LBP-06-20

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Alex S. Karlin, Chairman
Dr. Richard E. Wardwell
Dr. Thomas S. Elleman

In the Matter of ENTERGY NUCLEAR VERMONT YANKEE, LLC, and ENTERGY NUCLEAR OPERATIONS, INC. (Vermont Yankee Nuclear Power Station)	Docket No. 50-271-LR ASLBP No. 06-849-03-LR September 22, 2006

MEMORANDUM AND ORDER

(Ruling on Standing, Contentions, Hearing Procedures, State Statutory Claim, and Contention Adoption)

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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 twenty 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 non-profit 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 twenty 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.[1] Entergy seeks to extend the current operating license for the Vermont Yankee facility, which expires on March 21, 2012, for an additional twenty 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.[2] The AG, DPS, and NEC each submitted a request for a hearing, a petition to intervene, and one or more contentions.[3] The

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[1] 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.

[2] 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].

[3] [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

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.[4] 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 and Staff answers.[5] 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

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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].

[4] 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].

[5] [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).

in the original petitions, while failing to address the criteria for nontimely filings.[6] DPS and NEC each filed an opposition to Entergy's motions to strike.[7] The Staff filed an answer generally supporting Entergy's motions.[8]

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.[9] On the same day, NEC made a similar filing, giving notice that it was adopting the contentions filed by the AG and DPS.[10] Entergy opposed both filings because DPS and NEC failed to address the criteria for nontimely contentions.[11] 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.[12] NEC filed a motion for leave to file a reply to Entergy and the Staff answers.[13]

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[6] 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].

[7] [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].

[8] 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].

[9] 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].

[10] [NEC]'s Notice of Adoption of Contentions, or in the Alternative, Motion to Adopt Contentions (June 5, 2006) [NEC Notice of Adoption of Contentions].

[11] 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].

[12] 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

Both Entergy and the Staff opposed NEC's motion for leave to file a reply.[14]

On August 1 and 2, 2006, the Board conducted an oral argument with the petitioners,[15] 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

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Contentions (June 15, 2006) [Staff Answer to NEC Notice of Adoption of Contentions].

[13] 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].

[14] 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].

[15] 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).

NRC proceedings. Nuclear Management Company, 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 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 fifty miles of the nuclear power reactor.[16] 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).

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 ten 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 n.16. Because the Vermont Yankee Nuclear Power Station is located within ten miles of the

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[16] 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 Plants, Units 3 and 4), LBP-01-6, 53 NRC 138, 146-50 (2001) (applying the presumption in an operating license renewal proceeding).

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 ten 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.[17] Each member declares that he or she lives within close proximity to the plant (at distances ranging from four to twenty-five 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 plant.[18] Based on these declarations and the proximity

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[17] 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).

[18] See, e.g., NEC Petition, Exh. 2, Decl. of Sarah Kotkov ¶ 4 (May 24, 2006).

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 ten-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)[19] 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

[19] 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).

position on the issue; and

(vi) Provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

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 & 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 Serv., 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 Serv. 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 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 twenty 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 & 2, and Catawba Nuclear Station, Units 1 & 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, 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 Serv. 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.[20] 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).

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[20] Louisiana Energy Serv., 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).

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), 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).

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." 10 C.F.R. § 2.309(f)(1)(vi). 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.[21] The amplification of statements provided in an initial petition is legitimate and permissible. Louisiana Energy Serv., 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.[22]

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.[23] More specifically, the AG argues that the regulation requires the ER to include new

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[21] See Louisiana Energy Serv., 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 Mgmt. Co., LLC (Palisades Nuclear Plant), CLI-06-17, 63 NRC __, __ (slip op. at 6) (June 23, 2006) ("Replies must focus narrowly on the legal or factual arguments first presented in the original petition or raised in the answers to it.").

[22] AG Petition at 21. Unless otherwise noted, our statement of each contention is a direct quote from the text of the relevant petition.

[23] 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 Res. 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

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 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,[24] (2) the expert declaration and report of Dr. Jan Beyea,[25] (3) excerpts from NUREG-1738, (4) the 2006 "Safety and Security of Commercial Spent Nuclear Fuel Storage" report of the National Academy of Sciences,[26] and (5) the terrorist attacks of

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aware." AG Petition at 15.

[24] 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).

[25] 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).

[26] Comm. on the Safety and Security of Commercial Spent Nuclear Fuel Storage, Board on Radioactive Waste Mgmt., Nat'l Research Council, Safety and Security of Commercial Spent Nuclear Fuel Storage: Public Report (2006).

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 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 Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 6-13 (2001), 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 proceedings 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 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 Repy 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 on-site spent fuel management is a Category 1 issue,[27] 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

[27] 10 C.F.R. Part 51, App. B, Table B-1.

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 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." 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). Both Entergy, Tr. at 95, and the NRC Staff, Tr. at 113-114 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, 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 Commmission'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 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.[28] 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 Consideration 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.[29] The memorandum explained that the addition of Section 51.53(c)(3)(iv) would have little impact on license renewal adjudications because "[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." 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.[30] Commission approval of SECY-93-032 demonstrates

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[28] See Proposed Rule, "Environmental Review for Renewal of Operating Licenses," 56 Fed. Reg. 47,016, 47,027-28 (Sept. 17, 1991).

[29] SECY-93-032, Memorandum from James M. Taylor, EDO, to the Commissioners (Feb. 9, 1993), ADAMS Accession No. ML051660667.

[30] Memorandum from Samuel J. Chilk, Secretary, to James M. Taylor, EDO (Apr. 22, 1993), ADAMS Accession No. ML003760802.

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.[31] With this understanding of the regulations, the Commission

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[31] 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.

. . . .

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.

approved and finalized Section 51.53(c)(3)(iv). Given this regulatory history, it is clear that an allegation of new and significant 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 on-site 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 Res. 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.[32]

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[32] 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

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 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 at 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,[33] we

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hearing is narrower than the scope of the Staff's review.

[33] 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,

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, 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." Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358, 365 (2002). 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:

> 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.

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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.

McGuire, 56 NRC at 365 n.24 (citations omitted). This component of McGuire, 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. 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.[34] 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.[35] 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

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[34] Although the AG is not admitted to the proceeding as a party, it may still participate as an interested state. See Section VI.B.

[35] [AG] Petition for Rulemaking to Amend 10 C.F.R. Part 51 (Aug. 25, 2006).

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

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.[36]

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[37] code specifies that "aging due to elevated temperature exposure is not significant as long as concrete general area temperatures do not exceed 150E 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

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[36] DPS Petition at 10.

[37] 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.

the "[n]ormal environment in the drywell during plant operation is . . . an ambient temperature of about 135E F to 165E 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 165E F is above the cut off limit of 150E 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 150E F) necessary to prove that Entergy should be excused from managing the aging of the primary containment concrete. DPS Petition at 10-11.

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 135E F and 165E F and the application statement that "[d]uring normal operation, [general] areas within the primary containment" do not exceed 150E 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 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."[38]

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 150E 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 150E 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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[38] 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, Inc. (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003)). 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 150E 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 135E F and 165E 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 150E 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 USEC, Inc. (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006)). In that case the petitioner cited garbled and virtually incomprehensible statements by one Sergio Edwardovich Pashenko,[39] such as "I think that officials information about

[39] 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.

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!"[40] In response, the Commission noted, with some understatement, that "it is unclear just what Mr. Pashenko reviewed," that "Mr. Pashenkos' brief remarks are difficult to comprehend" and that even PRESS, the sponsor of this witness, did not seem to understand Mr. Pashenkos' statements. USEC, 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 150E 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 (135E F - 165E 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 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).[41]

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[40] Petition to Intervene by Portsmouth/Piketon Residents for Environmental Safety and Security (PRESS) (Feb. 28, 2006) at 37.

[41] 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.

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)).[42]

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

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[42] DPS Petition at 12-13.

that a permanent high-level waste repository will be in place by 2062; (2) Yucca Mountain cannot accomodate 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 inadmissable 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.[43]

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

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[43] 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 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.

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.[44]

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 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.[45]

As the "basis" of this contention, DPS states that Entergy did not include "security

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[44] 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.

[45] DPS Petition at 30-31.

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,"[46] 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).[47] 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.[48] 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

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[46] 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.

[47] 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.

[48] 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.

among the aging-related questions that are relevant in license renewal review. Id. at 24 (citing Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 638 (2004), and 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)). 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 non-safety SSCs are included under 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 Consideration. 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, 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,[49] the Commission concluded that "[t]errorism contentions are, by 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, 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,

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[49] 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 Consideration 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). Second, the Statement of Consideration 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).

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 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.[50]

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

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[50] 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.

based on NEPA. Instead, it is a safety contention based on the AEA. Accordingly, Millstone and McGuire, not Mothers for Peace, are controlling. Given 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.[51]

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

[51] 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.

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).[52]

D. Ruling on NEC Contentions

1. NEC Contention 1 (Environmental)

Entergy Failed to Assess Impacts to Water Quality.[53]

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 twenty-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[54] 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

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[52] 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 and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), LBP-06-14, 63 NRC 568.

[53] NEC Petition at 10.

[54] 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.

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 five years (2006-2011), and thus will not cover the cumulative impacts of thermal discharges over the twenty-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, 2006) ¶ 10 [Jones Decl.]. He concludes that a one-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 nine to eighteen 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 Contention1 provided that it is limited to considering the effects of a one-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 one-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 one-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 one 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 one 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 twenty-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 one-degree temperature increase, NEC states that it is a "truism" that "[h]eating the Connecticut River by 1E 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."[55] 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 twenty 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), 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

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[55] NEC Petition at 13. With regard to the NRC Staff's argument that the contention can be admitted if limited to a one-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 one 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 one-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 one degree. Below that measuring point, the temperature increase in the river will likely be less than one degree.

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.[56]

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 Serv. Co. of New Hampshire, et al. (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 Serv. Co. of New Hampshire, et al. (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

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[56] 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 Bd. of Environmental Protection, 126 S. Ct. 1843, 1853 n.8 (2006).

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 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).[57] 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 Envtl. Court, Docket No. 89-4-06 Vtec, August 28, 2006) (Appeal of Connecticut River Watershed Council, et al.). If the NPDES permit, which

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[57] 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.

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 C.F.R. § 51.53(c)(3)(ii)(B)? This is a matter of regulatory interpretation we need not reach today.[58]

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 twenty years in question. Meanwhile, Entergy's NPDES permit (and/or FWPCA 316(b) determination), even once it is final and effective, will expire in five 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

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[58] 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.

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 one 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.[59] See supra n.55.

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

[59] 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).

10 C.F.R. § 54.21(c).[60]

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[61])" 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 shows 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.

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[60] 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.

[61] 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.

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 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."[62] Entergy alleges that the Application includes a strategy 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

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[62] 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 "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.

"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 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 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 operations," 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).[63]

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[63] 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

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.[64]

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 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.

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moot.

[64] NEC Petition at 17.

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,[65] 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 Generating Co., L.L.C. (Early Site Permit for Clinton ESP Site), LBP-04017, 60 NRC 229, 241 (2004)). The Staff therefore argues that Contention 3 lacks an adequate basis and fails to demonstrate a genuine dispute, and should therefore be

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[65] Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), Docket No. 50-271-OLA, ASLBP No. 04-832-02-OLA.

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,[66] and that the application in this proceeding does not extend the current program for the full twenty 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, nor 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

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[66] 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.

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)." Entergy Nuclear Vermont Yankee, L.L.C. (Vermont Yankee Nuclear Power Station), LBP-06-14, 63 NRC 568, 589, n.35 (2006). 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. Hopenfeld 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." GPU Nuclear, Inc., Jersey Central Power & Light Co., and Amergen Energy Co., L.L.C. (Oyster Creek Nuclear Generating Station), CLI-00-06, 51 NRC 193, 208 (2000). 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."[67] 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 six years, and therefore has 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.[68]

In admitting this contention, this Board grants in part and denies in part Entergy's motion

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[67] 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)).

[68] We also note that NEC has 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.

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 six 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). Louisiana Energy Serv., L.P. (National Enrichment Facility), CLI-04-35, 60 NRC 619, 623 (2004).

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.

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.[69]

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. at ¶¶ 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.

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[69] NEC Petition at 18.

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 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, nor 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." Kansas City Gas & Electric Co. (Wolf Creek Generating Station, Unit 1), LBP-84-1, 19 NRC 29, 34 (1984). We find that NEC has met this requirement.[70]

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[70] 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 six-year period covered by the

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,

> 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 six 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 twenty 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

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EPU.

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 six 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.[71]

NEC Contention 5 challenges Entergy's assertion that "main condenser integrity is

[71] NEC Petition at 19.

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 Gundersen 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. Gundersen 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 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[72] 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 leak-tight. 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.

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[72] 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.

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 "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.[73] 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).[74]

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

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[73] Louisiana Energy Serv., L.P. (National Enrichment Facility), CLI-04-25, 60 NRC 223, 224-25 (2004) ("[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.").

[74] 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.

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.[75] 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 May 15, 2006, amendment to its license renewal application,[76] 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.

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[75] 71 Fed. Reg. 27,101 (May, 9, 2006).

[76] 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].

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."[77] 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 cite 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

[77] 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.

shell are inadequate. Given the absence of documentary or expert support for NEC's position, this contention fails to 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 ten-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 the 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.[78]

[78] 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.

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 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."[79] 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, L.L.C. (Vermont Yankee Nuclear Power Station), LBP-04-31, 60 NRC 686, 710-711 (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 711. 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 reasonable opportunity for State representatives to . . . interrogate witnesses." 42 U.S.C.

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[79] 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.

§ 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 consideration 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).[80] 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

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[80] 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 available if the State has not been admitted as a party under 10 C.F.R. § 2.309. Louisiana Energy Serv., L.P. (National Enrichment Facility), CLI-04-35, 60 NRC 619, 626-27 (2004).

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., BPI 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.

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.

10 C.F.R. § 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 & Power Co. (South Texas Project, Units 1 and 2), ALAB-779, 21 NRC 360, 381-82 (1985). Entergy the 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-779, 21 NRC at 381. That adoption attempt came several years after the Board admitted the contentions at issue. See Houston Lighting & Power Co. (South Texas Project, Units 1 and 2), LBP-80-11, 11 NRC 477 (1980); Houston Lighting & 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 & 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 twenty days) after the contention has been filed and admitted, then it is deemed timely and is not subject to the non-timely factors specified in 10 C.F.R. § 2.309(c). Accordingly, we find that the DPS and NEC adoption notices were timely.[81]

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

[81] The ten-day motions deadline of 10 C.F.R. § 2.323(c) do not apply because the adoption of contentions does not require a motion, as simple notice suffices.

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.

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 Consideration, 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.[82]

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

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[82] 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.

independent ability to litigate the full merits of the contention. 10 C.F.R. § 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 others 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.[83]

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 twenty (20) days of this order.[84]

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[83] 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.

[84] 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.

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.

It is so ORDERED.

THE ATOMIC SAFETY
AND LICENSING BOARD[85]

R/A
Alex S. Karlin, Chairman
ADMINISTRATIVE JUDGE

R/A by E. Roy Hawkens for
Richard E. Wardwell[86]
ADMINISTRATIVE JUDGE

R/A by E. Roy Hawkens for
Thomas S. Elleman
ADMINISTRATIVE JUDGE

Rockville, Maryland
September 22, 2006

[85] 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.

[86] 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 twenty-year license extension period.[1]

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 submit 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 determined 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)

[1] 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.

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 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 CFR § 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[2] 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

[2] 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.

analyses for the three Category 2 issues[3] 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.[4]

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.[5] 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 Section 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 (at 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

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[3] 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).

[4] 10 CFR § 51.53(c)(3) 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.

[5] 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.

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 Section 361(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,[6] 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 CFR § 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 CFR § 2.802, or 2) requesting a waiver of the regulations from the Commission under 10 CFR § 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

[6] 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.

aquatic habitat. As discussed in the Responsiveness Summary (RS), these conclusions were based on more than thirty 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, pg 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.

VANR has the opportunity to re-address these effluent limits every five 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 on-going 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 re-instated, 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 re-instated 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 five 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 five-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 mention 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 Section 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 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 Section 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 meet 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.[7]

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 Section 401 water quality certification and CWA Section 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 their own standards. Carolina Power & 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, 712-713, 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

[7] 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.

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 to amended 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 has been built into the NRC regulations is consistent with the CWA Section 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

In the Matter of	)	
	)	
ENTERGY NUCLEAR VERMONT YANKEE,	)	
LLC, and	)	
	)	
ENTERGY NUCLEAR OPERATIONS, INC.	)	Docket No. 50-271-LR
	)	
	)	
	)	
(Vermont Yankee Nuclear Power Station)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing LB MEMORANDUM AND ORDER (RULING ON STANDING, CONTENTIONS, HEARING PROCEDURES, STATE STATUTORY CLAIM, AND CONTENTION ADOPTION) (LBP-06-20) have been served upon the following persons by U.S. mail, first class, or through NRC internal distribution.

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[Original signed by Evangeline S. Ngbea]

Office of the Secretary of the Commission

Dated at Rockville, Maryland,
this 22nd day of September 2006