

June 22, 2006

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-LR
LLC, and ENTERGY NUCLEAR	)	
OPERATIONS, INC.	)	ASLBP No. 06-849-03-LR
	)	
(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 (“Staff”) 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 standing to participate in this proceeding. However, the Staff opposes admission of each of DPS’s proposed contentions.

BACKGROUND

By letter dated January 25, 2006, as supplemented March 15 and May 15, 2006, Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. (collectively, “Entergy” or “Applicant”) submitted an application, under 10 C.F.R. Part 54, to renew Operating License No. DPR-28 for the Vermont Yankee Nuclear Power Station (“VYNPS”).<sup>1</sup> The renewal

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<sup>1</sup> See Letter from William F. Maguire, Entergy, to the NRC Document Control Desk, “Vermont Yankee Nuclear Power Station, License No. DPR-28 (Docket No. 50-271), License Renewal Application,” dated January 25, 2006 (Agencywide Documents Access and Management System (“ADAMS”) Accession Nos. ML060300082, ML060300085, ML060300086).

would extend the license for an additional 20 years beyond the current expiration date of midnight on March 21, 2012 to midnight on March 21, 2032.

On March 27, 2006, the NRC published in the *Federal Register* a notice of acceptance for docketing and opportunity for a hearing.<sup>2</sup> In response to this notice, DPS timely filed its Petition on May 26, 2006.<sup>3</sup> Three other organizations, the New England Coalition (“NEC”), the Attorney General of the Commonwealth of Massachusetts, and the Selectboard of the Town of Marlboro, Vermont, submitted petitions requesting a hearing on this matter.<sup>4</sup> On June 8, 2006, this Atomic Safety and Licensing Board (“Licensing Board”) was established to preside over the proceeding.<sup>5</sup>

## DISCUSSION

### I. Interested State Participation

#### 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 same standards as an individual petitioner. *Northern States Power Co.*

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<sup>2</sup> See Entergy Nuclear Operations, Inc., Vermont Yankee Nuclear Power Station; Notice of Acceptance for Docketing of the Application and Notice of Opportunity for Hearing Regarding Renewal of Facility Operating License No. DPR-28 for an Additional 20-Year Period, 71 Fed. Reg. 15,220 (March 27, 2006).

<sup>3</sup> Pursuant to the Licensing Board’s oral order of June 19, 2006, the deadline for filing this Answer is June 22, 2006.

<sup>4</sup> See “New England Coalition’s Petition for Leave to Intervene, Request for Hearing, and Contentions,” dated May 26, 2006; “Massachusetts Attorney General’s Request for a Hearing and Petition for Leave to Intervene with Respect to Entergy Nuclear Operations Inc.’s Application for Renewal of the Vermont Yankee Nuclear Power Plant Operating License,” dated May 26, 2006; “Town of Marlboro Selectboard’s “Request for Hearing in Entergy Vermont Yankee License Extension Proceeding,” dated April 27, 2006.

<sup>5</sup> See “Establishment of Atomic Safety and Licensing Board,” dated June 8, 2006. 71 Fed. Reg. 34,397 (June 14, 2006).

(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); *Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station)*, LBP-87-7, 25 NRC 116, 118 (1987)). As noted by DPS (Petition at 3), 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 with respect to a facility within its boundaries. 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 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.<sup>6</sup>

*B. Vermont DPS is Not Entitled to a Hearing as a Matter of Right*

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). Instead, DPS argues that it is entitled to a formal hearing as a matter of right pursuant to section 274(l) of the Atomic Energy Act as amended (“AEA” or “the Act”), which requires the NRC to “afford reasonable opportunity for State representatives to offer evidence, interrogate witnesses, and advise the Commission” as to applications for the

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<sup>6</sup> 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.”

construction and operation of any utilization facility. 42 U.S.C. § 2021(l). As discussed below, DPS is not entitled, pursuant to section 274(l) of the AEA, to a hearing as a matter of right. However, with respect to participation as a party on its proposed contentions, the Staff agrees that DPS need not make a further demonstration of standing.<sup>7</sup> 10 C.F.R. § 2.309(d)(2).

Section 274(l) of the AEA, 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, 527 (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-84-6, 19 NRC 393, 426-27 (1984). In order for an interested State to participate, there must be at least one other party with an admitted contention. *Northern States*, 44 NRC at 140. Further, a state may not assert interested State status where it has already submitted contentions and been admitted as a party. *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-04-35, 60 NRC 619, 626 (2004). In the event that a Vermont DPS contention is admitted, it cannot participate as an interested State. *Id.*

DPS has filed a motion to adopt the contentions filed by NEC and the Massachusetts Attorney General. See Vermont DPS's "Notice of Intent to Adopt Contentions And Motion for Leave to be Allowed to Do So" dated June 5, 2006. The Staff did not object to this adoption provided DPS is admitted as a party to this proceeding based on its initial petition.<sup>8</sup> In the event that the Licensing Board grants DPS's motion to adopt admitted contentions of other parties,

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

<sup>8</sup> See "NRC Staff Answer to Vermont Department of Public Service Notice of Intention to Adopt Contentions and Motion for Leave," dated June 21, 2006.

DPS may participate to the extent allowed under 10 C.F.R. § 2.309(f)(3), as discussed above. In the event no contentions are admitted, there will be no hearing, and DPS cannot participate as an interested State. *Northern States*, 44 NRC at 140.

DPS also asserts that section 274(l) of the AEA grants it the right to “depositions and live testimony,” as well as the right to request production of documents. Petition at 4-5. Essentially, DPS argues that its requested hearing should utilize the procedures set forth in Subpart G to 10 C.F.R. Part 2. However, as the Licensing Board recently noted when DPS made this same argument in the Vermont Yankee Extended Power Uprate proceeding, “[t]he issue in this case is whether, under the Adjudicatory Process Final Rule, any [admitted contention] must or should be heard under Subpart G procedures.” *Entergy Nuclear Vermont Yankee, L.L.C., and Entergy Nuclear Operations Inc. (Vermont Yankee Nuclear Power Station)*, LBP-04-31, 60 NRC 686, 693 (2004).

Under that rule, set forth in 10 C.F.R. Part 2, a proceeding involving a license renewal 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 renewal 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 eyewitness may reasonably be expected to be at issue,<sup>9</sup> 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

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<sup>9</sup> 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.*

material issues of fact which may be best determined through the use of the identified [Subpart G] procedures.” 69 Fed. Reg. at 2221. DPS has not attempted to make such a showing.

Therefore, it’s request for formal hearing procedures should be denied.<sup>10</sup>

## II. *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;
- (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.

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<sup>10</sup> Further, the Licensing Board has held that the opportunity for cross-examination afforded by Subpart L (10 C.F.R. § 2.1204(b)(3)) is consistent with the State’s “reasonable opportunity . . . to interrogate witnesses” under section 274(l) of the AEA. *Vermont Yankee*, 60 NRC at 691 (citing *Citizens Awareness Network, Inc. v. United States*, 391 F.3d 338 (1st. Cir. 2004)).

10 C.F.R. § 2.309(f)(1).<sup>11</sup> 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 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 277, 291 (2004), (citing *Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 & 2), ALAB-899, 28 NRC 93, 97 (1988), *aff’d sub nom. Massachusetts v. NRC*, 924 F.2d 311 (D.C. Cir.), *cert. denied*, 502 U.S. 899 (1991)); *see also Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-02-28, 56 NRC 373, 379 (2002).

The scope of a license renewal proceeding is limited in both safety and environmental areas. The scope of Commission review determines the scope of admissible contentions in a renewal hearing absent a Commission finding under 10 C.F.R. § 2.335 (formerly § 2.758).

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<sup>11</sup> 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.

“Nuclear Power Plant License Renewal; Revisions [1995 Final Rule],” 60 Fed. Reg. 22,461, 22,482 n. 2. Review of safety issues is limited to “a review of the plant structures and components that will require an *aging* management review for the period of extended operation and the plant’s systems, structures and components that are subject to an evaluation of time-limited *aging* analyses.” *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station Units 1 & 2), CLI-02-26, 56 NRC 358, 363-64 (2002) (citations omitted) (emphasis in original). See also *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 & 3), LBP-04-15, 60 NRC 81, 90 (2004), *aff’d*, CLI-04-36, 60 NRC 631 (2004); *Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 & 2), CLI-98-14, 48 NRC 39, 41 (1998); 10 C.F.R. §§ 54.4, 54.21(a), (c). License renewal focuses on the potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs. *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), CLI-01-17, 54 NRC 3 (2001).

The scope of the environmental review is also limited in accordance with 10 C.F.R. §§ 51.71(d) and 51.95(c). See *Turkey Point*, 54 NRC at 11-13. Consideration of environmental issues in the context of license renewal proceedings is specifically limited by 10 C.F.R. Part 51 and by the NRC’s “Generic Environmental Impact Statement (GEIS) for License Renewal of Nuclear Plants” (NUREG-1437) (“GEIS”). *Id.* A number of environmental issues potentially relevant to license renewal are classified in 10 C.F.R. Part 51, Subpart A, Appendix B as “Category 1” issues, which means that “the Commission resolved the[se] issues generically for all plants and those issues are not subject to further evaluation in any license renewal proceeding.” *Turkey Point*, LBP-01-06, 53 NRC 138, 152-53, *aff’d*, CLI-01-17, 54 NRC at 11. The remaining issues, designated as “Category 2” in Appendix B, must be addressed by the applicant in its environmental report (“ER”), and in the NRC’s supplemental environmental impact statement for the facility at issue pursuant to 10 C.F.R. §§ 51.71(d) and 51.95(c). *Id.*

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. The Staff discusses the proposed contentions *seriatim* as they appear in Petitioner's filing.<sup>12</sup>

A. *DPS Proposed Contention 1*

The Application must be denied because the Applicant has failed to provide the necessary information with regard to age management of primary containment concrete in accordance with 10 C.F.R. § 54.21 such that the Commission cannot find that 10 C.F.R. § 54.29(a) is met.

Petition at 10. DPS sets forth a basis for this proposed contention, as follows:

As shown by the supporting evidence below, the Applicant improperly excludes the attribute of *reduction in strength and modulus of the primary containment structure due to elevated temperature*. The Applicant claims this is not an aging effect requiring management. However, the primary containment normal operating temperature limit is above the limit for excluding this attribute from consideration. The lack of consideration means the Commission cannot make the finding of acceptability in accordance with 10 C.F.R. § 54.29(a).

Petition at 10 (emphasis in original). Additional information supporting this proposed contention is provided in paragraphs 1 through 9 of the section of this proposed contention entitled "Supporting Evidence."

Specifically DPS alleges that in section 3.5-8 of the license renewal application ("LRA"), the Applicant states:

ASME Code, Section III, Division 2, Subsection CC indicates that aging due to elevated temperature exposure is not significant as

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<sup>12</sup> DPS seeks to reserve its rights to later file a new contention related to energy alternatives upon publication of the Staff's draft supplemental environmental impact statement. Petition at 9. However, environmental contentions must be based on the applicant's environmental report. 10 C.F.R. § 2.309(f)(2). New or amended contentions are only allowed if the NRC draft environmental impact statement contains new information materially different from the applicant's documents. *Id.*

long as *concrete general area temperatures do not exceed 150°F* and local area temperatures do not exceed 200°F. During normal operation, areas within primary containment are within these temperature limits. Therefore, reduction of strength and modulus of concrete structures due to elevated temperature is not an aging effect requiring management for VYNPS containment concrete.

Petition at 10.

According to DPS, this statement is contradicted by information in the Vermont Yankee Updated Final Safety Analysis Report (“UFSAR”). The UFSAR states: “Normal environment in the drywell during plant operation is approximately 2 psig pressure and an ambient temperature of about 135°F to 165°F.” UFSAR at 5.2-8. DPS’s expert witness, William K. Sherman, states in his declaration (“Sherman Declaration”) that “the concrete surface behind the steel shell will closely match the drywell ambient temperature.” Sherman Declaration at 2. He then states that because the UFSAR’s description of the normal environment in the drywell includes temperatures up to 165°F, “the statement at page 3.5-8 of the LRA is not accurate and reduction of strength and modulus of concrete structures is an aging effect requiring management.” *Id.* (emphasis in original).

#### Staff Response to DPS Contention 1

Vermont Yankee’s Mark I primary containment includes a steel drywell. UFSAR at 5.1-2. A concrete wall surrounds the drywell and provides shielding and additional resistance to deformation and buckling of the drywell. *Id.* at 5.2-7. Above the transition zone, the concrete is separated from the steel drywell by an air gap of approximately 2 inches. *Id.* There are other concrete components within the drywell (e.g. a sacrificial shield wall, the reactor pedestal, and a concrete floor). Each of these concrete structures, while not primary containment pressure boundary structures, are within the scope of license renewal, and the aging of all these

concrete structures will be managed by the Applicant's Structures Monitoring Program.<sup>13</sup> However, the scope of this contention, as submitted by DPS is limited to "the strength and modulus of the primary containment structure," and refers to concrete outside the steel drywell.<sup>14</sup> Petition at 12. Only concrete outside the drywell is described by Mr. Sherman as "closely matching the drywell ambient temperature." *Id.* at 11; Sherman Declaration at 2.

As stated above, pursuant to 10 C.F.R. § 2.309(f)(1)(vi), an intervenor is required to "[p]rovide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact." In attempting to satisfy the contention filing requirements, DPS relies solely on the assumption in the Sherman Declaration that "the concrete surface behind the steel shell will closely match the drywell ambient temperature." *Id.* Mr. Sherman's Declaration, however, is impermissibly speculative and conclusory and, as such, cannot provide an adequate basis for a contention.

As stated in the VYNPS UFSAR, ambient temperature within the drywell is maintained between 135°F and 165°F by recirculating the drywell atmosphere across forced draft air cooling units which, in turn, are cooled by the Reactor Building Closed Cooling Water System. UFSAR at 5.2-8. This 165°F maximum is an ambient air temperature within the steel drywell. ASME Code Section III, Division 2, Subsection CC, upon which this contention rests, does not refer to ambient air temperatures, but instead refers to *concrete general area temperatures*. Petition at 10. Mr. Sherman simply states that "the concrete surface behind the steel shell will closely match the drywell ambient temperature," yet provides no basis for this conclusory assertion. *Id.* Mr. Sherman provides no data or detailed opinion on heat profile changes (change in temperature as heat passes through air and the steel drywell). This conclusory

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<sup>13</sup> See LRA at Section 3.5, "Structures and Component Supports."

<sup>14</sup> As stated above, the "reach of a contention necessarily hinges upon its terms coupled with its stated bases." *Grand Gulf ESP*, 60 NRC at 291.

assertion that the two distinct temperature readings will “closely match” provides nothing more than speculation, and is insufficient to demonstrate the existence of a *genuine* dispute on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi).

Mr. Sherman’s conclusory and speculative assertion fails to establish a sufficient basis for DPS’s proposed contention, and fails to demonstrate the existence of a genuine dispute of material fact. In this regard, it is well-established that an intervenor has an obligation to present the factual information and expert opinions necessary to support its contention. *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), LBP-04-17, 60 NRC 229, 241 (2004).<sup>15</sup> In meeting this requirement, “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.” *Id.* (citing *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003) (emphasis added)). DPS’s proposed contention rests exclusively on the Declaration of Mr. Sherman. Because the Sherman Declaration is impermissibly speculative and conclusory, the contention lacks sufficient basis and fails to demonstrate the existence of a genuine dispute of material fact. Accordingly, DPS’s proposed contention must be rejected.

B. *DPS Proposed Contention 2*

The Application must be denied because Applicant has failed to comply with the requirements of 10 C.F.R. § 51.53(c)(3)(iv) by failing to include new and significant information regarding the substantial likelihood that spent fuel will have to be stored at the Vermont Yankee site longer than evaluated in the GEIS and

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<sup>15</sup> A petitioner’s failure to provide such an explanation regarding the bases of a proffered contention requires that it be rejected. *Clinton ESP*, 60 NRC at 242, citing *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155 (1991). Where a proffered contention fails to meet the basis requirements, “it is not within the Board’s power to make assumptions of fact that favor the petitioner, nor may the Board supply information that is lacking.” *Id.*, citing *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 422 (2001); *Georgia Institute of Technology* (Georgia Tech Research Reactor), LBP-95-6, 41 NRC 281, 305 (1995).

perhaps indefinitely and thus has failed to provide the necessary environmental information with regard to onsite land use in accordance with 10 C.F.R. § 54.23 such that the Commission cannot find that the applicable requirements of Subpart A of 10 C.F.R. Part 50 have been satisfied (10 C.F.R. § 54.29(b)).

Petition at 13. DPS sets forth seven bases for this proposed contention, as follows:

- (1) 10 CFR §51.53(c)(3)(iv) provides that the [t]he environmental report must contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware.”
- (2) 10 C.F.R. §54.23 requires the Applicant to submit an environmental report that complies with Subpart A of 10 C.F.R. Part 51.
- (3) New and significant information exists regarding the time for which onsite land will be removed from other uses, and whether such land use is irretrievable, which was not provided in the ER by the Applicant in accordance with 10 C.F.R. §51.53(c)(3)(iv). The current estimate in the Generic Environment Impact Statement (GEIS) is on-site storage of spent fuel will not last beyond 30 years after the end of the license period (including an extended license period). GEIS, Sections 6.4.6.2, 3.
- (4) The GEIS evaluates the impacts associated with onsite land use as Category 1, SMALL. The basis for this assessment is the assumption that the land used for storage of nuclear wastes at the reactor site will not exceed 30 years after the end of the license term. GEIS, Section 3.2 (referring to GEIS Chapter 6). That assumption, in turn, relies upon the assumption that a permanent high level waste repository, and perhaps even a second repository, will be in place by that time to receive the reactor wastes. GEIS, Section 6.4.6.2 Based on those assumptions the use of the reactor site for storing spent fuel, in this case for a period ending in 2062, has been deemed to be a small impact. GEIS, Section 3.2.
- (5) However, as the evidence summarized below demonstrates, these assumptions are flawed. Recent evidence, not evaluated previously in the GEIS, now discloses that: 1) the likelihood that a permanent high level waste repository will be in place by 2062 is slight due to unanticipated technical problems uncovered at the Yucca Mountain site coupled with changes in national policy; 2) the only currently contemplated high level waste repository

can accommodate the quantity of spent nuclear fuel expected to be produced by Vermont Yankee through the end of its originally licensed life, but it would not have space for at least a part of the additional spent nuclear fuel generated by VY during extended licensing; 3) no present plans exist for building a second high level waste repository nor has any site been identified for consideration for such a facility; 4) the United States is now embarking upon a changed policy for waste disposal which will make all the current schedules obsolete and for which there is no reliable time frame for its implementation; 5) there is not now nor has there been any reasonable prospect that the federal government or any third party will take title to the license-renewal spent fuel waste and remove it from the site; and 6) it follows that it is reasonable to expect that at least a part of spent fuel to be generated at VY during the period of an extended license will remain at the site for a much longer time than evaluated in the GEIS and perhaps indefinitely.

- (6) Since this new information, not available at the time of development of the GEIS, demonstrates that the commitment of onsite land for storage/disposal of spent nuclear fuel from license renewal will be substantially longer than assumed in the *GEIS*, and may be indefinite, this results in an irretrievable commitment of onsite land with a MODERATE or LARGE impact.
- (7) As demonstrated by the evidence below, Vermont and its communities have firmly established values associated with land use such that the long-term or indefinite use of a portion of the VY site for spent nuclear fuel storage should clearly be evaluated as a MODERATE or LARGE impact in the VY supplement to the GEIS.

Petition at 13-15. Additional information is provided in paragraphs 1 through 29 of the "Supporting Evidence" section for this proposed contention. Petition at 15-31.

#### Staff Response to DPS Contention 2

The Staff opposes admission of this contention on the grounds that it is outside the scope of the proceeding; is not material to the findings the NRC must make to support the action that is involved in the proceeding, and fails to show the existence of a genuine dispute on a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iii)- (iv). Furthermore, this contention

represents an inadmissible challenge to the Commission's regulations. 10 C.F.R. § 2.335(a). As the Commission stated in the Oconee license renewal case, it "has chosen to address high-level waste disposal generically rather than unnecessarily to revisit the same waste disposal questions, license-by-license, when reviewing individual applications." *Oconee*, CLI-99-11, 49 NRC at 345. This goal was achieved through promulgation of the "waste confidence" rule, which states:

(a) The Commission has made a generic determination that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor at its spent fuel storage basin or at either onsite or offsite independent spent fuel storage installations. Further, the Commission believes there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of any reactor to dispose of the commercial high-level waste and spent fuel originating in such reactor and generated up to that time.

(b) Accordingly, . . . no discussion of any environmental impact of spent fuel storage in reactor facility storage pools or independent spent fuel storage installations (ISFSI) for the period following the term of the reactor operating license . . . for which application is made, is required in any environmental report, environmental impact statement, environmental assessment, or other analysis prepared in connection with the issuance or amendment of an operating license for a nuclear reactor . . .

10 C.F.R. § 51.23.

Through the waste confidence rule, the Commission has determined that spent fuel can be stored on-site for at least 30 years beyond the licensed (and license renewal) operating life of nuclear power plants safely and with minimal environmental impact. *Id.* The waste confidence rule also expresses the Commission's belief that a repository will be available within 30 years following the licensed life of operation of any reactor. *Id.* Therefore, by rule, no discussion of the environmental impact of storage of spent fuel on site for the period following

the license period is required in the GEIS, the site-specific supplement to the GEIS, or the applicant's ER.<sup>16</sup> *Id.*

The waste confidence rule does not address the environmental impacts of high-level waste storage during the additional 20 years of operation. These impacts, therefore, were addressed in the GEIS. GEIS Section 6.4.6.7. The GEIS treats the impacts of on-site storage of high-level waste during the period of license renewal as a Category 1 issue, meaning these impacts can be addressed generically. *Id.* The GEIS reports that continued storage of existing spent fuel and storage of spent fuel generated during the license renewal period can be accomplished safely and without significant environmental impacts. *Id.*

DPS contends that new and significant information has come to light since the publication of the GEIS regarding the likelihood of a high-level waste repository becoming available within 30 years of the end of the proposed renewed license.<sup>17</sup> Therefore, DPS argues, this new and significant information should have been addressed in the Applicant's ER. Specifically, DPS contends that the ER should ignore the Commission's waste confidence rule, and assume that high-level waste storage will not be available after the period of renewal such that spent fuel will be stored onsite more than 30 years after the end of the renewed license period (i.e., beyond 2062). Petition at 13-15. These effects, DPS contends, must be evaluated in the applicant's ER. *Id.*

However, as discussed above, by rule, no discussion of the environmental impact of spent fuel storage for the period following the term of the operating license is required in an ER or EIS for license renewal. 10 C.F.R. § 51.23(b). Only new and significant information related

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<sup>16</sup> See also 10 C.F.R. § 51.53(c)(2), which states "the environmental report need not discuss any aspect of the storage of spent fuel for the facility within the scope of the generic determination in § 51.23(a) and in accordance with § 51.23(b).

<sup>17</sup> The Applicant's ER "must contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware." 10 C.F.R. § 51.53(c)(3)(iv).

to matters within the scope of the environmental review for license renewal need to be addressed in an applicant's ER. Even if there was new and significant information regarding the long-term storage of high-level waste beyond the period of license renewal, it would not need to be included in the GEIS, or any supplement thereto, as it is beyond scope.

This contention may be viewed as a challenge to the waste confidence rule itself. See *Turkey Point*, LBP-01-06, 53 NRC at 159 (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). Commission rules and regulations are not subject to attack in an adjudicatory proceeding. 10 C.F.R. § 2.335(a); see also *Oconee*, 49 NRC at 344. In *Oconee*, petitioners challenged the waste confidence rule, noting in their appeal to the Commission that the rule "appears suspect" because the candidate site of Yucca Mountain had yet to be licensed; the Department of Energy's target date for the repository had been missed; the capacity of the repository may prove to be insufficient; and there have been safety related incidents involving dry cask spent fuel storage. *Id.* at 344. The Commission rejected this claim procedurally because it was raised for the first time on appeal, and substantively because the petitioners failed to show special circumstances that warranted waiving or disregarding the Commission's rules.<sup>18</sup> *Id.*; see 10 C.F.R. § 2.335(b). The Commission noted, "[a]t bottom, the petitioners voice concerns only about uncertainties in high-level waste disposal, uncertainties that the Commission has always acknowledged, but has decided will be overcome in the next several decades." *Id.* at 344-45. Similarly, DPS's contention, at bottom, voices concerns about

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<sup>18</sup> Pursuant to 10 C.F.R. § 2.335(b), a party may petition for a waiver or exception from the application of a rule or regulation in an adjudicatory proceeding. The sole allowable ground for such a petition is that special circumstances exist such that application of the rule or regulation would not serve the purposes for which it was adopted. Such a petition must be accompanied by affidavit, which identifies with particularity the special circumstances. DPS has not filed a petition for waiver or exception or provided a conforming affidavit. Therefore, the waste confidence rule, 10 C.F.R. § 51.23, remains in effect for this proceeding.

uncertainties in high-level waste disposal. Petition at 15-21. The Commission has acknowledged these uncertainties, but has expressed its confidence that they will be overcome by promulgating the waste confidence rule.

Because the environmental impacts of storage of high level waste after the period of renewed license operation are beyond the scope of the Applicant's ER, DPS has failed to demonstrate that the issue raised in its contention is within the scope of this proceeding, is material to the findings the NRC must make to approve the license renewal, or to demonstrate a genuine dispute on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(iii)-(vi).

Accordingly, DPS's proposed contention must be rejected.

C. *DPS Proposed Contention 3*

The Application must be denied because the Applicant has failed to fully identify plant systems, structures and components that are non-safety-related systems, structures, and components in the security area whose failure could prevent satisfactory accomplishment of any of the functions of safety-related systems, structures and components in accordance with 10 C.F.R. § 54.4(a)(2), such that the Commission cannot find that 10 C.F.R. § 54.29(a) is met.

Petition at 31.

DPS sets forth the following basis for this proposed contention:

As shown by the supporting evidence below, the Applicant does not identify, for screening, security systems, structures and components required by 10 C.F.R. Part 73. These systems, structures, and components provide physical security and protect against terrorist activities which, if they fail, could result in the prevention of safety systems, structures and components to perform their safety functions. Among the systems, structures and components required by 10 C.F.R. Part 73 are those which require aging management review. The lack of this screening and aging management review prevents the Commission from completing its review of the requested license renewal in accordance with 10 C.F.R. § 54.29(a).

*Id.* at 31-32. Additional information in support of this basis is set forth in paragraphs 1 through 6 of the "Supporting Evidence" section for this proposed contention. *Id.* at 32-33.

Staff Response to DPS Contention 3

The Staff opposes admission of this contention on the grounds that it is outside the scope of the proceeding; is not material to the findings the NRC must make to support the action that is involved in the proceeding, does not set forth a specific factual or legal basis, as required, and does not demonstrate the existence of a genuine dispute on a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iii)-(vi).

The Commission has determined that “security issues at nuclear power reactors, while vital, are simply not among the aging-related questions at stake in a license renewal proceeding.” *Millstone*, CLI-04-36, 60 NRC at 638 (citing *McGuire and Catawba*, CLI-02-26, 56 NRC at 363). Issues regarding security are outside the scope of license renewal proceedings because, as the Commission stated, “the portion of the [current licensing basis] that can be impacted by the detrimental effects of aging is limited to the design-bases aspects of the [current licensing basis]. All other aspects of the [current licensing basis], e.g., . . . *physical protection (security)* . . . , are not subject to physical aging processes . . .” *McGuire and Catawba*, 56 NRC at 364 (citing 1995 Final Rule, 60 Fed. Reg. 22,475).

In the Statement of Consideration for the 1991 Final Rule, the Commission explained why security systems, structures, and components (“SSCs”) are not within the scope of the aging management review for license renewal:

The requirements of 10 CFR part 73, notably the testing and maintenance requirements of 10 CFR 73.55(g), include provisions for keeping up the performance of security equipment against impairment due to age-related degradation or other causes. Once a licensee establishes an acceptable physical protection system, changes that would decrease the effectiveness of the system cannot be made without filing an application for license amendment in accordance with 10 CFR 50.54(p)(1).

Application for a renewed license will not affect the standards for physical protection required by the NRC. The level of protection

will be maintained during the renewal term in the same manner as during the original license term, since these requirements remain in effect during the renewal term by the language of § 54.35. The requirements of 10 CFR part 73 will continue to be reviewed and changed to incorporate new information, as necessary. The NRC will continue to ensure compliance of all licensees, whether operating under an original license or a renewed one, through ongoing inspections and reviews.

Final Rule, "Nuclear Power Plant License Renewal," 56 Fed. Reg. 64,943, 64,967 (Dec. 13, 1991) (1991 Final Rule).

DPS attempts to bypass this precedent by arguing that some security SSCs must be reviewed pursuant to 10 C.F.R. § 54.4(a)(2), because they are nonsafety-related SSCs whose failure could prevent satisfactory functioning of safety-related SSCs identified in section 54.4(a)(1). DPS argues that "the failure of security [SSCs] to fulfill their function of physical protection against terrorist activity can directly result in the prevention of safety systems to accomplish their functions." Petition at 33. In the DPS hypothetical, once terrorists get past supposedly age-degraded security systems, they would most likely disable safety-related systems. *Id.* n.7.

DPS completes its argument by stating that any security SSCs within scope pursuant to 10 C.F.R. § 54.4(a)(2), are subject to an aging management review pursuant to section 54.21. DPS misreads section 54.21. Even assuming, *arguendo*, that there are some security SSCs that fall within the scope of section 54.4(a)(2), DPS's contention still fails to demonstrate that this issue is within the scope of this proceeding. The integrated plant assessment (IPA) of section 54.21 only requires that, for those SSCs within the scope of section 54.4, the application "identify and list those structures and components subject to an aging management review." By the terms of section 54.21, not all SSCs within the scope of section 54.4 are subject to an aging management review. As the Commission noted in the McGuire and Catawba license renewal proceeding, security SSCs are not subject to the physical aging

processes at issue in license renewal, and thus, are not subject to an aging management review.<sup>19</sup> 56 NRC at 364.

Additionally, DPS does not set forth a specific factual or legal basis for the contention, as required by 10 C.F.R. § 2.309(f)(1)(v). The Petition lists several subsections within 10 C.F.R. Part 73 with titles including the words “system” or “structure.” Petition at 32. However, it fails to identify any specific system, structure, or component that it believes is within the scope of section 54.4(a)(2). DPS asserts that it did not identify any such SSC in order to avoid a Nuclear Safeguards Information designation. Petition at 33 n. 6. DPS acknowledges that this lack of specificity undermines its contention, and “reserves its rights” to provide such a listing of SSCs.<sup>20</sup> *Id.* The Commission’s rules of procedure provide no such mechanism to submit general contentions and provide specificity at a later date. Any specific information added to this contention at this point would need to satisfy the Commission’s late-filed contention standards in sections 2.309(c) and (f)(2).

DPS has failed to demonstrate that the issue raised in this contention is within the scope of this proceeding, to demonstrate that the issue raised in this contention is material to the findings the NRC must make to approve the license renewal, or to provide a specific statement of the issue of law or fact to be raised. 10 C.F.R. § 2.309(f)(1). Accordingly, DPS’s proposed contention must be rejected.

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<sup>19</sup> “When the design bases of systems, structures, and components can be confirmed either indirectly by inspection or directly by verification of functionality through test or operation, a reasonable conclusion can be drawn that the CLB is or will be maintained. This conclusion recognizes that the portion of the CLB that can be impacted by the detrimental effects of aging is limited to the design-bases aspects of the CLB. All other aspects of the CLB, e.g., quality assurance, physical protection (security), and radiation protection requirements, are not subject to physical aging processes that may cause noncompliance with those aspects of the CLB.” 1995 Final Rule, 60 Fed. Reg. 22,475.

<sup>20</sup> DPS does not explain why it failed to submit the information under seal, or pursuant to a non-disclosure agreement.

CONCLUSION

Based on the foregoing, the Staff does not object to DPS's standing to participate in this proceeding. However, DPS's proposed contentions do not meet the requirements of 10 C.F.R. § 2.309(f)(1) and should not be admitted for hearing.

Respectfully submitted,

*/RA/*

Steven C. Hamrick  
Counsel for NRC Staff

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

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-LR  
LLC, and ENTERGY NUCLEAR )  
OPERATIONS, INC. ) ASLBP No. 06-849-03-LR  
)  
(Vermont Yankee Nuclear Power Station) )

CERTIFICATE OF SERVICE

I hereby certify that copies of the "NRC STAFF ANSWER TO VERMONT DPS NOTICE OF INTENTION TO PARTICIPATE AND PETITION TO INTERVENE" in the above-captioned proceeding have been served on the following by electronic mail with copies by deposit in the NRC's internal mail system or, as indicated by an asterisk, by electronic mail with copies by U.S. mail, first class, this 22nd day of June 2006.

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