

September 29, 2004

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

NRC STAFF ANSWER TO VERMONT DEPARTMENT OF PUBLIC SERVICE NOTICE OF
INTENTION TO PARTICIPATE AND PETITION TO INTERVENE

INTRODUCTION

Pursuant to 10 C.F.R. § 2.309(h)(1), the Staff of the Nuclear Regulatory Commission ("NRC" or "Commission") hereby answers the "Notice of Intention to Participate and Petition to Intervene" ("Petition") of the Vermont Department of Public Service ("DPS" or "Petitioner"). As discussed below, the Staff addresses DPS's participation in this proceeding and the admissibility of DPS's proposed contentions. For the reasons set forth below, the Staff does not oppose DPS's participation as a party in this proceeding. With the exception of a portion of Proposed Contention 2, Basis 3, and a portion of Proposed Contention 3, Basis 3(b), the Staff opposes admission of DPS's proposed contentions.

BACKGROUND

By letter dated September 10, 2003, Entergy Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. (collectively, "Entergy" or "Applicant") submitted an application for an amendment to the operating license for the Vermont Yankee Nuclear Power Station ("VYNPS").¹ Entergy

¹ See Letter from J.K. Thayer, Entergy, to the NRC 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," dated September 10, 2003 ("Application").

proposes to amend the VYNPS operating license to increase the maximum authorized power level from 1593 megawatts thermal ("MWt") to 1912 MWt. This change, designated an "extended power uprate ("EPU"),"² represents an increase of approximately 20 percent above the current maximum authorized power level. The proposed amendment would also change the VYNPS technical specifications to provide for implementing uprated power operation.

On July 1, 2004, the NRC published in the *Federal Register* a notice of consideration of issuance of the proposed amendment and opportunity for a hearing.³ In response to this notice, DPS timely filed its Petition on August 30, 2004.⁴

DISCUSSION

I. Legal Standards

A. *Legal Standards Governing Standing and Participation of Interested States*

An interested State, including a State agency such as DPS, may seek either to participate in an NRC adjudicatory proceeding as a party under 10 C.F.R. § 2.309, or as an interested State under 10 C.F.R. § 2.315(c). If a State agency chooses to participate as a party, it must satisfy the

² Power uprates are categorized based on the magnitude of the power increase and the methods used to achieve the increase. "Measurement uncertainty recapture" uprates result in power level increases that are generally less than 2 percent and are achieved by implementing enhanced techniques for calculating reactor power. "Stretch power" uprates typically result in power level increases that are up to 7 percent and do not generally involve major plant modifications. EPU's result in power level increases that are greater than stretch power uprates and may involve significant modifications to major balance-of-plant equipment such as the high pressure turbines, condensate pumps and motors, main generators, and/or transformers.

³ See Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc.; Notice of Consideration of Issuance of Amendment to Facility Operating License and Opportunity for a Hearing, 69 Fed. Reg. 39,976 (July 1, 2004).

⁴ The certificate of service indicates that the Petition was served by first-class mail, and, in addition, on the Staff by electronic mail on August 30, 2004. The Staff received the Petition, exclusive of attachments, by electronic mail on August 30, 2004. Counsel for DPS indicated in the electronic mail message that DPS was filing by first-class mail. Therefore, the Staff considers the Petition to be timely served by first-class mail on August 30, 2004, and calculated its response time accordingly, pursuant to 10 C.F.R. § 2.306.

same standards as an individual petitioner. *Northern States Power Co.* (Independent Spent Fuel Storage Installation), LBP-96-22, 44 NRC 138, 140 (1996), citing *Nuclear Fuel Servs.* (West Valley Reprocessing Plant), ALAB-263, 1 NRC 208, 216 n.14 (1975). As noted by DPS (Petition at 2), 10 C.F.R. § 2.309(d)(2) provides that a State agency desiring to participate as a party need not address the standing requirements. An interested State wishing to participate as a party to the proceeding must, however, meet the other requirements of § 2.309, including the standards for admissibility of contentions set forth in 10 C.F.R. § 2.309(f). 10 C.F.R. § 2.309(d)(2). Once admitted as a party, a State "is entitled to the rights and bears the responsibilities of a full party, including the ability to engage in discovery, initiate motions, and take positions on the merits." Final Rule, Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2201 (Jan. 14, 2004). Under 10 C.F.R. § 2.309(f)(3), a petitioner may, subject to certain requirements, adopt the contentions of other petitioners, thus permitting participation by that petitioner with respect to any of the contentions proffered by another petitioner.⁵

B. *Legal Standards Governing the Admission of Contentions*

To gain admission to a proceeding as a party, a petitioner must submit at least one admissible contention that meets the requirements of 10 C.F.R. § 2.309(f). 10 C.F.R. § 2.309(a).

This regulation requires a petitioner to:

- (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;

⁵ That section provides, in pertinent part, "If a requestor/petitioner seeks to adopt the contention of another sponsoring requestor/petitioner, the requestor/petitioner who seeks to adopt the contention must either agree that the sponsoring requestor/petitioner shall act as the representative with respect to that contention, or jointly designate with the sponsoring requestor/petitioner a representative who shall have the authority to act for the requestors/petitioners with respect to that contention."

- (iv) demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
- (v) provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and
- (vi) provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

10 C.F.R. § 2.309(f)(1).⁶ The Commission has emphasized that its rules on contention admissibility establish an evidentiary threshold more demanding than a mere pleading requirement and are "strict by design." *Dominion Nuclear Conn., 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 dismissing a contention. *See Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999).

The contentions should refer to the specific documents or other sources of which the petitioner is aware and upon which he or she intends to rely in establishing the validity of the contentions. *Millstone*, 54 NRC at 358 (citing *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2 & 3), CLI-99-11, 49 NRC 328, 333 (1999)). The petitioner must submit more than "bald

⁶ Although the Commission recently revised its Rules of Practice at 10 C.F.R. Part 2, the provisions of § 2.309 "incorporate the longstanding contention support requirements of former § 2.714--no contention will be admitted for litigation in any NRC adjudicatory proceeding unless these requirements are met." 69 Fed. Reg. at 2221.

or conclusory allegation[s]" of a dispute with the applicant. *Id.* Finally, "it has been recognized that '[t]he reach of a contention necessarily hinges upon its terms coupled with its stated bases.'" *System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), LBP-04-19, 60 NRC __ (Aug. 6, 2004), slip op. at 13, citing *Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 & 2), ALAB-899, 28 NRC 93, 97 (1998), *aff'd sub nom. Massachusetts v. NRC*, 924 F.2d 311 (D.C. Cir.), *cert. denied*, 502 U.S. 899 (1991); *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-02-28, 56 NRC 373, 379 (2002).

II. Standing of DPS

DPS does not state in its Petition whether it is seeking to participate in this proceeding as a party pursuant to 10 C.F.R. § 2.309, or as an interested State agency pursuant to 10 C.F.R. § 2.315(c). With respect to participation as a party, the Staff agrees that DPS need not make a further demonstration of standing.⁷ In addition, as set forth below, NRC does not challenge the admissibility of certain of DPS's proposed contentions. As such, the Staff does not object to DPS's participation in this proceeding as a party. That said, however, if DPS participates as a party, it is the Staff's belief that DPS is subject to the requirements of 10 C.F.R. § 2.309(f)(3) in order to participate with respect to any contentions proffered by another participant.⁸

⁷ In its Petition (at 2), DPS represents that it is the single representative of the State of Vermont for this proceeding.

⁸ Because the Staff does not challenge DPS's participation as a party to this proceeding, we do not address the merits of DPS's argument that a full hearing should be held pursuant to Section 274l. of the Atomic Energy Act of 1954, as amended ("AEA" or "Act") in the absence of an admissible contention. However, it is the Staff's view that Section 274l., which is implemented by 10 C.F.R. § 2.315(c), sets forth a limited mandate for governmental participation in NRC adjudicatory proceedings. It does not trigger a hearing where no admissible contentions are otherwise proffered. *See Northern States Power Co.* (Tyrone Energy Park, Unit 1), CLI-80-36, 12 NRC 523, 528 (1980); *Niagara Mohawk Power Corp.* (Nine Mile Point Nuclear Station, Unit 2), LBP-83-45, 18 NRC 213, 215 (1983); *Duquesne Light Co.* (Beaver Valley Power Station, Unit 2), LBP-84-16, 19 NRC 393, 426-27 (1984).

III. DPS's Proposed Contentions

The Staff respectfully submits that a review of the proposed contentions proffered by DPS in this proceeding, in light of the established contention admissibility requirements, demonstrates that the contentions should not be admitted except to the extent and in the manner set forth below. The Staff discusses the proposed contentions *seriatim* as they appear in Petitioner's filing.

A. *Proposed 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. [Part] 50, Appendix A, Criteria 35 and 38[,] 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).

Petition at 6. DPS sets forth three bases for this proposed contention, as follows:

- (1) The portion of NRC Regulatory Guide ("RG") 1.82, Revision 3 which purports to authorize containment overpressure credit has never been properly evaluated or approved by the Advisory Committee on Reactor Safeguards ("ACRS"), in violation of the requirements of 42 U.S.C. § 2039.
- (2) RG 1.82, Revision 3, is substantively indefensible because its authorization for the use of containment overpressure to demonstrate the Net Positive Suction Head ("NPSH") required to properly 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.
- (3) Even if RG 1.82, Revision 3, were applicable to this case, the Applicant has failed to demonstrate that it meets the very limited condition required by the RG for use of containment overpressure in calculating NPSH for ECCS pump operation. In particular, Applicant has not shown and cannot show that use of containment overpressure in calculating NPSH for ECCS pump operation is either "necessary" or that plant

operations or equipment cannot be "practicably altered" either by limiting thermal output of the reactor or upgrading the ECCS pumps.

Petition at 6-7. Additional information supporting this proposed contention is provided in paragraphs 1 through 13 of the section of this proposed contention entitled "Supporting Evidence."

1. Basis 1

Basis 1, asserting that the ACRS has not reviewed the position on NPSH set forth in RG 1.82, Revision 3, is incorrect. As discussed below, DPS has failed to articulate a genuine dispute on a material issue of law or fact with respect to this basis.

In 1996, as a result of NRC inspections, licensee notifications, and licensee event reports, the NRC Staff became aware that the available NPSH for ECCS and containment heat removal system pumps may not have been adequate in some cases. Consequently, the NRC issued Generic Letter ("GL") 97-04 to all holders of operating licenses for nuclear power plants (both pressurized and boiling water reactors), requesting that licensees provide current design basis information regarding NPSH analyses for the ECCS and containment heat removal pumps.⁹ In order to perform its review of the information provided in licensee responses to GL 97-04, the NRC Staff formulated and applied acceptance criteria for the reviews. The Staff briefed the ACRS on the calculation of NPSH and credit for containment accident pressure, as well as its proposed criteria, on December 2, 1997, and during the 447th meeting of the ACRS on December 3-6, 1997.

A December 12, 1997 ACRS letter to then-Chairman Jackson concluded:

In our June 17, 1997 letter to the Executive Director for Operations regarding our review of Generic Letter (GL) 97-04, "Assurance of Sufficient Net Positive Suction Head for Emergency Core Cooling and Containment Heat Removal Pumps," we stated that giving credit for containment overpressure to provide assurance of sufficient [NPSH] should not be considered an acceptable corrective action for

⁹ See generally Generic Letter 97-04, "Assurance of Sufficient Net Positive Suction Head for Emergency Core Cooling and Containment Heat Removal Pumps," dated October 7, 1997 (ADAMS accession number ML031110062).

any deficiencies found by the reviews requested by GL 97-04. As a result of further review of this issue, we now concur with the NRC staff position that selectively granting credit for small amounts of overpressure for a few cases may be justified. We recommend that instead of using qualitative arguments and restricting attention to a limited range of accident sequences, the decisionmaking process should consider the time variation of NPSH for a broad range of accident sequences such as typically found in a probabilistic risk assessment (PRA).

See 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," December 12, 1997, at 1 (ADAMS accession number 9712300132). Thereafter, the containment overpressure criteria were included in Draft Regulatory Guide DG-1107.¹⁰ Regulatory positions on NPSH in DG-1107 were included in DG-1107 in order to provide a single reference for regulatory positions related to pump suction issues (for example, vortexing, air entrainment, and debris blockage as well as NPSH). DG-1107 was finalized and published as Revision 3 to RG 1.82 in November 2003.

The references to the August 20, 2003 ACRS meetings cited by DPS and the September 30, 2003 ACRS letter, therefore, do not provide any foundation for Basis 1. The regulatory positions set forth in Revision 3 to RG 1.82 had been reviewed by the ACRS at the time of the RG's issuance and did not constitute a "major policy change," as charged by DPS.¹¹

In any event, even if the ACRS had *not* reviewed the Staff position prior to its inclusion in RG DG-1007, this basis would be insufficient to support the contention because the AEA does not *require* the ACRS to review regulatory guides. Section 29 of the AEA provides:

¹⁰ See Draft Regulatory Guide DG-1107 (Proposed Revision 3 to Regulatory Guide 1.82), "Water Sources for Long-Term Recirculation Cooling Following a Loss-of-Coolant Accident," February 2003 (ADAMS accession number ML030550431).

¹¹ In any event, the ACRS had the NPSH guidance before it in its review of RG 1.82, Revision 3. Any perceived lack of public discussion on the matter does not, in and of itself, provide proof that the ACRS did not review the guidance at that time.

The [ACRS] shall review safety studies and facility license applications *referred to it* and shall make reports thereon, shall advise the Commission with regard to the hazards of proposed or existing reactor facilities and the adequacy of proposed reactor safety standards, and shall perform such other duties *as the Commission may request*.

AEA Section 29, 42 U.S.C. § 2039 (emphasis added). 10 C.F.R. § 1.13, which implements Section 29 with respect to generic issues (including regulatory guides) provides that the ACRS, among other things, “reviews any generic issues or other matters *referred to it by the Commission* for advice.” (Emphasis added.) Therefore, there is no explicit requirement for the review desired by DPS – such a review is required *if requested by the Commission*. Compare, e.g., 10 C.F.R. §§ 52.23 (requiring that the Commission refer early site permit applications to the ACRS for review and report); 54.25 (requiring that each license renewal application be referred to the ACRS for review and report). This basis is insufficient as a matter of law, and therefore does not raise a genuine dispute.

2. Basis 2

With respect to Basis 2, DPS essentially contends that the provisions of RG 1.82, Revision 3, contravene safety requirements for defense-in-depth by allowing one barrier failure (containment failure) to compromise the effectiveness of (1) containment and (2) ECCS pump operation. Citing an ACRS letter dated May 19, 1999 (Exhibit 12 to the Petition), DPS asserts two specific problems, one taking issue with the Application, the other with RG 1.82. As discussed below, neither of these supports admission of this basis.

First, DPS argues that Applicant’s risk evaluation improperly devalues risk by taking credit for containment overpressure. Petition at 15. Specifically, DPS states:

The Applicant’s risk evaluation uses nominal or average values of temperatures, pressures, flows and other parameters, rather than conservative values. Under this nominal value evaluation, torus temperatures do not rise enough to require containment overpressure. Therefore, there is no calculated additional risk associated with overpressure. However this result is counter

intuitive and incorrect. There is some probability that temperatures, pressures, flows and other parameters will be at conservative values, and that, if containment failed in this situation, it would cause ECCS pump failure and increased core damage frequency, and therefore increased risk. However, risk evaluation techniques only assume nominal values and are not equipped to assign probabilities for a range of operating values. Therefore, the analytical technique does not properly calculate the increased risk from containment overpressure credit.

Id. at 15-16 (emphasis added). DPS's assertion, however, lacks specificity. DPS does not take issue with any parameter used in the Applicant's PRA. The Commission's contention admissibility requirements are clear that, in order for a basis to support a contention that the application is deficient, the petitioner must include references to the *specific* portions of the application that the petitioner disputes, the identification of such deficiencies, *and* the supporting reasons for this belief. *See SERI*, LBP-04-19, slip op. at 9, citing 10 C.F.R. § 2.309(f)(1)(vi).

Second, DPS asserts that conclusions drawn by the ACRS in its letter pertaining to RG 1.82, Revision 3, demonstrate that the ACRS "has questions about the analytic techniques that are not resolved by the Regulatory Guide and which remain open questions." Petition at 16. DPS also states that these conclusions show that "the calculation of the NPSH for ECCS pumps should be considered 'poorly treated by modern analysis.'" However, as discussed below, the ACRS statements do not provide support for these conclusions. *See Yankee Atomic Elec. Co.* (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 90, *rev'd in part on other grounds*, CLI-96-7, 43 NRC 235 (1996) ("[a] document put forth by an intervenor as the basis for a contention is subject to scrutiny both for what it does and does not show.")

The conclusions cited in the September 30, 2003 ACRS letter specifically pertain to debris blockage evaluation guidance for pressurized water reactors, which is also included in RG 1.82, Revision 3. Debris blockage guidance for boiling water reactors was not revised in Revision 3 of RG 1.82. Rather, revisions to the guidance regarding debris blockage evaluation for boiling water reactors were made as a part of Revision 2 to RG 1.82, seven years prior. *See* RG 1.82,

Revision 2, "Water Sources for Long-Term Recirculation Cooling Following a Loss-of-Coolant Accident," dated May 1996 (ADAMS accession number ML003740249).

Moreover, even assuming the ACRS conclusions specifically pertained to the NPSH issue, they would not suffice to demarcate the NPSH methodology as "an area poorly treated by modern analyses." See Petition at 17. The May 19, 1999 ACRS letter in which the quoted statement appears (*see* Petition at 10)¹² was a generic paper addressing the role of defense-in-depth in a risk-informed regulatory system. The Staff's NPSH guidance was *not* specifically implicated in this ACRS letter, and there is, therefore, no evidence that NPSH was a topic to which the ACRS was referring. Consequently, the citations provide insufficient foundation for the DPS's assertions. This basis does not present a genuine dispute on a material issue of law or fact.

3. Basis 3

Basis 3 argues that Entergy has not demonstrated, pursuant to RG 1.82, Revision 3, that the use of containment overpressure is "necessary," or that plant operations or equipment cannot be "practicably altered" either by limiting thermal output of the reactor or upgrading the ECCS pumps. Accordingly, DPS states, Entergy has failed to demonstrate that the proposed uprate will not create a significant hazard pursuant to 10 C.F.R. § 50.92, and will not provide adequate protection for the public health and safety pursuant to 10 C.F.R. § 50.57(a)(3). For the reasons set forth below, both elements of this basis are insufficient to support admission of the proposed contention.

First, DPS contends that Entergy fails to conform to RG 1.82, Revision 3, because it has not demonstrated that the proposed twenty percent power uprate itself is "necessary." Petition

¹² DPS quotes the ACRS as follows: "Defense in depth can still provide needed safety assurance in areas not treated or poorly treated by modern analyses or when results of the analyses are quite uncertain." See letter from D.A. Powers, ACRS Chairman, to the Honorable S.A. Jackson, "The Role of Defense in Depth in a Risk-Informed Regulatory System," dated May 19, 1999, at 2 (Exhibit 11 to the Petition).

at 17-18.¹³ Quite simply, this assertion does not form the basis for an admissible contention as it fails to demonstrate a genuine dispute on a material issue of law or fact. No regulation or guidance requires that an applicant demonstrate whether the power uprate is “necessary,” economically or otherwise. The NRC takes no role in its licensees’ ongoing business decisions; the agency looks only to whether a licensee can conduct operations safely. *See, e.g., Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 49 (2001).¹⁴

Second, DPS argues that Entergy has not “investigated or attempted” to determine whether the plant design can be “practicably altered” to avoid taking overpressure credit. Specifically, DPS states that Entergy, in contravention of RG 1.82, Revision 3, “has not shown that it is not possible” to modify existing ECCS pumps or provide new ECCS pumps that do not require credit for containment overpressure in order to function. Petition at 19. This does not raise a litigable issue, because an assertion of noncompliance with a regulatory guide is an insufficient basis for a contention. Staff regulatory guides are not regulations and do not have the force of regulations. An applicant is free to rely on a regulatory guide, but may take alternative approaches to meet applicable legal requirements. *See Curators*, CLI-95-8, 41 NRC at 397. Therefore, the assertion in Basis 3 of failure to comply with a regulatory guide is, without more, inadequate to meet NRC contention pleading requirements. *See Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), LBP-91-35, 34 NRC 163, 179 (1991).

¹³ Basis 3 (Petition at 7) argues that Applicant has failed to demonstrate that, under the RG, use of containment overpressure in calculating NPSH for ECCS pump operation is “necessary.” However, in its supporting evidence, DPS frames the argument in terms of the “necessity” of the uprate itself. The scope of a contention hinges upon the bases set forth in support thereof; therefore, the Staff interprets the scope of the contention to be defined by its supporting evidence. *See McGuire/Catawba*, CLI-02-28, 56 NRC at 379.

¹⁴ DPS also states that the Staff has not attempted to “investigate” the need for the uprate by sending an request for additional information (“RAI”) to Entergy to identify the highest power level at which credit for containment overpressure is not required. It is well established that it is the application, not the adequacy of the Staff’s review, that is at issue in this proceeding. *See Curators*, CLI-95-8, 41 NRC 386, 396 (1995).

One final matter deserves mention. One of the stated regulatory bases for this proposed contention, as well as Proposed Contentions 2 and 4, argues that approval of the proposed uprate would constitute a "significant hazard," pursuant to 10 C.F.R. § 50.92. The Staff's no significant hazards consideration ("NSHC") determination cannot form the regulatory basis for an admissible contention as a matter of law. The NSHC standard is a procedural criterion that governs whether an opportunity for a prior hearing must be provided before a proposed action is taken by the NRC. Specifically, pursuant to AEA Section 182a.(2)(A), 42 U.S.C. § 2239(a)(2)(A), the Commission may issue immediately effective reactor license amendments "in advance of the holding and completion of any required hearing upon a NSHC determination."¹⁵ The only purpose of the NSHC determination is to decide the timing of any hearing (that is, before or after issuance of the amendment). *See Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), LBP-90-6, 31 NRC 85, 90-91 (1990). The NSHC determination device, therefore, has no bearing on the *merits* of the Application. Section 50.92 cannot serve as the regulatory foundation for a contention.¹⁶

For all of these reasons, this proposed contention should be rejected.

¹⁵ *See generally* 10 C.F.R. § 50.92.

¹⁶ In this proceeding, the Staff has made neither a proposed nor a final NSHC determination, which means that the Staff has not made the findings necessary to issue the amendment during the pendency of any hearing granted in connection with the EPU amendment request. In the absence of a NSHC determination, the Commission would not issue the license amendment until the completion of any prior hearing. In any event, even if the staff were to issue a final NSHC determination, NRC regulations are clear that such a determination is not litigable in any hearing that might be held on the proposed amendment. NSHC determinations fall wholly within the discretion of the NRC Staff, and the regulations provide that "[n]o petition or other request for review of or hearing on the staff's significant hazards consideration determination will be entertained by the Commission." 10 C.F.R. § 50.58(b)(6); *see generally Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), CLI-01-7, 53 NRC 113 (2001).

B. *Proposed 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).

Petition at 20. DPS sets forth three bases for this proposed contention, as follows:

- (1) 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").
- (2) Without sufficient information to adequately bound the uncertainties associated with the extent to which pressure at the ECCS pumps will be reduced following a LOCA, there is no reliable basis to justify using the equally uncertain containment overpressure to compensate for the unquantifiable pressure losses at the ECCS pump.
- (3) VYNPS's current licensing and design basis recognize[s] that containment pressure increases above atmospheric pressure for various plant events, but do[es] not take credit for this increase in pressure to demonstrate that ECCS pumps will function properly. Thus, this increased containment pressure above atmospheric pressure serves as an additional safety margin or defense-in-depth for the functioning of ECCS pumps. It is inappropriate to abandon this safety margin or defense-in-depth by allowing containment overpressure credit because the calculations and analyses for determining NPSH of the ECCS pumps are uncertain and imprecise.

Petition at 20. Additional information is provided in paragraphs 1 through 11 of the "Supporting Evidence" section for this proposed contention. Petition at 21-28.

1. Bases 1 and 2

With respect to Bases 1 and 2, DPS complains that Vermont Yankee Calculation VYC-0808, Revision 6, "Core Spray and Residual Heat Removal Pump Net Positive Suction Head Margin Following a Loss of Coolant Accident," is not conservative because it does not incorporate all the provisions of RG 1.82, Revision 3. This assertion is insufficient to support admission of the

proposed contention for two reasons. First, as discussed above in the context of Proposed Contention 1, this statement does not raise a litigable issue, because an assertion of failure to comply with a regulatory guide is, without more, inadequate to meet NRC contention pleading requirements. *See Shoreham*, LBP-91-35, 34 NRC at 179.

Moreover, the assertion lacks the requisite specificity. Although DPS disagrees with the calculation generally, it fails in this basis to set forth a sufficient basis for its disagreement, including the specific aspects of the calculation that are allegedly out of compliance with the regulatory guide, and how those noncompliances affect the calculation and call into question the Entergy's compliance with applicable regulatory requirements. *See* 10 C.F.R. § 2.309(f)(1)(vi).

DPS also contends that, even if RG 1.82, Revision 3 were followed, there would not be "high confidence" in the results. Petition at 21. As support for this proposition, DPS cites to the transcript of the September 11, 2003 ACRS meeting regarding RG 1.82, Revision 3. Specifically, DPS excerpts portions of the meeting transcript, pertaining to ACRS discussion of debris accumulation and head loss. *See* Exhibit 10 to the Petition, ACRS Meeting Transcript at 382-89. As discussed above with respect to Proposed Contention 1, the referenced discussion pertained to debris blockage issues for pressurized water reactors.¹⁷ In any event, while this transcript may serve to document ACRS questions regarding estimates of head loss caused by debris blockage, neither this discussion nor the cited September 30, 2003 ACRS letter provides sufficient basis to call into question the *specific NPSH calculation* provided in the Application. *See* 10 C.F.R. § 2.309(f)(1)(vi).

¹⁷ *See SERI*, LBP-04-19, slip op. at 12 ("any supporting material provided by a petitioner, including those portions of the material that are not relied upon, is subject to Board scrutiny"), citing *Yankee Rowe*, LBP-96-2, 43 NRC at 90 ("[a] document put forth by an intervenor as the basis for a contention is subject to scrutiny both for what it does and does not show").

2. Basis 3

In paragraphs 6 and 7 of the "Supporting Evidence" section, Petition at 24-26, DPS argues that there is "insufficient conservatism and margin in the values used for required NPSH ("NPSHr") in Applicant's demonstration of ECCS pump adequacy," in calculation VYC-0808, Rev. 6, as follows:

- Both the residual heat removal and core spray pumps were only NPSH-tested over a limited flow range.
- No head drop was specified on the original curves.
- No vibration readings were taken in the NPSH tests for the residual heat removal pumps.
- Only one of the four residual heat removal pumps was tested for NPSHr, and this value was assumed correct for the other three pumps.
- The core spray pumps' original witness tests for NPSHr do not bracket the expected flow range during the accidents.
- NPSHr for the core spray pumps was not determined from VYNPS pumps, but rather for pumps from another facility.
- For both residual heat removal and core spray pumps, curve fit regimes were used to acquire NPSHr values for specific flow rates used in the demonstrations of adequacy, creating an uncertainty in the precision of the results.
- There is no indication in the Application of accounting for instrumentation inaccuracies in test instruments, nor is margin provided to account for the extrapolation of data and assumptions used for actual test data that is lacking.

Citing NRC RAI SPSB-C-25 (in which the Staff noted that the Hydraulic Institute recommended margin above NPSHr to suppress cavitation) and taking issue with the Applicant's response that no specific margin is included or required in the available NPSH calculation, DPS states that "the uncertainties from instrument inaccuracies, extrapolations and assumptions . . . direct that margin should be provided." Petition at 26.

The NRC staff does not challenge the admissibility of this portion of Basis 3, as supported by "Supporting Evidence" in paragraphs 6 and 7.

DPS also asserts in Basis 3 that uncertainty exists in the value used by the Applicant for containment leakage. In support of this proposition, DPS states, "Frequently the as-found condition of containment isolation valves from their leakage tests exceeds allowables such that containment leakage is underestimated." Petition at 26. This statement is without basis, and therefore is insufficient to support admission of this portion of the contention. See *SERI*, LBP-04-19, slip op. at 11 ("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").

Next, with respect to the Applicant's "complex" containment pressure and torus temperature calculations, DPS argues that, based on its review of NRC RAIs, "it appears NRC is only independently verifying the LOCA calculations," as opposed to the Applicant's calculations for LOCAs, station blackout ("SBO"), Appendix R and anticipated transient without scram ("ATWS") events.¹⁸ DPS complains that such a review will leave "uncertainty" regarding the accuracy of the SBO, Appendix R, and ATWS calculations. NRC case law is clear that a contention challenging the Staff's review of an application will be inadmissible. "The adequacy of the applicant's license application, not the NRC staff's safety evaluation, is the safety issue in any licensing proceeding . . ." 69 Fed. Reg. at 2202, citing *Curators of the Univ. of Mo.*, CLI-95-1, 41 NRC 71, 121-22 (1995), *aff'd on motion for reconsideration*, CLI-95-8, 41 NRC 386, 396 (1995); *La. Power & Light Co. (Waterford Steam Electric Station, Unit 3)*, ALAB-812, 22 NRC 5, 55-56 (1985); *Pac. Gas & Elec. Co. (Diablo Canyon Nuclear Power Plant, Units 1 & 2)*, ALAB-728, 17 NRC 777, 807 (1983), *review denied*, CLI-83-32, 18 NRC 1309 (1983).

¹⁸ DPS complains that the Applicant's Safety Analysis Report for Constant Pressure Power Uprate ("PUSAR") is "deficient" because it does not identify the amount of overpressure developed or credited for the SBO, Appendix R fire events and ATWS. Petition at 26. This information was provided in Supplement 8 to the Application, in response to NRC Staff RAI SPSB-C-8. Therefore, this assertion does not present a genuine dispute.

Finally, DPS contends that, because Entergy has modified VYC-0808 twice (in supplements to the Application dated July 1, 2004 and July 16, 2004), additional calculation changes will be discovered with further review. The revisions, according to DPS, demonstrate that uncertainty exists sufficient to retain the "entire containment overpressure as a safety margin and defense in-depth." Petition at 27. These statements represent pure speculation, and are insufficient to support admission of this contention.

For these reasons, the Staff opposes admission of Proposed Contention 2, except with respect to Basis 3 as it pertains to the uncertainty of calculation VYC-0808, and as supported by "Supporting Evidence" paragraphs 6 and 7.

C. *Proposed 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).

Petition at 28. DPS set forth three bases for this proposed contention. These bases articulate two issues that are directly related to the proposal to take credit for containment overpressure in order to meet NPSH requirements for ECCS pumps, for which, DPS claims, Applicant has not used unspecified "current, more restrictive" practices in its analysis. Specifically, DPS argues in Basis 3¹⁹ that Entergy has not done as follows:

- (a) Entergy has not evaluated the containment and its appurtenances under the current rules for single failure.
- (b) Entergy has not evaluated the proposed uprate in light of current assumptions for simultaneous safe shutdown earthquake ("SSE"), but relies on analytical methods and SSE values "that have evolved dramatically."

¹⁹ Bases 1 and 2 largely provide background information for this proposed contention.

Id. at 29. Additional information in support of this basis is set forth in paragraphs 1 through 11 of the “Supporting Evidence” section for this proposed contention. *Id.* at 29-33.

1. Basis 3(a)

With respect to Basis 3(a), DPS states that the applicant’s analysis does not consider “check valve movement,” “spurious valve movement,” and “the effects of a single inappropriate operator action” as single active failures under unspecified “current criteria.”²⁰ *Id.* at 31. As discussed below, this basis is inadmissible for its failure to challenge the application’s discussion of single failures.

In Supplement 8 to the Application, in response to RAI SPSB-C-10, Entergy performed a sensitivity case, assuming a single failure of a residual heat removal (“RHR”) heat exchanger. This sensitivity case concluded that, with only one of two RHR heat exchangers available, and assuming the design basis service water temperature of 85°F and initial pool temperature of 90°F, the peak suppression pool temperature would fall between 187°F and 180°F.²¹ The Application states:

At the upper end of the range (i.e., 187°F), some small amount of credit for containment overpressure would still be required. At the lower end of the range (i.e., 180°F), credit for containment overpressure would not be required.

Id. at 151. In its RAI response, Entergy represented that this sensitivity case demonstrated “large conservatisms in the accident analyses for EPU.” DPS has not challenged this assessment in any way, nor does it provide any basis for an argument that an assessment involving its stated single failures would be more conservative than the analysis done by the Applicant. Because DPS does not dispute the pertinent portion of the application addressing the single failure issue, this basis is

²⁰ To the extent that DPS purports to rely on RG 1.183, “Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors” (July 2000), its reliance is misplaced. See Petition at 30. RG 1.183 is not applicable to the single failure assessment performed in connection with the Application.

²¹ See Application, Supplement 8, Attach. 2 at 149-51.

insufficient to support admission of the contention. 10 C.F.R. § 2.309(f)(1)(vi); *Millstone*, CLI-01-24, 54 NRC at 361 (reiterating that the contention-pleading rule “calls on intervention petitioners to “include references to the specific portions of the application . . . that the petitioner disputes and the supporting reasons for each dispute”).

2. Basis 3(b)

With respect to Basis 3(b), DPS states that “the containment must be analyzed to current seismic analysis method to demonstrate adequacy,” specifically in connection with the design basis LOCA, in order to demonstrate reasonable assurance that the proposed crediting of containment overpressure will protect the public health and safety. Petition at 31, 32-33. Of the three assertions made in connection with this basis, as discussed below, only one is sufficient to support its admissibility.

DPS states (Petition at 32):

- “Containment isolation valves have frequently exceeded allowables in leakage tests. The Applicant has not demonstrated, from the as-found condition of containment isolation valves, that these valves will satisfactorily retain containment pressure for a period up to 50 hours following an earthquake using current seismic analysis standards.”
- “If the containment does not adequately withstand an earthquake, the containment or its attached isolation valves could fail in a manner not to retain pressure. In this event, the containment overpressure would not be present for ECCS pump adequacy, and there could be a high likelihood that the ECCS pumps would fail, in turn causing fuel failure and fission product release.”

Both of these statements are insufficient to sustain the admissibility of this basis, as they constitute wholly unsupported assertions. It is well established 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.” *SERI*, LBP-04-19, slip op. at 11.

DPS also relies on a letter from the Vermont State Geologist, dated August 26, 2004, that purports to question the adequacy of Entergy's containment seismic analysis.²² Citing 1996 United States Geological Survey data, the State Geologist concludes:

Short period earthquake induced energy may influence design elements such as shorter structures and piping in nuclear facilities. Predicted shorter period accelerations for 0.2 and 0.3 second period waves in Vernon are 26.20% of the acceleration of gravity (0.2620 g) and 20.45% of gravity (0.2045 g). Viewing the numbers of interest, the 1996 shorter period accelerations exceed the 0.14 SSE considerations in the license. This apparent discrepancy warrants further attention and consideration.

Id. at 2. The staff does not oppose admission of Basis 3(b) of this proposed contention, as to the adequacy of the current seismic analysis with respect to the VYNPS SSE in light of the request to credit containment overpressure, as supported by DPS's Exhibit 24 and paragraphs 8 and 11 of DPS's "Supporting Evidence."

D. *Proposed 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 as required by 10 C.F.R. § 50.57(a)(3).

Petition at 33. In support of this contention, DPS sets forth two bases, as follows:

- (1) The primary and desired response by plant operators in an event which increases containment pressure is to reduce containment pressure. With the proposed design basis change to credit set levels of containment overpressure, the operators will be placed in the confused position of both needing to reduce containment pressure and to maintain containment pressure.

²² See Letter from L.R. Becker, Vermont State Geologist, to W. Sherman, DPS, "Probability of Earthquake Induced Ground Accelerations at Vermont Yankee," dated Aug. 26, 2004 (appended to the Petition as Exhibit 24).

- (2) The Applicant's proposal related to emergency operator procedure[s] would create the same unacceptable human factors paradigm for operators that was found by the Task Force which investigated the causes of the Three Mile Island, Unit 2, accident.

Id. at 33. DPS provides additional information regarding these bases in paragraphs 1 through 7 of the "Supporting Evidence" section for this proposed contention. *See id.* at 33-40.

1. Basis 1

With respect to Basis 1, citing to several calculations in the Application, DPS specifically argues that the "pressure crediting scheme" in connection with the crediting of containment overpressure for certain design basis accidents (specifically, the LOCA, ATWS, and Appendix R fire) will be confusing and complicated for reactor operators, resulting in a greater potential for operator error. This basis does not support admission of this proposed contention because it fails to demonstrate a genuine dispute on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi).

At bottom, DPS contends in this basis that crediting containment overpressure will create confusion and increase the likelihood of reactor operator error, by requiring operators to focus on maintaining adequate containment pressure. In support of this assertion, DPS cites to two calculations (VYC-0808 and VYC-2314) pertaining to NPSH during certain design basis accidents, illustrating various different containment pressures credited over the course of the applicable accident. However, DPS disregards other information in the application that directly contravenes its position. In response to an RAI, the Applicant stated that the license amendment request involves no changes to emergency operating procedures ("EOPs"). In short, no new or different actions will be required of the operators in connection with the EOPs as a result of the proposed EPU.

Specifically, Entergy stated, in response to NRC RAI SPSB-C-22, "The VYNPS emergency operating procedures ("EOPs") *do not require revision* to ensure that containment accident pressure will be prevented from falling below the pressure required for adequate available

NPSH.”²³ Petition at 37. It is well established that, with respect to documentary or factual information alleged to provide the basis for a contention, the Licensing Board “is not to accept uncritically the assertion that a document or other factual information or an expert opinion supplies the basis for a contention.” *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 181 (1998). Rather, the Licensing Board will review the information to ensure that it does indeed provide such a basis. It is quite plain here that Entergy has provided in a supplement to the Application information that repudiates the basis for this portion of the contention. Entergy does not propose, in the Application, to revise the EOPs. Furthermore, DPS has not provided information sufficient to call into question the RAI response regarding the status of EOPs,²⁴ or to explain how unrevised EOPs will somehow increase the likelihood of operator confusion. Accordingly, Basis 1 does not demonstrate a genuine dispute on a material issue of law or fact.

2. Basis 2

With respect to Basis 2, DPS disagrees on several points made by Entergy in its response to the NRC RAI, in which Entergy stated that the VYNPS EOPs do not require revision to ensure that the containment accident pressure will be prevented from falling below the pressure required for adequate available NPSH. Fundamentally, Basis 2 fails for the same reason as Basis 1 – DPS has not provided sufficient evidence to demonstrate a genuine dispute with respect to the EOPs. Each of the supporting statements for this basis is considered in turn below.

First, DPS argues that it is “unacceptable” that the Applicant does not plan to change EOPs to incorporate the credited containment overpressure because the Three Mile Island Task Force

²³ See Application, Supplement 8, Attach. 2 at 178-79.

²⁴ For example, DPS has not provided evidence that disputes the RAI response statement that the current EOPs incorporate guidance to ensure the containment accident pressure will be prevented from falling below the pressure required for adequate available NPSH.

found that emergency operating procedures should be "unambiguous." Petition at 38-39. For the reasons stated above with respect to Basis 1, DPS has failed to provide evidence sufficient to support a claim that the existing EOPs *are* ambiguous. This portion of Basis 2 does not demonstrate a genuine dispute on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi).

Second, DPS contends that Note 5 to EOP-3, which states "Reducing primary containment pressure will reduce the available NPSH for pumps taking suction from the torus," is unacceptable because it does not tell the operator that he or she must maintain a set level of overpressure according to the licensing basis. Petition at 39. In the same vein, DPS states, "The fact that containment sprays automatically terminate at 2.5 psig creates an additional step the operator must take during a crisis." *Id.* However, as stated above, DPS does not rebut the Applicant's statement that the current EOPs will not be changed in connection with the proposed EPU amendment. Here, again, the DPS fails to raise a genuine issue.

DPS next states, "The EOPs identify the possibility of containment venting. The possibilities of over venting or not being able to re-close the vent have not been investigated properly, and when investigated, will illustrate that overpressure credit should not be granted." This statement is wholly unfounded and without evidentiary support and, as such, does not serve as sufficient basis for admission of the contention. *See SERI, LBP-04-19, slip op. at 11.*

Finally, DPS complains that the Applicant, in not revising its EOPs, "is creating a situation in which the NRC staff will not give the changes to the EOPs the necessary interdisciplinary review." Petition at 39-40. This asserted basis essentially calls into question the NRC Staff review of the Application, which, as discussed with respect to Proposed Contentions 1 and 2, under longstanding Commission precedent, is not a valid basis for a contention. "The adequacy of the applicant's license application, not the NRC staff's safety evaluation, is the safety issue in any licensing proceeding . . ." 69 Fed. Reg. at 2202, citing *Curators, CLI-95-1, 41 at 121-22.*

Moreover, this argument constitutes an impermissible challenge to NRC regulations. By alleging an inadequacy in the NRC review process, DPS attempts, in essence, to impose additional requirements regarding the NRC's review of EOPs. A contention presents an impermissible challenge to the Commission's regulations by seeking to impose requirements in addition to those set forth in the regulations. See *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-87-12, 26 NRC 383, 395 (1987).

For all of these reasons, this proposed contention should be rejected.

E. *Proposed 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).

Petition at 40. DPS sets forth four bases for this proposed contention, as follows:

- (1) Regulatory Guide 1.82, Revision 3, authorizes the use of containment overpressure to meet NPSH when it is "necessary" or when it would be "impracticable" to alter the plant to meet NPSH requirements. The normal meaning of these terms implicates economic considerations.²⁵
- (2) Applicant has not demonstrated that there is no available alternative to use of containment overpressure to meet NPSH requirements, and in fact either lowering the level of the proposed uprate or upgrading the ECCS pumps would allow VYNPS to meet NPSH requirements.
- (3) Cost considerations are irrelevant to determining whether safety requirements have been met.
- (4) The Applicant cannot excuse failure to meet NPSH requirements without the use of containment overpressure by asserting that meeting such requirements, without the use of containment overpressure, is too expensive or will reduce power output below the proposed 20% uprate.

²⁵ Here again, the DPS misunderstands the use of the term "necessary" in the context of RG 1.82. "Necessary" in that context means that credit for containment accident pressure is needed in order to provide adequate available NPSH to the ECCS pumps.

Petition at 40-41.

This contention is not valid, in the Staff's view, because DPS has provided no basis for the essence of its contention, *i.e.*, that the proposed amendment may not be granted because VYNPS could meet NPSH requirements by taking different, more costly, measures that would obviate the need to take credit for containment overpressure. Even assuming it can be proven that other measures, such as lowering the level of the proposed uprate or upgrading the ECCS pumps, would allow VYNPS to meet NPSH requirements without crediting containment overpressure, that proof would not entitle DPS to relief. *See Northeast Nuclear Energy Co. (Millstone Nuclear Power Station, Unit 3)*, LBP-98-28, 48 NRC 279, 284 n.2 (1998) (dismissing a contention on the basis that, if proven, the contention would not entitle the petitioner to any relief) (citing former Section 2.714(d)(2)(ii)).²⁶

In deciding whether to grant a license amendment application, the NRC considers information necessary to enable it to find that there will be adequate protection of the public health and safety. *See* AEA Section 182a., 42 U.S.C. § 2232(a). Section 182 does not require that an applicant justify, or otherwise address, its cost (or other economic) considerations when submitting an application. *See* 10 C.F.R. § 50.57(a)(3). Furthermore (as noted by DPS in both its Basis (3) and the cases listed as "Supporting Evidence"), the NRC has long held that benefit and cost considerations play *no part* in making the safety findings required under the AEA. *See, e.g., Maine Yankee Atomic Power Co. (Maine Yankee Atomic Power Station)*, ALAB-161, 6 AEC 1003, *cited in Union of Concerned Scientists v. NRC*, 824 F.2d 108, 117 (D.C. Cir. 1987); *Pub. Serv. Co.*

²⁶ *See* 69 Fed. Reg. at 2202 (declining to include a similar requirement in Section 2.309 because such a section would place an "unneeded additional requirement on the contention pleading provisions" in view of the requirement of Section 2.309(d)(1)(iv), requiring private intervenors to address "the possible effect of any decision or order that may be issued in the proceedings on the requestor's/petitioner's interest."). Because the provision has been captured in the revised Part 2, this still serves as a valid basis on which to reject a proposed contention.

of N.H. (Seabrook Station, Units 1 & 2), ALAB-623, 12 NRC 670, 677-78 (1980). DPS has not provided a basis for the proposition that the applicant must justify not using other, more expensive alternatives to its proposal. Because the law is clear that the Commission may not consider the economic costs of safety measures in making its safety determinations under the AEA, economic considerations which may ultimately be demonstrated would be of no import, and thus would not entitle DPS to relief – *i.e.*, denial of the proposed amendment.²⁷

In view of the above, Proposed Contention 5 should not be admitted.

IV. DPS's Request for a Subpart G Hearing Should Be Rejected.

DPS has requested that a hearing be conducted pursuant to the procedures in 10 C.F.R. Part 2, Subpart G. Petition at 42. DPS enumerates several reasons for this request, including Vermont's "keen and continuing interest in its one nuclear power plant," elected officials' concerns that adequate time be provided for the hearing, Vermonters' interest and concern, the complexity of the issues involved, and several "material fact disagreements" related to past activities. *See* Petition at 42-45. As demonstrated below, these reasons do not satisfy regulatory requirements for a Subpart G hearing, and therefore, DPS's request should be denied.

Under the recently revised regulations set forth in 10 C.F.R. Part 2, a proceeding involving a license amendment must ordinarily follow procedures for an informal hearing set forth in 10 C.F.R. Part 2, Subpart L. *See* 10 C.F.R. § 2.310(a). In order for a license amendment proceeding (or portions thereof) to be subject to Subpart G procedures, the presiding officer must find that resolution of one or more particular admitted contentions necessitates resolution of (1) issues of material fact relating to the occurrence of a past activity, where the credibility of an

²⁷ In any event, the proposed license amendment will not be approved by the Staff unless the appropriate safety findings under the AEA and the Commission's regulations are made. *See, e.g.*, 10 C.F.R. § 50.57.

eyewitness may reasonably be expected to be at issue,²⁸ and/or (2) issues of motive or intent of the party or eyewitness material to the resolution of the contention. 10 C.F.R. § 2.310(d). Additionally, a petitioner should demonstrate, “by reference to the contention and the basis provided and the specific procedures in Subpart G, that resolution of the contention necessitates resolution of material issues of fact which may be best determined through the use of the identified [Subpart G] procedures.” 69 Fed. Reg. at 2221. As discussed below, DPS has not made the requisite showing under Section 2.310(d), and its request should be denied.

DPS submits that a Subpart G hearing is essential so that the public can be assured that there has been a “full and public airing” of the important safety issues that may arise from the NRC granting an EPU to Entergy. *See* Petition at 43. DPS also states that the issues involved are extremely complex and that a Subpart G hearing is required to put concerns into “understandable terms” and to answer these concerns. *Id.* at 43-44. These reasons clearly do not satisfy the requirements of 10 C.F.R. § 2.310(d), as no material issues of fact relating to the occurrence of a past activity where the credibility of an eyewitness may be expected to be at issue have been demonstrated, nor have any issues of motive or intent of a party or eyewitness material to resolution of a contention. Indeed, the Commission considered allowing “complex issues” as a basis for the presiding officer to conduct a Subpart G hearing, but specifically declined to include that standard in the final rule. *See* 69 Fed. Reg. at 2204-05 (“Common sense, as well as case law, lead the Commission to conclude that oral hearings with right of cross-examination are best used to resolve issues where ‘motive, intent, or credibility are at issue, or if there is a dispute over the occurrence of a past event’.”)

²⁸ The first criterion contains two elements: the first is a dispute of material fact concerning the occurrence of (including the nature or details of) a past activity and the second is that the credibility of the eyewitness may reasonably be expected to be at issue. *See* 69 Fed. Reg. at 2222. This does not include disputes between parties over qualifications or professional “credibility” of witnesses. *Id.*

DPS submits five proposed issues of material fact relating to the occurrence of “past activities.” See Petition at 44-45. Specifically, DPS asserts that “material fact disagreements” related to past activities include: (1) how Entergy calculated post-accident conditions in making the determination of the level of post-accident containment pressure and how the calculation is appropriate (see Proposed Contention 2, Basis 3) and (2) whether testing of the performance of the ECCS pumps following a LOCA left a large area of uncertainty regarding NPSH, including the impact of strainers and debris (*id.*). See Petition at 44 (listed as issues 1, 2). However, DPS provides no explanation regarding how the credibility of an eyewitness could reasonably be expected to assist in the resolution of these issues, nor does DPS implicate issues of motive or intent of a party or eyewitness material to the resolution of Proposed Contention 2. Accordingly, the use of Subpart G procedures is not appropriate for these issues.

DPS states that material fact disagreements related to past activities also include: (1) whether the ACRS conducted a safety review of the portion of Regulatory Guide 1.82, Revision 3, that altered an NRC prohibition against using containment overpressure as a credit to meet NPSH for ECCS pumps following a LOCA (see Proposed Contention 1, Basis 1); (2) whether defense in depth prohibits allowing the failure of one physical barrier to result in the failure of the ECCS pump function, which in turn may fail a second physical barrier and, if it does, whether the level of uncertainty associated with the calculation of post-LOCA NPSH and containment performance is sufficiently high to make reliance on probabilistic risk assessment unacceptable (see Proposed Contention 1, Basis 2); and (3) whether Licensee has provided sufficient evidence to prove that meeting NPSH requirements without taking credit for overpressure containment is impracticable or whether use of containment overpressure is necessary (see Proposed Contention 1, Basis 3). See Petition at 44-45 (listed as issues 3-5). DPS submits no reasoning whatsoever regarding how these past activities relate to the credibility of any eyewitness, nor how they raise issues of motive or intent of the party or eyewitness material to the resolution of a

contention.²⁹ Rather, DPS states that such issues cannot be “rationally decided on the bare bones of the written word,” and therefore require full document production requests and depositions. Petition at 45-46. Finally, DPS suggests that the discovery processes under Subpart G proceeding are necessary, as they would enable DPS to obtain documents that would be unavailable in a Subpart L proceeding. See Petition at 47. The Commission, however, in issuing New Part 2, stated that the required discovery provisions for Subpart G “are analogous to the disclosure provisions in § 2.336.” 69 Fed. Reg. at 2226. Even assuming that these issues were admitted for hearing, DPS has not demonstrated that the mandatory disclosure provisions, together with the hearing file provided by the Staff pursuant to 10 C.F.R. § 2.1203, would not result in full required disclosures.

For all of the foregoing reasons, DPS’s request for a Subpart G hearing should be denied.

V. Amendment of the DPS Petition Is Subject to Late-Filing Requirements.

DPS “reserves the right” to amend its Petition pending the results of the recently completed Vermont Yankee Engineering Team Inspection.³⁰ In particular, DPS states:

[B]y delaying the date for action on the requests for intervention until 30 days after the full report of the independent inspection and its supporting documents have been made publicly available, will enable the parties to better identify any issues which require resolution, the bases for these issues, the information which supports these issues and the reason why an adjudicatory hearing is required.

²⁹ Moreover, as discussed *supra* with respect to Proposed Contention 1, Staff submits that these issues do not demonstrate a genuine dispute with Entergy on a material issue of law or fact, and therefore should not be admitted for hearing at all. See *supra* pages 6-13, concluding that DPS Proposed Contention 1 should not be admitted.

³⁰ By letter dated May 4, 2004, the Chairman informed the Vermont Public Service Board (“VPSB”) that the NRC would conduct a detailed engineering inspection at VYNPS, as part of a new engineering inspection program developed by the NRC to enhance the Reactor Oversight Process. See Letter from Chairman N.J. Diaz to M.H. Dworkin, VPSB, dated May 4, 2004 (ADAMS accession number ML041170438).

Petition at 49. Such a delay would, according to DPS, avoid “an unnecessary wrangle” over the application of the late-filing rules at 10 C.F.R. § 2.309(c) and (f)(i)-(iii). *Id.* Because the regulations and case law on this point are clear, as discussed below, this request should be denied.

As stated in 10 C.F.R. § 2.309(f)(2) (emphasis added), “Contentions *must be based on documents or other information available at the time the petition is to be filed*, such as the application, supporting safety analysis report, environmental report or other supporting document filed by an applicant or licensee, *or otherwise available to the petitioner.*”

As recently stated by the Commission in this proceeding:

An extension of time will not be granted to allow potential participants to review the results of ongoing staff license review-related activities before filing their hearing requests and accompanying contentions.

Entergy Nuclear Vermont Yankee, L.L.C. (Vermont Yankee Nuclear Power Station), Order (Aug. 18, 2004), slip op. at 2, citing *Baltimore Gas & Elec. Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 & 2), LBP-98-26, 48 NRC 232, 242-43, *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) (“[T]he availability of the application, not ongoing Staff and Applicant license review-related activities, is the central concern relative to setting a deadline for filing contentions.”).

Once the time for filing an intervention petition has passed, the Commission’s regulations provide that non-timely filings may be considered only upon a determination by the Licensing Board that the late-filing criteria in 10 C.F.R. § 2.309(f)(i)-(iii).³¹ Under these criteria, new or amended

³¹ These provisions state, in pertinent part:

[C]ontentions may be amended or new contentions filed after the initial filing only with leave of the presiding officer upon a showing that –

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

contentions may be admissible after the initial filing, depending, among other things, on the previous unavailability of the information upon which the new or amended contentions are based. DPS asserts that these requirements impose "additional hurdles which are not applicable to initial contentions." Petition at 49. Nevertheless, the regulations are applicable, and DPS's requested "extension of time," which directly contravenes them, should be denied.

CONCLUSION

Based on the foregoing, the Staff does not object to DPS's participation in this proceeding, subject to the conditions discussed above. Furthermore, DPS's Proposed Contentions 1, 2 (Bases 1 and 2, and portions of Basis 3), 3 (Basis 3(a) and portions of Basis 3(b)), 4 and 5 do not meet the requirements of 10 C.F.R. § 2.309(f)(1) and should not be admitted for hearing. The Staff does not challenge the admissibility of Proposed Contention 2, Basis 3, as supported by "Supporting Evidence" paragraphs 6 and 7; and Proposed Contention 3, Basis 3(b), as to the issue of adequacy of the current seismic analysis with respect to the VYNPS SSE in light of the request to credit containment overpressure, and as supported by DPS's Exhibit 24 and paragraph 8 and 11 of DPS's "Supporting Evidence."

Respectfully submitted,



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Dated at Rockville, Maryland
this 29th day of September, 2004

³¹(...continued)

(iii) materially different than information previously available; and
The amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information.