LBP-04-28

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Alex S. Karlin, Chairman
Dr. Anthony J. Baratta
Lester S. Rubenstein

In the Matter of ENTERGY NUCLEAR VERMONT YANKEE L.L.C. and ENTERGY NUCLEAR OPERATIONS, INC. (Vermont Yankee Nuclear Power Station)	Docket No. 50-271 ASLBP No. 04-832-02-OLA November 22, 2004

MEMORANDUM AND ORDER
(Ruling on Standing, Contentions, and State Reservation of Rights)

Before the Board are two petitions to intervene and requests for hearing related to the application of Entergy Nuclear Vermont Yankee, L.L.C., and Entergy Nuclear Operations, Inc. (collectively, Entergy), for an amendment to the operating license for the Vermont Yankee Nuclear Power Station in Windham County, Vermont. Entergy seeks a license amendment authorizing it to increase the maximum power level of the plant from 1593 megawatts thermal (MWt) to 1912 MWt and to modify associated technical specifications of the license. The petitioners are the Department of Public Service of the State of Vermont (State) and an environmental organization, the New England Coalition (NEC). For the reasons set forth below, we find that each of the petitioners has standing to intervene in this proceeding and has submitted at least one admissible contention. In addition, we deny the State's reservation of rights to extend the time for filing contentions.

I. BACKGROUND

In September 2003, Entergy submitted an extended power uprate (EPU) application to the Commission to amend Facility Operating License No. DPR-28, for operation of the Vermont Yankee Nuclear Power Station.[1] Subsequently, Entergy supplemented and amended its application several times. On July 1, 2004, the Commission issued a notice of consideration of issuance of the proposed amendment and opportunity for a hearing. 69 Fed. Reg. 39,976 (July 1, 2004).

The State and NEC each filed timely petitions to intervene, asking to be admitted as a party to any proceeding conducted on the application.[2] The State submitted five contentions challenging certain aspects of Entergy's application.[3] NEC proposed seven contentions.

Following the designation of this Board, 69 Fed. Reg. 56,797 (Sept. 22, 2004), both Entergy and the NRC Staff submitted answers to the petitioners' hearing requests on September 29, 2004. Entergy admitted that both petitioners had standing to participate in this

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[1] Letter from Jay K. Thayer, Site Vice President, to U.S. Nuclear Regulatory Commission, Document Control Desk, "Vermont Yankee Nuclear Power Station License No. DPR-28 (Docket No. 50-271) Technical Specification Proposed Change No. 263 Extended Power Uprate" (Sept. 10, 2003), ADAMS Accession No. ML032580089 [hereinafter Application].

[2] [State] Notice of Intention to Participate and Petition to Intervene (Aug. 30, 2004) [hereinafter State Petition]; [NEC]'s Request for Hearing, Demonstration of Standing, Discussion of Scope of Proceeding and Contentions (Aug. 30, 2004) [hereinafter NEC Petition]. Following the filing of its petition, on September 3 and 10, 2004, respectively, NEC re-filed Exhibit F and also submitted Exhibit G to its petition. Letters from Raymond Shadis, to the NRC Rulemakings and Adjudications Staff (Sept. 3, 2004) and (Sept. 10, 2004).

[3] On October 18, 2004, the State submitted a request to file a new contention, in response to a change in Entergy's procedures to prevent core uncovery. [State] Request for Leave to File a New Contention (Oct. 18, 2004). The Board's ruling related to this particular motion will be issued at a later date.

proceeding, but argued that they had submitted no admissible contentions.[4] The Staff agreed that both the State and NEC had standing. The Staff asserted that although most of the petitioners' contentions failed to meet NRC's regulatory requirements, they had each proffered at least one contention that was not objectionable.[5] Each petitioner filed replies to the Entergy and Staff answers.[6]

On October 21 and 22, 2004, the Board conducted a prehearing conference with the petitioners, Entergy, and the Staff in Brattleboro, Vermont, where we heard oral argument relating to the admissibility of the twelve contentions and associated legal issues. Tr. at 61-558.

II. ANALYSIS

NRC regulations require that any individual, group, business, or governmental entity that wishes to intervene as a party in an adjudicatory proceeding addressing a proposed licensing action must (1) establish that it has standing; and (2) offer at least one admissible contention. 10 C.F.R. § 2.309(a).[7]

A. Standards Governing Standing

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[4] Entergy's Answer to [State] Notice of Intention to Participate and Petition to Intervene (Sept. 29, 2004) [hereinafter Entergy Answer to State]; Entergy's Answer to the [NEC]'s Request for Hearing (Sept. 29, 2004) [hereinafter Entergy Answer to NEC].

[5] NRC Staff Answer to [State] Notice of Intention to Participate and Petition to Intervene (Sept. 29, 2004) [hereinafter Staff Answer to State]; NRC Staff Answer to Request for Hearing of [NEC] (Sept. 29, 2004) [hereinafter Staff Answer to NEC]. A week later, the Staff filed corrections to certain portions of its answers. NRC Staff's Errata to its Answers to Request for Hearing of [NEC] and [State] Notice of Intention to Participate and Petition to Intervene (Oct. 6, 2004).

[6] [State] Reply to Answers of Applicant and NRC Staff to Notice of Intention to Participate and Petition to Intervene (Oct. 7, 2004) [hereinafter State Reply]; [NEC]'s Reply to Applicant and NRC Staff Answers to New England Coalition's Request for Hearing, Demonstration of Standing, Discussion of Scope of Proceeding and Contentions (Oct. 11, 2004) [hereinafter NEC Reply].

[7] The current regulation covering, inter alia, standing and contention requirements is 10 C.F.R. § 2.309, adopted on January 14, 2004, effective February 13, 2004. 69 Fed. Reg. 2,182 (Jan. 14, 2004). The current regulation is, in pertinent part, substantially the same as the prior regulation, 10 C.F.R. § 2.714. The case law cited herein refers to the prior regulation or its predecessors.

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 the governing statutes to be made a party; (2) the nature of the petitioner's property, financial or other interest in the proceeding; and (3) the possible effect of any decision or order on the petitioner's interest. 10 C.F.R. § 2.309(d)(1). The NRC generally uses judicial concepts of standing in interpreting this regulation.[8] Thus, NRC requires a petitioner to establish that (1) it has suffered or will suffer a distinct and palpable harm constituting injury-in-fact within the zone of interests arguably protected by the governing statutes;[9] (2) the injury is fairly traceable to the action being challenged; and (3) the injury will likely be redressed by a favorable determination. Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 6 (1996). An organization seeking to intervene in a representational capacity must demonstrate that the licensing action will affect at least one of its members, must identify that member by name and address, and must show that it is authorized by that member to request a hearing on his or her behalf. Vermont Yankee Nuclear Power Corporation and Amergen Vermont, LLC (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). Meanwhile, "a State . . . that wishes to be a party in a proceeding for a facility located within its boundaries need not address the standing requirements." 10 C.F.R. § 2.309(d)(2).

B. Rulings on Standing

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[8] The Commission and the Atomic Safety and Licensing Boards are not Article III courts and are not bound to follow judicial concepts of standing. 69 Fed. Reg. at 2,200. In at least one case the Commission has imposed standing requirements more stringent than the federal courts. See Envirocare of Utah, Inc. v. NRC, 194 F.3d 72, 75 (D.C. Cir. 1999).

[9] E.g., the Atomic Energy Act of 1954 or the National Environmental Policy Act of 1969.

1. State

As the Vermont Yankee Nuclear Power Station is located in Vermont, we find that the State does not need to address the standing requirements. 10 C.F.R. § 2.309(d)(2).

2. New England Coalition

NEC's petition included the declarations of seven of its members authorizing the organization to represent their interests in Entergy's license amendment application. NEC Petition, Exh. C. The declaration of each individual states that he or she lives within close proximity of the plant, at distances ranging from one to fifteen miles from the nuclear facility. Id. The petition also included the declaration of Pamela Long, an officer of NEC, stating that its offices and property are located within ten miles of the facility and authorizing NEC to appear, through its pro se representative, in this proceeding. NEC Petition, Exh. B. Both Entergy, Entergy Answer to NEC at 3, and the Staff, Staff Answer to NEC at 9, concede that NEC has standing in this matter.

We agree. If the EPU amendment is granted there would be an increase in the radioactivity in the reactor core with an obvious potential for offsite consequences. See Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 330 (1989). NEC's representative members all state that they reside within fifteen miles of the plant and assert that they are concerned that the proposed EPU could increase both the potential for an accident and the harmful consequences of an offsite radiological release from the plant.[10] Based on these declarations, we find that NEC satisfies the requirements of representational standing as set out in Vermont Yankee, CLI-00-20, 52 NRC at 163.

C. Standards Governing Contention Admissibility

Section 2.309(f) of the Commission's regulations sets out the requirements that must be met if a contention is to be admitted to a proceeding. An admissible contention must (1) provide

[10] See, e.g., NEC Petition, Exh. C, Declaration of Paul Sather (Aug. 26, 2004) (residence approximately one mile from the plant).

a specific statement of the legal or factual issue sought to be raised; (2) provide a brief explanation of the basis for the contention; (3) demonstrate that the issue raised is within the scope of the proceeding; (4) demonstrate that the issue raised is material to the findings the NRC must make to support the action that is involved in the proceeding; (5) provide a concise statement of the alleged facts or expert opinions, including references to specific sources and documents, that support the petitioner's position and upon which the petitioner intends to rely at hearing; and (6) provide sufficient information to show that a genuine dispute exists in regard to a material issue of law or fact, including references to specific portions of the application that the petitioner disputes, or in the case when the application is alleged to be deficient, the identification of such deficiencies and supporting reasons for this 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 2,202; see also Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 553-554 (1978); BPI v. AEC, 502 F.2d 424, 428 (D.C. Cir. 1974); Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20 (1974). 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." 69 Fed. Reg. at 2,202. 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), pet. for reconsideration denied, CLI-02-1, 55 NRC 1 (2002). Failure to comply with any of these requirements is grounds for the dismissal of a contention. 69 Fed. Reg. at 2,221; Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999); Arizona Public Service Company (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991).

The application of these requirements has been further developed by NRC case law, as is summarized below:

1. Within the Scope of the Proceeding

A petitioner must demonstrate that the "issue raised in the contention is within the scope of the proceeding." 10 C.F.R. § 2.309(f)(1)(iii). The scope of the proceeding is defined by the Commission in its initial hearing notice and order referring the proceeding to the Licensing Board. Duke Power Company (Catawba Nuclear Station, Units 1 and 2), ALAB-825, 22 NRC 785, 790-91 (1985). Any contention that falls outside the specified scope of the proceeding must be rejected. See Portland General Electric Company (Trojan Nuclear Plant), ALAB-534, 9 NRC 287, 289-90 n.6 (1979).

2. Concise Allegation of Supporting Facts or Expert Opinion

Contentions must be supported by "a concise statement of the alleged facts or expert opinions which support the requestor's/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 and expert opinions necessary to support its contention adequately. Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305, vacated in part and remanded on other grounds and aff'd in part, CLI-95-10, 42 NRC 1, and CLI-95-12, 42 NRC 111 (1995). Failure to do so requires that the contention be rejected. Palo Verde, CLI-91-12, 34 NRC at 155.

Determining whether the contention is adequately supported by a concise allegation of the facts or expert opinion is, however, not a hearing on the merits. Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), LBP-82-106, 16 NRC 1649, 1654 (1982). The petitioner does not have to prove its contention at the admissibility stage. Private Fuel Storage L.L.C. (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 139 (2004). The contention admissibility threshold is less than is required at the summary

disposition stage, where inferences that can be drawn from evidence are construed in favor of the party opposing the summary disposition. See 10 C.F.R. § 2.710(c).[11] However, as with a summary disposition motion, a "Board may appropriately view Petitioners' support for its contention in a light that is favorable to the Petitioner." Palo Verde, CLI 91-12, 34 NRC at 155.

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) (citing 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 Tech Research Reactor, LBP-95-6, 41 NRC at 305; 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 Company (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 its does indeed supply adequate support for the contention. Vermont Yankee Nuclear Power Corporation (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

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[11] "[A]t 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." 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989).

that the petitioner provide "some alleged fact or facts in support its position." 54 Fed. Reg. at 33,170.[12]

3. Materiality

In order to be admissible, the petitioner must demonstrate that a contention asserts an issue of law or fact that is "material to the findings the NRC must make to support the action that is involved in the proceeding," that is to say, the subject matter of the contention must impact the grant or denial of a pending license application. 10 C.F.R. § 2.309(f)(1)(iv). "Materiality" requires that the petitioner show why the alleged error or omission is of possible significance to the result of the proceeding. Portland Cement Ass'n. v. Ruckelshaus, 486 F.2d 375, 394 (D.C. Cir. 1973), cert. denied sub nom. Portland Cement Corp. v. Administrator E.P.A., 417 U.S. 921 (1974). This means that there should be some significant link between the claimed deficiency and either the health and safety of the public or the environment. See Yankee Nuclear, LBP-96-2, 43 NRC at 75; see also Pacific Gas & Electric Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), LBP-02-23, 56 NRC 413, 439-41(2002), petition for review denied, CLI-03-12, 58 NRC 185, 191 (2003).

4. Genuine Dispute Regarding Specific Portions of Application

All contentions must "show that a genuine dispute exists" with regard to the license application in question, challenge and identify either specific portions of, or alleged omissions from, the application, and provide the supporting reasons for each dispute. 10 C.F.R. § 2.309(f)(1)(vi). Any contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed. See Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200,

[12] "This requirement does not call upon the intervenor to make its case at this 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.

247-48 (1993), review declined, CLI-94-2, 39 NRC 91 (1994); Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 NRC 370, 384 (1992).

5. Brief Explanation of the Basis of the Contention

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." 54 Fed. Reg. at 33,170. The brief explanation helps define the scope of a contention – "[t]he reach of a contention necessarily hinges upon its terms coupled with its stated bases." Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-899, 28 NRC 93, 97 (1988), aff'd sub nom. Massachusetts v. NRC, 924 F.2d 311 (D.C. Cir. 1991), cert. denied, 502 U.S. 899 (1991); see also Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 379 (2002). However, it is the admissibility of the contention, not the basis, that must be determined. 10 C.F.R. § 2.309(a).

6. Challenges to NRC Regulations

With limited exceptions, "no rule or regulation of the Commission . . . is subject to attack . . . in any adjudicatory proceeding." 10 C.F.R. § 2.335(a); see also Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 218 (2003). By the same token, any contention that amounts to an attack on applicable statutory requirements or represents a challenge to the basic structure of the Commission's regulatory process must be rejected. Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), LBP-82-76, 16 NRC 1029, 1035 (1982) (citing Peach Bottom, ALAB-216, 8 AEC at 20-21). Additionally, the adjudicatory process is not the proper venue for a petitioner to set forth any contention that merely addresses his or her own view regarding the direction regulatory policy should take. Peach Bottom, ALAB-216, 8 AEC at 21 n. 33.

Applying the above stated standards, our rulings on the various contentions are outlined below. Exercising our authority under 10 C.F.R. §§ 2.316, 2.319, 2.329, we have acted to

further define and/or consolidate contentions when the issues sought to be raised by one or both of the petitioners appear related, or when redrafting would clarify the scope of a contention.

D. Rulings on State Contentions

1. State Contention 1: Applicant Has Claimed Credit for Containment Overpressure in Demonstrating the Adequacy of ECCS Pumps for Plant Events Including a Loss of Coolant Accident in Violation of 10 C.F.R. § 50, Appendix A, Criteria 35 and 38[13] and Therefore Applicant Has Failed to Demonstrate That the Proposed Uprate Will Not Create a Significant Hazard as Required by 10 C.F.R. § 50.92 and Will Not Provide Adequate Protection for the Public Health and Safety as Required by 10 C.F.R. § 50.57(a)(3).

The State provided three explanations of the bases for this contention. First, the State asserts that the portion of NRC Regulatory Guide 1.82, Revision 3 (Reg. Guide 1.82)[14] that authorizes containment overpressure credit has never been properly evaluated or approved by the Advisory Committee on Reactor Safeguards (ACRS), in violation of 42 U.S.C. § 2039. State Petition at 6. The State argues that the containment overpressure credit element of Reg. Guide 1.82 is a major policy change, that it was buried in a regulatory guide focused on a different issue, and that members of the ACRS expressed reservations about allowing such credit. State Petition at 8-11. Entergy argues that the alleged shortcomings of the ACRS review are irrelevant to this proceeding. Entergy Answer to State at 15. The Staff responds that the assertion that the ACRS did not review the containment overpressure credit element of Reg

[13] The State asserts that Vermont Yankee is committed to the draft general design criteria (Draft GDC), 32 Fed. Reg. 10,213 (July 11, 1967), and that Draft GDC 44 and 52 correspond to the current design criteria (Current GDC) 35 and 38. State Petition at 6. Entergy acknowledges that the Vermont Yankee facility was licensed to the design requirements in the Draft GDC being considered at the time the construction permit was issued, Entergy Answer to NEC at 47, n. 52, and does not dispute that Draft GDC 44 and 52 from 1967 are controlling. Draft GDC 44 and Current GDC 35 cover ECCS. Draft GDC 52 and Current GDC 38 cover Containment Heat Removal. The text of the Draft GDC and the Current GDC is somewhat different. Because the Draft GDC are the relevant provisions for the Vermont Yankee plant, the text of the Draft GDC is used in this decision.

[14] U.S. Nuclear Regulatory Commission, Regulatory Guide 1.82, Rev. 3, "Water Sources for Long-Term Recirculation Cooling Following a Loss-of-Coolant Accident," (November 2003).

Guide 1.82 is incorrect and that the State has failed to articulate a genuine dispute on a material issue of law or fact with respect to this basis. Staff Answer to State at 7.

We conclude that the alleged shortcomings in the ACRS review are not material to the outcome of this proceeding, as is required by 10 C.F.R. § 2.309(f)(1)(iv). The ACRS approved the regulatory guide and it authorizes the use of containment overpressure to help achieve NPSH.[15] Accordingly, there is no violation of 42 U.S.C. § 2039. In any event, regulatory guides are not regulations and are not binding. Curators of the Univ. of Missouri, CLI 95-8, 41 NRC 386, 397 (1995). Arguments about the quality or quantity of the ACRS discussion concerning Reg. Guide 1.82 are irrelevant and not a proper subject for litigation in a licensing proceeding.

The second proffered explanation of the basis for Contention 1 again focuses on Reg. Guide 1.82, arguing its use is indefensible because the use of containment overpressure to demonstrate the net positive suction head (NPSH) required to operate emergency core cooling system (ECCS) pumps, improperly eliminates NRC safety requirements for defense in depth by multiple fission product barriers by allowing one barrier failure (containment failure) to compromise the effectiveness of two critical safety systems (containment and ECCS pump operation) and eventually compromise the two remaining fission product barriers (fuel cladding and the reactor coolant system). State Petition at 6. This "dependency," it is argued, does not comport with Draft GDC 44 and 52 and thus the application (a) fails to demonstrate that the proposed EPU will not create a significant hazard (10 C.F.R. § 50.92) and (b) undermines the reasonable assurance that the EPU can be granted without endangering the health and safety of the public (10 C.F.R. § 50.57(a)(3)). Entergy reiterates that Reg. Guide 1.82 is irrelevant because compliance with regulatory guides is not legally required and thus not litigable. Entergy Answer to State at 16. The Staff argues that the contention lacks specificity because

[15] Letter from R.L. Seale, Chairman, ACRS, to the Honorable S.A. Jackson, "Credit for Containment Overpressure to Provide Assurance of Sufficient Net Positive Suction Head for Emergency Core Cooling and Containment Heat Removal Pumps" (Dec. 12, 1997) ADAMS Accession No. 9712300132.

the State has not pointed to specific portions of the application that are deficient. Staff Answer to State at 10.

It is our assessment that State Contention 1, as supported by the State's second explanation of basis, is admissible under 10 C.F.R. § 2.309(f). First, the State makes clear that it is not citing Reg. Guide 1.82 as a legal requirement but instead as part of the rationale supporting the expert opinion of Mr. Sherman.[16] State Reply at 17-18. Further, while it is clear that neither NRC nor this Board can require that Entergy comply with a regulatory guide, in this case Entergy acknowledges that it is using Reg. Guide 1.82 and its methodologies to support its application and proposed use of containment overpressure credit to achieve NPSH. Tr. at 245, 273. Thus, Reg. Guide 1.82 is at least relevant to the safety questions raised by the State. Id. at 252-53.

The core issue of State Contention 1 is that if containment overpressure credit is granted for ECCS pump NPSH and then a single passive failure of the containment is assumed, two or more other safety systems could fail, thus undermining the protection of public safety and health. State Petition at 12-13. Draft GDC 44 requires that Vermont Yankee have at least two ECCS, "each with a capability for accomplishing abundant emergency core cooling." 32 Fed. Reg. at 10,216. Draft GDC states that the performance of each ECCS is to be "evaluated conservatively" and that "[t]he systems shall not share . . . features or components unless it can be demonstrated that . . . (c) capability of the shared feature or

[16] The Board is troubled by the form of the affidavit of the State's expert. In it, Mr. Sherman indicates that he assisted in the preparation of the State's pleading and simply endorses "[a]ll of the information given as supporting evidence in Contentions 1 through 4" as "true and correct to the best of my knowledge." State Petition, Sherman Declaration at 1. Such wholesale endorsement of the pleadings seriously undermines our ability to differentiate between the legal pleadings and the facts and opinions expressed by the expert. The State's form of expert opinion contrasts with the form used by NEC. Recognizing that the State's approach has been accepted in some prior Licensing Board proceedings, we decline to reject the State's contentions on this basis alone. However, expert declarations submitted hereafter in this proceeding (e.g., in support of any late filed contentions) must avoid the "wholesale endorsement" approach and instead separately state the expert's substantive opinions and whatever supporting facts the expert chooses to cite.

component to perform its required function is not impaired by the effects of a loss-of-coolant accident and is not lost during the entire period this function is required following the accident." Id. Whether the use of the containment overpressure creates an inappropriate dependency or renders the proposed EPU non-compliant with the requirements of Draft GDCs 44 and 52 and 10 C.F.R. § 50.57(a)(3) is a legitimate issue of fact and law that is in genuine dispute and is material to this proceeding.[17]

In contrast, however, we find that the second prong of Contention 1– that containment overpressure credit undermines or defeats Entergy's demonstration that the proposed EPU will not create a significant hazard as required by 10 C.F.R. § 50.92 – is not material to this proceeding. The only purpose of the analysis of the no significant hazard consideration (NSHC) contained in the application is to assist the Staff in deciding a procedural matter, i.e., whether an opportunity for a hearing must be provided before or after any amendment that might be granted. See AEA § 189a and 10 C.F.R. § 50.92(a). The NRC's NSHC determination is not subject to review. See 10 C.F.R. § 50.58(b)(6). The current proceeding concerns challenges to the merits of the application, not the timing of a hearing, and thus the adequacy of the applicant's NSHC analysis is not material.

As to specificity, we find that the State has met the requirement of 10 C.F.R. § 2.309(f)(1)(vi) to provide "sufficient information to show that a genuine dispute exists" including sufficient "references to specific portions of the application" necessary to support the admission of Contention 1. In particular, the State alleges that the application "uses nominal or average values of temperature, pressures, flows and other parameters, rather than conservative values" and goes on to explain why the State finds such an approach problematic. State Petition at 15.

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[17] Although the parties expend many words debating the philosophy of "defense in depth," we look in vain for a regulation that uses this phrase. Any hearing on State Contention 1 should instead focus on regulatory requirements and Draft GDC.

Clearly there is a genuine dispute and the State has referenced a specific portion of the application.

The State's third explanation of the basis for State Contention 1 is the assertion that the application failed to demonstrate that Entergy qualifies for the pre-conditions for the use of Reg. Guide 1.82 – that credit is either "necessary" or that plant operations or equipment cannot be "practicably altered." Entergy is indeed using Reg. Guide 1.82. Tr. at 245, 273. Reg. Guide 1.82 states a general rule that ECCS "should be independent of . . . containment pressure," Reg. Guide 1.82 at 8, but grants an exception where "credit for containment accident pressure may be necessary," id., but only for those "reactors for which the design cannot be practicably altered." Reg. Guide 1.82 at 20; see also Sections 2.1.1.1 and 2.1.1.2 of Reg. Guide 1.82. Entergy responds that it has met the "intent" of the necessity provision by showing that sufficient containment overpressure is "available." Entergy Answer to State at 17-18. But a showing of availability is not a showing of necessity. Entergy next baldly asserts that it has "clearly demonstrated in the Application the need for containment overpressure credit" and thus that it has shown that it is "necessary." Entergy Answer to State at 18. The State rightly characterizes this as a "meaningless tautology." State Repy at 19. Meanwhile, the Staff washes its hands of the entire necessity/impracticability precondition in Reg. Guide 1.82, saying it makes no judgment on these matters and has no role in such decisions. Staff Answer to State at 12. As to impracticability, the State points out that Entergy's own feasibility study identified practicable alternatives. State Reply at 20.

Ultimately however, we are brought back to the proposition that regulatory guides are not mandatory requirements and conclude that disputes about whether Entergy met the pre-requisites for the application of Reg. Guide 1.82, however genuine, are not material to the issues in this proceeding.[18] This is because the proper issue raised in State Contention 1 is not

[18] As we understand it, Entergy's proposed EPU has been referred to the ACRS. We (continued...)

whether Entergy met Reg. Guide 1.82 and its pre-conditions, but is whether the application shows that the Vermont Yankee Power Station, if uprated by 20%, comports with Draft GDC 44 and 52 and shows that the facility will reasonably assure the protection of the health or safety of the public.

In conclusion, we find that State Contention 1, as supported by the State's second explanation of its basis and as restated in Appendix 1, is admissible.

2. State Contention 2: Because of the Current Level of Uncertainty Associated with the Demonstration of the Adequacy of ECCS Pumps, Applicant Has Not Demonstrated That Allowing a Radical Departure from the Defense in Depth Principle Which Prohibits Use of Containment Overpressure to Provide the Necessary NPSH for ECCS Pumps Will Not Constitute a Significant Hazard (10 C.F.R. § 50.92) and Will Provide Adequate Protection for the Public Health and Safety as Required by 10 C.F.R. § 50.57(a)(3).

The State submitted three explanations of the basis of this contention. First, the State alleges that there is no reliable evidence of the magnitude of the impact of strainer and debris losses on pressure at the ECCS pumps following a loss of coolant accident (LOCA). Second, without sufficient information to adequately bound the uncertainties associated with the reduction of pressure at the ECCS pumps following a LOCA, there is no reliable basis to justify using the equally uncertain containment overpressure to compensate for such pressure losses. Third, the State asserts that containment overpressure already serves as a safety margin in Vermont Yankee's current design and licensing basis and it is inappropriate to abandon this safety margin by allowing containment overpressure credit because the calculations and analyses for determining NPSH are uncertain and imprecise. State Petition at 20.

Entergy asserts that Contention 2 is impermissibly vague, conclusory, and "boils down to the argument that 'Defense in Depth must not be abandoned.'" Entergy Answer to State at 21.

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[18](...continued)
hope that the ACRS will focus on the necessity and impracticability issues in its review.

It also argues that the State has provided no legal or factual basis for the contention. The Staff attacks several of the State's references to Reg. Guide 1.82 first by reminding us that failure to comply with a regulatory guide is, without more, inadequate to meet the NRC contention pleading requirements, and then by complaining that the State has failed to identify the aspects of certain calculations that did not comply with the regulatory guide. Staff Answer to State at 15. The Staff also says that the allegation that containment leakage is frequently underestimated is without basis and bristles at the suggestion that the State may be challenging the adequacy of the Staff's review of the application. Id. at 17. Next, the Staff characterizes as "pure speculation," the State's assertion that Entergy modifications to the VYC-0808 calculation demonstrate that sufficient uncertainty exists to retain containment overpressure as a safety margin, rather than crediting it to help achieve NPSH. Id. at 18. Finally, the Staff "does not challenge the admissibility of [the] portion of Basis 3" that is supported by the evidence provided in State Petition at 24-26. Id. at 16. The portion in question deals with the allegedly "insufficient conservatism and margin in the values used for required NPSH or NPSHr in Applicant's demonstration of ECCS pump adequacy." State Petition at 24.

We conclude that, properly narrowed, State Contention 2 meets the requirements of 10 C.F.R. § 2.309(f) and is admissible. In short, the State has alleged that there is insufficient information to adequately bound the uncertainty associated with Entergy's demonstration that the ECCS pumps, together with the requested credit for containment overpressure, will provide adequate protection for the public health and safety as required by 10 C.F.R. § 50.57(a)(3). Contrary to Entergy's assertion that the contention boils down to "defense in depth," we find that this phrase, and arguments about the defense in depth philosophy, are surplusage to the key point – are the uncertainties adequately bounded so as to reasonably assure protection of health and safety under 10 C.F.R. § 50.57(a)(3)?

This presents a genuine and disputed issue that is material to any decision on the license amendment application. As containment overpressure credit is a key part of Entergy's

EPU application, the appropriateness of this credit is clearly within the scope of this proceeding. The contention is supported by the affidavit of the State's expert, who has endorsed as his own statements, all of the allegations of uncertainties and risks set out at pages 21 to 28 of the State Petition.

The concerns raised by the Staff challenging some of the elements that are the foundation of the expert opinion of Mr. Sherman, are misplaced because the real support is the expert opinion itself. For example, the State does not contend that Reg. Guide 1.82 must be followed, but only cites it as part of the underpinning of Mr. Sherman's expert opinion that there is an uncertainly problem. Likewise, Mr. Sherman's sworn statement that "[f]requently the as-found condition of containment isolation valves [reveals] that containment leakage is frequently underestimated," State Petition at 26, is his expert opinion which we can test in an evidentiary hearing. The criticism that the State has failed to tie particular uncertainties noted by the ACRS in the calculation of the magnitude of head losses expected from debris blockage is aptly answered by the State that its real point is that no calculation of this type can be reliable, because (it contends) there is insufficient data to bound the uncertainties of such a prediction. State Reply at 23. Arguments about the validity of the expert opinion of Mr. Sherman are for the merits, and cannot be assessed here at the contention admissibility stage.

As discussed above with regard to the second prong of State Contention 1, we find that the second prong of State Contention 2 – that uncertainties in using containment overpressure credit means that the 10 C.F.R. § 50.92 NSHC analysis in the application is inadequate – raises a procedural issue that is not material to this proceeding.

In conclusion, we find that State Contention 2, as narrowed and restated in Attachment 1, is admissible.

3. State Contention 3: Because Applicant is Voluntarily Seeking a Change In Design or Licensing Basis, It Should Comply With Current, More Restrictive Practices Which Relate to the Proposed Design or Licensing Basis Change in

Order to Demonstrate That it Will Provide Adequate Protection to the Health and Safety of the Public as Required By 42 U.S.C. § 2232(a).

The State's three explanations of the bases for this contention boil down to the assertion that because Entergy is voluntarily asking for a change to its design or current licensing basis, Entergy should be required to meet current, more restrictive licensing requirements on matters that are "directly related" to the proposed change. State Petition at 28-29. Specifically, the State argues that the Vermont Yankee facility should be reviewed under modern standards and assumptions concerning single failure and simultaneous safe shutdown earthquake (SSE), both of which, it argues, are directly related to Entergy's request for containment overpressure credit. Id. at 29. The State asserts that NRC's backfit rule, 10 C.F.R. § 50.109, does not apply

because Entergy has voluntarily requested the proposed license amendment.[19] Id. at 30. The State cites section 5.1.4 of NRC Regulatory Guide 1.183, "Alternative Radiological Source Terms (AST) for Evaluating Design Basis Accidents at Nuclear Power Reactors," (July 2000) (Reg. Guide 1.183), as establishing a precedent for its argument. Id.

Entergy argues that State Contention 3 impermissibly challenges NRC's regulations regarding design and licensing basis maintenance, change, and approval process and ignores 10 C.F.R. § 2.335(a) which states that "no rule or regulation of the Commission . . . is subject to attack . . . in any adjudicatory proceeding." Entergy Answer to State at 28-29. Entergy points out that Reg. Guide 1.183 concerns AST, an entirely different subject, and even then it only considers the use of current calculation assumptions and methods if a new dose calculation methodology proposed by the applicant is "'incompatible' with 'analysis assumptions and methods currently reflected in the facility's design basis.'" Id. at 30 (quoting Reg. Guide 1.183).

The Staff does not address the backfit issue. Instead, it argues that the single failure element of Contention 3 should be rejected because Supplement 8 to the application shows that Entergy did indeed perform a sensitivity analysis relating to single failure (relating to residual heat removal heat exchangers) and therefore this part of the proposed contention is without factual foundation. Staff Answer to State at 19. However, based on the evidence from the Vermont State Geologist, the Staff did not oppose admission of Contention 3 "as to the adequacy of the current seismic analysis with respect to the VYNPS SSE in light of the request to credit containment overpressure." Id. at 21.

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[19] "Backfitting is defined as the modification of or addition to systems, structures, components, or design of a facility; or the design approval or manufacturing license for a facility; or the procedures or organization required to design, construct or operate a facility; any of which may result from a new or amended provision in the Commission rules or the imposition of a regulatory staff position interpreting the Commission rules that is either new or different from a previously applicable staff position after: (i) The date of issuance of the construction permit for the facility . . . , (ii) Six months before the date of docketing of the operating license application for the facility . . . , or (iv) The date of issuance of the design approval." 10 C.F.R. § 50.109(a)(1).

State Contention 3 raises the following issue – when an applicant voluntarily proposes an amendment to its license, is it appropriate for the NRC to assess (or an intervenor to raise a contention concerning) whether the proposed amendment would be incompatible with other elements in the applicant's current design and licensing basis and, if so, to condition approval of the proposed amendment on applying more stringent current standards which are compatible with the proposed amendment?

Although there appears to be no case law on this subject, we conclude that the NRC's evaluation of a license amendment application necessarily entails assuring its technical compatibility with the licensee's current design and licensing basis.[20] If there is an incompatibility, the NRC may condition its approval of the licensee's proposed amendment on adjustments to the current design and licensing basis to resolve the incompatibility. The licensee can then either accept these conditions, or withdraw its application to amend the license.

Section 5.1.4 of Reg. Guide 1.183 is a good example of this logic. The regulatory guide reasons that where the licensee "voluntarily initiated" a "significant change to the design basis" of a facility, the NRC staff must make a "current finding of compliance with regulations applicable to the amendment" including, where the revised methodology "may be incompatible" with the assumptions and methods in the facility's original design basis analysis, a "review of staff positions approved subsequent to the initial issuance of the license." Section 5.1.4 states, "[t]his is not considered a backfit as defined by 10 C.F.R. § 50.109, 'Backfitting.' However, prior design bases that are unrelated to the use of the AST, or are unaffected by the AST, may continue as the facility's design basis." In short, if there is an "incompatibility," it is permissible

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[20] For example, the NRC "Review Standards for Extended Power Uprates," requires an EPU applicant to identify, in addition to the EPU itself, "any additional areas of review that are affected by the EPU." RS-001, Rev. 0. at 2.1-1, (Dec. 2003), ADAMS Accession No. ML033640024. (Emphasis added.) The Staff then assesses "each area of review that is affected by the EPU" and may impose additional areas not covered by the applicant. Id. at 2.1-2. This is not backfitting. Id. at "Purpose" page 1.

to review and apply the current more restrictive standards, but if the other systems are "unrelated" or "unaffected" it is impermissible.[21]

The parties acknowledge this basic principle. The State agrees that only in "those limited cases where there's a linkage" should the updated standards be applied. Tr. at 288. Entergy admits that it is "not arguing that anything that is related to EPU somehow can't be changed." Id. at 303. The Staff acknowledges that the "linkage between the seismic issue and the EPU" is a "close" question, and decided to "err on the side" of not objecting to the Contention 3 with regard to seismic. Id. at 319.

The "incompatibility" standard is a strict one. Under the backfit rule, the NRC is prohibited from imposing new or amended licensing standards on existing licensees except under limited circumstances, such as where the NRC does a "systematic and documented analysis" and determines "that there is a substantial increase in the overall protection of the public health and safety or the common defense and security to be derived from the backfit and that the direct and indirect costs of the implementation for that facility are justified." 10 C.F.R. § 50.109(a)(2), (3). In contrast, the incompatibility standard is not a cost-benefit analysis. Nor can it be used to impose more stringent requirements merely because they seem like a "good idea" or are somehow "linked" or "related" to the proposed amendment. Instead, incompatibility requires that there be an unacceptable inconsistency between the proposed license amendment and other parts of the licensee's current design and licensing basis, such that approving the amendment must be conditioned on updating the relevant portion of the design or licensing basis in order to protect public safety and health.

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[21] We reject the State's argument that the backfit rule, which prohibits the NRC from ratcheting regulatory standards on a licensee, does not apply simply because the licensee has voluntarily requested an amendment to its license. Tr. at 284-85. Here, Entergy has requested one change (an EPU) and the State wants to impose another (modern seismic standards). The first is voluntary, the second is not.

Applying the incompatibility standard to State Contention 3, we find that the State has not proffered any basis to support the proposition that Entergy's application for containment overpressure credit is incompatible with its current design and licensing basis relating to single failure. Bald statements that there is a "linkage" between the two, Tr. at 286, or that the latter is impacted by the former, State Reply at 34, are not sufficient. Accordingly, this portion of Contention 3 is rejected as violative of 10 C.F.R. §§ 50.109 and 2.335.

Likewise, with regard to the seismic issues raised by the State, we see no incompatibility. We recognize that there is a relationship between granting a credit for containment overpressure and seismic standards. Containment overpressure is dependent on the integrity of the containment system, which in turn is dependent on its ability to withstand seismic events.[22] But a relationship is not an incompatibility. The Vermont Yankee plant is already subject to stringent seismic and structural standards and the State has offered nothing to suggest an incompatibility between them and the proposed license amendment. Absent such an incompatibility, State Contention 3 is not admissible.

4. State Contention 4: The Change in Design Basis to Use the Reactor Containment as an Engineered Safety Feature to Guarantee at Least a Minimum Pressure for ECCS Pump Performance Violates the Lessons-Learned Regarding Human Factors for Operators in the Three Mile Island Event and Creates Contrary and Confusing Operating Requirements That Will Create a Significant Hazard (10 C.F.R. § 50.92) and Will Not Provide Adequate Protection for the Public Health and Safety and Required by 10 C.F.R. § 50.57(a)(3).

The State's logic for this contention is quite simple. It argues that Vermont Yankee operators are trained to reduce containment pressure during an emergency so as to reduce the release of radionuclides to the outside environment. The State asserts that the EPU will require

[22] "[B]ecause containment integrity is essential to the use of containment overpressure (i.e. if the containment loses integrity there may not be sufficient pressure to meet NPSH requirements) the containment integrity should be evaluated in light of current standards." State Reply at 35.

a change in the Vermont Yankee emergency operating procedures (EOPs) to instruct operators to maintain (i.e., not reduce) containment pressure. The State concludes that it is concerned that simultaneously requiring operators to reduce and maintain containment pressure will confuse the operators, in contravention of lessons learned from Three Mile Island. State Petition at 33; Tr. at 183. The State points out that the amount of pressure that operators must maintain varies over the timeline and nature of the event (LOCA, Anticipated Transient Without Scram (ATWS), Station Blackout (SBO) and an Appendix R fire). State Petition at 35.

Entergy responds, inter alia, that Contention 4 is without factual foundation because Entergy does not plan to change the EOPs and that looking at the LOCA, ATWS, SBO and Appendix R fire accident scenarios "it is clear that the EOPs do not require modifications to incorporate taking credit for overpressure." Entergy Answer to State at 36. Management and control of pressure is part of the existing EOPs. Tr. at 200.

In our opinion, Entergy's response cuts the ground from under the State's logic and renders State Contention 4 inadmissible. On these pleadings, there is no dispute that Entergy's application proposes no changes to its EOPs or transient procedures.[23] If there are no changes to the EOPs, how can there be confusion? The State's contention, lacking an adequate explanation of its basis, must fail.[24]

5. State Contention 5: To the Extent Applicant is Claiming That Use of Containment Overpressure as a Credit to Meet NPSH Is Necessary and Failure to Use it is Impracticable Because of Economic or Need for Power Considerations, its Request Should Be Rejected as Contrary to the Atomic Energy Act (42 U.S.C. § 2232).

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[23] The State asserts that this is "unacceptable," State Petition at 38, and a violation of Entergy's licensing basis, State Petition at 39, but does not explain why.

[24] If new and materially different information later comes to light, we may entertain a motion for leave to file a new contention under 10 C.F.R. § 2.309(f)(2).

This contention is not admissible because its factual predicate is not supported and there is no genuine issue in dispute. The contention is contingent on a factual premise – if Entergy is justifying the use of containment overpressure to meet NPSH on economic or power need considerations – then this violates the AEA. Entergy has flatly stated that it "has not based any part of its Application on, or made any claim of, 'economic or need for power considerations' in connection with taking credit for containment overpressure." Entergy Answer to State at 37. The Staff agrees and reminds us that "NRC has long held that benefit and cost considerations play no part in making the safety findings required under the AEA." Staff Answer to State at 26 (citations omitted). The State acknowledges that "[i]f, as Applicant and the Staff assert in their unsworn Answers, no effort will be made in this proceeding to justify the use of containment overpressure on the basis of economic or need for power considerations, then this Contention is moot." State Reply at 42. Under these circumstances, we conclude that State Contention 5 is not admissible.

E. Rulings on NEC Contentions

1. NEC Contention 1: New England Coalition contends that an Extended Power Uprate license amendment approval should not be considered until the potential effect of a reduced QA/QC program is investigated and analyzed. 10 C.F.R. 50.54 details the requirement for maintaining a quality assurance program. Any changes requiring a reduction in the program must be submitted to NRC.

NEC's explanation of the basis for this contention alleges that Entergy has reduced its quality assurance and quality control (QA/QC) program at Vermont Yankee and that these changes undermine the quality and independence of the program, thus undermining the validity of the information and accuracy of Entergy's EPU application. NEC Petition at 10. NEC's sole factual support of this proposition is an April 15, 2004 internal Entergy memorandum on the subject of "Transition of Quality Control Functions From Quality Assurance to Engineering & Maintenance for Fleet Alignment, Rev. 0." Id., Exh. F (Entergy Memo).

Our review of the Entergy Memo leads us to conclude that NEC has failed to provide the facts or expert opinion necessary to support this contention. Contrary to NEC's central factual point – that there is a "reduced QA/QC program" at Vermont Yankee – the Entergy Memo indicates that the QA functions at the Vermont Yankee facility are not being changed.[25] Nor has NEC provided us with any support for its allegations that the current QA/QC program at Vermont Yankee does not comply with 10 C.F.R. § 50.54(a) or Part 50 Appendix B. Absent support, this agency declines to assume that licensees will contravene our regulations. Oyster Creek, CLI-00-6, 51 NRC at 207. And even if we assume, for the purposes of argument, that the current QA/QC program is non-compliant, to bring this contention within the scope of this EPU proceeding, NEC must point to specific portions of the EPU application that might be rendered suspect or deficient by virtue of the alleged QA/QC non-compliance. Absent such a showing, the contention lacks a genuine and litigable dispute under 10 C.F.R. § 2.309(f)(1)(vi) and is not within the scope of this proceeding under 10 C.F.R. § 2.309(f)(1)(iii).[26]

2. NEC Contention 2: The license amendment should not be approved at this time because Entergy has failed to address the root cause of Main Steam Line Isolation Valve ("MSIV") Leakage but instead proposes to shift the problem downstream to catch a higher allowable leakage in the condenser. Entergy fails to pursue the root cause of a negative component performance trend that could ultimately yield failure of the MSIV safety function. MSIVs are a critical line of defense during a reactor accident.

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[25] The Entergy Memo, covering the "transition" of certain QA/QC functions within the Entergy group described the Vermont Yankee facility as the "outlier" where there is "no QC inspection group to transition" and indicates that "[i]f it's desired to align Vermont Yankee with the rest of the Entergy Nuclear fleet, then it would require additional resources." Entergy Memo ¶ 8.

[26] If NEC has information that the Vermont Yankee facility is in violation of its current design and licensing basis or any regulation or statute, NEC may file a request to the Secretary of the Commission to institute proceedings to modify, suspend or revoke Entergy's license or for any other action that may be proper. See 10 C.F.R. § 2.206(a).

NEC relies upon the declaration of one of its experts, Mr. Arnold Gundersen, to support this contention. NEC Petition, Exh. D, Declaration of Arnold Gunderson in Support of Petitioner's Contentions (Gunderson Declaration). Mr. Gunderson, a nuclear engineer, states that the MSIVs have the safety function to close and maintain an essentially leak-tight barrier to the release of containment atmosphere. Gunderson Declaration at 2. His declaration recites that during the last few years the Vermont Yankee facility experienced an adverse trend in the results of the local leak rate test (LLRT) on the MSIVs. Mr. Gunderson reviewed the Entergy report analyzing the adverse trend (Entergy Condition Report -VTY-2004-0918 (CR-0918)) dated May 4, 2005 and indicates that he disagrees with that report. Id. Mr. Gunderson opines that "the MSIVs are failing at an increasing rate because they are aging and corroding," id. at 2, and that "if the power level of the Vermont Yankee plant is increased, the problem of MSIV failure will also increase," id. at 3.

Entergy and the Staff assert that NEC Contention is not within the scope of the application for the EPU because the adverse trend in the MSIV LLRT was the subject of an entirely separate license amendment request (AST application) that was filed by Entergy on July 31, 2003. Entergy Answer to NEC at 15-16; Staff Answer to NEC at 11. The AST application identified the adverse trend and asked for a relaxation of the MSIV leakage limit. Entergy Answer to NEC at 17. The NRC published a "no significant hazards" determination with regard to the AST application in the Federal Register,[27] but NEC failed to request a hearing on the matter. Id. Thus, they argue that the MSIV LLRT is outside of the scope of this proceeding. Entergy also asserts that NEC has failed to show any connection between the MSIV leakage tests and the proposed EPU and that Mr. Gunderson failed to identify any factual basis for his opinions except by citing CR-0918 which, Entergy says, contradicts those opinions. Id. at 18-19. For its part, the Staff argues that NEC has failed to dispute any specific portion of Entergy's

[27] 68 Fed. Reg. 66,131, 66,135 (Nov. 25, 2003).

application or explain how any of its analyses would be invalidated if Mr. Gunderson's views were true. Staff Answer to NEC at 12-13.

We reject the argument that because the MSIV LLTR is the subject of a prior license amendment request, it is automatically outside of the scope of the EPU application. Certainly, NEC could have challenged the prior request. But once an EPU is added to the mix, the situation changes. It is entirely reasonable that a member of the public might not object to a relaxation of the leakage limit while Vermont Yankee continued to operate at a maximum authorized power level of 1593 MWt, but could object that the MSIV would not withstand the reactor conditions if the authorized power was increased to 1912 MWt. Tr. at 399. This is what NEC is doing here. NEC Reply at 31, 33; Tr. at 399. NEC's concerns are within the scope of this EPU proceeding.

That said, we are troubled by the fact that NEC and its expert have failed to point to any specific portions of the EPU application that are objectionable or to demonstrate any plausible facts supporting NEC Contention 2. The contention asserts that Entergy has "failed to address the root cause of [MSIV] Leakage" and that it "fails to pursue the root cause of a negative component performance trend." NEC Petition at 10. But this is contradicted by Mr. Gunderson's own declaration, which attaches and relies extensively on CR-0918, Entergy's analysis of the root cause of the LLTR. Gunderson Declaration at 2-3. Mr. Gunderson cites several excerpts from CR-0918 as supporting his opinion, but in context, these cites controvert his views. For example, he cites the statement that "there is also a consensus that the Wye pattern globe valve is less than optimal from a design and application point of view," id. at 2, but fails to finish the quoted sentence to the effect that "[however], there are few LLRT failures directly attributable to valve design," CR-0918 at 12. Likewise Mr. Gunderson cites the statement that "the seating force in the MSIVs is marginal," Gunderson Declaration at 3, but omits the end of the paragraph stating that this "does not affect the valve's ability to perform its safety function," CR-0918 at 8. Nor does Mr. Gunderson confront the point that in an actual containment isolation event the

valve seating force would be greater, CR-0918 at 8, and presumably greater still (due to increased internal pressures) if the EPU is granted. Further, although Mr. Gunderson opines that aging is a factor in the MSIV LLRT, Gunderson Declaration at 3, the Entergy report states that "[s]ince MSIVs are routinely disassembled, examined, refurbished and reassembled to original manufacturer's specifications, it isn't clear what could 'age' in an MSIV," CR-0918 at 27. Clearly, the condition report cited by Mr. Gunderson is subject to scrutiny both as to those portions that purportedly support NEC's contention and those that do not. See Yankee Nuclear, LBP-96-2, 43 NRC at 90. In sum, we see that the MSIVs undergo periodic testing, refurbishment and/or replacement, but we fail to see how NEC has shown how this raises a genuine dispute or material issue within the scope of the proposed EPU. Accordingly, we conclude that NEC Contention 2 does not satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(iv) and (vi).

3. NEC Contention 3: The license amendment should not be approved at this time or until it is agreed by all parties that Large Transient Testing will be a prerequisite to Extended Power Uprate per the staff position on Duane Arnold Energy Center.

This contention is founded on the portion of the EPU application titled "Justification for Exception to Large Transient Testing" (EVY 03-08) where Entergy asks for the elimination of large transient testing (LTT) at the uprated condition. Gunderson Declaration at 3. Mr. Gunderson challenges various of Entergy's assertions in EVY 03-08, discusses a May 9, 2001 NRC Staff request for additional information (RAI) in the Duane Arnold EPU licensing proceeding, and quotes the Staff, in Duane Arnold, as saying:

> The NRC-approved ELTR-1 requires the MSIVC [MSIV closure] test to be performed if the power uprate is more than 10% above previously recorded MSIV closure transient data. The topical report also requires the GLR [generator load rejection] test to be performed if the uprate is more than 15% of previously recorded transient data.

Gunderson Declaration at 4. Mr. Gunderson says that the fact that the Vermont Yankee facility may have experienced full power load rejections at 100% power does not bear on performance testing at 120% power. Id. at 5. Mr. Gunderson opines that, "in order to preserve the current

levels of assurance of safety, Entergy should be required to test Vermont Yankee rapid shutdown capability at full uprated power." Id.

Entergy responds that NEC has ignored the application's detailed discussions, fails to identify specific portions of the application that are deficient, and notes that the RAI at Duane Arnold is not a Staff "decision" and is not binding. Entergy Answer to NEC at 22-25. The Staff also attacks the relevance of its Duane Arnold RAI. Staff Answer to NEC at 15. The Staff argues that the contention lacks sufficient references to disagreements with the application and is supported only by "bare assertions" and is therefore inadmissible. Id. at 16.

We find NEC Contention 3 to be admissible. Since the request to be relieved of LTT is part of the EPU application, this contention is within the scope of this proceeding. Mr. Gunderson's expert opinion, supported by specific references to the EPU application and citations to relevant Staff documents, provides a concise statement of the alleged facts or expert opinions which support NEC's position.[28] Elimination of LTT under EPU conditions raises material issues that are genuinely disputed here.[29] Accordingly, we admit this contention, as restated and clarified by the Board in Appendix 1.

4. NEC Contention 4: The license amendment should not be approved. Entergy cannot assure seismic and structural integrity of the cooling towers under uprate conditions, in particular the Alternate Cooling System cell. At present the minimum appropriate structural analyses have apparently not been done.

The gist of this contention is that a new seismic and structural analysis should be performed to qualify the Vermont Entergy cooling towers for the additional loads that will result

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[28] While we agree that the RAI concerning Duane Arnold is neither a Staff "decision" nor controlling here, Mr. Gunderson's use of it and the documents it cites provide some support for his opinion.

[29] Entergy acknowledges that there are differences between the current rating for Vermont Yankee and the uprate conditions, such as steam dump capability, Tr. at 441, and core configuration in terms of power distribution, temperature, and flow, id. at 445.

from increasing the maximum power by 20%. The contention is supported by the declaration of Mr. Gunderson with references to relevant Entergy documents and emails. Gunderson Declaration at 6-7. Entergy responds that the contention is outside of the scope of this proceeding because the application itself proposes no changes to the cooling tower structure, basin or fans. Entergy Answer to NEC at 26. Entergy disputes NEC's claim that it has not previously performed the appropriate structural analysis of the cooling towers under current loading, id. at 27-29, and adds that there is no genuine dispute because Entergy "intends to perform a structural analysis of the cooling towers" to qualify the towers for additional loads. Id. at 30. The Staff does not object to the admission of this contention. Staff Answer to NEC at 17.

We conclude that NEC Contention 4 meets the requirements of 10 C.F.R. § 2.309(f) and is admissible. It provides a specific statement of the issue, a brief explanation of its basis and is supported by alleged facts and an expert opinion. The contention focuses on the alleged need for Entergy to perform a seismic and structural analysis of the cooling towers under the proposed uprated conditions and is thus within the scope of the uprate proceeding.[30] Even if the Entergy application proposes no modification of the cooling towers and related systems, it is relevant to ask whether the unchanged structures and systems are adequate to handle the uprate. And the fact that Entergy may intend to conduct such an analysis does not eliminate this genuine dispute, because Entergy could change its intent at any time unless, as NEC argues, it is required to perform the analysis. This contention, as restated in Appendix 1, is admitted.

5. NEC Contention 5: The license amendment should not be approved at this time because Entergy has failed to maintain documentation and records, as required under 10 C.F.R. 54 and elsewhere, and adequate [sic] to determine plant condition and design basis conformance as a foundation on which to build uprate analysis.

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[30] Whether Entergy's prior seismic or structural analyses of the cooling towers, basins or fans are compliant with its current licensing basis is not relevant to this proceeding unless there is a clear and direct relationship to the alleged need for an analysis of these structures and systems under the proposed uprate conditions.

NEC supports this contention with the declaration of Mr. Gunderson who alleges a number of gaps or inadequacies in the documentation that Entergy is required to maintain under its current license, citing 10 C.F.R. § 50.54(f), and opines that Entergy's "design basis and documentation cannot support adequate assurance that EPU calculations are rooted in as-found, plant-specific design basis or regulatory conformance." Gunderson Declaration at 8. Entergy contends that there is no factual basis for NEC Contention 5 because, it says, the alleged documentation gaps and inadequacies do not exist. Entergy Answer to NEC at 33. More to the point, Entergy argues that this contention is outside of the scope of the EPU proceeding because NEC fails to connect any such alleged documentation problem to the proposed EPU. Id. at 31. The Staff also argues that NEC has failed to relate its assertions of missing documents to the EPU application and therefore the contention is outside of the scope of this proceeding. Staff Answer to NEC at 17.

We agree that NEC has failed to demonstrate how the alleged deficiencies in Entergy's existing licensing and design documentation are connected to the grant or denial of the EPU application, i.e., are within the scope of and material to this proceeding as required by 10 C.F.R. § 2.309(f)(1)(iii) and (iv). NEC must at least allege some plausible nexus between the putative recordkeeping gaps and some specific portion of the EPU application. See 10 C.F.R. § 2.309(f)(1)(vi). This they have not done. Accordingly, this contention is not admissible.[31]

6. NEC Contention 6: The proposed license amendment fails to preserve defense-in-depth. By placing dependence on maintaining containment pressure to secure Residual Heat Removal and Core Spray Pump suction under accident conditions, Entergy ignores single failure criteria and violates basic tenets of reactor safety. This must not be permitted as it deprives the public of protections afforded by defense-in-depth.

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[31] Allegations that Entergy is not compliant with its current licensing basis are not, per se, within the scope of, or material to, this EPU proceeding. However, NEC is entitled to file a petition under 10 C.F.R. § 2.206 to request the Commission to institute a proceeding to modify, suspend, revoke or take any other appropriate action to address any alleged non compliance.

This contention challenges Entergy's proposal to use containment overpressure to help achieve NPSH and thus achieve residual heat removal (RHR) as violative of single failure criteria and safety.[32] The only regulatory citations are provided in the declaration of NEC's expert, Mr. Paul Blanch, who refers to the draft General Design Criteria and to Criterion 21, the definition of "single failure." NEC Petition, Exh. E, Declaration of Paul M. Blanch in Support of Petitioner's Contentions at 1-2 (Blanch Declaration). The substantive core of this contention is NEC's complaint about Entergy calculation VYC-0808, as follows:

> [T]he calculation fails to address any single active or passive failures of the containment or the torus including failures of valves and penetrations which may impact the operability of redundant [ECCS]. It fails to provide the impact not only on the ability to cool the reactor core but also fails to analyze the consequences of the additional dose to the control room and the site boundary should a single failure occur while attempting to maintain this elevated pressure. Recent failures, both isolated and common mode failures [citing the Hatch Nuclear Plant LER 2004-02] of BWR containment valves have not been considered.

Blanch Declaration at 2.

For a number of reasons, we conclude that NEC has failed to provide the facts or law to establish the admissibility of this contention. First, it is clear that Supplement 8 to the Application does address a single failure of an RHR heat exchanger and performed a sensitivity analysis of it. Staff Answer to NEC at 21. The first sentence quoted above is flatly incorrect. Further, the Staff asserted that failure of the RHR heat exchanger is the most conservative single failure mode, and NEC did not dispute this assertion or show why this is incorrect. Id. In the second sentence quoted above, NEC argues that VYC-0808 fails to assess the impact on the ability to cool the reactor. Entergy aptly responds that its Power Uprate Safety Analysis Report (PUSAR) states that such analyses have been performed and that the regulatory requirements will be met. Entergy Answer to NEC at 40; PUSAR at 4.3. Next, NEC asserts that the application "fails to analyze the consequences of the additional dose to the control room and the site boundary

[32] NEC Contention 6 and State Contentions 1 and 2 cover similar topics.

should a single failure occur," whereas the PUSAR states that analyses demonstrate that doses remain below regulatory limits. PUSAR at 9-3. Finally, NEC states that "[r]ecent . . . failures of BWR containment valves have not been considered," but only points us to Hatch Nuclear Plant LER 2004-02. Entergy points out that the Hatch LER does not relate to a violation of the single failure criterion. Entergy Answer to NEC at 41. NEC's reply fails to respond to any of these issues. In sum, we conclude that NEC has failed to allege a legitimate factual foundation for the contention that Entergy has "ignored" the single failure criterion as stated in the contention.

Finally, the first and third sentences of NEC Contention 6 take us past the single failure issue and complain about a related issue - that the EPU application undermines "defense in depth." The only citation NEC provides on this point is Regulatory Guide 1.174. As previously stated however, regulatory guides are advisory in nature and do not impose legal requirements on the NRC or licensees. Curators of the Univ. of Missouri, CLI 95-8, 41 NRC at 397. Entergy does not even attempt to use or rely on this regulatory guide, so there is no inconsistency in concluding that we cannot impose it in this situation.

7. NEC Contention 7: Entergy has failed to comply with the requirements of 10 C.F.R. 50.71(E), Maintenance of Records and Making of Reports. Observance of the rule is essential to provide reviewers with accurate information about plant status. Records provide a measure upon which future activity can be predicated while maintaining safety. Without accurate and complete records, no meaningful review of the proposed uprate in its entirety can take place. Therefore, NRC should deny this amendment until Entergy can demonstrate that it has its documentation and records in order.

This contention is very similar to NEC Contention 5.[33] NEC alleges that Entergy is not in compliance with the recordkeeping requirements of 10 C.F.R. § 50.71(e) and specifically that

[33] For purposes of this analysis the Board assumes, as did Entergy and the Staff, Entergy Answer to NEC at 43, n. 44; Staff Answer to NEC at 23, n. 20, that NEC intended the Blanch Declaration concerning 10 C.F.R. § 50.71(e) as the support for NEC Contention 7.

Entergy has failed to comply with the requirements of Regulatory Guide 1.181 by mislabeling certain information as "historical." Blanch Declaration at 3-4.

As with NEC Contention 5, NEC has failed to provide us with any meaningful nexus between the allegation that Entergy is not complying with its current license, and Entergy's application for this uprate. While we might accept the abstract principle that in order to evaluate an application for a 20% power uprate it is necessary to understand the baseline against which the uprate is being sought, adjudicatory hearings are not designed to litigate abstract principles. In order to be admissible, NEC must point to a specific problem with the baseline documentation that is relevant to the proposed uprate. NEC must point to an error or omission in Entergy's current records that renders NEC unable to do a "meaningful review of the proposed uprate." The contention "must include references to specific portions of the application . . . that the petitioner disputes and the supporting reasons for each dispute." 10 C.F.R. § 2.309(f)(1)(vi). The contention must demonstrate that the alleged problem 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).

The only specific example that NEC raised was that, by using the phrase "Historical Information" in Entergy's proposed revision 18 to the UFSAR, Entergy misapplied the intent of Regulatory Guide 1.181 and that this error is a proposal "to remove all commitments to these basic regulatory requirements." Blanch Declaration at 4. There is no legal basis for this concern. First, regulatory guides are not binding or mandatory. Second, there is no plausible basis to think that any such mislabeling could change the regulatory requirements applicable to Entergy. Third, even assuming the label is incorrect, NEC has not shown us how it renders NEC unable to meaningfully review the EPU application. For the reasons stated, NEC Contention 7 is not admissible.

III. REQUEST FOR DELAY FOR FILING INITIAL CONTENTIONS

The State Petition includes a section titled "Reservation of Right to Amend," where it points out that the NRC agreed to conduct an independent engineering inspection of the

Vermont Yankee facility as part of the agency's consideration of the EPU application[34] and argues that the Board should delay the date for filing of contentions and requests for hearing "until 30 days after the full report of the independent inspection and its supporting documents have been made publicly available." State Petition at 48-49. The State asserts that it is not feasible for it to identify all of the appropriate issues until the results of the engineering inspection are public and that such a modest postponement of the deadline for initial contentions is sensible and efficient. The State argues that such contentions should not be subject to the "additional hurdles" and "unnecessary wrangle[s]" imposed on new or late filed contentions under 10 C.F.R. §§ 2.309(c) and (f)(2) (e.g., whether the new contention is timely and based on information that is "materially different"). Id. at 49.

Entergy and the Staff oppose this request. They point out that the State has already requested such relief in this proceeding and the Commission, via a ruling by the Secretary, rejected it. Entergy Answer to State at 42; Staff Answer to State at 31 (citing Entergy Nuclear Vermont Yankee, L.L.C. (Vermont Yankee Nuclear Power Station), Commission Order. Slip op. at 2, (Aug. 18, 2004)). The Staff asserts that the Commission's regulations provide that late or new contentions may be considered only upon a determination by the Board that the criteria in 10 C.F.R. §§ 2.309(c) or 2.309(f)(2) have been met. Staff Answer to State at 31.

We conclude that the State's request to extend the deadlines for the filing of initial contentions must be denied. Activities of the Staff occurring after the July 1, 2004 notice of opportunity for hearing do not give cause for us to delay the deadline for hearing requests specified in the notice. See Baltimore Gas & Electric Co. (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), LBP-98-26, 48 NRC 232, 243, aff'd, CLI-98-25, 48 NRC 325, 350-51(1998), pet. for review denied sub nom. Nat'l Whistleblower Ctr v. NRC, 208 F.3d 256 (D.C. Cir 2000). If the independent engineering inspection report provides information "not previously available" that is

[34] Letter from Nils J. Diaz, Chairman, NRC, to Michael H. Dworkin, Chairman, Vermont Public Service Board, (May 4, 2004) ADAMS accession number ML041170438.

"materially different," then the State is entitled to submit a motion for leave to file a new contention "in a timely fashion." 10 C.F.R. § 2.309(f)(2)(i)-(iii). Alternatively, the State can use the late filed contention provisions of 10 C.F.R. § 2.309(c). While we agree that these new and late filed contention regulations impose some additional procedural steps on the litigants and the Board, they are nevertheless the Commission's rules and we are not authorized to dispense with them here.

IV. HEARING PROCEDURE

Having determined that the hearing requests of the State and NEC should be granted this Board must determine, under 10 C.F.R. § 2.310, the type of hearing procedures to be used for each admitted contention. Two procedural issues are vigorously controverted. First, whether the admitted contentions meet the regulatory criteria of new 10 C.F.R. § 2.310(d), thus requiring that the hearing be conducted under the procedures of Part 2 Subpart G. Second, whether the State is entitled to "interrogate witnesses" pursuant to 42 U.S.C. § 2021(l). The Board will issue a separate memorandum and order on these novel questions. Given that the timing of initial disclosures and the availability of discovery (see 10 C.F.R. §§ 2.336, 2.704, and 2.705) are contingent on our determination as to whether Subpart L or Subpart G procedures apply, the parties are instructed to hold such activities in abeyance until the hearing procedure ruling is issued .[35]

V. CONCLUSION

For the reasons set forth above, the Board concludes that the Vermont Department of Public Service and the New England Coalition each have standing and have each proffered two admissible contentions meeting the requirements of 10 C.F.R. § 2.309(f). Accordingly, their

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[35] NEC has submitted two additional motions, seeking both the dismissal of this proceeding and certain procedural protections from alleged prejudices resulting from the NRC's suspension of access to ADAMS. [NEC]'s Motion to Dismiss Proceeding Due to Failure to Provide Proper Notice (Oct. 20, 2004); [NEC]'s Motion and Memorandum for Procedural Protections and Proposed Order (Oct. 26, 2004). The Board's determination related to these two motions will be issued at a later date.

requests for hearing are granted. The text of the admitted contentions is stated in Appendix 1 to this ruling.

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 on the question of whether the hearing request should have been wholly denied. 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.

FOR THE ATOMIC SAFETY
AND LICENSING BOARD[36]

Original Signed By
Alex S. Karlin, Chairman
ADMINISTRATIVE JUDGE

Original Signed By
Dr. Anthony J. Baratta
ADMINISTRATIVE JUDGE

Original Signed By G. P. Bollwerk, III For:
Lester S. Rubenstein
ADMINISTRATIVE JUDGE

Rockville, Maryland
November 22, 2004

[36] Copies of this order were sent this date by Internet e-mail transmission to counsel for (1) licensees Entergy Nuclear Vermont Yankee L.L.C. and Entergy Nuclear Operations, Inc.; (2) petitioners Vermont Department of Public Service and New England Coalition of Brattleboro, Vermont; and (3) the Staff.

APPENDIX 1

VERMONT YANKEE
ADMITTED AND RESTATED CONTENTIONS

State Contention 1: Entergy has claimed credit for containment overpressure in demonstrating the adequacy of ECCS pumps for plant events including a loss of coolant accident in violation of draft General Design Criteria 44 and 52 and therefore Entergy has failed to demonstrate that the proposed uprate will provide adequate protection for public health and safety as required by 10 C.F.R. § 50.57(a)(3).

State Contention 2: Because of the current level of uncertainty of the calculation which the Applicant uses to demonstrate the adequacy of ECCS pumps, the Applicant has not demonstrated that the use of containment overpressure to provide the necessary net positive suction head for ECCS pumps will provide adequate protection for the public health and safety as required by 10 C.F.R. § 50.57(a)(3).

NEC Contention 3: The license amendment should not be approved unless Large Transient Testing is a condition of the Extended Power Uprate.

NEC Contention 4: The license amendment should not be approved because Entergy cannot assure seismic and structural integrity of the cooling towers under uprate conditions, in particular the Alternate Cooling System cell. At present the minimum appropriate structural analyses have apparently not been done.