57</sup> (but not when the summary was written only to inform or to prepare an official before a public appearance or briefing<sup>58</sup>).

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<sup>51</sup> *Russell v. Department of the Air Force*, 682 F.2d 1045, 1047 (D.C. Cir. 1982); see *Hinckley*, 140 F.3d at 281 n.1 (discussing Mr. Hinckley’s misunderstanding that the deliberative process privilege applied only to policymaking). See also *Shoreham*, ALAB-773, 19 NRC at 1341 (“The privilege is not limited to policymaking, however. Rather, it may attach to ‘the deliberative process that precedes most decisions of government agencies.’”) (internal footnote omitted).

<sup>52</sup> See *Environmental Protection Agency v. Mink*, 410 U.S. 73, 91 (1973).

<sup>53</sup> See *Mapother v. Department of Justice*, 3 F.3d 1533, 1538 (D.C. Cir. 1993) (“[T]he fact/opinion test, while offering a quick, clear, and predictable rule of decision, is not infallible and must not be applied mechanically”) (internal citation omitted).

<sup>54</sup> *In re Sealed Case* [1997], 121 F.3d at 737.

<sup>55</sup> See *Montrose Chemical*, 491 F.2d at 71 (applying the deliberative process privilege to summaries of factual materials); *Russell*, 682 F.2d at 1049 (applying the privilege to draft versions of certain Air Force histories); *Dudman Communications Corp. v. Department of the Air Force*, 815 F.2d 1565, 1569 (D.C. Cir. 1987) (applying the privilege to draft versions of other Air Force histories). See also *National Wildlife Federation v. U.S. Forest Service*, 861 F.2d 1114, 1119 (9th Cir. 1988) (“[W]henver the unveiling of factual materials would be tantamount to the publication of the evaluation and analysis of the multitudinous facts conducted by the agency, the deliberative process privilege applies”).

<sup>56</sup> 491 F.2d at 68.

<sup>57</sup> *Mapother*, 3 F.3d at 1539.

<sup>58</sup> See *Playboy Enterprises*, 677 F.2d at 936 (distinguishing the protected summaries in *Montrose Chemical* from an unprotected document in which facts were summarized “only to inform the Attorney General of facts which he in turn would make available to members of Congress”). See also *Mapother*, 3 F.3d at 1539 (distinguishing between *Montrose Chemical* and *Playboy Enterprises* on the basis of the report’s purpose for the agency official).

In order to earn recognition, the deliberative process privilege must also be asserted in a particular way. That is, a qualified person, “such as the head of the department or division, having both expertise and an overview-type perspective concerning the balance between the agency’s duty of disclosure versus its need to conduct frank internal debate,”<sup>59</sup> must sign an affidavit asserting the privilege. Here, Guy Caputo, the Director of the NRC’s Office of Investigations, provided Mr. Geisen with such an affidavit.<sup>60</sup> In the absence of any challenge as to whether his position was sufficiently above the fray, we find that Mr. Caputo possesses the requisite responsibility and oversight to claim the privilege on behalf of the Staff.

In analogous circumstances, such an affidavit must provide the basis for the withholding and “a specific statement of the harm that would result if the information sought to be withheld is disclosed to the public.”<sup>61</sup> The Staff affidavit addresses this matter, but the statement of the alleged harm from disclosure lacks force in major respects: two of three dangers identified (the first and the last) seem patently nonapplicable here, in that they involve a supposed threat that the Staff’s preliminary views could be confused with the actual policy later adopted and could give rise to a suggestion that those preliminary views were the final agency action.

Although those arguments might have carried some weight while internal Staff deliberations were ongoing, the agency had already taken its final action in this matter<sup>62</sup> many months before the creation of the affidavits relied upon here. So any source of confusion about the preliminary views and their lack of official status had long since been eliminated.

More importantly, the notion that Licensing Board judges — presumably more discerning than lay jury members — would confuse the 2003 preliminary Report assessments with the 2006 ultimate Staff conclusions seems a product of attempting to force a general principle into a particular setting that it is obviously neither designed nor intended to fit.<sup>63</sup> We remind the Staff that the regulations require that a specific, not a generalized, statement of harm be provided to the party requesting discovery; we expect that all aspects of any such future statements will be applicable to the matter at hand.<sup>64</sup>

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<sup>59</sup> *Vermont Yankee*, LBP-05-33, 62 NRC at 846-47. See also *Marriott International Resorts v. United States*, 437 F.3d 1302, 1306 (D.C. Cir. 2006) (allowing an agency head to delegate the authority to invoke the deliberative process privilege to an appropriate supervisor).

<sup>60</sup> See Geisen Motion To Compel Exhibit 6, Affidavit of Guy P. Caputo (Apr. 25, 2006), and NRC Staff Answer Attachment B, Affidavit of Guy P. Caputo (Aug. 17, 2006).

<sup>61</sup> 10 C.F.R. § 2.390(b)(1)(ii), applicable to those seeking protection for documents being submitted to the agency.

<sup>62</sup> See Enforcement Order, 71 Fed. Reg. at 2571. Cf. *Vogtle*, note 91, below.

<sup>63</sup> See Tr. at 223.

<sup>64</sup> See 10 C.F.R. § 2.390(b)(1)(ii); see also last paragraph of note 35, above.

That leaves the third reason. Albeit conclusory in nature, it does serve as support for the claim of privilege here. Specifically, the Caputo affidavits assert that “forced disclosure of [the Staff’s] internal discussion could serve to chill future deliberations and could interfere with its ability to engage in free exchange of opinions and analyses.”<sup>65</sup> It is not disputed that the investigators’ analyses in the OI Report were created as frank assessments of the situation to aid their superior’s decisionmaking. As discussed above, this operational frankness is a needed aspect of government decisionmaking that can easily be chilled by public disclosure.<sup>66</sup>

## **B. The Personal Privacy Privilege**

As was done with the privilege at issue in the previous Section, the privacy privilege must first be analyzed under the NRC regulatory exemption and the comparable FOIA exemption. This we do now, including consideration of whether, and if so to what extent, privacy interests might be preserved by use of a protective order narrowly circumscribing release of any privileged information. As before, we defer our “balancing” analysis to Part V of this opinion, where we consider the other three factors reflected in 10 C.F.R. § 2.709(d) (*see pp. 393-94, below*).

This agency’s regulatory scheme for balancing privacy interests (arising in a law enforcement context) against the need for party discovery combines elements of both FOIA and the Federal Rules of Civil Procedure. Privacy interests are defined using FOIA’s language<sup>67</sup> but their weight is tempered by the capability in the discovery process of making *limited disclosure* to a litigant under a protective order, as contrasted with making the FOIA-required *unconditional release* to a member of the public.<sup>68</sup> The privacy interest, if any, that would remain threatened after surrounding it with a protective order must then be weighed against the other party’s need for disclosure (similar to what is done under the Federal Rules of Civil Procedure), rather than have the broadscale, unprotected privacy interest

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<sup>65</sup> See affidavits cited in note 60, above.

<sup>66</sup> See *Klamath Water Users*, 532 U.S. at 8-9; and discussion at pp. 380-81, above.

<sup>67</sup> Compare 5 U.S.C. § 552(b)(7)(C) with 10 C.F.R. § 2.390(a)(7)(iii).

<sup>68</sup> See 10 C.F.R. § 2.705(c) (authorizing protective orders). Federal courts have described the relationship between FOIA and discovery requests as such:

The FOIA acts as a “floor” when discovery of government documents is sought in the course of civil litigation. Though information available under the FOIA is likely to be available through discovery, information unavailable under the FOIA is not necessarily unavailable through discovery.

*Friedman v. Bache Halsey Stuart Shields, Inc.*, 738 F.2d 1336, 1344 (D.C. Cir. 1984).

measured against the consequences of FOIA's command of unfettered public disclosure.

Against the foregoing general background, we turn to the NRC regulations, which exempt from public disclosure information compiled for law enforcement purposes that "[c]ould reasonably be expected to constitute an unwarranted invasion of personal privacy" and thus parallels FOIA's law enforcement privilege.<sup>69</sup> When determining whether documents should be withheld on the basis of this exemption, federal courts have looked to balance "the private interest involved (namely, the individual's right of privacy) against the public interest."<sup>70</sup>

To make this balancing determination under FOIA, federal courts have first examined the strength of the privacy interest, which will vary according to context.<sup>71</sup> For example, the United States Court of Appeals for the District of Columbia Circuit uses a ten-point test for evaluating the law enforcement privilege under FOIA.<sup>72</sup> These points include an assessment of how disclosure will thwart governmental processes "by discouraging citizens from giving the government information" and chilling governmental self-evaluation,<sup>73</sup> the impact upon the individuals identified, the kind of information sought, whether the law enforcement investigation has been completed, whether the person seeking the discovery is a defendant or suspect in a criminal proceeding, whether the information

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<sup>69</sup> See note 67, above.

<sup>70</sup> *Judicial Watch, Inc. v. FDA*, 449 F.3d at 153 (internal citations omitted). In FOIA cases, the public interest is to open agency action to public scrutiny. *Id.* The NRC Staff incorrectly claims that the disclosures Mr. Geisen seeks have no public interest implications associated with them. See NRC Staff Answer at 13. In the first place, this being a highly regulated industry with enormous public safety responsibilities lodged in both the private and public sectors, there is a strong public interest in the proper resolution of all aspects of what occurred at Davis-Besse. See also our related analysis in LBP-06-13, 63 NRC at 555 n.113, concerning the public interest in the fair resolution of matters the government puts before judicial tribunals. And Mr. Geisen has a property interest in his employment-related license sufficient to invoke the procedural protections of the Due Process Clause, the vindication of which certainly invokes a public interest. See *Barry v. Barchi*, 443 U.S. 55, 64 (1979) (a horse trainer's license is property and its suspension must include due process protections). See also *Bell v. Burson*, 402 U.S. 535, 539 (1971) (driver's licenses cannot be taken away without due process protections).

<sup>71</sup> See *Judicial Watch, Inc. v. FDA*, 449 F.3d at 153 ("the privacy interest at stake may vary depending on the context in which it is asserted"). See also *Armstrong*, 97 F.3d at 582; *Lame v. U.S. Department of Justice*, 654 F.2d 917, 923 (3d Cir. 1981).

<sup>72</sup> See *In re Sealed Case*, 856 F.2d 268, 272 (D.C. Cir. 1988). See also *Tuite v. Henry*, 98 F.3d 1411, 1417-18 (D.C. Cir. 1996) (applying the ten-point test). This test has also been used by a number of district courts. See, e.g., *Anderson v. Marion County Sheriff's Department*, 220 F.R.D. 555, 563-64 (S.D. Ind. 2004); *Mueller v. Walker*, 124 F.R.D. 654, 656-67 (D. Or. 1989); *Spell v. McDaniel*, 591 F. Supp. 1090, 1116 (E.D.N.C. 1984), *aff'd in part and vacated and remanded in part, both on unrelated grounds*, 824 F.2d 1380 (4th Cir. 1987).

<sup>73</sup> *In re Sealed Case* [1988], 856 F.2d at 272.

is available from other sources, and the importance of the information.<sup>74</sup> Such a multifaceted analysis recognizes the extraordinary variability possible in the strength of a privacy interest and the degree to which it should be protected,<sup>75</sup> and warrants close analysis of the specific circumstances behind a privilege claim.

Intrinsic to such analyses of the FOIA exceptions is an assessment of harm based on public disclosure;<sup>76</sup> subsection 2.390(a)(7)(iii) of our regulations is also premised on such a public release of information.<sup>77</sup> Assuming such public disclosure, the redacted material in the OI Report might, depending on a FOIA court's assessments of the D.C. Circuit's ten-point test or a similar test, meet these exemption standards. On this score, federal courts have indeed found that third parties who were not charged have a legitimate privacy right not to be identified in law enforcement documents that are disclosed to the public.<sup>78</sup>

Without such public disclosure, the strength of the privacy interest diminishes because the "actual harm" in releasing the information can be virtually eliminated.<sup>79</sup> For instance, in *Whalen v. Roe*, the Supreme Court found that a New York program tracking sensitive information about patients' drug prescriptions did not violate the patients' right of privacy because there would be no public disclosure of the information outside of the State government.<sup>80</sup> Similarly, the Third Circuit mandated that a company turn over the personal health information of its employees to a government agency, despite the strong privacy interests involved, because the agency had provided "sufficiently adequate assurance of

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<sup>74</sup> *Id.*

<sup>75</sup> The Staff argues that the amended language of the exemption means it "does not need concrete or specific evidence that release of unsubstantiated allegations would constitute an unreasonable invasion of personal privacy." NRC Staff Answer at 11 n.18. The Staff does not cite any case law for what seems — in light of the D.C. Circuit's practice of specifically assessing the harm to an individual when considering the 7(C) law enforcement exemption (see *In re Sealed Case* [1988], 856 F.2d at 272) — to be an overly broad interpretation. Although an initial position of protecting privacy may be founded on mere theoretical constructs, an effective counter to a fact-based challenge would seem to depend upon "concrete or specific" analysis.

<sup>76</sup> See *In re Sealed Case* [1988], 856 F.2d at 272; 5 U.S.C. § 552(b) (FOIA exemptions).

<sup>77</sup> That regulation specifies the documents that are exempt from public inspection.

<sup>78</sup> See *SafeCard Services, Inc. v. Securities and Exchange Commission*, 926 F.2d 1197, 1205 (D.C. Cir. 1991) (with regard to names and addresses, "Exemption 7(C) affords broad privacy rights to suspects, witnesses, and investigators").

<sup>79</sup> See *Doe v. Southeastern Pennsylvania Transportation Authority*, 72 F.3d 1133, 1141 (3d Cir. 1995) (the "potential harm must be measured within the context of the disclosure that actually occurred"). See also *United States v. Westinghouse Electric Corp.*, 638 F.2d 570, 579 (3d Cir. 1980) ("we must consider whether there are effective provisions for security of the information against subsequent unauthorized disclosure").

<sup>80</sup> See *Whalen v. Roe*, 429 U.S. 589, 600-01 (1977). The Court also noted that "the remote possibility that judicial supervision of the evidentiary use of particular items of stored information will provide inadequate protection," was not adequate to find a privacy interest had been violated. *Id.* at 601.

non-disclosure,” including security measures.<sup>81</sup> In neither case was there perceived to remain — after creation of the protective measures — any real danger of public disclosure, so the contemplated selective disclosure did not implicate a strong privacy interest.

Using parallel reasoning, federal courts resolving discovery disputes generally find that a court-imposed protective order limiting the use of privileged materials to the trial provides sufficient protection against public disclosure.<sup>82</sup> In making discovery determinations, the court weighs the need “to protect a party or person from annoyance, embarrassment, oppression, or undue burden or expense”<sup>83</sup> against litigants’ need for materials. With confidential protection orders in place, weighing the privacy invasion from *public* disclosure against a party’s need for the materials is no longer appropriate, instead becoming “a red herring,” according to the Fourth Circuit in the *Lowcountry Red Cross* case.<sup>84</sup> There, the court dismissed concerns about the harm to privacy from using in court the names of blood donors with AIDS — an illness evoking intense privacy concerns — because a strict protection order was in place:

The possibility of public disclosure is even more remote in the case before us. The implicated donor’s identity, already known to the Red Cross, would be revealed to only the court and to the lawyer appointed by the court. The revelation to the court, moreover, is to be made directly to the judge by the Red Cross, to be hand delivered in an envelope marked “Personal and Confidential.” All answers are to be maintained in a sealed envelope marked “Confidential,” and the answers provided by the donor must have the signature redacted prior to filing. We cannot conceive of a better system to maintain the confidentiality of the donor’s identity. *The potential for disclosure does not rise to the level of a violation of the privacy rights of the donor.* [Emphasis added.]

Thus, with an appropriate protective order in place, parties in federal court must carry a heavy burden to show they are still entitled to a privacy-based withholding of otherwise-discoverable documents, because there is an assumption that disclosure *only to the other parties* will only minimally, if at all, harm that interest.<sup>85</sup>

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<sup>81</sup> *Westinghouse Electric Corp.*, 638 F.2d at 580.

<sup>82</sup> *See, e.g., Truswal Systems Corp. v. Hydro-Air Engineering, Inc.*, 813 F.2d 1207, 1211 (Fed. Cir. 1987) (rejecting a motion to quash, filed on the grounds that disclosure would violate the confidentiality of business data, because a protective order preserving confidentiality was in place).

<sup>83</sup> Fed. R. Civ. P. 26(c); 10 C.F.R. § 2.705(c).

<sup>84</sup> *Watson v. Lowcountry Red Cross*, 974 F.2d 482, 487-88 (4th Cir. 1992).

<sup>85</sup> *See, e.g., Smith v. Goord*, 222 F.R.D. 238, 239 (N.D.N.Y. 2004) (“[D]efendants have failed to carry their burden of demonstrating grounds for withholding the requested documents . . . and . . .”  
(*Continued*)

This agency's adjudicatory bodies have taken a similar approach.<sup>86</sup> A series of decisions in 1983 involved an organization called GAP that sought to quash subpoenas of several of its members on a number of grounds, including protecting the privacy of several anonymous whistleblowers.<sup>87</sup> The Licensing Board rejected the motions in part because the Board had, simultaneously with the issuance of the subpoenas, issued a strict protective order that limited the release of the information only to the parties, and only for use in that case.<sup>88</sup> In affirming the Licensing Board's denial of the motions to quash, the Appeal Board discussed the process by which the privacy privilege is evaluated when a protective order exists: "[t]he Board also concluded that the protective order it was imposing would eliminate the harm GAP perceived to its interest. It then weighed this factor against the others and — quite reasonably, in our view — denied the motion to quash."<sup>89</sup>

If an appropriate protective order were issued in the present case, the potential harm to privacy (of the subjects of the "unsubstantiated allegations" [see notes 31, above, and 121, below]) that could occur with disclosure to the parties becomes, as in the *Whalen*, *Lowcountry Red Cross*, and GAP cases, extremely small. It is that diminished harm that must be weighed against Mr. Geisen's interest in the material and the general liberality of discovery procedures.<sup>90</sup>

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the concerns associated with disclosure of those documents can be addressed adequately through the entry of an appropriate protective order"). See also *Rodriguez v. City of Fresno*, No. 1:05CV1017, 2006 WL 1530251 at 1 (E.D. Cal. May 30, 2006) (because a protective order limiting the disclosure of documents is already in place, the court will not withhold the documents from the other party).

<sup>86</sup>Licensing Boards have found very few reasons for continuing to withhold documents or quash subpoenas once an applicable protective order has been issued or requested. One is that the information request is simply not material. See *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 211 (2000). Another reason is that the protective order may be breached. *Consumers Power Co.* (Midland Plant, Units 1 and 2), LBP-83-53, 18 NRC 282, 287-88 (1983). As in the judicial precedents cited, however, Boards will normally assume that protective orders will not be breached; to counter that assumption, the withholding party must show evidence of the likelihood of a breach. *Id.* at 288.

<sup>87</sup>See the series of decisions in *Consumers Power Co.* (Midland Plant, Units 1 and 2): LBP-83-53, 18 NRC 282 (1983); LBP-83-64, 18 NRC 766 (1983); and ALAB-764, 19 NRC 633 (1984).

<sup>88</sup>See *Midland*, LBP-83-64, 18 NRC at 769; *Midland*, ALAB-764, 19 NRC at 643.

<sup>89</sup>*Midland*, ALAB-764, 19 NRC at 641 (internal citations omitted).

<sup>90</sup>See, e.g., *In re Motion To Unseal Electronic Surveillance*, 965 F.2d at 641 ("Much of the discovery done in civil suits implicates confidentiality and privacy interests, and courts are often asked to carefully balance these interests with the compelling need for discovery . . . Thus the rules of discovery allow intrusions into the private affairs of parties to litigation as well as third parties").

## V. THE BALANCE

In this Part, we apply the general standards just set forth to the particular matters before us. In doing so, we will balance the weight of each privilege, and what that privilege protects, against Mr. Geisen's interest in the materials and their necessity to the proceeding.

### A. Deliberative Process

Upon examination, as we have done *in camera*, it is readily apparent that we must honor the Staff's request that the deliberative process redactions of the OI Report remain withheld.<sup>91</sup> As explained below, the redacted portions meet the deliberative process criteria, and any slight need for them does not outweigh the agency's considerable interest in their protection.

The redactions are, as required for deliberative process materials, both pre-decisional and deliberative.<sup>92</sup> In reaching this conclusion, we have been mindful that, while opinion-containing analyses and conclusions are uniformly considered deliberative,<sup>93</sup> purely factual materials are generally unprotected.<sup>94</sup> But here the exceptions to this general rule apply.<sup>95</sup> When, as here, the redacted factual material is so intertwined that deliberations will be revealed from its disclosure, the material is deliberative.<sup>96</sup>

This conclusion is buttressed by the purpose of these summaries: the investigator wrote them not for the purpose of preparing a public statement, like the unprotected documents in *Playboy Enterprises*,<sup>97</sup> but to aid his superiors in making a decision regarding Mr. Geisen's employment in the nuclear industry. Put succinctly, the "Agent's Analysis" and other summary materials in the report were "assembled through an exercise of judgment in extracting pertinent material from a vast number of documents for the benefit of an official called upon to take discretionary action,"<sup>98</sup> like the summaries found to be deliberative in both

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<sup>91</sup> We note that in what appears to be the only other occasion in which a Licensing Board considered the withholding of an OI Report for deliberative process reasons, it was planned that the entire report would be released after the Commission made its final decision. See *Vogtle*, CLI-94-5, 39 NRC at 200. This was, however, by choice of the Staff, not by any compulsion of law or of the Licensing Board. *Id.* We trust that whatever factors motivated the release of the report in *Vogtle* were carefully considered (even if ultimately rejected) by the Staff in the present case.

<sup>92</sup> See discussion at p. 381, above.

<sup>93</sup> See, e.g., *Playboy Enterprises, Inc.*, 677 F.2d at 935.

<sup>94</sup> See *Mink*, 410 U.S. at 91.

<sup>95</sup> See discussion at p. 382, above.

<sup>96</sup> See *In re Sealed Case* [1997], 121 F.3d at 737.

<sup>97</sup> See 677 F. 2d at 935.

<sup>98</sup> *Mapother*, 3 F.3d at 1539.

*Mapother* and *Montrose Chemical*.<sup>99</sup> Here, of course, that discretionary action was the decision to issue the enforcement order.

Once a document has been found to meet this standard definition of deliberative process and thus to be exempt from public disclosure under 10 C.F.R. § 2.390, the strength of the interest protected by the privilege is balanced against the litigant's need for the material. This balancing is guided by 10 C.F.R. § 2.709(d), which specifies the factors to be used in determining whether materials should be withheld in discovery,<sup>100</sup> and the Commission's standard that, once material has been determined to be deliberative process, "the litigant must demonstrate an overriding need for the material."<sup>101</sup> Section 2.709(d) provides a general scheme, applicable to all privileged material, mandating that, once material is considered exempt from public disclosure, consideration be given to that material's relevancy to the decision,<sup>102</sup> its availability by other means,<sup>103</sup> and its relative necessity to the party.<sup>104</sup> Federal courts also use a balancing test and similarly consider "the relevance of the evidence, the availability of other evidence, the seriousness of the litigation, the role of the government, and the possibility of future timidity by government employees."<sup>105</sup>

In undertaking that balancing, courts have recognized that deliberative process protects several strong interests, including an agency's interest in preserving the integrity of its consultative functions and the public's interest in good govern-

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<sup>99</sup> *See id.*; and *Montrose Chemical Corp.*, 491 F.2d at 68.

<sup>100</sup> *See Three Mile Island*, LBP-81-50, 14 NRC at 892 (describing as a balancing test the four-part test now contained in section 2.709(d)).

<sup>101</sup> *Vogtle*, CLI-94-5, 39 NRC at 198. *See also Shoreham*, ALAB-773, 19 NRC at 1341. The Seventh Circuit has used a similar standard. *See Farley*, 11 F.3d at 1389 ("Since the documents at issue are within the scope of the deliberative process privilege, the government could only be required to produce them if [the defendant] made a showing that his need for the documents outweighed the government's interest in not disclosing them").

<sup>102</sup> In our discovery process, materials cannot generally be withheld as irrelevant if the request "appears reasonably calculated to lead to the discovery of admissible evidence." 10 C.F.R. § 2.705(b)(1). The NRC Staff claims, however, that this rule does not apply to discovery against the Staff because that process is governed by section 2.709, not by the NRC's general discovery rules. *See* NRC Staff Answer at 13 n.20. But section 2.709 deals with special procedural norms for discovery against the Staff; there is no reason to believe, as to substantive content, that its repeated use of the "relevance" concept was not intended to embrace the universal understanding of that concept (quoted in line 2, herein) that shapes the scope and definition of discoverable evidence in both the federal courts and our adjudications. *See* Fed. R. Civ. P. 26(b)(1); 10 C.F.R. § 2.705(b). *See also Seattle Times Co. v. Rhinehart*, 467 U.S. 20, 29 (1984); *Degen v. United States*, 517 U.S. 820, 825-26 (1996).

<sup>103</sup> *See Three Mile Island*, LBP-81-50, 14 NRC at 892 (explaining that the "obtainable from another source" language was designed to provide for materials available through the Licensee).

<sup>104</sup> *See* 10 C.F.R. § 2.709(d).

<sup>105</sup> *In re Sealed Case* [1997], 121 F.3d at 737-38.

ment.<sup>106</sup> Certainly, these interests are compromised and government processes chilled when the documents are released to the public; more to the point, even where the audience is smaller, the chilling effect can be just as great despite limiting the release to only those involved in particular litigation.<sup>107</sup>

These protected interests are so strong that courts are generally unwilling to compel discovery of deliberative materials, even when an individual's due process rights are plainly at stake,<sup>108</sup> unless there is a particular and compelling reason for the privilege to be suspended, like government corruption.<sup>109</sup> The Commission and the former Appeal Board have similarly recognized the strength of the interest protected by deliberative process and have rarely, and only in exceptional circumstances, allowed deliberative materials to be seen by parties.<sup>110</sup>

At the same time, courts evaluate the strength of the particular interest protected by the deliberative process privilege, not a generalized agency interest in confidentiality.<sup>111</sup> The NRC Staff must show with specificity that the agency has a strong interest in protecting these materials.<sup>112</sup> Here, by providing the documents for *in camera* inspection and by asserting the agency's interest in preserving its investigators' ability to summarize candidly and to evaluate freely various situations for their supervisors, the Staff has demonstrated the strength of this particular interest in the circumstances the parties have put before us.<sup>113</sup>

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<sup>106</sup> See, e.g., *NLRB v. Sears, Roebuck & Co.*, 421 U.S. at 151; *A. Michael's Piano, Inc. v. Federal Trade Commission*, 18 F.3d 138, 147 (2d Cir. 1994).

<sup>107</sup> See *In re Sealed Case* [1997], 121 F.3d at 736. A general understanding that even limited disclosure in a courtroom would harm the frankness of debate explains the lack of precedent for allowing deliberative process documents to be released under a protective order, or for even considering such a measure. See, e.g., *Hinckley*, 140 F.3d at 277; *Farley*, 11 F.3d at 1389-90; *Black v. Sheraton Corp. of America*, 564 F.2d 531, 547 (D.C. Cir. 1977).

<sup>108</sup> See, e.g., *Farley*, 11 F.3d at 1389-90 (refusing access to deliberative process documents to a defendant facing a \$910,000 civil penalty); *United States v. Fernandez*, 231 F.3d 1240, 1248 (9th Cir. 2000) (refusing access to deliberative process documents to a criminal defendant).

<sup>109</sup> See *Hinckley*, 140 F.3d at 285 (“[W]here there is reason to believe the documents sought may shed light on government misconduct, the privilege is routinely denied”).

<sup>110</sup> See *Virginia Electric and Power Co.* (North Anna Power Station, Units 1 and 2), CLI-74-16, 7 AEC 313, 315 (1974) (making public certain information regarding a possible geological fault at the North Anna site when it was not discovered until after the plants' construction permits were issued and allegations, sufficient to warrant an investigation, were made that the licensee had intentionally withheld information concerning the fault).

<sup>111</sup> See *United States v. O'Neill*, 619 F.2d 222, 227 (1980); *Resolution Trust Corp.*, 773 F. Supp. at 604; *Pacific Gas and Electric Co. v. United States*, 70 Fed. Cl. 128, 141 (2006). See also *United States v. Nixon*, 418 U.S. at 706, 711 (addressing the need for specifics in regard to the invocation of executive privilege).

<sup>112</sup> See *Resolution Trust Corp. v. Diamond*, 773 F. Supp. at 604.

<sup>113</sup> See NRC Staff Answer at 8.

Applying either the NRC’s “overriding need” test or one of the discovery balancing tests,<sup>114</sup> the interest protected by the deliberative process privilege is stronger than Mr. Geisen’s need for the material. The redacted portions are generally very brief and for the most part are explicitly limited to terse conclusions about the information revealed in the interviews already made available. Thus, absent a showing by Mr. Geisen as to why he needs such evaluations and summaries, they would seem to offer him very little help in assembling his case. That he does not agree with the agency’s final enforcement decision is not sufficient to show need.<sup>115</sup>

On the other side, there is in enforcement cases a clear, strong interest in preserving the confidentiality of investigators’ analyses and thought processes. Even making allowance for the difficulties of showing need for a document that he has not seen, there is no doubt that Mr. Geisen’s arguments have not met the high bar required for discovery of materials protected by the deliberative process privilege in either federal court or NRC adjudications.<sup>116</sup>

## **B. Personal Privacy**

As indicated above (p. 390), NRC regulations prescribe consideration of four factors in determining the treatment, for discovery purposes, of privileged materials, thereby creating a balancing test whereby the harm to the privacy interest is weighed against the three other factors.<sup>117</sup> In this regard, we conclude that the redacted OI Report portions would be exempt from disclosure under 10 C.F.R. § 2.390(a)(7)(iii) because, if *publicly* disclosed, the materials could reasonably be expected to present — if only to a modest degree (*see* pp. 393-94, below) — an unwarranted invasion of personal privacy.<sup>118</sup>

The actual harm done by disclosure — either publicly or under protective order — is then weighed against the material’s relevancy, the material’s availability from other sources, and the necessity of the material to Mr. Geisen and this proceeding.<sup>119</sup> These factors, particularly Mr. Geisen’s need for the material, must only be stronger than this individualized privacy invasion in these particular

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<sup>114</sup> *See* 10 C.F.R. § 2.709(d); *In re Sealed Case* [1997], 121 F.3d at 737-38.

<sup>115</sup> *See Hinckley*, 140 F.3d at 286.

<sup>116</sup> *See Vogtle*, CLI-94-5, 39 NRC at 198; *Hinckley*, 140 F.3d at 286.

<sup>117</sup> *See* 10 C.F.R. § 2.709(d). Again, the four factors are the relevancy of the document, whether the document is exempt from disclosure under 10 C.F.R. § 2.390, whether the document is necessary to a proper decision, and whether the document or information is reasonably obtainable from another source. *Id.*

<sup>118</sup> *See* discussion at p. 386, above.

<sup>119</sup> *See* 10 C.F.R. § 2.709(d).

circumstances.<sup>120</sup> Our decision is thus based upon (1) the relative contextual strength (or lack thereof) of this particular privacy privilege; (2) the existence of alternative means to protect the privacy interests at stake here; and (3) the weight of the stated factors.

### *1. Strength of the Privilege*

The basis of the “personal privacy” privilege being asserted by the Staff here involves, generally, an individual’s interest in not having it made known that the individual had been the subject of “unsubstantiated allegations” of criminal or other nefarious conduct. It is easy to perceive why such an interest should be protected. Law enforcement authorities receive many complaints from many sources about possible unlawful activity. Some complaints prove meritorious, but for a variety of reasons other complaints turn out to be not well founded. For instance, the complainant may be mistaken about what was seen; the complainant may not be truthful, but rather may be motivated by ill-will or revenge; or the activity under scrutiny, while appearing suspect, may have a legitimate explanation.

Given all the different circumstances that can thus lead to an individual being an innocent victim of “unsubstantiated allegations,” it is not surprising that the law would recognize a personal privacy interest not to have such allegations publicly disseminated after they have been shown to be insubstantial.<sup>121</sup> Although cleared of any misdeeds, the individual might well have an interest in not having neighbors, relatives, colleagues, or other types of constituents wondering why the individual was once suspected of the misdeeds.

That understanding is a sensible one, and clearly can have great force in some circumstances. But it lacks strength as applied to the unique facts before us.

The case law illustrates that a privacy interest does not exist as a generalized theory but instead will depend on such specific factors as the impact of the information’s disclosure upon particular individuals.<sup>122</sup> Here, based on the circumstances of this case and our *in camera* review of the disputed portions, that

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<sup>120</sup> See note 100, above.

<sup>121</sup> See *SafeCard Services, Inc.*, 926 F.2d at 1205. The court’s discussion recognizes that mere witnesses may also be entitled to privacy protections, but the Staff did not here assert the need for any such witness protection, and thus we have no question before us as to its legitimacy or applicability.

We have already observed (note 31, above) that what the Staff groups together as “unsubstantiated allegations” also includes allegations that *were* substantiated, but where the ultimate Staff decision was not to bring charges. In light of our overall disposition of the privacy issue, we need not decide here whether individuals in that category would have a greater or a lesser right than the others with whom the Staff grouped them.

<sup>122</sup> See *In re Sealed Case* [1988], 856 F.2d at 272. See also *Tuite v. Henry*, 98 F.3d 1411, 1417 (D.C. Cir. 1996).

impact is at most relatively slight. As all will recall, the Davis-Besse situation at the root of this proceeding was an open and notorious one, the subject not only of government investigations but of intense reporting by the news media. The licensee's settlements with the NRC and with the Department of Justice were highly publicized (*see* note 9, above). In other words, the overall allegations involved were highly visible, well known in the professional and community circles in which plant employees operated — all not surprising for those who work in a highly regulated industry.

In the eyes of the public, then, an indication that a particular employee in this fact-specific case was *not* found by either agency to bear civil or criminal responsibility would be more likely to provide vindication than, as in the situation described above (p. 393), to arouse suspicion. Whatever the degree to which one subscribes to this “vindication” view, it appears clear to us that the notorious nature of the Davis-Besse problems and investigations distinguishes the “personal privacy” privilege being asserted from the usual situation, where the allegation is not made, and the investigation is not performed, under public scrutiny.

In this regard, it is not a confidential matter that each of the employees whose privacy rights are now being advocated was interviewed in connection with the investigation, for the transcripts of each of those interviews were included as exhibits to the redacted OI Report, already made available by the Staff as part of its discovery obligations (Staff Brief at 2) and not covered by any protective order (Tr. at 219). It is only an investigator's summary of those interviews that is being withheld.<sup>123</sup> In other words, the public has constructive knowledge that each of the employees interviewed had a sufficient employment relationship to the root problem to warrant being interviewed.<sup>124</sup> In all these circumstances, it seems that the right of personal privacy being asserted is weak compared to the privacy rights that might cry out for protection in other “unsubstantiated allegation” circumstances.

## 2. *Protective Order*

That being so, it would seem the rights the Staff wishes to protect here would be amply preserved by invoking the simple expedient of a protective order — as has been done for other types of privileged materials at an earlier stage<sup>125</sup> —

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<sup>123</sup> Again (*see* p. 378, above), we observe that no “deliberative process” privilege was asserted as to those summaries.

<sup>124</sup> *See, e.g.*, John Funk and John Mangels, *Probe Looks for Davis-Besse Misdeeds*, Cleveland Plain Dealer, Aug. 30, 2002, at 1C.

<sup>125</sup> *See* Licensing Board Order (Protective Order Governing Disclosure of Proprietary Materials) (June 1, 2006). *See also* [Dale L. Miller] Order (Governing Personal Privacy Materials) (June 28, 2006).

that limits the disclosures to those involved in this litigation and thus having a need to know. Such an order would largely diminish, if not entirely eliminate, the potential harm from the disclosure.

### ***3. Need for, and Other Availability of, the Information***

Because, as mentioned above, what is at stake here are agents' summaries of interviews, the full transcript of which has already been released, the need for the material is likely considerably less than it would be if the transcripts themselves were being withheld and were sought after.<sup>126</sup> At the same time, we have also seen that the nature of the privilege being asserted begins as a relatively weak one and ends up — by virtue of the use of a standard protective order regularly employed in analogous circumstances — as being fully vindicated in any event.

In this circumstance, where the privilege and the need may be equally weak, but the privilege can be protected by other means, we return to where we started (*see* Part II, above) — in litigation's search for truth, full and open discovery is the norm, and privileges that stand in the way of truth are disfavored. Relevancy, not need, becomes the determinative standard.<sup>127</sup>

On that score, the Staff conceded very recently, in a companion case, the important role that discovery in litigation before a Licensing Board played in enabling it to determine that the truth was different from what it had originally believed.<sup>128</sup> Here, the Staff had the benefit of both a lengthy investigation and a lengthy deliberation, and we believe it important to provide Mr. Geisen every permissible countering opportunity to obtain discoverable information: he knows the underlying facts far better than we do, and he is in position to see, in what the Staff thought were unsubstantiated allegations (or substantiated allegations it chose not to pursue (*see* notes 31 and 121, above)), connections and clarifications whose significance could well escape the notice of most but could well point him to productive inquiries about others' roles.

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<sup>126</sup> Mr. Geisen argued that one reason he needs these materials is to prepare to cross-examine the investigators should they be called to testify in the upcoming trial. *See* Geisen Reply Brief at 2; Tr. at 185. This argument no longer carries any force, for the NRC Staff has represented that it does not intend to call the report's investigators to testify (except for exhibit identification and transcript introduction purposes). *See* Tr. at 215, 227-28.

<sup>127</sup> *See* 10 C.F.R. § 2.705(b)(1). *See also* Fed. R. Civ. P. 26(b)(1).

<sup>128</sup> *See* Licensing Board Order (Approving Proposed Settlement and Dismissing Proceeding [In the Matter of Dale L. Miller]) at 5 (September 29, 2006) ("in light of new information developed during the discovery process . . . the NRC Staff acknowledges that it no longer has a concern about the reliability and trustworthiness of Mr. Miller and believes that the health and safety of the public will be adequately protected if Mr. Miller is allowed to resume involvement in licensed activities"). *Compare* Dale Miller; Order Prohibiting Involvement in NRC-Licensed Activities (Effective Immediately), 71 Fed. Reg. 2579 (Jan. 17, 2006).

To be sure, the Staff correctly notes that only Mr. Geisen's guilt, not that of his former colleagues, is in issue before us. But more knowledge and perspective about others' roles might help him put his actions in a transactional context that would lessen or eliminate his responsibility for any missteps.<sup>129</sup> Perhaps the benefit to him from these forced disclosures will not prove great — but on the other hand, with the benefit of a protective order, any possible invasion of the interviewees' privacy rights will be vanishingly small.<sup>130</sup>

## VI. THE RESULT

Accordingly, the Motion To Compel Production is GRANTED as to the personal privacy redactions, which are to be released under an appropriate protective order to be prepared jointly by the parties and provided to the Board by November 10, and DENIED as to the deliberative process redactions, which may continue to be withheld.

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<sup>129</sup> Several of the sections redacted for privacy reasons mention Mr. Geisen by name. *See* OI Report.

<sup>130</sup> Notably, the precedents recognize that protective orders can be fully effective to preserve privacy interests, even those of a far greater caliber than are asserted here. *See, e.g., Lowcountry Red Cross*, 974 F.2d at 487-88.

It is so ORDERED.<sup>131</sup>

THE ATOMIC SAFETY AND  
LICENSING BOARD

Michael C. Farrar, Chairman  
ADMINISTRATIVE JUDGE

E. Roy Hawkens  
ADMINISTRATIVE JUDGE

Nicholas G. Trikouros  
ADMINISTRATIVE JUDGE

Rockville, Maryland  
October 31, 2006

Copies of this Order were sent this date by e-mail transmission to counsel for the parties in this proceeding. Because of the Order's possible relationship to a companion enforcement proceeding, a copy is also being sent to counsel therein.

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<sup>131</sup>We note that, owing to the pendency of the criminal charges against him, Mr. Geisen recently invoked here his Fifth Amendment privilege against self-incrimination in declining to respond to various written discovery requests the Staff had served upon him. *See, e.g.*, his Oct. 3 "Objections and Answers to NRC Staff's First Set of Interrogatories." In unsuccessfully seeking a stay of this proceeding at an earlier stage, the government had warned that Mr. Geisen might do exactly that, thus taking advantage of his discovery rights here to obtain information useful not only before us but in the criminal proceeding, while using his aforementioned privilege to deny discovery to the Staff. In denying the government's stay, we acknowledged that possibility but downplayed its significance. *See* LBP-06-13, 63 NRC at 553-54, particularly 554 n.109. For similar reasons, Mr. Geisen's recent invocation here of his constitutional privilege gives us no cause to deny him the discovery sought by the instant motion to compel. Whether or not other procedural consequences might flow from that action is another matter, not presented now.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**COMMISSIONERS:**

**Dale E. Klein**, Chairman  
**Edward McGaffigan, Jr.**  
**Jeffrey S. Merrifield**  
**Gregory B. Jaczko**  
**Peter B. Lyons**

**In the Matter of**

**Docket No. 72-26-ISFSI**

**PACIFIC GAS AND ELECTRIC  
COMPANY  
(Diablo Canyon Power Plant  
Independent Spent Fuel  
Storage Installation)**

**November 9, 2006**

**MOTIONS FOR RECONSIDERATION**

We undertake reconsideration only when a party shows a “compelling circumstance,” “such as the existence of a clear and material error in a decision, which could not have reasonably been anticipated” and that “renders the decision invalid.” We apply this standard strictly, and do not grant motions for reconsideration lightly.

**INJUNCTIVE RELIEF; MOTIONS FOR RECONSIDERATION**

Where a party *itself* requested that *we* provide injunctive relief, we balanced the equities to decide *that* question — as any determination on the necessity for an injunction requires. To justify reconsideration of our denial of the request for an injunction, the motion for reconsideration had to support a rebalancing of the equities, which it did not.

## RULES OF PRACTICE: MOTIONS FOR RECONSIDERATION

Since the original motion for injunctive relief never mentioned 10 C.F.R. § 51.101(a), a motion for reconsideration of the denial of injunctive relief based on that section falls afoul of our prohibition against raising new arguments in a motion for reconsideration.

## MEMORANDUM AND ORDER

We recently denied a “Motion by San Luis Obispo Mothers for Peace, Sierra Club, and Peg Pinard (collectively, “SLOMFP”) for Declaratory and Injunctive Relief with Respect to Diablo Canyon ISFSI.”<sup>1</sup> SLOMFP now asks us to reconsider our denial of its request to declare Pacific Gas & Electric Co.’s (“PG&E’s”) ISFSI’s license for Diablo Canyon invalid and to enjoin PG&E from loading spent fuel into the facility.<sup>2</sup> PG&E and the NRC Staff both oppose SLOMFP’s motion.<sup>3</sup>

SLOMFP’s motions derive from the United States Court of Appeals for the Ninth Circuit’s holding, in *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016, 1028 (9th Cir. 2006), that the NRC’s “categorical refusal to consider the environmental effects of a terrorist attack” was unreasonable under the National Environmental Policy Act (“NEPA”). The Ninth Circuit remanded the NEPA-terrorism question to the Commission for “further proceedings consistent with this opinion.”<sup>4</sup>

We undertake reconsideration only when a party shows a “compelling circumstance,” “such as the existence of a clear and material error in a decision, which could not have reasonably been anticipated” and that “renders the decision invalid.”<sup>5</sup> We apply this standard strictly, and do not grant motions for

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<sup>1</sup> CLI-06-23, 64 NRC 107 (2006). An “ISFSI” is an independent spent fuel storage installation.

<sup>2</sup> Motion by San Luis Obispo Mothers for Peace, Sierra Club, and Peg Pinard for Partial Reconsideration of CLI-06-23 (Sept. 18, 2006) (“SLOMFP Motion”).

<sup>3</sup> Answer of Pacific Gas and Electric Company to Motion for Partial Reconsideration of CLI-06-23 (Sept. 28, 2006) (“PG&E Answer”); NRC Staff Response to Motion for Reconsideration of CLI-06-23 (Sept. 26, 2006) (“Staff Response”).

<sup>4</sup> 449 F.3d at 1035.

<sup>5</sup> See 10 C.F.R. §§ 2.323(e), 2.345(b). SLOMFP cites 10 C.F.R. §§ 2.323 and 2.345 as the bases for its motion. Technically, our former rule (10 C.F.R. § 2.771(b)) applies here (since the original proceeding was noticed prior to February 13, 2004), but the new rules simply codify our practice (*see* note 6, below).

reconsideration lightly.<sup>6</sup> SLOMFP's motion for reconsideration does not meet our strict standard.

In its motion, SLOMFP seizes upon a change in one of the factors we pointed to when we denied SLOMFP's earlier motion. This single factor — that the Ninth Circuit has now issued its mandate<sup>7</sup> in *SLOMFP v. NRC*, whereas at the time of our earlier decision the mandate had not yet issued — does not justify reconsideration. Functionally, all that the mandate does is to effectuate the court of appeal's judgment by formally returning the proceeding to the NRC. The mandate creates no "compelling circumstance" warranting reconsideration of our decision to deny SLOMFP's motion for declaratory and injunctive relief and unearths no "clear and material error" in our reasoning. The eventual — legally required — issuance of the mandate is hardly an "unanticipated event." It is not a sufficient factual change to justify reconsideration.

We also do not find SLOMFP's legal arguments persuasive. SLOMFP questions our application of the "balancing the equities" concept in denying its original motion. SLOMFP argues that "[t]he only context in which a balancing of the equities might be relevant would be if the NRC or PG&E had requested a stay of the mandate."<sup>8</sup> But SLOMFP *itself* requested that *we* provide injunctive relief, as the title of its motion says. We considered the equities to decide *that* question — as any determination on the necessity for an injunction requires.<sup>9</sup>

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<sup>6</sup> See *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-35, 60 NRC 619, 622 (2004) ("We do not lightly revisit our own already-issued and well-considered decisions. We do so only if the party seeking reconsideration brings decisive new information to our attention or demonstrates a fundamental Commission misunderstanding of a key point."); *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-18, 58 NRC 433, 434 (2003) ("[p]etitions for reconsideration should not be used merely to 're-argue matters that the Commission already [has] considered' but rejected." Reconsideration petitions must establish an error in a Commission decision, based upon an elaboration or refinement of an argument already made, an overlooked controlling decision or principle of law, or a factual clarification." [alterations in original]).

<sup>7</sup> The mandate consists simply of a copy of the judgment issued with the decision back on June 2, 2006, with a September 12, 2006, date stamp and a court clerk's signature added.

<sup>8</sup> SLOMFP Motion at 6.

<sup>9</sup> "[T]he bases for injunctive relief are irreparable injury and inadequacy of legal remedies. In each case, a court must balance the competing claims of injury and must consider the effect on each party of the granting or withholding of the requested relief." *Amoco Production Co. v. Village of Gambell*, 480 U.S. 531, 542 (1987). See also *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 312 (1982) ("[T]he basis for injunctive relief . . . has always been irreparable injury and the inadequacy of legal remedies"). "[A]n injunction is an equitable remedy . . . not a remedy which issues as of course." *Weinberger*, 456 U.S. at 311.

Moreover, contrary to SLOMFP's apparent view, there is no presumption that irreparable damage occurs whenever there is a failure to adequately evaluate the environmental impact of a proposed project. Where, in weighing the "balance of harms," injury to the environment is "not at all

(Continued)

Thus, to justify reconsideration of our denial of SLOMFP's request for an injunction, SLOMFP's motion for reconsideration had to support a rebalancing of the equities, which it did not. SLOMFP's other legal argument, this one based on 10 C.F.R. § 51.101(a), falls afoul of our prohibition against raising new arguments in a motion for reconsideration.<sup>10</sup> SLOMFP's original motion never mentions section 51.101(a). Section 51.101(a)(2) states, in part, that until a record of decision is issued "[a]ny action concerning the proposal taken by an applicant which would (i) have an adverse environmental impact, or (ii) limit the choice of reasonable alternatives may be grounds for denial of the license." At the most, this rule merely confirms what we said in our earlier decision: PG&E proceeds with construction of the ISFSI at its own risk.<sup>11</sup>

As our prior decision stressed, the Ninth Circuit directed no particular NRC action on remand and in fact gave the NRC "maximum procedural leeway," stating that it was not "circumscribing the procedures that the NRC must employ," and that "[t]here remain . . . a wide variety of actions [the NRC] may take on remand."<sup>12</sup> We have not yet resolved the procedures that, consistent with the Court's decision, would govern our handling of the remanded proceeding.<sup>13</sup> But there is at present no need to issue any declaration regarding PG&E's ISFSI license and no need to issue any injunction. PG&E has stated publicly that it will not be ready to use the ISFSI to store spent fuel "until at least November, 2007."<sup>14</sup> So, as a practical matter, the facility will not be used and the irradiation of the casks that SLOMFP says it fears will "foreclose the consideration of alternatives"<sup>15</sup> cannot occur in the near term.

For these reasons, the Commission *denies* SLOMFP's motion for reconsider-

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probable," an injunction is not appropriate. *See Amoco*, 480 U.S. at 545. *See generally Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), CLI-06-8, 63 NRC 235, 237-38 & nn.4-7 (2006).

Here, where spent fuel will not be stored in the new facility for some time (at least another year), injury to the environment is "not at all probable" now, so there is no present need to pass on the validity of PG&E's license or to consider injunctive relief. And again, as we noted in CLI-06-23, PG&E does not need an NRC license for construction activity. *See generally Nuclear Fuel Services, Inc.* (Erwin, Tennessee), CLI-03-3, 57 NRC 239, 246-50 (2003).

<sup>10</sup> *See Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-02-2, 55 NRC 5, 7 & n.3 (2002), citing *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-00-21, 52 NRC 261, 264 (2000).

<sup>11</sup> CLI-06-23, 64 NRC at 108-09.

<sup>12</sup> *Id.* at 108, citing 449 F.3d at 1035.

<sup>13</sup> We also note PG&E has petitioned for a writ of certiorari. *Pacific Gas and Electric Co. v. San Luis Obispo Mothers for Peace*, No. 06-466 (S. Ct.).

<sup>14</sup> *See* Answer of Pacific Gas and Electric Company to Motion for Declaratory and Injunctive Relief at 15 (July 17, 2006).

<sup>15</sup> SLOMFP Motion at 6 n.4.

ation. To avoid last-second emergency motions, however, we direct PG&E to provide written notification, to the Commission and to all parties, of its intention to load any spent fuel into the new facility a *minimum of 60 days prior* to any actual loading of such material into the ISFSI.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK  
Secretary of the Commission

Dated at Rockville, Maryland,  
this 9th day of November 2006.

**Commissioner Gregory B. Jaczko Respectfully Concur, in Part**

I concur, in part, with this decision. I agree that the arguments presented do not establish a sufficient basis to merit reconsideration. I continue, however, to believe that the agency should conduct a review of the impacts of terrorist attacks on nuclear facilities as part of a NEPA analysis. My concerns regarding the Commission's decision not to do so have been fully explained in my dissent on the Order ruling upon the San Luis Obispo Mothers for Peace Motion for Declaratory and Injunctive Relief (CLI-06-23), and thus, need not be repeated here.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**COMMISSIONERS:**

**Dale E. Klein**, Chairman  
**Edward McGaffigan, Jr.**  
**Jeffrey S. Merrifield**  
**Gregory B. Jaczko**  
**Peter B. Lyons**

**In the Matter of**

**Docket No. 52-009-ESP**

**SYSTEM ENERGY RESOURCES, INC.**  
**(Early Site Permit for Grand Gulf**  
**ESP Site)**

**November 9, 2006**

**ORDER**

The Commission is responding to the Atomic Safety and Licensing Board's October 17, 2006 Notice (Change in Schedule). We have decided to consider for ourselves a recently filed late contention raising the issue of whether the Environmental Impact Statement must analyze the impacts of terrorism on the proposed facility.

In the October 17 Notice, the Board advised the Commission that it had revised its schedule for the mandatory hearing proceeding and that these changes will prevent the Board from meeting the Commission's expectation of a Board decision by November 30, 2006. The Board explained that it had granted the NRC Staff's unopposed motion for a 7-day extension of time to respond to the Board's inquiries concerning the Environmental Impact Statement. When granting the extension, the Board concluded that "minor modifications" to the schedule were necessary, and the Board adjusted the date for commencement of the mandatory

hearing from November 15 to November 29, 2006.<sup>1</sup> The Board also instructed the NRC Staff and Systems Energy Resources, Inc., the Applicant, to file any objections to the revised order by October 16, 2006, and neither filed an objection.

In the October 17 Notice, the Board also advised the Commission that, on October 12, 2006, several environmental interest groups had petitioned for a hearing on a late-filed National Environmental Policy Act (NEPA) contention concerning the environmental impacts of a terrorist attack on the proposed facility. Citing its need to take briefs on the admissibility of the proposed contention, the Board advised the Commission that it was “unable to determine what, if any, impact” the late-filed contention would have on its schedule.

While it is incumbent on the Boards to establish and adjust schedules to meet the key milestones and the Commission’s expectations, under the present circumstances it would be inefficient for the Board to take its attention away from the mandatory hearing issues to decide whether to admit the NEPA-terrorism contention. Whichever way the Board ruled on the contention, its decision would inevitably come before the Commission. The Ninth Circuit’s recent decision in *San Louis Obispo Mothers for Peace v. NRC*,<sup>2</sup> which found fault in the Commission’s established view on NEPA/terrorism, has created an unusual situation calling into question interim decisions in several proceedings. As a result, the Commission has before it a number of requests for clarification on how this decision affects current and future NEPA reviews. Fundamentally, this is a question of law and policy, which calls for a Commission determination. The Commission will determine the agency’s response to the Ninth Circuit’s decision and will provide direction on this matter to our Boards for the resolution of these issues and to the NRC Staff for the conduct of environmental reviews.

The Board has indicated that the “delay beyond November 30 in concluding this proceeding . . . will be very limited (far less than 45 days) . . .”<sup>3</sup> Our decision to take up the NEPA/terrorism contention ourselves should ensure that the filing of the late-filed contention does not impede the Board in achieving this goal.

There is no reason to alter the briefing schedule from what it would be if this issue were proceeding before the Board. The answers that the NRC Staff and the Applicant have already filed before the Board will be considered as if they had been filed with the Commission. The Petitioners may reply with briefs submitted directly to the Commission no later than November 13.

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<sup>1</sup>Licensing Board Order (Granting the NRC’s Motion for an Extension of Time and Revise Case Schedule (Oct. 11, 2006) (unpublished).

<sup>2</sup>449 F.3d 1016 (9th Cir. 2006).

<sup>3</sup>Order (Oct. 11, 2006) at 3 (unpublished).

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK  
Secretary of the Commission

Dated at Rockville, Maryland,  
this 9th day of November 2006.

**Commissioner Gregory B. Jaczko Respectfully Concurs**

I agree with my fellow Commissioners that, fundamentally, the question presented here is a question of law and policy which calls for a Commission determination. I offer a separate, concurring opinion because I also believe that the issue deserves immediate Commission resolution. Until the Commission renders a decision on the NEPA/terrorism issue, parties will have no choice but to continue to file or renew these contentions in all NRC adjudicatory cases and the Boards, having no Commission direction on the issue, will continue to be faced with this challenge. Regardless of whether the Commission continues to take this issue from all future Boards, doing so will inevitably result in unnecessary delays to the adjudicatory proceedings and to some licensing actions. Therefore, I agree that the issue should be resolved by the Commission. I also believe, however, that the Commission should do so expeditiously.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

James E. Dyer, Director

**In the Matter of**

**OPERATING AND DECOMMISSIONING  
POWER REACTORS and  
OPERATING AND DECOMMISSIONING  
RESEARCH AND TEST REACTORS**

**November 2, 2006**

The Petitioners requested that the U.S. Nuclear Regulatory Commission (NRC) issue Demands for Information (DFIs) to research, test, and power reactors to obtain responses to specific questions regarding leaks or potential leaks of radioactively contaminated water into the ground. As the basis for the request, the Petitioners cited several examples of contamination at NRC-licensed facilities and cited NRC regulations requiring licensees to have controls limiting the release of radioactive materials and limiting the radiation dose individuals receive from the operation of NRC-licensed facilities.

The final Director's Decision (DD) on this petition was issued on November 2, 2006. The final DD addresses the requested actions as follows: The portion of the Petition related to power reactors is considered granted in part, because power reactor licensees submitted a substantial amount of the requested information in response to an industry questionnaire. The portion of the Petition related to research and test reactors was denied, because existing NRC design and regulatory programs ensure that there is a minimal risk for a significant release of contaminated liquid effluents.

## DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

### I. INTRODUCTION

By letter dated January 25, 2006, as supplemented by the letters dated February 2 and April 26, 2006, Mr. David Lochbaum, on behalf of the Union of Concerned Scientists and numerous other organizations and individuals (the Petitioners), filed a petition pursuant to Title 10 of the *Code of Federal Regulations* (10 C.F.R.), section 2.206. The Petitioners requested that the U.S. Nuclear Regulatory Commission (NRC) respond to public concerns about nuclear reactors releasing water potentially contaminated with radioactive materials by taking the following action:

take enforcement action against all applicable licensees\* by issuing a Demand for Information requiring them to submit on the docket answers to the following questions:

1. What are the systems and components at your licensed facility that contain radioactively contaminated water?
2. What methods are being used to monitor leakage of radioactively contaminated water from the systems and components identified in response to question 1?
3. What is the largest leak rate that can remain undetected by the monitoring methods identified in response to question 2?
4. What methods are being used to monitor the grounds around the facility for potential leakage of radioactively contaminated water from the systems and components identified in response to question 1?
5. What assurance is there against a leak of radioactively contaminated water into the ground around your licensed facility from remaining undetected long enough to permit migration offsite in quantities exceeding federal regulations?

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\*Applicable licensees' are those licensees as listed in Appendix A, "U.S. Commercial Nuclear Power Reactors," Appendix B, "U.S. Commercial Nuclear Power Reactors Formerly Licensed to Operate," Appendix E, "U.S. Nuclear Research and Test Reactors Regulated by NRC," and Appendix F, "U.S. Nuclear Research and Test Reactors Under Decommissioning" in the "NRC Information Digest: 2004-2005 Edition," NUREG-1350, Vol. 16, Rev. 1, published February 2005 by the Nuclear Regulatory Commission.

As the basis for the request, the Petitioners cited several examples of contamination at NRC-licensed facilities and cited NRC regulations requiring licensees

to have controls limiting the release of radioactive materials and limiting the radiation dose individuals receive from the operation of NRC-licensed facilities. In a letter dated March 1, 2006, the NRC informed the Petitioners that their request was received and that the issues in the petition were being referred to the Office of Nuclear Reactor Regulation (NRR) for appropriate action.

In its March 1, 2006, letter, the NRC stated that it has responded to specific cases of unmonitored releases from nuclear power reactors and to general public concerns relating to possible groundwater contamination near NRC-licensed facilities. All available information on those releases shows no threat to the public health and safety. The NRC's actions have included conducting special inspections, assessing the extent and significance of groundwater contamination, revising NRC inspection guidance, and conducting a lessons-learned task force. The NRC Staff issued Information Notice (IN) 2006-13, "Ground-Water Contamination Due to Undetected Leakage of Radioactive Water," dated July 10, 2006, describing recent instances of groundwater contamination. The NRC inspection reports regarding these instances are referenced in IN 2006-13. The task force has evaluated cases of unmonitored releases of liquid effluents at nuclear power reactors and provided recommendations for possible changes in the NRC's regulation and oversight of power reactor facilities to NRC senior management. In addition, the NRC has held several meetings with licensees, industry groups, and other stakeholders regarding this matter and has committed to holding additional meetings or providing additional information.

The Petitioners have requested that the NRC issue a Demand for Information (DFI) requiring the subject licensees to provide specific information about the potential for unmonitored releases of liquid effluents containing radioactive materials and the licensees' ability to detect such releases before the contamination migrates beyond site boundaries. The administrative action of issuing a DFI is described in 10 C.F.R. § 2.204 as follows:

- (a) The Commission may issue to a licensee or other person subject to the jurisdiction of the Commission a demand for information for the purpose of determining whether an order under § 2.202 should be issued, or whether other action should be taken, which demand will:
  - (1) Allege the violations with which the licensee or other person is charged, or the potentially hazardous conditions or other facts deemed to be sufficient ground for issuing the demand; and
  - (2) Provide that the licensee must, or the other person may, file a written answer to the demand for information under oath or affirmation within twenty (20) days of its date, or such other time as may be specified in the demand for information.

In addition, the NRC Enforcement Manual (available on the NRC Web site, (<http://www.nrc.gov/what-we-do/regulatory/enforcement/guidance.html>)) states:

A DFI is a significant action. It should be used only when it is likely that an inadequate response will result in an order or other enforcement action.

On April 5, 2006, the NRC conducted a meeting and teleconference with the Petitioners. The Petitioners further explained and supported their petition by providing additional information to the NRC's Petition Review Board (PRB). The transcript of this teleconference was treated as a supplement to the petition.

In addition to the April 5, 2006, meeting and teleconference with the Petitioners, the NRC Staff has held several other public meetings on the topic of groundwater contamination near specific facilities and at NRC headquarters in Rockville, Maryland. Meetings with representatives from the Nuclear Energy Institute (NEI) and the nuclear power industry to discuss the issue and possible industry actions were held on March 22, May 9, June 21, and August 10, 2006. Many of the Petitioners participated in the public question and comment periods during these meetings.

The NRC Staff sent a copy of the proposed Director's Decision (DD) to Petitioners and to NEI for comment by letters dated June 28, 2006. Petitioners provided comments in a letter dated July 20, 2006, and NEI provided comments in a letter dated July 28, 2006. The comments were considered by the NRC Staff and are addressed in a publicly available memorandum (ADAMS Accession No. ML062410523).

The NRC Staff has posted information regarding the meetings and other activities related to groundwater contamination on its Web site at <http://www.nrc.gov/reactors/operating/ops-experience/grndwtr-contam-tritium.html>. All publically available documents related to this petition, including the transcript of the April 5, 2006, meeting and teleconference (Accession No. ML061230344), are available in the Agencywide Documents Access and Management System (ADAMS) and at the Commission's Public Document Room (PDR), located at One White Flint North, Public File Area O1 F21, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records are accessible from the ADAMS Public Electronic Reading Room on the NRC Web site <http://www.nrc.gov/reading-rm/adams.html>. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS, should contact the NRC PDR Reference staff by telephone at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr@nrc.gov](mailto:pdr@nrc.gov).

## II. DISCUSSION

The petition requests that the NRC issue a DFI seeking information on the potential for and monitoring of liquid radioactive leaks from the following operating and decommissioning reactors: (1) commercial nuclear power reactors

and (2) research and test reactors (RTRs). These two groups are addressed separately in this Director's Decision.

### ***1. Commercial Nuclear Power Reactors***

With regard to power reactors, the Staff agrees with the Petitioners that radioactive liquid which leaks into the ground undetected on a plant site, should be identified and addressed by licensees before quantities of radioactive material migrate offsite which could result in NRC radiation dose limits for members of the public being exceeded. Although there have been a number of events where significant quantities of radioactive liquids were released to the ground in an unmonitored, unplanned manner, none of the events resulted in public radiation dose limits being exceeded because of the negligible health effects of the isotopes at the quantities and concentrations released. Given the above information that public radiation dose limits have not been exceeded, the Staff concludes that a DFI to obtain information on groundwater contamination is not warranted due to the relatively low safety significance of the issue.

Nonetheless the NRC Staff is pursuing this issue via other means. On March 10, 2006, the NRC Executive Director for Operations (EDO) chartered a Lessons Learned Task Force (LLTF) to assess the NRC regulatory framework in this area, and to make recommendations for change. The LLTF conducted a review from March through September 2006 and issued a report dated September 1, 2006, containing twenty-six recommendations. The report was made publicly available in ADAMS on October 4, 2006 (Accession No. ML062650312). NRC senior management has reviewed the LLTF report recommendations and issued a memorandum which tasks agency offices with addressing the recommendations.

During the meetings on May 9, June 21, and August 10, 2006, NEI described an industry initiative to improve management of inadvertent liquid radiological releases that includes the participation by licensees for all commercial nuclear power reactors, both operating and decommissioning. The initiative includes each licensee developing an action plan and completing an NEI questionnaire on potential sources of inadvertent releases of radioactive liquids, monitoring programs in place to detect unplanned releases of radioactive liquids, and past occurrences of inadvertent releases of radioactive liquids. Each licensee has completed responding to the questionnaire and submitted the results to the NRC. The NRC has made these responses available to the public by placing them on its Web site. Each licensee also has committed to increase reporting of liquid effluent leaks to the NRC and state or local governments, and share operating experience and best practices related to the control of liquid effluents with each other. Most of the future information related to the initiative will be available to the public in documents such as the annual effluents release reports, which are submitted to the NRC.

The NRC Staff will continue to ensure the public health and safety through its reviews and inspection oversight of the industry and will continue to interact with NEI and licensees on the development and implementation of the initiative.

The NRC has concluded that a DFI to licensees for operating power reactors and shutdown power reactors undergoing decommissioning is not warranted. The NRC Staff finds that the questionnaire responses substantially provide the information requested in the petition. Other forms of generic communication that would require a written response from licensees may be pursued in the future, but are deemed unnecessary at this time. In accordance with established NRC procedures (NRR Office Instruction LIC-503, “Generic Communications Affecting Nuclear Reactor Licensees”), the NRC Staff may describe in a Regulatory Issue Summary the agency’s acceptance of the industry initiative as part of the longer term resolution of this issue, although the agency has not yet reached this conclusion.

Because the licensee responses to the NEI questionnaire result in a substantial amount of the information requested by the Petitioners being made available to the public, the NRC considers the portion of the petition related to power reactors to be granted in part. Petitioner’s request that a DFI be used to obtain information is denied. The NRC will revisit the need to issue a generic communication or take other action regarding power reactor licensees if the NRC identifies additional concerns as a result of operating experience or as a result of the NRC Staff’s implementation of the recommendations of the LLTF.

## ***2. Research and Test Reactors***

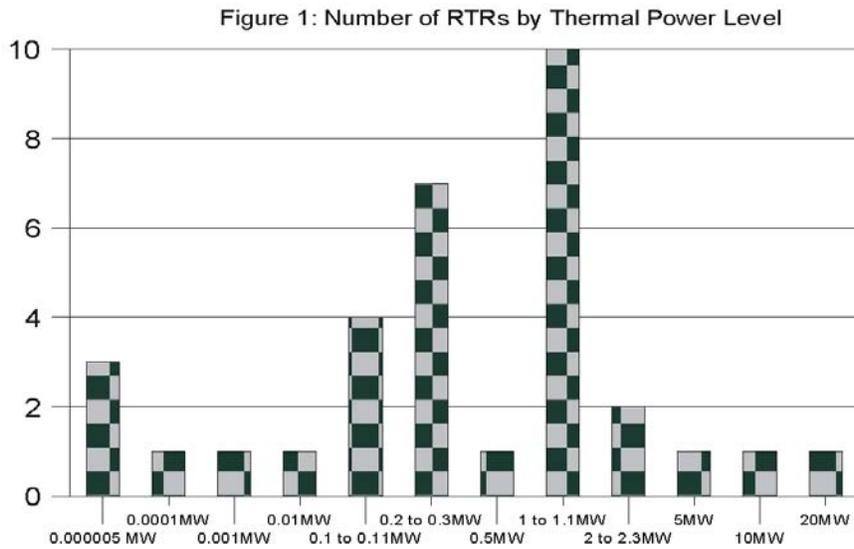
With regard to RTRs, the Staff agrees with the Petitioners that radioactive liquid which leaks into the ground undetected should be identified and addressed by licensees before quantities of radioactive material migrates offsite which could result in NRC radiation dose limits for members of the public being exceeded. Although there have been events where relatively small quantities of radioactive liquids were inadvertently released to the ground from NRC-licensed RTRs, none of the events resulted in public radiation dose limits being exceeded. Given the information presently available, the Staff concludes that a DFI to obtain information on groundwater contamination is not warranted due to the low safety significance of the issue.

RTRs are not addressed by the industry initiative created to assess groundwater contamination at operating and decommissioning commercial nuclear power reactors. Nonetheless, the NRC Staff is pursuing this issue via other means. The NRC Staff made a presentation on this issue at the annual meeting of the National Organization of Test, Research and Training Reactors (TRTR) in September 2006. Further, the NRC Staff has assessed the licensed RTRs in terms of design, operating characteristics, inventories of radioactive liquids,

operating histories, and the potential for unplanned, uncontrolled releases of liquid radioactive effluents.

RTRs differ from commercial power reactors in several ways that significantly reduce the potential for and associated consequences of a release of radioactive liquid effluents. The first difference is the sheer size difference, which can best be exemplified by licensed power levels and affects radioactive inventories, fluid inventories, system size, and associated contamination potential. As shown in Figure 1, operating RTRs regulated by the NRC range in power levels from 5 watts to a maximum of 20 megawatts (MW). In comparison, the reactor core of a typical power reactor has a thermal power level of 3000 MW or more than a factor of 100 greater than the power level of the highest power-level RTR.

In addition, most RTRs are operated as needed to support specific research or educational needs, while power reactors are generally operated continuously between refueling and maintenance outages. Specifically, most RTRs operate for relatively short times at power levels up to the licensed power. Although regulatory requirements are established for both RTRs and power reactors to ensure that a potential leak of radioactively contaminated water into the ground will not exceed public radiation dose limits, the low power levels together with the noncontinuous operation of RTRs result in a much lower inventory and much less potential for release or discharge of radioactive materials for RTRs than is associated with power reactors.



Another factor is that the volume of contaminated water at RTRs is much less than that routinely handled by power reactors. Further, the amount of inventory-makeup water at RTRs to address evaporation and controlled leakage is generally well established, monitored as required, and relatively small. Therefore, RTR licensees are likely to recognize even a small loss of water to the environment. This characteristic introduces a practical defense against the release of liquid effluents that supplements the environmental monitoring requirements in NRC regulations and RTR Technical Specifications. As part of the required programs, licensees assess the possibility of uncontrolled leakage of contaminated liquid and establish preventive measures and protective features. The NRC Staff's evaluation of these measures and features at RTRs considers the facility footprint, which is smaller and closer to more highly populated areas than power reactors, but still provides reasonable assurance that potential leaks will not exceed public radiation dose limits.

A key factor is that NRC-licensed RTRs maintain radiological contamination of their liquids to a minimum, generally well below the levels allowed for release to the environment. This is accomplished by maintaining water chemistry within specified limits in these low power, low temperature reactors to minimize fuel leakage, activation, and corrosion. Further, monitoring of radioactivity levels provides acceptable assurance that actions are taken to correct any problem to keep radioactivity levels low and provides confidence in understanding the magnitude and consequences of a release if it occurs.

To ensure that radiation hazards are identified, each licensee is required to make radiological surveys necessary to comply with the regulations and to evaluate the magnitude and extent of radiation levels and concentrations or quantities of radioactive material. As with power reactors, the requirements and operating practices for RTRs provide assurance that radiological exposures to the public remain well below the established regulatory limits and that conditions related to a release of radioactive material will be identified, evaluated, and corrected. These measures significantly reduce the potential for groundwater contamination such as occurred at Brookhaven National Laboratories and eliminate or dramatically reduce the potential for groundwater contamination affecting public health and safety.

Each RTR and power reactor licensee also is required to keep records of information important to the safe and effective decommissioning of the facility. Such information includes records of spills or other unusual occurrences involving the spread of contamination in and around the facility when significant contamination remains after performing the cleanup procedures or when there is reasonable likelihood that contaminants may have spread to inaccessible areas, as in the case of possible seepage into porous materials. These controls and records provide the information necessary for evaluation of the facility to meet the radiological

criteria for license termination in 10 C.F.R. Part 20, Subpart E, “Radiological Criteria for License Termination.”

Past operating practices and controls on some RTRs undergoing decommissioning have led to the discovery of small amounts of radioactive materials outside the facility site boundaries. An example is the Plum Brook reactor previously operated by the National Aeronautics and Space Administration (NASA). The contamination near Plum Brook, which occurred when the facility was operating, was discovered as part of the site characterization, decontamination, and planned release of the site. Such activities have been or are being performed at the other RTRs being decommissioned to ensure compliance with the requirements of 10 C.F.R. Part 20, Subpart E. Further, NRC has performed and will continue to perform confirmatory radiological surveys to ensure radiological criteria for license termination are satisfied. Although contamination was found at Plum Brook, it was relatively low and did not impact public health and safety as we would expect for RTRs. For those RTRs being maintained in a safe storage condition (SAFESTOR) prior to active decommissioning (DECON), routine monitoring is sufficient to detect a loss of the very small inventory at these sites.

Based on the previous discussion, the NRC Staff finds that NRC-licensed RTRs pose a minimal risk for a significant release of contaminated liquid effluents. We, therefore, conclude that a DFI or other generic action is not warranted to address the control of liquid effluents at operating or decommissioning RTRs and deny the petition as it relates to RTRs. The NRC Staff will continue to inspect facilities to ensure they meet the requirements for control of radioactive materials and contamination. The NRC Staff made a presentation on this issue at the TRTR annual meeting in September 2006. Further, the NRC Staff will continue to evaluate the need for site-specific and generic communications and inspections on RTRs. The NRC Staff will incorporate, as needed, such discussions or inspections into its routine site-specific licensing and oversight activities.

### **III. CONCLUSION**

The NRC Staff shares the concerns expressed by the Petitioners. The NRC Staff is addressing the concerns related to commercial nuclear power reactors that are operating or undergoing decommissioning through its review and inspection oversight activities and by interacting with NEI and specific licensees in the industry initiative to prevent inadvertent liquid radiological releases, to better control the releases that may occur, and to better inform the public of the releases. Because the NEI questionnaire provides the Petitioners with a substantial amount of the requested information, the portion of the petition related to power reactors is considered granted in part even though a DFI was not used as the mechanism to obtain the information. The NRC denies the portion of the petition related

to RTRs because existing design and regulatory programs ensure that there is minimal risk for a significant release of contaminated liquid effluents and the NRC does not need additional information from the RTR licensees.

As provided in 10 C.F.R. § 2.206(c), a copy of this DD 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

J.E. Dyer, Director  
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland,  
this 2d day of November 2006.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**NUCLEAR REGULATORY COMMISSION**

**COMMISSIONERS:**

**Dale E. Klein**, Chairman  
**Edward McGaffigan, Jr.**  
**Jeffrey S. Merrifield**  
**Gregory B. Jaczko**  
**Peter B. Lyons**

**In the Matter of**

**Docket No. 40-8968-ML**

**HYDRO RESOURCES, INC.**  
**(P.O. Box 777, Crownpoint, NM 87313)**

**December 14, 2006**

The Commission denies a petition for review of a Presiding Officer initial decision on the adequacy of a Final Environmental Impact Statement.

**NEPA: NEED FOR EIS SUPPLEMENT**

Not all new information that might emerge following issuance of an environmental impact statement requires a supplement to the impacts analysis. The new information must present a seriously different picture of the environmental impact of the proposed project from what was previously envisioned.

**APPEALS: DISCRETIONARY**

On fact-specific technical issues, where a Presiding Officer has reviewed an extensive record in detail with the assistance of a technical advisor, the Commission is disinclined to upset the Presiding Officer's findings and conclusions, particularly where the submissions of experts have been weighed. While the Commission may choose on occasion to make its own *de novo* findings of fact,

we generally do not exercise that authority where a Presiding Officer or Licensing Board has issued a plausible decision that rests on carefully rendered findings of fact.

#### **NEPA: MITIGATION**

The purpose of addressing possible mitigation measures in an FEIS is to ensure that the agency has taken a hard look at the potential environmental impacts of a proposed action. An EIS therefore must address mitigation measures in sufficient detail to ensure that environmental consequences have been fairly evaluated. An EIS need not, however, contain a complete mitigation plan. In addition, NEPA does not guarantee that federally approved projects will have no adverse impacts at all.

### **MEMORANDUM AND ORDER**

In this decision, we consider a petition for review filed jointly by Intervenor Eastern Navajo Diné Against Uranium Mining (“ENDAUM”), Southwest Research and Information Center (“SRIC”), Grace Sam, and Marilyn Morris. Intervenor seek review of LBP-06-19, the Presiding Officer’s Final Partial Initial Decision in this lengthy materials license proceeding. The Presiding Officer’s decision addresses the adequacy of the Final Environmental Impact Statement’s (“FEIS”) analysis for the Hydro Resources Inc. (“HRI”) Crownpoint Uranium Solution Mining Project. The decision focuses on the FEIS insofar as it relates to the Church Rock Section 17, Unit 1, and Crownpoint sites.<sup>1</sup> HRI and the NRC Staff oppose Intervenor’s petition for review. The Commission carefully has considered the Intervenor’s petition, but finds that it does not identify any “clearly erroneous” factual finding, significant legal error, or any other reason warranting plenary review.<sup>2</sup> For the reasons outlined below, we deny the petition.

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<sup>1</sup> The HRI license, issued by the NRC in 1998, authorizes HRI to conduct *in situ* leach uranium mining at four sites in McKinley County, New Mexico: Church Rock Section 8, Church Rock Section 17, Unit 1, and Crownpoint. Earlier decisions by the Presiding Officer and Commission rejected Intervenor arguments on the adequacy of the FEIS analysis as it relates to the Church Rock Section 8 site. See LBP-99-30, 50 NRC 77 (1999), *aff’d*, CLI-01-4, 53 NRC 31 (2001). The first portion of this proceeding (“Phase I”) focused on Church Rock Section 8. Issues specific to the other three mining sites — Church Rock Section 17, Unit 1, and Crownpoint — have been litigated in this second portion (“Phase II”) of the proceeding.

<sup>2</sup> See 10 C.F.R. § 2.786(b)(4) (2004). The NRC has amended its adjudicatory procedural rules in 10 C.F.R. Part 2. See Final Rule: “Changes to Adjudicatory Process,” 69 Fed. Reg. 2182 (Jan. 14, 2004).  
(Continued)

## I. FEIS SUPPLEMENT

The Intervenor argue that the NRC must supplement the FEIS to address a “change in the legal status of HRI’s proposed mining project.”<sup>3</sup> Specifically, they state that the Diné Natural Resources Protection Act (“DNRPA”), passed by the Navajo Nation Council in 2005, “definitively prohibits uranium mining or processing within Navajo Indian Country,” and that Section 17, Unit 1, and part of the Crownpoint site are “Indian Country.”<sup>4</sup> They therefore claim that “HRI is prohibited by law from mining on at least two of its four proposed sites,” and that an FEIS supplement is necessary because the DNRPA is a “significant change in the legal requirements affecting the HRI mine.”<sup>5</sup> According to Intervenor, by rejecting their argument on the need for an EIS supplement, the Presiding Officer violated 10 C.F.R. § 51.71(d).<sup>6</sup>

But as the Commission explained earlier in this proceeding, not all new information that might emerge following issuance of an environmental impact statement requires a supplement to the impacts analysis. The new information must present a “‘seriously different picture of the environmental impact of the proposed project from what was previously envisioned.’”<sup>7</sup> Here, the Presiding Officer found that the Intervenor “fail[ed] to provide evidence or argument to suggest that the DNRPA calls into question any of the environmental conclusions in the FEIS.”<sup>8</sup> Concluding that there was no “indication that the DNRPA will result in a significantly new potential impact not considered in the FEIS,” the Presiding Officer rejected the Intervenor’s argument on the need for an FEIS supplement.<sup>9</sup>

The Presiding Officer did note that HRI must comply with all applicable legal requirements, including obtaining any necessary underground injection control

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2004). For cases docketed prior to February 13, 2004 (such as this case), the previous procedural rules, including the former 10 C.F.R. § 2.786, continue to apply. A substantially equivalent new rule now appears in 10 C.F.R. § 2.341(b)(4).

<sup>3</sup> Intervenor’s Petition for Review of LBP-06-19 (Sept. 11, 2006) (“Petition”) at 3.

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

<sup>6</sup> Intervenor’s petition does not explain their reference to section 51.71(d), an NRC regulation on the contents of a draft environmental impact statement. We assume they mean to reference the provision’s statement that “[d]ue consideration will be given to compliance with . . . requirements that have been imposed by Federal, State, regional, and local agencies having responsibility for environmental protection . . . .” The regulation emphasizes that “irrespective” of any such requirements, the NRC will consider the environmental impacts of the proposed action.

<sup>7</sup> *Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-04-39, 60 NRC 657, 659 (2004) (quoting *Sierra Club v. Froehlke*, 816 F.2d 205, 210 (5th Cir. 1987)).

<sup>8</sup> LBP-06-19, 64 NRC 53, 104 (2006).

<sup>9</sup> *Id.*

permit and aquifer exemption. He therefore stated that resolution of “whether the sites on which HRI proposes to conduct NRC-licensed mining operations are in ‘Indian Country’ . . . may affect HRI’s ability to mine,” just as whether HRI can obtain necessary permits or exemptions would affect its ability to mine.<sup>10</sup> Pursuant to license condition, HRI must “obtain all necessary permits and licenses from the appropriate regulatory authorities” prior to injecting lixiviant.<sup>11</sup>

To the extent that the DNRPA presents another “legal requirement[ ] affecting the HRI mine,” the Presiding Officer’s decision itself effectively supplements the FEIS, thereby updating the FEIS description of the Navajo Nation’s position on uranium mining activities and making clear the DNRPA’s enactment and HRI’s need “to ensure its operations do not run afoul” of the DNRPA.<sup>12</sup> However, it is beyond the NRC’s authority or the scope of this proceeding to resolve jurisdictional questions that ultimately may determine whether HRI is able to proceed with the uranium mining project. While the NRC recognizes the tribal sovereignty of the Navajo Nation, it is not the function of the EIS process to resolve existing or potential jurisdictional disputes.<sup>13</sup> The FEIS notes expressly that resolution of which proposed project areas are Indian Country and related jurisdictional questions “may ultimately be determined through litigation” outside of the EIS process.<sup>14</sup> Simply put, if HRI cannot satisfy applicable Federal, State, and Navajo Nation requirements, it cannot go forward with the project.

Ultimately, at issue is whether the DNRPA significantly alters the FEIS’s findings on environmental impacts. In their petition for review, Intervenors simply call “the effects of the DNRPA on the FEIS . . . major and obvious,”<sup>15</sup> and then go on to suggest that because of the DNRPA, the FEIS requires a new

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<sup>10</sup> *Id.* at 104 n.40.

<sup>11</sup> *See* License Condition 9.14.

<sup>12</sup> LBP-06-19, 64 NRC at 104 n.40 (quoting LPP-06-1, 63 NRC 41, 71 n.29 (2006)). At the time the FEIS was issued, there was an ongoing moratorium on uranium mining activity on Navajo lands. The Navajo Nation issued the moratorium in 1983, and renewed it by tribal executive order in 1992. *See* NUREG-1508, “Final Environmental Impact Statement to Construct and Operate the Crownpoint Uranium Solution Mining Project, Crownpoint, New Mexico” (February 1997) (“FEIS”) at 3-87. The FEIS nonetheless noted that many individuals (“allottees”) had agreed to lease their land to HRI, and that a conflict existed between the Navajo Nation moratorium on uranium mining and the “individuals’ decisions about their land.” *Id.* at 4-120. In light of unresolved conflicts over applicability of the moratorium to allotted lands, the FEIS describes that the NRC chose to proceed “with the EIS process and with a Safety Evaluation Report” to determine the potential impacts of HRI’s proposed project and alternatives. *Id.*; *see also id.* at A-54.

<sup>13</sup> *See, e.g.*, FEIS at 4-114 to 4-115 (regarding “competing jurisdictional claims” over “which sovereign — the Navajo Nation or the State of New Mexico — can administer the utilization of water rights”; *see also, e.g., id.* at 1-5 (“there are disputes over the jurisdictional status of some of the project area, and similar conflicts may arise regarding other project areas”), 4-115, A-54 to A-55.

<sup>14</sup> *See id.* at 4-101; *see also id.* at 5-4, A-54 to A-56.

<sup>15</sup> Petition at 3 n.3.

cost-benefit analysis, a new analysis of project “alternatives,” and a new analysis of the environmental effects of liquid waste disposal.<sup>16</sup>

As a threshold matter, we note that these arguments were not part of the Intervenor’s original NEPA presentation to the Presiding Officer, and are therefore impermissibly late.<sup>17</sup> The Commission deems waived arguments or legal theories not raised before a Presiding Officer or Licensing Board,<sup>18</sup> or only introduced in a reply filing which opposing parties did not have the opportunity to address.<sup>19</sup> In any event, Intervenor’s broad-brushed calls for “revisit[ing]” or “reevaluat[ing]” the FEIS cost-benefit analysis, analysis of alternatives, and liquid waste disposal analysis do not indicate how the DNRPA significantly alters the FEIS’s findings and conclusions.

Intervenor’s petition for review suggests that the HRI project is “effectively halved” because “at least two of [HRI’s] proposed sites”<sup>20</sup> are Indian Country and cannot be mined under the DNRPA. Thus, they claim that the cost-benefit analysis must be redone. But Intervenor has had the opportunity to litigate the adequacy of the FEIS’s analysis of potential environmental impacts at all four proposed sites: Church Rock Section 8, Church Rock Section 17, Unit 1, and Crownpoint. In the event that HRI proceeds with a much smaller project with two fewer sites, the estimated environmental impacts from mining at the two eliminated sites would not occur. Potential project benefits (e.g., amount of domestically produced uranium to offset imports, new local jobs, and new additional county and state tax revenues) also would be reduced correspondingly.<sup>21</sup> It is not apparent, however, why the overall conclusions of the cost-benefit analysis

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<sup>16</sup> *Id.*

<sup>17</sup> See Intervenor ENDAUM’s, SRIC’s, Grace Sam’s and Marilyn Morris’s Written Presentation in Opposition to HRI’s Application for a Materials License with Respect to NEPA Issues for Church Rock Section 17, Unit 1, and Crownpoint (June 24, 2005) at 50-51.

<sup>18</sup> See *Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-04-33, 60 NRC 581, 592 (2004).

<sup>19</sup> See *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-25, 60 NRC 223, 225 (2004) (“[i]n Commission practice, and in litigation practice generally, new arguments may not be raised for the first time in a reply brief”). In replying to the NRC Staff and HRI, Intervenor introduced a claim that the FEIS cost-benefit analysis requires revision because the Navajo Nation would not receive tax or other benefits from the HRI project. See “Reply to HRI’s and the NRC Staff’s Responses in Opposition to Intervenor’s Written Presentation with Respect to NEPA Issues for Church Rock Section 17, Unit 1, and Crownpoint” (Aug. 19, 2005) at 21. Intervenor’s arguments on a need for new analyses of alternatives and liquid waste disposal impacts appear to be entirely new claims raised on appeal before the Commission.

<sup>20</sup> See Petition at 3.

<sup>21</sup> See, e.g., FEIS at 5-1 to 5-7 (cost-benefit analysis), 4-97 to 4-105 (socioeconomic impacts).

would significantly change, and the Intervenors do not suggest how they would.<sup>22</sup> Of course, if in the end HRI cannot proceed or chooses not to proceed with the proposed project because of the DNRPA, there would be *no* project impacts or benefits at all. Such a result would be equivalent to the “no action” alternative discussed in the FEIS.

## II. CUMULATIVE IMPACTS TO AIR QUALITY AND TO GROUNDWATER RESOURCES

Cumulative impacts are “the impact on the environment which results from *the incremental impact* of the [proposed] action, when added to other past, present, and reasonably foreseeable future actions.”<sup>23</sup> Thus, a cumulative impacts analysis will consider whether the incremental impacts from an action will combine with preexisting environmental impacts in a “fashion that will enhance the significance of their individual effects.”<sup>24</sup> Intervenors argue that the Presiding Officer erred when he found adequate the FEIS’s cumulative impacts analyses for radiological air impacts and groundwater impacts.

The Presiding Officer’s cumulative impacts findings rest heavily upon his analysis of technical and fact-intensive arguments presented by the parties. On such fact-specific technical issues, where a Presiding Officer has reviewed an “extensive record in detail, with the assistance of a technical advisor,” the Commission is disinclined to upset the Presiding Officer’s findings and conclusions, particularly where the submissions of experts have been weighed.<sup>25</sup> While the Commission on occasion may choose to make its own *de novo* findings of fact,

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<sup>22</sup> See, e.g., LBP-06-19, 64 NRC at 92 (summarizing general cost-benefit conclusions). Nor do we find persuasive Intervenors’ new claims that the DNRPA requires additional FEIS analysis of project “alternatives” and of liquid waste disposal options. The FEIS provides an extensive analysis of alternatives and their potential impacts, examining a variety of alternative sites for mining (including the options of only mining at one or two of the proposed sites), alternative sites for yellowcake drying and packaging, and various liquid waste disposal options. See, e.g., FEIS at 2-31, 4-13, 4-58, 4-60, 4-65, 4-80 to 4-81, 4-83, 4-86 to 4-88, 4-94, 4-110 to 4-111. In light of these comprehensive analyses, the Intervenors fail to identify what other “range of alternatives” must be considered. An agency need not “undertake a ‘separate analysis of alternatives which are not significantly distinguishable from alternatives [already] considered, or which have substantially similar consequences.’” *Westlands Water District v. United States Department of the Interior*, 376 F.3d 853, 871-72 (9th Cir. 2004), quoting *Headwaters, Inc. v. Bureau of Land Management*, 914 F.2d 1174 (9th Cir. 1990).

<sup>23</sup> 40 C.F.R. § 1508.7 (emphasis added).

<sup>24</sup> *Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 57 (2001).

<sup>25</sup> *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), CLI-06-1, 63 NRC 1, 2 (2006), quoting *Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-00-12, 52 NRC 1, 3 (2000).

we generally do not exercise that authority where a Presiding Officer or Licensing Board has issued “‘a plausible decision that rests on carefully rendered findings of fact.’”<sup>26</sup> Intervenor’s petition does not identify any clear error or other reason warranting review of the Presiding Officer’s findings on cumulative air impacts or cumulative groundwater impacts, and we therefore decline to review them. Below we provide additional brief comment on the Intervenor’s claims.

#### A. Cumulative Air Impacts

Intervenor’s argue that the FEIS evaluates only the expected “‘incremental’” airborne radiological emissions expected from the HRI project, but not the “‘combined impacts of airborne radiological emissions from HRI’s operation and residues of past mining.’”<sup>27</sup> The Presiding Officer rejected this argument, explaining that the incremental increase in radiological air impacts due to the HRI project is so “‘de minimis’” or “‘negligible’” that it would not significantly enhance already existing environmental effects from background airborne radiation.<sup>28</sup> Intervenor’s provide us with no reason to question that conclusion. As we stated in Phase I of this proceeding regarding expected environmental impacts at Church Rock Section 8, “‘Intervenor’s understandably . . . focus upon the adverse effects of former mining, but they have not explained why [an] additional, and expected to be negligible, radiation impact . . . would have any public health and safety significance.’”<sup>29</sup>

Intervenor’s also argue that the FEIS inappropriately averaged background radiation levels for Church Rock and Crownpoint, when Church Rock has significantly higher radiation levels. But the Presiding Officer acknowledged “‘the existence of discrete sources of higher background radiation in Church Rock.’”<sup>30</sup> Indeed, he noted that background doses as high as 1000 mrem/year are not unusual in the United States.<sup>31</sup> He concluded, however, that the actual “‘typical background radiation level for the general public at Church Rock is *closer* to the 225 mrem/year estimated in the FEIS, rather than the 1000 mrem/year alleged by the Intervenor’s.”<sup>32</sup> Intervenor’s petition does not suggest otherwise.

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<sup>26</sup> HRI, CLI-06-1, 63 NRC at 2, quoting *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-03-8, 58 NRC 11, 25-26 (2003).

<sup>27</sup> Petition at 5 (emphasis added).

<sup>28</sup> See LBP-06-19, 64 NRC at 71-72, 74, 80.

<sup>29</sup> CLI-01-4, 53 NRC at 69.

<sup>30</sup> LBP-06-19, 64 NRC at 70; see also *id.* at 70-71.

<sup>31</sup> See *id.* at 70; see also LBP-06-1, 63 NRC at 61 n.16 (Phase II Radiological Air Emissions Challenges), *aff’d*, CLI-06-14, 63 NRC 510 (2006).

<sup>32</sup> LBP-06-19, 64 NRC at 71 (emphasis added).

## B. Cumulative Groundwater Impacts

Intervenors argue that the FEIS fails to take a hard look at the potential for groundwater contaminants to migrate from HRI's proposed mine. Their particular concern is the presence of underground mine workings (from a previous underground mining operation) located in the southern end of the Church Rock site, and the potential for these mine workings to form preferential pathways for lixiviant (mining solutions) to move away from the well field. Such pathways could lead to "excursions," which are "unanticipated releases of mining solutions that move beyond the well field area."<sup>33</sup>

Specifically, Intervenors argue that the Presiding Officer erred by "accepting the FEIS's unexplained and unjustified failure to model the acknowledged potential for excursions in the old mine workings."<sup>34</sup> They claim that by finding the FEIS discussion of the mine workings adequate, the Presiding Officer "violated" 10 C.F.R. § 51.71, an NRC regulation which calls for environmental impacts to be quantified to the "fullest extent practicable."<sup>35</sup> They further claim that the Presiding Officer "lacked any rational basis" for assuming that HRI is capable of correcting an excursion if one were detected.<sup>36</sup>

The FEIS discusses the potential for horizontal and vertical excursions during HRI's proposed mining operations extensively, particularly focusing on the underground mine workings in Church Rock.<sup>37</sup> Contrary to Intervenors' claims, we see no indication that the Presiding Officer relied upon "unexplained and unjustified" discussion in the FEIS, or that he lacked any reasonable basis for concluding that the FEIS provides adequate consideration of the old mine workings and the potential risks they pose to groundwater impacts.<sup>38</sup>

Referencing the FEIS, the Presiding Officer notes that there are established methods in *in situ* leach mining for detecting and correcting horizontal and vertical excursions, that HRI has a sensitive excursion monitoring program, and that HRI

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<sup>33</sup> FEIS at 4-15 (internal quotation omitted).

<sup>34</sup> Petition at 7.

<sup>35</sup> *Id.* (quoting 10 C.F.R. § 51.71).

<sup>36</sup> *Id.*

<sup>37</sup> *See* FEIS at 4-54 to 4-56.

<sup>38</sup> *See* LBP-06-19, 64 NRC at 76-78. We find unpersuasive Intervenors' claim that the Presiding Officer lacked "any rational basis" to assume that an excursion can be corrected. In addressing potential vertical excursions, the FEIS states that it "should be possible" to mine in the Westwater Canyon aquifer without creating a vertical excursion, but notes that HRI has not actually "specifically demonstrated" how it would accomplish this. *See* FEIS at 4-56. Therefore, the FEIS does not exclude the possibility that there could be a vertical excursion. That HRI has not provided a specific "demonstration" of how it would mine in the Westwater Canyon without creating an excursion, however, does not by itself suggest that HRI would be incapable of correcting an excursion if one were detected.

would employ premining testing and particular drilling methods to minimize the risk of excursions.<sup>39</sup> In the event of an excursion, HRI must follow procedures mandated by license condition, including notifying the NRC by telephone within 24 hours.<sup>40</sup> If HRI cannot correct an excursion within 60 days, it must either terminate injection of lixiviant within the well field until aquifer cleanup is complete, or increase its surety amount to cover the full third-party cost of correcting and cleaning up the excursion.<sup>41</sup>

In short, the record amply supports the Presiding Officer's finding that the FEIS "adequately considers the cumulative impact of HRI's proposed ISL mining operation on groundwater contamination *vis a vis* the old mine workings."<sup>42</sup> Intervenors have not shown the Presiding Officer's fact-based findings to be unreasonable.<sup>43</sup>

### III. MITIGATION MEASURES FOR THE CROWNPOINT MUNICIPAL WATER WELLS

The FEIS identifies potentially significant groundwater impacts associated with HRI's proposed mining at the Crownpoint site.<sup>44</sup> Under a conservative analysis, the NRC Staff found a potential risk that the local water supply at Crownpoint could be contaminated by excessive amounts of uranium. Therefore, the Staff has imposed a license condition requiring HRI to move the town of Crownpoint's existing water supply wells and water delivery system prior to injecting any lixiviant at Crownpoint.<sup>45</sup>

Specifically, HRI's license requires it to replace the town of Crownpoint's water supply wells, construct the necessary water pipeline, and provide funds so that the existing water supply systems of the Navajo Tribal Utility Authority ("NTUA") and the Bureau of Indian Affairs ("BIA") can be connected to the

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<sup>39</sup> See LBP-06-19, 64 NRC at 77; *see also* FEIS at 4-16 to 4-17.

<sup>40</sup> See License Condition 12.1; *see also* FEIS at 4-21 to 4-22.

<sup>41</sup> See License Condition 10.13; *see also* FEIS at 4-21 to 4-22.

<sup>42</sup> LBP-06-19, 64 NRC at 78.

<sup>43</sup> Intervenors' arguments on the underground mine workings are not entirely clear. In one part of their argument they apparently challenge the Presiding Officer's discussion of potential horizontal excursions, *see* Petition at 7 (quoting the Presiding Officer's discussion of horizontal excursions at LBP-06-19, slip op. at 23 [64 NRC at 77]), but then in another part of the argument go on to quote parts of the Presiding Officer's decision and FEIS that specifically address vertical excursions. *See id.* (quoting LBP-06-19, slip op. at 24 [64 NRC at 78] and FEIS at 4-56). Regardless, their petition does not present any clear error or other reason for revisiting the Presiding Officer's fact-based evaluation of groundwater impacts.

<sup>44</sup> See FEIS at 4-48 to 4-49, 4-113, 4-122 to 4-123, 5-7.

<sup>45</sup> See License Condition 10.27; *see also* FEIS at 4-62, A-1 to A-2.

new wells. The license further requires that “[a]ny new wells, pumps, pipelines, and other changes to the existing water supply systems . . . shall be made such that the systems can continue to provide at least the same quantity of water as the existing systems.”<sup>46</sup> Moreover, water quality at each individual well head must “not exceed the EPA’s primary and secondary drinking water standards.”<sup>47</sup> To determine “the appropriate placement of the new wells,” HRI must “coordinate with the appropriate agencies and regulatory authorities,” including the BIA, the NTUA, the Navajo Nation Department of Water Development and Water Resources, and the Navajo Nation Environmental Protection Agency.<sup>48</sup>

The Presiding Officer found that the FEIS adequately addresses mitigation measures for replacing the Crownpoint water supply wells.<sup>49</sup> Intervenors challenge this ruling, arguing that the mitigation measures are “insufficiently discuss[ed]” and must be supported by “scientific studies and substantial evidence.”<sup>50</sup> In particular, they claim that while the replacement wells must provide the same quantity of water as existing wells and must meet specific drinking water standards, “this mitigation measure is not supported by any data as to whether there are other locations in or near Crownpoint that might meet these criteria, which regulatory agency, if any, will be responsible for well relocation or oversight of well relocation, whether existing water infrastructure or new infrastructure will be needed and whether building such infrastructure is even feasible.”<sup>51</sup>

Intervenors, however, demand a level of detail not required by NEPA. The purpose of addressing possible mitigation measures in an FEIS is to ensure that the agency has taken a “hard look” at the potential environmental impacts of a proposed action.<sup>52</sup> An EIS therefore must address mitigation measures “in sufficient detail to ensure that environmental consequences have been fairly evaluated.”<sup>53</sup> An EIS need not, however, contain “a complete mitigation plan,”<sup>54</sup>

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<sup>46</sup> License Condition 10.27(A).

<sup>47</sup> *Id.* Placement of new water wells and implementing details relating to the requirement that the new water supply systems provide “at least the same quantity of water as the existing systems” would implicate the jurisdiction of other agencies and regulatory authorities as indicated in License Condition 10.27. For example, local authorities may confront issues, such as planned water usage or population growth issues, relating to the sustainable yield of a different aquifer if one were chosen for a new water supply.

<sup>48</sup> *Id.*; see also FEIS at 4-113.

<sup>49</sup> LBP-06-19, 64 NRC at 93-95.

<sup>50</sup> Petition at 8.

<sup>51</sup> *Id.*

<sup>52</sup> *Westlands Water Dist.*, 376 F.3d at 872, citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 352 (1989).

<sup>53</sup> *Robertson*, 490 U.S. at 352.

<sup>54</sup> *Id.*

or “a detailed explanation of specific measures which will be employed.”<sup>55</sup> Indeed, a mitigation plan “‘need not be legally enforceable, funded or even in final form to comply with NEPA’s procedural requirements.’”<sup>56</sup> As long as the potential adverse impacts from a proposed action have been adequately disclosed, it is not improper for an EIS to describe “mitigating measures in general terms and rel[y] on general processes . . . .”<sup>57</sup>

At bottom, Intervenor’s fear that HRI may be unable to meet the “criteria” specified in the license condition. But if HRI cannot meet the specified water quantity and quality and related requirements for the replacement water supply wells, it will *not* be able to begin mining at Crownpoint. In short, the mitigation measures set forth specific goals that are a *condition* that HRI must meet prior to injecting lixiviant at Crownpoint.

#### IV. LAND USE IMPACTS AND MITIGATION MEASURES

Intervenor’s argue that the Presiding Officer erred when he found adequate the FEIS discussion of potential land use impacts. They claim that the Presiding Officer ignored evidence they presented on the impacts that HRI’s mining project would have on the Navajo people who live and work in Church Rock Section 17, and that by “failing to examine the environmental impacts of HRI’s operation on the specific locale of Section 17, the Presiding Officer violated 40 C.F.R. § 1508.27.”<sup>58</sup> They also argue that the Presiding Officer ignored their evidence showing that the mitigation measures for land use impacts are inadequate.

We find no indication that the Presiding Officer failed to address or “ignored”

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<sup>55</sup> *Id.* at 353.

<sup>56</sup> *Okanogan Highlands Alliance v. Williams*, 236 F.3d 468, 473 (9th Cir. 2000), quoting *National Parks & Conservation Ass’n v. United States Department of Transportation*, 222 F.3d 677, 681 n.4 (9th Cir. 2000). We find unpersuasive Intervenor’s argument that mitigation measures set forth in an EIS must be “supported by scientific studies.” See Petition at 8. The case cited by Intervenor for that proposition did not involve an EIS, but instead mitigation measures relied upon to avoid the need to prepare an EIS. See *Wyoming Outdoor Council v. Corps of Engineers*, 351 F. Supp. 2d 1232, 1250 (D. Wy. 2005).

<sup>57</sup> *Northern Alaska Environmental Center v. Kempthorne*, 457 F.3d 969, 979 (9th Cir. 2006). Moreover, HRI will need to coordinate the placement of the new water wells with various specified authorities. Consequently, numerous details that will bear on potential well placement are simply not yet known, and may not be known until HRI has been able to survey potential locations for replacement wells.

<sup>58</sup> Again, the Intervenor’s cite to a regulation without identifying their precise argument. Section 1508.27 sets forth the Council on Environmental Quality’s definition of the word “significantly” as used in the NEPA process to describe the significance of environmental impacts. It provides that the significance of an action must be analyzed in several contexts, including the “locality.” See 40 C.F.R. § 1508.27.

evidence that the Intervenor presented. Instead, he rejected their claims, agreeing instead with HRI and the NRC Staff in concluding that the FEIS adequately discusses the land use impacts. To be sure, HRI's proposed mining project necessarily would cause adverse land use impacts at all of the proposed mining sites.<sup>59</sup> These include temporarily disrupting livestock grazing, which "'would adversely affect Navajo who have grazing permits for the land and rely on livestock as an important economic resource.'" <sup>60</sup> The mining activities also would force the relocation of particular individuals or families that are Navajo "allottees" (owners of surface and mineral rights) or their tenants. But as the FEIS notes, the allottees were "voluntary signatories" to leases negotiated by HRI. They were informed as a condition of the leases that there would be a need for relocation and access restrictions during HRI's mining. Among those forced to relocate, however, there may be individuals who were not actual signatories to a lease, but are living on allotted lands (e.g., as tenants).

To help mitigate land use impacts, HRI is to compensate those individuals who hold livestock grazing permits that would be interrupted:

HRI should compensate these permittees directly (for private lands) or indirectly through the relevant tribal [authority] (for tribal lands) or Federal agency (BIA for allottee lands). Staff recommend that the Navajo Nation negotiate compensation arrangements for lands where grazing permits are held in tribal trust, and that BIA negotiate compensation arrangements for lands where allottees have grazing permits.<sup>61</sup>

In addition, HRI is to provide direct compensation to any residents of allotted lands who were not signatories to leases, but are forced to relocate during project construction and operation.<sup>62</sup>

These are measures "to help mitigate"<sup>63</sup> impacts that understandably would bring hardship to the individuals affected. The FEIS does not purport to claim that the mitigation measures would relieve all difficulty. Intervenor claim that the Presiding Officer "violated NEPA by accepting the adequacy of monetary compensation and relocation as mitigation measures."<sup>64</sup> Intervenor believe that "monetary compensation does not suffice," and that it is unacceptable for

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<sup>59</sup> See FEIS at 92-96.

<sup>60</sup> LBP-06-19, 64 NRC at 82 (quoting FEIS at 4-94). The FEIS notes that under the Federal General Mining Law of 1872, "mineral rights owners [HRI has secured mineral leases] can disrupt surface grazing permits in order to remove minerals." See FEIS at 4-94.

<sup>61</sup> FEIS at 4-95.

<sup>62</sup> *Id.*

<sup>63</sup> *Id.*

<sup>64</sup> Petition at 9.

any potentially affected individuals to have to relocate.<sup>65</sup> Whether there is *any* mitigation measure that they would find adequate is not apparent because they do not suggest one. But NEPA does not guarantee that federally approved projects will have no adverse impacts at all. Nor does it require an agency to select the most environmentally benign alternative. While the HRI FEIS might have said more about those who may be affected by HRI's project, the Presiding Officer found that it sufficiently discusses potential impacts and mitigation measures. Intervenor provide us with no reason to revisit that conclusion.<sup>66</sup>

## V. CONCLUSION

For the reasons given in this decision, we *deny* the Intervenor's petition for review of LBP-06-19.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK  
Secretary of the Commission

Dated at Rockville, Maryland,  
this 14th day of December 2006.

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<sup>65</sup> *See id.* at 9-10.

<sup>66</sup> Intervenor also claim the FEIS is inadequate because it does not specifically address "the logistical matters" involved with the relocations, including "how tribal members unwilling to be relocated will be treated." *See* Petition at 8. But as we stressed previously, *see supra* pp. 426-27, mitigation measures need not include a complete plan with all details. The FEIS stresses that "it would not be possible to determine how many individuals or families might have to be relocated until well drilling began." *See* FEIS at 4-94.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**ATOMIC SAFETY AND LICENSING BOARD**

**Before Administrative Judges:**

**Michael C. Farrar**, Chairman  
**E. Roy Hawkens**  
**Nicholas G. Trikouros**

**In the Matter of**

**Docket No. IA-05-054**  
**(ASLBP No. 06-847-03-EA)**

**STEVEN P. MOFFITT**

**December 13, 2006**

In this challenge to an NRC Staff immediately effective enforcement order prohibiting a former Davis-Besse employee from working in NRC-licensed activities for 5 years, the Licensing Board finds a proposed settlement to be in the public interest, so that no adjudication is required.

**LICENSING BOARDS: RESPONSIBILITIES (SETTLEMENT OF CONTESTED PROCEEDING)**

**RULES OF PRACTICE: SETTLEMENT OF CONTESTED PROCEEDING**

In order for a licensing board to review a settlement agreement for compliance with agency regulations, including 10 C.F.R. §§ 2.203 and 2.338, and to evaluate whether the agreement is plainly in the public interest, the wording of the agreement must be clear enough for the board to ascertain unambiguously what its terms signify.

**NUCLEAR REGULATORY COMMISSION: ENFORCEMENT**

The apparent inconsistency created by an unexplained lapse of several years

between the Staff's completion of a thorough investigation and its initiation of an immediately effective enforcement order may jeopardize both public confidence in government decisionmaking and public protection from asserted safety threats, and may require an explanation if the immediate effectiveness of the order were to be challenged.

## **ORDER**

### **(Approving Proposed Settlement and Dismissing Proceeding)**

Early last month, the parties to this enforcement proceeding, which arose out of the Davis-Besse reactor vessel head problems of several years ago, entered into a formal Settlement Agreement and submitted a joint motion asking this Board to issue their proposed settlement order and thereby to dismiss the proceeding. Those documents set forth, *inter alia*, conditions that will govern Mr. Moffitt's future employment opportunities and steps Mr. Moffitt has agreed to take in order to have the NRC Staff's original enforcement order — which had banned him, effective immediately, from all work in the regulated nuclear industry for 5 years — superseded by the new settlement order.

Upon review of the initial documents, we perceived certain ambiguities in their terms. Accordingly, we deferred action and asked for additional information to provide clarification. *See* our Order (Requiring Additional Information Regarding Proposed Settlement) of November 8, 2006 (unpublished).<sup>1</sup> The parties have since provided us the clarifying information needed, and in conjunction therewith have submitted a Revised Settlement Agreement addressing the points that had concerned us.

#### ***1. The Public Interest***

Given the longstanding NRC policy of encouraging parties' settlement efforts, we are pleased to learn that an agreement has been reached and to announce our approval of the proposed revised settlement. In its current form, that agreement not only complies with agency regulations, including 10 C.F.R. §§ 2.203 and 2.338, but — as we explain below — is also plainly seen to be in “the public interest.” *See Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 71 (1994); *see also* 10 C.F.R. § 2.203 (settlement “shall be subject to approval by” the Board, which “may order such adjudication

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<sup>1</sup>In that order (at 3), we pointed out that “we cannot carry out our obligation to determine whether a settlement agreement is in the public interest if we cannot ascertain unambiguously what the terms of that agreement are intended to signify.”

of the issues as [it] may deem to be required in the public interest’); *id.* § 2.338(i) (to same effect).

Given the showing made by the joint motion and its accompanying documents, the substance of which we adopt, the public interest does not require the adjudication of any issues herein. Rather than continue to contest the matter,<sup>2</sup> Mr. Moffitt has accepted responsibility for his role, has agreed to assist the Staff in other ongoing enforcement actions, and has acceded to a reduced and phased — but nonetheless still substantial — employment penalty: the 5-year, quite stringent employment restrictions originally imposed upon him nearly a year ago will continue to be in effect for somewhat more than another full year, and then will be followed by 2 additional years of less stringent restrictions. In addition, Mr. Moffitt — who is currently employed in a related but unregulated field — has agreed to give a series of talks that are calculated to have a salutary educational effect upon key audiences, viz., employees in the regulated nuclear industry who provide information that makes its way to the NRC Staff.

## **2. *The Board’s Concern***

Having concluded that the ending of this proceeding is in the public interest, we also have a word to say about its beginning. In this and companion matters, the NRC Staff conducted a lengthy and thorough investigation, the results of which were embodied in an Office of Investigations report dated August 2003. For whatever reason, the Staff did not take enforcement action until well over 2 years later, in January of 2006 — then, when it did so, it disqualified Mr. Moffitt and two others from work in the regulated nuclear industry, effective immediately, because of the imminent threat they were said to represent.<sup>3</sup>

This course of events evokes an apparent — and unexplained — inconsistency between (1) the lengthy delay (after the investigatory report was completed) before any enforcement action was taken, and (2) the subsequent sudden implementation of an assertedly urgent job debarment order.<sup>4</sup> Whatever the explanation for that

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<sup>2</sup>Mr. Moffitt’s efforts in that regard would have been hampered by his inability to obtain the testimony of (1) a former subordinate against whom a criminal proceeding is pending and who has elected, in the exercise of his Fifth Amendment right against self-incrimination, not to provide testimony herein, and (2) other former co-workers similarly situated.

<sup>3</sup>According to the enforcement order, the Staff appears to have utilized the “public health and safety” provision of the regulation, not its “willful violation” aspect, to make its action immediately effective. 71 Fed. Reg. 2581, 2584 (Jan. 17, 2006); see 10 C.F.R. § 2.202(a)(5). Compare the Staff’s action in *Safety Light Corp.* (Bloomsburg, Pennsylvania Site), as described in LBP-05-2, 61 NRC 53, 56-59 (2005).

<sup>4</sup>So there can be no room for any misunderstanding, we point out that we of course have no quarrel either with the Staff’s need, in appropriate circumstances, to investigate matters thoroughly before

*(Continued)*

inconsistency here, such a course of events can be viewed as jeopardizing both (1) public confidence, in terms of creating negative perceptions about the quality and/or timeliness of government decisionmaking, and (2) public protection, in terms of allowing the continued presence at nuclear power plants of employees whose conduct had made them, at least as later asserted by the enforcement order, a threat to the public health and safety. We trust that whatever factors led to the troubling course of events here can be avoided in the future.<sup>5</sup>

### 3. *The Settlement Terms*

In light of the observations made in Section 1, above, and notwithstanding the concerns stated in Section 2, it is appropriate for us to rely upon the jointly submitted proposed order by incorporating its terms — consisting of eight numbered paragraphs (which include reference to the ‘‘Exhibit A’’ Revised Settlement Agreement that we append hereto) — in this Order, as follows:

1. On January 4, 2006, the Staff issued an Order (Effective Immediately) Prohibiting Involvement in NRC Licensed Activities to Mr. Steven P. Moffitt, a former employee of Davis-Besse Nuclear Power Plant.
2. On February 23, 2006, Mr. Moffitt properly and timely answered the Order, denied the allegations in the Order, and requested an expedited hearing.
3. On March 16, 2006, this Licensing Board was established.
4. On March 20, 2006, the Staff answered the hearing request, and agreed that Mr. Moffitt was entitled to a hearing.
5. On March 27, 2006, the Board granted Mr. Moffitt’s hearing request.

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taking enforcement action, or with the long time that can be consumed in the investigation of a complex matter involving numerous participants and witnesses. Nor do we question that in some circumstances the need can arise to take urgent enforcement action, removing from their positions immediately any employees thought to be an imminent threat to the public health and safety. Our concern here is only with the unexplained lapse of time between the completion of the thorough investigation and the initiation of the urgent action; although we note in the text on this page the *impact* of that delay on two aspects of the public interest, we decline to speculate as to what its *cause* might have been here.

<sup>5</sup>If similar circumstances were to arise again and a challenge to an order’s immediate effectiveness were to be brought, it is not apparent why a long delay between investigation and action, while a supposed threat to public safety continued unabated, would not require some degree of explanation by the Staff in defending the order’s immediate effectiveness. No such challenge was lodged here, presumably because of the strategic implications of the severe limitations the operative regulations otherwise place upon the scope and timing of such a challenge. *See* 10 C.F.R. § 2.202(c)(2)(i); *In re Geisen*, LBP-06-13, 63 NRC 523, 543, 558 (2006) (citing *Oncology Services Corp.*, CLI-93-17, 38 NRC 44, 58 (1993), and Tr. at 68-69 (Apr. 11, 2006)).

6. The Order issued on January 4, 2006, to Mr. Steven P. Moffitt is superseded by this Order.

7. The Revised Settlement Agreement, attached as Exhibit A to this Order, is hereby incorporated into this Order.

8. Upon review of the Revised Settlement Agreement, the Licensing Board is satisfied that its terms reflect a fair and reasonable settlement of this matter, in keeping with the objectives of the NRC's Enforcement Policy, and that no further adjudication of any matter is required in the public interest.

With all matters that were subject to adjudication herein having thus been amicably resolved in the public interest, the relief sought by the joint motion is hereby GRANTED, the controversy before us is TERMINATED in accordance with the Revised Settlement Agreement (Exhibit A hereto), and the proceeding is DISMISSED.

It is so ORDERED.

THE ATOMIC SAFETY AND  
LICENSING BOARD

Michael C. Farrar, Chairman  
ADMINISTRATIVE JUDGE

E. Roy Hawkens  
ADMINISTRATIVE JUDGE

Nicholas G. Trikouros  
ADMINISTRATIVE JUDGE

Rockville, Maryland  
December 13, 2006

Copies of this Order were sent this date by e-mail transmission to counsel for the parties.

**EXHIBIT A**  
**REVISED SETTLEMENT AGREEMENT**

1. On January 4, 2006, the Staff issued an Order (Effective Immediately) Prohibiting Involvement in NRC Licensed Activities to Mr. Steven P. Moffitt, a former employee of Davis-Besse Nuclear Power Plant.
2. On February 23, 2006, Mr. Moffitt properly and timely answered the Order, denied the allegations in the Order, and requested an expedited hearing.
3. On March 16, 2006, the Atomic Safety and Licensing Board with jurisdiction over Mr. Moffitt's hearing request was established.
4. On March 20, 2006, the Staff answered the hearing request, and agreed that Mr. Moffitt was entitled to a hearing.
5. On March 27, 2006, the Board granted Mr. Moffitt's request for a hearing.
6. The parties agree that the Order issued on January 4, 2006 to Mr. Moffitt will be superseded by an Order approving and incorporating this Agreement.
7. Mr. Moffitt agrees that, by virtue of his position as Director of Technical Services, he was responsible for misinformation communicated to the NRC during the Fall of 2001 related to NRC Bulletin 2001-01.<sup>1</sup> Mr. Moffitt agrees the NRC was misled by FirstEnergy's oral and written submissions to the NRC during the Fall of 2001 related to Bulletin 2001-01.
8. Mr. Moffitt agrees to take the following corrective actions:
  - a. Mr. Moffitt agrees not to seek employment in any NRC-licensed activities prior to January 4, 2008.
  - b. Between January 4, 2008 and January 4, 2010, Mr. Moffitt agrees not to seek employment at an NRC-licensed operating nuclear power facility, or with the corporate parent of a nuclear power facility in a position related to oversight or operation of a nuclear power plant, as either a manager or a supervisor, above the first-line supervisor level prior to January 4, 2010.<sup>2</sup>
  - c. Mr. Moffitt agrees to use his best efforts to make presentations to the INPO Senior Nuclear Plant Manager (SNPM) training course regarding lessons learned from the incident at Davis-Besse for directors and future directors of nuclear power facilities.
  - d. Mr. Moffitt agrees to use his best efforts to make presentations to an NRC leadership development program regarding lessons learned from the incident at Davis-Besse. The NRC Staff agrees to make every effort to arrange said presentations.

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<sup>1</sup>The NRC initiated enforcement actions against other individuals who it believes provided inaccurate and/or incomplete information to the NRC in connection with the Bulletin.

<sup>2</sup>A "first-line" supervisor is the first person, starting from the bottom of the organization, with supervisory or managerial authority.

9. With regard to the presentations to the SNPM training course and the NRC Leadership Development Program:

- a. Mr. Moffitt agrees to provide drafts of his presentations to the Director of the Office of Enforcement for review prior to making the presentation.
- b. Mr. Moffitt will use his best efforts to make presentations to the NRC class for at least the next two years, from the date of this Agreement.
- c. Mr. Moffitt will use his best efforts to make four presentations to the SNPM course over the next two years, from the date of this Agreement.

10. With regard to Mr. Moffitt's employability:

- a. Mr. Moffitt may engage in sales of products and services to nuclear facilities.
- b. Mr. Moffitt's current position complies with the terms of this Agreement.
- c. Mr. Moffitt cannot hold any position with his current employer that violates the terms of this Agreement.

11. The corrective actions listed in Item 8 are sufficient to satisfy the NRC's underlying concerns with Mr. Moffitt's trustworthiness and reliability regarding the incident at Davis-Besse. Furthermore, the NRC Staff believes Mr. Moffitt's acceptance of responsibility and agreement to undertake corrective actions serves the public interest.

12. Mr. Moffitt agrees to cooperate with any on-going investigations or proceedings in connection with the incident at Davis-Besse.

13. The NRC Staff agrees to provide copies of this Agreement to the licensees for the Fermi, Perry, and Davis-Besse nuclear power stations for their information and consideration in regard to the Personnel Access Data System (PADS) for access authorization.

14. In light of the above, the parties agree that all further procedural steps before the Licensing Board and any right to challenge or contest the validity of the order entered into in accordance with the Agreement, and all rights to seek judicial review or otherwise to contest the validity of the order are expressly waived.

15. The parties further agree that the order accepting the Agreement has the same force and effect as an order made after a full hearing.

16. It is also agreed by the parties that all matters required to be adjudicated as part of this proceeding have been resolved upon the Licensing Board's approval of this agreement and the parties agree that the proceeding, ASLB-06-847-03-EA, should be dismissed upon the Licensing Board's approval of this Agreement.

*[As submitted to the Board, the foregoing Revised Settlement Agreement was subscribed to on behalf of Counsel for the NRC Staff and Counsel for Mr. Moffitt]*

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**ATOMIC SAFETY AND LICENSING BOARD**

**Before Administrative Judges:**

**Alan S. Rosenthal**, Chairman  
**Dr. Paul B. Abramson**  
**Dr. Richard F. Cole**

**In the Matter of**

**Docket No. 40-8838-MLA**  
**(ASLBP No. 00-776-04-MLA)**

**U.S. ARMY**  
**(Jefferson Proving Ground Site)**

**December 20, 2006**

**RULES OF PRACTICE: CONTENTIONS (SPECIFICITY  
AND BASIS)**

Neither the Rules of Practice nor Commission precedent mandates the consideration at the threshold of every basis assigned for every contention advanced by the hearing requestor.

**RULES OF PRACTICE: CONTENTIONS (SAFETY EVALUATION  
REVIEW)**

The Commission has made it clear that “[t]he adequacy of the applicant’s license application, not the NRC staff’s safety evaluation, is the safety issue in any licensing proceeding, and under longstanding decisions of the agency, contentions on the adequacy of the [content of the Safety Evaluation Report] are not cognizable in a proceeding.” 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

## **NATIONAL ENVIRONMENTAL POLICY ACT: ENVIRONMENTAL ASSESSMENT**

The National Environmental Policy Act requires the preparation of an Environmental Impact Statement (EIS) for all “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C) (2000). Council on Environmental Quality regulations state that, in determining whether to prepare an EIS, the Federal agency shall prepare an Environmental Assessment, which will “briefly provide sufficient evidence and analysis for determining whether to prepare an [EIS] or a finding of no significant impact.” 40 C.F.R. § 1508.9(a)(1).

## **RULES OF PRACTICE: CONTENTIONS (ENVIRONMENTAL ASSESSMENT)**

It might well be that, in order for a petitioner to raise an admissible contention with respect to a Staff finding of no significant impact, it need not demonstrate that there will in fact be a significant environmental impact as a consequence of the proposed action; however, it must “allege[ ] facts which, if true, show that the proposed project *may* significantly degrade some human environmental factor.” *Steamboaters v. FERC*, 759 F.2d 1382, 1392 (9th Cir. 1985).

## **MEMORANDUM AND ORDER (Determining Scope of Evidentiary Hearing)**

On February 2, 2006, this Board granted the petition to intervene and request for hearing of Save the Valley, Inc. (Intervenor or STV) regarding an application submitted by the Department of the Army (Licensee) for an amendment to its NRC materials license (License No. SUB-1435). LBP-06-6, 63 NRC 167 (2006). Between 1984 and 1994, under the auspices of that license the Licensee conducted accuracy testing of depleted uranium (DU) tank penetration rounds at its Jefferson Proving Ground (JPG) site located in Madison, Indiana. It now seeks a license amendment that would provide an additional 5-year period for submittal of a decommissioning plan for that site. Such a plan is required because there is currently amassed on the JPG site approximately 70,000 kilograms of DU munitions.

In granting Intervenor’s petition to intervene, this Board found that at least one of Intervenor’s contentions, Contention B-1, satisfied the admissibility requirements imposed by 10 C.F.R. § 2.309(f)(1). We deferred ruling on the remainder of Intervenor’s contentions and assigned bases until completion of the NRC Staff’s technical review, at which time Intervenor would be provided the opportunity to

withdraw, to amend, and/or to supplement the contentions it filed with its original petition to intervene. Pending before this Board is a motion of Intervenor in which it sets forth the contentions it would now have admitted.

For the reasons set forth below, we find these contentions inadmissible, except to the extent addressed to the adequacy of the Licensee's proposed site characterization activities.

## I. BACKGROUND

The extended history of this proceeding is adequately summarized in LBP-06-6 and need not be rehearsed here. For present purposes, the starting point is the November 23, 2005 petition for intervention and request for hearing filed by Intervenor in response to a June 27, 2005 *Federal Register* notice.<sup>1</sup> That notice provided an opportunity to seek a hearing on the Licensee's May 25, 2005 proposal submitted to the NRC Staff, in which it sought authorization for an alternate schedule in which to submit its decommissioning plan for the JPG site.<sup>2</sup> Specifically, the Licensee desires to characterize the JPG site over a 5-year period, at the end of which it will present the NRC with a decommissioning plan. LBP-06-6, 63 NRC at 170.

The petition to intervene advanced six contentions — each supported by a number of bases — concerned with the following aspects of the Licensee's alternate schedule proposal: (1) the Environmental Radiation Monitoring Plan (ERMP) previously submitted by the Licensee in connection with its since-withdrawn 2003 application for a possession-only license (POL);<sup>3</sup> (2) the Field Sampling Plan (FSP);<sup>4</sup> (3) the Health and Safety Plan (HASP);<sup>5</sup> and (4) the Licensee's timeliness and financial assurance commitments. *Id.* at 172-76. Intervenor's filing was accompanied by an unopposed motion to the effect that, should its request be granted, a hearing in the matter be deferred to await the NRC Staff's completion of its technical review of the alternate schedule proposal.

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<sup>1</sup> 70 Fed. Reg. 36,964 (June 27, 2005); Petition To Intervene and Request for Hearing of Save the Valley, Inc. (Nov. 23, 2005).

<sup>2</sup> Letter from Alan G. Wilson, Department of the Army, to Tom McLaughlin, Office of Nuclear Material Safety and Safeguards (May 25, 2005) [hereinafter May 25 Letter].

<sup>3</sup> Environmental Radiation Monitoring Program for License SUB-1435 Jefferson Proving Ground (Sept. 2003), Encl. to Letter from John Ferriter, Department of the Army, to Tom McLaughlin, Office of Nuclear Material Safety and Safeguards (Sept. 30, 2003) [hereinafter ERMP].

<sup>4</sup> Field Sampling Plan: Depleted Uranium Impact Area Site Characterization Jefferson Proving Ground, Madison, Indiana (May 2005), Encl. to May 25 Letter [hereinafter FSP].

<sup>5</sup> Health and Safety Plan: Depleted Uranium Impact Area Site Characterization Jefferson Proving Ground, Madison, Indiana (May 2005), Encl. to May 25 Letter [hereinafter HASP].

The Licensee filed a response to Intervenor's petition to intervene<sup>6</sup> and asserted that none of the stated contentions is admissible. *Id.* at 176-79. The NRC Staff also filed a response,<sup>7</sup> in which it maintained that one of Intervenor's stated contentions, as supplemented by three bases, was admissible and, therefore, the hearing request should be granted. *Id.* at 179-81.

On February 2, 2006, we issued LBP-06-6, granting both the hearing request and the motion to defer a hearing. On the former score, we found that, as supported by at least one of the bases assigned for it, Contention B-1 satisfied the admissibility requirements imposed by 10 C.F.R. § 2.309(f)(1). *Id.* at 183-85. That contention asserted (*id.* at 183):

As filed, the FSP is not properly designed to obtain all the verifiable data required for reliable dose modeling and accurate assessment of the effects on exposure pathways of meteorological, geological, hydrological, animal, and human features specific to the JPG site and its surrounding area.

The specific basis to which the Board pointed in admitting Contention B-1 — basis (a)<sup>8</sup> — stated:

The EI geophysical study which will follow the fracture analysis study, as described in section 6.1 of the FSP, is supposed to find all significant karst features and location of the water table. From these studies, 10 to 20 pairs of monitoring wells are proposed to attempt to tie into "conduits" of ground water flow. This study may help to site monitoring wells, but stream gauging studies should be an early and integral part of the search for likely conduits. The stream reaches of strong gain would be a very strong direct indicator of the discharge points of ground water "conduits." EI is an indirect technique and can miss conduits or identify features that are not conduits. The FSP alludes to doing stream gauging in its discussion of well location criteria, but the time table shown indicates stream studies will follow the ground water studies by a year.

*Id.* at 183.

Having found acceptable one of Intervenor's contentions along with a supporting basis, the Board deemed it unnecessary to pass at that time on the adequacy of either the other bases assigned for Contention B-1 or the five additional contentions and their assigned bases. Rather, given our decision to grant Intervenor's

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<sup>6</sup> Army's Response to Save the Valley, Inc.'s Concerns and Contentions as Set Forth in Its Petition To Intervene Filed Herein on November 23, 2005 (Dec. 16, 2005) [hereinafter Army Response].

<sup>7</sup> NRC Staff's Response to Petition To Intervene and Request for Hearing Filed by Save the Valley, Inc. (Dec. 19, 2005) [hereinafter NRC Staff Response].

<sup>8</sup> The NRC Staff had acknowledged in its response to Intervenor's petition to intervene that Contention B-1 as supported by basis (a) was admissible. LBP-06-6, 63 NRC at 180.

motion to defer the hearing, it seemed that resolving the disagreement among the parties on the remaining contentions could readily abide the event of the NRC Staff's completion of its technical review of the alternate schedule proposal. In that connection, we indicated that Intervenor would then be given a reasonable opportunity to review the documents associated with the technical review and to make changes, if so advised, in what it had presented in the hearing request. *Id.* at 185-86.

On March 15, the NRC Staff published in the *Federal Register* notice of its completion of the Environmental Assessment (EA) prepared in support of the Licensee's proposed license amendment.<sup>9</sup> The EA concluded that a "Finding of No Significant Impact" (FONSI) was appropriate, with the result that an Environmental Impact Statement (EIS) would not be prepared.<sup>10</sup>

More specifically, the NRC Staff concluded that the Licensee's proposed activities associated with site characterization "should not produce significant radiological or nonradiological impacts to the environment, workers or members of the public," and any radiation exposure to workers or the public would be within the limits of 10 C.F.R. Part 20. EA at 2-3. Although acknowledging that the presence of unexploded ordnance (UXO) on the JPG site "could potentially have nonradiological environmental impacts," the Staff did not anticipate it being a source of "significant environmental impact," given the Licensee's assurance that precautions would be taken to mitigate the risks from UXO in its planning and implementation of site characterization activities. *Id.* at 3. The Staff considered a "no-action alternative" to the Licensee's proposal — i.e., denial of the alternate schedule request. It concluded that, while the environmental impacts would be slightly less, "without the requested time to conduct additional site characterization, . . . the [Licensee] would not have information adequate to produce a viable [decommissioning plan and, therefore,] the no-action alternative would not serve the objective of effective decommissioning." *Id.* at 3-4.

On April 27, the NRC Staff notified the Board<sup>11</sup> that it had issued the following materials license amendment (License Amendment Number 13):

The Army shall submit a decommissioning plan for NRC review and approval under an alternate schedule identified in its May 25, 2005, Field Sampling Plan, its responses to action items from a September 8, 2005, public meeting by letter dated October 26, 2005, its Field Sampling Plan addendum dated November 2005, and its

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<sup>9</sup> 71 Fed. Reg. 13,435 (Mar. 15, 2006).

<sup>10</sup> *Ibid.*; see also Environmental Assessment Related to Issuance of a License Amendment to [NRC] Materials License No. SUB-1435 Department of Army (Mar. 6, 2006), Encl. to Memorandum from Thomas McLaughlin, Office of Nuclear Material Safety and Safeguards, to Atomic Safety and Licensing Board and All Parties (Mar. 14, 2006) [hereinafter EA].

<sup>11</sup> NRC Staff Notification of License Amendment Issuance (Apr. 27, 2006).

responses to NRC's request for additional information by letter dated February 9, 2006, by the end of 2011 or earlier. The Army will also submit an Environmental Report using the guidance in NUREG-1748 for NRC to use in preparing an Environmental Impact Statement.<sup>12</sup>

The amendment was accompanied by issuance of the Staff's Safety Evaluation Report (SER).<sup>13</sup> As reflected therein, in performing its safety evaluation of the Licensee's alternate schedule proposal, the Staff reviewed the proposed FSP to determine whether it satisfied the three criteria governing the grant of an alternate schedule request (10 C.F.R. § 40.42(g)(2)):<sup>14</sup>

The Commission may approve an alternate schedule for submittal of a decommissioning plan required pursuant to paragraph (d) of this section if the Commission determines that the alternative schedule is [(1)] necessary to the effective conduct of decommissioning operations and [(2)] presents no undue risk from radiation to the public health and safety and [(3)] is otherwise in the public interest.

More particularly, the NRC Staff examined the Licensee's proposed site characterization activities — groundwater and surface water monitoring; biota, soil, and sediment sampling; determination of distribution coefficients, penetrator corrosion and dissolution rate — and found that each of the planned approaches was adequate. SER at 4-8. It concluded that "there is reasonable assurance that the health and safety of the public will not be endangered by the proposed site characterization activities and alternate schedule for submittal of a [decommissioning plan]," that "such activities will be conducted in compliance with NRC regulations," and finally, that "it is in the public interest to take the additional

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<sup>12</sup>Materials License No. SUB-1435 Amendment No. 13, at 2, Encl. 1 to Letter from Daniel M. Gillen, Office of Nuclear Material Safety and Safeguards, to Alan G. Wilson, Department of the Army (Apr. 26, 2006).

<sup>13</sup>Safety Evaluation for Issuance of Amendment No. 13 to Materials License No. SUB-1435, Department of the Army, Jefferson Proving Ground, Encl. 2 to Letter from Daniel M. Gillen, Office of Nuclear Material Safety and Safeguards, to Alan G. Wilson, Department of the Army (Apr. 26, 2006) [hereinafter SER].

<sup>14</sup>The Staff noted in the SER that it also reviewed the Licensee's HASP; however, given that the HASP deals "solely with worker protection in the DU impact area" no findings were made with respect to the plan nor was it relied upon in reaching conclusions regarding the proposed license amendment. SER at 4. Likewise, although not providing a basis for the conclusions reached in the SER, the Staff noted that during its review it considered that the Licensee's current ERMP, established in 1999, obligates the Licensee to collect semi-annual samples throughout the 5-year period. According to the Staff, if any of the groundwater, surface water or sediment samples exceed the preestablished action levels, "the Army is required to contact NRC and take corrective measures to reduce the uranium concentration (natural uranium plus DU) below the action level." *Ibid.*

time to adequately address monitoring deficiencies and allow for more specific information to be gathered from the site.” *Id.* at 8-9.<sup>15</sup>

In light of the NRC Staff’s completion of its technical review, on May 1 the Board issued an order restoring this proceeding to fully active status.<sup>16</sup> In that order, the Board established a schedule allowing Intervenor to amend, to withdraw, and/or to supplement its original petition to intervene. It cautioned the Intervenor that any attempt to add bases to existing contentions or to advance new contentions must be entirely based upon information contained in the EA or SER and the information must not have been previously available.<sup>17</sup> In addition, Intervenor was instructed to make clear to the Board and the other parties precisely what contentions and what supporting bases it sought to be included in an evidentiary hearing. The Licensee and the Staff were likewise instructed that any response filed was to be strictly confined to the content of the request for leave to amend and/or to supplement the original petition to intervene. It was made clear that any further augmentation on either party’s part with regard to admissibility of contentions or adequacy of supporting bases not sought to be amended or supplemented would not be accepted. May 1 Order at 4.

Pursuant to our May 1 Order, on May 31, Intervenor timely filed a motion for leave to withdraw, to amend, and/or to supplement contentions contained in its November 23, 2005 hearing request.<sup>18</sup> In a separate document, it set forth the nine contentions and supporting bases it would have included in the evidentiary hearing.<sup>19</sup> Although amending selected bases for Contention B-1 and adding three new contentions, Intervenor remained steadfast in its belief that the Licensee’s May 25 alternate schedule proposal contained “serious and glaring deficiencies which, if not corrected” will prevent the Licensee from conducting a proper site characterization pursuant to 10 C.F.R. § 40.42(g)(2). STV Final Contentions at 3. With respect to its three new contentions, Intervenor maintained that being based on either the Staff’s SER or the EA, neither of which was available at the time it filed its initial contention, each contention complied with the Board’s May 1 Order. In its contentions addressing the SER, Intervenor asserted the Staff’s review was inadequate because it “does not sufficiently address or

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<sup>15</sup>With respect to the potential risk to “human health and safety from UXO in placing the wells and gathering the site-specific data in the areas with UXO,” the SER states that the Licensee has acknowledged such risk and has “indicated . . . it will take precautions in its planning and implementation of site characterization to mitigate the risks from UXO.” SER at 8.

<sup>16</sup>Licensing Board Memorandum and Order (Scheduling Further Proceedings) (May 1, 2006) (unpublished) [hereinafter May 1 Order].

<sup>17</sup>May 1 Order at 3; *see also* 10 C.F.R. § 2.309(c), (f)(2).

<sup>18</sup>Motion for Leave To Withdraw, Amend, and Supplement Contentions of Save the Valley, Inc. (May 31, 2006) [hereinafter STV Motion To Amend].

<sup>19</sup>Final Contentions of Save the Valley, Inc. (May 31, 2006) [hereinafter STV Final Contentions].

resolve relevant significant deficiencies'' in the Licensee's FSP or that plan's interrelationship with the HASP. STV Motion To Amend at 3. As for the Staff's EA, Intervenor insisted that its ''reasoning and assumptions . . . are faulty in significant respects.'' *Ibid.*

On June 19, the Licensee timely submitted its response to Intervenor's Motion To Amend, in which it conceded that Intervenor's Motion to supplement Contention B-1, bases (m) and (q), should be granted, but nonetheless maintained that all of Intervenor's remaining requests to supplement, to clarify, or to add new contentions should be denied.<sup>20</sup> It is the Licensee's position that the remaining supplemented and/or clarified bases and the three new contentions do not meet the requirements under 10 C.F.R. § 2.309(f)(2) for submission of new or amended contentions, nor do they satisfy the contention admissibility requirements imposed by 10 C.F.R. § 2.309(f)(1).

On June 20, the NRC Staff timely submitted its response to Intervenor's Motion To Amend.<sup>21</sup> It urged the Board to deny Intervenor's request to clarify and to supplement selected bases assigned in support of Contention B-1, as well as to deny its request to admit two new contentions. It is the Staff's position that Contention E-1 and E-2 should not be admitted for the reason that they constitute impermissible attacks on the SER. With respect to Intervenor's new Contention F-1, the Staff asserted that it should be rejected for failing to raise a genuine dispute of law or fact with the Staff's FONSI determination.

On June 30, Intervenor timely submitted its reply to the Licensee and the NRC Staff's filings.<sup>22</sup> In it, Intervenor maintained that, contrary to the assertions of the Licensee and the Staff, its requests to supplement, to clarify, and to add new contentions complied with the Board's May 1 Order, as well as with the applicable Commission regulations governing submission of amended or new contentions. In addition, it asserted that its new bases and contentions satisfied the contention admissibility requirements imposed by 10 C.F.R. § 2.309(f)(1).

After receipt of all the parties' pleadings, this Board convened a prehearing conference on July 19 in Madison, Indiana. Its purpose was to address those matters pertaining to the scope of the forthcoming evidentiary hearing that were left open in LBP-06-6. In the course of the conference, it became evident that the details of the Licensee's site characterization plans remained in a state of flux and, thus, it would be fruitful for the Licensee and Intervenor to consult regarding

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<sup>20</sup> Army's Response to the Motion for Leave To Withdraw, Amend, and Supplement Contentions of Save the Valley, Inc. Filed Herein on May 31, 2006 (June 19, 2006) [hereinafter Army Response to STV Motion].

<sup>21</sup> NRC Staff Response to Motion for Leave To Withdraw, Amend and Supplement Contentions by Save the Valley, Inc. (June 20, 2006) [hereinafter NRC Staff Response to STV Motion].

<sup>22</sup> Reply in Support of Motion for Leave To Withdraw, Amend and Supplement Contentions of Save the Valley, Inc. (June 30, 2006) [hereinafter STV June 30 Reply].

the issues of concern to Intervenor. Accordingly, the Board concluded, with the agreement of all parties, that no useful purpose would be served by proceeding to hold an evidentiary hearing in advance of such consultation.

Giving effect to this conclusion, the Board provided the Licensee and Intervenor an opportunity to bring together their technical consultants to explore the accommodation of the Intervenor's concerns and to discuss future procedures for updating and revising the Licensee's site characterization plans. The parties were directed to submit to the Board a joint status report on their progress, which they did on September 29.<sup>23</sup> The report detailed the negotiations to date, which included four meetings between the Licensee and the Intervenor and two additional meetings between their counsel (in all of which meetings the NRC Staff and/or its counsel were also participants). Although no agreement had been reached on any of the matters of concern to the Intervenor, the parties requested time for additional negotiations. The Board granted the request and directed that a second status report be submitted no later than November 9.

The second status report was timely submitted. It indicated that, after two teleconferences, the Licensee and Intervenor "were unable to reach agreement on any issues" and "have no plans for future meetings and collaboration regarding development of the site characterization."<sup>24</sup> As a result, "[a]ll matters remain unresolved and the parties' respective positions remain unchanged."<sup>25</sup>

Given this apparent impasse in negotiations, we deem it necessary to move forward with the evidentiary hearing in this proceeding. To this end, we now turn to consider the admissibility of Intervenor's contentions not addressed in LBP-06-6, *supra*.

## II. ANALYSIS

### A. Legal Standards Governing the Admissibility of Intervenor's Contentions

As provided in 10 C.F.R. § 2.309(f)(1), in order to be admitted for evidentiary consideration, a contention must:

- (i) Provide a specific statement of the issue of law or fact to be raised or controverted;
- (ii) Provide a brief explanation of the basis for the contention;
- (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;

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<sup>23</sup> Joint Status Report on Settlement Negotiations (Sept. 29, 2006).

<sup>24</sup> Second Joint Status Report on Settlement Negotiations at 2 (Nov. 9, 2006).

<sup>25</sup> *Ibid*.

(iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;

(v) Provide a concise statement of the alleged facts or expert opinions which support the . . . petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the . . . petitioner intends to rely to support its position on the issue; and

(vi) Provide sufficient information to show that a genuine dispute exists with the . . . licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

A contention that fails to comply with each of these requirements must be rejected. *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999); Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2221 (Jan. 14, 2004).

As previously noted, in LBP-06-6 the Board found that Intervenor's Contention B-1, as supported by at least one of its bases, satisfied the admissibility requirements of 10 C.F.R. § 2.309(f)(1). 63 NRC at 183-85. In that circumstance, we need not address further that contention at this time. Neither the Rules of Practice nor Commission precedent mandates the consideration at the threshold of every basis assigned for every contention advanced by the hearing requestor. That does not mean that each of the sixteen bases assigned by Intervenor in support of Contention B-1 will merit exploration at the evidentiary hearing. Upon receipt of Intervenor's written testimony, the Licensee and the NRC Staff will have the opportunity to object to any part of it they deem to be outside the permissible scope of the proceeding.<sup>26</sup>

## **B. Scope of This Proceeding**

As seen, what the Licensee is here seeking is simply a 5-year period in which to characterize the JPG site, with the expectation that at the end of such time it will submit to the NRC Staff a viable decommissioning plan. During those 5 years it will be permitted *only* to conduct site characterization activities; no decommissioning operations may begin until such time as the Licensee submits, and the Staff approves, a decommissioning plan. Thus, contrary

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<sup>26</sup> Similarly, with respect to those bases assigned to support Contention B-1 that Intervenor sought to add or to amend in light of the Staff's issuance of the SER and EA, we need not address at this juncture whether they satisfy the timeliness requirements under 10 C.F.R. § 2.309(f)(2).

to Intervenor's assertions, this proceeding does not encompass "the entire JPG DU site decommissioning process." STV Final Contentions at 24. Rather, the scope of this proceeding is limited to whether the Licensee's proposal for characterizing the JPG site during the alternate schedule period — i.e., the next 5 years — is: (1) "necessary to the effective conduct of decommissioning operations"; (2) will "present[] no undue risk from radiation to the public health and safety"; and (3) "is otherwise in the public interest." 10 C.F.R. § 40.42(g)(2).<sup>27</sup> In order for a contention to be considered "within the scope of th[is] proceeding" (10 C.F.R. § 2.309(f)(1)(iii)), it must challenge one of these three criteria. Intervenor's Contention B-1 was admitted by the Board because it challenged the adequacy of the Licensee's FSP, by which the Licensee will ultimately characterize the site and eventually produce an effective decommissioning plan. Any other contention submitted by Intervenor that is not similarly addressed to one of the three factors in 10 C.F.R. § 40.42(g)(2) will be deemed inadmissible.

### **C. Contention Admissibility**

With the foregoing in mind, we now turn to a consideration of Intervenor's final contentions not previously addressed.

#### ***1. Intervenor's Contention Regarding the Licensee's Environmental Radiation Monitoring Plan***

Intervenor's Contention A-1 asserts that "[t]he Army's most recent Environmental Radiation Monitoring Plan (2003) is still inadequate in several respects to meet the requirements of [10 C.F.R. § 40.42(g)(2)]." STV Final Contentions at 5. Six bases are assigned in support of Contention A-1. Each one addresses perceived inadequacies with the Licensee's 2003 ERMP, which was previously submitted by the Licensee in conjunction with its now-superseded 2003 application for a 5-year POL. Intervenor would have it that the Licensee's 2003 ERMP is "both logically and practically intertwined with the JPG Site Characterization Project contemplated in the [Licensee's May 25 proposal]," and as such is "within the scope of the current hearing opportunity." *Id.* at 4 n.3.

The first two bases assigned for Contention A-1 are concerned with the adequacy of the ERMP with regard to the Licensee's response to certain environmental conditions detected during monitoring. *Id.* at 5. The next two bases

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<sup>27</sup>To be clear, if it so chooses, Intervenor will have an opportunity to challenge the adequacy of the Licensee's decommissioning plan once it is formally docketed with the NRC Staff, presumably in 2011. At that time, a notice of opportunity to request a hearing will be published in the *Federal Register* and Intervenor, or any other member of the public, will be able to file a petition to intervene and request for a hearing challenging specific components of that decommissioning plan.

address the water supply underlying the JPG site. First, Intervenor asserts that the Licensee's statement in the ERMP, that "[d]irect exposure of humans to drinking water is unlikely given that the aquifer is not a drinking water source and is of poor quality," is erroneous because it wrongly denies the existence of individuals who live in proximity to the JPG site and who receive their drinking water from private wells. *Id.* at 6 (quoting ERMP at 3-4). Second, Intervenor maintains that the ERMP needs to "acknowledge and address th[e] critical fact" that the "aquifer underlying the JPG site is not sufficiently characterized to demonstrate its extent and gradient." *Ibid.* In its fifth basis, Intervenor contends that the ERMP fails to utilize the entire monitoring data history and actual historic data trends for the JPG site in its trending analysis, which "would provide a more complete picture for analysis purposes." *Id.* at 6-7. Lastly, Intervenor alleges that the ERMP wrongly "dismisses the need for air monitoring during future prescribed burns . . . [and] denies the need for future biota sampling." *Id.* at 7.

The Licensee and the NRC Staff each assert that Contention A-1 is inadmissible because the challenge to the ERMP is beyond the scope of this proceeding. According to both parties, the ERMP is a separate obligation placed upon the Licensee as part of its existing materials license, and is not encompassed in this proceeding for an alternate schedule for submittal of a decommissioning plan. Army Response at 3; NRC Staff Response at 10-13.

We agree that Contention A-1 is inadmissible to the extent that it is not addressed to the site characterization issues that are the focal point of this proceeding. Stated otherwise, the proceeding does not provide a vehicle for challenges to the adequacy of the ERMP, which is the fulfillment of an independent monitoring obligation imposed upon the Licensee as part of its existing materials license. Because the ERMP is subject to ongoing NRC Staff review and approval, the Licensee was not required to — and did not — submit a new or updated ERMP. Although the ERMP was relevant during the 2003 POL proceeding — in which the Army was seeking only to modify its environmental monitoring obligations — the Licensee is here seeking approval of an "alternate schedule for active site characterization and submission of a decommissioning plan. The proposed alternate schedule . . . does not require any change, or reference, to the existing ERMP." NRC Staff Response at 12. The Licensee's obligation to maintain its ERMP during the requested 5-year period will continue "in parallel with" the FSP. *Ibid.* As such, any challenge to the ERMP is beyond the scope of this proceeding and, therefore, inadmissible. 10 C.F.R. § 2.309(f)(1)(iii).<sup>28</sup>

A portion of Contention A-1 appears, however, to be concerned with site characterization and, therefore, is subsumed under Contention B-1 — namely, the

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<sup>28</sup> If Intervenor wishes to raise concerns with respect to the Licensee's ERMP or the Staff's review of that plan, it may exercise its rights under 10 C.F.R. § 2.206 to petition for a rulemaking or to seek an enforcement action. It may not, however, raise such matters within the context of this hearing.

claim that the “aquifer underlying the JPG site is not sufficiently characterized to demonstrate its extent and gradient.” STV Final Contentions at 6. Without proper characterization of the aquifers, the Licensee will have insufficient knowledge of the direction and gradient of potential contaminants traveling through the aquifers in the area. This presents a significant problem in that all parties acknowledge the possible existence of individuals near the JPG site who use private wells for drinking water. *See ibid.*; NRC Staff Response at 16; Army Response at 6. Given this fact, proper aquifer characterization is “necessary to the effective conduct of decommissioning operations.” 10 C.F.R. § 40.42(g)(2).<sup>29</sup> Thus, while the challenge to the ERMP is inadmissible, a specific and adequately supported challenge to the characterization of the aquifer is admitted for litigation in the context of Contention B-1.

## **2. *Intervenor’s Contentions Regarding the Licensee’s Health and Safety Plan***

Intervenor raises two contentions addressing the Licensee’s HASP. It asserts, first, that “[t]he HASP is very generic and not site-specific in nature, without identification of the particular UXO hazards to be addressed or the specific locations in which they are found” (STV Final Contentions at 19 (Contention C-1)), and second, that “[t]he HASP is not effectively integrated with the FSP” (*id.* at 20-22 (Contention C-2)). Both contentions are supported by a number of bases, all of which contend that the HASP and the FSP fail adequately to include site-specific information about the location of UXO on the JPG site, and fail to include necessary health and safety precautions for Licensee personnel who might encounter UXO during site characterization activities. According to Intervenor, FSP sampling procedures that involve driving electrodes or drilling wells into the ground — such as will occur with the electrical imaging, groundwater, soil, and sediment sampling — necessitate the inclusion in the FSP and HASP of detailed UXO safety procedures. *Id.* at 19-22.

Because Intervenor fails to provide any basis for believing that the potential risk to Licensee personnel from UXO on the JPG site might pose a *radiological* risk to members of the public, we agree with the NRC Staff that Intervenor’s contentions are beyond the scope of this proceeding. 10 C.F.R. § 2.309(f)(1)(iii);

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<sup>29</sup> We find unavailing the NRC Staff’s claim that Intervenor fails to state facts to support its position regarding the adequacy of the Licensee’s aquifer characterization. *See* NRC Staff Response at 17 (citing 10 C.F.R. § 2.309(f)(1)(v)). Intervenor states clearly that a recent study conducted by the Army concluded that “wells near and within the Delta Impact Area south of Big Creek are *too widely spaced to construct a meaningful ground-water elevation contour map.*” STV Final Contentions at 6 (emphasis added).

*see also* NRC Staff Response at 35-36.<sup>30</sup> Section 40.42(g)(2) makes clear that, in its review of that proposal, the only health-related concern the Staff must evaluate is whether the alternate schedule will “present[ ] . . . undue risk *from radiation* to the *public health and safety*”; it is not required to evaluate the potential for nonradiological hazards to Licensee personnel as well. 10 C.F.R. § 40.42(g)(2) (emphasis added). The Staff correctly states that “[w]hile the presence of UXO at JPG most certainly is a safety issue,” it is not within the scope of the Staff’s regulatory review in this proceeding. NRC Staff Response at 36-37.

To the extent it also endeavors to assert that the Licensee’s failure to include detailed safety precautions in its HASP and/or FSP renders its alternate schedule not “effective [for the] conduct of decommissioning operations,” Intervenor fails to provide any support for such a claim. Intervenor supplies no facts or expert opinion to demonstrate that the lack of detailed safety plans in the Licensee’s application means that the Licensee will not follow appropriate UXO safety practices during site characterization operations or that it will otherwise not be able to successfully conduct site characterization activities. To the contrary, the HASP states that onsite personnel will be trained to recognize the types of UXO that may be present on the JPG site, and that only qualified UXO specialists will be allowed to conduct intrusive operations in areas where there is suspected UXO. *See* HASP at 8-6 to 8-7. Intervenor’s contentions are, therefore, inadmissible on the additional ground that they fail to demonstrate that a genuine dispute exists with the Licensee on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi); *see also* NRC Staff Response at 37-45.

### **3. *Intervenor’s Contentions Regarding the Licensee’s Timeliness and Financial Assurances for Decommissioning Operations***

Intervenor’s Contentions D-1 and D-2 challenge the Licensee’s timeliness and financial assurances for its eventual decommissioning of the JPG site. First, in Contention D-1, Intervenor asserts that “[t]he alternate schedule being proposed fails to meet the requirements of 10 C.F.R. § 40.42 of a *definite* schedule for *timely* decommissioning of the JPG site.” STV Final Contentions at 28. Two of the three bases assigned in support of the contention maintain that the Licensee’s alternate schedule proposal does not satisfy the Commission’s “Timely Decommissioning

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<sup>30</sup>In its response to Intervenor’s petition to intervene, the Licensee did not take a position on whether Intervenor’s Contention C-1 or C-2 satisfied the admissibility requirements under 10 C.F.R. § 2.309(f)(1). Instead, it explained that the HASP is intended to address the health and safety aspects of site characterization “comprehensively,” while specific aspects of the program will be addressed with future addenda that are referenced in the HASP. Army Response at 32. These addenda are “anticipated to include activity-specific hazard analyses and associated detailed health and safety procedures beyond the protocol specified in the HASP.” *Ibid.*

Rule.”<sup>31</sup> Intervenor asserts, first, that the proposal does not include a limit on the time permitted to decontaminate and decommission the JPG site, and, second, that the Licensee does not demonstrate that the longer period of time requested is necessary to complete decommissioning. *Id.* at 29. In Intervenor’s mind, the Timely Decommissioning Rule was adopted in order to prevent this sort of “indefinite postponement of the decommissioning and decontamination of licensed sites.” *Ibid.* Third, Intervenor claims that the Licensee has not demonstrated a “pattern of compliance with Commission decommissioning rules [so as to] instill confidence that timely decommissioning will actually occur at JPG.” *Id.* at 30. Intervenor maintains that such a showing is “contemplated by Commission guidance,” particularly NUREG-1757.<sup>32</sup>

In its second contention, Contention D-2, Intervenor states that “[t]he financial assurance provided for the Army’s alternate schedule for decommissioning is insufficient to meet the requirements of 10 C.F.R. §§ 40.36 and 40.42 for a complete, *definite and quantified* financial commitment for the decommissioning of the JPG site.” *Ibid.* Intervenor’s two bases for this contention address, first, the asserted failure of the Licensee to provide specific budget information for the 5-year site characterization period, and, second, the purported inadequacy of the Licensee’s Statement of Intent submitted to the NRC Staff. *Id.* at 30-32.<sup>33</sup> With respect to the Statement of Intent, Intervenor asserts that the Statement did not include cost estimates for conducting and implementing the FSP and the HASP; that it provided inadequate documentation to prove that the requisite funds for decommissioning will be obtained or that the signator of the May 25 Letter has the authority to request and to approve disbursement of the necessary funds; and that it did not indicate the potential effects the requested delay would have on the eventual cost of decommissioning. *Id.* at 31-32. According to Intervenor, all of the above is required under NRC regulatory guidance.<sup>34</sup>

Intervenor would have it that these contentions are within the scope of the present proceeding and hearing request, which it sees as encompassing “the entire JPG DU site decommissioning process.” STV Final Contentions at 24 (citing LBP-05-9, 61 NRC 218, 221-22 (2005)). Moreover, Intervenor

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<sup>31</sup> Timeliness in Decommissioning of Materials Facilities, 59 Fed. Reg. 36,026 (July 15, 1994).

<sup>32</sup> STV Final Contentions at 30 (citing NUREG-1757, vol. 3, “Consolidated NMSS Decommissioning Guidance: Financial Assurance, Recordkeeping, and Timeliness” at 2-13 (Sept. 2003) [hereinafter NUREG-1757, vol. 3] (“[t]o demonstrate that delaying the start of decommissioning will not be detrimental to public health and safety, a licensee should submit . . . [a] discussion of its record of regulatory compliance, particularly its compliance with NRC regulations”)).

<sup>33</sup> Section 40.36(e)(4) requires federal, state, or local government licensees to submit a “ ‘statement of intent containing a cost estimate for decommissioning . . . and indicat[ion] that funds for decommissioning will be obtained when necessary.’ ” STV Final Contentions at 31.

<sup>34</sup> STV Final Contentions at 31-32 (citing NUREG-1757, vol. 3, secs. 4.3.1, 4.3.2.13, App. A.16).

insists that, because the Licensee has failed — since submitting its original proposal for decommissioning in 1993 — to provide updated cost estimates for decommissioning, “this is clearly the appropriate time to require the Army to provide an updated timetable, projected budget, and financial assurance for the recently reinstated decommissioning process at the JPG DU site in its entirety.” *Id.* at 26. Intervenor asserts that the circumstances at issue in this proceeding “are essentially comparable to those contemplated in the [Standard Review Plan]”<sup>35</sup> for licensee requests to extend the time allowed for initiating decommissioning activities, which requires that a timetable, cost estimate, and financial assurance be presented at this time. STV Final Contentions at 26-27.<sup>36</sup>

The Licensee and NRC Staff insist that Contentions D-1 and D-2 should be rejected by the Board. They assert that both contentions are beyond the scope of this proceeding and fail to raise an issue material to the Staff’s findings. Army Response at 43-49; NRC Staff Response at 46-57.

As stated above, this proceeding involves only the Licensee’s request for a 5-year period in which to characterize the JPG site so that at the end of such time it will be able to submit to the NRC Staff a viable decommissioning plan. Contrary to the Intervenor’s assertions, the Staff — at this stage in the decommissioning process — is not required to make any determination regarding the timeliness of ultimate decommissioning, nor need it pass upon the Licensee’s financial assurances for the conduct of decommissioning. Such considerations, rather, constitute separate regulatory obligations not relevant to the Licensee’s present request for an alternate schedule for submitting a decommissioning plan.<sup>37</sup> For instance, 10 C.F.R. § 40.42(g)(4)(v) requires licensees to include *in their decommissioning plan* an “updated detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside for decommissioning,

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<sup>35</sup> Standard Review Plan for Licensee Requests to Extend the Time Periods Established for Initiation of Decommissioning Activities, RIS-00-009 (June 26, 2000) [hereinafter SRP RIS-00-009].

<sup>36</sup> Intervenor requests that, if the Board decides that issues relating to timeliness and financial assurance “are limited during this hearing opportunity to those related to the Army’s JPG DU Site Characterization Project,” then it be granted leave to restate Contentions D-1 and D-2. Reply in Support of Petition To Intervene and Request for Hearing of Save the Valley, Inc. at 17 (Jan. 3, 2006) [hereinafter STV January 3 Reply]. Intervenor’s restated Contention D-1 asserts that the Licensee’s proposed alternate schedule “fails to meet the requirements of 10 C.F.R. § 40.42(g)(2) for a *timely* characterization of the JPG DU site.” *Id.* at 17. Restated Contention D-2 asserts that “[t]he financial assurance provided for the Army’s alternate schedule is insufficient to meet the requirements of 10 C.F.R. §§ 40.36 and 40.42(g)(2) for a *complete, definite and quantified* financial commitment for the characterization of the JPG DU site.” *Id.* at 18.

<sup>37</sup> Similarly, Intervenor’s reliance on SRP RIS-00-009 and NUREG-1757 as support for its position that issues of timeliness and financial assurance are included within the scope of this proceeding is misplaced. Both of these documents provide guidance for licensees who seek to delay the “initiation” of decommissioning activities under 10 C.F.R. § 40.42(f), and not requests under 10 C.F.R. § 40.42(g)(2). See NRC Staff Response at 56.

and a plan for assuring the availability of adequate funds for completion of decommissioning.’’ This requirement is in addition to 10 C.F.R. § 40.36(d) and (e), which obligate licensees — even prior to submitting a decommissioning plan — to maintain funding assurances for decommissioning and periodically to provide cost estimates for the decommissioning activities. *See* Staff Answer at 53.<sup>38</sup>

With respect to the timeliness of the Licensee’s actual decommissioning of the JPG site, the regulations require that, when it submits its decommissioning plan — presumably in 2011 — it will be required, *at that time*, to include a time estimate for the completion of decommissioning operations. 10 C.F.R. § 40.42(g)(4). At this juncture, the Licensee need not provide and the NRC Staff need not consider any estimates for how long decommissioning the site will take.<sup>39</sup>

In the final analysis, Contentions D-1 and D-2 seek to broaden the requirements the Licensee must meet beyond that which is required under 10 C.F.R. § 40.42(g)(2). As such, they are outside the scope of this proceeding. 10 C.F.R. § 2.309(f)(1)(iii).<sup>40</sup>

#### ***4. Intervenor’s Contentions Regarding the NRC Staff’s Safety Evaluation Report***

Intervenor raises two contentions challenging perceived inadequacies with the NRC Staff’s SER. First, in Contention E-1, it states that “[t]he SER is clearly inadequate because it does not sufficiently address or resolve the Contentions and supporting Bases submitted by STV, as clarified or supplemented herein, to identify and describe relevant and significant deficiencies in the Army’s FSP.’’ STV Final Contentions at 33. Intervenor’s twelve bases take issue with

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<sup>38</sup> According to the Staff, contrary to Intervenor’s claim, the Licensee provided a cost estimate for the JPG site in its 1998 statement of intent, and will be required to submit an updated cost estimate, and associated statement of intent, in this month. *See* NRC Staff Response at 54 (citing Letter from Thomas L. Roller, Department of the Army, to Clayton L. Pittiglio (June 8, 1998)).

<sup>39</sup> To the extent Intervenor alleges that the Licensee will fail to submit its decommissioning plan within the 5 years proposed, or will fail to meet its funding obligations, based on the information submitted in support of its contention, it is mere speculation without any offered factual support. *See* 10 C.F.R. § 2.309(f)(1)(v), (vi); *see also* NRC Staff Response at 47-57. Intervenor references no instance in which the Licensee failed to comply with NRC regulations, nor does it state any facts to contradict the Licensee’s stated intention — which has been accepted by the Staff — to submit to the Staff a decommissioning plan within 5 years. “Absent such support, this agency has declined to assume that licensees will contravene our regulations.” *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 197 (2000).

<sup>40</sup> For similar reasons we reject Intervenor’s “alternative” Contentions D-1 and D-2. *See supra* note 36. Nowhere in 10 C.F.R. § 40.42(g)(2) does it require “timely characterization” or “definite and quantified financial commitment for . . . characterization” as Intervenor alleges. *See* STV January 3 Reply at 17-19.

the Licensee's responses to Staff Requests for Additional Information (RAI).<sup>41</sup> Specifically, Intervenor would have it that the Licensee's responses inadequately address or resolve the fundamental deficiencies in the FSP that were identified and described by Intervenor in its submitted Contention B-1. *Id.* at 33-39. Because, according to Intervenor, the SER "is premised on the assumption that the Army's responses to the Staff's . . . [RAIs] have addressed and resolved the deficiencies in the FSP identified and described by Intervenor, and to some extent, the Staff as well," the SER itself is inadequate. *Id.* at 33.

Intervenor's second contention, Contention E-2, insists that "[t]he SER is clearly inadequate because it does not sufficiently address or resolve the Contentions and supporting Bases submitted by STV to identify and describe relevant and significant deficiencies in the Army's [HASP] and their critical interrelationship to implementation of the Army's FSP." *Id.* at 39. Each of the six bases provided in support of Contention E-2 reiterate assertions previously made by Intervenor with respect to the adequacy of the HASP.

Both the Licensee and the NRC Staff object to the admission of Contentions E-1 and E-2 on the ground that, with respect to safety-related matters, "the adequacy of the application, not the adequacy of the staff's review or evaluation, e.g., its SER, is the focus for a proper [safety] contention." NRC Staff Response to STV Motion at 12 (quoting *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-3, 53 NRC 84, 97 (2001)); *see also* Army Response to STV Motion at 5-6. In response, Intervenor asserts that the Licensee and Staff are taking the ruling in *Private Fuel Storage* out of context. STV June 30 Reply at 6. According to Intervenor, its contentions challenge "the extent to which the SER . . . materially mischaracterizes significant elements of the FSP . . . by mistakenly reading the Army's responses to selected Staff RAIs to address issues and solve problems that they simply do not address or solve." *Id.* at 6-7 (emphasis omitted).

We are unpersuaded by Intervenor's claim. First, the plain language of its contentions clearly constitutes an impermissible attack on the adequacy of the NRC Staff's safety evaluation review of the Licensee's application. *See* STV Final Contentions at 33 (Contention E-1: "[t]he SER is clearly inadequate . . ."); *id.* at 39 (Contention E-2: "[t]he SER is clearly inadequate . . ."). To be sure, the SER can, and often does, play an important part in passing upon the viability of an applicant's proposal that is under challenge in an adjudicatory proceeding. Its content might disclose, for example, that serious problems inhere in one aspect or another of the proposal. Thus, this Intervenor is free to refer to any portion of the

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<sup>41</sup> Letter from Alan G. Wilson, Department of the Army, to Tom McLaughlin, Office of Nuclear Material Safety and Safeguards (Feb. 9, 2006) (Responses to the Nuclear Regulatory Commission January 18, 2006, Request for Additional Information Regarding the Proposed Field Sampling Plan for Jefferson Proving Ground (License SUB-1435)).

SER in question that might lend support to any cognizable claim it might advance (perhaps taking the form of a new contention) with respect to the sufficiency of the Licensee's proposed site characterization activities. It does not perforce follow, however, that it is equally free to put into issue the quality of the Staff's safety review as reflected by what is found in the SER. To the contrary, the Commission has made it clear that "[t]he adequacy of the applicant's license application, not the NRC staff's safety evaluation, is the safety issue in any licensing proceeding, and under longstanding decisions of the agency, *contentions on the adequacy of the [content of the] SER are not cognizable in a proceeding.*" 69 Fed. Reg. at 2202 (emphasis added).

Second, given the bases assigned for them, it is apparent that these contentions are nothing more than a restatement of other submitted contentions, including the previously admitted Contention B-1. LBP-06-6, 63 NRC at 183-85. This is seen from the fact that the claimed deficiencies in the SER relate to its asserted failure to address the shortcomings that assertedly are to be found in the FSP — the subject of Contention B-1.

Contentions E-1 and E-2 are, therefore, inadmissible.<sup>42</sup>

##### ***5. Intervenor's Contention Regarding the Staff's Environmental Assessment***

The National Environmental Policy Act requires the preparation of an EIS for all "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C) (2000). Council on Environmental Quality regulations state that, in determining whether to prepare an EIS, the federal agency shall prepare an EA, which will "briefly provide sufficient evidence and analysis for determining whether to prepare an [EIS] or a [FONSI]." 40 C.F.R. § 1508.9(a)(1). As noted above, the NRC Staff prepared the requisite EA and concluded that the "activities associated with site characterization should not produce significant radiological or nonradiological impacts to the environment, workers or members of the public." EA at 2. On the basis of this finding, the NRC Staff determined that an EIS was not necessary. *Id.* at 4.

Intervenor's Contention F-1 charges that "[t]he reasoning and assumptions supporting the EA's FONSI are faulty in significant respects." STV Final Contentions at 41. The majority of the seventeen bases Intervenor assigns in support of the contention assert that the NRC Staff relied upon faulty logic in

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<sup>42</sup> Although Intervenor is prohibited from launching an attack on the NRC Staff's safety evaluation review of the Licensee's FSP, the basic concern underlying Contention E-1 — that the FSP is fundamentally deficient — is assuaged by the admission of Contention B-1, the adjudication of which will resolve whether the FSP is adequate to provide the Licensee with sufficient information to develop an effective decommissioning plan.

reaching its conclusion that there will be minimal radiological and nonradiological impacts as a result of the 5-year delay in decommissioning.

First, according to Intervenor, the NRC Staff incorrectly hypothesizes that there will be no radiological impact “from wells installed inside the DU impact area because earlier wells installed outside of the DU impact area did not have radiological impacts.” *Id.* at 42. This reasoning is said to be faulty because the first installation was in an area that did not contain any DU contamination, whereas future installations will occur in areas containing DU contamination. *Ibid.* Second, Intervenor maintains, the Staff offers no supporting data or quantification for its assertion that “the risk from radiological impacts from exploding UXO is ‘insignificant.’” *Ibid.* Third, Intervenor believes the Staff’s declaration in the EA, that “the existing monitoring program has found ‘no DU,’” to be faulty because it “rel[ies] on the supposition that the monitoring program of the [ERMP] is adequate to identify migrating DU from the DU impact area.” *Id.* at 42-43. Fourth, Intervenor devotes nine bases to discussing why the Staff’s application of NUREG/CR-6705, “Historical Case Analysis of Uranium Plume Attenuation,” was inappropriate with respect to the JPG site. *Id.* at 43-47.

In its final four bases, Intervenor would have it that the NRC Staff’s conclusion in the EA that “no DU has been detected in the samples collected” (*id.* at 47 (quoting EA at 3)) is “inaccurate and misleading,” because radiation was in fact detected in the vegetation and vegetation root wash. *Ibid.* Additionally, Intervenor asserts that “better estimates of whether DU is or has been present in surface water comes from the aquatic bioaccumulators,” as opposed to the aqueous sampling proposed by the Licensee. *Id.* at 48.

The Licensee and the NRC Staff each counter that Contention F-1 is inadmissible for failing (1) to provide facts or expert opinion to support Intervenor’s position, and (2) to raise a genuine dispute on a material issue of law or fact with respect to the Staff’s FONSI.<sup>43</sup> As the Staff sees it, while Intervenor asserts that the JPG site is not directly analogous to the sites discussed in NUREG/CR-6705, it does nothing to explain why these alleged differences may be significant to the Staff’s FONSI.<sup>44</sup> In the alternative, if the Board finds that Intervenor has raised

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<sup>43</sup> See Army Response to STV Motion at 6-7; NRC Staff Response to STV Motion at 25-37. In response to the charge that the bases assigned in support of Contention F-1 fail to state a genuine issue of law or fact, Intervenor asserts that the plain language of the contention — “[t]he reasoning and the assumptions supporting the EA’s FONSI are faulty in significant respects” — “is a direct challenge to the legal and factual basis to the EA’s ‘bottom line,’” the FONSI. STV June 30 Reply at 12.

<sup>44</sup> NRC Staff Response to STV Motion at 26 (citing *Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-04-14, 60 NRC 40, 56 (2004) (“providing any material or document as a basis for a contention, without setting forth an explanation of its significance, is inadequate to support the admission of the contention”)).

a genuine issue of law or fact, it is the Staff's position that Contention F-1 is admissible, but only as supported by two of Intervenor's bases. *Id.* at 30, 33.<sup>45</sup>

We agree with the appraisal of the Licensee and NRC Staff. It might well be that, in order for a petitioner to raise an admissible contention with respect to a Staff finding of no significant impact, it need not demonstrate that there will in fact be a significant environmental impact as a consequence of the proposed action; however, it must "allege[] facts which, if true, show that the proposed project *may* significantly degrade some human environmental factor."<sup>46</sup> Intervenor fails to make such a showing. At no point in Contention F-1 does Intervenor state — let alone provide supporting facts or expert opinion — that the Licensee's proposed site characterization activities might of themselves have a significant effect on the environment. This failure renders this contention inadmissible. 10 C.F.R. § 2.309(f)(1)(vi).<sup>47</sup>

### III. ADMINISTRATIVE MATTERS

The hearing in this proceeding shall be conducted in accordance with the informal adjudicatory procedures prescribed in Subpart L of 10 C.F.R. Part 2. In an order dated May 2, 2006,<sup>48</sup> the Board deferred a number of the parties' obligations pending our determination as to the bounds of the evidentiary hearing. Having now made such determination, the following obligations are now in effect: (1) the Licensee and Intervenor shall make its mandatory disclosures no later than January 24, 2007 (10 C.F.R. § 2.336); (2) if there is unanimous agreement among the parties that the upcoming evidentiary hearing should consist only of written submissions they shall file a joint motion to that effect no later than January 9, 2007 (10 C.F.R. § 2.1206); and (3) the NRC Staff shall file in the docket, present to the Licensing Board, and make available to the parties a hearing file no later than January 24, 2007 (10 C.F.R. § 2.1203).

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<sup>45</sup> The Staff does not provide any explanation as to why it believes Intervenor's bases (g) — sites analyzed in NUREG/CR-6705 for plume interpretation are not analogous to the JPG site — and (k) — sites analyzed in NUREG/CR-6705 for the ready transfer of dissolved uranium from matrix groundwater flow to free-flowing body of water are not analogous to the JPG site — to be admissible. *See* NRC Staff Response to STV Motion at 30, 33.

<sup>46</sup> *Steamboaters v. Federal Energy Regulatory Commission*, 759 F.2d 1382, 1392 (9th Cir. 1985) (internal quotation marks omitted).

<sup>47</sup> It seems to us, rather, that Intervenor's Contention F-1 is a reiteration of its overarching concern that the Licensee's proposed site characterization activities are inadequate for purposes of producing a viable decommissioning plan. Intervenor's concerns should be assuaged by the admission of Contention B-1, whose adjudication will resolve whether the FSP is adequate to provide the Licensee with sufficient information to develop an effective decommissioning plan.

<sup>48</sup> Licensing Board Order (Deferring Mandatory Disclosure) (May 2, 2006) (unpublished).

This Memorandum and Order is subject to appeal in accordance with the provisions in 10 C.F.R. § 2.311. Any petitions for review meeting the requirements set forth in section 2.311 must be filed within ten (10) days of service of this Memorandum and Order.

It is so ORDERED.

THE ATOMIC SAFETY AND  
LICENSING BOARD<sup>49</sup>

Alan S. Rosenthal, Chairman  
ADMINISTRATIVE JUDGE

Dr. Paul B. Abramson  
ADMINISTRATIVE JUDGE

Dr. Richard F. Cole  
ADMINISTRATIVE JUDGE

Rockville, Maryland  
December 20, 2006

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<sup>49</sup> Copies of this Memorandum and Order were sent this date by Internet electronic mail transmission to counsel for (1) the Licensee, (2) the NRC Staff, and (3) Intervenor.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**ATOMIC SAFETY AND LICENSING BOARD**

**Before Administrative Judges:**

**Dr. Paul B. Abramson**, Chairman  
**Dr. Anthony J. Baratta**  
**Dr. David L. Hetrick**

**In the Matter of**

**Docket No. 52-007-ESP**  
**(ASLBP No. 04-821-01-ESP)**

**EXELON GENERATION COMPANY, LLC**  
**(Early Site Permit for Clinton**  
**ESP Site)**

**December 28, 2006**

In this proceeding regarding the application of Exelon Generation Company, LLC (Exelon) for an Early Site Permit, under 10 C.F.R. Part 52, for its site in Dewitt County, Illinois, the Licensing Board sets forth its findings on certain uncontested safety and environmental matters relative to the Exelon application and authorizes the Director of Nuclear Reactor Regulation to issue Exelon an early site permit for the Clinton ESP site.

**CONSTRUCTION PERMIT(S): EARLY SITE PERMIT(S)**

As provided in 10 C.F.R. § 52.39, an ESP allows a future applicant for a construction permit (“CP”), an operating license (“OL”), or a combined license (“CL” or “COL”), to seek early NRC review and approval of some siting and environmental issues, and therefore, to “bank” a site for up to 20 years in anticipation of its future reference in an application for a CP or COL. *See* 10 C.F.R. § 52.27.

**CONSTRUCTION PERMIT(S): EARLY SITE PERMIT(S)**

Section 52.17 of 10 C.F.R. sets forth the required content of an ESP application. Section 52.17 also allows an ESP applicant to make a number of choices regarding the scope, and therefore the content, of its ESP application. One such choice relates to the development of an emergency plan (“EP”). Section 52.17(b)(2) states that an ESP applicant may propose for review and approval by the NRC (i) major features of its emergency plan, or (ii) a complete and integrated emergency plan.

**CONSTRUCTION PERMIT(S): EARLY SITE PERMIT(S)**

An applicant may also, according to 10 C.F.R. § 52.17, choose to submit “a plan for redress of the site,” which if accepted as part of an approved ESP would allow an applicant to perform certain preconstruction activities (as defined by 10 C.F.R. § 50.10(e)(1)) at the site, without additional authorization.

**ATOMIC ENERGY ACT: SECTION 189a**

**MANDATORY HEARING: ORIGIN OF REQUIREMENT**

The genesis of the mandatory hearing requirement is section 189a(1)(A) of the Atomic Energy Act of 1954 (AEA), which provides, in relevant part, that “[t]he Commission shall hold a hearing after thirty days’ notice and publication once in the Federal Register, on each application . . . for a construction permit for a [production or utilization] facility.” 42 U.S.C. § 2239(a). In the context of an Early Site Permit, Commission regulations implement the mandatory hearing requirement of section 189a through 10 C.F.R. § 52.21, which provides, in relevant part, that the Board shall “determine whether, taking into consideration the site criteria contained in 10 CFR part 100, a reactor, or reactors, having characteristics that fall within the parameters for the site[, and which meets the terms and conditions proposed by the Staff in the SER,] can be constructed and operated without undue risk to the health and safety of the public.” Additionally, 10 C.F.R. § 2.104(b) sets forth the Commission’s procedural regulations specifying the issues to be addressed in uncontested proceedings.

**LICENSING BOARD(S): SCOPE OF REVIEW (MANDATORY HEARING SAFETY AND ENVIRONMENTAL FINDINGS)**

**MANDATORY HEARING: SCOPE OF REVIEW (UNCONTESTED MATTERS)**

For *uncontested* license applications, section 52.21 and the notice requirements

of section 2.104(b)(2) (and the Notice of Hearing itself) outline the Board's obligation to "determine":

(i) Without conducting a de novo evaluation of the application, whether the application and the record of the proceeding contain sufficient information, and the review of the application by the Commission's staff has been adequate to support affirmative findings on (b)(1)(i) through (iii) specified in [10 C.F.R. § 2.104] and a negative finding on (b)(1)(iv) specified in [10 C.F.R. § 2.104] proposed to be made and the issuance of the construction permit proposed by the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, and

(ii) If the application is for a construction permit for a nuclear power reactor, a testing facility, a fuel processing plant, a uranium enrichment facility, or other facility whose construction or operation has been determined by the Commission to have a significant impact on the environment, whether the review conducted by the Commission pursuant to the National Environmental Policy Act (NEPA) has been adequate. 10 C.F.R. § 2.104(b)(2).

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

**MANDATORY HEARING: SCOPE OF NEPA REVIEW ("BASELINE" FINDINGS)**

Section 51.105(a)(1)(3) and the notice requirements of section 2.104(b)(3) (and the Notice of Hearing itself) outline the three NEPA-related matters the Board is required to address:

(i) Determine whether the requirements of section 102(2) (A), (C), and (E) of [NEPA] and subpart A of part 51 of this chapter have been complied with in the proceeding;

(ii) Independently 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

(iii) Determine whether the construction permit should be issued, denied, or appropriately conditioned to protect environmental values. *See* 10 C.F.R. § 2.104(b)(3).

**LICENSING BOARD(S): SCOPE OF REVIEW (MANDATORY HEARING SAFETY AND ENVIRONMENTAL FINDINGS)**

**MANDATORY HEARING: SCOPE OF REVIEW (UNCONTESTED MATTERS)**

Our regulations require the licensing board to perform two types of inquiries

with respect to safety matters: *first*, “whether the application and the record of the proceeding contain sufficient information, . . . to support a negative finding on Safety Issue 1 (whether the issuance of an ESP will be inimical to the common defense and security or to the health and safety of the public), and an affirmative finding on Safety Issue 2 (whether, taking into consideration the site criteria contained in 10 CFR Part 100, a reactor, or reactors, having characteristics that fall within the parameters for the site, can be constructed and operated without undue risk to the health and safety of the public),” and *second*, “whether . . . the review of the application by the Commission’s staff has been adequate to support” those same findings. 68 Fed. Reg. 69,426, 69,427 (Dec. 12, 2003); *see also* CLI-05-17, 62 NRC 5, 39 (2005); 10 C.F.R. § 2.104(b).

**MANDATORY HEARING: SCOPE OF REVIEW (UNCONTESTED MATTERS)**

The Commission (a) advised that a board’s task is “‘to constitute a check on the understanding of the staff,’” (b) cautioned that “‘truly independent review’ . . . does not mean that multiple reviews of the same *uncontested* issues — first by the NRC Staff, then by the ACRS, and finally by a licensing board — would be necessary to serve this purpose [of constituting a check on the understanding of the Staff],” and (c) summarized that “boards should conduct a simple ‘sufficiency’ review of uncontested issues.” CLI-05-17, 62 NRC at 39-40.

**MANDATORY HEARING: SCOPE OF REVIEW (UNCONTESTED MATTERS)**

Further clarifying how we are to approach this task, the Commission noted that with respect to uncontested proceedings — even as to the three “baseline” NEPA issues on which a Board is required under our regulations to make its own independent judgment — “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.” CLI-05-17, 62 NRC at 39-40. The Commission reminded the Boards that, although we are to ensure that the Staff made findings with reasonable support in logic and in fact, “[t]his is not to say that we expect our licensing boards to follow a cursory, hands-off approach . . . . On the contrary, . . . we anticipate that our boards will carefully probe those findings by asking appropriate questions and by requiring supplemental information when necessary . . . .” *Id.* at 40.

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

We have interpreted our charge to be to determine whether the record enables us to conclude that the Staff had a reasonable basis for its conclusions, assuming that such a reasonable basis would be present where the Standard Review Plan (SRP) and applicable Regulatory Guides (or other guidance documents) were specifically followed, and where the facts underlying its determinations were clear and its decision logically flowed from those facts and the applicable regulatory guidance. Where the SRP had not been followed, no specific Regulatory Guide was applicable, a Regulatory Guide required adaptation, or the Staff's logic was incomplete or unclear, the Board sought a thorough explanation of the Staff's rationale for the process it ultimately adopted along with its conclusions, and examined that process and those conclusions to ensure they were well founded in fact and logic.

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

By identifying areas of the Staff's Standard Review Plan that were precisely, prescriptively followed, because following that prescriptive process would be reasonable and logical for both the Staff and the Applicant, and by giving reasonable deference to Staff determinations (as the Commission has advised, *see* CLI-05-17, 62 NRC at 34, 36) when that process was indeed followed, this Board was able, in the absence of obvious gaps in the logic of the Staff as set out in the record, to conclude for those areas that no further scrutiny would be required. In contrast, identification of those areas where there was (1) a deviation from an SRP or from the methodologies set out in an ordinarily prescribed regulatory guidance document, or (2) no applicable regulatory guidance document, required that we more closely scrutinize the factual underpinnings of the Staff's and the Applicant's documentation and their conclusions.

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

**MANDATORY HEARING: SCOPE OF NEPA REVIEW ("BASELINE" FINDINGS)**

The Commission directed, in this regard, that 'licensing boards must reach their own independent determination on uncontested NEPA 'baseline' questions — i.e., whether the NEPA process 'has been complied with,' what is the appropriate 'final balance among conflicting factors,' and whether the 'construction permit

should be issued, denied or appropriately conditioned.’ ’ CLI-05-17, 62 NRC at 45. In reaching these independent determinations, however, “boards should not second-guess underlying technical or factual findings by the NRC Staff,” and “[t]he only exceptions to this would be if the reviewing board found the Staff review to be incomplete or the Staff findings to be insufficiently explained in the record.” *Id.*

**NEPA: SCOPE OF ENVIRONMENTAL ANALYSIS  
(SECTION 102(2)(A))**

Section 102(2)(A) of NEPA requires all federal agencies to “utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man’s environment.” 42 U.S.C. § 4332(2)(A).

**NEPA: SCOPE OF ENVIRONMENTAL ANALYSIS  
(SECTION 102(2)(C))**

Section 102(2)(C) of NEPA requires a federal agency to address in its environmental impact statement: (1) the environmental impact of the proposed action; (2) any adverse environmental effects which cannot be avoided should the proposal be implemented; (3) alternatives to the proposed action; (4) the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity; and (5) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented. 42 U.S.C. § 4332(2)(C).

**NEPA: SCOPE OF ENVIRONMENTAL ANALYSIS  
(SECTION 102(2)(C))**

NEPA section 102(2)(C) also requires that an agency “consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved.” 42 U.S.C. § 4332(2)(C).

**NEPA: SCOPE OF ENVIRONMENTAL ANALYSIS  
(SECTION 102(2)(C))**

Section 102(2)(E) of NEPA requires a federal agency to “study, develop, and describe appropriate alternatives to the recommended courses of action in

any proposal which involves unresolved conflicts concerning alternative uses of available resources.’’ 42 U.S.C. § 4332(2)(E). At the ESP stage, NRC regulations expressly excuse an applicant from examination, in its environmental report, of the benefits of the proposed project, e.g., the need for power, or analysis regarding energy alternatives, and provide that the relevant regulations ‘‘may not be construed to require that . . . the draft or final environmental impact statement include an assessment of the benefits of the proposed action.’’ 10 C.F.R. § 52.21.

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## **INITIAL DECISION** **(Uncontested Issues)**

### **I. INTRODUCTION AND BACKGROUND**

1.1 On November 7 and 8, 2006, this Licensing Board conducted an evidentiary hearing in Decatur, Illinois, pursuant to the mandatory hearing requirements (described below in Part I.C) for the pending application of Exelon Generation Company, LLC (“Exelon” or “Applicant”) for an application seeking an Early Site Permit (“ESP”) for its site in Dewitt County, Illinois (approximately 6 miles east of Clinton, Illinois, and commonly referred to as the “Clinton Site”), pursuant to Subpart A of 10 C.F.R. Part 52.

1.2 This Initial Decision sets forth the findings of the Board with respect to the mandatory hearing requirements of section 189a(1)(A) of the Atomic Energy Act of 1954 (AEA), 42 U.S.C. § 2239(a)(1)(A), the National Environmental Policy Act (“NEPA”), and Commission regulations, as guided by Commission direction. As described below, we find that the Staff’s review of the application has been adequate, and the record of this proceeding sufficient, to support the required safety-related findings. Further, we find that the NRC Staff has complied with NEPA (and implementing regulations), and, having performed an independent assessment of the required environmental considerations, we find that the ESP should be issued subject to the COL Action Items, Permit Conditions (as modified by this Order), and all other items not resolved at this point, as indicated in the NRC Staff’s Final Safety Evaluation Report and Final Environmental Impact Statement. Subject to any review by the Commission, this Decision completes the Board’s work in this proceeding.

#### **A. ESP Application**

1.3 As provided in 10 C.F.R. § 52.39, an ESP allows a future applicant for a construction permit (“CP”), an operating license (“OL”), or a combined license (“CL” or “COL”) to seek early NRC review and approval of some siting and environmental issues, and therefore, to “bank” a site for up to 20 years in anticipation of its future reference in an application for a CP or COL. *See* 10 C.F.R. § 52.27. An ESP is, in fact, a “partial construction permit,” authorizing limited construction activities when issued.<sup>1</sup>

1.4 As permitted by 10 C.F.R. Part 52, Exelon has not selected a specific reactor type for the site. Instead, Exelon developed a plant parameter envelope

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<sup>1</sup> 10 C.F.R. § 52.21.

(PPE)<sup>2</sup> to serve as a surrogate for design information. Exelon developed its PPE using information from several reactor plant designs that are either currently commercially available or anticipated to be commercially available within the term of the ESP, including the Advanced Boiling Water Reactor (ABWR), the AP1000 Reactor, the Pebble Bed Modular Reactor (PBMR), the Gas Turbine Modular Helium Reactor (GTMHR), the Advanced CANDU Reactor (ACR), the International Reactor Innovative and Secure Reactor (IRIS), and the Economic Simplified Boiling Water Reactor (ESBWR).<sup>3</sup> The PPE values serve as a set of parameters that are intended to bound the impacts of a reactor or reactors that might be deployed at the site.<sup>4</sup> The PPE values are listed in Appendix A of the NRC Staff's Final Safety Evaluation Report ("FSER")<sup>5</sup> and Appendix J of the Staff's Final Environmental Impact Statement ("FEIS"),<sup>6</sup> and were used by the Applicant and the Staff to assess the future use of the Clinton ESP site from both a safety and an environmental perspective.

1.5 Section 52.17 sets forth the required content of an ESP application. Section 52.17 also allows an ESP applicant to make a number of choices regarding the scope, and therefore the content, of its ESP application. One such choice relates to the development of an emergency plan ("EP"). Section 52.17(b)(2) states that an ESP applicant may propose for review and approval by the NRC (i) major features of its emergency plan, or (ii) a complete and integrated emergency plan. Exelon chose the former course, submitting fourteen major features of the EP, thirteen of which the Staff found acceptable.<sup>7</sup> Having submitted proposed

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<sup>2</sup> At the CP or COL stage, an applicant must demonstrate that the chosen reactor fits within the site parameters set forth in the ESP's PPE, if it wishes to treat as "resolved" any related issues from the ESP review. *See* 10 C.F.R. § 52.39(a)(2). Also, in order to satisfy the regulatory requirements in 10 C.F.R. §§ 52.17(a)(2) and 52.18, the Staff and the Applicant's environmental review must "focus upon the environmental effects of construction and operation of a reactor, or reactors, which have characteristics that fall within the postulated site parameters."

<sup>3</sup> *See* NUREG-1844, "Safety Evaluation Report for an Early Site Permit (ESP) at the Exelon Generation Company, LLC (EGC) ESP Site," at 1-5 to -7 [hereinafter "FSER"]; *see also* Prefiled Testimony of Thomas P. Mundy on Exelon Generation Company's ESP Application (Oct. 17, 2006) at 6-8 [hereinafter Mundy Testimony].

<sup>4</sup> *See* FSER at 1-5; NUREG-1815, "Environmental Impact Statement for an Early Site Permit (ESP) at the Exelon ESP Site," at 1-2 [hereinafter "FEIS"].

<sup>5</sup> *See* FSER, App. A.4.

<sup>6</sup> *See* FEIS, App. J.

<sup>7</sup> The Staff accepted the Applicant's major features A-G, I-L, O, and P which included: assignment of responsibility (organization control); onsite emergency organizations; emergency response support and resources; emergency classification system; notification measures; emergency communications; public education and information; accident assessment; protective response; radiological exposure control; medical and public health support; radiological emergency response training; and responsibility for the planning effort (development, periodic review, and distribution of emergency plans). *See*

*(Continued)*

major features, the Applicant will be required to submit a complete and integrated emergency plan if it chooses to submit a COL or CP in the future.<sup>8</sup>

1.6 An applicant may also, according to 10 C.F.R. § 52.17, choose to submit “a plan for redress of the site,” which if accepted as part of an approved ESP would allow an applicant to perform certain preconstruction activities (as defined by 10 C.F.R. § 50.10(e)(1)) at the site, without additional authorization. Exelon chose to submit a site redress plan to demonstrate “that redress carried out under the plan [would] achieve an environmentally stable and aesthetically acceptable site suitable for whatever non-nuclear use,”<sup>9</sup> and the NRC Staff reviewed Exelon’s plan in the FEIS.<sup>10</sup>

## **B. Contested Portion of the Proceeding**

1.7 The Board’s and Commission’s earlier rulings on the contested portions of this proceeding are fully set forth in LBP-04-17, 60 NRC 229 (2004), and LBP-05-19, 62 NRC 134 (2005), *rev. denied*, CLI-05-29, 62 NRC 801 (2005), *aff’d*, *Environmental Law and Policy Center v. NRC*, No. 06-1442 (7th Cir. Dec. 5, 2006), along with thorough discussions of the procedural history. We do not recount that information here, but provide the following brief summary.

1.8 On September 25, 2003, Exelon filed with the Nuclear Regulatory Commission (NRC) an application to obtain the subject Early Site Permit. The Commission issued a December 8, 2003 Notice of Hearing and Opportunity To Petition for Leave To Intervene (“Notice of Hearing”), which was subsequently published in the *Federal Register* at 68 Fed. Reg. 69,426 (Dec. 12, 2003). In response to that notice, several entities (“Clinton Petitioners”) filed a request for a hearing and petition to intervene in the proceeding on the application.<sup>11</sup> The Commission referred the matter to the Atomic Safety and Licensing Board Panel, and on March 22, 2004, a Licensing Board was constituted to preside over the Exelon ESP adjudicatory proceeding.<sup>12</sup>

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FSER at 13-19 to -80. The Staff did not accept the Applicant’s proposed Major Feature H (related to emergency facilities and equipment), because the Applicant did not describe the feature in sufficient detail. *See* FSER at 13-43.

<sup>8</sup> *See* FSER at 13-17 to -79.

<sup>9</sup> 10 C.F.R. § 52.17(c).

<sup>10</sup> *See* FEIS at 10-4, 10-9.

<sup>11</sup> *See* Hearing Request and Petition To Intervene by Environmental Law and Policy Center, Blue Ridge Environmental Defense League, Nuclear Information and Resource Service, Nuclear Energy Information Service, and Public Citizen (Jan. 12, 2004).

<sup>12</sup> *See* 69 Fed. Reg. 15,910 (Mar. 26, 2004); *Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), CLI-04-8, 59 NRC 113, 119 (2004). Subsequently, on August 6, 2004, the

(Continued)

1.9 In ruling on the petition to intervene, the Board found the Clinton Petitioners to have demonstrated standing and to have proffered one admissible contention regarding energy alternatives, including wind power and solar power alternatives, as well as a mix of those alternatives along with the gas-fired generation and “clean coal” resource alternatives (Contention 3.1).<sup>13</sup> Subsequently, responding to a Staff request for additional information (“RAI”), Exelon provided the NRC with additional analysis regarding alternative technologies for generating power, including combinations of wind and solar technology with coal and natural gas fueled facilities. Based on the information provided in the RAI response, and its later incorporation and analysis by the Staff in a Draft Environmental Impact Statement, Exelon filed a motion for summary disposition of the lone admitted contention, claiming that the analysis had cured the failure alleged by the Clinton Petitioners.<sup>14</sup> The Board granted Exelon’s motion for summary disposition of Contention 3.1.<sup>15</sup> Ruling on an appeal of the Board’s ruling, granting Exelon’s summary disposition motion and rejecting a proposed amended contention, the Commission denied review,<sup>16</sup> and both decisions were recently affirmed by the U.S. Court of Appeals for the Seventh Circuit.<sup>17</sup> Accordingly, the balance of this proceeding was conducted as an uncontested hearing.

### C. Mandatory Hearing Requirement

1.10 The genesis of the mandatory hearing requirement is section 189a(1)(A) of the Atomic Energy Act of 1954 (AEA), which provides, in relevant part, that “[t]he Commission shall hold a hearing after thirty days’ notice and publication once in the Federal Register, on each application . . . for a construction permit for a [production or utilization] facility.” 42 U.S.C. § 2239(a). In the context of an Early Site Permit, Commission regulations implement the mandatory hearing requirement of section 189a through 10 C.F.R. § 52.21, which provides, in relevant part, that the Board shall “determine whether, taking into consideration the site criteria contained in 10 CFR part 100, a reactor, or reactors, having characteristics that fall within the parameters for the site[, and which meets the terms and conditions proposed by the Staff in the SER,] can be constructed and operated without undue risk to the health and safety of the public.” Additionally, 10

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Licensing Board was reconstituted to form the Board currently sitting in this proceeding. *See* 69 Fed. Reg. 49,916 (Aug. 12, 2004).

<sup>13</sup> *See* LBP-04-17, 60 NRC at 250, 252.

<sup>14</sup> *See* Exelon’s Motion for Summary Disposition of Contention 3.1 (Mar. 17, 2005).

<sup>15</sup> *See* LBP-05-19, 62 NRC at 183.

<sup>16</sup> *See* CLI-05-29, 62 NRC 801.

<sup>17</sup> *See Env’t. Law and Policy Ctr. v. NRC*, No. 06-1442 (7th Cir. Dec. 5, 2006).

C.F.R. § 2.104(b) sets forth the Commission's procedural regulations specifying the issues to be addressed in uncontested proceedings.<sup>18</sup>

1.11 For *uncontested* license applications, section 52.21 and the notice requirements of section 2.104(b)(2) (and the Notice of Hearing itself) outline the Board's obligation to "determine":<sup>19</sup>

(i) Without conducting a *de novo* evaluation of the application, whether the application and the record of the proceeding contain sufficient information, and the review of the application by the Commission's staff has been adequate to support affirmative findings on (b)(1)(i) through (iii) specified in [10 C.F.R. § 2.104] and a negative finding on (b)(1)(iv) specified in [10 C.F.R. § 2.104] proposed to be made and the issuance of the construction permit proposed by the Director of Nuclear Reactor Regulation or Director of Nuclear Material Safety and Safeguards, as appropriate, and

(ii) If the application is for a construction permit for a nuclear power reactor, a testing facility, a fuel processing plant, a uranium enrichment facility, or other facility whose construction or operation has been determined by the Commission to have a significant impact on the environment, whether the review conducted by the Commission pursuant to the National Environmental Policy Act (NEPA) has been adequate.<sup>20</sup>

1.12 Section 51.105(a)(1)(3) and the notice requirements of section 2.104(b)(3) (and the Notice of Hearing itself) outline the three NEPA-related matters the Board is required to address:

(i) Determine whether the requirements of section 102(2) (A), (C), and (E) of [NEPA] and subpart A of part 51 of this chapter have been complied with in the proceeding;

(ii) Independently 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

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<sup>18</sup> It is interesting to note that 10 C.F.R. § 2.104 is a procedural regulation, simply setting forth the required contents of a notice of hearing the Agency is to issue when an application on which a hearing is required by the AEA is received. However, the regulation is quite instructive in that no other single provision sets forth all of the specific matters to be considered and determinations to be made by the licensing board in these mandatory hearing proceedings.

<sup>19</sup> The Commission, responding to confusion regarding the use of both "consider" and "determine" when describing the Board's review responsibility, instructed that in the context of the Board's mandatory hearing responsibilities the terms should be viewed as "essentially synonymous." CLI-05-17, 62 NRC 5, 36 (2005). Continuing its discussion the Commission "remind[ed] the boards, however, that their review of a contested issue is quite different from their review of an uncontested one, and that this difference is reflected, to a considerable extent, in the *depth* of the boards' review (i.e., *de novo* or not)." *Id.* at 38 (emphasis in original).

<sup>20</sup> 10 C.F.R. § 2.104(b)(2).

(iii) Determine whether the construction permit should be issued, denied, or appropriately conditioned to protect environmental values.<sup>21</sup>

The Commission has advised that we are to treat the regulatory mandates above as applicable to the uncontested *portion* of a hearing, which is also referred to as the “mandatory hearing.”<sup>22</sup> In addressing these latter charges, we interpret clause (ii) to mean that we are to “independently consider” the referenced “balance among conflicting factors” in making the “determination” required by clause (iii).<sup>23</sup>

1.13 While 10 C.F.R. § 2.104(b)(2) outlines all of the safety issues relevant to construction permits (which include Early Site Permits), not all of those issues are ripe for review in an ESP Proceeding.<sup>24</sup> The Commission’s December 12, 2003 Notice of Hearing explicitly sets forth the issues that, pursuant to the Atomic Energy Act of 1954, are relevant to this ESP proceeding:

(1) Whether the issuance of an ESP will be inimical to the common defense and security or to the health and safety of the public (Safety Issue 1); and, (2) whether, taking into consideration the site criteria contained in 10 CFR Part 100, a reactor, or reactors, having characteristics that fall within the parameters for the site, can be constructed and operated without undue risk to the health and safety of the public (Safety Issue 2).<sup>25</sup>

1.14 In March 2005, presented with the first mandatory hearings to be conducted by this Agency in nearly two decades,<sup>26</sup> the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel certified to the Commission (on behalf of the four Licensing Boards with then-pending proceedings), a series of questions regarding the scope and conduct of these hearings.<sup>27</sup> In a July 28, 2005 Memorandum and Order, the Commission ruled on the certified questions,

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<sup>21</sup> 10 C.F.R. § 2.104(b)(3).

<sup>22</sup> See CLI-05-17, 62 NRC at 34-35.

<sup>23</sup> This interpretation seems appropriate, notwithstanding the Commission’s advice in CLI-05-17 that it intended the terms “consider” and “determine” to be synonymous. *Id.* at 36.

<sup>24</sup> See 10 C.F.R. § 52.21.

<sup>25</sup> 68 Fed. Reg. at 69,427.

<sup>26</sup> At the time, there were three pending proceedings for a nuclear power plant early site permit: the current proceeding, *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), Docket No. 52-007; *Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), Docket No. 52-008-ESP; *System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), Docket No. 52-009-ESP, as well as one license proceeding to construct and operate a uranium enrichment facility, *Louisiana Energy Services, L.P.* (National Enrichment Facility), Docket No. 70-3103-ML, and one additional, and since initiated proceeding regarding a license for a uranium enrichment facility, *USEC Inc.* (American Centrifuge Plant), Docket No. 70-7004.

<sup>27</sup> See LBP-05-7, 61 NRC 188 (2005).

providing guidance on the scope of a board's responsibility and review in the uncontested portion of a mandatory hearing.<sup>28</sup>

1.15 Our regulations require the licensing board to perform two types of inquiries with respect to safety matters: *first*, “whether the application and the record of the proceeding contain sufficient information, . . . to support a negative finding on Safety Issue 1 above, and an affirmative finding on Safety Issue 2,” and *second*, “whether . . . the review of the application by the Commission's staff has been adequate to support” those same findings.<sup>29</sup> Although these determinations are to be made “without conducting a *de novo* evaluation of the application,”<sup>30</sup> because a *de novo* review might well involve unfettered repetition of the Staff's work, this limitation does little to clarify the precise scope of review contemplated by the charges to determine whether the record and the Staff's review support the required findings. Taken on its face, at its most literal reading, and without Commission guidance, these charges would require each member of the Board to scour the entire record of the proceeding, including the many hundreds of pages included in the application, the RAIs and responses, the NRC Staff's FSER and FEIS, and sufficiently investigate all technical, economic, and legal matters covered therein to enable him or her to affirm or disaffirm that the conclusions of the Staff were supported in the record.

1.16 In its July 28, 2005 Memorandum and Order, the Commission attempted to more clearly delineate the respective roles of a licensing board and the Staff. The Commission (a) advised that a board's task is “to constitute a check on the understanding of the staff,”<sup>31</sup> (b) cautioned that “‘truly independent review’ . . . does not mean that multiple reviews of the same *uncontested* issues — first by the NRC Staff, then by the ACRS, and finally by a licensing board — would be necessary to serve this purpose [of constituting a check on the understanding of the Staff],”<sup>32</sup> and (c) summarized that “boards should conduct a simple ‘sufficiency’ review of uncontested issues.”<sup>33</sup> While a casual reading of the foregoing guidance might lead to the inference that the Commission had in mind a relatively cursory effort on the part of a licensing board, that cannot be the case. For, speaking

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<sup>28</sup> See CLI-05-17, 62 NRC 5.

<sup>29</sup> 68 Fed. Reg. at 69,427; see also CLI-05-17, 62 NRC at 39; 10 C.F.R. § 2.104(b).

<sup>30</sup> 10 C.F.R. § 2.104(b)(2)(i); see CLI-05-17, 62 NRC at 39.

<sup>31</sup> CLI-05-17, 62 NRC at 40 (quoting “AEC Memorandum Concerning Mandatory Hearing Requirement Under Atomic Energy Act,” published in *Radiation Safety and Regulation: Hearings Before the Joint Committee on Atomic Energy*, 87th Cong. 376 (1961)).

<sup>32</sup> CLI-05-17, 62 NRC at 40 (emphasis in original).

<sup>33</sup> *Id.* at 39. In explaining this view, the Commission noted that “applying a less stringent sufficiency standard when examining uncontested issues merely recognizes the inherent limitations on a board's review . . . [and] [a]s a practical matter . . . it would simply not be possible for the two technical members of the panel to evaluate the totality of the material relevant to safety matters that the Staff and ACRS have generated through many months of work.” *Id.* at 40 (internal quotations omitted).

again to uncontested portions of a hearing, the Commission set out a different view of our task: “when considering safety and environmental matters not subject to the adversarial process,” the Board “*should inquire whether the NRC Staff performed an adequate review and made findings with reasonable support in logic and fact.*”<sup>34</sup> This latter explanation establishes our task to be to investigate and comprehend the facts underlying, and the logic behind, the Staff determination, and from those inquiries to develop the basis for our determinations.<sup>35</sup>

1.17 Further clarifying how we are to approach this task, the Commission noted that with respect to uncontested proceedings — even as to the three “baseline” NEPA issues on which a Board is required under our regulations to make its own independent judgment — “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.”<sup>36</sup> The Commission reminded the Boards that, although we are to ensure that the Staff made findings with reasonable support in logic and in fact, “[t]his is not to say that we expect our licensing boards to follow a cursory, hands-off approach . . . . On the contrary, . . . we anticipate that our boards will carefully probe those findings by asking appropriate questions and by requiring supplemental information when necessary . . . .”<sup>37</sup>

1.18 In sum, we are strongly guided in our interpretation of the charge of the Commission’s December 2003 Notice of Hearing to “determine” whether the record supports an affirmative (or negative) determination and whether the Staff’s review supports its decision, by two principles set out by the Commission: (a) “boards should inquire whether the NRC Staff performed an adequate review and made findings with reasonable support in logic and fact”;<sup>38</sup> and (b) the Staff’s underlying technical and factual findings are not open to Board reconsideration unless we find the Staff review inadequate or its findings insufficient.<sup>39</sup>

1.19 Applying these principles to the proceeding at hand, the Board found in many instances that the technical portions of the Staff documents in the record (particularly the SER and, to some degree, the EIS) did not support

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<sup>34</sup> *Id.* at 39 (emphasis added).

<sup>35</sup> *See* CLI-06-20, 64 NRC 15, 25 (2006). Further, we are directed that “the boards may probe the Staff for additional testimony or record material when necessary to ascertain whether the Staff had reasonable bases for the Staff’s final determinations.” *Id.*

<sup>36</sup> CLI-05-17, 62 NRC at 39-40.

<sup>37</sup> *Id.* at 40.

<sup>38</sup> *Id.* at 39.

<sup>39</sup> *See id.* at 39-40.

a finding that the Staff's review supported its decisions.<sup>40</sup> Rather, we found that in many instances these documents did not lend themselves to our making this type of judgment because those sections of the documents merely state what determinations were made and, occasionally, where applicable, identify the source of facts or analytical methodology used to reach the determinations. Thus, the record as initially presented to us often did not supply adequate technical information or flow of logic to permit a judgment as to whether the Staff had a reasonable basis for its conclusion(s).<sup>41</sup> As a result, because part of our charge is to determine whether the Staff's review was sufficient, this Board found it necessary to examine in more depth a major portion of the record and to supplement it with information sought in more than 200 written inquiries. In our view, the lack of explanation and lack of clarity of logic found in a large portion of the FSER and, to a lesser degree, the FEIS placed an unnecessary burden on all participants, including the Board, and could have been avoided by a more detailed initial Staff explanation of its analysis and reasoning.

#### **D. Uncontested Portion of the Proceeding**

1.20 In an April 17, 2006 Order, the Board requested from the Applicant and the Staff a number of foundational documents associated with the ESP Application and the Staff's review thereof, including Exelon Safety Analysis Report (SAR), Site Redress Plan, Emergency Plan (EP), and the Environmental Report (ER).<sup>42</sup> The Board followed that order with a series of orders requesting further information regarding the Staff's review because of the lack of clarity and

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<sup>40</sup> We interpret the requirements of 10 C.F.R. § 51.105(a)(2), wherein we are required to "independently consider the final balance among conflicting [environmental] factors contained in the record of the proceeding with a view to determining the appropriate action to be taken," to simply direct us to *examine the record independently* to formulate the basis for the determination required by 10 C.F.R. § 51.105(a)(3), to "[d]etermine, after weighing the environmental, economic, technical and other benefits against environmental and other costs, and considering reasonable alternatives, whether the construction permit . . . should be issued, denied, or appropriately conditioned to protect environmental values." We do not read 10 C.F.R. § 51.105(a)(2) as establishing any requirement to go beyond the record, but rather as a requirement simply to independently perform the required weighing described in clause (a)(3) based upon the record.

<sup>41</sup> We have not attempted to determine whether the Staff's conclusions "were the right ones," as the Commission suggested in CLI-05-17, 62 NRC at 40, because such a determination would require us to substitute our judgment for that of the Staff and would thereby be tantamount to a *de novo* review. We have, instead, applied, as the bulk of the Commission guidance indicates we should, what is in effect a "substantial evidence" test that focused on whether the Staff's conclusions are reasonable given the support that exists in the record — not whether those conclusions are the only ones a reasonable person could reach from the facts set out in the record.

<sup>42</sup> See Licensing Board Order (Request for Documents and Briefings) (April 17, 2006) (unpublished) [hereinafter April 17 Board Order].

logic in many portions of the FSER and FEIS. Since the Commission directed that we focus on specific issues rather than ask the Staff for general clarification and foundation,<sup>43</sup> those orders included more than 200 specific inquiries regarding the Staff's review of health and safety matters and of environmental matters.<sup>44</sup> In addition, the Board conducted two telephone conferences with the Applicant and the Staff relative to the mandatory hearing prior to the 2-day oral hearing.<sup>45</sup>

1.21 Pursuant to an August 2, 2006 Board Order, the Applicant and the NRC Staff submitted briefs on the required mandatory hearing safety and environmental findings on September 14, 2006.<sup>46</sup> On October 2, 2006, the Board issued a Notice of Hearing and of Opportunity To Make Oral or Written Limited Appearance Statements that outlined, for the public, the date, time, and place of the mandatory hearing and limited appearance session, and in addition, described the matters that would be addressed at the hearing.<sup>47</sup> Subsequently, on October 17, 2006, the parties submitted prefiled direct testimony addressing the safety and environmental determinations.<sup>48</sup>

1.22 On October 23, 2006, the Board issued an Order providing the parties with guidance on various administrative matters associated with the mandatory hearing, including the submission of testimony and exhibits.<sup>49</sup> Thereafter, in accordance with the schedule set forth in the Board's October 2, 2006 Notice, an evidentiary hearing was held in Decatur, Illinois, on November 7 and 8, 2006. The

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<sup>43</sup> See CLI-06-20, 64 NRC at 23.

<sup>44</sup> See Licensing Board Order (Requesting Staff Responses to Attachment A Regarding Clinton ESP FSER) (July 20, 2006) (unpublished) [hereinafter July 20 Board Order]; Licensing Board Order (Addressing: (a) Commission Order dated 7/26/06; (b) requiring briefings in preparation for a public hearing; and (c) establishing a preliminary schedule) (Aug. 2, 2006) (unpublished) [hereinafter Aug. 2 Board Order]; Licensing Board Order (Reconsidering Inquiry 88; Following up on the Staff's Response to Inquiries; and Requiring Supplementation Regarding FSER Follow-Up Items Not Treated as COL Action Items) (Aug. 17, 2006) (unpublished) [hereinafter Aug. 17 Board Order]; Licensing Board Order (Requesting Staff Responses to Attachment A Regarding Clinton ESP FEIS) (Sept. 6, 2006) (unpublished) [hereinafter Sept. 6 Board Order]; Licensing Board Order (Additional Administrative Matters for Mandatory Hearing) (Oct. 23, 2006) (unpublished) [hereinafter Oct. 23 Board Order].

<sup>45</sup> Those telephone conferences were conducted on September 5, 2006, and October 3, 2006. See Tr. at 472; *id.* at 501.

<sup>46</sup> See NRC Staff's Brief in Response to the Licensing Board's Order of August 2, 2006 (Sept. 14, 2006); Exelon Generation Company, LLC, Brief in Response to the Board's August 2, 2006 Order Regarding Safety and Environmental Findings (Sept. 14, 2006).

<sup>47</sup> See 71 Fed. Reg. 59,135 (Oct. 6, 2006).

<sup>48</sup> See Prefiled Testimony of Thomas P. Mundy on Exelon Generation Company's ESP Application (Oct. 17, 2006); Prefiled Testimony of Tamar Jergensen Cerafici on Required Environmental Findings (Oct. 17, 2006); Prefiled Testimony of Eddie R. Grant on Required Safety Findings (Oct. 17, 2006); Staff's Prefiled Direct Testimony on Environmental Issues in the Clinton ESP Proceeding (Oct. 17, 2006) [hereinafter Staff Prefiled Environmental Testimony]; NRC Staff's Prefiled Direct Testimony on Health and Safety Issues in the Clinton ESP Proceeding (Oct. 17, 2006).

<sup>49</sup> See Oct. 23 Board Order.

hearing focused on the required determinations outlined in the Notice of Hearing and 10 C.F.R. § 2.104(b), as well as the parties' briefs, their prefiled testimony, and their responses to certain specific Board inquiries made at that hearing. During the hearing the Applicant and the Staff witnesses made presentations related to the Application and the Staff's review, and answered the Board's questions regarding their presentations and supporting exhibits. The Staff's health and safety and environmental presentations were accompanied by slide projections documenting the Staff's review and findings with respect to the FSER and FEIS, which were offered into evidence as Staff Exhs. 1 and 2, respectively.<sup>50</sup> The Applicant made its presentation to the Board in a similar manner, but included an additional presentation giving a brief overview of the ESP Application.<sup>51</sup>

1.23 The Board conducted a limited appearance session, as described in the October 2, 2006 Notice, in Clinton, Illinois, on the evening of November 8, 2006, during which approximately twenty individuals expressed their views regarding the proposed ESP through oral statements. Further, the Board and the NRC Hearing Docket received nineteen written limited appearance statements.

1.24 Following the November 2006 hearing, the Board issued two orders, calling for supplemental briefing regarding issues that had arisen during the hearing and the limited appearance session that were not addressed sufficiently at that time.<sup>52</sup> Additionally, the Applicant submitted proposed findings of fact and conclusions of law on November 28, 2006, and the Staff submitted its proposed findings of fact and conclusions of law on November 30, 2006.<sup>53</sup>

## II. ANALYSIS

2.1 The initial record of this proceeding<sup>54</sup> was supplemented by information provided by the Applicant and the Staff in (1) replies to the more than 200 inquiries

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<sup>50</sup> See Staff Exh. 1, NRC Staff Health and Safety Presentation Slides (Nov. 7, 2006); Staff Exh. 2, NRC Staff Environmental Presentation Slides (Nov. 8, 2006).

<sup>51</sup> The Applicant offered three exhibits accompanying its presentations: EGC Exh. 1, Presentation: Overview of Exelon Early Site Permit Application, Thomas Mundy (Nov. 7, 2006); EGC Exh. 2, Presentation: Safety Assessment for Exelon Early Site Permit, Eddie Grant (Nov. 7, 2006); EGC Exh. 3, Presentation: Environmental Analysis for Exelon Early Site Permit, Tamar Cerafici (Nov. 7, 2006).

<sup>52</sup> See Licensing Board Order (Directing Post-Hearing Supplemental Briefing) (Nov. 17, 2006) (unpublished) [hereinafter Nov. 17 Board Order]; Licensing Board Order (Directing NRC Staff Response to Hearing Issue) (Dec. 12, 2006) (unpublished) [hereinafter Dec. 12 Board Order].

<sup>53</sup> See Exelon Generation Company, LLC's Proposed Findings of Fact and Conclusions of Law (Nov. 28, 2006) [hereinafter Exelon's Proposed Findings]; NRC Staff's Proposed Findings of Fact and Conclusions of Law in the Mandatory Hearing (Nov. 30, 2006).

<sup>54</sup> The initial record included all documents submitted by the Applicant, the draft and final SER and EIS, the ACRS review letter and minutes of meetings, and the iterations between the Staff and the Applicant with respect to Requests for Additional Information.

issued by this Board,<sup>55</sup> (2) briefs on the required safety and environmental findings the Board must make, (3) prefiled testimony regarding the Staff's review of the ESP Application and its findings, (4) presentations addressing those topics at the mandatory hearing, (5) the dialogue at the oral portion of this hearing addressing specific matters of concern to the Board, and finally (6) the replies to our post-oral-hearing orders. The following sections set out first the results of the Board's review with respect to the required safety findings, followed by the Board's review with respect to the required general environmental finding, the Board's review with respect to the three "baseline" NEPA determinations, and, finally, a brief discussion of some examples of issues that arose during the Board's review and the resolution of those issues.

#### **A. Board Review of the Staff's Safety Review**

2.2 As discussed above, with respect to safety matters, this Board is required to *determine*, without conducting a *de novo* review, "whether the application and the record of the proceeding contain sufficient information, and the review of the application by the Commission's staff has been adequate to support" license issuance.<sup>56</sup> While the Board indeed reviewed the principal documents in the record, we focused on those areas where our review of the FSER led us to believe that further exploration was necessary, areas where it was not clear that the Staff completely followed an established regulatory review process, and areas where the Staff's logic was not clear. We did not, however, undertake any independent review of (or attempt to verify) technical results presented in the Application or in the Staff's FSER. Instead, as directed by the Commission, we deferred to the NRC Staff's underlying technical and factual findings in the absence of an indication that the Staff's review was inadequate or its findings insufficient. Thus, as discussed above, we have interpreted our charge to be to determine whether the record enables us to conclude that the Staff had a reasonable basis for its conclusions, assuming that such a reasonable basis would be present where the Standard Review Plan (SRP) and applicable Regulatory Guides (or other guidance documents) were specifically followed,<sup>57</sup> and where the facts underlying its determinations were clear and its decision logically flowed

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<sup>55</sup> Eighty-eight inquiries were initially made regarding the FSER, followed by sixty-four inquiries seeking further explanations, and sixty-two specific inquiries regarding the FEIS. See July 20 Board Order, Attach. A; Aug. 17 Board Order, Attach. A; Sept. 6 Board Order, Attach. A.

<sup>56</sup> 68 Fed. Reg. at 69,427.

<sup>57</sup> We note that neither Regulatory Guides nor standard review plans are legally binding, but our task here is to determine whether the Staff had a reasonable basis for its determinations, and such a basis is, in our view, clearly present when the Staff's own internal and external guidance documents have been followed.

from those facts and the applicable regulatory guidance. Where the SRP had not been followed, no specific Regulatory Guide was applicable, a Regulatory Guide required adaptation, or the Staff's logic was incomplete or unclear, the Board sought a thorough explanation of the Staff's rationale for the process it ultimately adopted along with its conclusions, and examined that process and those conclusions to ensure they were well founded in fact and logic.<sup>58</sup>

2.3 The Board's review of the record led us to ask for specific clarification with regard to nearly ninety safety-related matters, all of which were addressed in written responses from the Staff and more than sixty of which required further exploration.<sup>59</sup> The net result was that only a limited number of matters were left for further exploration at the oral portion of this hearing, and those final discussions and explanations were factored into the Board's rulings set out below.

### ***1. Board's Review of Staff Application of Regulatory Guidance***

2.4 By identifying areas of the SRP that were precisely, prescriptively followed, because following that prescriptive process would be reasonable and logical for both the Staff and the Applicant, and by giving reasonable deference to Staff determinations (as the Commission has advised<sup>60</sup>) when that process was indeed followed, this Board was able, in the absence of obvious gaps in the logic of the Staff as set out in the record, to conclude for those areas that no further scrutiny would be required. In contrast, identification of those areas where there was (1) a deviation from an SRP or from the methodologies set out in an ordinarily prescribed regulatory guidance document, or (2) no applicable regulatory guidance document, required that we more closely scrutinize the factual underpinnings of the Staff's and the Applicant's documentation and their conclusions.

2.5 In performing its review of the Clinton ESP application, the Staff relied upon Review Standard (RS) RS-002, "Processing Applications for Early Site Permits," which sets forth guidance for the review of ESP applications and provides references to the applicable review criteria. The review criteria established for ESP applications in RS-002 are based on the "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," NUREG-0800.

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<sup>58</sup> See April 17 Board Order at 3; Licensing Board Order (Reconsideration of April 17, 2006 Order) (May 3, 2006) at 6 (unpublished); NRC Staff Response to Licensing Board's Order of August 2, 2006 (Aug. 18, 2006).

The Commission, in reviewing the Board's approach to departures from applicable SRPs, found that "it is reasonable for the Board to request information of this nature in order to help focus its review." CLI-06-20, 64 NRC at 23.

<sup>59</sup> See *supra* note 55.

<sup>60</sup> See CLI-05-17, 62 NRC at 34, 36.

2.6 By adhering as closely as possible to the relevant guidance and acceptance criteria of the SRP, the Staff utilized, for those areas, a reasonable and (where we were able to conclude that its logic was sufficiently explained) logical approach to reviewing the application.

## **2. Board's Review of Safety Matters Not Directly Addressed by Regulatory Guidance and Areas of Unclear Staff Logic**

2.7 While 10 C.F.R. § 2.104(b)(2)(i) seemingly presents the Board with two safety-related charges, the inquiries are not independent of each other: a finding that the facts in the record are sufficient to support the required determinations cannot be made if the Staff's review is inadequate to support that conclusion, because the relevant facts will not necessarily be set out in the record. Correspondingly, the record cannot inform the Board that the Staff's review was adequate if the facts in the record are insufficient to support those conclusions or if the Staff's logic in using those facts to reach its conclusion is not clearly or adequately explained. The Commission's interpretation of its regulations, to the effect that we are to examine the record to see if the Staff's conclusions are well grounded in fact and logic, coupled with its directive to give deference to Staff factual determinations absent manifest error, guides us in interpreting the regulations' directive that our determinations are to be made without a *de novo* review. Unless the second part of the regulatory requirement (determining the adequacy of the Staff's review) is to be rendered meaningless by a positive finding on the first part (facts in the record support affirmative decision), a result that is contrary to fundamental principles of regulation construction, this Board is required to seek out and determine whether the Staff's conclusions have adequate factual and logical underpinnings.

2.8 In examining the Staff's portion of the record, we found a plethora of instances where the Staff's conclusions could only be characterized as conclusory.<sup>61</sup> As a consequence, we initially issued, based upon our review of the Draft SER, an Order requiring the Staff to provide a thorough report detailing (among other things) how relevant guidance was applied, where the Staff deviated from that guidance, and where disagreements arose so that the Board could understand the factual underpinnings and logic of the Staff's conclusions.<sup>62</sup> After the Board denied portions of a Staff Motion To Reconsider,<sup>63</sup> the Staff appealed the Board's decision and the Commission ordered this Board to begin with a review of the

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<sup>61</sup> See discussion *infra* Part II.C.

<sup>62</sup> See April 17 Board Order.

<sup>63</sup> See Licensing Board Order (Reconsideration of April 17, 2006 Order) (May 3, 2006) (unpublished); NRC Staff Motion for Reconsideration (April 27, 2006).

record (including the FSER), because the “SER . . . should already explain [the Staff’s] conclusions, logic, and underlying facts,” and following such review, “*tailor* its request for additional information to those areas for which it needs additional information.”<sup>64</sup>

2.9 During the pendency of that appeal, the Staff issued its FSER which we promptly began to review. While the FSER represented a material improvement over the Draft SER, it still failed, in a large number of instances, to logically connect facts to conclusions. In accordance with the Commission’s ruling on the aforesaid appeal, the Board refined its request for a narrative summary describing deviations from regulatory guidance documents and, instead, required a tabular list of all sections of the FSER wherein the applicable regulatory guidance documents were not expressly followed by the Applicant or the Staff, together with brief explanations of how the Staff addressed those deviations and its logic for its elected review process. The Staff identified a total of ten such instances, occurring in matters discussed in Chapters 2, 11, 15, and 17 of the SER, and in each instance the Staff provided a description of the guidance that was not followed (i.e., the Regulatory Guide (RG) section, code section, Standard Review Plan Section, or RS Section), a description of the evaluation process it used in lieu of the identified guidance, and its rationale for using such a review process.<sup>65</sup>

2.10 While the Staff only identified ten instances where regulatory guidance was not prescriptively followed, there remained numerous instances where it failed to set out its logic leading from recited facts to recited conclusions. Thus, the Board focused further written inquiries on obtaining, from the Staff and the Applicant, the facts underpinning the Staff’s determinations and the logic used by the Staff in analyzing those facts to reach its determinations. In addition to covering subject areas where the Staff had not followed the prescribed SRP and regulatory guide procedures, we inquired regarding many instances for which the Staff advised us that it had indeed followed the guides, but the Staff’s logic and stated facts appeared inadequate to make the required determination that its “review was sufficient” to support the required findings. The Staff replies eventually supplied the vast majority of the missing information, and the inquiries and replies became part of the record of this proceeding, enabling this Board to reduce materially the information necessary to be covered at the oral part of this mandatory hearing.

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<sup>64</sup> CLI-06-20, 64 NRC at 23 (emphasis in original); *see* NRC Staff Petition for Interlocutory Review of the Licensing Board’s May 3, 2006 Order (May 23, 2006).

<sup>65</sup> *See* NRC Staff Response to Licensing Board’s Order of August 2, 2006 (Aug. 18, 2006).

## **B. NEPA and Other Environmental-Related Matters**

2.11 A federal agency's obligation under NEPA to prepare an Environmental Impact Statement (EIS) is triggered when it undertakes a "major Federal action[ ] significantly affecting the quality of the human environment."<sup>66</sup> The Commission, having determined that the issuance of an Early Site Permit is a "major Federal action significantly affecting the quality of the human environment," promulgated 10 C.F.R. § 52.18, requiring the Staff to prepare an EIS during its review of any application for an ESP.

2.12 To assist the Board in comprehending the scope and significance of the federal action that would be undertaken by issuance of the requested Early Site Permit, in our October 23, 2006 Order we requested that the Parties deliver a concise statement of precisely what actions would be permitted if the requested ESP were granted.<sup>67</sup> The Applicant and the Staff responded at the hearing with Joint Exhibit 1.<sup>68</sup> This exhibit describes the general scope of an ESP and precisely what is permitted pursuant to 10 C.F.R. § 50.10(e). Joint Exhibit 1 also sets forth the views of the Applicant and the Staff regarding the tasks and information a holder of this proposed ESP would not be required to undertake or produce as a future COL applicant, and called to the Board's attention those items that would require additional information, as specified in the ESP Conditions in FSER App. A and FEIS § 4.3.1, the COL Action Items in FSER App. A, and other unresolved issues listed in the FEIS, along with other issues not addressed at the ESP stage, such as need for power, final cost-benefit analysis, and a complete and integrated emergency plan.<sup>69</sup>

2.13 Section 51.105(a)(4) of 10 C.F.R. requires the Board, as a general matter, to determine "whether the NEPA review conducted by the NRC Staff has been adequate." To assess the Staff's NEPA review the Board looked first to the overarching goals of NEPA, requiring the Staff to take a "hard look" at the Applicant's environmental findings and ensure that NEPA's goals of public disclosure, identification of potential adverse environmental impacts, and consideration of reasonable alternatives have been satisfied. The Board's review of the adequacy of the Staff's NEPA review followed a similar course to that of our review of the safety-related matters described above; i.e., we reviewed the Staff's facts and process to enable us to comprehend and evaluate the logic employed, and then focused our review on those areas with shortcomings.

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<sup>66</sup> NEPA § 102(2)(C), 42 U.S.C. § 4332(2)(C).

<sup>67</sup> See Oct. 23 Board Order at 2.

<sup>68</sup> Joint Exh. 1, NRC Staff's and Applicant's Joint Response to Request for Information on Activities Permitted by the Early Site Permit (ESP) (Nov. 7, 2006).

<sup>69</sup> See *id.*

2.14 The Board’s final assessment of the adequacy of the Staff’s NEPA review is in large part guided by the Commission’s regulations, which establish certain procedural requirements for the Staff’s review and set out the specific baseline NEPA determinations required in this proceeding. Our resolution of the specific baseline determinations is discussed below.

### ***1. “Baseline” NEPA Determinations***

2.15 In addition to the general NEPA compliance portion of our review, 10 C.F.R. § 51.105(a) requires this Board, with respect to certain NEPA issues, to:

- (i) Determine whether the requirements of section 102(2) (A), (C), and (E) of the National Environmental Policy Act and the regulations in this subpart of this chapter [subpart A of part 51] have been met;
- (ii) Independently 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
- (iii) Determine, after weighing the environmental, economic, technical, and other benefits against environmental and other costs, and considering reasonable alternatives, whether the construction permit should be issued, denied, or appropriately conditioned to protect environmental values.<sup>70</sup>

The Commission directed, in this regard, that ‘licensing boards must reach their own independent determination on uncontested NEPA ‘baseline’ questions — i.e., whether the NEPA process ‘has been complied with,’ what is the appropriate ‘final balance among conflicting factors,’ and whether the ‘construction permit should be issued, denied or appropriately conditioned.’ ’<sup>71</sup> In reaching these independent determinations, however, ‘boards should not second-guess underlying technical or factual findings by the NRC Staff,’ and ‘[t]he only exceptions to this would be if the reviewing board found the Staff review to be incomplete or the Staff findings to be insufficiently explained in the record.’<sup>72</sup> In examining the requirement, and establishing a standard, for this Board’s NEPA-related review, the United States Court of Appeals for the District of Columbia Circuit stated that ‘[p]erhaps the greatest importance of NEPA is to require the [Commission] and other agencies

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<sup>70</sup>The Commission’s Notice of Hearing, and the provisions of 10 C.F.R. § 2.104(b)(3) shorthand this provision as ‘‘determine whether the construction permit should be issued, denied, or appropriately conditioned to protect environmental values,’’ supporting the Board’s interpretation (*see supra* note 40) that the requirement to ‘‘independently consider’’ the matters set out in 10 C.F.R. §§ 51.105(a)(2) and 2.104 (b)(3)(ii) is purely to identify what matters are to be considered in reaching the determination specified in section 51.105(a)(3).

<sup>71</sup>CLI-05-17, 62 NRC at 45 (quoting 10 C.F.R. § 2.104(b)(3)).

<sup>72</sup>*Id.*

to consider environmental issues just as they consider other matters within their mandate.”<sup>73</sup> Thus, the D.C. Circuit has determined that the NRC must not apply a lesser standard for its environmental review than it applies for its safety review. The Board’s determinations with respect to these NEPA-related issues were made employing the same review standards we used for safety-related issues, and are set forth below.

2.16 The applicable NRC regulatory criteria and review standards for the evaluation of an ESP applicant’s Environmental Report (ER) are outlined in 10 C.F.R. § 52.18, and the environmental regulatory framework is further set out in 10 C.F.R. Part 51, “Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions,” (§§ 51.45, 51.50, 51.71, and 51.75). As with the NRC Staff’s review of the safety aspects of an ESP, RS-002, “Processing Applications for Early Site Permits,” provides the general review standards for the Staff’s environmental review, while referencing and relying upon NUREG-1555, “Standard Review Plan for Environmental Reviews of Nuclear Power Plants.” These regulations, review standards, and regulatory guides provided the Board with a framework for assessing the Staff’s review of the ESP application as well as a framework for the Board to make the three specific required NEPA findings.

## **2. Compliance with Sections 102(2)(A), (C), and (E) of NEPA and Subpart A of 10 C.F.R. Part 51**

2.17 As noted above, 10 C.F.R. Part 51 mandates certain review requirements related to an EIS for a construction permit, including an ESP. Many of these requirements are procedural and cover, among other things, the notice and distribution for public comment of the EIS, responses to public comment, and distribution of the final EIS.<sup>74</sup> Further, Part 51 contains substantive requirements setting forth mandatory elements of the EIS, which include a description of the purpose of and need for the action, alternatives, the affected environment, environmental consequences and mitigating actions, and substantive comments

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<sup>73</sup> *Calvert Cliffs’ Coordinating Committee, Inc. v. AEC*, 449 F.2d 1109, 1112 (D.C. Cir. 1971). “The Commission’s regulations provide that in an uncontested proceeding the hearing board shall on its own determine whether the application and the record of the proceeding contain sufficient information, and the review of the application by the Commission’s regulatory staff has been adequate, to support affirmative findings on various nonenvironmental factors. *NEPA requires at least as much automatic consideration of environmental factors.* In uncontested hearings, the board need not necessarily go over the same ground covered in the detailed [environmental impact] statement. But it must at least examine the statement carefully to determine whether the review . . . by the Commission’s regulatory staff has been adequate. And it must independently consider the final balance among conflicting factors that is struck in the staff’s recommendation.” *Id.* at 1118 (emphasis added, footnote and internal quotation marks omitted).

<sup>74</sup> See 10 C.F.R. §§ 51.28, 51.29, 51.73, 51.74, 51.91, 51.93, 51.117.

received during the public comment period as well as NRC responses.<sup>75</sup> The relevant portions of the record of this proceeding, in particular the FEIS and its appendices, demonstrate that the Staff has complied with both the procedural and substantive requirements of 10 C.F.R. Part 51.<sup>76</sup>

2.18 Section 102(2)(A) of NEPA requires all federal agencies to “utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man’s environment.”<sup>77</sup> The FEIS and other elements of the record of this proceeding (including the responses to our numerous inquiries and the information presented at the oral portion of this hearing and in writing subsequent thereto), demonstrate that the Staff utilized a systematic, interdisciplinary approach integrating their use of the natural and social sciences in their decisionmaking regarding environmental impacts as required under NEPA. The Staff’s review considered the following subjects and impacts: the purpose and need for the proposed ESP; public and worker health; the need for the facility; the alternatives to the proposed action; compliance with the applicable regulations; meteorology and air quality; geology; the radiological environment; water resources and water use; local ecology; socioeconomics; aesthetics; cultural resources; environmental justice; threatened and endangered species; transportation; noise; land use; public worker health; accidents; waste management and fuel cycle impacts; decommissioning; cumulative impacts; and resource commitments.<sup>78</sup> The record of this proceeding, in particular the FEIS and the Staff’s presentations, demonstrate the Staff’s utilization of the expertise of professional scientists, engineers, and social scientists in conducting its review, indicating a systematic, interdisciplinary approach and integrating the use of the natural and social sciences.<sup>79</sup>

2.19 Section 102(2)(C) of NEPA requires a federal agency to address in its environmental impact statement: (1) the environmental impact of the proposed action; (2) any adverse environmental effects which cannot be avoided should the proposal be implemented; (3) alternatives to the proposed action; (4) the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity; and (5) any irreversible and irretrievable commitments of resources which would be involved in the proposed

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<sup>75</sup> See 10 C.F.R. §§ 51.70, 51.71, 51.75.

<sup>76</sup> Federal Register Notices announcing and providing the public information regarding the draft EIS and final EIS for the Clinton ESP application as well as opportunities for public comment can be found in 68 Fed. Reg. 66,130 (Nov. 25, 2003); 70 Fed. Reg. 12,022 (Mar. 10, 2005); 71 Fed. Reg. 42,884 (July 28, 2006).

<sup>77</sup> 42 U.S.C. § 4332(2)(A).

<sup>78</sup> See FEIS at v to xviii; Staff Prefiled Environmental Testimony at 94.

<sup>79</sup> See FEIS Apps. A & B; Staff Prefiled Environmental Testimony at 94-95.

action should it be implemented. 42 U.S.C. § 4332(2)(C). The record of this proceeding, in particular the FEIS and the testimony and exhibits proffered by the Staff, demonstrates that the Staff has complied with these requirements in performing its environmental review. In particular, the Staff examined the potential impacts associated with the construction, operation, and decommissioning of a reactor(s) having characteristics that fall within the parameters of the site in: FEIS Chapter 4 (Construction Impacts), Chapter 5 (Operational Impacts), Chapter 6 (Impacts of Fuel Cycle, Transportation, and Decommissioning), and Chapter 7 (Cumulative Impacts). Unavoidable adverse impacts are addressed by the Staff in Chapter 10.1 of the FEIS, while Chapters 1, 8, and 9 of the FEIS address reasonable alternatives, including the no-action alternative. Finally, Chapter 10 of the FEIS addressed both the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitment of resources that might result from the proposed action.

2.20 NEPA section 102(2)(C) also requires that an agency "consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved." 42 U.S.C. § 4332(2)(C). The record of this proceeding, in particular the Appendices to the FEIS, demonstrates that the Staff has complied with this requirement. Appendix B of the FEIS details each agency or person consulted for purposes of the Staff's review. Appendix D of the FEIS includes public comments received by the Staff at its scoping meeting, and Appendix E contains public comments responding to the Staff's Draft Environmental Impact Statement.

2.21 Finally, section 102(2)(E) of NEPA requires a federal agency to "study, develop, and describe appropriate alternatives to the recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(2)(E). At the ESP stage, NRC regulations expressly excuse an applicant from examination, in its environmental report, of the benefits of the proposed project, e.g., the need for power, or analysis regarding energy alternatives, and provide that the relevant regulations "may not be construed to require that the . . . draft or final environmental impact statement include an assessment of the benefits of the proposed action."<sup>80</sup> These matters are to be addressed at the CP or COL application stage.<sup>81</sup> The Exelon environmental report included an assessment of energy alternatives, and Chapter 8 of the FEIS

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<sup>80</sup> 10 C.F.R. § 52.21.

<sup>81</sup> See Aug. 2, 2006 Order. The Board explained that "[w]ith regard to the final NEPA determination, the regulations make clear that at the ESP stage a discussion of the benefits, including need for power, is not necessary. See 10 C.F.R. § 52.17(a)(2). Further, the Commission has made clear that 'the board's reasonable alternatives responsibilities are limited' and focus on the consideration and comparison of alternative sites only." *Id.* at 5 n.14 (quoting CLI-05-17, 62 NRC at 48).

sets out the NRC review regarding energy alternatives, plant design alternatives, alternative sites and the no-action alternative. The FEIS and the parties' briefings and testimony on this matter demonstrate that the Staff has met its obligations under NEPA with respect to consideration of alternatives.

### **3. *Independent Consideration of the Final Balance Among Conflicting Factors***

2.22 In Chapters 8 and 9 of the FEIS, the Staff outlines its evaluation of energy alternatives, plant design alternatives, the alternative site selection process, and six alternative sites. Since an analysis of the need for power from the ESP facility and a final cost-benefit balance is not required for the issuance of an ESP, this Board's balancing review relates to the selection of the Clinton ESP site vis-a-vis other potential sites.<sup>82</sup> Chapter 9 of the FEIS sets forth the Staff's review of certain alternative sites, its evaluation of the likely environmental impacts of construction and operation at these sites, and its ultimate comparison among those alternatives, leading to the conclusion that selection of the proposed site is appropriate.<sup>83</sup> The Board's independent consideration of the FEIS and the record in this proceeding indicates that the information and evaluation prepared by the Staff is reasonable and reasonably supports the Staff's judgment (with which this Board agrees) that none of the alternative sites identified is environmentally preferable or obviously superior to the proposed Clinton ESP site.<sup>84</sup>

### **4. *Ultimate Determination vis-a-vis NEPA Regarding ESP Issuance***

2.23 The Board has undertaken (without substituting its judgment for that of the Staff regarding its specific technical and factual findings, and instead relying upon the Staff's technical expertise absent manifest error) an independent review of the Clinton ESP application with respect to the three NEPA "baseline" questions. We find nothing illogical about the Staff's approach, and nothing to indicate that the facts in the record do not support the Staff's conclusions with respect to environmental matters. Further, we find nothing to indicate that the review conducted by the Staff pursuant to NEPA has been inadequate or that the facts in the record do not support the Staff's conclusions with respect to environmental matters. Based upon our review of the FEIS and the record of this proceeding, and subject to the qualifications set out in Part III of this Decision, the Board agrees with the Staff that, after considering the reasonable alternatives

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<sup>82</sup> See 10 C.F.R. § 52.17(a)(2); CLI-05-17, 62 NRC at 48.

<sup>83</sup> See FEIS at 9-2 to -9.

<sup>84</sup> See *id.* at 9-8, 9-9.

as described above, *the ESP should be issued, subject to the Permit Conditions, COL Action Items, and those items listed in the record as requiring further action or followup at the COL stage.*<sup>85</sup> Notwithstanding the foregoing findings, none of the aforesaid Permit Conditions, COL Action Items, or items listed as requiring further action or followup shall be treated as “resolved” for the purposes of 10 C.F.R. § 52.39(a)(2).

### **C. Selected Examples and Considerations**

2.24 The following selected examples illustrate (1) the nature of issues confronting this Board where portions of the FSER or the FEIS failed to provide a clear picture of the Staff’s logic and/or of its review of the Applicant’s statements, and (2) the process employed by this Board for review (and resolution) of its concerns.

#### ***1. Selected Examples of Unclear Logic in the FSER***

2.25 In section 15.3.1 of the FSER, “Selection of [Design Basis Accidents] DBAs,” the Staff concluded that the AP1000 and ABWR source terms bound the source terms for all reactors included in the PPE. The Applicant, as would be expected at this stage, has not chosen a reactor design, and, accordingly, has performed its analysis using the PPE values, or other surrogate source characteristics. In selecting its DBAs, the Applicant primarily relied on the source terms from the proposed AP1000 and certified ABWR Design Control Documents (DCD); however, it also examined and considered possible DBAs from other reactor types.<sup>86</sup> The Staff, in reviewing the Applicant’s DBA selection, noted that “[t]he applicant stated that the DBAs analyzed in the proposed AP1000 and certified ABWR DCDs are expected to bound the DBAs of the other reactors being considered for the proposed ESP site,” and then simply concluded, “[w]hile it has not reviewed the designs other than the ABWR and AP1000 in detail, the staff believes that any conclusions drawn regarding the site’s acceptability based on the AP1000 and ABWR designs are likely to be valid for the other reactor designs the applicant is considering.”<sup>87</sup>

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<sup>85</sup> See NRC Staff Responses to the Board’s Inquiries Concerning the Staff’s Final Environmental Impact Statement, Attach. A (Sept. 29, 2006) at 3-5; *see also* FEIS App. K. In response to a Board inquiry regarding issues and facts to be resolved or confirmed at the COL stage, the Staff directed the Board to Appendix K of the FEIS, and described those matters which were not considered by the Staff at the ESP stage but will be subject to review and verification by the Staff at the COL stage.

<sup>86</sup> See Tr. at 647-56; FSER at 15-1.

<sup>87</sup> FSER at 15-5.

2.26 The Board, finding the Staff's logic in the FSER insufficient to explain its conclusory findings, pursued the topic in one of its many FSER written inquiries.<sup>88</sup> The Staff's response provided a similar answer to that set out in the FSER, simply stating that "any conclusions drawn regarding the site's acceptability based on the AP1000 and ABWR designs are likely to be valid for the other reactor designs."<sup>89</sup> Still perplexed, the Board pursued the matter further at the oral hearing.<sup>90</sup> While the Board was never presented with a clear description of the Staff's logic for accepting the significant and substantial proposition that the consequences of DBAs in AP1000 and ABWR designs would bound those of other possible reactor designs, we find that this deficiency is not fatal because of required further review to be performed at the CP or COL stage. The Staff has advised that if a reactor other than the AP1000 or ABWR is selected by the Applicant, its source term characteristics will be reviewed by the Staff at the COL or CP application stage to ensure that the impacts of such designs are in fact bounded by the DBA analyses performed for this ESP.<sup>91</sup>

2.27 An example of lack of clarity is found in section 2.4.1.3 of the FSER stating:

In response to RAI 2.4.1-1, the applicant stated that it expects the horizontal clearance between the existing CPS piping and the new ESP facility piping to be 50 ft. The staff determined that this proposed horizontal clearance is acceptable.<sup>92</sup>

On its face, this statement by the Staff suggests, without explanation and without analyses, that it accepted the Applicant's statements on their face; however, after this broad statement the Staff explained that review of the Applicant's proposed horizontal clearance is the subject of a COL Action Item and is therefore the subject of forthcoming review (i.e., it has not, in fact, found "this proposed clearance acceptable").<sup>93</sup> The opening language hardly conveyed this message; rather, it seems to suggest that the Staff had finished its review and "accept[ed]" the Applicant's statements.

2.28 In other instances, the Board's concerns regarding conclusory statements in the FSER were not as simply relieved. Describing the population distribution data provided by the Applicant, the FSER states that "the applicant

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<sup>88</sup> See July 20 Board Order, Attach. A at 9.

<sup>89</sup> NRC Staff Response to Licensing Board's Order of July 20, 2006, Requiring Answers to Inquiries and the Provision of Documents (July 31, 2006), Attach. A at 26 [hereinafter Staff Response to July 20 Board Order].

<sup>90</sup> See Tr. at 647-56, 664-65, 685-96.

<sup>91</sup> FSER at 15-5.

<sup>92</sup> *Id.* at 2-66.

<sup>93</sup> See *id.*

estimated and provided the population distribution within a 50-mile radius of the proposed ESP site, based on the most recent U.S. Census data, and the projected population estimates up to 2060, including transient populations.’’<sup>94</sup> Subsequently, in its description of the Staff’s technical evaluation, the FSER states that the ‘‘the staff finds that the applicant’s projected data cover an appropriate number of years and are therefore reasonable.’’<sup>95</sup> Leading up to this assessment the Staff explains that it ‘‘compared and verified the applicant’s population data against U.S. Census Bureau internet data’’ — data that is historical only.<sup>96</sup> There is, however, no discussion of the Staff’s analysis of the accuracy of the Applicant’s method for making its population *projections*, or comparisons with other projections.

2.29 After written questioning by the Board, the Staff explained its review by describing the method employed by the Applicant to estimate the population change through 2060 and the Applicant’s use of an Illinois State University study for population projections based on 1990 census data.<sup>97</sup> The Staff explained that Illinois State University projected for the years 2000, 2010, and 2020, and that the Applicant took those projections and used a linear analysis to project the population out to years 2030, 2040, 2050, and 2060. The only deviation by the Applicant from the Illinois State University’s study was the use of actual data for the year 2000 as opposed to the estimates used by the Illinois State University in its study.<sup>98</sup> This response, however, provided no insight into the Staff’s logic for its conclusion that the Applicant’s analyses were acceptable. Therefore, the Board pursued this matter through followup written inquiries, questioning at the hearing, and in a post-hearing order, in which the Board asked the Staff to address more recent population data and projections.<sup>99</sup>

2.30 Through its responses to the Board’s written and oral inquiries and its analysis with respect to the more recent projections by Illinois Department of Commerce and Economic Opportunity,<sup>100</sup> the Staff eventually explained to the Board that even adopting the more recent population data and projections,

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<sup>94</sup> *Id.* at 2-7.

<sup>95</sup> *Id.* at 2-9.

<sup>96</sup> *Id.*

<sup>97</sup> See July 20 Board Order, Attach. A at 1; Staff Response to July 20 Board Order, Attach. A at 1; Staff Response to July 20 Board Order, Attach. A at 1-2.

<sup>98</sup> See Tr. at 591-94.

<sup>99</sup> See Aug. 17 Board Order at 9-10; Tr. at 590-603; Nov. 17 Board Order.

<sup>100</sup> Responding to the Board’s November 17, 2006 Order the Staff stated that it ‘‘had determined in the FSER that population densities for the proposed site would be well below 500 persons per square mile averaged over any radial distance out to 20 miles. The reevaluated population densities were based on the new IDCEO data for years 2000, 2010, 2020, and 2030 over radial distances out to 20 miles. They were 116, 123, 132, and 138 persons per square mile for years 2000, 2010, 2020, and 2030, respectively, and were still well below the population density criterion specified in RG 4.7.’’ NRC Staff’s Response to Licensing Board’s November 17, 2006 Order (Dec. 4, 2006) at 2.

the population density still fell below the thresholds specified in the applicable regulatory guide. In addition, the Staff noted that if actual population growth deviates materially from those projections, new analyses will be required.<sup>101</sup>

2.31 In fact, the results of our inquiries advise us that the data could be in error by a factor of two or more and still be such that the population per square mile would fall far below the 500 persons per square mile criterion in Regulatory Position C.4 of Regulatory Guide (RG) 4.7, “General Site Suitability Criteria for Nuclear Power Station.”<sup>102</sup> Thus, we infer that the Staff’s assessment rested primarily upon the lack of impact that changes in the data would have on the Staff’s conclusions, even if population projections had been materially in error; all parties would have benefitted if the Staff had simply so stated from the outset.

## **2. Instances of Nonverification of Facts Asserted by the Applicant**

2.32 In addition to our concern regarding the lack of a clear logic flowing from the facts recited in the FSER to the conclusions the Staff reached, we observed a large number of instances wherein the Staff appeared to simply accept, without checking or verifying, the facts stated by the Applicant. This led to a number of our early inquiries regarding safety matters, probing the Staff’s process for verifying facts relied upon during its review. The Staff replied that some facts are taken by the Staff to be true on the basis that they are in the nature of an affirmation or declaration under oath by the Applicant.<sup>103</sup> This approach stands in stark contrast to the Staff’s approach to facts underlying its assessment of environmental matters, where the Staff checked underlying facts, presumably because our regulations require the Staff to “independently evaluate and be responsible for the reliability of any information which it uses” in complying with its NEPA obligations.<sup>104</sup> It also stands in stark contrast to certain portions

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<sup>101</sup> See *id.* at 3.

<sup>102</sup> The RG specifies that if the population density in the vicinity of the proposed site projected at the time of initial site approval and within 5 years thereafter were to exceed 500 persons per square mile averaged over any radial distance out to 20 miles, alternative sites should be considered. In the Staff’s response to the Board Order following the hearing, the Staff reevaluated population densities based on data from the Illinois Department of Commerce and found in all cases the estimates were still well below the 500 persons per square mile. See *id.*

<sup>103</sup> See Staff Response to Board Order of August 17, 2006: Response to Amended Inquiry 88 (Aug. 31, 2006) [hereinafter Staff Response to Aug. 17 Board Order] (where the Staff affirmed that it accepted, without verification, facts submitted by the Applicant in, e.g., FSER sections 2.4.1.1, 2.4.2.1, 2.4.3.1, 2.4.4.1, 2.4.7.1, 2.4.8.1); see *infra* note 108, indicating more than 100 such instances.

<sup>104</sup> 10 C.F.R. §§ 51.41, 51.70(b). In this regard, we note the United States Court of Appeals for the District of Columbia Circuit’s holding in *Calvert Cliffs*, 449 F.2d 1109 (see *supra* note 73), that the NRC must apply no lesser standard to its environmental review than it does to its safety review, and suggest that the inverse principle is equally important to follow.

of the Staff's safety review, most notably its review of the Applicant's proposed alternative method for estimating the seismic hazard at the proposed site in section 2.5.2.3.6 of the FSER, in which the Staff had a contractor perform an in-depth review of the Applicant's methodology that resulted in the FSER incorporation of a derivation of the equations used in that methodology.

2.33 Notwithstanding these clear inconsistencies, we find ourselves compelled by Commission rulings and policy statements to accept this approach by the Staff because the Commission has advised that their "longstanding practice . . . grounded in sound policy" is to "leave[] to the expert NRC technical staff prime responsibility for technical fact-finding on uncontested matters."<sup>105</sup> Consequently we are directed to give deference to the Staff's technical expertise and findings.<sup>106</sup> Further, the Commission has advised that "boards should not second-guess underlying technical or factual findings by the NRC Staff" with the only exceptions being where "the reviewing board found the Staff review to be incomplete or the Staff findings to be insufficiently explained in the record."<sup>107</sup> Therefore, in these instances, where the Staff has provided an explanation rooted in an established and, in the context of the relatively simple safety matters at issue in this ESP proceeding, not-unreasonable basis for accepting the Applicant's facts without checking them,<sup>108</sup> we accept the Staff's factual findings as conforming with the Commission's instructions. Nonetheless, our confidence in the Staff's judgment would have been materially improved had the more important of those facts been checked. When it comes, however, to a construction permit application, or a combined license application, which may require complex transient, accident, and other detailed safety analyses, in every instance performed with computer

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<sup>105</sup> CLI-05-17, 62 NRC at 35.

<sup>106</sup> *See id.* at 34.

<sup>107</sup> *Id.* at 45.

<sup>108</sup> More than 110 such instances were detailed in an 83-page response by the Staff to the August 17 Board Order directing the Staff to deliver, with respect only to sections 2.4, 2.5, 13.3.1 and 13.3.3.11 of the FSER, "a table indicating each fact or technical conclusion referred to in a subsection of the FSER entitled 'Technical Information in the Application' which was not expressly referred to in the succeeding subsection entitled 'Technical Evaluation' and explaining (a) whether or not that fact or technical conclusion was verified, and, if not, why not, and (b) how, if at all, that fact or conclusion undergirds (and the role that fact plays in the logic of) the Staff's conclusion regarding the matter subject of that subsection. To the extent that such fact(s) or conclusion(s) play no such role, Staff may so indicate . . ." August 17 Board Order at 6. A few examples include nonverification of: (i) the precise location of the Clinton dam because it "did not have an effect on Staff's evaluation on the SER"; (ii) the statement that the design water level in the Ultimate Heat Sink is 675 ft MSL because the "Staff relied upon the Applicant's assertion in the SAR [and] . . . this fact was used to determine the effects of an ice sheet formation in Clinton Lake on the proposed intake structure of the ESP facility"; and (iii) the statement that the estimated annual sedimentation amount for the Clinton Lake is 5 ac-ft, noting that the information "was used in the Staff's determination . . . [and was] the basis to assess if adequate cooling water was available." Staff Response to Aug. 17 Board Order.

codes used to simulate the plant's behavior, we would find such an approach regarding the assumptions underlying the models incorporated into those codes and input data used for the analyses extremely troubling. The results of any such analyses are completely driven by those assumptions, the models, and the input data, and cannot be relied upon without thorough examination of the assumptions and limitations of the models and careful consideration of the input data.

### **3. *An Example Regarding the Staff's NEPA Review***

2.34 After its initial review of the FEIS, the Board was troubled by the Staff's differing treatment of internally versus externally initiated severe accident events. Potential environmental consequences of severe accidents are discussed in section 5.10.2 of the FEIS, where it is stated that "only [those] risks associated with internally initiated events are presented in Table 5-13."<sup>109</sup> Probing the logic of this decision, the Board, in a written inquiry, questioned the Staff's decision to include only risks from internally initiated events.<sup>110</sup>

2.35 In response, the Staff referred to NUREG-1150, "Severe Accident Risks: An Assessment for Five U.S. Nuclear Power Plants," in which both internal and external initiating events were analyzed for two of the five plants studied in that report. The Staff stated that "[m]ost of the [external] events examined were assessed to be insignificant contributors by means of bounding analyses. However, seismic events and fires were found to be potentially major contributors for Surry and Peach Bottom."<sup>111</sup> The Staff further stated that "[t]he risks calculated for ABWR and AP1000 reactor designs at the Exelon ESP site are well within the Commission's safety goals," and "[i]f external events had been considered and had they doubled or tripled the risk, the risk would still be well within the safety goals."<sup>112</sup>

2.36 This Board found the Staff's response unilluminating, noting that: (a) the suggestion that most of the events examined were insignificant is vague; (b) the term "bounding analyses" was not defined; (c) the reference to seismic events and fires for the two specifically referenced plants was not related to the ESP; and (d) no basis was supplied for the statement that if external events had been considered and had they doubled or tripled the risk, the risk would have remained well within the safety goals. Therefore, in its October 23, 2006 Order

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<sup>109</sup> FEIS at 5-69.

<sup>110</sup> See Sept. 6 Board Order, Attach. A at 4.

<sup>111</sup> NRC Staff's Responses to the Board's Inquiries Concerning the Staff's [FEIS] (Sept. 29, 2006) at 24. The Staff also stated that "[s]ubsequent severe accident analyses related to license renewal have focused on internal initiating events. The same approach has been followed for the early site permit environmental reviews." *Id.*

<sup>112</sup> *Id.*

the Board directed the parties to be prepared to pursue the matter further at the oral hearing.<sup>113</sup>

2.37 At the hearing, two witnesses, one for the Applicant<sup>114</sup> and one for the Staff,<sup>115</sup> addressed the matter. The role of probabilistic risk assessment and the use of a factor of two or three for multiplying the internally initiated risk in order to account for the effect of external events were explained. We found this discussion to be sufficient and consider the question to be closed, but we note that a Board inquiry would not have been necessary if Staff had explained its logic from the outset by incorporating into the FEIS the relevant information ultimately presented at the hearing.

#### **4. Logic Behind Hydrology Permit Conditions**

2.38 Finally, we are concerned about the Staff's replies to discussion at the oral hearing regarding modification of Permit Condition 3 (requiring hydraulic gradients to be toward radwaste facilities) to include piping as well as surface and subsurface conditions, to which the Applicant responded it "would have no problem expanding that permit condition to include other piping leading into the radwaste building or other buildings with the liquid radwaste."<sup>116</sup>

2.39 Having not resolved that concern at the oral hearing, the Board directed the Staff and Applicant to consult and address the issue. In its Proposed Findings of Fact and Conclusions of Law, the Applicant reported that it had consulted with the Staff regarding an additional permit condition for liquid radwaste in other structures, systems, and components ("SSCs"), but the Staff responded that it did not support any further permit condition.<sup>117</sup> Seeking clarification, the Board issued an order on December 12, 2006, requesting that the Staff provide an explanation of its position.<sup>118</sup> The Staff replied, in substance, that Permit Condition 4 to the FSER (requiring incorporation of "features to *preclude any and all accidental releases* of radio-nuclides *into any potential liquid pathway*,"<sup>119</sup>) "addresses th[ose] concerns."<sup>120</sup>

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<sup>113</sup> See Oct. 23 Board Order at 2.

<sup>114</sup> See Tr. at 773-78.

<sup>115</sup> See *id.* at 875-79.

<sup>116</sup> *Id.* at 733.

<sup>117</sup> See Exelon's Proposed Findings at 14.

<sup>118</sup> See Dec. 12 Board Order.

<sup>119</sup> FSER at A-3 (emphasis added).

<sup>120</sup> NRC Staff's Response to the Board's December 12, 2006 Order (Dec. 14, 2006) at 2.

2.40 We are concerned that the absolute obligation created by Permit Condition 4<sup>121</sup> is unachievable as a practical matter and, therefore, may be unenforceable as a legal matter,<sup>122</sup> whereas the proposed modification of Permit Condition 3 would not create such a situation. Thus, we find that Permit Condition 3 should be expanded to include, as Applicant has agreed, “piping leading into the radwaste building or other buildings [containing] liquid radwaste.”<sup>123</sup>

#### **D. Completeness of COL Action Items and Open Items**

2.41 Another aspect of the Staff’s review process that the Board found to be illogical was the multifaceted approach, in the FSER and FEIS, to documenting issues that remained unresolved or open after the completion of the Staff’s review of the ESP. The Staff expressly documents Permit Conditions (tabulated in Appendix A.1 of the FSER and a single environmental permit condition in section 4.3.1 of the FEIS) and COL Action Items (tabulated in Appendix A.2 of the FSER). However, throughout both the FSER and FEIS the Staff identifies numerous items that are incomplete, not addressed, or remain open until submittal of a complete COL. These latter items were the subject of a series of inquiries to the Staff.<sup>124</sup>

2.42 In response to our inquiries at the hearing, the Staff stated that they “will use the information in the early site permit in [their] safety evaluation at the COL stage,”<sup>125</sup> and, in fact, acknowledged that both the Applicant and the Staff will have to go page-by-page through the SER and the EIS at the CP or COL stage to identify those items that still need to be addressed.<sup>126</sup> Considering that an ESP is valid for 20 years, this approach places a considerable and unnecessary burden on all participants and could lead to considerable confusion regarding what has indeed been resolved when and if a CP or COL is eventually submitted. The Board is at a loss to understand why, as a matter of practice, such items are not listed in an exhaustive list in the FSER or in a database for future reviewers,

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<sup>121</sup>This same permit condition is present in the FSER for Grand Gulf and was the subject of extended discussions between the Staff and the Grand Gulf Licensing Board at its oral hearing. *See* NUREG-1840, “Safety Evaluation Report for an Early Site Permit (ESP) at the Grand Gulf Site,” at App. A.2; Grand Gulf Early Site Permit Hearing Transcript (Nov. 29, 2006) at 228-62, ADAMS Accession No. ML063450140.

<sup>122</sup>Such a Permit Condition is akin to a requirement that the plant design preclude any and all accidents that might release radioactivity, and is unachievable as a practical matter, violates the entire foundation of consideration of “design basis accidents,” and is contrary to the principles of risk-informed regulation toward which the Commission has turned.

<sup>123</sup>Tr. at 733.

<sup>124</sup>*See* July 20 Board Order, Attach. A at 1, 2, 3, 9; Aug. 17 Board Order at 6-7, 11.

<sup>125</sup>Tr. at 731.

<sup>126</sup>*See id.*

so as to ensure that all unresolved items are addressed through the use of proper configuration control of the permit. The Board, therefore, asked the Staff to supplement the FSER with a table listing all instances wherein “issues that have not been documented as COL action items, but have, nonetheless, been found to need additional review and evaluation at the COL stage.”<sup>127</sup> The Staff provided the Board with such a table, which the Board hereby incorporates into the Staff’s review documents.<sup>128</sup>

#### **E. General Observations Regarding the Process**

2.43 We close this portion of our Order with a few observations for the Commission, in whose shoes we have stood as we performed this review of the record and the Staff’s work.

2.44 First, we found a wide variation in the depth of detail and the level of inclusion of logic from subsection to subsection in the FSER, with some subsections providing nothing more than rote recitation of the language prescribed by the SRP and others going into substantial detail regarding underlying facts, explaining logic and reaching conclusions based thereupon. This variation was disturbing to us for two primary reasons: (a) in the former instances, we could not determine what, if any, logic was used by the Staff reviewer when performing his/her task; and (b) it implied that there was, at the least, a lack of coordination among the reviewers, and at the worst, a lack of supervision over the product/project. These concerns, absent the Commission-mandated deference to the Staff’s judgment, might well have been the source of a much more probing review, particularly in areas where the subject matter of the subsection was complicated or highly technical.

2.45 Second, this phenomenon was not particularly present with respect to the FEIS (which, we believe, was largely prepared by a contractor to the Staff), a fact which, when coupled with the fact that a significant number of the subsections of the FSER that were comprehensive had been prepared by contractors to the Staff, leads us to observe that in a material number of instances the Agency’s internal work product did not rise to the level produced by contractors, and might not have risen to a desirable level at all without our probing and prodding. This is not to say that we have found that the Staff did not do its job — just that in a significant number of instances the FSER and FEIS did not demonstrate on their face that they had.

2.46 Third, until a number of months into this review, the Staff fought our

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<sup>127</sup> Aug. 17 Board Order at 7.

<sup>128</sup> See Staff Response to Part III of the Board’s Order of August 17, 2006, “Supplementation of the FSER” (Sept. 14, 2006).

requests for information at every turn. This was counterproductive, led to material delays, and shifted workload for the Staff, the Applicant, and the Board toward the end of the proceeding. Our initial Order, issued after review of the DSER, had requested that the Staff expressly lay out the facts and logic of its decisions; had the Staff done so, even in the FSER (which was issued before the Commission ruled on the Staff's appeals, and which we began reviewing immediately upon issuance), the entire process would have been much easier and probably would have required less Staff, Applicant, and Board effort.

2.47 Finally, as this review is an inquisitorial function performed by the Board on behalf of the Agency in fulfillment of the Agency's obligation under the AEA to conduct a "mandatory hearing," future parties to mandatory hearings would undoubtedly benefit from Commission instructions to the Staff that the Board indeed stands in the shoes of the Commission reviewing the Staff work product, and the Staff should treat Board requests accordingly.

### III. CONCLUSION

The Board has, in fulfilling its mandatory hearing obligations discussed above, reviewed material portions of the record in this proceeding, and required the Staff and the Applicant to provide additional testimony and documentary evidence with respect to certain areas for which review indicated to the Board that information in the record was insufficient to enable the requisite determinations. In our rulings, we have relied upon and assumed, without independent investigation, the accuracy, veracity, and thoroughness of (1) the content of the Staff documents, including the FEIS and the FSER, and those of the Applicant as placed into the record of this proceeding; and (2) the Staff and Applicant responses to the Board's inquiries and their testimony at the oral portion of this mandatory hearing. We have also assumed and relied upon, pursuant to Commission rulings, the completeness of the Staff's NEPA-related examination of the matters related to the Application, including its consideration of alternatives. Subject to the foregoing, and the Permit Conditions as modified by this Board, *supra* Part II.C.4, COL Action Items, and those items listed in the record as requiring further action or followup at the COL stage (none of which shall be treated as resolved for the purposes of 10 C.F.R. § 52.39(a)(2)), we have reached the following determinations:

- A. With respect to safety issues, the Board has determined that the application and the record of this proceeding, as supplemented by the information provided to the Board during the course of its review, contain sufficient information, and that the review of the application by the Staff has been adequate to support findings by the NRC Staff and the Director of NRR in accordance with the Commission's December 2003 Notice of Hearing, *see also* 10 C.F.R. § 2.104(b), that (1) the issuance of the ESP will not be

inimical to the common defense and security or to the health and safety of the public; and (2) taking into consideration the site criteria contained in 10 C.F.R. Part 100, a reactor, or reactors, having characteristics that fall within parameters for the site, can be constructed and operated without undue risk to the health and safety of the public.

- B. With respect to environmental issues, the Board has determined that the review conducted by the Staff pursuant to NEPA and the Commission's implementing regulations in 10 C.F.R. Part 51 has been adequate, in accordance with the Commission's December 2003 Notice of Hearing, *see also* 10 C.F.R. § 2.104(b)(2)(ii). In addition, the Board finds that (1) the requirements of sections 102(2)(A), (C), and (E) of NEPA and Subpart A of 10 C.F.R. Part 51 have been complied with in this proceeding; (2) having conducted its own independent balancing of the conflicting environmental and other factors, but excluding examination of the costs and benefits of the proposed facility, the overall balance supports issuance of the license; and (3) after considering reasonable alternatives,<sup>129</sup> protection of the environment does not require denial or conditioning of the license except to the extent proposed by the Staff in the FSER and the FEIS. Therefore, the Board concludes that these factors support issuance of the requested license.

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For the foregoing reasons, it is this 28th day of December 2006, ORDERED that the Director of Nuclear Reactor Regulation is authorized to issue Exelon Generation Company, LLC, an early site permit for the Clinton ESP site for a duration of 20 years, consistent with the Atomic Energy Act of 1954, Commission regulations, and this Initial Decision.

Pursuant to 10 C.F.R. § 2.1210 of the Commission's Rules of Practice, this Initial Decision will constitute the final decision of the Commission forty (40) days from the date of its issuance, or on February 6, 2007, unless a petition for review is filed in accordance with 10 C.F.R. §§ 2.341, 2.1212, or the Commission directs otherwise. This Initial Decision shall not become effective until the Commission actions specified in section 2.340(f)(2) have taken place.

Within fifteen (15) days after service of this Initial Decision, the Staff or the Applicant may file a petition for review with the Commission on the grounds specified in 10 C.F.R. § 2.341(b)(4). The filing of a petition for review is mandatory in order for a party to have exhausted its administrative remedies before seeking judicial review. Within ten (10) days after service of a petition for

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<sup>129</sup> As previously discussed, the Board did not consider those alternatives that the Commission has directed the Board to postpone until the COL application stage, including design alternatives.

review, a party may file an answer supporting or opposing Commission review. The petition for review and any answers shall conform to the requirements of 10 C.F.R. § 2.341(b)(2)-(3).

THE ATOMIC SAFETY AND  
LICENSING BOARD<sup>130</sup>

Paul B. Abramson, Chairman  
[by E. Roy Hawkens]  
ADMINISTRATIVE JUDGE

Anthony J. Baratta  
ADMINISTRATIVE JUDGE

David L. Hetrick [by E. Roy Hawkens]  
ADMINISTRATIVE JUDGE

Rockville, Maryland  
December 28, 2006

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<sup>130</sup> Copies of this Initial Decision were sent this date by Internet e-mail transmission to counsel for Applicant and the Staff.

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- Andrus v. Sierra Club*, 442 U.S. 347, 350 (1979)  
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- Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149 (1991)  
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- Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155 (1991)  
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- Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991)  
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- Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 156 (1991)  
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- Armstrong v. Executive Office of the President*, 97 F.3d 575, 582 (D.C. Cir. 1996)  
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- Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc.*, 462 U.S. 87, 97 (1983)  
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- Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc.*, 462 U.S. 87, 99 n.12 (1983)  
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- Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-14, 48 NRC 39, 41 (1998), *motion to vacate denied*, CLI-98-15, 48 NRC 45 (1998)  
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a property interest in an employment-related license is sufficient to invoke the procedural protections of the Due Process Clause, the vindication of which certainly invokes a public interest; LBP-06-25, 64 NRC 385 n.70 (2006)
- Black v. Sheraton Corp. of America*, 564 F.2d 531, 547 (D.C. Cir. 1977)  
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- Business and Professional People for the Public Interest v. AEC*, 502 F.2d 424, 426-29 (D.C. Cir. 1974)  
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- Calvert Cliffs' Coordinating Committee, Inc. v. AEC*, 449 F.2d 1109 (D.C. Cir. 1971)  
NRC must apply no lesser standard to its environmental review than it does to its safety review; LBP-06-28, 64 NRC 491 n.104 (2006)
- Calvert Cliffs' Coordinating Committee, Inc. v. AEC*, 449 F.2d 1109, 1112 (D.C. Cir. 1971)  
the greatest importance of NEPA may be that it requires the Commission and other agencies to consider environmental issues just as they consider other matters within their mandate; LBP-06-28, 64 NRC 484 n.73 (2006)
- Calvert Cliffs' Coordinating Committee, Inc. v. AEC*, 449 F.2d 1109, 1118 (D.C. Cir. 1971)  
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- Carolina Power & Light Co.* (H.B. Robinson, Unit 2), ALAB-569, 10 NRC 557, 562 (1979)  
where a state has assessed the aquatic impacts in approving a plant's cooling system, NRC must take the state's evaluation at face value and may not undercut the state's judgment by undertaking an independent analysis or establishing its own standards; LBP-06-20, 64 NRC 217 (2006)
- Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), ALAB-843, 24 NRC 200, 204 (1986)  
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- Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant) LBP-00-19, 52 NRC 85 (2000), *aff'd*, CLI-01-11, 53 NRC 370 (2001)  
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- Cheney v. U.S. District Court for District of Columbia*, 542 U.S. 367, 384 (2004)  
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- Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 195 (D.C. Cir.), *cert. denied*, 502 U.S. 994 (1991)  
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- Citizens Awareness Network, Inc. v. NRC*, 391 F.3d 338, 343 (1st Cir. 2004)  
NRC's procedures for filing contentions comply with the relevant provisions of the Administrative Procedure Act and the Commission has furnished an adequate explanation for its changes; LBP-06-23, 64 NRC 273 n.45; LBP-06-23, 64 NRC 352 n.6 (2006)
- Citizens Awareness Network, Inc. v. NRC*, 391 F.3d 338, 349, 360-61 (1st Cir. 2004)  
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- Citizens Awareness Network, Inc. v. NRC*, 391 F.3d 338, 351 (1st Cir. 2004)  
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- City of Angoon v. Hodel*, 803 F.2d 1016, 1021 (9th Cir. 1986), *cert. denied*, 484 U.S. 870 (1987)  
when the purpose of a proposed action is to accomplish one thing, it makes no sense to consider the alternative ways by which another thing might be achieved; LBP-06-19, 64 NRC 86-87 (2006)
- Commonwealth Edison Co.* (Carroll County Site), ALAB-601, 12 NRC 18, 24 (1980)  
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- Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), ALAB-616, 12 NRC 419, 426-27 (1980)  
contentions are not cognizable unless they are material to matters that fall within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's notice of opportunity for hearing and order referring the proceeding to the Board; LBP-06-23, 64 NRC 354 (2005)
- Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185, 189 (1999)  
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- Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185, 194 (1999)  
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- Connecticut Bankers Ass'n v. Board of Governors*, 627 F.2d 245, 251 (D.C. Cir. 1980)  
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- Consolidated Edison Co. of New York* (Indian Point, Units 1 and 2), CLI-01-8, 53 NRC 225, 229 (2001)  
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- Consolidated Edison Co. of New York* (Indian Point, Units 1 and 2), CLI-01-19, 54 NRC 109, 143-44 (2001)  
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- Consumers Power Co.* (Midland Plant, Units 1 and 2), ALAB-634, 13 NRC 96 (1981)  
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- Consumers Power Co.* (Midland Plant, Units 1 and 2), ALAB-764, 19 NRC 633, 641 (1984)  
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- Consumers Power Co.* (Midland Plant, Units 1 and 2), ALAB-764, 19 NRC 633, 642 (1984)  
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- Consumers Power Co.* (Midland Plant, Units 1 and 2), LBP-83-53, 18 NRC 282 (1983)  
a licensing board rejected motions to continue to withhold documents in part because the board had, simultaneously with the issuance of the subpoenas, issued a strict protective order that limited the release of the information only to the parties, and only for use in that case; LBP-06-25, 64 NRC 388 (2006)
- Consumers Power Co.* (Midland Plant, Units 1 and 2), LBP-83-53, 18 NRC 282, 287-88 (1983)  
licensing boards have continued to withhold documents or quash subpoenas once an applicable protective order has been issued or requested if the protective order may be breached; LBP-06-25, 64 NRC 388 n.85 (2006)
- Consumers Power Co.* (Midland Plant, Units 1 and 2), LBP-83-53, 18 NRC 282, 288 (1983)  
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- Consumers Power Co.* (Midland Plant, Units 1 and 2), LBP-83-64, 18 NRC 766, 769 (1983)  
a licensing board rejected motions to continue to withhold documents in part because the board had, simultaneously with the issuance of the subpoenas, issued a strict protective order that limited the release of the information only to the parties, and only for use in that case; LBP-06-25, 64 NRC 388 (2006)
- Curators of the University of Missouri* (TRUMP-S Project), CLI-95-8, 41 NRC 386, 397 (1995)  
NUREGs and Regulatory Guides are advisory by nature and do not themselves impose legal requirements on either the Commission or its licensees; LBP-06-23, 64 NRC 312 n.255 (2006)
- David Geisen*, LBP-06-13, 63 NRC 523, 543, 558 (2006)  
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- Davis v. Latschar*, 202 F.3d 359, 369 (D.C. Cir. 2000)  
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- Degen v. United States*, 517 U.S. 820, 825-26 (1996)  
although 10 C.F.R. 2.709 deals with special procedural norms for discovery against the Staff, there is no reason to believe, as to substantive content, that its repeated use of the relevance concept was not intended to embrace the universal understanding of that concept that shapes the scope and definition of discoverable evidence in both the federal courts and NRC adjudications; LBP-06-25, 64 NRC 390 n.102 (2006)
- Department of Interior v. Klamath Water Users*, 532 U.S. 1, 8-9 (2001)  
deliberative process privilege rests on the obvious realization that officials will not communicate candidly among themselves if each remark is a potential item of discovery and front page news, and

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- Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-18, 58 NRC 433, 434 (2003)  
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- Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001), *petition for reconsideration denied*, CLI-02-1, 55 NRC 1 (2002)  
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requirements for admissibility of contentions are strict by design and any contention that does not satisfy these requirements will be rejected; CLI-06-24, 64 NRC 118 (2006); LBP-06-20, 64 NRC 147 (2006); LBP-06-22, 64 NRC 235 (2006)  
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- Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 359-60 (2001)  
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- Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 366-67 (2001)  
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- Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 637 (2004)  
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- Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 638 (2004)  
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- Dubois v. United States Department of Agriculture*, 102 F.3d 1273, 1292-93 (1st Cir. 1996), *cert. denied*, 521 U.S. 1119 (1997)  
alternative mining sites considered in the final environmental impact statement that are subsets of applicant's proposed sites are well within the spectrum and range of alternatives discussed in the draft environmental impact statement; LBP-06-19, 64 NRC 100 (2006)
- Dudman Communications Corp. v. Department of the Air Force*, 815 F.2d 1565, 1569 (D.C. Cir.1987)  
draft versions of histories have been protected in certain circumstances by deliberative process privilege; LBP-06-25, 64 NRC 382 n.55 (2006)
- Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-02-2, 55 NRC 5, 7 & n.3 (2002)  
raising new arguments in a motion for reconsideration is prohibited; CLI-06-27, 64 NRC 402 (2006)
- Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 422 (2001)  
if a petitioner neglects to provide the requisite support for its contentions, the board should not make assumptions of fact that favor the petitioner, or supply information that is lacking; LBP-06-20, 64 NRC 150 (2006); LBP-06-23, 64 NRC 355 (2005)
- Duke Energy Corp.* (Catawba Nuclear Station, Units 1 and 2), CLI-04-6, 59 NRC 62, 70 (2004)  
the Commission's longstanding general policy disfavors interlocutory review; CLI-06-24, 64 NRC 119 (2006)
- Duke Energy Corp.* (Catawba Nuclear Station, Units 1 and 2), CLI-04-21, 60 NRC 21, 27 (2004)  
the Commission has inherent supervisory power over its adjudications and may direct the licensing boards' conduct of proceedings; CLI-06-20, 64 NRC 21 (2006)
- Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-20, 54 NRC 211, 212 (2001)  
the scope of a license renewal proceeding is limited to a review of the plant structures and components that will require an aging management review for the period of extended operation and the plant's systems, structures, and components that are subject to an evaluation of time-limited aging analyses; LBP-06-22, 64 NRC 235, 241 (2006)
- Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 290 (2002)  
a draft supplemental environmental impact statement must address significant new circumstances or information relevant to a license renewal, including new and significant information relating to Category 1 issues; LBP-06-20, 64 NRC 149 (2006)  
after considering public comments on the draft supplemental environmental impact statement, covering both plant-specific Category 2 issues and new and significant information on Category 1 issues, the Staff weighs the expected environmental impacts of license renewal and sets forth its conclusions in the final supplemental environmental impact statement; LBP-06-20, 64 NRC 149 (2006)  
applicant must provide additional analysis of even a Category 1 issue if new and significant information has surfaced; LBP-06-20, 64 NRC 156 (2006); LBP-06-23, 64 NRC 294 (2006)
- Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 290-91 (2002)  
the final supplemental environmental impact statement must consider new and significant information on Category 1 issues; LBP-06-20, 64 NRC 149, 156 (2006)  
the final supplemental environmental impact statement also takes account of public comments, including new information on generic findings; LBP-06-23, 64 NRC 294 n.151 (2006)
- Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1 (2002)  
the evaluation of risk is at the heart of a SAMA analysis, and only by considering risk can one determine those alternatives that provide the greatest benefit for the dollars expended; LBP-06-23, 64 NRC 327 (2006)

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- 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; LBP-06-23, 64 NRC 327 (2006)  
use of probabilistic risk assessment and modeling is accepted and standard practice in SAMA analyses; LBP-06-23, 64 NRC 340 (2006)
- Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 8 n.14 (2002)  
reductions in risk are assessed in terms of the total averted risk; LBP-06-23, 64 NRC 327 (2006)
- Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 10 (2002)  
although NEPA does not require agencies to select particular options, it is intended to foster both informed decisionmaking and informed public participation, and thus to ensure the agency does not act on incomplete information, only to regret its decision after it is too late to correct; LBP-06-23, 64 NRC 340 (2006)
- Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358, 361 (2002)  
there is no need to address terrorism issues in license renewal proceedings because it is sensible not to devote resources to the likely impact of terrorism during the license renewal period, but instead to concentrate on how to prevent a terrorist attack in the near term at the already licensed facilities; LBP-06-23, 64 NRC 300 (2006)
- 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)  
even if terrorism issues require analysis under NEPA, the generic environmental impact statement concluded that if such an event were to occur, the resultant core damage and radiological release would be no worse than those expected from internally initiated events; LBP-06-23, 64 NRC 285 (2006)  
license renewal proceedings generally concern requests to renew 40-year operating licenses for additional 20-year terms; LBP-06-23, 64 NRC 274 (2006)  
the scope of a license renewal proceeding is limited to a review of the plant structures and components that will require an aging management review for the period of extended operation and the plant's systems, structures, and components that are subject to an evaluation of time-limited aging analyses; LBP-06-22, 64 NRC 235, 241 (2006); LBP-06-23, 64 NRC 274 (2006)
- Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358, 364 (2002)  
security issues are not among the aging-related questions that are relevant in license renewal review; LBP-06-20, 64 NRC 171 (2006)  
terrorism contentions are, by their very nature, directly related to security and are therefore unrelated to the detrimental effects of aging, and, consequently, are beyond the scope of, not material to, and inadmissible in a license renewal proceeding; LBP-06-20, 64 NRC 173 (2006)  
there is no need to address terrorism issues in license renewal proceedings because it is sensible not to devote resources to the likely impact of terrorism during the license renewal period, but instead to concentrate on how to prevent a terrorist attack in the near term at the already-licensed facilities; LBP-06-20, 64 NRC 160 (2006)
- Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358, 365 n.24 (2002)  
even if a terrorist attack on a nuclear power plant were to occur, the resultant core damage and radiological release would be no worse than expected from internally initiated events; LBP-06-20, 64 NRC 154, 160-61 (2006)
- Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 424 (2003)  
the contention rules bar contentions where petitioners have only what amounts to generalized suspicions, hoping to substantiate them later; LBP-06-23, 64 NRC 353 (2005)

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- Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 428 (2003)  
mere notice pleading does not suffice for admission of contentions; CLI-06-24, 64 NRC 119 (2006)
- 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)  
under NEPA, mitigation need only be discussed in sufficient detail to ensure that environmental consequences of the proposed project have been fairly evaluated; LBP-06-23, 64 NRC 329 (2006)
- Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-98-17, 48 NRC 123, 125 (1998)  
the scope of license renewal proceedings, which generally concern requests to renew 40-year operating licenses for additional 20-year terms, is discussed; LBP-06-23, 64 NRC 274 (2006)
- Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999)  
at the contention admission stage, petitioner must simply proffer some minimal factual foundation sufficient to raise a genuine dispute regarding the existence of a corrosive environment; LBP-06-22, 64 NRC 243, 244 (2006)  
heightened standards for the admissibility of contentions originally came into being in 1989, when the Commission amended its rules to raise the threshold for the admission of contentions; LBP-06-23, 64 NRC 272 (2006)  
the origin of the current contention admissibility standards was the Commission's determination in 1989 that licensing boards prior to that time had admitted and litigated numerous contentions that appeared to be based on little more than speculation; LBP-06-23, 64 NRC 272, 352 (2005)  
the strict contention rule focuses the hearing process on real disputes susceptible of resolution in an adjudication, puts other parties in the proceeding on notice of the petitioners' specific grievances and thus gives them a good idea of the claims they will be either supporting or opposing, and helps to ensure that full adjudicatory hearings are triggered only by those able to proffer at least some minimal factual and legal foundation in support of their contentions; LBP-06-23, 64 NRC 273, 352 (2006)
- Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 337-39 (1999)  
it is legitimate for the Commission to screen out contentions of doubtful worth and to avoid starting down the path toward a hearing at the behest of petitioners who themselves have no particular expertise or expert assistance and no particularized grievance, but are hoping something will turn up later as a result of NRC Staff work; LBP-06-23, 64 NRC 356 (2005)  
the contention rules bar contentions where petitioners have only what amounts to generalized suspicions, hoping to substantiate them later; LBP-06-23, 64 NRC 353 (2005)
- Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 343-44 (1999)  
the expected increase in the volume of spent fuel from an additional 20 years of operation can be safely accommodated onsite with small environmental effects through dry or pool storage at all plants if a permanent repository or monitored retrievable storage is not available; LBP-06-23, 64 NRC 291 (2006)
- Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 344-45 (1999)  
issues related to the environmental impact of onsite spent fuel storage after the license renewal term are outside the scope of a license renewal proceeding because contentions may not challenge the NRC's Waste Confidence Rule; LBP-06-20, 64 NRC 170 (2006)
- Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 345 (1999)  
licensing boards should not accept in individual license proceedings contentions that are (or are about to become) the subject of general rulemaking by the Commission; LBP-06-23, 64 NRC 312 n.255 (2006)
- Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 468 (1982)  
petitioner has an ironclad obligation to examine available information and use it to support its contention; LBP-06-20, 64 NRC 188 (2006)
- Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-813, 22 NRC 59, 86 (1985)  
licensing boards should not accept in individual license proceedings contentions that are (or are about to become) the subject of general rulemaking by the Commission; LBP-06-23, 64 NRC 312 n.255 (2006)

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- Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-825, 22 NRC 785, 790-91 (1985)  
contentions are not cognizable unless they are material to matters that fall within the scope of the proceeding for which the licensing board has been delegated jurisdiction; LBP-06-23, 64 NRC 354 (2005)  
the scope of a proceeding is defined by the Commission in its initial hearing notice and order referring the proceeding to the licensing board; LBP-06-20, 64 NRC 148 (2006)
- Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), LBP-82-116, 16 NRC 1937, 1946 (1982)  
a contention about a matter not covered by a specific rule need only allege that the matter poses a significant safety problem; LBP-06-23, 64 NRC 316 (2006)
- Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), CLI-06-8, 63 NRC 235, 237-38 & nn.4-7 (2006)  
as litigation moves forward or terminates, the equities that traditionally govern stays or injunctive relief may change; CLI-06-23, 64 NRC 109 (2006)  
there is no presumption that irreparable damage occurs whenever there is a failure to adequately evaluate the environmental impact of a proposed project; CLI-06-27, 64 NRC 402 n.9 (2006)
- Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-04-31, 60 NRC 686, 705 (2004)  
a board in its sound discretion must determine the type of hearing procedures most appropriate for the specific contentions before it; LBP-06-20, 64 NRC 204 (2006)
- Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-04-31, 60 NRC 686, 710 (2004)  
since the opportunity for cross-examination under Subpart L is equivalent to the opportunity for cross-examination under the Administrative Procedure Act, it is likewise consistent with the state's reasonable opportunity to interrogate witnesses under 42 U.S.C. § 2021(f); LBP-06-20, 64 NRC 203 (2006)
- Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-05-33, 62 NRC 828, 839 (2005)  
all levels of NRC adjudicators have consistently applied the deliberative process privilege; LBP-06-25, 64 NRC 381 (2006)  
the fact that the Staff puts a document on a privilege log, and thus labels a document as deliberative, is not sufficient to assess whether it is; LBP-06-25, 64 NRC 379 n.35 (2006)
- Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-05-33, 62 NRC 828, 843 (2005)  
materials are deliberative if they reflect a consultative process; LBP-06-25, 64 NRC 381 (2006)
- Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-05-33, 62 NRC 828, 846-47 (2005)  
to earn recognition, deliberative process privilege must be asserted by a qualified person, such as the head of the department or division, having both expertise and an overview-type perspective concerning the balance between the agency's duty of disclosure versus its need to conduct frank internal debate; LBP-06-25, 64 NRC 383 (2006)
- Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-06-14, 63 NRC 568 (2006)  
new, amended, or nontimely contentions would have to meet the requirements of 10 C.F.R. 2.309(c) and (f)(1); LBP-06-20, 64 NRC 174 (2006)
- Environmental Protection Agency v. Mink*, 410 U.S. 73, 91 (1973)  
purely factual material is not generally protected by the deliberative process privilege; LBP-06-25, 64 NRC 382, 389 (2006)
- Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5 (2005)  
in its mandatory review, boards are not to undertake a *de novo* review of the application, but rather are to perform merely a sufficiency review of the NRC Staff's findings; CLI-06-20, 64 NRC 19 (2006)
- Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5, 39 (2005)  
a board's role in an uncontested proceeding is somewhat analogous to the function of an appellate court applying the substantial evidence test; CLI-06-20, 64 NRC 25 (2006)

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- in a mandatory hearing, a board's task is to ensure that the Staff's review is adequate and that the Staff has made findings with reasonable support in logic and fact; CLI-06-20, 64 NRC 19 (2006)
- Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5, 39-40 (2005)  
a board should not reconsider the NRC Staff's factual findings unless it first determines that the Staff's review was inadequate or its findings insufficient; CLI-06-20, 64 NRC 19 (2006)
- Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5, 40 (2005)  
in a mandatory hearing, a board should carefully probe the Staff's findings and ask appropriate questions; CLI-06-20, 64 NRC 19 (2006)
- Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 808 (2005)  
mere notice pleading does not suffice for admission of contentions; CLI-06-24, 64 NRC 119 (2006)  
NEPA imposes no obligation to examine alternatives that would do nothing to satisfy a particular project's goals; LBP-06-19, 64 NRC 87 (2006)  
NRC contention admission rules require a clear statement of the bases for contentions and the submission of supporting information and references to specific documents and sources that establish the validity of the contention; CLI-06-24, 64 NRC 119 (2006)  
requirements for admissibility of contentions are strict by design and any contention that does not satisfy these requirements will be rejected; CLI-06-24, 64 NRC 118 (2006)
- Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), LBP-04-17, 60 NRC 229, 241 (2004)  
neither mere speculation nor bare or conclusory assertions, even by an expert, alleging that a matter should be considered will suffice to allow the admission of a proffered contention; LBP-06-20, 64 NRC 164, 165, 188 (2006)
- Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003)  
a contention will be ruled inadmissible if petitioner has offered no tangible information, no experts, no substantive affidavits, but instead only bare assertions and speculation; LBP-06-20, 64 NRC 150, 164, 165 (2006); LBP-06-23, 64 NRC 355 (2005)
- Farmland Preservation Ass'n v. Goldschmidt*, 611 F.2d 233, 239 (8th Cir. 1979)  
discussion of the no-action alternative in a final environmental impact statement need not be exhaustive or inordinately detailed; LBP-06-19, 64 NRC 90 (2006)
- Federal Open Market Committee of Federal Reserve System v. Merrill*, 443 U.S. 340, 362 (1979)  
privilege for trade secrets or confidential information is not absolute; LBP-06-25, 64 NRC 376 (2006)
- First Eastern Corp. v. Mainwaring*, 21 F.3d 465, 468 (D.C. Cir. 1994)  
in creating the FOIA exemptions, Congress acted on a belief that government decisions are better made when staff members are able to share ideas and opinions frankly, rather than operating in a fishbowl; LBP-06-25, 64 NRC 380 (2006)
- Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989)  
in proceedings involving nuclear power reactors, a petitioner is presumed to have standing to intervene without the need to specifically plead injury, causation, and redressability if the petitioner lives within 50 miles of the nuclear power reactor; LBP-06-20, 64 NRC 144 n.16 (2006); LBP-06-23, 64 NRC 270 (2006)  
the proximity presumption applies in proceedings for nuclear power plant construction permits, operating licenses, or significant amendments thereto; LBP-06-20, 64 NRC 144 n.16 (2006)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-00-23, 52 NRC 327, 329 (2000)  
the scope of license renewal proceedings, which generally concern requests to renew 40-year operating licenses for additional 20-year terms, is discussed; LBP-06-23, 64 NRC 274 (2006)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 6-13 (2001)  
a license renewal environmental report need not provide information regarding the storage of spent fuel; LBP-06-20, 64 NRC 154 (2006)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 7 (2001)  
adverse aging effects that license renewal applicants must address may result from potential metal fatigue, erosion, corrosion, thermal and radiation embrittlement, microbiologically induced effects, creep, and shrinkage; CLI-06-24, 64 NRC 117 (2006)

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- in developing Part 54, the Commission sought to develop a process that would be both efficient, avoiding duplicative assessments where possible, and effective, allowing the NRC Staff to focus its resources on the most significant safety concerns at issue during the renewal term; LBP-06-23, 64 NRC 275 (2006)
- requiring a full reassessment of safety issues that were thoroughly reviewed when the facility was first licensed and continue to be routinely monitored and assessed by ongoing agency oversight and agency-mandated licensee programs would be both unnecessary and wasteful for license renewals; LBP-06-23, 64 NRC 276 (2006)
- safety contentions in license renewal proceedings must focus on topics related to the detrimental effects of aging and related time-limited issues dealt within 10 C.F.R. Part 54; LBP-06-20, 64 NRC 148 (2006)
- the NRC license renewal safety review focuses upon those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs; LBP-06-23, 64 NRC 276 (2006)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 7-8 (2001)
- a license renewal inquiry includes age-related degradation of components that, left unmitigated, can unacceptably reduce safety margins and lead to the loss of required plant functions with a potential for offsite exposures; LBP-06-22, 64 NRC 241 (2006)
- issues that concern age-related degradation, such as metal fatigue, corrosion, and thermal and radiation embrittlement, are within the scope of a license renewal proceeding; LBP-06-20, 64 NRC 148 (2006)
- the adverse aging effects can affect a number of reactor and auxiliary systems, including the reactor vessel, the reactor coolant system pressure boundary, steam generators, electrical cables, the pressurizer, heat exchangers, and the spent fuel pool; CLI-06-24, 64 NRC 117 (2006)
- the detrimental effects of aging that are important principally during the period of extended operation beyond the initial 40-year license term are described; LBP-06-23, 64 NRC 277 (2006)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 7, 9 (2001)
- a license renewal review does not revisit the full panoply of issues considered during review of an initial license application; CLI-06-24, 64 NRC 117 (2006)
- contentions that focus on safety issues that were thoroughly reviewed when the plant was initially licensed and are continually monitored as part of the NRC's ongoing oversight programs are outside of the scope of license renewal proceedings; LBP-06-20, 64 NRC 148 (2006)
- the scope of the health and safety review on a license renewal is limited to those potentially detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs; CLI-06-24, 64 NRC 117 (2006)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 8 (2001)
- issues relating to a plant's current licensing basis are ordinarily beyond the scope of a license renewal review because those issues already are monitored, reviewed, and commonly resolved as needed by ongoing regulatory oversight; LBP-06-22, 64 NRC 235-36, 253 (2006)
- license renewal applicants must demonstrate how their programs will be effective in managing the effects of aging during the proposed period of extended operation at a detailed component and structure level, rather than at a more generalized system level; LBP-06-23, 64 NRC 275 (2006)
- license renewal applicants must demonstrate that they will adequately manage the detrimental effects of aging for all important components and structures; CLI-06-24, 64 NRC 117 (2006)
- to the extent that any health and safety analyses performed during the initial licensing process were limited to the initial 40-year license period, the license renewal applicant must show that it has reassessed these time-limited aging analyses and that these analyses remain valid for the period of extended operation; CLI-06-24, 64 NRC 117 (2006)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 8-9 (2001)
- review of a license renewal application does not reopen issues relating to a plant's current licensing basis, or any other issues that are subject to routine and ongoing regulatory oversight and enforcement; CLI-06-24, 64 NRC 118 (2006)

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- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 9 (2001)  
emergency planning is one of the safety issues that need not be reexamined within the context of license renewal; LBP-06-23, 64 NRC 340 (2006)  
it is unnecessary and inappropriate to throw open the full gamut of provisions in a plant's current licensing basis to reanalysis during the license renewal review; LBP-06-23, 64 NRC 276 (2006)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 9-10 (2001)  
emergency planning issues are not within the scope of a license renewal proceeding; LBP-06-20, 64 NRC 148 (2006)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 10 (2001)  
adjudicatory hearings in individual license renewal proceedings will share the same scope of issues as the NRC Staff review; LBP-06-20, 64 NRC 159 n.32 (2006); LBP-06-23, 64 NRC 294 (2006)  
license renewal reviews focus on plant systems, structures, and components for which current regulatory activities and requirements may not be sufficient to manage the effects of aging in the period of extended operation; LBP-06-22, 64 NRC 235 (2006); LBP-06-23, 64 NRC 277 (2006)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 10 n.2 (2001)  
an issue can be related to plant aging and still not warrant review at the time of a license renewal application, if an aging-related issue is adequately dealt with by regulatory processes on an ongoing basis; LBP-06-23, 64 NRC 277 (2006)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 11 (2001)  
a generic environmental impact statement provides an extensive study of potential environmental impacts of extending the operating licenses for nuclear power plants for 20 years; LBP-06-20, 64 NRC 148 (2006)  
Category 1 issues involve environmental effects that are essentially similar for all plants, and thus they need not be assessed repeatedly on a site-specific basis, plant-by-plant; LBP-06-20, 64 NRC 148 (2006); LBP-06-23, 64 NRC 279 (2006)  
Category 2 issues involve environmental impact severity levels that might differ significantly from one plant to another, or impacts for which additional plant-specific mitigation measures should be considered; LBP-06-23, 64 NRC 279 (2006)  
environmental issues for which the Commission was not able to make generic environmental findings are designated as Category 2 matters, and applicants must provide plant-specific analyses of their environmental impacts; LBP-06-23, 64 NRC 279 (2006)  
even where the generic environmental impact statement has found that a particular impact applies generically (Category 1), the applicant must still provide additional analysis in its environmental report if new and significant information may bear on the applicability of the Category 1 finding at its particular plant; LBP-06-20, 64 NRC 156 (2006); LBP-06-23, 64 NRC 294 (2006)  
license renewal applicants may in their site-specific environmental reports refer to and adopt the generic environmental impact findings found in Table B-1, Appendix B, , Subpart A of Part 51 for all Category 1 issues; LBP-06-23, 64 NRC 279 (2006)  
NRC's Part 51 environmental review requirements are tailored to provide an efficient and focused renewal-specific review, rather than duplicating the review required for an initial license; CLI-06-24, 64 NRC 118 (2006)  
the 1996 Generic Environmental Impact Statement for License Renewal of Nuclear Plants was part of an amendment of the requirements of Part 51 undertaken by the Commission to establish environmental review requirements for license renewals that were both efficient and more effectively focused; LBP-06-23, 64 NRC 279 (2006)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 11-12 (2001)  
plant-specific, or Category 2, issues must be addressed in a license renewal applicant's environmental report; LBP-06-20, 64 NRC 148 (2006)

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- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 11-13 (2001)  
the scope of license renewal proceedings, which generally concern requests to renew 40-year operating licenses for additional 20-year terms, is discussed; LBP-06-23, 64 NRC 274 (2006)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 12 (2001)  
although the initial requirement to discuss the extent to which adverse effects can be avoided falls upon applicants, the ultimate responsibility lies with the Staff, who must address these issues in a supplemental environmental impact statement that is specific to the particular site involved and provides the Staff's independent assessment of the applicant's environmental report; LBP-06-23, 64 NRC 280 (2006)  
failure of an environmental report to include known new and significant information concerning a Category 1 issue cannot give rise to an admissible contention because there are three options for addressing this information that might arise after the GEIS on Category 1 issues has been finalized; LBP-06-20, 64 NRC 156-57 (2006)  
if petitioner wants to raise its concerns that new and significant information relating to terrorism needs to be considered, it should pursue one of the three paths specified by the Commission; LBP-06-20, 64 NRC 160 (2006)  
NRC Staff must independently assess the applicant's environmental report, setting out its conclusions in a site-specific draft supplemental environmental impact statement; LBP-06-20, 64 NRC 149 (2006)  
petitioners with evidence that a generic finding is incorrect for all plants may petition the Commission to initiate a fresh rulemaking or may use the SEIS notice-and-comment process to ask the NRC to forgo use of the suspect generic finding and to suspend license renewal proceedings, pending a rulemaking or updating of the GEIS; LBP-06-23, 64 NRC 295 (2006)  
petitioners with new information showing that a generic rule would not serve its purpose at a particular plant may seek a waiver of the rule; LBP-06-23, 64 NRC 295 (2006)  
the final supplemental environmental impact statement must consider new and significant information on Category 1 issues; LBP-06-20, 64 NRC 149 (2006)  
the final supplemental environmental impact statement takes account of public comments, including new information on generic findings; LBP-06-20, 64 NRC 156 (2006); LBP-06-23, 64 NRC 294 n.151 (2006)  
the impact of extended operation on endangered or threatened species varies from one location to another, and is thus included within Category 2; LBP-06-23, 64 NRC 279 (2006)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 13-14 (2001)  
reliance on generic environmental impact statement tiering comports with the National Environmental Policy Act; LBP-06-20, 64 NRC 159 (2006)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 21-22 (2001)  
an environmental report need not address severe accident mitigation alternatives for mitigating spent fuel pool accidents; LBP-06-20, 64 NRC 154 (2006)  
for a license renewal, severe accident mitigation alternatives are not required for spent fuel pool accidents; LBP-06-20, 64 NRC 161 (2006)  
severe accident mitigation alternatives apply only to reactor accidents, not to spent fuel pool accidents; LBP-06-23, 64 NRC 291 (2006)
- 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-06-20, 64 NRC 157 (2006); LBP-06-23, 64 NRC 295 (2006)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 23 n.14 (2001)  
Part 51, with its underlying generic environmental impact statement, precludes litigation of spent fuel pool accidents; LBP-06-20, 64 NRC 157 (2006)

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- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-90-16, 31 NRC 509, 521 & n.12 (1990)  
an allegation that some aspect of a license application is inadequate or unacceptable does not give rise to a genuine dispute unless it is supported by facts and a reasoned statement of why the application is unacceptable in some material respect; LBP-06-23, 64 NRC 358 (2005)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138 (2001)  
section 51.53 of 10 C.F.R. does not require an applicant to broadly consider severe accident risks, only severe accident mitigation alternatives; LBP-06-23, 64 NRC 290 n.143 (2006)
- Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 146-50 (2001)  
based on the physical proximity of an organization's representative to the Pilgrim Nuclear Power Station, and because the affected member has authorized the petitioner organization to represent her in this proceeding, the organization has demonstrated representational standing; LBP-06-23, 64 NRC 271 (2006)  
close proximity to a facility has always been deemed to be enough, standing alone, to establish the requisite interest to confer standing; LBP-06-23, 64 NRC 270 (2006)  
the proximity presumption for standing to intervene is applied in operating license renewal proceedings; LBP-06-20, 64 NRC 144 n.16 (2006)
- Friedman v. Bache Halsey Stuart Shields, Inc.*, 738 F.2d 1336, 1344 (D.C. Cir. 1984)  
although information available under FOIA is likely to be available through discovery, information unavailable under FOIA is not necessarily unavailable through discovery; LBP-06-25, 64 NRC 384 n.68 (2006)
- Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995)  
based on the physical proximity of an organization's representative to the Pilgrim Nuclear Power Station, and because the affected member has authorized the petitioner organization to represent her in this proceeding, the organization has demonstrated representational standing; LBP-06-23, 64 NRC 271 (2006)  
when determining whether a petitioner has established the necessary interest under Commission rules, licensing boards are directed by Commission precedent to look to judicial concepts of standing for guidance; LBP-06-23, 64 NRC 270 (2006)  
when determining whether a petitioner has met the requirements for establishing standing, the board must construe the petition in favor of the petitioner; LBP-06-20, 64 NRC 144 (2006)
- Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 118 (1995)  
a petitioner must present sufficient information to show a genuine dispute and reasonably indicating that a further inquiry is appropriate; LBP-06-23, 64 NRC 359 (2005)
- Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305, *vacated in part and remanded on other grounds*, CLI-95-10, 42 NRC 1, and *aff'd in part*, CLI-95-12, 42 NRC 111 (1995)  
if a petitioner neglects to provide the requisite support for its contentions, the board should not make assumptions of fact that favor the petitioner, or supply information that is lacking; LBP-06-20, 64 NRC 150 (2006); LBP-06-23, 64 NRC 355 (2005)  
petitioner must provide the analyses and expert opinion showing why its bases support its contention; LBP-06-23, 64 NRC 355 (2005)
- Georgia Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), CLI-94-5, 39 NRC 190, 197 (1994)  
a document is predecisional when it was prepared before the adoption of an agency decision and specifically prepared to assist the decisionmaker in arriving at his or her decision; LBP-06-25, 64 NRC 381 (2006)  
a document must be predecisional and deliberative to be categorized as deliberative process; LBP-06-25, 64 NRC 381 (2006)  
absent support to the contrary, NRC declines to assume that licensees will contravene its regulations; LBP-06-27, 64 NRC 454 n.39 (2006)

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- all levels of NRC adjudicators have consistently applied the deliberative process privilege; LBP-06-25, 64 NRC 381 (2006)
- the exemption of interagency or intra-agency memoranda or letters that would not be available by law to a party from disclosure is meant to encompass the common-law discovery exemptions for attorney work product and government deliberative process; LBP-06-25, 64 NRC 380 (2006)
- Georgia Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), CLI-94-5, 39 NRC 190, 198 (1994) analysis of whether deliberative process privilege applies turns on three factors under 10 C.F.R. 2.709(d) and the overriding-need test; LBP-06-25, 64 NRC 380 (2006)
- materials are deliberative if they reflect a consultative process; LBP-06-25, 64 NRC 381 (2006) once material has been determined to be deliberative process, the litigant must demonstrate an overriding need for the material; LBP-06-25, 64 NRC 390 (2006)
- Georgia Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), CLI-94-5, 39 NRC 190, 200 (1994) a licensing board considered the withholding of an OI Report for deliberative process reasons, but it was planned that the entire report would be released after the Commission made its final decision; LBP-06-25, 64 NRC 389 n.91 (2006)
- GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 202 (2000) for an organization to establish representational standing, the organization must show that at least one of its members may be affected by the licensing action and, accordingly, would have standing to sue in his or her own right, identify that member by name and address, and show that the organization is authorized to request a hearing on behalf of that member; LBP-06-23, 64 NRC 271 (2006)
- GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 208 (2000) a contention will be ruled inadmissible if petitioner has offered no tangible information, no experts, no substantive affidavits, but instead only bare assertions and speculation; LBP-06-20, 64 NRC 150, 190 (2006); LBP-06-23, 64 NRC 355 (2005)
- GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 211 (2000) licensing boards have continued to withhold documents or quash subpoenas once an applicable protective order has been issued or requested if the information request is simply not material; LBP-06-25, 64 NRC 388 n.85 (2006)
- Gulf States Utilities Co.* (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 51 (1994) a petitioner must present sufficient information to show a genuine dispute and reasonably indicating that a further inquiry is appropriate; LBP-06-23, 64 NRC 359 (2005)
- Headwaters, Inc. v. Bureau of Land Management*, 914 F.2d 1174 (9th Cir. 1990) an agency need not undertake a separate NEPA analysis of alternatives that are not significantly distinguishable from alternatives already considered, or that have substantially similar consequences; CLI-06-29, 64 NRC 422 n.22 (2006)
- Herbert v. Lando*, 441 U.S. 153, 175 (1979) evidentiary privileges in litigation are not favored, and even those rooted in the Constitution must give way in proper circumstances; LBP-06-25, 64 NRC 376 (2006)
- Herbert v. Lando*, 441 U.S. 153, 175-77 (1979) privilege for journalists is not absolute; LBP-06-25, 64 NRC 376 (2006)
- Hickman v. Taylor*, 329 U.S. 495, 501 (1947) parties are entitled to obtain, through discovery and other pretrial activities, the fullest possible knowledge of the issues and facts before trial; LBP-06-25, 64 NRC 375 (2006)
- Hinckley v. United States*, 140 F.3d 277, 277 (D.C. Cir. 1998) even limited disclosure in a courtroom could harm the frankness of debate, which explains the lack of precedent for allowing deliberative process documents to be released under a protective order, or for even considering such a measure; LBP-06-25, 64 NRC 391 n.107 (2006)
- Hinckley v. United States*, 140 F.3d 277, 281 n.1 (D.C. Cir. 1998) in the context of deliberative process privilege, policy and lawmaking can be viewed as including most decisions of government agencies; LBP-06-25, 64 NRC 382 (2006)
- Hinckley v. United States*, 140 F.3d 277, 285 (D.C. Cir. 1998) in creating the FOIA exemptions, Congress acted on a belief that government decisions are better made when staff members are able to share ideas and opinions frankly, rather than operating in a fishbowl; LBP-06-25, 64 NRC 380 (2006)

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- where there is reason to believe the documents sought may shed light on government misconduct, the deliberative process privilege is routinely denied; LBP-06-25, 64 NRC 391 n.109 (2006)
- Hinckley v. United States*, 140 F.3d 277, 286 (D.C. Cir. 1998)
- that the subject of an enforcement order does not agree with the agency's final enforcement decision is not sufficient to show need for deliberative process documents; LBP-06-25, 64 NRC 392 (2006)
- Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), ALAB-549, 9 NRC 644, 649 (1979)
- it is neither congressional nor Commission policy to exclude parties because the niceties of pleading were imperfectly observed, the sounder practice being to decide issues on their merits, not to avoid them on technicalities; LBP-06-23, 64 NRC 358 n.42 (2005)
- Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-00-12, 52 NRC 1, 3 (2000)
- on fact-specific technical issues, where a Presiding Officer has reviewed an extensive record in detail, with the assistance of a technical advisor, the Commission is disinclined to upset the presiding officer's findings and conclusions, particularly where the submissions of experts have been weighed; CLI-06-29, 64 NRC 422 (2006)
- Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 46 (2001)
- an intervenor bears responsibility for any misunderstanding of its claims that are unclear or indeterminate; LBP-06-19, 64 NRC 67 n.9 (2006)
- Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 47 (2001)
- Commission precedent directs that the final environmental impact statement should be read and understood as a whole; LBP-06-19, 64 NRC 85 (2006)
- Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 52 (2001)
- an environmental impact statement must be supplemented only when changed circumstances cause effects that are significantly different from those already studied; LBP-06-19, 64 NRC 99 (2006)
- Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 53 (2001)
- Staff's addition of mitigation measures to a final environmental impact statement is not only permissible, it is properly viewed as the Staff's conscientious performance of its NEPA responsibilities; LBP-06-19, 64 NRC 101 (2006)
- the adjudicatory record and board decision and any Commission appellate decisions become, in effect, part of the final environmental impact statement; LBP-06-19, 64 NRC 69 n.11 (2006)
- the final environmental impact statement, in response to comments received, may supplement, refine, or otherwise adapt the project alternatives; LBP-06-19, 64 NRC 101 (2006)
- Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 54 (2001)
- one of the alternatives generally discussed in a final environmental impact statement is the alternative of taking no action; LBP-06-19, 64 NRC 89 (2006)
- the no-action alternative in a final environmental impact statement need not contain much discussion, since it is most simply viewed as maintaining the status quo; LBP-06-19, 64 NRC 90 (2006)
- Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 55 (2001)
- NEPA imposes no obligation to select the most environmentally benign alternative; LBP-06-19, 64 NRC 90 (2006)
- Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 55-56 (2001)
- when an agency is being asked to approve a private applicant's proposed project, the agency may take into account the applicant's economic goals, according appropriate deference to the applicant's proposed siting and design plans; LBP-06-19, 64 NRC 89 (2006)
- Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 57 (2001)
- cumulative impacts analysis considers whether the incremental impacts from an action will combine with preexisting environmental impacts in a fashion that will enhance the significance of their individual effects; CLI-06-29, 64 NRC 422 (2006)
- cumulative impacts analysis may also look to whether a proposed action's impacts will have interregional synergistic effects; LBP-06-19, 64 NRC 67 n.8 (2006)
- Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 60 (2001)
- cumulative impacts analysis in the NEPA context is not concerned with the singular impacts that an individual project may have on the environment, but rather it looks to whether the proposed action's impacts will be significantly enhanced by already-existing environmental effects from prior actions; LBP-06-19, 64 NRC 66-67, 72 (2006)

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- Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 64 (2001)  
pursuant to environmental justice principles, each agency should identify and address, as appropriate, any disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations; LBP-06-19, 64 NRC 79 (2006)
- Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 69 (2001)  
the environmental justice analysis is similar to a cumulative impacts analysis but also takes into account relevant features of the minority community; LBP-06-19, 64 NRC 79 (2006)
- Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 71 (2001)  
intervenor's preference that the final environmental impact statement contain additional details on any particular issue is not, standing alone, probative of the FEIS adequacy; LBP-06-19, 64 NRC 81 n.27 (2006)
- Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-04-33, 60 NRC 581, 592 (2004)  
arguments or legal theories not raised before a presiding officer or licensing board are deemed waived; CLI-06-29, 64 NRC 421 (2006)
- Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-04-33, 60 NRC 581, 602-03, 605-06 (2004)  
a board's analysis of decommissioning cost estimates should be tailored to the specifics of the proceeding; CLI-06-22, 64 NRC 42 (2006)
- Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-04-39, 60 NRC 657, 659 (2004)  
new information that might emerge following issuance of an environmental impact statement requires a supplement to the impacts analysis if the new information presents a seriously different picture of the environmental impact of the proposed project from what was previously envisioned; CLI-06-29, 64 NRC 419 (2006)
- Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), CLI-06-1, 63 NRC 1, 2 (2006)  
although the Commission has discretion to review all underlying factual issues *de novo*, it generally steps in only to correct clearly erroneous findings; CLI-06-22, 64 NRC 40 (2006)  
although the Commission on occasion may choose to make its own *de novo* findings of fact, it generally does not exercise that authority where a presiding officer or licensing board has issued a plausible decision that rests on carefully rendered findings of fact; CLI-06-29, 64 NRC 423 (2006)  
on fact-specific technical issues, where a presiding officer has reviewed an extensive record in detail, with the assistance of a technical advisor, the Commission is disinclined to upset the presiding officer's findings and conclusions, particularly where the submissions of experts have been weighed; CLI-06-29, 64 NRC 422 (2006)
- Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), CLI-06-11, 63 NRC 483, 488 (2006)  
subject to limited exceptions, legal determinations made on appeal in a case are controlling precedent, becoming the law of the case, for all later decisions in the same case; LBP-06-19, 64 NRC 84 n.29 (2006)
- Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), LBP-04-23, 60 NRC 441, 447 (2004)  
only reasonable scenarios need to be considered, limited to effects that are shown to have some likelihood of occurring; LBP-06-23, 64 NRC 329 (2006)
- Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), LBP-05-17, 62 NRC 77, 98 n.14 (2005)  
arguments that an intervenor fails to adequately develop are treated as waived; LBP-06-19, 64 NRC 76 n.21 (2006)  
it is not the duty of an adjudicative body to dig through the reams of paper that litigants have deposited to construct and develop their arguments; LBP-06-19, 64 NRC 67 n.8 (2006)
- In re Motion To Unseal Electronic Surveillance*, 965 F.2d 637, 641 (8th Cir. 1992)  
the rules of discovery allow intrusions into the private affairs of parties to litigation as well as third parties; LBP-06-25, 64 NRC 388 (2006)
- In re Motion To Unseal Electronic Surveillance*, 965 F.2d 637, 642 (8th Cir. 1992)  
much of the discovery done in civil suits implicates confidentiality and privacy interests, and courts are often asked to carefully balance these interests with the compelling need for discovery; LBP-06-25, 64 NRC 377 (2006)

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- In re Sealed Case*, 121 F.3d 729, 736 (D.C. Cir. 1997)  
agency interests are compromised and government processes are chilled when deliberative process documents are released to the public; LBP-06-25, 64 NRC 391 (2006)  
rooted in common law, variations on the deliberative process privilege doctrine are thought to have been used in American courts since the beginnings of our nation; LBP-06-25, 64 NRC 381 (2006)
- In re Sealed Case*, 121 F.3d 729, 737 (D.C. Cir. 1997)  
privileges protecting deliberative process are not absolute; LBP-06-25, 64 NRC 376 (2006)  
the greater the interest protected by the privilege, the more compelling the need and the other circumstances must be to overcome it; LBP-06-25, 64 NRC 377 (2006)  
where factual material is so inextricably intertwined with the deliberative sections of documents that its disclosure would inevitably reveal the government's deliberations, that material is protected by deliberative process privilege; LBP-06-25, 64 NRC 382, 389 (2006)
- In re Sealed Case*, 121 F.3d 729, 737-38 (D.C. Cir. 1997)  
federal courts use a balancing test for discovery and consider the relevance of the evidence, the availability of other evidence, the seriousness of the litigation, the role of the government, and the possibility of future timidity by government employees; LBP-06-25, 64 NRC 390 (2006)
- In re Sealed Case*, 121 F.3d 729, 755 (D.C. Cir. 1997)  
a far greater showing of need is required to overcome the presidential communications privilege than must be shown to overcome the deliberative process privilege, because the interest in protecting presidential communications is stronger than the interest in protecting communications among executive branch subordinates; LBP-06-25, 64 NRC 377 (2006)
- In re Sealed Case*, 856 F.2d 268, 272 (D.C. Cir. 1988)  
a privacy interest does not exist as a generalized theory but instead will depend on such specific factors as the impact of the information's disclosure upon particular individuals; LBP-06-25, 64 NRC 393 (2006)  
a ten-point test for evaluating personal privacy privilege includes an assessment of how disclosure will thwart governmental processes by discouraging citizens from giving the government information and chilling governmental self-evaluation; LBP-06-25, 64 NRC 385 (2006)  
a ten-point test for evaluating the law enforcement privilege under FOIA has been used; LBP-06-25, 64 NRC 385 (2006)  
harm to an individual is specifically assessed when considering the 7(C) law enforcement privilege claim; LBP-06-25, 64 NRC 386 (2006)  
intrinsic to analyses of the FOIA exceptions is an assessment of harm based on public disclosure; LBP-06-25, 64 NRC 386 n.75 (2006)
- In re Subpoena Duces Tecum Served on the Office of the Comptroller of the Currency*, 145 F.3d 1422, 1424 (D.C. Cir. 1998)  
if the plaintiff's cause of action is directed at the government's intent, it makes no sense to permit the government to use the privilege as a shield; LBP-06-25, 64 NRC 377 (2006)
- International Uranium (USA) Corp.* (White Mesa Uranium Mill), CLI-01-21, 54 NRC 247, 251 (2001)  
since a license amendment involves a facility with ongoing operations, a petitioner's challenge must show that the amendment will cause a distinct new harm or threat apart from the activities already licensed; LBP-06-22, 64 NRC 246 (2006)
- International Uranium (USA) Corp.* (White Mesa Uranium Mill), CLI-01-21, 54 NRC 247, 252 (2001)  
if an organization seeks standing on its own behalf, it must demonstrate a discrete institutional injury to the organization itself; LBP-06-20, 64 NRC 144, 145 (2006)
- Judicial Watch, Inc. v. Food and Drug Administration*, 449 F.3d 141, 153 (D.C. Cir. 2006)  
privileges protecting privacy interests may vary depending on the context in which it is asserted; LBP-06-25, 64 NRC 376, 385 (2006)  
when determining whether documents should be withheld on the basis of the personal privacy exemption, federal courts have looked to balance the private interest involved against the public interest; LBP-06-25, 64 NRC 385 n.70 (2006)
- Kansas City Gas & Electric Co.* (Wolf Creek Generating Station, Unit 1), LBP-84-1, 19 NRC 29, 34 (1984)  
at the contention admissibility stage, applicants must be sufficiently put on notice so that they will know at least generally what they will have to defend against or oppose, and that there has been

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- sufficient foundation assigned to warrant further exploration of the contention; LBP-06-20, 64 NRC 190, 194 (2006)
- Kelley v. Selin*, 42 F.3d 1501, 1508 (6th Cir. 1995)  
to qualify for 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; LBP-06-23, 64 NRC 270 (2006)
- Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976)  
a cumulative impacts analysis that looks at whether a proposed action's impacts will have interregional synergistic effects may be appropriate when several proposals for actions that will have a cumulative or synergistic environmental impact upon a region are pending concurrently before an agency; LBP-06-19, 64 NRC 67 n.8 (2006)
- Lame v. U.S. Department of Justice*, 654 F.2d 917, 923 (3d Cir. 1981)  
the privacy interest at stake may vary depending on the context in which it is asserted; LBP-06-25, 64 NRC 385 (2006)
- Limerick Ecology Action, Inc. v. NRC*, 869 F.2d 719 (3d Cir. 1989)  
the evaluation of risk is at the heart of a SAMA analysis, and only by considering risk can one determine those alternatives that provide the greatest benefit for the dollars expended; LBP-06-23, 64 NRC 327 (2006)
- Limerick Ecology Action, Inc. v. NRC*, 869 F.2d 719, 738 (3d Cir. 1989)  
use of probabilistic risk assessment and modeling is accepted and standard practice in SAMA analyses; LBP-06-23, 64 NRC 340 (2006)
- Limerick Ecology Action, Inc. v. NRC*, 869 F.2d 719, 738-39 (3d Cir. 1989)  
the probability of a risk may change with population density; LBP-06-23, 64 NRC 327 (2006)
- Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-773, 19 NRC 1333, 1341 (1984)  
deliberative process privilege is not limited to policymaking, but rather, it may attach to the deliberative process that precedes most decisions of government agencies; LBP-06-25, 64 NRC 382 n.51 (2006)  
once material has been determined to be deliberative process, the litigant must demonstrate an overriding need for the material; LBP-06-25, 64 NRC 390 (2006)
- Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-773, 19 NRC 1333, 1341 n.30 (1984)  
boards have looked to FOIA cases and the balancing tests they employ for guidance on issues of public disclosure; LBP-06-25, 64 NRC 380 n.36 (2006)
- Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-773, 19 NRC 1333, 1341-42 (1984)  
all levels of NRC adjudicators have consistently applied the deliberative process privilege; LBP-06-25, 64 NRC 381 (2006)
- Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-855, 24 NRC 792, 795 (1986)  
the Commission gives substantial deference to boards' determinations on threshold issues such as standing and contention admissibility; CLI-06-24, 64 NRC 121 (2006)
- Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 89 (1998)  
the adjudicatory record and board decision and any Commission appellate decisions become, in effect, part of the final environmental impact statement; LBP-06-19, 64 NRC 69 n.11 (2006)
- Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 97 (1998)  
the adequacy of the no-action alternative discussion in a final environmental impact statement is governed by a rule of reason; LBP-06-19, 64 NRC 90 (2006)
- Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-35, 60 NRC 619, 622-23 (2004)  
rewriting a contention on appeal is not permitted; CLI-06-24, 64 NRC 122 (2006)
- Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-35, 60 NRC 619, 623 (2004)  
petitioner does not have to provide an exhaustive list of its experts or evidence or prove the merits of its contention at the admissibility stage; LBP-06-20, 64 NRC 147, 150 (2006)
- Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-25, 60 NRC 223, 224-25 (2004)  
new arguments may not be raised for the first time in reply briefs; LBP-06-20, 64 NRC 199 n.73 (2006)

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- Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-25, 60 NRC 223, 225 (2004)  
a petitioner that fails to satisfy the requirements of 10 C.F.R. 2.309(f)(1) in its initial contention submission may not use its reply to rectify the inadequacies of its petition or to raise new arguments, but the reply may respond to and focus on any legal, logical, or factual arguments presented in the answers; CLI-06-29, 64 NRC 421 (2006); LBP-06-20, 64 NRC 152, 191 (2006); LBP-06-23, 64 NRC 359 (2005)
- Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-35, 60 NRC 619, 621-23 (2004)  
failure to present adequate privilege logs, including detailed information regarding the location of and reason for any redactions might well lead to rejection of the claimed privilege; LBP-06-25, 64 NRC 379 n.35 (2006)
- Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-35, 60 NRC 619, 622 (2004)  
the Commission does not lightly revisit its own already-issued and well-considered decisions, doing so only if the party seeking reconsideration brings decisive new information to its attention or demonstrates a fundamental Commission misunderstanding of a key point; CLI-06-27, 64 NRC 401 n.6 (2006)
- Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-35, 60 NRC 619, 623 (2004)  
petitioner does not have to provide a complete or final list of its experts or evidence or prove the merits of its contention at the admissibility stage; LBP-06-23, 64 NRC 356 (2005)  
the brief explanation of the logical underpinnings of a contention does not require a petitioner to provide an exhaustive list of possible bases, but simply to provide sufficient alleged factual or legal bases to support the contention; LBP-06-23, 64 NRC 353 (2005)
- Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-35, 60 NRC 619, 626-27 (2004)  
the opportunity to participate as an interested state is available only if the state has not been admitted as a party; LBP-06-20, 64 NRC 205 n.80 (2006)
- Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-35, 60 NRC 619, 627 (2004)  
a state that has been admitted as a party may be given the additional opportunity to participate on another party's contentions; LBP-06-20, 64 NRC 205 (2006)
- Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-04-14, 60 NRC 40, 56 (2004)  
providing any material or document as a basis for a contention, without setting forth an explanation of its significance, is inadequate to support the admission of the contention; LBP-06-27, 64 NRC 457 (2006)
- Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-04-14, 60 NRC 40, 58, *aff'd*, CLI-04-25, 60 NRC 223 (2004)  
in its reply, petitioner may respond to and focus on any legal, logical, or factual arguments presented in the answers, and the amplification of statements provided in an initial petition is legitimate and permissible; LBP-06-20, 64 NRC 152 (2006); LBP-06-23, 64 NRC 359 (2005)
- Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-06-17, 63 NRC 747 (2006)  
although each board must have the freedom to manage the proceedings before it, the approach used in this mandatory proceeding is informative; CLI-06-20, 64 NRC 19 (2006)
- Mapother v. Department of Justice*, 3 F.3d 1533, 1538 (D.C. Cir. 1993)  
the test for whether material is factual or opinion is not infallible and must not be applied mechanically; LBP-06-25, 64 NRC 382 (2006)
- Mapother v. Department of Justice*, 3 F.3d 1533, 1539 (D.C. Cir. 1993)  
summaries are covered by deliberative process privilege when the disputed documents are factual summaries that were written to assist the making of a discretionary decision; LBP-06-25, 64 NRC 382, 389 (2006)
- Maritimes & Northeast Pipeline, LLC*, 115 FERC P 61,176, ¶¶67-81, 2006 WL 1315789 at \*\*17-\*\*22 (FERC) (May 15, 2006)  
administrative agencies and their adjudicators routinely approve stipulations and settlements to which fewer than all the parties in a case subscribe; CLI-06-18, 64 NRC 7 (2006)
- Marriott International Resorts v. United States*, 437 F.3d 1302, 1306 (D.C. Cir. 2006)  
an agency head may delegate the authority to invoke the deliberative process privilege to an appropriate supervisor; LBP-06-25, 64 NRC 383 (2006)

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- Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 371 (1989)  
by focusing government and public attention on the environmental effects of proposed agency action, NEPA ensures that the agency will not act on incomplete information, only to regret its decision after it is too late to correct; LBP-06-23, 64 NRC 278 n.64 (2006)  
the required dissemination of information permits the public to react to the effects of a proposed action at a meaningful time; LBP-06-23, 64 NRC 298 n.169 (2006)
- Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 373 (1989)  
a supplemental environmental impact statement is required if new information presents a seriously different picture of the environmental impact of the proposed project from what was previously envisioned; LBP-06-19, 64 NRC 98 (2006)
- Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 374 (1989)  
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an environmental report must contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware; LBP-06-20, 64 NRC 152 n.23 (2006)
- Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit 1), LBP-81-50, 14 NRC 888, 892 (1981)  
boards have looked to FOIA cases and the balancing tests they employ for guidance on issues of public disclosure; LBP-06-25, 64 NRC 380 n.36, 390 (2006)  
the "obtainable from another source" language was designed to provide for materials available through the licensee; LBP-06-25, 64 NRC 390 (2006)
- Mississippi Power and Light Co.* (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-130, 6 AEC 423, 426 (1973)  
in passing upon whether an intervention petition should be granted, it is not the function of a licensing board to reach the merits of any contention contained therein; LBP-06-22, 64 NRC 244 (2006)
- Montrose Chemical Corp. of California v. Train*, 491 F.2d 63, 68 (D.C. Cir. 1974)  
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- Montrose Chemical Corp. of California v. Train*, 491 F.2d 63, 68, 71 (D.C. Cir. 1974)  
summaries of a hearing record prepared for the EPA Administrator were protected because to probe the summaries of record evidence would be the same as probing the decisionmaking process itself; LBP-06-25, 64 NRC 382 (2006)
- Montrose Chemical Corp. of California v. Train*, 491 F.2d 63, 69 (D.C. Cir. 1974)  
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- Montrose Chemical Corp. of California v. Train*, 491 F.2d 63, 70 (D.C. Cir. 1974)  
an investigator's summary of an interview, reflecting the investigator's judgment about which parts of the interview deserved mention and emphasis, are part of the deliberative process; LBP-06-25, 64 NRC 378 (2006)  
the general purpose of the deliberative process privilege is to prevent injury to the quality of agency decisions and to do so by ensuring that the mental processes of decisionmakers are not subject to public scrutiny; LBP-06-25, 64 NRC 380 (2006)
- Montrose Chemical Corp. of California v. Train*, 491 F.2d 63, 71 (D.C. Cir. 1974)  
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- Mueller v. Walker*, 124 F.R.D. 654, 656-67 (D. Or. 1989)  
a ten-point test for evaluating the law enforcement privilege under FOIA has been used; LBP-06-25, 64 NRC 385 (2006)
- National Archives and Records Administration v. Favish*, 541 U.S. 157, 174 (2004)  
there is a presumption that governmental officials, acting in their official capacities, have properly discharged their duties, and clear evidence is usually required to rebut this presumption; CLI-06-22, 64 NRC 49 n.48 (2006)

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- National Council of La Raza v. Department of Justice*, 411 F.3d 350, 356-57 (2d Cir. 2005)  
if an agency has chosen expressly to adopt or incorporate by reference a memorandum previously covered by FOIA Exemption 5 in what would otherwise be a final opinion, that voluntary change of status would waive the exemption; LBP-06-25, 64 NRC 381 n.45 (2006)
- National Labor Relations Board v. Sears, Roebuck & Co.*, 421 U.S. 132, 151 (1975)  
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- National Labor Relations Board v. Sears, Roebuck & Co.*, 421 U.S. 132, 153 (1975)  
FOIA Exemption 5, properly construed, calls for disclosure of all opinions and interpretations that embody the agency's effective law and policy, and the withholding of all papers that reflect the agency's group thinking in the process of working out its policy and determining what its law shall be; LBP-06-25, 64 NRC 381 (2006)
- National Parks & Conservation Ass'n v. Department of Transportation*, 222 F.3d 677, 681 n.4 (9th Cir. 2000)  
a mitigation plan need not be legally enforceable, funded, or even in final form to comply with NEPA's procedural requirements; CLI-06-29, 64 NRC 427 (2006)
- National Wildlife Federation v. U.S. Forest Service*, 861 F.2d 1114, 1119 (9th Cir. 1988)  
whenever the unveiling of factual materials would be tantamount to the publication of the evaluation and analysis of the multitudinous facts conducted by the agency, the deliberative process privilege applies; LBP-06-25, 64 NRC 382 n.55 (2006)
- Neighbors of Cuddy Mountain v. United States Forest Service*, 137 F.3d 1372, 1380 (9th Cir. 1998)  
mitigation must be discussed in sufficient detail in an environmental impact statement to ensure that environmental consequences have been fairly evaluated; LBP-06-19, 64 NRC 93 (2006)
- North Atlantic Energy Service Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 220-21 (1999)  
a board's analysis of decommissioning cost estimates should be tailored to the specifics of the proceeding; CLI-06-22, 64 NRC 42 (2006)
- North Atlantic Energy Service Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 223 (1999)  
failure to carefully read the governing procedural regulations does not constitute good cause for accepting a late-filed petition; CLI-06-21, 64 NRC 33 (2006)
- North Pacifica, LLC v. City of Pacifica*, 274 F. Supp. 2d 1118, 1124 (N.D. Cal. 2003)  
the fact that the city government was accused of serious Constitutional violations made use of the deliberative process privilege inappropriate; LBP-06-25, 64 NRC 377 (2006)
- Northeast Nuclear Energy Co.* (Millstone Nuclear Power Station, Units 1, 2, and 3), CLI-00-18, 52 NRC 129, 132 (2000)  
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- Northern Alaska Environmental Center v. Kempthorne*, 457 F.3d 969, 979 (9th Cir. 2006)  
as long as the potential adverse impacts from a proposed action have been adequately disclosed, it is not improper for an environmental impact statement to describe mitigating measures in general terms and rely on general processes; CLI-06-29, 64 NRC 427 (2006)
- Nuclear Fuel Services, Inc.* (Erwin, Tennessee), CLI-03-3, 57 NRC 239, 246-50 (2003)  
an NRC license is unnecessary for construction activity on an independent spent fuel storage installation; CLI-06-23, 64 NRC 108 (2006)  
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- Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant), CLI-06-6, 63 NRC 161, 163 (2006)  
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- Nuclear Management Co., LLC* (Palisades Nuclear Plant), CLI-06-17, 63 NRC 727, 732 (2006)  
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- Okanogan Highlands Alliance v. Williams*, 236 F.3d 468, 473 (9th Cir. 2000)  
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- Oncology Services Corp.*, CLI-93-13, 37 NRC 419, 420-21 (1993)  
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- Oncology Services Corp.*, CLI-93-17, 38 NRC 44, 49, 53-57 (1993)  
whether continuation of an NRC enforcement adjudication could at least arguably jeopardize a related criminal proceeding is a key factor in any abeyance ruling in an NRC enforcement proceeding; CLI-06-19, 64 NRC 12 (2006)
- Oncology Services Corp.*, CLI-93-17, 38 NRC 44, 49-50, 59-60 (1993)  
harm from a delay of the enforcement proceeding is a key issue in any abeyance ruling; CLI-06-19, 64 NRC 12 (2006)
- Oncology Services Corp.*, CLI-93-17, 38 NRC 44, 58 (1993)  
a challenge to an order's immediate effectiveness could be brought on the basis of the long delay between investigation and action; LBP-06-26, 64 NRC 434 n.5 (2006)
- Pacific Gas and Electric Co. v. United States*, 70 Fed. Cl. 128, 141 (2006)  
courts evaluate the strength of the particular interest protected by the deliberative process privilege, not a generalized agency interest in confidentiality; LBP-06-25, 64 NRC 391 (2006)
- Pacific Gas and Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-06-23, 64 NRC 107, 108 (2006)  
the Commission has maximum procedural leeway to address the terrorism issue; LBP-06-23, 64 NRC 289 (2006)
- Philadelphia Electric Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20 (1974)  
any contention that amounts to an attack on applicable statutory requirements must be rejected by a licensing board as outside the scope of the proceeding; LBP-06-20, 64 NRC 149 (2006); LBP-06-23, 64 NRC 354 (2005)
- Philadelphia Electric Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20-21 (1974)  
at the contention admissibility stage, applicants must be sufficiently put on notice so that they will know at least generally what they will have to defend against or oppose, and that there has been sufficient foundation assigned to warrant further exploration of the contention; LBP-06-20, 64 NRC 190 (2006)
- Playboy Enterprises, Inc. v. Department of Justice*, 677 F.2d 931, 935 (D.C. Cir. 1982)  
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- Playboy Enterprises, Inc. v. Department of Justice*, 677 F.2d 931, 936 (D.C. Cir. 1982)  
summaries of factual information are not covered by deliberative process privilege when they were written only to inform or to prepare an official before a public appearance or briefing; LBP-06-25, 64 NRC 382 n.58 (2006)
- Playboy Enterprises, Inc. v. Department of Justice*, 677 F.2d 931, 937 (D.C. Cir. 1982)  
conclusions, recommendations, opinions, or advice may properly be withheld from public disclosure; LBP-06-25, 64 NRC 381 (2006)
- Potomac Electric Power Co.* (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79, 85 (1974)  
licensing boards should not accept in individual license proceedings contentions that are (or are about to become) the subject of general rulemaking by the Commission; LBP-06-23, 64 NRC 312 n.255 (2006)
- Power Authority of the State of New York* (James A. FitzPatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-00-22, 52 NRC 266, 314, 316 (2000)  
although the Commission is disinclined to step into the middle of a labor dispute or involve itself in

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- the personnel decisions of licensees, it has recognized that there may be cases where employment-related contentions are closely tied to specific health-and-safety concerns or to potential violations of NRC rules that can be admitted for a hearing; CLI-06-21, 64 NRC 34 (2006)
- Power Authority of the State of New York* (James A. FitzPatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-00-22, 52 NRC 266, 315 (2000)
- general assertions, unsupported by specific facts or expert opinion, that personnel reductions may adversely affect health and safety are inadmissible in a license transfer proceeding; CLI-06-21, 64 NRC 34 (2006)
- Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999)
- a contention that fails to comply with any of the pleading requirements will not be admitted for litigation; LBP-06-20, 64 NRC 147 (2006); LBP-06-22, 64 NRC 235 (2006); LBP-06-23, 64 NRC 272, 351 (2006); LBP-06-27, 64 NRC 447 (2006)
- failure of a petitioner, even one found to have standing to proceed, to submit an admissible contention will result in dismissal of its petition and request for hearing; LBP-06-23, 64 NRC 351 (2005)
- Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-00-21, 52 NRC 261, 264 (2000)
- raising new arguments in a motion for reconsideration is prohibited; CLI-06-27, 64 NRC 402 (2006)
- Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-00-21, 52 NRC 261, 265 (2000)
- the Commission regularly affirms board decisions on the admissibility of contentions where the appellant points to no error of law or abuse of discretion; CLI-06-24, 64 NRC 121 (2006)
- Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-01-1, 53 NRC 1, 5 (2001)
- an exception to the Commission's longstanding general policy disfavoring interlocutory review occurs when the disputed ruling threatens the aggrieved party with serious, immediate, and irreparable harm or where it will have a pervasive or unusual effect on the proceedings below; CLI-06-24, 64 NRC 119 (2006)
- refusal to admit a contention, where the intervenor's other contentions remain in litigation, does not constitute a pervasive effect on the litigation calling for interlocutory review; CLI-06-24, 64 NRC 126 (2006)
- the Commission grants interlocutory review under the pervasive-and-unusual-effect standard only in extraordinary circumstances; CLI-06-24, 64 NRC 119 (2006)
- Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348 n.22 (2002)
- although the Commission is not bound by Council on Environmental Quality regulations that it has not expressly adopted, it gives those regulations substantial deference; LBP-06-19, 64 NRC 62-63 n.3 (2006)
- Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-03-8, 58 NRC 11, 25-26 (2003)
- although the Commission has discretion to review all underlying factual issues *de novo*, it generally steps in only to correct clearly erroneous findings; CLI-06-22, 64 NRC 40 (2006); CLI-06-29, 64 NRC 423 (2006)
- Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 139 (2004)
- petitioner does not have to provide an exhaustive list of its experts or evidence or prove the merits of its contention at the admissibility stage; LBP-06-20, 64 NRC 150 (2006); LBP-06-23, 64 NRC 356 (2005)
- Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 140 (2004)
- rewriting a contention on appeal is not permitted; CLI-06-24, 64 NRC 122 (2006)
- Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 179-80 (1998), *aff'd in part*, CLI-98-13, 48 NRC 26 (1998)
- adequacy of the aging management program as it relates to underground pipes and tanks has health and safety significance and is material to whether the license renewal may be granted; LBP-06-23, 64 NRC 311 (2006)

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- Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 179 (1998), *aff'd in part*, CLI-98-13, 48 NRC 26 (1998)  
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- Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 180, *aff'd*, CLI-98-13, 48 NRC 26 (1998)  
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- Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-3, 53 NRC 84, 97 (2001)  
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- Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-3, 53 NRC 84, 99 (2001)  
technical perfection is not an essential element of contention pleading; LBP-06-23, 64 NRC 358 (2005)
- Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 324 (1999)  
the Commission gives substantial deference to boards' determinations on threshold issues such as standing and contention admissibility; CLI-06-24, 64 NRC 121 (2006)
- Public Service Co. of Indiana* (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 NRC 167, 170-71 (1976)  
contentions are not cognizable unless they are material to matters that fall within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's notice of opportunity for hearing and order referring the proceeding to the Board; LBP-06-23, 64 NRC 354 (2005)
- Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-366, 5 NRC 39, 52 (1977)  
NRC must consider any adverse environmental impact that would accrue from the operation of the facility in compliance with EPA-imposed Federal Water Pollution Control Act standards, but it cannot go behind either those standards or the determination by EPA or the state that the facility would comply with them; LBP-06-20, 64 NRC 180 (2006)
- Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-731, 17 NRC 1073, 1074 (1983)  
a licensing board order is final for appellate purposes where it either disposes of at least a major segment of the case or terminates a party's right to participate, and rulings that do neither are interlocutory; CLI-06-18, 64 NRC 4 (2006)
- Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-899, 28 NRC 93, 97 (1988), *aff'd sub nom. Massachusetts v. NRC*, 924 F.2d 311 (D.C. Cir. 1991)  
the reach of a contention necessarily hinges upon its terms coupled with its stated bases; LBP-06-20, 64 NRC 147 (2006); LBP-06-23, 64 NRC 353 (2005)
- Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-942, 32 NRC 395, 428 (1990)  
a contention must demonstrate that there has been sufficient foundation assigned for it to warrant further exploration; LBP-06-23, 64 NRC 353 (2005)
- Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1, 26 (1978)  
the relationship between EPA and NRC is such that EPA determines what cooling system a nuclear power facility may use and NRC factors the impacts resulting from the use of that system into the NEPA cost-benefit analysis; LBP-06-20, 64 NRC 180 (2006)
- Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-88-10, 28 NRC 573, 586 (1988)  
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- Public Service Co. of Oklahoma* (Black Fox Station, Units 1 and 2), ALAB-573, 10 NRC 775, 804 (1979)  
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- Quivira Mining Co.* (Ambrosia Lake Facility, Grants, New Mexico), CLI-98-11, 48 NRC 1, 5-6 (1998)  
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- Quivira Mining Co.* (Ambrosia Lake Facility, Grants, New Mexico), CLI-98-11, 48 NRC 1, 6 (1998)  
the injury asserted in support of a petitioner's standing must arguably lie within the zone of interests protected by the statutes governing the proceeding; LBP-06-23, 64 NRC 270 (2006)
- Renegotiation Board v. Grumman Aircraft Engineering Corp.*, 421 U.S. 168, 186 (1975)  
a document must be predecisional and deliberative to be categorized as deliberative process;  
LBP-06-25, 64 NRC 381 (2006)
- Resolution Trust Corp. v. Diamond*, 773 F. Supp. 597, 604 (S.D.N.Y. 1991)  
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- Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 344-47 (1989)  
the SAMA analysis requires no different level of consideration or evaluation than that employed for analyzing mitigation generally under NEPA; LBP-06-23, 64 NRC 329 (2006)
- Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348 (1989)  
federal agencies must include in every recommendation or report on major federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on the environmental impact of the proposed action; LBP-06-23, 64 NRC 277 (2006)
- Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989)  
preparation of an environmental impact statement ensures that a federal agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts, and also guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision; LBP-06-23, 64 NRC 277 (2006)  
the public participation aspect of NEPA arises from the informational role played by the environmental impact statement in giving the public the assurance that the agency has indeed considered environmental concerns in its decisionmaking process and, perhaps more significantly, providing a springboard for public comment; LBP-06-23, 64 NRC 298 n.169 (2006)
- Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (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-06-19, 64 NRC 63 (2006); LBP-06-23, 64 NRC 277 n.64 (2006)  
the National Environmental Policy Act does not mandate particular results, but simply prescribes the necessary process; LBP-06-19, 64 NRC 63 (2006)  
the National Environmental Policy Act imposes no obligation to select the most environmentally benign alternative; LBP-06-19, 64 NRC 90 (2006)
- Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 n.13 (1989)  
Council on Environmental Quality regulations require agencies to request and consider comments from other federal agencies, appropriate state and local agencies, affected Indian tribes, any relevant applicant, the public generally, and, in particular, interested or affected persons or organizations;  
LBP-06-23, 64 NRC 298 n.169 (2006)
- Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 351-52 (1989)  
an environmental impact statement will discuss the extent to which adverse effects can be avoided;  
LBP-06-23, 64 NRC 279 n.78 (2006)

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- Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 352 (1989)  
an environmental impact statement must address mitigation measures in sufficient detail to ensure that environmental consequences have been fairly evaluated, but the EIS need not contain a complete mitigation plan; CLI-06-29, 64 NRC 426 (2006)  
the basis for the requirement that an EIS discuss the extent to which adverse effects can be avoided is that omission of a reasonably complete discussion of possible mitigation measures would undermine the action-forcing function of NEPA; LBP-06-23, 64 NRC 279 n.78 (2006)  
the purpose of addressing possible mitigation measures in a final environmental impact statement is to ensure that the agency has taken a hard look at the potential environmental impacts of a proposed action; CLI-06-29, 64 NRC 426 (2006)  
without a discussion in the EIS of the extent to which adverse effects can be avoided, neither an agency nor other interested groups or individuals can properly evaluate the severity of the adverse effects; LBP-06-23, 64 NRC 279 n.78 (2006)
- Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 353 (1989)  
an environmental impact statement need not contain a detailed explanation of specific mitigation measures that will be employed; CLI-06-29, 64 NRC 427 (2006)
- Rodriguez v. City of Fresno*, No. 1:05CV1017, 2006 WL 1530251 at 1 (E.D. Cal. May 30, 2006)  
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- Russell v. Department of the Air Force*, 682 F.2d 1045, 1047 (D.C. Cir. 1982)  
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- Russell v. Department of the Air Force*, 682 F.2d 1045, 1049 (D.C. Cir. 1982)  
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- S.D. Warren Co. v. Maine Board of Environmental Protection*, 126 S. Ct. 1843, 1853 n.8 (2006)  
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- 10 C.F.R. 2.206
- a petitioner that seeks to express a personal view regarding the direction of regulatory policy may submit a request that NRC Staff take enforcement action; LBP-06-20, 64 NRC 149 (2006)
  - a request for action regarding leaks or potential leaks of radioactively contaminated water into the ground is granted in part regarding power reactors and denied regarding research and test reactors because existing NRC design and regulatory programs ensure that there is a minimal risk for a significant release of contaminated liquid effluents; DD-06-3, 64 NRC 408-16 (2006)
  - a request for an order modifying a license based upon an alleged potential hazardous condition in the current spent fuel pool amounts to a request for agency enforcement action and thus is not suitable for a license renewal adjudication; CLI-06-26, 64 NRC 226-27 (2006)
  - any person may file a request to institute a proceeding pursuant to section 2.202 to modify, suspend, or revoke a license, or for any other action as may be proper; CLI-06-26, 64 NRC 227 n.4 (2006)
  - if an intervenor wishes to raise concerns with respect to licensee's environmental radiation monitoring plan or the Staff's review of that plan, it may exercise its rights to seek an enforcement action; LBP-06-27, 64 NRC 449 n.28 (2006)
  - petitions to require backfitting to protect against spent fuel pool accidents are more appropriately filed as a request for NRC enforcement action than in a license renewal proceeding; LBP-06-23, 64 NRC 267 n.4 (2006)
  - requests for enforcement action must be filed with the NRC's Executive Director of Operations, who will refer the request to the appropriate NRC office director; CLI-06-26, 64 NRC 227 n.4 (2006)
- 10 C.F.R. 2.206(a)
- if new and significant information comes to light showing that licensee's mining operations adversely affect the environment, any member of the public may seek to institute an action regarding the licensee's authority to operate under its NRC license; LBP-06-19, 64 NRC 102 (2006)
- 10 C.F.R. 2.309
- NRC must provide a hearing upon the request of any person whose interest may be affected by the proceeding; LBP-06-23, 64 NRC 270 (2006)
  - the opportunity to participate as an interested state is available only if the state has not been admitted as a party; LBP-06-20, 64 NRC 205 n.80 (2006)
- 10 C.F.R. 2.309(a)
- an intervention petitioner must demonstrate standing and must proffer at least one admissible contention; CLI-06-24, 64 NRC 118 (2006); LBP-06-20, 64 NRC 143 (2006); LBP-06-22, 64 NRC 234 n.6 (2006)
  - it is the contention, not bases, whose admissibility must be determined; LBP-06-20, 64 NRC 147 (2006); LBP-06-23, 64 NRC 353 (2005)
- 10 C.F.R. 2.309(b)(3)(iii)
- contentions must be filed with the original petition, within 60 days of notice of the proceeding in the *Federal Register*, unless another period is therein specified; LBP-06-23, 64 NRC 273 n.44, 352 (2005)
- 10 C.F.R. 2.309(c)
- a nontimely contention is not perforce inadmissible, but a petitioner must demonstrate that its admission is warranted pursuant to the eight-factor balancing test; LBP-06-22, 64 NRC 234 n.7 (2006)
  - an energy alternatives contention that is not based on data or conclusions that differ significantly from data or conclusions in the environmental report or generic environmental impact assessment can only be admitted upon a favorable balancing of the untimeliness factors; LBP-06-20, 64 NRC 174 (2006)
  - any attempt to add bases to existing contentions or to advance new contentions must be entirely based upon information contained in the environmental assessment or safety evaluation report and the information must not have been previously available; LBP-06-27, 64 NRC 444 (2006)
- 10 C.F.R. 2.309(c)(1), (2)
- filings that are nearly 3 months late must satisfy not only the requirements to demonstrate standing and submit at least one admissible contention, but also must satisfy eight stringent requirements for untimely filings and late-filed contentions; CLI-06-21, 64 NRC 33, 34 (2006)
- 10 C.F.R. 2.309(d)
- an intervention petitioner must demonstrate standing; CLI-06-24, 64 NRC 118 (2006)
  - filings that are nearly 3 months late must satisfy not only the requirements to demonstrate standing and submit at least one admissible contention, but also must satisfy the stringent requirements for untimely filings and late-filed contentions; CLI-06-21, 64 NRC 33 (2006)

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- to gain party status in an NRC adjudicative proceeding, a petitioner must submit at least one admissible contention and satisfy standing requirements; LBP-06-22, 64 NRC 234 n.6 (2006)
- 10 C.F.R. 2.309(d)(1)(ii)-(iv)  
an intervention petition must state the nature of the petitioner's right under a relevant statute to be made a party to the proceeding, the nature and extent of the petitioner's property, financial, or other interest in the proceeding, the possible effect of any decision or order that may be issued in the proceeding on the petitioner's interest; LBP-06-20, 64 NRC 143 (2006); LBP-06-23, 64 NRC 270 n.24 (2006)
- 10 C.F.R. 2.309(d)(2)  
a state or local governmental entity located outside the state in which a reactor is located may qualify for standing under the proximity presumption; LBP-06-20, 64 NRC 145 (2006)  
a state that wishes to be a party in a proceeding for a facility located within its boundaries need not address the standing requirements; LBP-06-23, 64 NRC 271 (2006)
- 10 C.F.R. 2.309(d)(2)(i)-(ii)  
a state or local governmental body that wishes to be a party in a proceeding that involves a facility located within its boundaries is automatically deemed to have standing; LBP-06-20, 64 NRC 144 (2006)
- 10 C.F.R. 2.309(f)(1)  
a state that wishes to raise specific concerns may submit contentions complying with the pleading requirements and become a party to the adjudication; LBP-06-20, 64 NRC 205 (2006)  
a vague, one-sentence assertion falls far short of satisfying any of the six admissibility factors; LBP-06-22, 64 NRC 250 n.23 (2006)  
filings that are nearly 3 months late must satisfy not only the requirements to demonstrate standing and submit at least one admissible contention, but also must satisfy the stringent requirements for untimely filings and late-filed contentions; CLI-06-21, 64 NRC 33 (2006)  
in addition to the eight-factor balancing test of section 2.309(c), a late-filed contention must satisfy six additional factors to be deemed admissible; LBP-06-22, 64 NRC 234 (2006)  
the contention admissibility standards and their interpretation in case law are addressed; LBP-06-23, 64 NRC 351-59 (2005)  
to intervene in an NRC proceeding, a petitioner must, in addition to demonstrating standing, submit at least one contention meeting six pleading requirements; LBP-06-23, 64 NRC 272 (2006); LBP-06-27, 64 NRC 446-47 (2006)
- 10 C.F.R. 2.309(f)(1)(i)  
a contention that provides a specific statement of the issue of fact to be raised satisfies this admissibility requirements; LBP-06-20, 64 NRC 164 (2006); LBP-06-22, 64 NRC 240 (2006)  
case law interpreting this subsection is discussed; LBP-06-23, 64 NRC 353 (2005)
- 10 C.F.R. 2.309(f)(1)(i)-(vi)  
an intervention petitioner must proffer at least one admissible contention; CLI-06-24, 64 NRC 118 (2006)  
contentions must satisfy six pleading requirements; LBP-06-20, 64 NRC 146-47 (2006)  
requirements for admissibility of contentions are strict by design and any contention that does not satisfy these requirements will be rejected; CLI-06-24, 64 NRC 118 (2006)
- 10 C.F.R. 2.309(f)(1)(ii)  
a brief explanation of the basis for a contention is a necessary prerequisite to its admission; LBP-06-20, 64 NRC 147, 164-65 (2006); LBP-06-22, 64 NRC 240 (2006)  
case law interpreting this subsection is discussed; LBP-06-23, 64 NRC 353 (2005)
- 10 C.F.R. 2.309(f)(1)(iii)  
a safety contention alleging that applicant fails to supply information that is related to the effects of aging and that is required by the license renewal regulations is within the scope of a license renewal proceeding; LBP-06-20, 64 NRC 165 (2006)  
any challenge to the Environmental Radiation Monitoring Plan is beyond the scope of a materials license amendment proceeding and therefore inadmissible; LBP-06-27, 64 NRC 449 (2006)  
by referencing the license renewal application's aging management plan regarding buried pipes and tanks, petitioner has supported its contention sufficiently to establish that it falls directly within the scope of the license renewal proceeding; LBP-06-23, 64 NRC 310 (2006)  
case law interpreting this subsection is discussed; LBP-06-23, 64 NRC 353-54 (2005)  
contentions must fall within the scope of the proceeding in which intervention is sought; CLI-06-24, 64 NRC 119 (2006); LBP-06-20, 64 NRC 147-48 (2006); LBP-06-23, 64 NRC 274 (2006)

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- for a contention to be considered within the scope of a materials license amendment proceeding, it must challenge whether licensee's proposal for characterizing the site during the alternate schedule period is necessary to the effective conduct of decommissioning operations, will present no undue risk from radiation to the public health and safety, or is otherwise in the public interest; LBP-06-27, 64 NRC 448 (2006)
- security-related issues are not within the scope of a license renewal proceeding; LBP-06-20, 64 NRC 172 (2006)
- whether applicant's environmental report complies with the provisions of Part 51 relevant to Category 2 environmental matters is within the scope of a license renewal proceeding; LBP-06-20, 64 NRC 178 (2006)
- 10 C.F.R. 2.309(f)(1)(iv)
- a contention must be material to the findings the NRC must make to support the action that is involved in the proceeding; LBP-06-22, 64 NRC 241 (2006)
- a safety contention alleging that applicant fails to supply information that is related to the effects of aging and that is required by the license renewal regulations is material to the findings that Staff must make in evaluating the license renewal application; LBP-06-20, 64 NRC 165 (2006)
- case law interpreting this subsection is discussed; LBP-06-23, 64 NRC 354 (2005)
- petitioner demonstrates a genuine, material dispute with a license renewal application by raising the question of whether applicant's "plan to develop a plan" to manage environmentally assisted fatigue is sufficient to meet the license renewal requirements; LBP-06-20, 64 NRC 186 (2006)
- petitioner must show that the issue raised in its contention is material to the findings the NRC must make to support the action that is involved in the proceeding; LBP-06-20, 64 NRC 149 (2006)
- whether applicant's environmental report complies with the provisions of Part 51 relevant to Category 2 environmental matters is material to a license renewal proceeding; LBP-06-20, 64 NRC 178 (2006)
- 10 C.F.R. 2.309(f)(1)(v)
- case law interpreting this subsection is discussed; LBP-06-23, 64 NRC 355-56 (2005)
- contentions must be supported by a concise statement of the alleged facts or expert opinions that support the petitioner's position on the issue together with references to the specific sources and documents on which it intends to rely to support its position; LBP-06-20, 64 NRC 150 (2006); LBP-06-22, 64 NRC 242 (2006)
- for purposes of admissibility, petitioner need not prove that the various documents actually contain new and significant information, but instead need only provide a concise statement of the alleged facts or expert opinions that support the contention and provide sufficient information to show that a genuine dispute exists on this point; LBP-06-20, 64 NRC 160 (2006)
- 10 C.F.R. 2.309(f)(1)(v), (vi)
- absent references to instances in which licensee has failed to comply with NRC regulations or facts that contradict the licensee's stated intention, NRC declines to assume that licensees will contravene its regulations; LBP-06-27, 64 NRC 454 n.39 (2006)
- 10 C.F.R. 2.309(f)(1)(vi)
- a challenge to licensee's monitoring program for coating integrity and moisture is inadmissible; LBP-06-22, 64 NRC 248 n.21 (2006)
- a properly pleaded contention must contain sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact; LBP-06-20, 64 NRC 151 (2006); LBP-06-22, 64 NRC 242 (2006); LBP-06-23, 64 NRC 321 (2006)
- case law interpreting this subsection is discussed; LBP-06-23, 64 NRC 357 (2005)
- challenges to an intervention petition indicate that questions of both law and fact are sharply disputed, satisfying the requirement that a genuine dispute exists; LBP-06-20, 64 NRC 179 (2006)
- failure to provide supporting facts or expert opinion renders a contention inadmissible; LBP-06-27, 64 NRC 458 (2006)
- for purposes of admissibility, petitioner need not prove that the various documents actually contain new and significant information, but instead need only provide a concise statement of the alleged facts or expert opinions that support the contention and provide sufficient information to show that a genuine dispute exists on this point; LBP-06-20, 64 NRC 160 (2006)

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- petitioner demonstrates a genuine, material dispute with a license renewal application by raising the question of whether applicant's "plan to develop a plan" to manage environmentally assisted fatigue is sufficient to meet the license renewal requirements; LBP-06-20, 64 NRC 186 (2006)
- petitioner must provide sufficient information to show a genuine dispute on a material issue of law or fact, including specific references to portions of the application it disputes and the reasons for the dispute; LBP-06-23, 64 NRC 314 (2006)
- petitioners who have failed to discuss the very programs that they are attacking have failed to provide sufficient information to show that a genuine dispute exists regarding a material issue of fact; LBP-06-22, 64 NRC 248 n.21, 249 (2006)
- 10 C.F.R. 2.309(f)(2)
- any attempt to add bases to existing contentions or to advance new contentions must be entirely based upon information contained in the environmental assessment or safety evaluation report and the information must not have been previously available; LBP-06-27, 64 NRC 444 (2006)
- filings that are nearly 3 months late must satisfy not only the requirements to demonstrate standing and submit at least one admissible contention, but also must satisfy eight stringent requirements for untimely filings and late-filed contentions; CLI-06-21, 64 NRC 33 (2006)
- if applicant's NPDES permit is reinstated with modifications, petitioners may request leave to amend their contention or file a new contention; LBP-06-20, 64 NRC 215 (2006)
- petitioner must file contentions based on the documents and information available at the time the petition is filed; LBP-06-20, 64 NRC 174 (2006)
- petitioners who seek to introduce a new or amended contention based on allegedly new information that was previously unavailable must show that such information was not previously available and is materially different than information previously available and the amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information; LBP-06-22, 64 NRC 234 (2006)
- with regard to NEPA issues, petitioner shall file contentions based on the applicant's environmental report but may amend those contentions or file new contentions if there are 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 documents; LBP-06-20, 64 NRC 174 (2006)
- 10 C.F.R. 2.309(f)(2)(i)
- an allegation that petitioners timely asked licensee for data and were rebuffed, if properly supported, would be probative of whether an applicant improperly thwarted a petitioner's effort to obtain supporting documentation and, hence, whether such documentation was not previously available; LBP-06-22, 64 NRC 253 n.27 (2006)
- 10 C.F.R. 2.309(f)(2)(i)-(iii)
- a contention satisfies the timeliness requirements because the information on which the new contention is based, a new UT testing plan, was not previously available and is materially different than the prior plan, and the new contention was submitted in a timely fashion; LBP-06-22, 64 NRC 240 (2006)
- 10 C.F.R. 2.309(f)(3)
- a petitioner may adopt the contention of a different petitioner if the adopting petitioner agrees that the sponsoring petitioner will act as the representative with respect to that contention or if the sponsoring and adopting petitioners jointly agree and designate which one of them will have the authority to act for the petitioners on that contention; LBP-06-20, 64 NRC 206 (2006)
- there is no requirement for adopted contentions to satisfy the eight lateness criteria; LBP-06-20, 64 NRC 207 (2006)
- 10 C.F.R. 2.310(a)
- upon granting a hearing request in a license renewal proceeding, a licensing board must determine the specific hearing procedures to be used in the proceeding; LBP-06-20, 64 NRC 202 (2006)
- use of the term "may" in describing board options in selecting the appropriate hearing procedures, instead of the mandatory "shall," indicates that even if a petitioner fails to demonstrate that Subpart G procedures are required, the board "may" still find that the use of Subpart G procedures is more appropriate than the use of Subpart L procedures for a given contention; LBP-06-20, 64 NRC 204 (2006)

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- 10 C.F.R. 2.310(b)  
NRC's approach to the scope of discovery is similar to that of the Federal Rules of Civil Procedure; LBP-06-25, 64 NRC 376 (2006)
- 10 C.F.R. 2.310(d)  
upon granting a hearing request in a license renewal proceeding, a licensing board must determine the specific hearing procedures to be used in the proceeding; LBP-06-20, 64 NRC 202 (2006)
- 10 C.F.R. 2.311  
license applicants may appeal contention admissibility rulings within 10 days after a board grants a petition to intervene, but only if the license applicant argues the petition should have been wholly denied; CLI-06-25, 64 NRC 129 (2006)  
this section is not applicable to the board's refusal to supplement the basis of intervenor's contention or to add new contentions because the section applies only where a board decision rules on a request for hearing, petition to intervene, or selection of hearing procedures; CLI-06-24, 64 NRC 125 (2006)
- 10 C.F.R. 2.311(a)  
an appeal filed several months after the 10-day deadline is dismissed as untimely; CLI-06-25, 64 NRC 129 (2006)
- 10 C.F.R. 2.311(b)  
an appeal lies where a potential intervenor claims that the board wrongly rejected all contentions; CLI-06-24, 64 NRC 119 (2006)
- 10 C.F.R. 2.311(c)  
an interested state may introduce evidence, interrogate witnesses where cross-examination by the parties is permitted, advise the Commission without requiring the representative to take a position with respect to the issue, file proposed findings in those proceedings where findings are permitted, and petition for review by the Commission with respect to the admitted contentions; LBP-06-20, 64 NRC 205 (2006)  
any interested state, local governmental body, and affected, federally recognized Indian Tribe that has not been admitted as a party under 10 C.F.R. 2.309 will be given a reasonable opportunity to participate in any hearing; LBP-06-20, 64 NRC 209 (2006)  
the representative of an interested state shall identify those contentions on which it will participate in advance of any hearing held; LBP-06-20, 64 NRC 209 (2006)  
where the NRC Staff or the license applicant argues that the board ought to have rejected all contentions, an appeal lies; CLI-06-24, 64 NRC 119 (2006)
- 10 C.F.R. 2.319  
boards are responsible for managing the proceedings before them and should be granted appropriate discretion to determine the best way to approach their job, particularly where they are engaged in an essentially new process where the agency lacks recent experience; CLI-06-20, 64 NRC 19 (2006)
- 10 C.F.R. 2.323(c)  
the 10-day motions deadline does not apply to the adoption of contentions because simple notice suffices for adoption of contentions; LBP-06-20, 64 NRC 207 n.81 (2006)
- 10 C.F.R. 2.323(e)  
reconsideration is undertaken only when a party shows a compelling circumstance, such as the existence of a clear and material error in a decision, which could not have reasonably been anticipated and that renders the decision invalid; CLI-06-27, 64 NRC 400 (2006)
- 10 C.F.R. 2.335  
a petitioner may, within the adjudicatory context, submit a request for waiver of a rule; LBP-06-23, 64 NRC 354 (2005)  
Category 1 issues can only be litigated after the granting of a waiver petition; LBP-06-20, 64 NRC 158 (2006)  
without a waiver, a challenge to the current NRC dose limit regulations is impermissible in a license renewal adjudication; LBP-06-23, 64 NRC 345 (2006)
- 10 C.F.R. 2.335(a)  
a contention that challenges a Commission rule or regulation is outside the scope of the proceeding because, absent a waiver, no rule or regulation of the Commission is subject to attack in any adjudicatory proceeding; LBP-06-20, 64 NRC 149 (2006); LBP-06-22, 64 NRC 246-47 (2006); LBP-06-23, 64 NRC 354 (2005)

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- 10 C.F.R. 2.336(b)(5)  
when materials are withheld from discovery, sufficient information for assessing the claim of privilege or protected status of the documents must be provided to the requesting party; LBP-06-25, 64 NRC 379 n.35 (2006)
- 10 C.F.R. 2.338  
settlement agreements must comply with agency regulations and be in the public interest; LBP-06-26, 64 NRC 432 (2006)  
the Commission has a longstanding policy of encouraging settlements; CLI-06-18, 64 NRC 7 (2006)
- 10 C.F.R. 2.338(g)  
only the parties consenting to a settlement must file the settlement with the board; CLI-06-18, 64 NRC 7 (2006)
- 10 C.F.R. 2.338(i)  
settlement agreements must comply with agency regulations and be in the public interest; LBP-06-26, 64 NRC 433 (2006)  
settlement shall be subject to approval by a board, which may order such adjudication of the issues as it may deem to be required in the public interest; LBP-06-21, 64 NRC 220 (2006)
- 10 C.F.R. 2.341(b)(4)  
this regulation applies to petitions for review of a full or partial initial decision, and does not establish a right to petition for review of interlocutory orders; CLI-06-18, 64 NRC 4 (2006)
- 10 C.F.R. 2.341(b)(4)(iii)  
the Commission takes review of a board decision to clarify important issues raised in the petitions; CLI-06-22, 64 NRC 40 (2006)
- 10 C.F.R. 2.341(b)(6)  
grant of review is prohibited where a petitioner has simultaneously filed for reconsideration before the board; CLI-06-24, 64 NRC 126 n.82 (2006)
- 10 C.F.R. 2.341(f)  
in cases where an appeal does not lie, the Commission has discretion in limited circumstances to grant interlocutory review at the request of a party; CLI-06-24, 64 NRC 119 (2006)  
petitioner must show that the issue for which interlocutory review is sought threatens the party adversely affected by it with immediate and serious irreparable impact which, as a practical matter, could not be alleviated through a petition for review of the presiding officer's final decision, or affects the basic structure of the proceeding in a pervasive or unusual manner; CLI-06-24, 64 NRC 126 (2006)
- 10 C.F.R. 2.341(f)(1), (f)(2)(i) & (ii)  
discretionary interlocutory review is allowed only when a licensing board certifies a ruling or refers a question, or when an interlocutory board ruling creates immediate and serious irreparable impact or affects the basic structure of the proceeding in a pervasive or unusual manner; CLI-06-18, 64 NRC 4 (2006)
- 10 C.F.R. 2.341(f)(2)(i)  
interlocutory review is warranted if contested orders will have a pervasive and unusual effect on the litigation; CLI-06-20, 64 NRC 20 (2006)
- 10 C.F.R. 2.345(b)  
reconsideration is undertaken only when a party shows a compelling circumstance, such as the existence of a clear and material error in a decision, which could not have reasonably been anticipated and that renders the decision invalid; CLI-06-27, 64 NRC 400 (2006)
- 10 C.F.R. 2.390  
boards have looked to FOIA cases and the balancing tests they employ for guidance on issues of public disclosure; LBP-06-25, 64 NRC 380 (2006)
- 10 C.F.R. 2.390(a)(5)  
NRC interagency or intra-agency memoranda or letters that would not be available by law to a party are exempt from public disclosure; LBP-06-25, 64 NRC 380 (2006)
- 10 C.F.R. 2.390(a)(7)(iii)  
documents that are exempt from public inspection are specified; LBP-06-25, 64 NRC 386 (2006)

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- 10 C.F.R. 2.390(b)(1)(ii)  
an affidavit must provide the basis for the withholding and a specific statement of the harm that would result if the information sought to be withheld is disclosed to the public, applicable to those seeking protection for documents being submitted to the agency; LBP-06-25, 64 NRC 383 (2006)
- 10 C.F.R. 2.705(b)  
although 10 C.F.R. 2.709 deals with special procedural norms for discovery against the Staff, there is no reason to believe, as to substantive content, that its repeated use of the relevance concept was not intended to embrace the universal understanding of that concept that shapes the scope and definition of discoverable evidence in both the federal courts and NRC adjudications; LBP-06-25, 64 NRC 390 n.102 (2006)
- 10 C.F.R. 2.705(b)(1)  
materials cannot generally be withheld as irrelevant if the request appears reasonably calculated to lead to the discovery of admissible evidence; LBP-06-25, 64 NRC 390 n.102 (2006)  
NRC's approach to the scope of discovery is similar to that of the Federal Rules of Civil Procedure; LBP-06-25, 64 NRC 376 (2006)  
where the privilege and the need may be equally weak, but the privilege can be protected by other means, full and open discovery is the norm, and privileges that stand in the way of truth are disfavored, and relevancy, not need, becomes the determinative standard; LBP-06-25, 64 NRC 395 (2006)
- 10 C.F.R. 2.705(c)  
in making discovery determinations, the court weighs the need to protect a party or person from annoyance, embarrassment, oppression, or undue burden or expense against litigants' need for materials; LBP-06-25, 64 NRC 387 (2006)  
privacy interests are defined using FOIA's language but their weight is tempered by the capability in the discovery process of making limited disclosure to a litigant under a protective order, as contrasted with making the FOIA-required unconditional release to a member of the public; LBP-06-25, 64 NRC 384 (2006)
- 10 C.F.R. 2.709  
although this section deals with special procedural norms for discovery against the Staff, there is no reason to believe, as to substantive content, that its repeated use of the relevance concept was not intended to embrace the universal understanding of that concept that shapes the scope and definition of discoverable evidence in both the federal courts and NRC adjudications; LBP-06-25, 64 NRC 390 n.102 (2006)
- 10 C.F.R. 2.709(a)(1)  
NRC regulations provide procedures that should assist and guide boards in their approach in seeking testimony, additional witnesses, and documents; CLI-06-20, 64 NRC 25 (2006)
- 10 C.F.R. 2.709(d)  
analysis of whether deliberative process privilege applies turns on three factors and the overriding-need test; LBP-06-25, 64 NRC 380 (2006)  
once material is considered exempt from public disclosure, consideration must be given to that material's relevancy to the decision; LBP-06-25, 64 NRC 390 (2006)  
the actual harm done by disclosure is weighed against the material's relevancy, the material's availability from other sources, and the need for the material; LBP-06-25, 64 NRC 392 (2006)  
the four factors for determining the treatment, for discovery purposes, of privileged materials are the relevancy of the document, whether the document is exempt from disclosure under 10 C.F.R. 2.390, whether the document is necessary to a proper decision, and whether the document or information is reasonably obtainable from another source; LBP-06-25, 64 NRC 392 (2006)  
the strength of the interest protected by the deliberative process privilege is balanced against the litigant's need for the material; LBP-06-25, 64 NRC 390 (2006)
- 10 C.F.R. 2.710(c)  
as long as the admissibility requirements have been met, support for a contention may be viewed in a light that is favorable to the petitioner, and inferences that can be drawn from evidence may be construed in favor of the petitioner; LBP-06-20, 64 NRC 150 (2006); LBP-06-23, 64 NRC 356 (2005)

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- 10 C.F.R. 2.710(d)(2)  
where applicant's amended license application has eliminated the dispute, there remains no genuine dispute of material fact and applicant is entitled to summary disposition as a matter of law; LBP-06-24, 64 NRC 364 (2006)
- 10 C.F.R. 2.771(b)  
this rule applies when the original proceeding was noticed prior to February 13, 2004; CLI-06-27, 64 NRC 400 n.5 (2006)
- 10 C.F.R. 2.786  
for cases docketed prior to February 13, 2004, the previous procedural rules continue to apply; CLI-06-29, 64 NRC 419 n.2 (2006)
- 10 C.F.R. 2.786(b)(4)  
a petition for review must identify any clearly erroneous factual finding, significant legal error, or any other reason warranting plenary review; CLI-06-29, 64 NRC 418 (2006)
- 10 C.F.R. 2.802  
a petitioner that seeks to express a personal view regarding the direction of regulatory policy may submit a petition for rulemaking; LBP-06-20, 64 NRC 149 (2006)
- 10 C.F.R. Part 2, Subpart L  
this part is applicable to cases that were noticed before February 13, 2004; LBP-06-19, 64 NRC 60 (2006)
- 10 C.F.R. 2.1204(b)(3)  
as a party, a state may offer evidence and, where necessary to ensure the development of an adequate record, may be allowed to interrogate witnesses; LBP-06-20, 64 NRC 205 (2006)  
cross-examination by the parties is only permitted if the presiding officer determines that it is necessary to ensure the development of an adequate record for decision; LBP-06-20, 64 NRC 203 (2006)  
the grant of cross-examination to situations where it is necessary to ensure the development of an adequate record for decision is consistent with the statutory requirement that state representatives be given a reasonable opportunity to interrogate witnesses; LBP-06-20, 64 NRC 204 (2006)  
the standard for allowing cross-examination is equivalent to section 556(d) of the Administrative Procedure Act; LBP-06-20, 64 NRC 203 (2006)
- 10 C.F.R. 2.1205(c)  
where applicant's amended license application has eliminated the dispute, there remains no genuine dispute of material fact and applicant is entitled to summary disposition as a matter of law; LBP-06-24, 64 NRC 364 (2006)
- 10 C.F.R. 2.1207  
NRC regulations provide procedures that should assist and guide boards in their approach in seeking testimony, additional witnesses, and documents; CLI-06-20, 64 NRC 25 (2006)
- 10 C.F.R. 2.1208  
as a party, a state may offer evidence and, where necessary to ensure the development of an adequate record, may be allowed to interrogate witnesses; LBP-06-20, 64 NRC 205 (2006)
- 10 C.F.R. 2.1233(c)  
arguments that an intervenor fails to adequately develop are treated as waived; LBP-06-19, 64 NRC 76 n.21 (2006)
- 10 C.F.R. Part 2, Appendix B, § II  
a board's conduct of a single hearing following completion of the NRC Staff's environmental analysis is an approach fully consistent with NRC Model Milestones for informal hearings; CLI-06-18, 64 NRC 6 (2006)
- 10 C.F.R. 20.1003  
TEDE is defined as the sum of the deep-dose equivalent (for external exposures) and the committed effective dose equivalent (for internal exposures); LBP-06-19, 64 NRC 68 n.10 (2006)
- 10 C.F.R. 20.1301(a)(1)  
licensed operations that will result in a TEDE to members of the public in excess of 0.1 rem per year are proscribed; LBP-06-19, 64 NRC 68 n.10, 72 n.16 (2006)  
the TEDE calculation is tied to radiation from licensed operations, and it expressly excludes preexisting background radiation; LBP-06-19, 64 NRC 69 (2006)

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- 10 C.F.R. 40.36(d) and (e)  
prior to submitting a decommissioning plan, licensees must maintain funding assurances for decommissioning and periodically provide cost estimates for the decommissioning activities; LBP-06-27, 64 NRC 454 (2006)
- 10 C.F.R. 40.36(e)(4)  
federal, state, or local government licensees must submit a statement of intent containing a cost estimate for decommissioning and an indication that funds for decommissioning will be obtained when necessary; LBP-06-27, 64 NRC 452 (2006)
- 10 C.F.R. 40.42(f)  
issues of timeliness and financial assurance are not included within the scope of materials license amendment proceedings for approval of an alternate schedule for submitting a decommissioning plan; LBP-06-27, 64 NRC 453 n.37 (2006)
- 10 C.F.R. 40.42(g)(2)  
in its review of licensee's Health and Safety Plan for site decommissioning, the only health-related concern the Staff must evaluate is whether the alternate schedule will present undue risk from radiation to the public health and safety; LBP-06-27, 64 NRC 451 (2006)  
in performing its safety evaluation of licensee's alternate schedule proposal, the Staff reviews the proposed field sampling plan to determine whether it satisfied the three criteria governing the grant of an alternate schedule request; LBP-06-27, 64 NRC 443 (2006)  
proper aquifer characterization is necessary to the effective conduct of decommissioning operations; LBP-06-27, 64 NRC 450 (2006)  
the scope of a materials license amendment proceeding is limited to whether the Licensee's proposal for characterizing the site during the alternate schedule period is necessary to the effective conduct of decommissioning operations, will present no undue risk from radiation to the public health and safety, and is otherwise in the public interest; LBP-06-27, 64 NRC 448 (2006)
- 10 C.F.R. 40.42(g)(4)  
when licensee submits its decommissioning plan, it will be required at that time to include a time estimate for the completion of decommissioning operations; LBP-06-27, 64 NRC 454 (2006)
- 10 C.F.R. 40.42(g)(4)(v)  
licensees must include in their decommissioning plan an updated detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and a plan for assuring the availability of adequate funds for completion of decommissioning; LBP-06-27, 64 NRC 453 (2006)
- 10 C.F.R. Part 40, Appendix A, Criterion 9  
a surety arrangement for decommissioning funding is necessary as a prerequisite to operating, not a prerequisite to licensing; LBP-06-19, 64 NRC 96 n.36 (2006)
- 10 C.F.R. 50.5(a)(2)  
deliberately providing information to the NRC that one knows is not complete or accurate in all material respects is a violation; CLI-06-19, 64 NRC 10 (2006)
- 10 C.F.R. 50.10(e)(1)  
an early site permit applicant may choose to submit a plan for redress of the site, which, if accepted as part of an approved ESP, would allow an applicant to perform certain preconstruction activities at the site, without additional authorization; LBP-06-28, 64 NRC 469 (2006)
- 10 C.F.R. 50.34(h)(3)  
provisions in regulatory guides or even a standard review plan are not a substitute for the regulations, and compliance is not a requirement; CLI-06-20, 64 NRC 37 (2006)
- 10 C.F.R. 50.55a  
petitioners are prohibited from challenging the adequacy of a licensee program that incorporates the requirements of an ASME Code that is specifically referenced in this regulation; LBP-06-22, 64 NRC 247 (2006)
- 10 C.F.R. 50.55a(a)(3)  
authorization from the NRR Director is required only when alternatives to the established requirements in subsections (c), (d), (e), (f), (g), and (h) are used; CLI-06-24, 64 NRC 122 (2006)

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- 10 C.F.R. 50.55a(g)(4), (g)(6)(ii)(B)  
the requirements set forth in ASME section XI, subsection IWE are imposed on licensees; LBP-06-22, 64 NRC 247 (2006)
- 10 C.F.R. Part 50, Appendix B, § II  
licensees are required to develop a quality assurance program that is documented by written policies, procedures, or instructions and it shall be carried out throughout plant life; LBP-06-22, 64 NRC 252 n.25 (2006)
- 10 C.F.R. Part 51  
as part of the NRC's review in a license renewal proceeding, the NRC Staff conducts an environmental review; CLI-06-24, 64 NRC 117 (2006)  
environmental topics in license renewal proceedings are divided into generic issues based on the Generic Environmental Impact Statement for License Renewal of Nuclear Plants or plant-specific issues; LBP-06-20, 64 NRC 148 (2006)
- 10 C.F.R. 51.20(a)(2)  
an environmental impact statement is required for issuance or renewal of a nuclear reactor operating license; LBP-06-23, 64 NRC 278 (2006)
- 10 C.F.R. 51.41  
although the requirements of NEPA are directed to federal agencies and thus the primary duties of NEPA fall on the NRC Staff in NRC proceedings, the initial requirement to analyze the environmental impacts of an action, including license renewal, is directed to applicants under relevant NRC rules; LBP-06-23, 64 NRC 278 (2006)  
it is the NRC, not applicant, that has the legal duty to perform a NEPA analysis and to issue appropriate NEPA documents; CLI-06-18, 64 NRC 5 (2006)  
Staff must independently evaluate and be responsible for the reliability of any information that it uses in complying with its NEPA obligations; LBP-06-28, 64 NRC 491 (2006)
- 10 C.F.R. 51.45(d)  
applicant's environmental report must include a discussion of the status of compliance with applicable environmental quality standards and requirements including, but not limited to, thermal and other water pollution limitations or requirements that have been imposed by federal, state, regional, and local agencies; LBP-06-20, 64 NRC 182 n.58 (2006)
- 10 C.F.R. 51.53(c)(2)  
Category 1 environmental issues are outside of the scope of license renewal proceedings; LBP-06-20, 64 NRC 154 (2006)  
for license renewal, an applicant's environmental report must include a description of the proposed action, a detailed description of modifications directly affecting the environmental or plant effluents, and a discussion of the environmental impacts of alternatives to the license renewal; LBP-06-20, 64 NRC 212 (2006); LBP-06-23, 64 NRC 278 (2006)  
for a license renewal, the environmental report and the supplemental environmental impact statement do not need to discuss spent fuel storage issues related to a generic determination; LBP-06-20, 64 NRC 170 (2006)
- 10 C.F.R. 51.53(c)(3)  
applicant's environmental report is not required to contain an analysis of the environmental impacts identified as Category 1 issues in Appendix B to Subpart A of the generic environmental impact statement; LBP-06-20, 64 NRC 212 (2006)  
applicant's environmental report must contain any new and significant information regarding the impacts of license renewal of which the applicant is aware; LBP-06-20, 64 NRC 212 (2006)  
Category 2 thermal issues include entrainment of fish and shellfish in early life stages, impingement of fish and shellfish, and heat shock; LBP-06-20, 64 NRC 212 (2006)  
even where the generic environmental impact statement has found that a particular impact applies generically (Category 1), the applicant must still provide additional analysis in its environmental report if new and significant information may bear on the applicability of the Category 1 finding at its particular plant; LBP-06-20, 64 NRC 155 (2006)  
for a plant with a once-through cooling system, applicant must include analyses in its environmental report for the three Category 2 issues related to thermal discharges; LBP-06-20, 64 NRC 212 (2006)

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- the site-specific environmental review does not routinely reconsider Category 1 issues, but requires applicants (and ultimately the NRC Staff) to assess certain site-specific, "Category 2" issues; CLI-06-24, 64 NRC 118 (2006)
- 10 C.F.R. 51.53(c)(3)(i)  
applicant's environmental report must include new and significant information regarding a Category 1 issue; LBP-06-20, 64 NRC 155 (2006)  
generic, or Category 1, issues generally need not be assessed in a license renewal application because the Commission has already concluded that they involve environmental effects that are similar at all existing plants; LBP-06-20, 64 NRC 148 (2006)  
license renewal applicants may in their site-specific ERs refer to and adopt the generic environmental impact findings found in Table B-1, Appendix B, , Subpart A of Part 51 for all Category 1 issues; LBP-06-23, 64 NRC 279 (2006)  
section 51.53(c)(3)(iv) creates an exception to this section in the context of the requirements for ERs and EISs but not with regard to the scope of issues permitted to be raised in contentions in a license renewal adjudication context, absent a waiver; LBP-06-23, 64 NRC 299 n.170 (2006)
- 10 C.F.R. 51.53(c)(3)(i), (ii)  
applicant's environmental report is not required to contain analyses of environmental impacts identified as Category 1, or generic, issues in Appendix B to Subpart A of Part 51, but must contain analyses of the environmental impacts of the proposed action, including the impacts of refurbishment activities, if any, associated with license renewal and the impacts of operation during the renewal term, for those issues identified as Category 2, or plant-specific, issues in Appendix B to Subpart A; LBP-06-23, 64 NRC 278 (2006)
- 10 C.F.R. 51.53(c)(3)(ii)  
applicant needs to provide an analysis of severe accident mitigation alternatives only for those issues identified as Category 2 in Appendix B to Subpart A of Part 51; LBP-06-20, 64 NRC 161 (2006)
- 10 C.F.R. 51.53(c)(3)(ii)(B)  
applicant may address Category 2 thermal issues by including a copy of the current Clean Water Act § 316(b) determination relating to the location, design, construction, and capacity of the cooling water system to minimize impingement and entrainment, and, if necessary, a section 316(a) demonstration or equivalent State permits and supporting documentation to minimize impact of effluent discharges; LBP-06-20, 64 NRC 213 (2006)  
if applicant cannot provide the relevant Clean Water Act § 316(a) or (b) documents, it must assess the impact of the license renewal on fish and shellfish resources resulting from heat shock, impingement, and entrainment; LBP-06-20, 64 NRC 213 (2006)  
renewal applicants with plants with once-through cooling water systems must provide a copy of current Clean Water Act 316(b) determinations and, if necessary, a 316(a) variance in accordance with 40 C.F.R. Part 125, or equivalent State permits and supporting documentation; LBP-06-20, 64 NRC 181-82 (2006)
- 10 C.F.R. 51.53(c)(3)(ii)(L)  
alternatives to mitigate severe accidents must be considered for all plants that have not previously considered such alternatives; LBP-06-20, 64 NRC 161 (2006); LBP-06-23, 64 NRC 279 (2006)  
an applicant is not required to broadly consider severe accident risks, only severe accident mitigation alternatives; LBP-06-23, 64 NRC 290 n.143 (2006)  
an environmental report must contain severe accident mitigation alternatives for some issues; LBP-06-20, 64 NRC 154 (2006)
- 10 C.F.R. 51.53(c)(3)(ii)-(iii)  
plant-specific, or Category 2, issues must be addressed in a license renewal applicant's environmental report; LBP-06-20, 64 NRC 148 (2006)
- 10 C.F.R. 51.53(c)(3)(iii)  
an environmental report must contain severe accident mitigation alternatives for some issues; LBP-06-20, 64 NRC 154 (2006)
- 10 C.F.R. 51.53(c)(3)(iv)  
applicant's environmental report must contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware; LBP-06-20, 64 NRC 152 (2006); LBP-06-23, 64 NRC 279 (2006)

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- applicant's environmental report must include new and significant information regarding a Category 1 issue; LBP-06-20, 64 NRC 148, 155, 159 n.32 (2006)
- this rule creates an exception to section 51.53(c)(3)(i) in the context of the requirements for ERs and EISs but not with regard to the scope of issues permitted to be raised in contentions in a license renewal adjudication context, absent a waiver; LBP-06-23, 64 NRC 299 n.170 (2006)
- this rule may be read as in effect creating an exception to section 51.53(c)(3)(i)'s allowance that an applicant's ER is not required to contain analyses of the environmental impacts of the license renewal issues identified as Category 1 issues in Appendix B; LBP-06-23, 64 NRC 294 (2006)
- 10 C.F.R. 51.70
- although the initial requirement to discuss the extent to which adverse effects can be avoided falls upon applicants, the ultimate responsibility lies with the Staff, who must address these issues in a supplemental environmental impact statement that is specific to the particular site involved and provides the Staff's independent assessment of the applicant's environmental report; LBP-06-23, 64 NRC 280 (2006)
- 10 C.F.R. 51.70(b)
- Staff must independently evaluate and be responsible for the reliability of any information that it uses in complying with its NEPA obligations; LBP-06-28, 64 NRC 491 (2006)
- the requirements of NEPA are directed to federal agencies and thus the primary duties of NEPA fall on the NRC Staff in NRC proceedings; LBP-06-23, 64 NRC 278 (2006)
- 10 C.F.R. 51.71
- difficulty in quantification does not excuse inclusion in the environmental impact statement, because, to the extent that there are important qualitative considerations that cannot be quantified, these considerations or factors will be discussed in qualitative terms; LBP-06-23, 64 NRC 324 (2006)
- 10 C.F.R. 51.71(c)
- although federal permits and exemptions must be mentioned in the final environmental impact statement, the absence of such mention does not perforce render the FEIS invalid; LBP-06-19, 64 NRC 104 n.40 (2006)
- 10 C.F.R. 51.71(d)
- a draft environmental impact statement must include a preliminary analysis that considers and weighs 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-06-19, 64 NRC 62 (2006)
- Category 2 issues are plant- or site-specific environmental impacts that must be evaluated in the supplemental environmental impact statement; LBP-06-20, 64 NRC 212 n.3 (2006)
- compliance with the environmental quality standards and requirements of the Federal Water Pollution Control Act is not a substitute for and does not negate the requirement for NRC to weigh all environmental effects of the proposed action; LBP-06-20, 64 NRC 179 (2006)
- the draft supplemental environmental impact statement for a license renewal will rely on conclusions presented in the generic environmental impact statement for Category 1 issues, but must contain an analysis of those issues identified as Category 2; LBP-06-20, 64 NRC 213, 216 (2006)
- the environmental impact statement must provide a cost-benefit analysis among alternatives that considers and weighs the environmental effects of the proposed action and the alternatives available for reducing or avoiding adverse environmental effects; LBP-06-19, 64 NRC 91 (2006)
- water pollution limitations imposed pursuant to the Federal Water Pollution Control Act for thermal discharges must be relied upon in the overall assessment of environmental impacts from the licensed renewal period; LBP-06-20, 64 NRC 216 (2006)
- when preparing an environmental impact statement, in addition to considering the adverse environmental impacts of a proposed action, Staff must consider measures to mitigate such impacts by examining alternatives available for reducing or avoiding adverse environmental effects; LBP-06-19, 64 NRC 93 (2006)
- 10 C.F.R. 51.71(e)
- a draft environmental impact statement must include a preliminary recommendation by NRC Staff respecting the proposed action; LBP-06-19, 64 NRC 62 (2006)

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- 10 C.F.R. 51.72(a)  
an environmental impact statement must be supplemented only when changed circumstances cause effects that are significantly different from those already studied; LBP-06-19, 64 NRC 99 (2006)  
further Staff analysis does not require a further circulation of the final environmental impact statement for comment, nor is it necessary to develop further alternatives for evaluation; LBP-06-19, 64 NRC 100 (2006)  
Staff must supplement an environmental impact statement if there are substantial changes in the proposed action that are relevant to environmental concerns, or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; LBP-06-19, 64 NRC 98 (2006)
- 10 C.F.R. 51.72(a)(2)  
Staff must review applicant's environmental report and include any significant new circumstances or information relating to Category 1 issues in supplements to the draft supplemental environmental impact statement; LBP-06-20, 64 NRC 149, 159 n.32 (2006)
- 10 C.F.R. 51.73, 51.74  
although the initial requirement to discuss the extent to which adverse effects can be avoided falls upon applicants, the ultimate responsibility lies with the Staff, who must address these issues in a supplemental environmental impact statement that is specific to the particular site involved and provides the Staff's independent assessment of the applicant's environmental report; LBP-06-23, 64 NRC 280 (2006)  
upon completing its draft environmental impact statement, Staff releases it to the public and requests comments; LBP-06-19, 64 NRC 62 (2006)
- 10 C.F.R. 51.90  
although federal permits and exemptions must be mentioned in the final environmental impact statement, the absence of such mention does not render the FEIS invalid; LBP-06-19, 64 NRC 104 n.40 (2006)
- 10 C.F.R. 51.90, 51.91  
after the release-and-comment stage on the draft environment impact statement, Staff prepares a final environmental impact statement, which includes responses to any comments on the DEIS; LBP-06-19, 64 NRC 62 (2006)
- 10 C.F.R. 51.92(a)  
Staff must supplement an environmental impact statement if there are substantial changes in the proposed action that are relevant to environmental concerns, or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; LBP-06-19, 64 NRC 98, 99 (2006)
- 10 C.F.R. 51.92(a)(1)  
Staff's final supplemental environmental impact statement will cover any significant new circumstances or information relating to Category 1 issues; LBP-06-20, 64 NRC 156, 159 n.32 (2006)  
Staff's pursuit of further analysis of a proposed project, which resulted in no substantial changes relevant to environmental concerns, does not require supplementing the final environmental impact statement; LBP-06-19, 64 NRC 101 (2006)
- 10 C.F.R. 51.92(a)(2)  
when preparing the supplemental environmental impact statement, the Staff must consider any significant new information related to Category 1 issues; LBP-06-23, 64 NRC 294 (2006)
- 10 C.F.R. 51.92(d)(1)  
the required dissemination of information permits the public to react to the effects of a proposed action at a meaningful time; LBP-06-23, 64 NRC 298 n.169 (2006)
- 10 C.F.R. 51.95(c)  
although the initial requirement to discuss the extent to which adverse effects can be avoided falls upon applicants, the ultimate responsibility lies with the Staff, who must address these issues in a supplemental environmental impact statement that is specific to the particular site involved and provides the Staff's independent assessment of the applicant's environmental report; LBP-06-23, 64 NRC 280 (2006)  
the draft supplemental environmental impact statement for a license renewal will rely on conclusions presented in the generic environmental impact statement for Category 1 issues, but must contain an analysis of those issues identified as Category 2; LBP-06-20, 64 NRC 213 (2006)

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- 10 C.F.R. 51.95(c)(2)  
for a license renewal, the environmental report and the supplemental environmental impact statement need not discuss spent fuel storage issues related to a generic determination; LBP-06-20, 64 NRC 170 (2006)
- 10 C.F.R. 51.95(c)(3)  
when preparing the supplemental environmental impact statement, Staff must consider any significant new information related to Category 1 issues; LBP-06-20, 64 NRC 156 (2006); LBP-06-23, 64 NRC 294 (2006)
- 10 C.F.R. 51.101(a)  
applicant proceeds with construction of an independent spent fuel storage installation at its own risk; CLI-06-27, 64 NRC 402 (2006)
- 10 C.F.R. 51.102, 51.103  
the adjudicatory record and board decision and any Commission appellate decisions become, in effect, part of the final environmental impact statement; LBP-06-19, 64 NRC 69 n.11 (2006)
- 10 C.F.R. 51.103(a)(5)  
in making any decision relating to any license renewal application, the Commission shall determine whether or not the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable; LBP-06-23, 64 NRC 280 (2006)
- 10 C.F.R. 51.105(a)(1)(3)  
three NEPA-related matters must be addressed by the board; LBP-06-28, 64 NRC 471 (2006)
- 10 C.F.R. 51.105(a)(2)  
a licensing board's review need not go beyond the record, but rather must independently perform the required weighing based upon the record; LBP-06-28, 64 NRC 475 n.40 (2006)
- 10 C.F.R. Part 51, Subpart A, Appendix A, § 4  
the proper inquiry for determining the sufficiency of the purpose and need statement is whether the final environmental impact statement, read as a whole, includes a correct and adequate description of the purpose and need of the proposed action; LBP-06-19, 64 NRC 85 n.30 (2006)
- 10 C.F.R. Part 51, Subpart A, Appendix A, § 5  
the final environmental impact statement must contain a discussion of alternatives, which is considered to be the heart of the environmental impact statement; LBP-06-19, 64 NRC 86 (2006)
- 10 C.F.R. Part 51, Subpart A, Appendix B  
alternatives to mitigate severe accidents must be considered for all plants that have not previously considered such alternatives; LBP-06-23, 64 NRC 279 (2006)  
Category 1 issues are those that apply to all plants having specified plant or site characteristics, that have a small impact, and whose alternatives analyses demonstrate that additional plant-specific mitigation measures are likely not to be sufficiently beneficial to warrant implementation; LBP-06-20, 64 NRC 212 n.2 (2006)  
Category 2 issues are plant- or site-specific environmental impacts that must be evaluated in the supplemental environmental impact statement; LBP-06-20, 64 NRC 212 n.3 (2006)  
even though the probability that 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, alternatives to mitigate severe accidents must still be considered; LBP-06-23, 64 NRC 324 (2006)  
issues on which the Commission found that it could draw generic conclusions applicable to all existing nuclear power plants, or to a specific subgroup of plants, are identified as Category 1 issues; LBP-06-23, 64 NRC 279 (2006)
- 10 C.F.R. Part 51, Subpart A, Appendix B, Table B-1  
all spent fuel accidents, whatever their cause, are treated as generic, Category 1 events not suitable for case-by-case adjudication; LBP-06-23, 64 NRC 295 (2006)  
in a generic environmental impact statement, the NRC has already considered certain environmental issues common to all (or to a certain category of) reactors, designated "Category 1" issues, which include such matters as onsite land use, noise, bird collisions with cooling towers, and onsite spent fuel storage; CLI-06-24, 64 NRC 118 (2006)  
onsite spent fuel management is a Category 1 issue; LBP-06-20, 64 NRC 155 (2006)

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- the expected increase in the volume of spent fuel from an additional 20 years of operation can be safely accommodated onsite with small environmental effects through dry or pool storage at all plants if a permanent repository or monitored retrievable storage is not available; LBP-06-23, 64 NRC 291 (2006)
- 10 C.F.R. Part 52, Subpart A
- an early site permit is a special type of NRC permit that can resolve certain environmental, safety, and emergency planning issues related to a proposed site for a reactor; LBP-06-24, 64 NRC 361 (2006)
- 10 C.F.R. 52.17
- an early site permit applicant may choose to submit a plan for redress of the site, which, if accepted as part of an approved ESP, would allow an applicant to perform certain preconstruction activities; LBP-06-28, 64 NRC 469 (2006)
- an early site permit applicant may make a number of choices regarding the scope, and therefore the content, of its ESP application; LBP-06-28, 64 NRC 468 (2006)
- 10 C.F.R. 52.17(a)(2)
- since an analysis of the need for power from the proposed facility and a final cost-benefit balance are not required for the issuance of an early site permit, the board's balancing review relates to the selection of the site vis-a-vis other potential sites; LBP-06-28, 64 NRC 487 (2006)
- Staff and applicant's environmental review must focus upon the environmental effects of construction and operation of a reactor, or reactors, that have characteristics that fall within the postulated site parameters; LBP-06-28, 64 NRC 468 n.2 (2006)
- with regard to the final NEPA determination, at the early site permit stage a discussion of the benefits, including need for power, is not necessary; LBP-06-28, 64 NRC 486 n.81 (2006)
- 10 C.F.R. 52.17(b)(2)
- an early site permit applicant may propose for review and approval by the NRC major features of its emergency plan, or a complete and integrated emergency plan; LBP-06-28, 64 NRC 468 (2006)
- 10 C.F.R. 52.18
- Staff and applicant's environmental review must focus upon the environmental effects of construction and operation of a reactor, or reactors, that have characteristics that fall within the postulated site parameters; LBP-06-28, 64 NRC 468 n.2 (2006)
- 10 C.F.R. 52.21
- a licensing board must determine whether, taking into consideration the site criteria contained in 10 C.F.R. Part 100, a reactor, or reactors, having characteristics that fall within the parameters for the site, and which meets the terms and conditions proposed by the Staff in the safety evaluation report, can be constructed and operated without undue risk to the health and safety of the public; LBP-06-28, 64 NRC 470 (2006)
- an early site permit is a partial construction permit, authorizing limited construction activities when issued; LBP-06-28, 64 NRC 467 (2006)
- at the early site permit stage, an applicant is excused from examination, in its environmental report, of the benefits of the proposed project or analysis regarding energy alternatives, and the relevant regulations may not be construed to require that the draft or final environmental impact statement include an assessment of the benefits of the proposed action; LBP-06-28, 64 NRC 486 (2006)
- not all of the safety issues relevant to construction permits are ripe for review in an early site permit proceeding; LBP-06-28, 64 NRC 472 (2006)
- 10 C.F.R. 52.27
- an early site permit allows a future applicant for a construction permit, an operating license, or a combined license to seek early NRC review and approval of some siting and environmental issues, and therefore, to bank a site for up to 20 years in anticipation of its future reference in an application for a CP or COL; LBP-06-28, 64 NRC 467 (2006)
- 10 C.F.R. 52.39
- an early site permit allows a future applicant for a construction permit, an operating license, or a combined license to seek early NRC review and approval of some siting and environmental issues, and therefore, to bank a site for up to 20 years in anticipation of its future reference in an application for a CP or COL; LBP-06-28, 64 NRC 467 (2006)
- 10 C.F.R. 52.39(a)(2)
- at the construction permit or combined operating license stage, an applicant must demonstrate that the chosen reactor fits within the site parameters set forth in the early site permit's plant parameter

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- envelope, if it wishes to treat as resolved any related issues from the ESP review; LBP-06-28, 64 NRC 468 n.2 (2006)
- 10 C.F.R. Part 54  
as part of the NRC's review in a license renewal proceeding, the Staff conducts a health and safety review; CLI-06-24, 64 NRC 117 (2006)
- safety contentions in license renewal proceedings must focus on topics related to the detrimental effects of aging and related time-limited issues; LBP-06-20, 64 NRC 148 (2006); LBP-06-22, 64 NRC 235 (2006)
- 10 C.F.R. 54.3  
"current licensing basis" is a term of art comprehending the various Commission requirements applicable to a specific plant that are in effect at the time of the license renewal application, and consists of the license requirements, including license conditions and technical specifications; LBP-06-23, 64 NRC 276 n.57 (2006)
- licensee's current licensing basis includes the NRC regulations contained in 10 C.F.R. Parts 50, among others, and appendices thereto; LBP-06-22, 64 NRC 253 (2006)
- time-limited aging analyses are defined; LBP-06-20, 64 NRC 183 n.61 (2006)
- 10 C.F.R. 54.3(a)  
"current licensing basis" is defined as the set of NRC requirements applicable to a specific plant and a licensee's written commitments for ensuring compliance with and operation within applicable NRC requirements and the plant- specific design basis (including all modifications and additions to such commitments over the life of the license) that are docketed and in effect; LBP-06-22, 64 NRC 235-36 n.8 (2006)
- 10 C.F.R. 54.4  
in its license renewal application, applicant must include an aging management review for the drywell shell; LBP-06-22, 64 NRC 241 (2006)
- 10 C.F.R. 54.4(a)  
plant systems, structures, and components that are within the scope of a license renewal proceeding are described; LBP-06-23, 64 NRC 275 n.52 (2006)
- 10 C.F.R. 54.4(a)(2)  
plant security systems, structures, and components within the scope of Part 54 include all nonsafety-related SSCs whose failure could prevent satisfactory accomplishment of any of the functions identified in paragraphs (a)(1)(i), (ii), or (iii) of this section; LBP-06-20, 64 NRC 171 n.47 (2006)
- 10 C.F.R. 54.21  
NUREGs represent general guidance for the Staff's review, and do not specify the only acceptable way to satisfy the requirements of this regulation; LBP-06-23, 64 NRC 312 n.255 (2006)
- 10 C.F.R. 54.21(a)  
in its license renewal application, applicant must include an aging management review for the drywell shell; LBP-06-22, 64 NRC 241 (2006)
- license renewal applicants must demonstrate that they will adequately manage the detrimental effects of aging for all important components and structures; CLI-06-24, 64 NRC 117 (2006)
- 10 C.F.R. 54.21(a)(1)(i)  
a host of individual components and structures may be vulnerable to the adverse effects of aging; LBP-06-23, 64 NRC 277 (2006)
- 10 C.F.R. 54.21(a)(3)  
to approve a license renewal request, the NRC Staff must find that applicant demonstrates that the effects of aging of the drywell shell will be adequately managed so that the structural support and pressure boundary will be maintained for the period of extended operation; LBP-06-22, 64 NRC 241 (2006)
- 10 C.F.R. 54.21(c)  
applicant for a license renewal must demonstrate that the effects of aging on the intended functions will be adequately managed for the period of extended operation; CLI-06-24, 64 NRC 122 (2006)
- to the extent that any health and safety analyses performed during the initial licensing process were limited to the initial 40-year license period, the license renewal applicant must show that it has reassessed these time-limited aging analyses and that these analyses remain valid for the period of extended operation; CLI-06-24, 64 NRC 117 (2006)

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**REGULATIONS**

- 10 C.F.R. 54.21(c)(1)(i)-(iii)  
petitioner demonstrates a genuine, material dispute with a license renewal application by raising the question of whether applicant's "plan to develop a plan" to manage environmentally assisted fatigue is sufficient to meet the license renewal requirements; LBP-06-20, 64 NRC 186 (2006)
- 10 C.F.R. 54.29  
standards defining the findings the NRC must make to support a license renewal are described; LBP-06-23, 64 NRC 354 (2005)
- 10 C.F.R. 54.29(a)(1)-(2)  
safety contentions in license renewal proceedings must focus on topics related to the detrimental effects of aging and related time-limited issues dealt within 10 C.F.R. Part 54; LBP-06-20, 64 NRC 148 (2006)
- 10 C.F.R. 54.29(a)(2)  
to the extent that any health and safety analyses performed during the initial licensing process were limited to the initial 40-year license period, the license renewal applicant must show that it has reassessed these time-limited aging analyses and that these analyses remain valid for the period of extended operation; CLI-06-24, 64 NRC 117 (2006)
- 10 C.F.R. 61.58  
even if the Staff ultimately were to alter the general classification rules, it would not follow that licensee's depleted uranium could not be classified as Class A at another specific near-surface facility; CLI-06-22, 64 NRC 50 n.52 (2006)
- 10 C.F.R. 73.46(g)(1)  
because of the importance of security systems, the Commission does not wait until the license renewal stage to address their aging, but rather actively manages them under the current licensing basis; LBP-06-20, 64 NRC 173 n.50 (2006)
- 40 C.F.R. 1502.13  
the final environmental impact statement is required to include a description of the underlying purpose and need of a proposed project; LBP-06-19, 64 NRC 83 (2006)
- 40 C.F.R. 1502.22(b)(1)  
difficulty in quantification does not excuse inclusion in the environmental impact statement, because, to the extent that there are important qualitative considerations that cannot be quantified, these considerations or factors will be discussed in qualitative terms; LBP-06-23, 64 NRC 323 (2006)
- 40 C.F.R. 1503.1  
agencies are required to request and consider comments from other federal agencies, appropriate state and local agencies, affected Indian tribes, any relevant applicant, the public generally, and, in particular, interested or affected persons or organizations; LBP-06-23, 64 NRC 298 n.169 (2006)
- 40 C.F.R. 1506.6c  
agencies are required to request and consider comments from other federal agencies, appropriate state and local agencies, affected Indian tribes, any relevant applicant, the public generally, and, in particular, interested or affected persons or organizations; LBP-06-23, 64 NRC 298 n.169 (2006)
- 40 C.F.R. 1508.7  
cumulative impacts are the impact on the environment that results from the incremental impact of a proposed action, when added to other past, present, and reasonably foreseeable future actions; CLI-06-29, 64 NRC 422 (2006); LBP-06-19, 64 NRC 67, 72 (2006)
- 40 C.F.R. 1508.9(a)(1)  
in determining whether to prepare an environmental impact statement, the federal agency shall prepare an environmental assessment, which will briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact; LBP-06-27, 64 NRC 456 (2006)
- 40 C.F.R. 1508.27  
the word "significantly" as used in the NEPA process describes the significance of environmental impacts in several contexts, including the locality; CLI-06-29, 64 NRC 427 n.58 (2006)

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STATUTES**

- Administrative Procedure Act, 5 U.S.C. § 556(d)  
cross-examination must be available whenever it is required for a full and fair adjudication of the facts;  
LBP-06-23, 64 NRC 349 n.477 (2006)
- Atomic Energy Act, 189a, 42 U.S.C. § 2239(a)  
NRC is required to hold hearings on applications for the construction of certain production and utilization  
facilities, including nuclear power plants, even if the proceeding is uncontested; CLI-06-20, 64 NRC  
19 (2006)
- Atomic Energy Act, 189a, 42 U.S.C. § 2239(a)(1)(A)  
NRC shall grant a hearing upon the request of any person whose interest may be affected by the  
proceeding; LBP-06-20, 64 NRC 208 (2006); LBP-06-23, 64 NRC 269-70 (2006)  
NRC shall hold a hearing after 30 days' notice and publication once in the *Federal Register*, on each  
application for a construction permit for a production or utilization facility; LBP-06-28, 64 NRC 470  
(2006)
- Atomic Energy Act, 42 U.S.C. § 2021(j)  
NRC in its oversight role periodically reviews state radiation control programs to confirm that they  
remain compatible with the Commission's programs and adequately protect public health and safety,  
and NRC retains authority to suspend or terminate agreements relinquishing regulatory authority to  
states; CLI-06-22, 64 NRC 51 n.58 (2006)
- Atomic Energy Act, 274(l), 42 U.S.C. § 2021(l)  
states do not have an absolute right of cross-examination, but the Commission shall afford reasonable  
opportunity for state representatives to interrogate witnesses; LBP-06-20, 64 NRC 203 (2006)
- Atomic Energy Act, 42 U.S.C. 2241  
the Commission could ultimately conduct licensing proceedings itself; CLI-06-20, 64 NRC 28 (2006)
- Federal Water Pollution Control Act, 402, 33 U.S.C. § 1251 *et seq.*  
National Pollutant Discharge Elimination System permits are issued by the U.S. Environmental Protection  
Agency or by authorized states; LBP-06-20, 64 NRC 175 n.54 (2006)
- Federal Water Pollution Control Act, 511(c)(2), 33 U.S.C. § 1371(c)(2)  
nothing in NEPA authorizes any federal agency to review any effluent limitation or other requirement  
established pursuant to the Clean Water Act or impose any effluent limitations other than those  
established pursuant to FWPCA; LBP-06-20, 64 NRC 216 (2006)  
NRC is not relieved of its basic NEPA duty to do an environmental impact statement covering all  
environmental effects, including water quality, but NRC cannot second-guess or impose its own  
effluent limitations, or review other water quality requirements that EPA or the state may impose  
under the statute; LBP-06-20, 64 NRC 180 (2006)
- Freedom of Information Act, 5 U.S.C. § 552(b)  
intrinsic to analyses of the FOIA exceptions is an assessment of harm based on public disclosure;  
LBP-06-25, 64 NRC 386 (2006)
- Freedom of Information Act, 5 U.S.C. § 552(b)(5)  
the exemption of interagency or intra-agency memoranda or letters that would not be available by law to  
a party from disclosure is meant to encompass the common-law discovery exemptions for attorney  
work product and government deliberative process; LBP-06-25, 64 NRC 380 (2006)
- Freedom of Information Act, 5 U.S.C. § 552(b)(7)(C)  
privacy interests are defined using FOIA's language but their weight is tempered by the capability in the  
discovery process of making limited disclosure to a litigant under a protective order, as contrasted

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### STATUTES

- with making the FOIA-required unconditional release to a member of the public; LBP-06-25, 64 NRC 384 (2006)
- National Environmental Policy Act, 42 U.S.C. § 2296b-3  
the U.S. Secretary of Energy has a statutory responsibility to encourage the use of domestic uranium; LBP-06-19, 64 NRC 85 (2006)
- National Environmental Policy Act, 42 U.S.C. §§ 4321-4370f  
this statute ensures that an agency considers every significant aspect of the environmental impact of a proposed action and informs the public that it has, in fact, considered environmental concerns in its decisionmaking process; LBP-06-19, 64 NRC 62 (2006)
- National Environmental Policy Act, 42 U.S.C. § 4332  
federal agencies must include in every recommendation or report on major federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on the environmental impact of the proposed action; LBP-06-23, 64 NRC 277 (2006)
- National Environmental Policy Act, 102(2)(A), 42 U.S.C. § 4332(2)(A)  
all federal agencies are required to use a systematic, interdisciplinary approach that will ensure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking that may have an impact on the human environment; LBP-06-28, 64 NRC 485 (2006)
- National Environmental Policy Act, 102(2)(C), 42 U.S.C. § 4332(2)(C)  
an agency must consult with and obtain the comments of any federal agency that has jurisdiction by law or special expertise with respect to any environmental impact involved; LBP-06-28, 64 NRC 486 (2006)
- before taking any action significantly affecting the quality of the human environment, a federal agency must prepare a detailed statement, which must be made available to the public, discussing the environmental impact of the proposed action and possible alternatives; LBP-06-19, 64 NRC 62, 72 (2006)
- in its environmental impact statement, a federal agency must address the environmental impact of the proposed action, any adverse environmental effects that cannot be avoided, alternatives to the proposed action, the relationship between local short-term uses of the human environment and the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitments of resources; LBP-06-28, 64 NRC 485 (2006)
- preparation of an environmental impact statement is required for all major Federal actions significantly affecting the quality of the human environment; LBP-06-27, 64 NRC 456 (2006)
- National Environmental Policy Act, 42 U.S.C. § 4332(2)(C)(ii)  
an agency should prepare a detailed statement on any adverse environmental effects which cannot be avoided should the proposal be implemented; LBP-06-23, 64 NRC 279 n.78 (2006)
- National Environmental Policy Act, 102(2)(E), 42 U.S.C. § 4332(2)(E)  
a federal agency must study, develop, and describe appropriate alternatives to the recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources; LBP-06-28, 64 NRC 486 (2006)
- USEC Privatization Act, 3113, 42 U.S.C. § 2297h-11  
DOE is required to accept for disposal depleted uranium from NRC-licensed uranium enrichment facilities as long as the depleted uranium is ultimately determined to be low-level radioactive waste; CLI-06-22, 64 NRC 39 (2006)
- neither an intervenor nor an applicant/licensee (nor seemingly the NRC) has the authority to challenge or direct DOE's estimates of the fees it will charge to a uranium enrichment facility that requests DOE to disposition its depleted uranium waste; CLI-06-22, 64 NRC 45 (2006)

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OTHERS**

- Fed. R. Civ. P. 26(b)(1)  
although 10 C.F.R. 2.709 deals with special procedural norms for discovery against the Staff, there is no reason to believe, as to substantive content, that its repeated use of the relevance concept was not intended to embrace the universal understanding of that concept that shapes the scope and definition of discoverable evidence in both the federal courts and NRC adjudications; LBP-06-25, 64 NRC 390 n.102 (2006)  
parties may obtain discovery regarding any matter, not privileged, that is relevant to the claim or defense of any party; LBP-06-25, 64 NRC 376 (2006)  
prior to trial, every party to a civil action is entitled to the disclosure of all relevant information in the possession of any person; LBP-06-25, 64 NRC 376 (2006)  
where the privilege and the need may be equally weak, but the privilege can be protected by other means, full and open discovery is the norm, and privileges that stand in the way of truth are disfavored, and relevancy, not need, becomes the determinative standard; LBP-06-25, 64 NRC 395 (2006)
- Fed. R. Civ. P. 26(b)(5)  
a party's failure to notify the other parties that it is withholding materials under a certain privilege is viewed as a waiver of privilege; LBP-06-25, 64 NRC 378 n.34 (2006)  
claims of privilege must be made expressly; LBP-06-25, 64 NRC 378 (2006)
- Fed. R. Civ. P. 26(c)  
in making discovery determinations, the court weighs the need to protect a party or person from annoyance, embarrassment, oppression, or undue burden or expense against litigants' need for materials; LBP-06-25, 64 NRC 387 (2006)
- Charles Alan Wright, Arthur R. Miller, and Richard L. Marcus, *Federal Practice and Procedure* §2001 (2d ed. 1994)  
prior to trial, every party to a civil action is entitled to the disclosure of all relevant information in the possession of any person; LBP-06-25, 64 NRC 376 (2006)

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### ABEYANCE OF PROCEEDING

- harm from a delay of the enforcement proceeding is a key issue in any abeyance ruling; CLI-06-19, 64 NRC 9 (2006)
- prejudice to the enforcement target's ability to litigate the enforcement proceeding and prejudice to his employment interests must be considered in ruling on an abeyance request; CLI-06-19, 64 NRC 9 (2006)
- the question whether to hold an NRC enforcement proceeding in abeyance pending a related criminal prosecution is generally suitable for interlocutory Commission review because the abeyance issue cannot await the end of the proceeding; CLI-06-19, 64 NRC 9 (2006)
- the weight to be given the Staff's reason for seeking an abeyance turns on the quality of the factual record; CLI-06-19, 64 NRC 9 (2006)
- whether continuation of an NRC enforcement adjudication could at least arguably jeopardize a related criminal proceeding is a key factor in any abeyance ruling in an NRC enforcement proceeding; CLI-06-19, 64 NRC 9 (2006)

### ACCIDENTS, SEVERE

- in license renewal proceedings, the term "severe accidents" encompasses only reactor accidents and not spent fuel pool accidents, which fall within the analysis of the generic Category 1 issue of onsite storage of spent fuel; LBP-06-23, 64 NRC 257 (2006)

### ADVISORY COMMITTEE ON REACTOR SAFEGUARDS

- a board may ask Staff to produce ACRS documents that it reviewed in conducting its license application review, but Staff need not obtain additional ACRS documents that it never saw in conducting its review; CLI-06-20, 64 NRC 15 (2006)

### AFFIDAVITS

- the assertion of deliberative process privilege should provide the basis for the withholding and a statement of specific harm, applicable to the circumstances of the case, that would result from disclosure; LBP-06-25, 64 NRC 367 (2006)

### AGING MANAGEMENT

- a contention that alleges that the applicant's plan to manage metal fatigue is too vague and is really only a "plan to develop a plan" raises an admissible and material issue as to whether the applicant has met its requirement to demonstrate that the effects of aging will be adequately managed; LBP-06-20, 64 NRC 131 (2006)
- an issue can be related to plant aging and still not warrant safety review at the time of a license renewal application if the issue is adequately dealt with by regulatory processes on an ongoing basis; LBP-06-23, 64 NRC 257 (2006)
- NRC's safety review for license renewals is focused upon those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs; LBP-06-23, 64 NRC 257 (2006)
- renewal applicants must demonstrate that they will adequately manage the detrimental effects of aging for all important components and structures, with attention, for example, to metal fatigue, erosion, corrosion, thermal and radiation embrittlement, microbiologically induced effects, creep, and shrinkage; CLI-06-24, 64 NRC 111 (2006)

### AMENDMENT OF CONTENTIONS

- petitioners who seek to introduce a new or amended contention based on allegedly new information that was previously unavailable must show that such information was not previously available and is

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materially different than information previously available and the amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information; LBP-06-22, 64 NRC 229 (2006)

to the extent that the draft or final supplemental environmental impact statement contains data or conclusions that differ significantly from the data or conclusions in the applicant's environmental report or in the generic environmental impact statement, a petitioner is entitled to use 10 C.F.R. 2.309(f)(2) as the grounds to file a new or amended contention; LBP-06-20, 64 NRC 131 (2006)

### APPEALS

a licensing board order is final for appellate purposes where it either disposes of at least a major segment of the case or terminates a party's right to participate, and rulings that do neither are interlocutory; CLI-06-18, 64 NRC 1 (2006)

arguments or legal theories not raised before a presiding officer or licensing board are deemed waived; CLI-06-29, 64 NRC 417 (2006)

on fact-specific technical issues, where a presiding officer has reviewed an extensive record in detail with the assistance of a technical advisor, the Commission is disinclined to upset the presiding officer's findings and conclusions, particularly where the submissions of experts have been weighed; CLI-06-29, 64 NRC 417 (2006)

petitioners cannot raise new contentions for the first time on appeal to the Commission; CLI-06-24, 64 NRC 111 (2006)

the Commission usually defers to boards' fact-based decisions; CLI-06-19, 64 NRC 9 (2006)

where a potential intervenor claims that the board wrongly rejected all contentions, an appeal lies; CLI-06-24, 64 NRC 111 (2006)

where NRC Staff or the license applicant argues that the board ought to have rejected all contentions, an appeal lies; CLI-06-24, 64 NRC 111 (2006)

### APPEALS, INTERLOCUTORY

license applicants may appeal contention admissibility rulings within 10 days after a board grants a petition to intervene, but only if the license applicant argues the petition should have been wholly denied; CLI-06-25, 64 NRC 128 (2006)

the question whether to hold an NRC enforcement proceeding in abeyance pending a related criminal prosecution is generally suitable for interlocutory Commission review because the abeyance issue cannot await the end of the proceeding; CLI-06-19, 64 NRC 9 (2006)

See also Review, Interlocutory

### APPELLATE REVIEW

although the Commission has discretion to review all underlying factual issues *de novo*, it is disinclined to do so where a board has weighed arguments presented by experts and rendered reasonable, record-based factual findings; CLI-06-22, 64 NRC 37 (2006)

under its inherent supervisory power over adjudications, the Commission accepts review because licensing boards are conducting the first mandatory hearings in more than two decades and additional Commission guidance is deemed appropriate; CLI-06-20, 64 NRC 15 (2006)

### APPLICANTS

an environmental report for license renewal must contain a description of the proposed action, including plans to modify the facility or its administrative control procedures, and must describe in detail the modifications directly affecting the environment or affecting plant effluents that affect the environment; LBP-06-23, 64 NRC 257 (2006)

contention admissibility rulings may be appealed within 10 days after a board grants a petition to intervene, but only if applicant argues the petition should have been wholly denied; CLI-06-25, 64 NRC 128 (2006)

### ATOMIC ENERGY ACT

a board shall determine whether, taking into consideration the site criteria contained in 10 C.F.R. Part 100, a reactor having characteristics that fall within the parameters for the site, and which meets the terms and conditions proposed by the Staff in the Safety Evaluation Report, can be constructed and operated without undue risk to the health and safety of the public; LBP-06-28, 64 NRC 460 (2006)

NRC must provide a hearing upon the request of any person whose interest may be affected by the proceeding; LBP-06-23, 64 NRC 257 (2006)

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### BACKFITTING

- a request that the Commission require licensees to return spent fuel pools to their original low-density storage configuration and to use dry storage for any excess fuel is not appropriate for litigation in a license renewal hearing; CLI-06-26, 64 NRC 225 (2006)
- petitions to require backfitting to protect against spent fuel pool accidents are more appropriately filed as a request for NRC enforcement action than in a license renewal proceeding; LBP-06-23, 64 NRC 257 (2006)

### BENEFIT-COST ANALYSIS

- at the early site permit stage, applicant is excused from examination, in its environmental report, of the benefits of the proposed project or analysis regarding energy alternatives, and relevant regulations may not be construed to require that the draft or final environmental impact statement include an assessment of the benefits of the proposed action; LBP-06-28, 64 NRC 460 (2006)
- benefits described by the project's purpose and need are among the factors that are weighed against the project's costs in striking the balance required by NEPA in the final environmental impact statement; LBP-06-19, 64 NRC 53 (2006)
- the analysis among alternatives must consider and weigh the environmental effects of the proposed action and the alternatives available for reducing or avoiding adverse environmental effects; LBP-06-19, 64 NRC 53 (2006)

### CANCER

- a contention that new and significant information about cancer rates in communities around a plant shows that another 20 years of operations may result in greater offsite radiological impacts on human health than was previously known is denied; LBP-06-23, 64 NRC 257 (2006)

### CASE MANAGEMENT

- boards have discretion to reframe a contention for purposes of clarity, succinctness, and a more efficient proceeding; LBP-06-22, 64 NRC 229 (2006)
- in uncontested cases, boards are expected to issue their final initial decisions generally within 4 to 6 months of the Staff's safety evaluation report and final environmental impact statement issuances; CLI-06-20, 64 NRC 15 (2006)

### CONSIDERATION OF ALTERNATIVES

- a federal agency must study, develop, and describe appropriate alternatives to the recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources; LBP-06-28, 64 NRC 460 (2006)
- at the early site permit stage, applicant is excused from examination, in its environmental report, of the benefits of the proposed project or analysis regarding energy alternatives, and relevant regulations may not be construed to require that the draft or final environmental impact statement include an assessment of the benefits of the proposed action; LBP-06-28, 64 NRC 460 (2006)
- because blending down highly enriched uranium for reactor fuel would not promote applicant's primary purpose of maintaining the viability of a dwindling domestic uranium industry, it is outside the scope of reasonable alternatives that must be considered under NEPA; LBP-06-19, 64 NRC 53 (2006)
- discussion of the no-action alternative in a final environmental impact statement is governed by a rule of reason and need not be exhaustive or inordinately detailed; LBP-06-19, 64 NRC 53 (2006)
- in its environmental review of a private applicant's proposed project, the agency may accord appropriate deference to the applicant's proposed siting and design plans; LBP-06-19, 64 NRC 53 (2006)
- NEPA imposes no obligation to select the most environmentally benign alternative; LBP-06-19, 64 NRC 53 (2006)
- the discussion of alternatives in the final environmental impact statement shall identify reasonable alternatives, present the environmental impacts of the proposal and the alternatives in comparative form, and include a final recommendation on the action to be taken; LBP-06-19, 64 NRC 53 (2006)
- when the purpose of a proposed action is to accomplish one thing, it makes no sense to consider the alternative ways by which another thing might be achieved; LBP-06-19, 64 NRC 53 (2006)

### CONSTRUCTION

- an NRC license is unnecessary for construction activity on an independent spent fuel storage installation; CLI-06-23, 64 NRC 107 (2006)

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### CONSTRUCTION PERMITS

- a future applicant for a construction permit, an operating license, or a combined license may seek early NRC review and approval of some siting and environmental issues, and therefore, "bank" a site for up to 20 years in anticipation of its future reference in an application for a CP or COL; LBP-06-28, 64 NRC 460 (2006)
- an early site permit applicant may make a number of choices regarding the scope, and therefore the content, of its ESP application; LBP-06-28, 64 NRC 460 (2006)
- an early site permit applicant may submit a plan for redress of the site, which if accepted as part of an approved ESP would allow an applicant to perform certain preconstruction activities without additional authorization; LBP-06-28, 64 NRC 460 (2006)
- applicant does not need an NRC license for construction of an independent spent fuel storage installation, but proceeds with construction at its own risk; LBP-06-27, 64 NRC 399 (2006)
- because an early site permit is a type of construction permit, a mandatory hearing is required by the Atomic Energy Act and thus the case will continue as an uncontested proceeding; LBP-06-24, 64 NRC 360 (2006)

### CONTENTIONS

- boards have discretion to reframe a contention for purposes of clarity, succinctness, and a more efficient proceeding; LBP-06-22, 64 NRC 229 (2006)
- if a notice of adoption of a contention is filed within a reasonable time (such as 20 days) after the contention has been filed and admitted, then it is deemed timely; LBP-06-20, 64 NRC 131 (2006)
- petitioner must set forth with particularity the contentions sought to be raised; CLI-06-21, 64 NRC 30 (2006)
- proof of independent ability to litigate a contention by an adopting party is not required; LBP-06-20, 64 NRC 131 (2006)
- to intervene in an NRC proceeding, a petitioner must, in addition to demonstrating standing, submit at least one contention meeting the pleading requirements of 10 C.F.R. § 2.309(f)(1); LBP-06-23, 64 NRC 257 (2006)

See also Amendment of Contentions

### CONTENTIONS, ADMISSIBILITY

- a clear statement of the basis for contentions and the submission of supporting information and references to specific documents and sources that establish the validity of the contention are required; CLI-06-24, 64 NRC 111 (2006)
- a contention alleging that the applicant's plan to manage metal fatigue is too vague and is really only a "plan to develop a plan" raises an admissible and material issue as to whether the applicant has met its requirement to demonstrate that the effects of aging will be adequately managed; LBP-06-20, 64 NRC 131 (2006)
- a contention alleging that the applicant's proposed monitoring techniques are not adequate because they are based on computer models that were not benchmarked is admissible; LBP-06-20, 64 NRC 131 (2006)
- a contention must provide sufficient information to show that a genuine dispute exists on a material issue of law or fact; LBP-06-22, 64 NRC 229 (2006)
- a contention questioning whether particular bits of information taken from an emergency plan are sufficiently accurate for use in computing the health and safety consequences of a severe accident, as an environmental issue, is admissible; LBP-06-23, 64 NRC 257 (2006)
- a contention that applicant has failed to identify non-safety-related systems, structures, and components in the security area whose failure could prevent satisfactory accomplishment of the functions of safety-related systems, structures, and components is not admissible because security-related issues are not within the scope of a license renewal proceeding; LBP-06-20, 64 NRC 131 (2006)
- a contention that applicant's aging management program fails to adequately assure the continued integrity of the drywell liner for the requested license extension is denied; LBP-06-23, 64 NRC 257 (2006)
- a contention that applicant's aging management program is inadequate with regard to aging management of buried pipes and tanks that contain radioactively contaminated water because it does not provide for monitoring wells that would detect leakage is admitted; LBP-06-23, 64 NRC 257 (2006)
- a contention that applicant's severe accident mitigation alternatives analysis is deficient regarding input data on evacuation times, economic consequences, and meteorological patterns, resulting in incorrect

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- conclusions about the costs versus benefits of possible mitigation alternatives, is admitted; LBP-06-23, 64 NRC 257 (2006)
- a contention that fails to comply with any of the pleading requirements will not be admitted for litigation; LBP-06-22, 64 NRC 229 (2006)
- a contention that new and significant information about cancer rates in communities around a plant shows that another 20 years of operations may result in greater offsite radiological impacts on human health than was previously known is denied; LBP-06-23, 64 NRC 257 (2006)
- a contention that raises the question as to whether requirements of 10 C.F.R. 51.53(c)(3)(ii)(B) supplement the more general requirements of 10 C.F.R. 51.45(c) and 51.53(c), or instead displace and supplant the latter requirements, raises an admissible and material issue of interpretation and construction of the regulations; LBP-06-20, 64 NRC 131 (2006)
- a late-filed contention will be rejected as untimely unless the petitioner demonstrates that the eight-factor balancing test in 10 C.F.R. 2.309(c) militates in favor of considering the contention's admissibility; LBP-06-22, 64 NRC 229 (2006)
- a licensing board is not permitted to draw any inferences on behalf of a petitioner; LBP-06-23, 64 NRC 257 (2006)
- a petitioner may not demand an adjudicatory hearing to attack generic NRC requirements or regulations, or to express generalized grievances about NRC policies; LBP-06-23, 64 NRC 257 (2006)
- a petitioner who fails to satisfy the contention pleading requirements in its initial contention submission may not use its reply to rectify those inadequacies or to raise new arguments, but may use the reply to flesh out contentions that have already met the pleading requirements; LBP-06-20, 64 NRC 131 (2006)
- a petitioner who without reason fails to argue that a nontimely contention satisfies the eight-factor balancing test in 10 C.F.R. 2.309(c) may be deemed as having waived that argument; LBP-06-22, 64 NRC 229 (2006)
- a waiver of 10 C.F.R. 2.335 is necessary to litigate an applicant's failure to include new and significant information concerning a Category 1 issue in its environmental report; LBP-06-20, 64 NRC 131 (2006)
- although a contention regarding the risks of terrorism related to the high-density racking of spent fuel in pools is new and significant information concerning a Category 1 matter, the contention is inadmissible; LBP-06-20, 64 NRC 131 (2006)
- although the Commission is disinclined to step into the middle of a labor dispute or involve itself in the personnel decisions of licensees, it has recognized that there may be cases where employment-related contentions are closely tied to specific health-and-safety concerns or to potential violations of NRC rules that can be admitted for a hearing; CLI-06-21, 64 NRC 30 (2006)
- an alleged failure to address "new and significant information" does not give rise to an admissible contention, absent a waiver of the rule in 10 C.F.R. §51.53(c)(3)(i) that Category 1 issues need not be addressed in a license renewal; LBP-06-23, 64 NRC 257 (2006)
- at the admission stage, petitioner is not required to prove its contention or to provide all the evidence for its contention that may be required later in the proceeding; LBP-06-20, 64 NRC 131 (2006)
- at the admission stage, petitioner must simply proffer some minimal factual foundation sufficient to raise a genuine dispute regarding the existence of a corrosive environment; LBP-06-22, 64 NRC 229 (2006)
- at the contention admission stage, the board's purpose in applying 10 C.F.R. 2.309(f)(1) is only to ensure that the adjudicatory process is used to address real, concrete, specific issues that are appropriate for litigation; LBP-06-20, 64 NRC 131 (2006)
- citation to specific and potentially inconsistent portions of applicant's documents together with the declaration of petitioner's unchallenged expert provide alleged facts or expert opinion that are sufficient to meet the contention pleading requirements; LBP-06-20, 64 NRC 131 (2006)
- contentions must fall within the scope of the proceeding in which intervention is sought; CLI-06-24, 64 NRC 111 (2006)
- contentions that applicant's environmental report fails to satisfy NEPA because it does not address the environmental impacts of severe spent fuel pool accidents, and fails to address severe accident mitigation alternatives that would reduce the potential for spent fuel pool water loss and fires, are inadmissible; LBP-06-23, 64 NRC 257 (2006)
- detailed pleadings help to ensure that full adjudicatory hearings are triggered only by those able to proffer at least some minimal factual and legal foundation in support of their contentions; LBP-06-23, 64 NRC 257 (2006)

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detailed pleadings put other parties in the proceeding on notice of the petitioner's specific grievances and thereby give them a good idea of the claims they will be either supporting or opposing; LBP-06-23, 64 NRC 257 (2006)

emergency planning concerns are not within the scope of a license renewal proceeding; LBP-06-20, 64 NRC 131 (2006); LBP-06-23, 64 NRC 257 (2006)

failure of a contention to meet any of the requirements of section 2.309(f)(1) is grounds for its dismissal; LBP-06-23, 64 NRC 257 (2006)

failure of an applicant to include new and significant information concerning a Category 1 issue relating to the dangers of high-density racking of spent fuel in its environmental report does not give rise to an admissible contention; LBP-06-20, 64 NRC 131 (2006)

failure to provide supporting facts or expert opinion renders a contention inadmissible; LBP-06-27, 64 NRC 438 (2006)

general assertions, unsupported by specific facts or expert opinion, that personnel reductions may adversely affect health and safety are inadmissible in a license transfer proceeding; CLI-06-21, 64 NRC 30 (2006)

in passing upon whether an intervention petition should be granted, it is not the function of a licensing board to reach the merits of any contention contained therein; LBP-06-22, 64 NRC 229 (2006)

intervention petitioners must provide a concise statement of the alleged facts or expert opinions that support their position together with references to the specific sources and documents on which they intend to rely; LBP-06-22, 64 NRC 229 (2006)

issues related to a plant's current licensing basis are ordinarily beyond the scope of a license renewal review because those issues already are monitored, reviewed, and commonly resolved as needed by ongoing regulatory oversight; LBP-06-22, 64 NRC 229 (2006)

issues related to the environmental impact of onsite spent fuel storage after the license renewal term are covered by NRC's Waste Confidence Rule and are outside the scope of a license renewal proceeding because contentions may not challenge a regulation; LBP-06-20, 64 NRC 131 (2006)

neither the Rules of Practice nor Commission precedent mandates the consideration at the threshold of every basis assigned for every contention advanced by the hearing requestor; LBP-06-27, 64 NRC 438 (2006)

petitioners cannot raise new contentions for the first time on appeal to the Commission; CLI-06-24, 64 NRC 111 (2006)

petitioners who seek to introduce a new or amended contention based on allegedly new information that was previously unavailable must show that such information was not previously available and is materially different than information previously available and the amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information; LBP-06-22, 64 NRC 229 (2006)

pleading requirements are strict by design and any contention that does not satisfy these requirements will be rejected; CLI-06-24, 64 NRC 111 (2006); LBP-06-22, 64 NRC 229 (2006)

providing any material or document as a basis for a contention, without setting forth an explanation of its significance, is inadequate to support the admission of the contention; LBP-06-27, 64 NRC 438 (2006)

since a license amendment involves a facility with ongoing operations, a petitioner's challenge must show that the amendment will cause a distinct new harm or threat apart from the activities already licensed; LBP-06-22, 64 NRC 229 (2006)

substantive admissibility standards for contentions and the case law interpreting the requirements are discussed; LBP-06-23, 64 NRC 257 (2006)

the adequacy of the applicant's license application, not the NRC Staff's safety evaluation, is the safety issue in any licensing proceeding, and contentions on the adequacy of the [content of the Safety Evaluation Report are not cognizable in a proceeding; LBP-06-27, 64 NRC 438 (2006)

the Commission regularly affirms board decisions when the appellant points to no error of law or abuse of discretion; CLI-06-24, 64 NRC 111 (2006)

the question as to whether an NPDES permit that will expire before the proposed 20-year NRC license renewal would even take effect raises an admissible and material issue of law and fact; LBP-06-20, 64 NRC 131 (2006)

the scope of a license renewal proceeding is limited to a review of the plant structures and components that will require an aging management review for the period of extended operation and the plant's

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- systems, structures, and components that are subject to an evaluation of time-limited aging analyses; LBP-06-22, 64 NRC 229 (2006)
- the strict pleading requirements for contentions focus the hearing process on real disputes susceptible of resolution in an adjudication; LBP-06-23, 64 NRC 257 (2006)
- to raise an admissible contention with respect to a Staff finding of no significant impact, petitioner need not demonstrate that there will be a significant environmental impact as a consequence of the proposed action, but it must allege facts that, if true, show that the proposed project may significantly degrade some human environmental factor; LBP-06-27, 64 NRC 438 (2006)
- CONTENTIONS, LATE-FILED**
- a petitioner who without reason fails to argue that a nontimely contention satisfies the eight-factor balancing test in 10 C.F.R. 2.309(c) may be deemed as having waived that argument; LBP-06-22, 64 NRC 229 (2006)
- an environmental contention that is not based on new information can only be admitted upon a favorable balancing of the factors in 10 C.F.R. 2.309(c); LBP-06-20, 64 NRC 131 (2006)
- filings that are nearly 3 months late must satisfy not only the requirements to demonstrate standing and submit at least one admissible contention, but also must satisfy the stringent requirements for untimely filings and late-filed contentions; CLI-06-21, 64 NRC 30 (2006)
- petitioner must satisfy the eight-factor balancing test in 10 C.F.R. 2.309(c); LBP-06-22, 64 NRC 229 (2006)
- petitioners who seek to introduce a new or amended contention based on allegedly new information that was previously unavailable must show that such information was not previously available and is materially different than information previously available and the amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information; LBP-06-22, 64 NRC 229 (2006)
- to the extent that the draft or final supplemental environmental impact statement contains data or conclusions that differ significantly from the data or conclusions in the applicant's environmental report or in the generic environmental impact statement, a petitioner is entitled to use 10 C.F.R. 2.309(f)(2) as the grounds to file a new or amended contention; LBP-06-20, 64 NRC 131 (2006)
- COOLING SYSTEMS**
- after applicant's amendment to its ER, whereby it changed its cooling method for the proposed reactor to a no-discharge cooling system that uses a combination of wet and dry cooling towers, there remains no genuine dispute about discharge of heated water; LBP-06-24, 64 NRC 360 (2006)
- COUNCIL ON ENVIRONMENTAL QUALITY**
- although NRC is not bound by CEQ regulations that it has not expressly adopted, it gives those regulations substantial deference; LBP-06-19, 64 NRC 53 (2006)
- CRIMINAL PROCEEDING**
- although the subject of an NRC enforcement proceeding may attempt to take advantage of his discovery rights in the civil proceeding to obtain information also useful in his criminal proceeding, that is no reason to deny him that discovery because he asserted his Fifth Amendment right not to respond to discovery requests directed to him, even if other procedural consequences might flow from that action; LBP-06-25, 64 NRC 367 (2006)
- the Commission does not lightly second-guess DOJ's views on whether, and how, premature disclosure might affect its criminal prosecutions; CLI-06-19, 64 NRC 9 (2006)
- whether continuation of an NRC enforcement adjudication could at least arguably jeopardize a related criminal proceeding is a key factor in any abeyance ruling in an NRC enforcement proceeding; CLI-06-19, 64 NRC 9 (2006)
- CROSS-EXAMINATION**
- the Atomic Energy Act does not give a state an absolute right of cross-examination, but requires only that the Commission shall afford reasonable opportunity for state representatives to interrogate witnesses; LBP-06-20, 64 NRC 131 (2006)
- CUMULATIVE IMPACTS ANALYSIS**
- synergistic effects of a proposed action are examined when several proposals for actions in a region are pending concurrently before an agency; LBP-06-19, 64 NRC 53 (2006)

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- whether the proposed action's impacts will be significantly enhanced by already existing environmental effects from prior actions is examined as well as whether there will be interregional synergistic effects; LBP-06-19, 64 NRC 53 (2006)
- CUMULATIVE USAGE FACTOR**  
because applicant's change in cumulative usage factor is already endorsed by 10 C.F.R. 50.55a(g), the approval requirements of subsection 50.55a(a)(3) do not apply; CLI-06-24, 64 NRC 111 (2006)
- CURRENT LICENSING BASIS**  
issues relating to a plant's CLB are ordinarily beyond the scope of a license renewal review because those issues already are monitored, reviewed, and commonly resolved as needed by ongoing regulatory oversight; CLI-06-24, 64 NRC 111 (2006); LBP-06-22, 64 NRC 229 (2006)
- DEADLINES**  
in uncontested cases, boards are expected to issue their final initial decisions generally within 4 to 6 months of the Staff's safety evaluation report and final environmental impact statement issuances; CLI-06-20, 64 NRC 15 (2006)  
See also Time Limits
- DECOMMISSIONING FUNDING**  
a board's analysis of decommissioning cost estimates should be tailored to the specifics of the proceeding; CLI-06-22, 64 NRC 37 (2006)  
a board's examination of licensee's decommissioning cost estimates for reliability is consistent with its obligation to verify whether the estimates provided reasonable assurance for decommissioning funding; CLI-06-22, 64 NRC 37 (2006)  
obtaining an estimate from an experienced third-party vendor is not the only way for an applicant to demonstrate that its cost estimate is documented and reasonable; CLI-06-22, 64 NRC 37 (2006)
- DELAY**  
an unexplained lapse of several years between the Staff's completion of a thorough investigation and its initiation of an immediately effective enforcement order may jeopardize both public confidence in government decisionmaking and public protection from asserted safety threats, and may require an explanation if the immediate effectiveness of the order were to be challenged; LBP-06-26, 64 NRC 431 (2006)
- DELIBERATIVE PROCESS PRIVILEGE**  
a sufficiently high-ranking person must sign the affidavit asserting the privilege; LBP-06-25, 64 NRC 367 (2006)  
purely factual material is not generally protected, except factual materials too intertwined with deliberative discussions and summaries of factual materials compiled to assist in agency decisionmaking; LBP-06-25, 64 NRC 367 (2006)  
the affidavit asserting the privilege should provide the basis for the withholding and a statement of specific harm, applicable to the circumstances of the case, that would result from disclosure; LBP-06-25, 64 NRC 367 (2006)  
the chilling effect upon frank government discussions can be just as great when the release is limited only to those involved in particular litigation as when the documents are released publicly; LBP-06-25, 64 NRC 367 (2006)  
the general purpose of the privilege is to protect frank agency deliberations from public scrutiny and thus to prevent injury to the quality of agency decisions; LBP-06-25, 64 NRC 367 (2006)  
the protected interests are so strong that federal courts and NRC adjudicators are generally unwilling to compel discovery of deliberative materials unless there is a particular and compelling reason for the privilege to be suspended; LBP-06-25, 64 NRC 367 (2006)
- DEPARTMENT OF ENERGY**  
neither an intervenor nor an applicant/licensee (nor seemingly the NRC) has the authority to challenge or direct DOE's estimates of the fees it will charge to a uranium enrichment facility that requests DOE to disposition its depleted uranium waste; CLI-06-22, 64 NRC 37 (2006)
- DEPARTMENT OF JUSTICE**  
the Commission does not lightly second-guess DOJ's views on whether, and how, premature disclosure might affect its criminal prosecutions; CLI-06-19, 64 NRC 9 (2006)
- DISCOVERY**  
a privilege that is not claimed is waived; LBP-06-25, 64 NRC 367 (2006)

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- although the subject of an NRC enforcement proceeding may attempt to take advantage of his discovery rights in the civil proceeding to obtain information also useful in his criminal proceeding, that is no reason to deny him that discovery because he asserted his Fifth Amendment right not to respond to discovery requests directed to him, even if other procedural consequences might flow from that action; LBP-06-25, 64 NRC 367 (2006)
- an assertion that material can be withheld must expressly state the specific privilege being claimed; LBP-06-25, 64 NRC 367 (2006)
- parties in NRC adjudications are generally entitled to obtain, through discovery and other pretrial activities, the fullest possible knowledge of the issues and facts before trial; LBP-06-25, 64 NRC 367 (2006)
- privacy interests are defined using FOIA's language but their weight is tempered by the capability in the discovery process of making limited disclosure to a litigant under a protective order instead of public disclosure; LBP-06-25, 64 NRC 367 (2006)
- qualified privilege materials may be excluded, depending on the particular circumstances presented; LBP-06-25, 64 NRC 367 (2006)
- sufficient information for assessing the claim of privilege or protected status of documents withheld from discovery must be provided to the requesting party; LBP-06-25, 64 NRC 367 (2006)
- the greater the interest protected by the privilege, the more compelling the need and the other circumstances must be to overcome it; LBP-06-25, 64 NRC 367 (2006)
- the subject of an enforcement order may benefit from more knowledge and perspective about others' roles in an incident because it might help him put his actions in a transactional context that would lessen or eliminate his responsibility for any missteps; LBP-06-25, 64 NRC 367 (2006)
- the universal understanding of relevance, applicable to the NRC Staff and others, includes matters that appear reasonably calculated to lead to the discovery of admissible evidence; LBP-06-25, 64 NRC 367 (2006)
- where a protective order precludes public disclosure, the strength of the privacy interest diminishes because any threatened harm in releasing the information can be virtually eliminated; LBP-06-25, 64 NRC 367 (2006)
- where the privilege and the need may be equally weak, but the privilege can be protected by other means, adjudicators return to the norms of full and open discovery, so that relevancy, not need, becomes the determinative standard; LBP-06-25, 64 NRC 367 (2006)
- with a confidential protection order in place, weighing the privacy invasion from public disclosure against a party's need for the materials is no longer appropriate; LBP-06-25, 64 NRC 367 (2006)
- DOCUMENT PRODUCTION**
- whether NRC Staff should be required to produce four paper copies of relevant documents is a matter best left to a board's discretion; CLI-06-20, 64 NRC 15 (2006)
- DUE PROCESS**
- the subject of an enforcement action has a property interest in his employment-related license sufficient to invoke the procedural protections of the Due Process Clause, the vindication of which invokes a public interest; LBP-06-25, 64 NRC 367 (2006)
- EARLY SITE PERMIT APPLICATION**
- an applicant may make a number of choices regarding the scope, and therefore the content, of its application; LBP-06-28, 64 NRC 460 (2006)
- applicant is excused from examination, in its environmental report, of the benefits of the proposed project or analysis regarding energy alternatives, and relevant regulations may not be construed to require that the draft or final environmental impact statement include an assessment of the benefits of the proposed action; LBP-06-28, 64 NRC 460 (2006)
- applicant may propose for review and approval by the NRC major features of its emergency plan or a complete and integrated emergency plan; LBP-06-28, 64 NRC 460 (2006)
- applicant may submit a plan for redress of the site, which if accepted as part of an approved ESP would allow an applicant to perform certain preconstruction activities without additional authorization; LBP-06-28, 64 NRC 460 (2006)
- where applicant's amended license application has eliminated the dispute, there remains no genuine dispute of material fact and applicant is entitled to summary disposition as a matter of law; LBP-06-24, 64 NRC 360 (2006)

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### EARLY SITE PERMIT PROCEEDING

because an early site permit is a type of construction permit, a mandatory hearing is required by the Atomic Energy Act and thus the case will continue as an uncontested proceeding; LBP-06-24, 64 NRC 360 (2006)

boards should conduct a simple sufficiency review of uncontested issues; LBP-06-28, 64 NRC 460 (2006)

boards should not second-guess underlying technical or factual findings by the NRC Staff; LBP-06-28, 64 NRC 460 (2006)

licensing boards must perform two types of inquiries with respect to safety matters in uncontested proceedings; LBP-06-28, 64 NRC 460 (2006)

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-06-28, 64 NRC 460 (2006)

the three NEPA-related factors that the board is required to address are discussed; LBP-06-28, 64 NRC 460 (2006)

where the Standard Review Plan had not been followed, no specific Regulatory Guide was applicable, a Regulatory Guide required adaptation, or the Staff's logic was incomplete or unclear, the Board sought a thorough explanation of the Staff's rationale for the process it ultimately adopted along with its conclusions, and examined that process and those conclusions to ensure they were well founded in fact and logic; LBP-06-28, 64 NRC 460 (2006)

### EARLY SITE PERMITS

a board shall determine whether, taking into consideration the site criteria contained in 10 C.F.R. Part 100, a reactor having characteristics that fall within the parameters for the site, and which meets the terms and conditions proposed by the Staff in the Safety Evaluation Report, can be constructed and operated without undue risk to the health and safety of the public; LBP-06-28, 64 NRC 460 (2006)

a future applicant for a construction permit, an operating license, or a combined license may seek early NRC review and approval of some siting and environmental issues, and therefore, "bank" a site for up to 20 years in anticipation of its future reference in an application for a CP or COL; LBP-06-28, 64 NRC 460 (2006)

for uncontested applications, section 52.21, the notice requirements of section 2.104(b)(2), and the Notice of Hearing itself outline a board's review obligation; LBP-06-28, 64 NRC 460 (2006)

### ECONOMIC INJURY

litigation inevitably results in the parties' loss of both time and money; CLI-06-18, 64 NRC 1 (2006)

### EMERGENCY PLANNING

such issues are beyond the scope of license renewal proceedings; LBP-06-20, 64 NRC 131 (2006)

### EMERGENCY PLANS

a contention questioning whether particular bits of information taken from an emergency plan are sufficiently accurate for use in computing the health and safety consequences of a severe accident, as an environmental issue, is admissible; LBP-06-23, 64 NRC 257 (2006)

an ESP applicant may propose for review and approval by the NRC major features of its plan or a complete and integrated plan; LBP-06-28, 64 NRC 460 (2006)

### EMPLOYMENT

the subject of an enforcement action has a property interest in his employment-related license sufficient to invoke the procedural protections of the Due Process Clause, the vindication of which invokes a public interest; LBP-06-25, 64 NRC 367 (2006)

### ENFORCEMENT ACTIONS

a request that the Commission require licensees to return spent fuel pools to their original low-density storage configuration and to use dry storage for any excess fuel is not appropriate for litigation in a license renewal hearing; CLI-06-26, 64 NRC 225 (2006)

although the subject of an NRC enforcement proceeding may attempt to take advantage of his discovery rights in the civil proceeding to obtain information also useful in his criminal proceeding, that is no reason to deny him that discovery because he asserted his Fifth Amendment right not to respond to discovery requests directed to him, even if other procedural consequences might flow from that action; LBP-06-25, 64 NRC 367 (2006)

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the subject of an enforcement action has a property interest in his employment-related license sufficient to invoke the procedural protections of the Due Process Clause, the vindication of which invokes a public interest; LBP-06-25, 64 NRC 367 (2006)

the subject of an enforcement order may benefit from more knowledge and perspective about others' roles in an incident because it might help him put his actions in a transactional context that would lessen or eliminate his responsibility for any missteps; LBP-06-25, 64 NRC 367 (2006)

### ENFORCEMENT ORDERS

an unexplained lapse of several years between the Staff's completion of a thorough investigation and its initiation of an immediately effective enforcement order may jeopardize both public confidence in government decisionmaking and public protection from asserted safety threats, and may require an explanation if the immediate effectiveness of the order were to be challenged; LBP-06-26, 64 NRC 431 (2006)

in a challenge to an NRC Staff immediately effective enforcement order prohibiting a former licensee employee from working in NRC-licensed activities for 5 years, the licensing board finds a proposed settlement to be in the public interest, so that no adjudication is required; LBP-06-21, 64 NRC 219 (2006)

Staff may make an enforcement order immediately effective on the basis of public health and safety or a willful violation; LBP-06-26, 64 NRC 431 (2006)

### ENFORCEMENT PROCEEDINGS

hearings regarding immediately effective enforcement orders must be held expeditiously; CLI-06-19, 64 NRC 9 (2006)

the Commission does not lightly second-guess DOJ's views on whether, and how, premature disclosure might affect its criminal prosecutions; CLI-06-19, 64 NRC 9 (2006)

the question whether to hold an NRC enforcement proceeding in abeyance pending a related criminal prosecution is generally suitable for interlocutory Commission review because the abeyance issue cannot await the end of the proceeding; CLI-06-19, 64 NRC 9 (2006)

the weight to be given the Staff's reason for seeking an abeyance turns on the quality of the factual record; CLI-06-19, 64 NRC 9 (2006)

whether continuation of an NRC enforcement adjudication could at least arguably jeopardize a related criminal proceeding is a key factor in any abeyance ruling in an NRC enforcement proceeding; CLI-06-19, 64 NRC 9 (2006)

### ENVIRONMENTAL ANALYSIS

a federal agency must study, develop, and describe appropriate alternatives to the recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources; LBP-06-28, 64 NRC 460 (2006)

all federal agencies must use a systematic, interdisciplinary approach that will ensure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking that may have an impact on the human environment; LBP-06-28, 64 NRC 460 (2006)

an agency must consult with and obtain the comments of any federal agency that has jurisdiction by law or special expertise with respect to any environmental impact involved; LBP-06-28, 64 NRC 460 (2006)

cumulative impacts analysis looks to whether the proposed action's impacts will be significantly enhanced by already existing environmental effects from prior actions; LBP-06-19, 64 NRC 53 (2006)

it is the NRC, not applicant, that has the legal duty to perform a NEPA analysis and to issue appropriate NEPA documents; CLI-06-18, 64 NRC 1 (2006)

### ENVIRONMENTAL ASSESSMENT

although NRC will consider the fact that an applicant is subject to, and compliant with, other environmental laws and permits, it must still perform an EA prior to any major federal action significantly affecting the environment; LBP-06-20, 64 NRC 131 (2006)

in determining whether to prepare an environmental impact statement, the federal agency shall prepare an EA, which will briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact; LBP-06-27, 64 NRC 438 (2006)

to raise an admissible contention with respect to a Staff finding of no significant impact, petitioner need not demonstrate that there will be a significant environmental impact as a consequence of the proposed action, but it must allege facts that, if true, show that the proposed project may significantly degrade some human environmental factor; LBP-06-27, 64 NRC 438 (2006)

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### ENVIRONMENTAL EFFECTS

agencies need not elevate environmental concerns over other appropriate considerations, but rather must only take a hard look at the environmental consequences before taking a major action; LBP-06-19, 64 NRC 53 (2006)

where, in weighing the balance of harms, injury to the environment is not at all probable, an injunction is not appropriate; LBP-06-27, 64 NRC 399 (2006)

### ENVIRONMENTAL IMPACT STATEMENT

at the early site permit stage, relevant regulations may not be construed to require that the draft or final EIS include an assessment of the benefits of the proposed action; LBP-06-28, 64 NRC 460 (2006)

because of the questions of law and policy about the environmental impacts of terrorist attacks, the Commission decides to consider this issue itself; LBP-06-28, 64 NRC 404 (2006)

before taking any action significantly affecting the quality of the human environment, the agency must prepare a detailed statement, which must be made available to the public, discussing the environmental impact of the proposed action and possible alternatives; LBP-06-19, 64 NRC 53 (2006)

environmental issues common to all (or to a certain category of) reactors, designated Category 1 issues, which include such matters as onsite land use, noise, bird collisions with cooling towers, and onsite spent fuel storage, have already been considered generically by NRC and need not be considered again for license renewal; CLI-06-24, 64 NRC 111 (2006)

federal agencies must address the environmental impact of the proposed action, any adverse environmental effects that cannot be avoided, alternatives to the proposed action, the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitments of resources that would be involved in the proposed action; LBP-06-28, 64 NRC 460 (2006)

federal agencies must include in every recommendation or report on major federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on the environmental impact of the proposed action; LBP-06-23, 64 NRC 257 (2006)

if the adverse environmental effects 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-06-19, 64 NRC 53 (2006)

in determining whether to prepare an EIS, the federal agency shall prepare an environmental assessment, which will briefly provide sufficient evidence and analysis for determining whether to prepare an EIS or a finding of no significant impact; LBP-06-27, 64 NRC 438 (2006)

preparation of an EIS is required for all major federal actions significantly affecting the quality of the human environment; LBP-06-27, 64 NRC 438 (2006)

the statutory requirement that a federal agency contemplating a major action prepare an EIS serves NEPA's action-forcing purpose in two important respects; LBP-06-23, 64 NRC 257 (2006)

See also Generic Environmental Impact Statement; Final Environmental Impact Statement; Supplemental Environmental Impact Statement

### ENVIRONMENTAL ISSUES

Category 2 issues involve environmental impact severity levels that could differ significantly from plant to plant, or impacts for which additional plant-specific mitigation measures should be considered; LBP-06-23, 64 NRC 257 (2006)

Category 2, or plant specific, issues are within the scope of license renewal, and applicants must provide a plant-specific review of them; LBP-06-23, 64 NRC 257 (2006)

### ENVIRONMENTAL JUSTICE

each agency should identify and address, as appropriate, any disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority or low-income populations; LBP-06-19, 64 NRC 53 (2006)

### ENVIRONMENTAL REPORT

a waiver of 10 C.F.R. 2.335 is necessary to litigate an applicant's failure to include new and significant information concerning a Category 1 issue; LBP-06-20, 64 NRC 131 (2006)

applicant must provide additional analysis of even a Category 1 issue if new and significant information has surfaced; LBP-06-20, 64 NRC 131 (2006); LBP-06-23, 64 NRC 257 (2006)

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- after applicant's amendment to its ER, whereby it changed its cooling method for the proposed reactor to a no-discharge cooling system that uses a combination of wet and dry cooling towers, there remains no genuine dispute about discharge of heated water; LBP-06-24, 64 NRC 360 (2006)
- applicant's ER for license renewal must contain a description of the proposed action, including plans to modify the facility or its administrative control procedures, and must describe in detail the modifications directly affecting the environment or affecting plant effluents that affect the environment; LBP-06-23, 64 NRC 257 (2006)
- at the early site permit stage, applicant is excused from examination of the benefits of the proposed project or analysis regarding energy alternatives, and relevant regulations may not be construed to require that the draft or final environmental impact statement include an assessment of the benefits of the proposed action; LBP-06-28, 64 NRC 460 (2006)
- Category 1, or generic, issues need not be repeatedly assessed on a plant-by-plant basis, and license renewal applicants may refer to and adopt the generic environmental impact findings in 10 C.F.R. Part 51, Subpart A, Appendix B, Table B-1; LBP-06-23, 64 NRC 257 (2006)
- failure of an applicant to include new and significant information concerning a Category 1 issue relating to dangers of high-density racking of spent fuel in its environmental report does not give rise to an admissible contention; LBP-06-20, 64 NRC 131 (2006)
- ENVIRONMENTAL REVIEW**
- a Part 51 license renewal environmental review has both a generic component and a plant-specific component and is focused on renewal-specific issues, rather than duplicating the review required for an initial license; CLI-06-24, 64 NRC 111 (2006)
- applicants and NRC Staff must assess certain site-specific, Category 2 environmental issues for license renewal; CLI-06-24, 64 NRC 111 (2006)
- the primary duties of NEPA fall on the NRC Staff in NRC proceedings, but the initial requirement to analyze the environmental impacts of an action, including license renewal, is directed to applicants; LBP-06-23, 64 NRC 257 (2006)
- EVIDENCE**
- at the admissibility stage, petitioner is not required to prove its contention or to provide all the evidence for its contention that may be required later in the proceeding; LBP-06-20, 64 NRC 131 (2006)
- there is a presumption that governmental officials, acting in their official capacities, have properly discharged their duties, and clear evidence is usually required to rebut this presumption; CLI-06-22, 64 NRC 37 (2006)
- FEDERAL WATER POLLUTION CONTROL ACT**
- NRC is barred from imposing or second-guessing effluent limitations or water quality certification requirements imposed by EPA or an authorized state, but it may address water quality matters in its assessment of the environmental impact of a license renewal; LBP-06-20, 64 NRC 131 (2006)
- FIFTH AMENDMENT**
- although the subject of an NRC enforcement proceeding may attempt to take advantage of his discovery rights in the civil proceeding to obtain information also useful in his criminal proceeding, that is no reason to deny him that discovery because he asserted his Fifth Amendment right not to respond to discovery requests directed to him, even if other procedural consequences might flow from that action; LBP-06-25, 64 NRC 367 (2006)
- FINAL ENVIRONMENTAL IMPACT STATEMENT**
- a cost-benefit analysis among alternatives must consider and weigh the environmental effects of the proposed action and the alternatives available for reducing or avoiding adverse environmental effects; LBP-06-19, 64 NRC 53 (2006)
- a description of the underlying purpose and need of a proposed project is required by NEPA; LBP-06-19, 64 NRC 53 (2006)
- a mitigation plan need not be legally enforceable, funded, or even in final form to comply with NEPA's procedural requirements; CLI-06-29, 64 NRC 417 (2006)
- although federal permits and exemptions must be mentioned in the FEIS, the absence of such mention does not render the FEIS invalid; LBP-06-19, 64 NRC 53 (2006)
- although Staff inadvertently omitted information about background radiation from the final environmental impact statement, but the information was made available to the public in the draft environmental impact statement and was taken into account by Staff in its NEPA analysis in the FEIS, intervenors

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- were not prejudiced nor was the correctness of the Staff's analysis undermined; LBP-06-19, 64 NRC 53 (2006)
- because blending down highly enriched uranium for reactor fuel would not promote applicant's primary purpose of maintaining the viability of a dwindling domestic uranium industry, it is outside the scope of reasonable alternatives that must be considered under NEPA; LBP-06-19, 64 NRC 53 (2006)
- benefits described by the project's purpose and need are among the factors that are weighed against the project's costs in striking the cost-benefit balance required by NEPA; LBP-06-19, 64 NRC 53 (2006)
- discussion of the no-action alternative is governed by a rule of reason and need not be exhaustive or inordinately detailed; LBP-06-19, 64 NRC 53 (2006)
- in its environmental review of a private applicant's proposed project, the agency may accord appropriate deference to the applicant's proposed siting and design plans; LBP-06-19, 64 NRC 53 (2006)
- in response to comments received, the FEIS may supplement, refine, or otherwise adapted the project alternatives; LBP-06-19, 64 NRC 53 (2006)
- intervenor's preference that the FEIS contain additional details on any particular issue is not, standing alone, probative of the FEIS's adequacy; LBP-06-19, 64 NRC 53 (2006)
- mitigation measures must be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated, but the EIS need not contain a complete mitigation plan; CLI-06-29, 64 NRC 417 (2006)
- NEPA imposes no obligation to select the most environmentally benign alternative; LBP-06-19, 64 NRC 53 (2006)
- Staff must consider measures to mitigate environmental impacts by examining alternatives available for reducing or avoiding adverse effects and must discuss the mitigation measures in sufficient detail to ensure that environmental consequences have been fairly evaluated; LBP-06-19, 64 NRC 53 (2006)
- the adjudicatory record and board decision and any Commission appellate decisions become, in effect, part of the FEIS; LBP-06-19, 64 NRC 53 (2006)
- the discussion of alternatives shall identify reasonable alternatives, present the environmental impacts of the proposal and the alternatives in comparative form, and include a final recommendation on the action to be taken; LBP-06-19, 64 NRC 53 (2006)
- the proper inquiry for determining the sufficiency of the purpose and need statement is whether the FEIS, read as a whole, includes a correct and adequate description of the purpose of and need for the proposed action; LBP-06-19, 64 NRC 53 (2006)
- the purpose of addressing possible mitigation measures is to ensure that the agency has taken a hard look at the potential environmental impacts of a proposed action; CLI-06-29, 64 NRC 417 (2006)
- the statement of purpose and need in the FEIS is independent of any specific project area, and thus a prior decision of the Commission adjudicating an intervenor's challenge to the statement of purpose and need applies with equal force to all areas of a proposed project; LBP-06-19, 64 NRC 53 (2006)
- when the purpose of a proposed action is to accomplish one thing, it makes no sense to consider the alternative ways by which another thing might be achieved; LBP-06-19, 64 NRC 53 (2006)
- FINALITY**
- a licensing board order is final for appellate purposes when it either disposes of at least a major segment of the case or terminates a party's right to participate, and rulings that do neither are interlocutory; CLI-06-18, 64 NRC 1 (2006)
- FINDING OF NO SIGNIFICANT IMPACT**
- to raise an admissible contention with respect to a Staff finding of no significant impact, petitioner need not demonstrate that there will be a significant environmental impact as a consequence of the proposed action, but it must allege facts that, if true, show that the proposed project may significantly degrade some human environmental factor; LBP-06-27, 64 NRC 438 (2006)
- FINDINGS OF FACT**
- a board's analysis of decommissioning cost estimates should be tailored to the specifics of the proceeding; CLI-06-22, 64 NRC 37 (2006)
- a board's examination of licensee's decommissioning cost estimates for reliability is consistent with its obligation to verify whether the estimates provided reasonable assurance for decommissioning funding; CLI-06-22, 64 NRC 37 (2006)

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- although the Commission has discretion to review all underlying factual issues *de novo*, it is disinclined to do so where a board has weighed arguments presented by experts and rendered reasonable, record-based factual findings; CLI-06-22, 64 NRC 37 (2006)
- GENERIC ENVIRONMENTAL IMPACT STATEMENT
- the GEIS for license renewal provides data supporting the table of Category 1 and 2 issues in 10 C.F.R. Part 51, Subpart A, Appendix B; LBP-06-23, 64 NRC 257 (2006)
- GENERIC ISSUES
- any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware must be included in the environmental report even if this concerns a Category 1 issue; LBP-06-23, 64 NRC 257 (2006)
- Category 1 issues need not be repeatedly assessed on a plant-by-plant basis, and license renewal applicants may in their ERs refer to and adopt the generic environmental impact findings found in 10 C.F.R. Part 51, Subpart A, Appendix B, Table B-1; LBP-06-23, 64 NRC 257 (2006)
- GOVERNMENT PARTIES
- a state that wishes to be a party in a proceeding for a facility located within its boundaries need not address the standing requirements; LBP-06-23, 64 NRC 257 (2006)
- GROUNDWATER CONTAMINATION
- a request for action regarding leaks or potential leaks of radioactively contaminated water into the ground is granted in part regarding power reactors and denied regarding research and test reactors; DD-06-3, 64 NRC 407 (2006)
- HEALTH AND SAFETY
- for early site permits, section 52.21, the notice requirements of section 2.104(b)(2), and the Notice of Hearing itself outline a board's review obligation; LBP-06-28, 64 NRC 460 (2006)
- renewal applicants must demonstrate that they will adequately manage the detrimental effects of aging for all important components and structures, with attention, for example, to metal fatigue, erosion, corrosion, thermal and radiation embrittlement, microbiologically induced effects, creep, and shrinkage; CLI-06-24, 64 NRC 111 (2006)
- review of a license renewal application does not reopen issues relating to a plant's current licensing basis, or any other issues that are subject to routine and ongoing regulatory oversight and enforcement; CLI-06-24, 64 NRC 111 (2006)
- the Part 54 safety review is limited to those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs; CLI-06-24, 64 NRC 111 (2006)
- to the extent that any analyses performed during the initial licensing process were limited to the initial 40-year license period, a license renewal applicant must show that it has reassessed these time-limited aging analyses and that these analyses remain valid for the period of extended operation; CLI-06-24, 64 NRC 111 (2006)
- HEARING PROCEDURES
- a board, in its sound discretion, must determine the type of hearing procedures most appropriate for the specific contentions before it; LBP-06-20, 64 NRC 131 (2006)
- selection of appropriate procedures in a license renewal proceeding is a contention-by-contention matter, dependent on the nature of the specific issues involved in the contention; LBP-06-20, 64 NRC 131 (2006)
- the Atomic Energy Act does not give a state an absolute right of cross-examination, but requires only that the Commission shall afford reasonable opportunity for state representatives to interrogate witnesses; LBP-06-20, 64 NRC 131 (2006)
- HEARING RIGHTS
- NRC must provide a hearing upon the request of any person whose interest may be affected by the proceeding; LBP-06-23, 64 NRC 257 (2006)
- HIGH-ENRICHED URANIUM
- because blending down HEU for reactor fuel would not promote applicant's primary purpose of maintaining the viability of a dwindling domestic uranium industry, it is outside the scope of reasonable alternatives that must be considered under NEPA; LBP-06-19, 64 NRC 53 (2006)
- IMMEDIATE EFFECTIVENESS
- an unexplained lapse of several years between the Staff's completion of a thorough investigation and its initiation of an immediately effective enforcement order may jeopardize both public confidence in

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- government decisionmaking and public protection from asserted safety threats, and may require an explanation if the immediate effectiveness of the order were to be challenged; LBP-06-26, 64 NRC 431 (2006)
- Staff may make an enforcement order immediately effect on the basis of public health and safety or a willful violation; LBP-06-26, 64 NRC 431 (2006)
- INDEPENDENT SPENT FUEL STORAGE INSTALLATION**  
applicant does not need an NRC license for construction activity, but proceeds with construction at its own risk; CLI-06-23, 64 NRC 107 (2006); LBP-06-27, 64 NRC 399 (2006)
- INJUNCTIVE RELIEF**  
an injunction is an equitable remedy, not a remedy that issues as of course; LBP-06-27, 64 NRC 399 (2006)  
as litigation moves forward or terminates, the equities that traditionally govern stays or injunctive relief may change; CLI-06-23, 64 NRC 107 (2006)  
the bases are irreparable injury and inadequacy of legal remedies, and in each case, a court must balance the competing claims of injury and must consider the effect on each party of the granting or withholding of the requested relief; LBP-06-27, 64 NRC 399 (2006)  
where, in weighing the balance of harms, injury to the environment is not at all probable, an injunction is not appropriate; LBP-06-27, 64 NRC 399 (2006)
- INJURY IN FACT**  
to establish standing, petitioner must show (among other things) that its potential injury is fairly traceable to a grant of the application; CLI-06-21, 64 NRC 30 (2006)  
to qualify for standing, injury to a petitioner may be either actual or threatened, but must lie arguably within the zone of interests protected by the statutes governing the proceeding; LBP-06-23, 64 NRC 257 (2006)  
See also Economic Injury
- INTERESTED STATE PARTICIPATION**  
the representative of an interested governmental entity participating under section 2.315(c) shall identify those contentions on which it will participate in advance of any hearing held; LBP-06-20, 64 NRC 131 (2006)
- INTERPRETATION**  
the word "significantly" as used in the NEPA process describes the significance of environmental impacts in several contexts, including the locality; CLI-06-29, 64 NRC 417 (2006)
- INTERVENTION**  
a petitioner must, in addition to demonstrating standing, submit at least one contention meeting the pleading requirements of 10 C.F.R. § 2.309(f)(1); LBP-06-23, 64 NRC 257 (2006)  
NRC must provide a hearing upon the request of any person whose interest may be affected by the proceeding; LBP-06-23, 64 NRC 257 (2006)
- INTERVENTION PETITIONS**  
petitioner must demonstrate standing and proffer at least one admissible contention; CLI-06-24, 64 NRC 111 (2006)
- INTERVENTION PETITIONS, LATE-FILED**  
failure to carefully read the governing procedural regulations does not constitute good cause for accepting a late-filed petition; CLI-06-21, 64 NRC 30 (2006)  
filings that are nearly 3 months late must satisfy not only the requirements to demonstrate standing and submit at least one admissible contention, but also must satisfy the stringent requirements for untimely filings and late-filed contentions; CLI-06-21, 64 NRC 30 (2006)
- INTERVENTION RULINGS**  
in passing upon whether an intervention petition should be granted, it is not the function of a licensing board to reach the merits of any contention contained therein; LBP-06-22, 64 NRC 229 (2006)
- IRREPARABLE INJURY**  
there is no presumption that irreparable damage occurs whenever there is a failure to adequately evaluate the environmental impact of a proposed project; LBP-06-27, 64 NRC 399 (2006)
- LABOR ISSUES**  
although the Commission is disinclined to step into the middle of a labor dispute or involve itself in the personnel decisions of licensees, it has recognized that there may be cases where employment-related

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contentions are closely tied to specific health-and-safety concerns or to potential violations of NRC rules that can be admitted for a hearing; CLI-06-21, 64 NRC 30 (2006)

### LAW OF THE CASE

subject to limited exceptions, legal determinations made on appeal in a case are controlling precedent for all later decisions in the same case; LBP-06-19, 64 NRC 53 (2006)

the statement of purpose and need in the final environmental impact statement is independent of any specific project area, and thus a prior decision of the Commission adjudicating an intervenor's challenge to the statement of purpose and need applies with equal force to all areas of a proposed project; LBP-06-19, 64 NRC 53 (2006)

### LICENSE RENEWAL APPLICATIONS

applicant must include an aging management review for the drywell shell; LBP-06-22, 64 NRC 229 (2006)

the Commission shall determine whether or not the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable; LBP-06-23, 64 NRC 257 (2006)

### LICENSE RENEWAL PROCEEDINGS

a contention alleging that the applicant's proposed monitoring techniques are not adequate because they are based on computer models that were not benchmarked is admissible; LBP-06-20, 64 NRC 131 (2006)

a contention questioning whether particular bits of information taken from an emergency plan are sufficiently accurate for use in computing the health and safety consequences of a severe accident, as an environmental issue, is admissible; LBP-06-23, 64 NRC 257 (2006)

a contention that alleges that the applicant's plan to manage metal fatigue is too vague and is really only a "plan to develop a plan" raises an admissible and material issue as to whether the applicant has met its requirement to demonstrate that the effects of aging will be adequately managed; LBP-06-20, 64 NRC 131 (2006)

a contention that applicant has failed to identify non-safety-related systems, structures, and components in the security area whose failure could prevent satisfactory accomplishment of the functions of safety-related systems, structures, and components is not admissible; LBP-06-20, 64 NRC 131 (2006)

a contention that applicant's aging management program fails to adequately assure the continued integrity of the drywell liner for the requested license extension is denied; LBP-06-23, 64 NRC 257 (2006)

a contention that applicant's aging management program is inadequate with regard to aging management of buried pipes and tanks that contain radioactively contaminated water because it does not provide for monitoring wells that would detect leakage is admitted; LBP-06-23, 64 NRC 257 (2006)

a contention that applicant's severe accident mitigation alternatives analysis is deficient regarding input data on evacuation times, economic consequences, and meteorological patterns, resulting in incorrect conclusions about the costs versus benefits of possible mitigation alternatives, is admitted; LBP-06-23, 64 NRC 257 (2006)

a contention that new and significant information about cancer rates in communities around a plant shows that another 20 years of operations may result in greater offsite radiological impacts on human health than was previously known is denied; LBP-06-23, 64 NRC 257 (2006)

a contention that raises the question as to whether an NPDES permit that will expire before the proposed 20-year NRC license renewal would even take effect is admissible and material; LBP-06-20, 64 NRC 131 (2006)

a contention that raises the question as to whether requirements of 10 C.F.R. 51.53(c)(3)(ii)(B) supplement the more general requirements of 10 C.F.R. 51.45(c) and 51.53(c), or instead displace and supplant the latter requirements, raises an admissible and material issue of interpretation and construction of the regulations; LBP-06-20, 64 NRC 131 (2006)

a petitioner who fails to satisfy the contention pleading requirements in its initial contention submission may not use its reply to rectify those inadequacies or to raise new arguments, but may use the reply to flesh out contentions that have already met the pleading requirements; LBP-06-20, 64 NRC 131 (2006)

a request that the Commission require licensees to return spent fuel pools to their original low-density storage configuration and to use dry storage for any excess fuel is not appropriate for litigation; CLI-06-26, 64 NRC 225 (2006)

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- any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware must be included in the environmental report even if this concerns a Category 1 issue; LBP-06-23, 64 NRC 257 (2006)
- Category 1, or generic, issues need not be repeatedly assessed on a plant-by-plant basis, and license renewal applicants may in their ERs refer to and adopt the generic environmental impact findings found in 10 C.F.R. Part 51, Subpart A, Appendix B, Table B-1; LBP-06-23, 64 NRC 257 (2006)
- Category 2, or plant-specific, issues are within the scope of license renewal, and applicants must provide a plant-specific review of them; LBP-06-23, 64 NRC 257 (2006)
- contentions that applicant's ER fails to satisfy NEPA because it does not address the environmental impacts of severe spent fuel pool accidents, and fails to address severe accident mitigation alternatives that would reduce the potential for spent fuel pool water loss and fires, are found inadmissible; LBP-06-23, 64 NRC 257 (2006)
- emergency planning need not be reexamined within the context of license renewal; LBP-06-20, 64 NRC 131 (2006); LBP-06-23, 64 NRC 257 (2006)
- intervention petitioners must demonstrate standing and proffer at least one admissible contention; CLI-06-24, 64 NRC 111 (2006)
- issues related to the environmental impact of onsite spent fuel storage after the license renewal term are covered by NRC's Waste Confidence Rule and are outside the scope of a license renewal proceeding because contentions may not challenge a regulation; LBP-06-20, 64 NRC 131 (2006)
- issues relating to a plant's current licensing basis are ordinarily beyond the scope of a license renewal review because those issues already are monitored, reviewed, and commonly resolved as needed by ongoing regulatory oversight; LBP-06-22, 64 NRC 229 (2006)
- Part 54 addresses safety-related issues and Part 51 addresses the environmental aspects; LBP-06-23, 64 NRC 257 (2006)
- selection of appropriate hearing procedures is a contention-by-contention matter, dependent on the nature of the specific issues involved in the contention; LBP-06-20, 64 NRC 131 (2006)
- since a license amendment involves a facility with ongoing operations, a petitioner's challenge must show that the amendment will cause a distinct new harm or threat apart from the activities already licensed; LBP-06-22, 64 NRC 229 (2006)
- the Atomic Energy Act does not give a state an absolute right of cross-examination, but requires only that the Commission shall afford reasonable opportunity for state representatives to interrogate witnesses; LBP-06-20, 64 NRC 131 (2006)
- the scope of the proceeding is limited to a review of the plant structures and components that will require an aging management review for the period of extended operation and the plant's systems, structures, and components that are subject to an evaluation of time-limited aging analyses; LBP-06-22, 64 NRC 229 (2006)
- the term "severe accidents" encompasses only reactor accidents and not spent fuel pool accidents, which fall within the analysis of the generic Category 1 issue of onsite storage of spent fuel; LBP-06-23, 64 NRC 257 (2006)
- LICENSE RENEWALS**
- a Part 51 environmental review has both a generic component and a plant-specific component; CLI-06-24, 64 NRC 111 (2006)
- a waiver of 10 C.F.R. 2.335 is necessary to litigate an applicant's failure to include new and significant information concerning a Category 1 issue in its environmental report; LBP-06-20, 64 NRC 131 (2006)
- although a contention regarding the risks of terrorism related to the high-density racking of spent fuel in pools is new and significant information concerning a Category 1 matter, the contention is not admissible; LBP-06-20, 64 NRC 131 (2006)
- an issue can be related to plant aging and still not warrant safety review if the issue is adequately dealt with by regulatory processes on an ongoing basis; LBP-06-23, 64 NRC 257 (2006)
- applicant must provide additional analysis of even a Category 1 issue if new and significant information has surfaced; LBP-06-20, 64 NRC 131 (2006)
- applicant's environmental report must contain a description of the proposed action, including plans to modify the facility or its administrative control procedures, and must describe in detail the modifications directly affecting the environment or affecting plant effluents that affect the environment; LBP-06-23, 64 NRC 257 (2006)

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- applicants must demonstrate that they will adequately manage the detrimental effects of aging for all important components and structures, with attention, for example, to metal fatigue, erosion, corrosion, thermal and radiation embrittlement, microbiologically induced effects, creep, and shrinkage; CLI-06-24, 64 NRC 111 (2006)
- failure of an applicant to include new and significant information concerning a Category 1 issue regarding the dangers of high-density racking of spent fuel in its environmental report does not give rise to an admissible contention; LBP-06-20, 64 NRC 131 (2006)
- federal agencies must include in every recommendation or report on major federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on the environmental impact of the proposed action; LBP-06-23, 64 NRC 257 (2006)
- NRC is barred from imposing or second-guessing effluent limitations or water quality certification requirements imposed by EPA or an authorized state, but it may address water quality matters in its assessment of environmental impacts; LBP-06-20, 64 NRC 131 (2006)
- NRC's safety review is focused upon those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs; LBP-06-23, 64 NRC 257 (2006)
- review of a renewal application does not reopen issues relating to a plant's current licensing basis, or any other issues that are subject to routine and ongoing regulatory oversight and enforcement; CLI-06-24, 64 NRC 111 (2006)
- Staff's final supplemental environmental impact statement must take account of public comments concerning new and significant information on Category 1 findings; LBP-06-20, 64 NRC 131 (2006)
- the generic environmental impact statement provides data supporting the table of Category 1 and 2 issues in 10 C.F.R. Part 51, Subpart A, Appendix B; LBP-06-23, 64 NRC 257 (2006)
- the Part 54 safety review is limited to those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs; CLI-06-24, 64 NRC 111 (2006)
- the primary duties of NEPA fall on the NRC Staff in NRC proceedings, but the initial requirement to analyze the environmental impacts of an action is directed to applicants; LBP-06-23, 64 NRC 257 (2006)
- the statutory requirement that a federal agency contemplating a major action prepare an EIS serves NEPA's action-forcing purpose in two important respects; LBP-06-23, 64 NRC 257 (2006)
- to the extent that any analyses performed during the initial licensing process were limited to the initial 40-year license period, applicant must show that it has reassessed these time-limited aging analyses and that these analyses remain valid for the period of extended operation; CLI-06-24, 64 NRC 111 (2006)
- when preparing the supplemental environmental impact statement, Staff must consider any significant new information related to Category 1 issues; LBP-06-20, 64 NRC 131 (2006)
- LICENSE TRANSFER PROCEEDINGS**
- although the Commission is disinclined to step into the middle of a labor dispute or involve itself in the personnel decisions of licensees, it has recognized that there may be cases where employment-related contentions are closely tied to specific health-and-safety concerns or to potential violations of NRC rules that can be admitted for a hearing; CLI-06-21, 64 NRC 30 (2006)
- LICENSEE CHARACTER**
- to be litigable, there must be some direct and obvious relationship between licensee character issues and the licensing action in dispute; CLI-06-22, 64 NRC 37 (2006)
- LICENSES**
- an NRC license is unnecessary for construction activity on an independent spent fuel storage installation; CLI-06-23, 64 NRC 107 (2006)
- LICENSING BOARD DECISIONS**
- in uncontested cases, boards are expected to issue their final initial decisions generally within 4 to 6 months of the Staff's safety evaluation report and final environmental impact statement issuances; CLI-06-20, 64 NRC 15 (2006)
- on appeal, the Commission usually defers to boards' fact-based findings; CLI-06-19, 64 NRC 9 (2006); CLI-06-29, 64 NRC 417 (2006)
- the adjudicatory record and board decision and any Commission appellate decisions become, in effect, part of the final environmental impact statement; LBP-06-19, 64 NRC 53 (2006)
- the Commission gives substantial deference to boards' determinations on threshold issues, such as standing and contention admissibility; CLI-06-24, 64 NRC 111 (2006)

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the Commission regularly affirms board decisions on the admissibility of contentions where the appellant points to no error of law or abuse of discretion; CLI-06-24, 64 NRC 111 (2006)

### LICENSING BOARDS

boards must perform two types of inquiries with respect to safety matters in uncontested early site permit proceedings; LBP-06-28, 64 NRC 460 (2006)

boards should conduct a simple sufficiency review of uncontested issues; LBP-06-28, 64 NRC 460 (2006)

boards should not second-guess underlying technical or factual findings by the NRC Staff; LBP-06-28, 64 NRC 460 (2006)

for a licensing board to review a settlement agreement for compliance with agency regulations, and to evaluate whether the agreement is plainly in the public interest, the wording of the agreement must be clear enough for the board to ascertain unambiguously what its terms signify; LBP-06-26, 64 NRC 431 (2006)

for early site permits, section 52.21, the notice requirements of section 2.104(b)(2), and the Notice of Hearing itself outline a board's review obligation; LBP-06-28, 64 NRC 460 (2006)

it is not the duty of an adjudicative body to dig through the reams of paper that litigants have deposited to construct and develop their arguments; LBP-06-19, 64 NRC 53 (2006)

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-06-28, 64 NRC 460 (2006)

the three NEPA-related factors that the board is required to address in uncontested early site permit proceedings are discussed; LBP-06-28, 64 NRC 460 (2006)

where the Standard Review Plan had not been followed, no specific Regulatory Guide was applicable, a Regulatory Guide required adaptation, or the Staff's logic was incomplete or unclear, the Board sought a thorough explanation of the Staff's rationale for the process it ultimately adopted along with its conclusions, and examined that process and those conclusions to ensure they were well founded in fact and logic; LBP-06-28, 64 NRC 460 (2006)

### LICENSING BOARDS, AUTHORITY

a board, in its sound discretion, must determine the type of hearing procedures most appropriate for the specific contentions before it; LBP-06-20, 64 NRC 131 (2006)

boards have discretion to reframe a contention for purposes of clarity, succinctness, and a more efficient proceeding; LBP-06-22, 64 NRC 229 (2006)

settlement shall be subject to approval by a board, which may order such adjudication of the issues as it may deem to be required in the public interest; LBP-06-21, 64 NRC 219 (2006)

### LICENSING, PERFORMANCE-BASED

NRC uses performance-based licensing as an additional way to decrease the administrative burden of regulation while ensuring the continued protection of public health and safety; LBP-06-19, 64 NRC 53 (2006)

### MANDATORY HEARINGS

a board may ask Staff to produce ACRS documents that it reviewed in conducting its license application review, but Staff need not obtain additional ACRS documents that it never saw in conducting its review; CLI-06-20, 64 NRC 15 (2006)

a board shall determine whether, taking into consideration the site criteria contained in 10 C.F.R. Part 100, a reactor having characteristics that fall within the parameters for the site, and which meets the terms and conditions proposed by the Staff in the Safety Evaluation Report, can be constructed and operated without undue risk to the health and safety of the public; LBP-06-28, 64 NRC 460 (2006)

a board's request for a list of all regulatory guides applicable to the Staff's analysis of a license application, as well as a list of all instances where potentially applicable regulatory guides were not used, is approved; CLI-06-20, 64 NRC 15 (2006)

because an early site permit is a type of construction permit, a mandatory hearing is required by the Atomic Energy Act and thus the case will continue as an uncontested proceeding; LBP-06-24, 64 NRC 360 (2006)

boards should conduct a simple sufficiency review of uncontested issues; LBP-06-28, 64 NRC 460 (2006)

boards should not second-guess underlying technical or factual findings by the NRC Staff; LBP-06-28, 64 NRC 460 (2006)

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- for uncontested early site permit applications, section 52.21, the notice requirements of section 2.104(b)(2), and the Notice of Hearing itself outline a board's review obligation; LBP-06-28, 64 NRC 460 (2006)
- in uncontested cases, boards are expected to issue their final initial decisions generally within 4 to 6 months of the Staff's safety evaluation report and final environmental impact statement issuances; CLI-06-20, 64 NRC 15 (2006)
- licensing boards must perform two types of inquiries with respect to safety matters in uncontested early site permit proceedings; LBP-06-28, 64 NRC 460 (2006)
- NRC Staff is not required to provide a board with information relevant to instances when the Staff reviewer disagreed with his supervisor with respect to the license application; CLI-06-20, 64 NRC 15 (2006)
- 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-06-28, 64 NRC 460 (2006)
- the board's demand for a complete narrative report summarizing the Staff's review of the license application is vacated and the board is directed to focus on specific issues and Staff is to provide indexes as a means to summarize the documents on which it relied for its review; CLI-06-20, 64 NRC 15 (2006)
- the three NEPA-related factors that the board is required to address in uncontested early site permit proceedings are discussed; LBP-06-28, 64 NRC 460 (2006)
- under its inherent supervisory power over adjudications, the Commission accepts review because licensing boards are conducting the first mandatory hearings in more than two decades and additional Commission guidance is deemed appropriate; CLI-06-20, 64 NRC 15 (2006)
- where the Standard Review Plan had not been followed, no specific Regulatory Guide was applicable, a Regulatory Guide required adaptation, or the Staff's logic was incomplete or unclear, the Board sought a thorough explanation of the Staff's rationale for the process it ultimately adopted along with its conclusions, and examined that process and those conclusions to ensure they were well founded in fact and logic; LBP-06-28, 64 NRC 460 (2006)
- whether NRC Staff should be required to produce four paper copies of relevant documents is a matter best left to a board's discretion; CLI-06-20, 64 NRC 15 (2006)
- MATERIALS LICENSES**
- performance-based licensing is fully consistent with sound NEPA practice and does not run counter to any agency mandate contained in the Atomic Energy Act or any established Commission regulation; LBP-06-19, 64 NRC 53 (2006)
- MONITORING**
- a contention alleging that the applicant's proposed monitoring techniques are not adequate because they are based on computer models that were not benchmarked is admissible; LBP-06-20, 64 NRC 131 (2006)
- MOTIONS FOR RECONSIDERATION**
- movant must show a compelling circumstance, such as the existence of a clear and material error in a decision, which could not have reasonably been anticipated and that renders the decision invalid; LBP-06-27, 64 NRC 399 (2006)
- petitioners should not use this venue merely to re-argue matters that the Commission already has considered but rejected; LBP-06-27, 64 NRC 399 (2006)
- raising new arguments for the first time is prohibited; LBP-06-27, 64 NRC 399 (2006)
- NATIONAL ENVIRONMENTAL POLICY ACT**
- a contention that raises the question as to whether requirements of 10 C.F.R. 51.53(c)(3)(ii)(B) supplement the more general requirements of 10 C.F.R. 51.45(c) and 51.53(c), or instead displace and supplant the latter requirements, raises an admissible and material issue of interpretation and construction of the regulations; LBP-06-20, 64 NRC 131 (2006)
- a cost-benefit analysis among alternatives must consider and weigh the environmental effects of the proposed action and the alternatives available for reducing or avoiding adverse environmental effects; LBP-06-19, 64 NRC 53 (2006)

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a federal agency must study, develop, and describe appropriate alternatives to the recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources; LBP-06-28, 64 NRC 460 (2006)

a mitigation plan need not be legally enforceable, funded, or even in final form to comply with NEPA's procedural requirements; CLI-06-29, 64 NRC 417 (2006)

agencies need not elevate environmental concerns over other appropriate considerations, but rather must only take a hard look at the environmental consequences before taking a major action; LBP-06-19, 64 NRC 53 (2006)

all federal agencies must use a systematic, interdisciplinary approach that will ensure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking that may have an impact on the human environment; LBP-06-28, 64 NRC 460 (2006)

although federal permits and exemptions must be mentioned in the final environmental impact statement, the absence of such mention does not render the FEIS invalid; LBP-06-19, 64 NRC 53 (2006)

although NRC will consider the fact that an applicant is subject to, and compliant with, other environmental laws and permits, it must still perform an environmental assessment prior to any major federal action significantly affecting the environment; LBP-06-20, 64 NRC 131 (2006)

although Staff inadvertently omitted information about background radiation from the final environmental impact statement, but the information was made available to the public in the draft environmental impact statement and was taken into account by Staff in its NEPA analysis in the FEIS, intervenors were not prejudiced nor was the correctness of the Staff's analysis undermined; LBP-06-19, 64 NRC 53 (2006)

an agency must consider every significant aspect of the environmental impact of a proposed action and inform the public that it has, in fact, considered environmental concerns in its decisionmaking process; LBP-06-19, 64 NRC 53 (2006)

an agency must consult with and obtain the comments of any federal agency that has jurisdiction by law or special expertise with respect to any environmental impact involved; LBP-06-28, 64 NRC 460 (2006)

applicant has no obligation to select the most environmentally benign alternative; LBP-06-19, 64 NRC 53 (2006)

because blending down highly enriched uranium for reactor fuel would not promote applicant's primary purpose of maintaining the viability of a dwindling domestic uranium industry, it is outside the scope of reasonable alternatives that must be considered; LBP-06-19, 64 NRC 53 (2006)

cumulative impacts analysis looks to whether the proposed action's impacts will be significantly enhanced by already existing environmental effects from prior actions; LBP-06-19, 64 NRC 53 (2006)

discussion of the no-action alternative in a final environmental impact statement is governed by a rule of reason and need not be exhaustive or inordinately detailed; LBP-06-19, 64 NRC 53 (2006)

federal agencies must include in every recommendation or report on major federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on the environmental impact of the proposed action; LBP-06-23, 64 NRC 257 (2006)

in an environmental impact statement, federal agencies must address the environmental impact of the proposed action, any adverse environmental effects that cannot be avoided, alternatives to the proposed action, the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitments of resources that would be involved in the proposed action; LBP-06-28, 64 NRC 460 (2006)

in determining whether to prepare an environmental impact statement, the federal agency shall prepare an environmental assessment, which will briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact; LBP-06-27, 64 NRC 438 (2006)

in its environmental review of a private applicant's proposed project, the agency may accord appropriate deference to the applicant's proposed siting and design plans; LBP-06-19, 64 NRC 53 (2006)

intervenors' preference that the final environmental impact statement contain additional details on any particular issue is not, standing alone, probative of the FEIS's adequacy; LBP-06-19, 64 NRC 53 (2006)

new information that might emerge following issuance of an environmental impact statement requires a supplement to the impacts analysis if the new information presents a seriously different picture of the environmental impact of the proposed project from what was previously envisioned; CLI-06-29, 64 NRC 417 (2006)

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- NRC is barred from imposing or second-guessing effluent limitations or water quality certification requirements imposed by EPA or an authorized state, but it may address water quality matters in its assessment of the environmental impact of a license renewal; LBP-06-20, 64 NRC 131 (2006)
- NRC's categorical refusal to consider the environmental effects of a terrorist attack is found to be unreasonable; CLI-06-23, 64 NRC 107 (2006)
- preparation of an environmental impact statement is required for all major federal actions significantly affecting the quality of the human environment; LBP-06-27, 64 NRC 438 (2006)
- pursuant to environmental justice principles, each agency should identify and address, as appropriate, any disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority or low-income populations; LBP-06-19, 64 NRC 53 (2006)
- Staff must consider measures to mitigate environmental impacts by examining alternatives available for reducing or avoiding adverse effects and must discuss the mitigation measures in sufficient detail to ensure that environmental consequences have been fairly evaluated; LBP-06-19, 64 NRC 53 (2006)
- Staff shall supplement an environmental impact statement if there are substantial changes in the proposed action that are relevant to environmental concerns or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; LBP-06-19, 64 NRC 53 (2006)
- the adjudicatory record and board decision and any Commission appellate decisions become, in effect, part of the final environmental impact statement; LBP-06-19, 64 NRC 53 (2006)
- the discussion of alternatives in the final environmental impact statement shall identify reasonable alternatives, present the environmental impacts of the proposal and the alternatives in comparative form, and include a final recommendation on the action to be taken; LBP-06-19, 64 NRC 53 (2006)
- the final environmental impact statement is required to include a description of the underlying purpose and need of a proposed project; LBP-06-19, 64 NRC 53 (2006)
- the proper inquiry for determining the sufficiency of the purpose and need statement is whether the final environmental impact statement, read as a whole, includes a correct and adequate description of the purpose of and need for the proposed action; LBP-06-19, 64 NRC 53 (2006)
- the statement of purpose and need in the final environmental impact statement is independent of any specific project area, and thus a prior decision of the Commission adjudicating an intervenor's challenge to the statement of purpose and need applies with equal force to all areas of a proposed project; LBP-06-19, 64 NRC 53 (2006)
- the statute does not mandate particular results, but simply prescribes the necessary process; LBP-06-19, 64 NRC 53 (2006)
- the word "significantly" as used in the NEPA process describes the significance of environmental impacts in several contexts, including the locality; CLI-06-29, 64 NRC 417 (2006)
- when the purpose of a proposed action is to accomplish one thing, it makes no sense to consider the alternative ways by which another thing might be achieved; LBP-06-19, 64 NRC 53 (2006)
- NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT**
- although NRC will consider the fact that an applicant is subject to, and compliant with, other environmental laws and permits, it must still perform an environmental assessment prior to any major federal action significantly affecting the environment; LBP-06-20, 64 NRC 131 (2006)
- the question as to whether an NPDES permit that will expire before the proposed 20-year NRC license renewal would even take effect raises an admissible and material issue of law and fact; LBP-06-20, 64 NRC 131 (2006)
- NRC POLICY**
- questions of law and policy call for a Commission determination; LBP-06-28, 64 NRC 404 (2006)
- the Commission has a longstanding policy of supporting settlements; CLI-06-18, 64 NRC 1 (2006)
- NRC PROCEEDINGS**
- parties are generally entitled to obtain, through discovery and other pretrial activities, the fullest possible knowledge of the issues and facts before trial; LBP-06-25, 64 NRC 367 (2006)
- NRC STAFF REVIEW**
- a board may ask Staff to produce ACRS documents that it reviewed in conducting its license application review, but Staff need not obtain additional ACRS documents that it never saw in conducting its review; CLI-06-20, 64 NRC 15 (2006)

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although Staff inadvertently omitted information about background radiation from the final environmental impact statement, but the information was made available to the public in the draft environmental impact statement and was taken into account by Staff in its NEPA analysis in the FEIS, intervenors were not prejudiced nor was the correctness of the Staff's analysis undermined; LBP-06-19, 64 NRC 53 (2006)

Staff is not required to provide a board with information relevant to instances when the Staff reviewer disagreed with his supervisor with respect to the license application; CLI-06-20, 64 NRC 15 (2006)

Staff is to provide indexes as a means to summarize the documents on which it relied as a means to assist the board in its mandatory hearing on a license application; CLI-06-20, 64 NRC 15 (2006)

Staff's final supplemental environmental impact statement on a license renewal must take account of public comments concerning new and significant information on Category 1 findings; LBP-06-20, 64 NRC 131 (2006)

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-06-28, 64 NRC 460 (2006)

the adequacy of the applicant's license application, not the NRC Staff's safety evaluation, is the safety issue in any licensing proceeding, and contentions on the adequacy of the content of the Safety Evaluation Report are not cognizable in a proceeding; LBP-06-27, 64 NRC 438 (2006)

the primary duties of NEPA fall on the NRC Staff in NRC proceedings, but the initial requirement to analyze the environmental impacts of an action, including license renewal, is directed to applicants; LBP-06-23, 64 NRC 257 (2006)

when preparing the supplemental environmental impact statement for a license renewal, Staff must consider any significant new information related to Category 1 issues; LBP-06-20, 64 NRC 131 (2006) where the Standard Review Plan had not been followed, no specific Regulatory Guide was applicable, a Regulatory Guide required adaptation, or the Staff's logic was incomplete or unclear, the Board sought a thorough explanation of the Staff's rationale for the process it ultimately adopted along with its conclusions, and examined that process and those conclusions to ensure they were well founded in fact and logic; LBP-06-28, 64 NRC 460 (2006)

whether NRC Staff should be required to produce four paper copies of relevant documents is a matter best left to a board's discretion; CLI-06-20, 64 NRC 15 (2006)

### NUCLEAR POWER PLANTS

a request for action regarding leaks or potential leaks of radioactively contaminated water into the ground is granted in part; DD-06-3, 64 NRC 407 (2006)

### NUCLEAR REGULATORY COMMISSION

although NRC is not bound by CEQ regulations that it has not expressly adopted, it gives those regulations substantial deference; LBP-06-19, 64 NRC 53 (2006)

NEPA requires that an agency consider every significant aspect of the environmental impact of a proposed action and inform the public that it has, in fact, considered environmental concerns in its decisionmaking process; LBP-06-19, 64 NRC 53 (2006)

See also NRC Policy; NRC Staff Review

### NUCLEAR REGULATORY COMMISSION, AUTHORITY

although the Commission has discretion to review all underlying factual issues *de novo*, it is disinclined to do so where a board has weighed arguments presented by experts and rendered reasonable, record-based factual findings; CLI-06-22, 64 NRC 37 (2006); CLI-06-29, 64 NRC 417 (2006)

NRC has maximum procedural leeway in how it addresses the environmental impacts of terrorism; LBP-06-27, 64 NRC 399 (2006)

questions of law and policy call for a Commission determination; LBP-06-28, 64 NRC 404 (2006)

under its inherent supervisory power over adjudications, the Commission accepts review because licensing boards are conducting the first mandatory hearings in more than two decades and additional Commission guidance is deemed appropriate; CLI-06-20, 64 NRC 15 (2006)

### OPERATING LICENSE AMENDMENTS

since a license amendment involves a facility with ongoing operations, a petitioner's challenge must show that the amendment will cause a distinct new harm or threat apart from the activities already licensed; LBP-06-22, 64 NRC 229 (2006)

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### PERMITS

although NRC will consider the fact that an applicant is subject to, and compliant with, other environmental laws and permits, it must still perform an environmental assessment prior to any major federal action significantly affecting the environment; LBP-06-20, 64 NRC 131 (2006)

### PERSONAL PRIVACY INTEREST

although an initial position of protecting privacy may be founded on mere theoretical constructs, when a fact-based challenge is made, concrete or specific analysis is needed to effectively counter the challenge and to establish the privacy interests involved; LBP-06-25, 64 NRC 367 (2006)

NRC's regulatory scheme for balancing privacy interests arising in a law enforcement context against the need for party discovery combines elements of both FOIA and the Federal Rules of Civil Procedure; LBP-06-25, 64 NRC 367 (2006)

privacy interest depends on such specific factors as the impact of the information's disclosure upon particular individuals and in particular circumstances; LBP-06-25, 64 NRC 367 (2006)

the interests for which protection is sought can be amply preserved by a protective order that limits the disclosures to those involved in the litigation and thus having a need to know; LBP-06-25, 64 NRC 367 (2006)

the law generally recognizes a personal privacy interest not to have allegations of unlawful activity publicly disseminated after they have been shown to be insubstantial, but a privacy interest does not exist as a generalized theory; LBP-06-25, 64 NRC 367 (2006)

when an investigation is open and notorious, the interview transcripts are not confidential, and the public has constructive knowledge that those interviewed had a sufficient relationship to the root problem to warrant being interviewed, the right of personal privacy being asserted is weak compared to the privacy rights in other circumstances of unsubstantiated allegation; LBP-06-25, 64 NRC 367 (2006)

where a protective order precludes public disclosure, the strength of the privacy interest diminishes because any threatened harm in releasing the information can be virtually eliminated; LBP-06-25, 64 NRC 367 (2006)

### PRIVILEGE

a privilege that is not claimed is waived; LBP-06-25, 64 NRC 367 (2006)

an assertion that material can be withheld must expressly state the specific privilege being claimed; LBP-06-25, 64 NRC 367 (2006)

if insufficient information is provided to support a claim of privilege, the privilege may be denied; LBP-06-25, 64 NRC 367 (2006)

qualified materials may be excluded from discovery, depending on the particular circumstances presented; LBP-06-25, 64 NRC 367 (2006)

sufficient information for assessing the claim of privilege or protected status of documents withheld from discovery must be provided to the requesting party; LBP-06-25, 64 NRC 367 (2006)

the greater the interest protected, the more compelling the need and the other circumstances must be to overcome it; LBP-06-25, 64 NRC 367 (2006)

where the privilege and the need may be equally weak, but the privilege can be protected by other means, adjudicators return to the norms of full and open discovery, so that relevancy, not need, becomes the determinative standard; LBP-06-25, 64 NRC 367 (2006)

See also Deliberative Process Privilege

### PROPERTY INTERESTS

the subject of an enforcement action has a property interest in his employment-related license sufficient to invoke the procedural protections of the Due Process Clause, the vindication of which invokes a public interest; LBP-06-25, 64 NRC 367 (2006)

### PROTECTIVE ORDERS

the privacy interests for which protection is sought can be amply preserved by a protective order that limits the disclosures to those involved in the litigation and thus having a need to know; LBP-06-25, 64 NRC 367 (2006)

the weight of privacy interests is tempered by the capability in the discovery process of making limited disclosure to a litigant under a protective order instead of public disclosure; LBP-06-25, 64 NRC 367 (2006)

to counter a board's normal assumption that protective orders will not be breached, the withholding party must show evidence of the likelihood of a breach; LBP-06-25, 64 NRC 367 (2006)

## SUBJECT INDEX

where a protective order precludes public disclosure, the strength of the privacy interest diminishes because any threatened harm in releasing the information can be virtually eliminated; LBP-06-25, 64 NRC 367 (2006)

with a confidential protection order in place, weighing the privacy invasion from public disclosure against a party's need for the materials is no longer appropriate; LBP-06-25, 64 NRC 367 (2006)

### PUBLIC COMMENTS

Staff's final supplemental environmental impact statement on a license renewal must take account of public comments concerning new and significant information on Category 1 findings; LBP-06-20, 64 NRC 131 (2006)

### PUBLIC INTEREST

no adjudication is required where a licensing board finds a settlement to be in the public interest; LBP-06-21, 64 NRC 219 (2006)

the subject of an enforcement action has a property interest in his employment-related license sufficient to invoke the procedural protections of the Due Process Clause, the vindication of which invokes a public interest; LBP-06-25, 64 NRC 367 (2006)

there is an important public interest in the proper resolution of all aspects of what occurred at a nuclear facility when serious safety and communication issues are involved; LBP-06-25, 64 NRC 367 (2006)

### RADIOACTIVE EFFLUENTS

a request for action regarding leaks or potential leaks of radioactively contaminated water into the ground is granted in part regarding power reactors and denied regarding research and test reactors; DD-06-3, 64 NRC 407 (2006)

### RADIOLOGICAL CONTAMINATION

a request for action regarding leaks or potential leaks of radioactively contaminated water into the ground is granted in part regarding power reactors and denied regarding research and test reactors; DD-06-3, 64 NRC 407 (2006)

### RADIOLOGICAL EXPOSURE

a contention that new and significant information about cancer rates in communities around a plant shows that another 20 years of operations may result in greater offsite radiological impacts on human health than was previously known is denied; LBP-06-23, 64 NRC 257 (2006)

### REASONABLE ASSURANCE

a board's analysis of decommissioning cost estimates should be tailored to the specifics of the proceeding; CLI-06-22, 64 NRC 37 (2006)

a board's examination of licensee's decommissioning cost estimates for reliability is consistent with its obligation to verify whether the estimates provided reasonable assurance for decommissioning funding; CLI-06-22, 64 NRC 37 (2006)

obtaining an estimate from an experienced third-party vendor is not the only way for an applicant to demonstrate that its cost estimate is documented and reasonable; CLI-06-22, 64 NRC 37 (2006)

### REBUTTABLE PRESUMPTION

there is a presumption that governmental officials, acting in their official capacities, have properly discharged their duties, and clear evidence is usually required to rebut this presumption; CLI-06-22, 64 NRC 37 (2006)

### RECONSIDERATION

the Commission does not lightly revisit its own already-issued and well-considered decisions, doing so only if the party seeking reconsideration brings decisive new information to its attention or demonstrates a fundamental Commission misunderstanding of a key point; LBP-06-27, 64 NRC 399 (2006)

See also Motions for Reconsideration

### RECORD OF DECISION

the Commission shall determine whether or not the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable; LBP-06-23, 64 NRC 257 (2006)

### REGULATIONS

although NRC is not bound by CEQ regulations that it has not expressly adopted, it gives those regulations substantial deference; LBP-06-19, 64 NRC 53 (2006)

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### REGULATIONS, INTERPRETATION

- a contention that raises the question as to whether requirements of 10 C.F.R. 51.53(c)(3)(ii)(B) supplement the more general requirements of 10 C.F.R. 51.45(c) and 51.53(c), or instead displace and supplant the latter requirements, raises an admissible and material issue of interpretation and construction of the regulations; LBP-06-20, 64 NRC 131 (2006)
- because applicant's change in cumulative usage factor is already endorsed by 10 C.F.R. 50.55a(g), the approval requirements of subsection 50.55a(a)(3) do not apply; CLI-06-24, 64 NRC 111 (2006)
- section 2.311 does not authorize appeals from an order refusing to supplement an admitted contention; CLI-06-24, 64 NRC 111 (2006)
- section 2.311 is not applicable to the board's refusal to supplement the basis of a contention or to add new contentions because the section applies only when a board decision rules on a request for hearing, petition to intervene, or selection of hearing procedures; CLI-06-24, 64 NRC 111 (2006)

### REGULATORY GUIDES

- a board's request for a list of all regulatory guides applicable to the Staff's analysis of a license application, as well as a list of all instances where potentially applicable regulatory guides were not used, is approved; CLI-06-20, 64 NRC 15 (2006)

### RELEVANCE

- the universal understanding of relevance, applicable to the NRC Staff and others, includes matters that appear reasonably calculated to lead to the discovery of admissible evidence; LBP-06-25, 64 NRC 367 (2006)
- where the privilege and the need may be equally weak, but the privilege can be protected by other means, adjudicators return to the norms of full and open discovery, so that relevancy, not need, becomes the determinative standard; LBP-06-25, 64 NRC 367 (2006)

### REPLY BRIEFS

- new arguments may not be raised for the first time in a reply brief; CLI-06-22, 64 NRC 37 (2006); CLI-06-29, 64 NRC 417 (2006); LBP-06-20, 64 NRC 131 (2006)
- petitioner may respond to and focus on any legal, logical, or factual arguments presented in the answers, and the amplification of statements provided in an initial petition is legitimate and permissible; LBP-06-20, 64 NRC 131 (2006); LBP-06-23, 64 NRC 257 (2006)

### RESEARCH REACTORS

- a request for action regarding leaks or potential leaks of radioactively contaminated water into the ground is denied because existing NRC design and regulatory programs ensure that there is a minimal risk for a significant release of contaminated liquid effluents; DD-06-3, 64 NRC 407 (2006)

### REVIEW, INTERLOCUTORY

- discretionary interlocutory review is allowed only when a licensing board certifies a ruling or refers a question, or when an interlocutory board ruling creates immediate and serious irreparable impact or affects the basic structure of the proceeding in a pervasive or unusual manner; CLI-06-18, 64 NRC 1 (2006); CLI-06-24, 64 NRC 111 (2006)
  - review is granted under the pervasive-and-unusual-effect standard only in extraordinary circumstances; CLI-06-24, 64 NRC 111 (2006)
  - settling some but not all contentions is a routine feature of NRC litigation, but it does not affect the proceeding in a pervasive or unusual manner; CLI-06-18, 64 NRC 1 (2006)
  - the Commission grants review only when the disputed ruling threatens the aggrieved party with serious, immediate, and irreparable harm or where it will have a pervasive or unusual effect on the proceedings below; CLI-06-24, 64 NRC 111 (2006)
- See also Appeals, Interlocutory; Appellate Review

### RULES OF PRACTICE

- a contention that fails to comply with any of the pleading requirements will not be admitted for litigation; LBP-06-22, 64 NRC 229 (2006)
- a late-filed contention will be rejected as untimely unless the petitioner demonstrates that the eight-factor balancing test in 10 C.F.R. 2.309(c) militates in favor of considering the contention's admissibility; LBP-06-22, 64 NRC 229 (2006)
- a licensing board order is final for appellate purposes where it either disposes of at least a major segment of the case or terminates a party's right to participate, and rulings that do neither are interlocutory; CLI-06-18, 64 NRC 1 (2006)

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- a petitioner who without reason fails to argue that a nontimely contention satisfies the eight-factor balancing test in 10 C.F.R. 2.309(c) may be deemed as having waived that argument; LBP-06-22, 64 NRC 229 (2006)
- a request for an order to modify a license based upon an allegedly hazardous condition in the current spent fuel pool amounts to a request for agency enforcement action and thus is not suitable for a license renewal adjudication, but may be considered under 10 C.F.R. § 2.206; CLI-06-26, 64 NRC 225 (2006)
- a state that wishes to be a party in a proceeding for a facility located within its boundaries need not address the standing requirements; LBP-06-23, 64 NRC 257 (2006)
- a sufficiently high-ranking person must sign the affidavit asserting the deliberative process privilege; LBP-06-25, 64 NRC 367 (2006)
- administrative agencies and their adjudicators routinely approve stipulations and settlements to which fewer than all the parties in a case subscribe; CLI-06-18, 64 NRC 1 (2006)
- although an initial position of protecting privacy may be founded on mere theoretical constructs, when a fact-based challenge is made, concrete or specific analysis is needed to effectively counter the challenge and to establish the privacy interests involved; LBP-06-25, 64 NRC 367 (2006)
- although the Commission is disinclined to step into the middle of a labor dispute or involve itself in the personnel decisions of licensees, it has recognized that there may be cases where employment-related contentions are closely tied to specific health-and-safety concerns or to potential violations of NRC rules that can be admitted for a hearing; CLI-06-21, 64 NRC 30 (2006)
- an assertion that material can be withheld must expressly state the specific privilege being claimed; LBP-06-25, 64 NRC 367 (2006)
- an organization may establish standing to intervene by demonstrating either organizational standing or representational standing; LBP-06-23, 64 NRC 257 (2006)
- an unexplained lapse of several years between the Staff's completion of a thorough investigation and its initiation of an immediately effective enforcement order may jeopardize both public confidence in government decisionmaking and public protection from asserted safety threats, and may require an explanation if the immediate effectiveness of the order were to be challenged; LBP-06-26, 64 NRC 431 (2006)
- arguments that an intervenor fails to adequately develop are treated as waived; LBP-06-19, 64 NRC 53 (2006)
- at the admissibility stage, petitioner is not required to prove its contention or to provide all the evidence for its contention that may be required later in the proceeding; LBP-06-20, 64 NRC 131 (2006)
- at the contention admission stage, the board's purpose in applying 10 C.F.R. 2.309(f)(1) is only to ensure that the adjudicatory process is used to address real, concrete, specific issues that are appropriate for litigation; LBP-06-20, 64 NRC 131 (2006)
- citation to specific and potentially inconsistent portions of applicant's documents together with the declaration of petitioner's unchallenged expert provide alleged facts or expert opinion that are sufficient to meet the contention pleading requirements; LBP-06-20, 64 NRC 131 (2006)
- contention admissibility requirements are strict by design and any contention that does not satisfy these requirements will be rejected; CLI-06-24, 64 NRC 111 (2006); LBP-06-22, 64 NRC 229 (2006)
- contentions that applicant's ER fails to satisfy NEPA because it does not address the environmental impacts of severe spent fuel pool accidents, and fails to address severe accident mitigation alternatives that would reduce the potential for spent fuel pool water loss and fires, are found inadmissible; LBP-06-23, 64 NRC 257 (2006)
- discretionary interlocutory review is allowed only when a licensing board certifies a ruling or refers a question, or when an interlocutory board ruling creates immediate and serious irreparable impact or affects the basic structure of the proceeding in a pervasive or unusual manner; CLI-06-18, 64 NRC 1 (2006)
- failure to carefully read the governing procedural regulations does not constitute good cause for accepting a late-filed petition; CLI-06-21, 64 NRC 30 (2006)
- filings are that are nearly 3 months late must satisfy not only the requirements to demonstrate standing and submit at least one admissible contention, but also must satisfy the stringent requirements for untimely filings and late-filed contentions; CLI-06-21, 64 NRC 30 (2006)

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general assertions, unsupported by specific facts or expert opinion, that personnel reductions may adversely affect health and safety are inadmissible in a license transfer proceeding; CLI-06-21, 64 NRC 30 (2006)

if a notice of adoption of a contention is filed within a reasonable time (such as 20 days) after the contention has been filed and admitted, then it is deemed timely; LBP-06-20, 64 NRC 131 (2006)

individual petitioners living within 50 miles of a nuclear power plant may establish standing based on a longstanding proximity presumption principle; LBP-06-23, 64 NRC 257 (2006)

interlocutory review is granted only when the disputed ruling threatens the aggrieved party with serious, immediate, and irreparable harm or where it will have a pervasive or unusual effect on the proceedings below; CLI-06-24, 64 NRC 111 (2006)

interlocutory review is granted under the pervasive-and-unusual-effect standard only in extraordinary circumstances; CLI-06-24, 64 NRC 111 (2006)

it is not the duty of an adjudicative body to dig through the reams of paper that litigants have deposited to construct and develop their arguments; LBP-06-19, 64 NRC 53 (2006)

license applicants may appeal contention admissibility rulings within 10 days after a board grants a petition to intervene, but only if the license applicant argues that the petition should have been wholly denied; CLI-06-25, 64 NRC 128 (2006)

licensing boards are to look to judicial concepts of standing when ruling on intervention petitions; LBP-06-23, 64 NRC 257 (2006)

neither the Rules of Practice nor Commission precedent mandates the consideration at the threshold of every basis assigned for every contention advanced by the hearing requestor; LBP-06-27, 64 NRC 438 (2006)

NRC must provide a hearing upon the request of any person whose interest may be affected by the proceeding; LBP-06-23, 64 NRC 257 (2006)

NRC's regulatory scheme for balancing privacy interests arising in a law enforcement context against the need for party discovery combines elements of both FOIA and the Federal Rules of Civil Procedure; LBP-06-25, 64 NRC 367 (2006)

parties in NRC adjudications are generally entitled to obtain, through discovery and other pretrial activities, the fullest possible knowledge of the issues and facts before trial; LBP-06-25, 64 NRC 367 (2006)

petitioner must set forth with particularity the contentions sought to be raised; CLI-06-21, 64 NRC 30 (2006)

petitioners who seek to introduce a new or amended contention based on allegedly new information that was previously unavailable must show that such information was not previously available and is materially different than information previously available and the amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information; LBP-06-22, 64 NRC 229 (2006)

portions of a reply that respond to legal, logical, and factual arguments raised in the answers are appropriate; LBP-06-20, 64 NRC 131 (2006)

proof of independent ability to litigate a contention by an adopting party is not required; LBP-06-20, 64 NRC 131 (2006)

purely factual material is not generally protected by the deliberative process privilege, except factual materials too intertwined with deliberative discussions and summaries of factual materials compiled to assist in agency decisionmaking; LBP-06-25, 64 NRC 367 (2006)

qualified privilege materials may be excluded from discovery, depending on the particular circumstances presented; LBP-06-25, 64 NRC 367 (2006)

settlements that are presumably based on an analysis of litigation risk and optimum use of the NRC Staff's scarce resources are commonplace in litigation and have, in the past, received Commission approval; CLI-06-18, 64 NRC 1 (2006)

settling some but not all contentions is a routine feature of NRC litigation, but it does not affect the proceeding in a pervasive or unusual manner; CLI-06-18, 64 NRC 1 (2006)

subject to limited exceptions, legal determinations made on appeal in a case are controlling precedent, becoming the law of the case, for all later decisions in the same case; LBP-06-19, 64 NRC 53 (2006)

substantive admissibility standards for contentions and the case law interpreting the requirements are discussed; LBP-06-23, 64 NRC 257 (2006)

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sufficient information for assessing the claim of privilege or protected status of documents withheld from discovery must be provided to the requesting party; LBP-06-25, 64 NRC 367 (2006)

the adequacy of the applicant's license application, not the NRC staff's safety evaluation, is the safety issue in any licensing proceeding, and contentions on the adequacy of the [content of the Safety Evaluation Report are not cognizable; LBP-06-27, 64 NRC 438 (2006)

the affidavit asserting the deliberative process privilege should provide the basis for the withholding and a statement of specific harm, applicable to the circumstances of the case, that would result from disclosure; LBP-06-25, 64 NRC 367 (2006)

the burden of a settlement with an intervenor regarding NEPA issues falls on the NRC Staff; CLI-06-18, 64 NRC 1 (2006)

the chilling effect upon frank government discussions can be just as great when the release is limited only to those involved in particular litigation as when the documents are released publicly; LBP-06-25, 64 NRC 367 (2006)

the Commission gives substantial deference to boards' determinations on threshold issues, such as standing and contention admissibility; CLI-06-24, 64 NRC 111 (2006)

the Commission has a longstanding policy of supporting settlements; CLI-06-18, 64 NRC 1 (2006)

the Commission has discretion to grant interlocutory review at the request of a party in limited circumstances, but its longstanding general policy disfavors interlocutory review; CLI-06-24, 64 NRC 111 (2006)

the Commission usually defers to boards' fact-based decisions; CLI-06-19, 64 NRC 9 (2006)

the general purpose of the deliberative process privilege is to protect frank agency deliberations from public scrutiny and thus to prevent injury to the quality of agency decisions; LBP-06-25, 64 NRC 367 (2006)

the law generally recognizes a personal privacy interest not to have allegations of unlawful activity publicly disseminated after they have been shown to be insubstantial, but a privacy interest does not exist as a generalized theory; LBP-06-25, 64 NRC 367 (2006)

the privacy interests for which protection is sought can be amply preserved by a protective order that limits the disclosures to those involved in the litigation and thus having a need to know; LBP-06-25, 64 NRC 367 (2006)

the protected interests are so strong that federal courts and NRC adjudicators are generally unwilling to compel discovery of deliberative materials unless there is a particular and compelling reason for the privilege to be suspended; LBP-06-25, 64 NRC 367 (2006)

the question whether to hold an NRC enforcement proceeding in abeyance pending a related criminal prosecution is generally suitable for interlocutory Commission review because the abeyance issue cannot await the end of the proceeding; CLI-06-19, 64 NRC 9 (2006)

the representative of an interested governmental entity participating under section 2.315(c) shall identify those contentions on which it will participate in advance of any hearing held; LBP-06-20, 64 NRC 131 (2006)

the scope of a license renewal proceeding is limited to a review of the plant structures and components that will require an aging management review for the period of extended operation and the plant's systems, structures, and components that are subject to an evaluation of time-limited aging analyses; LBP-06-22, 64 NRC 229 (2006)

the statement of purpose and need in the final environmental impact statement is independent of any specific project area, and thus a prior decision of the Commission adjudicating an intervenor's challenge to the statement of purpose and need applies with equal force to all areas of a proposed project; LBP-06-19, 64 NRC 53 (2006)

the strict pleading requirements for contentions focus the hearing process on real disputes susceptible of resolution in an adjudication; LBP-06-23, 64 NRC 257 (2006)

the universal understanding of relevance, applicable to the NRC Staff and others, includes matters that appear reasonably calculated to lead to the discovery of admissible evidence; LBP-06-25, 64 NRC 367 (2006)

third parties have no absolute right to veto settlements that the agreeing parties find to their advantage; CLI-06-18, 64 NRC 1 (2006)

to counter a board's normal assumption that protective orders will not be breached, the withholding party must show evidence of the likelihood of a breach; LBP-06-25, 64 NRC 367 (2006)

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- to establish standing, petitioner must show (among other things) that its potential injury is fairly traceable to a grant of the application; CLI-06-21, 64 NRC 30 (2006)
  - to intervene in an NRC proceeding, a petitioner must, in addition to demonstrating standing, submit at least one contention meeting the pleading requirements of 10 C.F.R. § 2.309(f)(1); LBP-06-23, 64 NRC 257 (2006)
  - to qualify for 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; LBP-06-23, 64 NRC 257 (2006)
  - to raise an admissible contention with respect to a Staff finding of no significant impact, petitioner need not demonstrate that there will be a significant environmental impact as a consequence of the proposed action, but it must allege facts that, if true, show that the proposed project may significantly degrade some human environmental factor; LBP-06-27, 64 NRC 438 (2006)
  - to the extent that the draft or final supplemental environmental impact statement contains data or conclusions that differ significantly from the data or conclusions in the applicant's environmental report or in the generic environmental impact statement, a petitioner is entitled to use 10 C.F.R. 2.309(f)(2) as the grounds to file a new or amended contention; LBP-06-20, 64 NRC 131 (2006)
  - when an investigation is open and notorious, the interview transcripts are not confidential, and the public has constructive knowledge that those interviewed had a sufficient relationship to the root problem to warrant being interviewed, the right of personal privacy being asserted is weak compared to the privacy rights in other circumstances of unsubstantiated allegation; LBP-06-25, 64 NRC 367 (2006)
  - where a potential intervenor claims that the board wrongly rejected all contentions, an appeal lies; CLI-06-24, 64 NRC 111 (2006)
  - where NRC Staff or the license applicant argues that the board ought to have rejected all contentions, an appeal lies; CLI-06-24, 64 NRC 111 (2006)
  - where the privilege and the need may be equally weak, but the privilege can be protected by other means, adjudicators return to the norms of full and open discovery, so that relevancy, not need, becomes the determinative standard; LBP-06-25, 64 NRC 367 (2006)
- SAFETY EVALUATION REPORT**
- the adequacy of the applicant's license application, not the NRC staff's safety evaluation, is the safety issue in any licensing proceeding, and contentions on the adequacy of the [content of the Safety Evaluation Report are not cognizable in a proceeding; LBP-06-27, 64 NRC 438 (2006)
- SAFETY ISSUES**
- boards must perform two types of inquiries with respect to safety matters in uncontested early site permit proceedings; LBP-06-28, 64 NRC 460 (2006)
  - boards should conduct a simple sufficiency review of uncontested issues; LBP-06-28, 64 NRC 460 (2006)
- SAFETY REVIEW**
- if a structure or component is already required to be replaced at mandated, specified time periods, it would fall outside the scope of license renewal review; LBP-06-23, 64 NRC 257 (2006)
  - renewal applicants must demonstrate that they will adequately manage the detrimental effects of aging for all important components and structures, with attention, for example, to metal fatigue, erosion, corrosion, thermal and radiation embrittlement, microbiologically induced effects, creep, and shrinkage; CLI-06-24, 64 NRC 111 (2006)
  - review of a license renewal application does not reopen issues relating to a plant's current licensing basis, or any other issues that are subject to routine and ongoing regulatory oversight and enforcement; CLI-06-24, 64 NRC 111 (2006)
  - the Part 54 review is limited to those potentially detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs; CLI-06-24, 64 NRC 111 (2006); LBP-06-23, 64 NRC 257 (2006)
  - to the extent that any analyses performed during the initial licensing process were limited to the initial 40-year license period, a license renewal applicant must show that it has reassessed these time-limited aging analyses and that these analyses remain valid for the period of extended operation; CLI-06-24, 64 NRC 111 (2006)
- SECURITY**
- a contention that applicant has failed to identify non-safety-related systems, structures, and components in the security area whose failure could prevent satisfactory accomplishment of the functions of

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safety-related systems, structures, and components is not admissible because security-related issues are not within the scope of a license renewal proceeding; LBP-06-20, 64 NRC 131 (2006)

### SETTLEMENT AGREEMENTS

for a licensing board to review a settlement agreement for compliance with agency regulations, and to evaluate whether the agreement is plainly in the public interest, the wording of the agreement must be clear enough for the board to ascertain unambiguously what its terms signify; LBP-06-26, 64 NRC 431 (2006)

### SETTLEMENTS

administrative agencies and their adjudicators routinely approve stipulations and settlements to which fewer than all the parties in a case subscribe; CLI-06-18, 64 NRC 1 (2006)

basing settlements on an analysis of litigation risk and optimum use of the NRC Staff's scarce resources is commonplace in litigation and has, in the past, received Commission approval; CLI-06-18, 64 NRC 1 (2006)

in a challenge to an NRC Staff immediately effective enforcement order prohibiting a former licensee employee from working in NRC-licensed activities for 5 years, the licensing board finds a proposed settlement to be in the public interest; LBP-06-21, 64 NRC 219 (2006)

no adjudication is required where a licensing board finds a settlement to be in the public interest; LBP-06-21, 64 NRC 219 (2006)

the burden of a settlement with an intervenor regarding NEPA issues falls on the NRC Staff; CLI-06-18, 64 NRC 1 (2006)

the Commission has a longstanding policy of supporting settlements; CLI-06-18, 64 NRC 1 (2006)

third parties have no absolute right to veto settlements that the agreeing parties find to their advantage; CLI-06-18, 64 NRC 1 (2006)

### SEVERE ACCIDENT MITIGATION ANALYSIS

a contention that applicant's SAMA analysis is deficient regarding input data on evacuation times, economic consequences, and meteorological patterns, resulting in incorrect conclusions about the costs versus benefits of possible mitigation alternatives, is admitted; LBP-06-23, 64 NRC 257 (2006)

### SITE REMEDIATION

an early site permit applicant may submit a plan for redress of the site, which if accepted as part of an approved ESP would allow an applicant to perform certain preconstruction activities without additional authorization; LBP-06-28, 64 NRC 460 (2006)

### SPENT FUEL STORAGE

a request that the Commission require licensees to return spent fuel pools to their original low-density storage configuration and to use dry storage for any excess fuel is not appropriate for litigation in a license renewal hearing; CLI-06-26, 64 NRC 225 (2006)

failure of an applicant to include new and significant information concerning a Category 1 issue relating to regarding the dangers of high-density racking of spent fuel in its environmental report does not give rise to an admissible contention; LBP-06-20, 64 NRC 131 (2006)

issues related to the environmental impact of onsite spent fuel storage after the license renewal term are covered by NRC's Waste Confidence Rule and are outside the scope of a license renewal proceeding because contentions may not challenge a regulation; LBP-06-20, 64 NRC 131 (2006)

### STANDARD OF PROOF

there is a presumption that governmental officials, acting in their official capacities, have properly discharged their duties, and clear evidence is usually required to rebut this presumption; CLI-06-22, 64 NRC 37 (2006)

### STANDARD OF REVIEW

the Commission gives substantial deference to boards' determinations on threshold issues, such as standing and contention admissibility; CLI-06-24, 64 NRC 111 (2006)

### STANDING TO INTERVENE

a state that wishes to be a party in a proceeding for a facility located within its boundaries need not address the standing requirements; LBP-06-23, 64 NRC 257 (2006)

individual petitioners living within 50 miles of a nuclear power plant may establish standing based on a longstanding proximity presumption principle; LBP-06-23, 64 NRC 257 (2006)

injury may be either actual or threatened, but must lie arguably within the zone of interests protected by the statutes governing the proceeding; LBP-06-23, 64 NRC 257 (2006)

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- licensing boards are to look to judicial concepts of standing when ruling on intervention petitions; LBP-06-23, 64 NRC 257 (2006)
- petitioner must show (among other things) that its potential injury is fairly traceable to a grant of the application; CLI-06-21, 64 NRC 30 (2006)
- to qualify for 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; LBP-06-23, 64 NRC 257 (2006)
- STANDING TO INTERVENE, ORGANIZATIONAL**
- an organization must show that the interests of the organization will be harmed by the proceeding; LBP-06-23, 64 NRC 257 (2006)
- STANDING TO INTERVENE, REPRESENTATIONAL**
- an organization must demonstrate that the interests of at least one of its members may be affected by the licensing action and would have standing to sue in his or her own right, identify that member by name and address, and show that the organization is authorized to request a hearing on behalf of that member; LBP-06-23, 64 NRC 257 (2006)
- STATE GOVERNMENT**
- a state that wishes to be a party in a proceeding for a facility located within its boundaries need not address the standing requirements; LBP-06-23, 64 NRC 257 (2006)
- the Atomic Energy Act does not give a state an absolute right of cross-examination, but requires only that the Commission afford reasonable opportunity for state representatives to interrogate witnesses; LBP-06-20, 64 NRC 131 (2006)
- STAY**
- as litigation moves forward or terminates, the equities that traditionally govern stays or injunctive relief may change; CLI-06-23, 64 NRC 107 (2006)
- SUMMARY DISPOSITION**
- where applicant's amended license application has eliminated the dispute, there remains no genuine dispute of material fact and applicant is entitled to summary disposition as a matter of law; LBP-06-24, 64 NRC 360 (2006)
- SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT**
- for license renewals, Staff's review must take account of public comments concerning new and significant information on Category 1 findings; LBP-06-20, 64 NRC 131 (2006)
- new information that may call for a supplement must present a seriously different picture of the environmental impact of the proposed project from what was previously envisioned; CLI-06-29, 64 NRC 417 (2006); LBP-06-19, 64 NRC 53 (2006)
- Staff shall supplement an environmental impact statement if there are substantial changes in the proposed action that are relevant to environmental concerns or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; LBP-06-19, 64 NRC 53 (2006)
- TERMINATION OF PROCEEDING**
- grant of a motion for summary disposition on intervenor's sole remaining contention terminates the contested portion of the proceeding; LBP-06-24, 64 NRC 360 (2006)
- TERRORISM**
- although a contention regarding the risks of terrorism related to the high-density racking of spent fuel in pools is new and significant information concerning a Category 1 matter, the contention is not admissible in a license renewal proceeding; LBP-06-20, 64 NRC 131 (2006)
- because of the questions of law and policy about the environmental impacts of terrorist attacks, the Commission decides to consider this issue itself; LBP-06-28, 64 NRC 404 (2006)
- NRC has maximum procedural leeway in how it addresses the environmental impacts; LBP-06-27, 64 NRC 399 (2006)
- NRC's categorical refusal to consider the environmental effects of a terrorist attack is found to be unreasonable under the National Environmental Policy Act; CLI-06-23, 64 NRC 107 (2006)
- TIME LIMITS**
- the only timing requirement for giving notice of participation by an interested state is that a representative shall identify those contentions on which it will participate in advance of any hearing held; LBP-06-20, 64 NRC 131 (2006)

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### UNCONTESTED LICENSE APPLICATIONS

for early site permits, section 52.21, the notice requirements of section 2.104(b)(2), and the Notice of Hearing itself outline a board's review obligation; LBP-06-28, 64 NRC 460 (2006)

### WAIVER

a privilege that is not claimed is waived; LBP-06-25, 64 NRC 367 (2006)

### WAIVER OF OBJECTION

arguments that an intervenor fails to adequately develop are treated as waived; LBP-06-19, 64 NRC 53 (2006)

it is not the duty of an adjudicative body to dig through the reams of paper that litigants have deposited to construct and develop their arguments; LBP-06-19, 64 NRC 53 (2006)

### WAIVER OF RULE

matters at issue must involve special circumstances with respect to the subject matter of the particular proceeding; LBP-06-23, 64 NRC 257 (2006)

### WASTE CONFIDENCE RULE

issues related to the environmental impact of onsite spent fuel storage after the license renewal term are covered by NRC's Waste Confidence Rule and are outside the scope of a license renewal proceeding because contentions may not challenge a regulation; LBP-06-20, 64 NRC 131 (2006)

### WASTE DISPOSAL

neither an intervenor nor an applicant/licensee (nor seemingly the NRC) has the authority to challenge or direct DOE's estimates of the fees it will charge to a uranium enrichment facility that requests DOE to disposition its depleted uranium waste; CLI-06-22, 64 NRC 37 (2006)

### WATER QUALITY

NRC is barred from imposing or second-guessing effluent limitations or water quality certification requirements imposed by EPA or an authorized state, but it may address water quality matters in its assessment of the environmental impact of a license renewal; LBP-06-20, 64 NRC 131 (2006)

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