

**STATE OF VERMONT
PUBLIC SERVICE BOARD**

Docket 7862

August 16, 2013

Amended Petition of Entergy Nuclear Vermont)
Yankee, LLC, and Entergy Nuclear Operations,)
Inc., for amendment of their Certificate of)
Public Good and other approvals required under)
30 V.S.A. § 231(a) for authority to continue)
after March 21, 2012, operation of the Vermont)
Yankee Nuclear Power Station, including the)
storage of spent nuclear fuel)

INITIAL BRIEF OF WINDHAM REGIONAL COMMISSION

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Attachments

Docket 7440, Reply Brief of the Windham Regional Commission, 8/7/09
Docket 7440, WRC Motion for Reimbursement, 4/13/12
Docket 7600, WRC Direct Brief Concerning Scope and Jurisdiction, 8/20/10

PART ONE

Introduction

Windham Regional Commission (WRC) is a Regional Planning Commission representing 27 towns and approximately 46,000 residents of Southeastern Vermont, acting under 24 V.S.A. Chapter 117 to support the Windham Regional Plan adopted on October 24, 2006 and duly approved by its municipal constituents. WRC is acting *pro se* in this docket, as we have in dockets 6812, 7082, 7600, 7440, and others.

WRC neither supports nor opposes continued operation of the VY Station. We recognize that Entergy VY employs roughly 620 workers in the tri-state area¹ with a payroll of about \$65.7 million, and that it accounts for 2% of employment and 5% of compensation earned in Windham County.² WRC has identified many important issues in this docket, chief among them are overall reliability, prompt and complete decommissioning, and critical impacts of plant operation and eventual closure, including the management of spent nuclear fuel in a manner that supports the orderly development of the region. WRC also identifies a distinction between Entergy Nuclear Vermont Yankee, LLC (ENVY), Entergy Nuclear Operations, Inc. (ENO), and Entergy Corporation as the parent company, and advocates for holding these entities jointly and severally responsible for all costs associated with prompt decommissioning and site restoration.

ENVY and ENO have been issued Certificates of Public Good (CPG) to own and operate the Vermont Yankee Station, with authorization to produce electricity limited to the period ending on March 21, 2012. In this docket ENVY and ENO (together Entergy VY) are seeking amendment of those certificates to allow the production of electricity for an additional 20 years, and to allow the on-site storage of spent nuclear fuel derived from the extended period of operations. **Windham Regional Commission asks the Board to carefully consider the delicate balance first established in docket 6545 when Entergy VY purchased the Station, and if an amended CPG is granted, to support the orderly development of the region and the general good of the state of Vermont by maintaining and further enhancing that balance.**

WRC offers this brief as a concluding filing in docket 7862, and as formal recommendations of the Regional Planning Commission contemplated by Title 30 § 248(b)(1).

¹ WRC-Cross-36; In July 2013 Entergy Corporation announced corporate-wide layoffs, and Entergy VY has confirmed some of those layoffs will occur at Vermont Yankee. The announcement was made after the close of the evidentiary record in this docket and is not reflected in the record. On August 2, 2013 VPIRG and NEC filed a Motion asking the Board to reopen the record to take notice of the new information.

² EN-RWH-3, page 9

History

The Vermont Yankee Station began operating in 1972 pursuant to a 40 year license issued by the Atomic Energy Commission, the predecessor to the Nuclear Regulatory Commission. On January 27, 2006 Entergy VY applied to the NRC for a renewal of its federal license.³ On March 21, 2011 the NRC issued Renewed Facility Operating License No. DPR-28, which authorizes operation of the VY Station through March 21, 2032.⁴

Since operations began at the VY Station, the Vermont Public Service Board (PSB) has opened numerous dockets to examine various elements of ownership and operation. The major dockets involving Entergy companies are listed below.

Until 2002 the Vermont Yankee Station was owned by a consortium of regulated utilities called Vermont Yankee Nuclear Power Corporation (VYNPC). VYNPC attempted to sell the station to AmerGen in 1999. The PSB considered that proposed sale in docket 6300, but was not convinced that the petition or an improved amended proposal would serve the general good. On January 12, 2001 Entergy Nuclear Corporation offered to meet or exceed all elements of the AmerGen amended proposal. In response to a Motion to Dismiss filed by Entergy Nuclear Corporation, the Board dismissed the AmerGen petition and ordered Entergy Nuclear Corporation to post a Performance Bond in support of its offer.⁵ VYNPC then conducted an open auction to identify another qualified buyer. Thus it was Entergy Corporation, through its subsidiary Entergy Nuclear Corporation, which interceded in docket 6300 to block the sale to AmerGen.

On August 22, 2001 VYNPC provided the Board with notice of its intent to enter into a Sale Agreement with ENVY to purchase the Station (and its ratepayer provided decommissioning fund).⁶ The PSB considered the sale in docket 6545, and on June 13, 2002 issued an Order granting a CPG to ENVY and ENO to own and operate the station, respectively, as a merchant plant for the approximately 10 years remaining on its NRC license. In order to secure the purchase of the VY Station, Entergy VY contracted to sell 510 MW of power to VYNPC under favorable contract terms until 2012, and to provide additional benefits to VYNPC and the ratepayers of the State of Vermont.⁷ The CPG specifically limited the operation of the station for power production to a term ending on March 21, 2012, and allowed operations after that date

³ PWT 1/29/12, Michael Twomey, page , answer 6

⁴ Entergy VY Amended Petition, 4/16/12, paragraph 7; EN-TMT-2)

⁵ Dkt 6300, Board Order, 2/14/01

⁶ Dkt 6545 Board Order, 6/13/02, page 14

⁷ Dkt 6545, Board Order, 6/13/02, Central Vermont and Green Mountain would receive 55% of Vermont Yankee output (page 105, see also page 13 for all ownership stakes)

solely for the purposes of decommissioning,⁸ but also contemplated the potential for a future petition to extend the period of operations.

On March 15, 2004 Entergy VY received a CPG in docket 6812 for a power uprate of roughly 20%, bringing total output to 620 megawatts. In exchange for this authorization Entergy VY committed to conditions that would provide additional benefits and protect Vermont ratepayers from potential financial harms related to the uprate.⁹

On April 26, 2006 Entergy VY received a CPG in docket 7082 to construct and operate an Independent Spent Fuel Storage Installation (ISFSI), often called a dry fuel storage pad, on which to store dry casks containing spent nuclear fuel. The CPG granted Entergy VY the right to construct a dry fuel storage pad to accommodate 36 casks, but it limited the actual use of the pad to the amount of fuel consumed up to but not beyond March 21, 2012.¹⁰ As in other dockets before it, the resulting CPG provided Vermont ratepayers with additional benefits necessary to serve the general good.

On March 3, 2008 Entergy VY filed a petition for amendment of their CPGs to allow for power production beyond March 21, 2012. The Board opened docket 7440 to consider the petition. Docket 7440 involved extensive discovery, testimony, and exhibits, with initial briefs filed on July 17, 2009 and reply briefs filed on August 7, 2009.¹¹

In early January 2010 a leak of tritium was identified at the VY Station and traced to a series of underground pipes. On January 10, 2010 the Board was informed that Entergy VY had not fully disclosed the existence of those pipes in discovery and testimony provided in docket 7440. In response, the Board adopted a process under which Entergy VY would take steps to correct errors in the record, and parties would inform the Board when it was appropriate to hold further proceedings.¹² The Board subsequently awarded reimbursement of limited costs to several participating parties, determining “there is a clear causal connection between the misrepresentation made by Entergy VY and additional expenses that WRC, VPIRG, and NEC would incur, and in fact have incurred” in docket 7440.¹³

On February 25, 2010 the Board opened docket 7600 as an investigation into: “(1) whether Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc. (collectively, "Entergy VY"), should be required to cease operations at the Vermont Yankee Nuclear Power

⁸ Dkt 6545, Board Order re: Motions to Alter, 7/11/02, page 17

⁹ Dkt 6812, Board Order, 3/15/04, page 8

¹⁰ Dkt 7082, Board Order, 4/26/06, page 90, paragraph 4

¹¹ WRC filed a Reply Brief in docket 7440, but did not file an Initial Brief

¹² Dkt 7440, Board Order Closing Docket, 1/9/13

¹³ Dkt 7440, Board Order re: Request for Sanctions, 6/4/10, page 10

Station, or take other ameliorative actions, pending completion of repairs to stop releases of radionuclides, radioactive materials, and, potentially, other nonradioactive materials into the environment; (2) whether good cause exists to modify or revoke the 30 V.S.A. § 231 Certificate of Public Good issued to Entergy VY; and (3) whether any penalties should be imposed on Entergy VY for any identified violations of Vermont statutes or Board Orders related to the releases.”¹⁴ The Board scheduled extensive discovery and hearings on point one of the caption, which concluded with direct briefs being filed on February 16, 2011 and reply briefs filed on March 2, 2011.¹⁵ The Board has not issued an Order on point one of the caption, nor has it defined or initiated a review process for points two and three of the caption.

In April 2011 Entergy VY filed suit in Federal District Court challenging certain provisions relevant to docket 7440. On January 19, 2012 the United States District Court for the District of Vermont entered a Decision and Order that partially favored Entergy VY, and partially favored the State of Vermont.¹⁶ Both Entergy VY and the State of Vermont have appealed that decision in the United States Court of Appeals for the Second Circuit.¹⁷

On January 31, 2012 Entergy VY filed a motion with the PSB seeking issuance of a final decision and order in docket 7440. The Board considered numerous outstanding issues in docket 6545, 7082, and 7440, and on March 29, 2012 it denied the Entergy VY motion, and ordered Entergy VY to file an amended petition identifying “the specific approval or approvals that it is seeking from the Board, and the state-law authority under which the Board would issue each approval that Entergy VY seeks.”¹⁸

On April 16, 2012 Entergy VY filed an amended petition that would become the basis for docket 7862. The Board established a bifurcated schedule that has included two rounds of prefiled testimony, discovery, and technical hearings.

On January 9, 2013 the Board issued an Order that formally closed docket 7440. Entergy VY has appealed that Order to the Vermont Supreme Court.

¹⁴ Dkt 7600, Board Order Opening Investigation And Notice of Prehearing Conference, 2/25/10

¹⁵ WRC filed a Reply Brief in docket 7600, but did not file an Initial Brief

¹⁶ Entergy VY subsequently filed an Expedited Motion for Injunction Pending Appeal, which the District Court responded to on March 19, 2012

¹⁷ The United States Court of Appeals for the Second Circuit issued a concluding decision on August 14, 2013, just two days before docket 7862 initial briefs were due, and the day after this WRC brief was approved by our governing Executive Board.

¹⁸ Dkt 7440, Board Order re: Entergy VY Motion Seeking Final Decision And Other Procedural Issues, 3/29/12, page 9, paragraph 2

Authorizations Being Sought

WRC recognizes some level of uncertainty regarding the approvals sought by Entergy VY in this docket. We understand several parties may believe that Entergy VY is seeking a new CPG.¹⁹ WRC understands instead that Entergy VY holds CPG's to own and operate the VY Station, but that its authority to operate the Station for the purpose of producing electricity and its authority to generate additional spent nuclear fuel are prohibited after March 21, 2012 by existing MOU's, CPG's, and Board Orders.²⁰ It is therefore our understanding that Entergy VY is seeking amendments that will allow those date limited operations to continue. The specific authorizations that Entergy VY is seeking are important to clarify in order to establish the scope of review and the criteria under which the Petition will be evaluated.²¹

Although the record includes some ambiguity, Entergy VY and the Board have long recognized that a *renewed or amended* CPG would be required for operations after March 21, 2012 (emphasis added below):

- a) In the docket 6545 MOU Entergy VY agreed to “Board Approval of Operating License *Renewal*,²²” and “to waive any claim each may have that federal law preempts the jurisdiction of the Board to take the actions and impose the conditions agreed upon in this paragraph to *renew, amend or extend* the ENVY CPG and ENO CPG to allow operation of the VYNPS after March 21, 2012, or to decline to so *renew, amend or extend*.”²³
- b) In the docket 6545 Order dated June 13, 2002, the Board required that, “absent issuance of a *new* Certificate of Public Good or *renewal* of the Certificate of Public Good issued today, Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. are

¹⁹ See Dkt 7862 VPIRG Trial Memorandum Rebuttal Phase 6/16/13; See transcript of exchange between Board Member Burke and Entergy VY witness Towmey, TR, 2/15/13, Vol. I, page 137, line 4; See transcript of Mr. Kirsch responding to an objection, 2/11/13, Vol. I, page 59, line 10; See transcript of Mr. Dumont examining Mr. Dodson, 2/13/13, Vol. I, page 25, line 19; See transcript of Mr. Board member Burke and Department witness Hopkins, 6/28/13, Vol. II, page 25, line 13.

²⁰ Dkt 7440, Board Order Re: Entergy VY Motion For Declaratory Ruling, 3/19/12. Some elements may be extended by the timely renewal doctrine. See also federal appeal, Case 1:11-cv-00099-jgm, Memorandum and Order on Plaintiffs' Expedited Motion for an Injunction Pending Appeal, 3/19/12, page 5 regarding addressing storage of spent fuel.

²¹ On March 29, 2012 the Board issued an Order in docket 7440 requiring Entergy VY to file an amended petition, and to identify “the specific approval or approvals that it is seeking from the Board.” That amended petition became the genesis of docket 7862. To the extent that there still remains any ambiguity, it is at least partially a result of the conflicts within Entergy VY's Amended Petition that reference both a new and amended certificate(s).

²² The NRC issues a *license*. The Public Service Board issues a *Certificate of Public Good* (CPG). The terms are sometimes used interchangeably.

²³ Dkt 6545 MOU, paragraph 12 (entered in Dkt 7862 as PSD-01)

prohibited from operating the Vermont Yankee Nuclear Power Station after March 21, 2012.”²⁴

- c) In the docket 6545 CPG dated June 13, 2002 the Board wrote, “It is Hereby Certified that the Public Service Board ("Board") of the State of Vermont on this date finds and adjudges that the issuance of a Certificate of Public Good ("Certificate") *to expire on March 21, 2012*, to Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc., to own and operate, respectively, the Vermont Yankee Nuclear Power Station will promote the general good of the State of Vermont.”²⁵ The following language, which recognized continuing obligations, was incorporated in an amendment to the CPG issued in Board Order Re Motion To Alter Or Amend And To Unseal Exhibit: “Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. are authorized to own and operate Vermont Yankee beyond March 21, 2012, solely for purposes of decommissioning.”²⁶
- d) In the docket 7082 Order the Board described the docket 6545 MOU as providing that, “Board approval will be required for any license *renewal* of Entergy VY's license to operate Vermont Yankee, and that the Board is not preempted by federal law in its jurisdiction over license *renewal*.”²⁷ The docket 7082 Order further clarifies the need for reconsideration after March 21, 2012 as follows: “Compliance with the provisions of the Certificate of Public Good and this Order shall not confer any expectation or entitlement to continued operation of Vermont Yankee following the *expiration of its current operating license* on March 21, 2012. Before Entergy VY, its successors or assigns, may operate the facility beyond that date, the owners must first *obtain* a Certificate of Public Good from the Board under Title 30.”²⁸
- e) The Order in docket 7082 includes the following condition: “The cumulative total amount of spent nuclear fuel stored at Vermont Yankee is limited to the amount derived from the operation of the facility up to, but not beyond, *the end of the current operating license*, March 21, 2012.”²⁹

²⁴ Dkt 6545, Order of the Board, 6/13/02, page 159, paragraph 8

²⁵ Dkt 6545, CPG dated 6/13/02

²⁶ Dkt 6545, Order Re Motion To Alter Or Amend, And To Unseal Exhibit, 7/11/02, page 17

²⁷ Dkt 7082, Order dated 4/26/06, page 84

²⁸ Dkt 7082, Order dated 4/26/06, page 90, paragraph 7

²⁹ Dkt 7082, Order dated 4/26/06, page 90, paragraph 4

- f) Entergy VY filed a petition on March 3, 2008, “for such approvals from this Board and the Vermont General Assembly as may be required to operate the Vermont Yankee Nuclear Power Station ("VY Station") after March 21, 2012.” Entergy VY acknowledged that after March 21, 2012 it was “authorized only to decommission the VY Station,”³⁰ and “accordingly each hereby petitions the Board for *an amendment* of their respective CPGs allowing operation of the VY Station after that date.”³¹ This petition became the genesis of docket 7440.
- g) At the behest of the Board, Entergy VY filed an Amended Petition on April 16, 2012 seeking, “*amendment* of their certificates of public good and other approvals required under 30 V.S.A. § 231(a).”³² This petition became the genesis of docket 7862.
- h) The Amended Petition stated that, “Entergy VY desires to operate the VY Station after March 21, 2012, and accordingly hereby petitions the Board for *amendment of the CPG, or the issuance of a new CPG* allowing operation of the VY Station after that date and until March 21, 2032.”³³
- i) The Amended Petition sought specific *modifications* of prior Orders and CPG’s that the Board found to render 3 V.S.A. 814(b) inapplicable.³⁴
- j) The Board addressed the terms of the requested authorization squarely in its January 7, 2013 Order Re: Motion For Declaratory Ruling Prescribing Scope Of Proceeding, stating, “In its motion, Entergy VY characterizes the nature of the Board's ruling as whether to shut down the plant. In statutory terms, this is a proceeding under Section 231(a) to *alter an existing CPG*, and the Board is not determining whether to shut down the Vermont Yankee Nuclear Station ("VY Station") or revoke an existing CPG. Rather, in Docket 6545, the Board granted a limited right to Entergy VY to own and operate the VY Station upon the conditions set forth in the Docket 6545 CPG and the order approving the sale. As a result, the question now before the Board is whether to *amend existing CPGs and Orders* to allow Entergy VY to operate the VY Station on a going-forward basis for a purpose other than to decommission the VY Station. Entergy VY must demonstrate that it

³⁰ Dkt 7440, Entergy VY Petition, 3/3/08, paragraph 2

³¹ Dkt 7440, Entergy VY Petition, 3/3/08, paragraph 3

³² Dkt 7862, Amended Petition, 4/16/12, caption of the petition

³³ Dkt 7862, Amended Petition, 4/16/12, page 3, paragraph 4

³⁴ Dkt 7862, Amended Petition, 4/16/12, page 4, paragraph 9

will promote the general good of the State of Vermont *to alter* the rights that Entergy VY now has, which do not currently encompass the right to operate the VY Station.”³⁵

- k) The Board addressed its scope of review under Vermont law in the June 19, 2013 Order Re: Motion for Partial Summary Judgment, stating, “Entergy VY's petition in this Docket presents the question of whether the Board should *amend* a CPG under Section 231 to authorize Entergy Nuclear Vermont Yankee to own and Entergy Nuclear Operations to operate the VY Station after March 21, 2012. By statute, the Board must decide whether *the amendment* will promote the general good of the state. Section 231 itself provides no more specificity.”³⁶ The Board further addressed scope several pages later stating “At the same time, we must also recognize that *the amendment* of Entergy VY's CPG presents considerations that are different from those reviewed in past requests under Section 231 — namely, *amendment* of Entergy VY's CPG would have the effect of authorizing the operation of the VY Station for an additional 20 years.”³⁷

In simple terms, WRC recognizes that the CPG issued in docket 6545 has expired, but that the timely renewal doctrine applies in part.³⁸ Entergy VY retains ongoing authority to own and operate the VY Station, but the operations authorized after March 21, 2012 are limited to decommissioning. Granting a brand new CPG or new authorizations will not change the existing limitations, nor will granting a renewal of the existing CPG's. Rather, if Entergy VY wishes to operate the Station for the purpose of producing electricity, then the existing authorization must be amended to allow the continuing operation of the Station for that purpose. The amendment of the existing CPG could be accomplished within a new CPG issued specifically to modify the existing conditions, but in essence such a CPG would function to amend existing conditions. Thus, Entergy VY is not defending a right it already has, but is instead seeking authorization for an activity that was contemplated in 2002, but that Entergy VY was not granted at that time or since. The burden is upon Entergy VY to show that the privileges and changes it is seeking will, on balance, serve the general good to at least the same degree approved in 2002 and in subsequent dockets.

The lingering ambiguity over the nature of authorization(s) sought in this docket is troubling, and WRC believes clarification is essential.

³⁵ Dkt 6545, 7082,7862, Order Re: Motion for Declaratory Ruling Prescribing Scope of Proceeding, 1/7/13, page 3-4

³⁶ Dkt 7862, Order Re: Motion For Partial Summary Judgment, 6/19/13, page 6

³⁷ Dkt 7862, Order Re: Motion For Partial Summary Judgment, 6/19/13, page 8

³⁸ We understand that the timely renewal doctrine applies to those parts of the CPG that expire, but not to those parts of the CPG that define ongoing obligations. (Dkt 7440 Order re: Entergy VY Motion for Declaratory Ruling, 3/19/12)

Federal Preemption

In the United States nuclear power is regulated by the federal government under the Atomic Energy Act of 1954 (as amended). Regulations by the states that have a “direct and substantial” effect on the operators of a nuclear plant are prohibited, but states retain their traditional oversight of matters not directly related to the regulation of nuclear safety.

The Public Service Board addressed federal preemption when it considered the sale of the Vermont Yankee Station to Entergy VY in docket 6545, affirming the role of federal regulation, but likewise defined the authority of the Board as follows:

“Here we affirm the concept set out in the Scoping Order, stressing three points. First, our authority, like the NRC's is conferred by law. If we did not respect the choice of the elected representatives of the people to give the NRC its power, we would have no right to expect VYNPC or its owners to respond to the authority that lawmakers have given to this Board. Second, despite the limitations on our authority, if we did see the transfer of Vermont Yankee to ENVY as creating a safety risk, we would say so bluntly and clearly in advisory terms even if without legal effect. Third, the record before us persuades us that ENVY should operate the facility at least as safely as the current owners.”³⁹

“The Board does not have direct jurisdiction over radiological safety at Vermont Yankee. Rather, these issues are within the purview of the Nuclear Regulatory Commission. The Board retains authority to regulate the economic implications of safety.”⁴⁰

The Board recognized that preemption occurs when a direct conflict exists between a federal and state requirement such that an operator cannot meet both requirements. And the Board recognized that “a scheme of federal regulation may be so pervasive as to make reasonable the inference that Congress left no room for states to supplement it.”⁴¹

With Entergy VY's consent the Board undertook a brief examination of nuclear safety in docket 6545 and through its Scoping Order determined that “as part of this broad investigation, we must consider the effects, if any, of the proposed transfer on health and safety,”⁴² a consideration that would be prohibited under the scheme now advanced by Entergy VY. Likewise, in docket 6812 (uprate) the Board, with Entergy VY's blessing, heard sufficient evidence about safety and

³⁹ Dkt 6545, Board Order, 6/13/02, page 125

⁴⁰ Dkt 6545, Board Order, 6/13/02, page 15, footnote 25; repeated in docket 6812 Board Order, 3/15/04, page 4, footnote 5

⁴¹ Dkt 6545, Board Order, 6/13/02, page 118 and footnote 249, quoting *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947)

⁴² Dkt 6545, Board Order, 6/13/02, see discussion of safety on pages 121-127; page 125 quoting Scoping Order; page 148, paragraph B(1) responding to public concerns

reliability to cause it to seek an Independent Engineering Assessment by the NRC.⁴³ Yet today, Entergy VY is arguing that the PSB should not even be permitted to consider testimony about safety, as it did in that prior docket.

Entergy VY accepted the Board's understanding of federal preemption as expressed in the docket 6545 Order, and in subsequent Orders, and has accepted multiple conditions through MOUs, CPGs and Orders that its arguments now presume would fall within preempted territory. As an example, in the docket 7082 MOU Entergy VY agreed to configure the spent-fuel pool so that "high-decay-heat assemblies of SNF are surrounded by low-decay-heat assemblies of SNF,"⁴⁴ a condition that clearly falls within the purview of the NRC. Likewise, in docket 6812, Entergy VY accepted a condition within the Board Order requiring the installation of 200-hp fans, rather than 125-hp fans listed in the original proposal,⁴⁵ a condition that certainly had a direct and substantial effect on operational decisions, and that it would likely now claim to be preempted. And, in both dockets 6545 and 7082 Entergy VY agreed to use its "commercial best efforts to assure that the spent fuel is removed from the VYNPS site in a reasonable manner and as quickly as possible,"⁴⁶ but now argues that the NRC regulates all aspects of spent fuel storage and management, and that no room remains for the states.⁴⁷

The claims to preemption now expressed by Entergy VY are in direct contrast to its more narrowly defined argument when it wished to purchase the Station. In its docket 6545 initial brief, the petitioners, including Entergy VY, stated:

"It follows that the Board's jurisdiction, confirmed by the agreement contained in Paragraph 12 of the MOU, to issue to ENVY a CPG—subject to a condition subsequent authorizing operation of the Vermont Yankee Nuclear Power Station only until March 12, 2012—is not preempted by the federal government's authority (under the Atomic Energy Act) to regulate the radiological-safety aspects of the Station's construction and operation. See *Pacific Gas*, 461 U.S. at 205. As long as Vermont does not purport to regulate on nuclear-safety grounds and avoids imposing requirements that make compliance with NRC regulations a physical

⁴³ Dkt 6812, Board Order, 3/15/04, page 65-67, finding 118, "...The assessment should consist of a vertical slice review of two safety-related systems and two Maintenance Rule, non-safety systems affected by the uprate." See also Appendix "D", Letter to NRC

⁴⁴ Dkt 7082 MOU, paragraph 9 (docket 7862 exhibit PSD-09)

⁴⁵ Dkt 6812 Order, 3/15/04, page 119, paragraph 2(e)

⁴⁶ Dkt 6545 MOU, paragraph 11 (docket 7862 exhibit PSD-01), and docket 7082 MOU, paragraph 8 (docket 7862 exhibit PSD-09). See also Board discussion in docket 7082 Order, 4/26/06, page 64: "We also find it hard to understand the validity of a preemption argument where, as here, there has been such a failure by DOE to fulfill its statutory responsibilities to take ownership of and remove the spent nuclear fuel in a timely manner, with the result that the state of Vermont may need to absorb some risk."

⁴⁷ WRC is particularly troubled by Entergy VY's assertion that the docket 7082 MOU commitment to use its commercial best efforts to remove the spent fuel may be preempted, and points out that in paragraph 12 of the very same MOU Entergy VY committed that "The company agrees that it will not file an action or petition based on or otherwise seek, claim, defend or rely on the doctrine of federal preemption to prevent enforcement of its express obligations under this MOU."

impossibility, its franchising authority and traditional authority to regulate need, reliability, cost and other non-radiological concerns remains intact.”⁴⁸

Yet Entergy VY has continued to maintain that if any connection exists between an action the Board might take and the operation of the Station, no matter how slight, then that Board action is preempted, thus leaving almost no room for the Board at all.⁴⁹ Indeed, in its preemption filing at the Federal District Court, Entergy VY even challenged the very right of the State of Vermont and the Board to affect the operation of the Station through regulation or the denial of a CPG:

“6. The question presented by this case is whether the State of Vermont, either through a state administrative agency (the PSB) and/or the state legislature (the General Assembly) may effectively veto the federal government’s authorization to operate the Vermont Yankee Station through March 21, 2032. The answer is no.

7. Vermont’s attempt to shut down operations at the Vermont Yankee Station through regulatory or legislative denial of a CPG is preempted by the federal Atomic Energy Act.”⁵⁰

* * *

“89. The AEA vests in the NRC exclusive jurisdiction over licensing and operation of nuclear power facilities. State laws and regulations requiring a state license for plant operation or otherwise having a direct and substantial effect on plant operation are preempted under the Supremacy Clause.

90. Vermont’s statutes and regulations asserting state authority over the operation and safety of the Vermont Yankee Station, including the authority to bar its continued operation without a state CPG, are invalid under the Supremacy Clause because they interfere with NRC’s exclusive jurisdiction over licensing or operation (including the storage of spent nuclear fuel) of a federally licensed nuclear power station. Specifically, the PSB has asserted authority to prohibit

⁴⁸ Dkt 6545 initial brief of the petitioners, as quoted in the docket 7862 Procedural Order, 1/7/13, page 2, footnote 2; see also PSD-05, PSD-06, PSD-07

⁴⁹ The decision of the United States Court of Appeals for the Second Circuit issued on August 14, 2013 rejected this argument.

⁵⁰ Dkt 1:11-CV-99 (jgm) United States District Court for the District of Vermont, Entergy VY Complaint for Declaratory and Injunctive Relief, 4/18/11, page 3 (docket 7862 exhibit CLF-JC-7)

ENVY and ENOI from operating the Vermont Yankee Station altogether without PSB's approval in the form of a new CPG."⁵¹

WRC and other parties to dockets 7440, 7600, and 7862 have repeatedly challenged Entergy VY's expansive claims to preemption, including an Entergy VY claim in docket 7600 that merely responding to discovery questions would consume company resources and would thus be preempted.⁵²

The Board has been patient with Entergy VY's overbroad claims to federal preemption, and has diligently sought to define the role state regulation should play within the context of the AEA. In its Order transitioning from docket 7440 to 7862 the Board summarized its authority as follows:

In light of the District Court Decision, the U.S. Supreme Court's holding in *Pacific Gas*, and Entergy VY's acknowledgment in Docket 6545 of the scope of proper review for a renewed CPG under Section 231, we conclude that, as a general matter, we may consider any non-radiological-health-and-safety matters that bear upon the general good of the state and that do not directly conflict with the Nuclear Regulatory Commission's exercise of its federal jurisdiction or frustrate the purposes of the federal regulation.⁵³

WRC recognizes the authority of the NRC as defined by Board Orders and accepted by Entergy VY in docket 6545 (and subsequent dockets). And WRC respects the dual federal and state regulatory authority contemplated by the AEA. Yet we are increasingly dismayed at Entergy VY's claims within Vermont filings that it respects the regulatory authority of the PSB while it argues otherwise to the federal government. WRC has made this point before as follows:

“Over a long period of time Entergy VY has made multiple commitments to respect the Board and its authority, and has done so in numerous proceedings, in a

⁵¹ Dkt 1:11-CV-99 (jgm) United States District Court for the District of Vermont, Entergy VY Complaint for Declaratory and Injunctive Relief, April 18, 2011, page 26 (docket 7862 exhibit CLF-JC-7)

⁵² Please see attachment: Dkt 7600, WRC Direct Brief Concerning the Scope and Jurisdiction of the PSB, 8/20/10, page 9-10, quoting the Initial Brief of Entergy VY Concerning the Jurisdiction of the Public Service Board in docket 7600, (quoted text is from the Entergy VY Brief dated 5/18/10, page 27):

“As to the direct and substantial test, cooperating with investigations by state authorities into nuclear-plant construction, operational and safety issues can impose significant costs and burdens—personnel time and overtime, attorney fees, risks inherent in maintaining the security of federally-restricted information, and so forth—on a nuclear operator, costs and burdens potentially as great (if not more so) than those of the on-site inspection at issue in County of Suffolk. The threat of imposing such costs and burdens on a nuclear operator gives not only states, but also non-government interest groups operating in state forums, the ability to leverage nuclear operators into complying with construction and operational standards not required under federal law.”

⁵³ Dkt 7440, Order Re: Entergy VY Motion Seeking Final Decision, 3/29/12, page 8

variety of MOU's, and through the acceptance of various CPG's and Board Orders, including the CPG and Board Order that allowed Entergy VY to purchase and operate the station in the first place. Yet Entergy VY's current approach to state regulation is wholly dismissive of those same Board authorities."⁵⁴

* * *

It would simply not be possible for the Board to adequately regulate the production or distribution of electric power within Vermont if the VY Station were entirely beyond the grasp of state regulation. Nor would it be possible to reasonably assure the station serves the General Good if its operation were to be completely ignored simply because of the technology with which it produces energy.⁵⁵

WRC will discuss preemption with regard to specific issues to the extent necessary as they are argued in Part Two of this brief. Otherwise we will not belabor this issue, other than to ask the Board to review the discussion in prior WRC briefs⁵⁶ and to recognize Entergy VY arguments as overbroad:

- Docket 7600, Direct Brief Of Windham Regional Commission Concerning The Scope And Jurisdiction Of The Public Service Board In Docket 7600 8/20/10 (pages 8-18)
- Docket 7440, WRC Motion For Reimbursement of Expenses, 4/13/12 (Discussion points 1-4, Conclusion, and History on pages 3-9 as appropriate)
- Docket 7862, WRC Reply To Entergy VY Motion For Declaratory Ruling Prescribing Scope Of Proceeding, 7/13/12

Commerce Clause

The Dormant Commerce Clause is a doctrine inferred from Article I, section 8 of the U.S. Constitution that prohibits economic protectionism. Electricity transmitted in interstate commerce is subject to the protections of the Commerce Clause,⁵⁷ and thus the State of Vermont cannot compel Entergy VY, as a wholesale generator, to sell any or all of its production to in-state utilities at a discounted price.

⁵⁴ Dkt 7862, WRC Reply to Entergy VY Motion For Declaratory Ruling Prescribing Scope of Proceeding, 7/13/12, page 6. Please see this WRC Reply for additional arguments regarding Entergy VY's preemption claims.

⁵⁵ Dkt 7600, Direct Brief of Windham Regional Commission Concerning the Scope and Jurisdiction of the Public Service Board in Docket 7600, 8/20/10, page 10; also as quoted in Dkt 7862, WRC Reply to Entergy VY Motion for Declaratory Ruling, 7/13/12, page 7

⁵⁶ Material not already filed I docket 7862 has been attached to this brief for Board reference as needed.

⁵⁷ U.S. District Court for the District of Vermont, Decision And Order On The Merits Of Plaintiffs' Complaint, docket 1:11-cv-99, 1/19/12, page 86

In reviewing a claimed violation of the Dormant Commerce Clause filed by Entergy VY, the United States District Court for the District of Vermont identified several points where the Department of Public Service (arguing as one of many litigants) urged the PSB to require a beneficial PPA, and also identified legislative discourse that appeared to require a beneficial PPA. Although the PSB did not compel below market rates, the District Court nevertheless ordered:

3. Defendants are permanently enjoined, as prohibited by the Dormant Commerce Clause, from conditioning the issuance of a Certificate of Public Good for continued operation on the existence of a below-wholesale-market Power purchase agreement between Plaintiffs and Vermont utilities, or requiring Vermont Yankee to sell power to Vermont utilities at rates below those available to wholesale customers in other states.⁵⁸

The District Court did not prohibit the PSB from considering the value of a beneficial PPA, if one is made available, but rather only prohibited the Board from conditioning the issuance of a CPG on the existence of a PPA.⁵⁹ It is altogether reasonable for the Board to identify the value needed to justify the issuance of a CPG and to require that the petitioner provide that level of value. A PPA voluntarily offered by a petitioner may certainly be considered as part of a total value package. However, the petitioner is always free to decline to offer a beneficial PPA, and to instead offer sufficient value through other mechanisms.

WRC has been engaged in this docket, or its predecessor docket, since early 2008, and was one of the parties in docket 7440 that sought a beneficial PPA. We did so specifically because, “our constituents have been especially sensitive to the assumption of highly favorable electric rates delivered to the consumer, and that the petitioners have used this public perception to build support for continued operation.”⁶⁰ Entergy VY aggressively marketed the beneficial rates under a PPA in effect through March 21, 2012 as an advantage that would be had with continued operation, and it did so to sway public opinion and build support for continued operation. It is that aggressive marketing that created an overwhelming public interest in a beneficial PPA, and to which WRC and other parties, including the Department, have responded.

⁵⁸ U.S. District Court for the District of Vermont, Decision And Order On The Merits Of Plaintiffs’ Complaint, docket 1:11-cv-99, 1/19/12, page 101. This injunction has been vacated by the United States Court of Appeals for the Second Circuit (Docket 12-707-cv(L) 12-791-cv (XAP), August 14, 2013, page 50 and page 53, line 11).

⁵⁹ The decision of the United States Court of Appeals for the Second Circuit found the terms of a PPA relative to FERC jurisdiction were not ripe for review, and appeared to leave wide latitude for the Public Service Board to consider the availability of a PPA and its terms.

⁶⁰ Dkt 7440, WRC Reply Brief, 8/7/09, page 23

Entergy VY cannot be compelled to deliver a specific benefit in the form of a PPA (or an additional RSA) that would disadvantage consumers in another state, but WRC continues to urge the company to satisfy the public demand for beneficial electric rates that it created through aggressive marketing. If Entergy VY is not willing to provide a PPA (and an additional RSA) with sufficient value, then it must offer comparable value through other mechanisms. WRC notes here that we are not seeking *new* value, but rather are seeking a total value package in this docket that is comparable to the value offered in prior dockets, including docket 6545. Entergy VY is free to offer that value in any form that it chooses, including a favorably priced PPA or other mechanisms that do not include a favorably priced PPA.

Scope of Review (General Good)

In this docket Entergy VY has requested amendments under Title 30 § 231(a). The Board is clearly authorized to review such a petition, but the scope of review under the standard of general good in § 231 is necessarily nebulous and dependent on the specifics of the petition, and multiple other factors. The Board has extensive experience in applying the general good standard to a variety of operations, and has said:

“in making its public good assessment, the Board has examined a number of different criteria. However, the Board has also made clear that these factors are considerations to be weighed; ultimately, there is only one inquiry – whether granting the petition will promote the general good of the state.”⁶¹

The Standard of the general good necessarily involves weighing and balancing multiple factors. Many of those issues can and should be reviewed first in isolation under 30 V.S.A. § 248(b),⁶² and then be added to a conclusive review under § 231(a).

The Board has noted the uniqueness of this petition, and some of the factors that require special attention:

“At the same time, we must also recognize that the amendment of Entergy VY's CPG presents considerations that are different from those reviewed in past

⁶¹ Dkt 7862, Order Re: Motion For Partial Summary Judgment, 6/19/13, page 7. See footnote 15 for a discussion of the criteria.

⁶² Entergy VY offered the following discussion of criteria in its docket 6545 Brief, as cited by the Board in its Dkt 7862 Order Re: Motion For Partial Summary Judgment, 6/19/13, page 8:

“As to the particular criteria the Board would consider in the CPG extension case, ENVY anticipates that the Board would review renewal of the CPG under the standard of "General good of the state "set forth in 30 V.S.A. §§ 201 and 231, as that standard would apply to the action for which approval is being sought, i.e., extension of ENVY's authority to operate the VY Station. ENVY cannot predict at this time what may be encompassed by that standard in 2012, but believes it is a flexible standard that would include the relevant factors under 30 V.S.A § 248.”

requests under Section 231— namely, amendment of Entergy VY's CPG would have the effect of authorizing the operation of the VY Station for an additional 20 years. This is the result of two factors: (1) Entergy VY is a single asset company, so that absent authorization under Section 231, it has no authority to operate the VY Station; and (2) Entergy VY proposed — and the Board, relying upon that commitment — accepted the imposition of a time limit on operation of the VY Station, absent further Board action that granted Entergy VY authorization to own and operate the VY Station after March 21, 2012, for purposes other than decommissioning. Thus, unlike almost all prior Section 231 proceedings, the issuance of a CPG here could lead (among other things) to (1) extending the land use and environmental impacts of the VY Station, (2) the provision of greater economic benefit to the state of Vermont, and (3) altering the reliability of the power system — the type of impacts that are normally reviewed in Section 248 proceedings.”⁶³

This petition is further unique in that the original authorization was for a ten year period, which Entergy VY now seeks to extend by 20 additional years. The original CPG and Order were predicated on a balanced package of benefits and assumptions, many of which have changed significantly. Indeed, the original CPG and Order were so closely balanced that Entergy VY and other parties filed motions for reconsideration of seemingly minor issues, which the Board carefully reviewed.⁶⁴ As an example, the docket 6545 MOU included a sharing of any excess decommissioning funds, but in its original concluding Order the Board struck that element of the MOU. Although the sharing provision was unlikely to have much economic value Entergy VY was nonetheless willing to walk away from the purchase if the Board didn't restore the companies claim to a share of any excess monies in the Decommissioning Trust Fund, which the Board ultimately allowed following a negotiated settlement. That value-point was at the time a small and insignificant element, yet it had the potential to derail the entirety of the purchase which makes clear just how carefully balanced the original authorizations were.

Docket 7862 is an outgrowth of docket 7440 in which Entergy VY was seeking authorizations for continued operations nearly identical to those requested here. That docket began as a Section 248 proceeding and culminated in concluding briefs and reply briefs from parties which articulated a baseline of conditions each determined necessary to serve the general good.⁶⁵ Entergy VY thus began the docket 7862 process fully informed as to the interests of other

⁶³ Dkt 7862, Order Re: Motion For Partial Summary Judgment, 6/19/13, page 8

⁶⁴ Dkt 6545, Order Re: Motions to Alter Or Amend, and to Unseal Exhibit, 7/11/02; Dkt 6545 Order Re: Petition For Temporary Restraining Order And Preliminary Injunction, 7/26/02 which allowed the sharing of excess decommissioning funds.

⁶⁵ For an example please see Dkt 7440, Reply Brief of Windham Regional Commission, 8/7/09; Dkt 7440 Brief of the Department, page 59-62, and conclusion on page 72 (docket 7862 exhibit EN-Cross-Hopkins-16)

parties, and conditions each considered necessary to secure a CPG.⁶⁶ If, in spite of that advance notice, the petition filed by Entergy VY fails to deliver sufficient value, then the Board can use its discretion to address specific issues raised by parties and add appropriate value through conditions attached to any resulting CPG.⁶⁷

WRC recommends that the Board require that any value offered by continued operations for the next 20 year period should match or exceed the value provided for the first ten year period on an annualized basis. The distinction between then and now is viewed in stark contrast when considering that at the time of the 2002 sale Entergy VY offered significant value in the form of a PPA and a RSA, and provided positive assumptions of decommissioning and spent fuel management, none of which are supported in its current petition. WRC repeats here that we neither support nor oppose continued operation of the VY Station, but we add our concern that the benefits Entergy VY are offering now do not appear to match those provided in 2002. Nevertheless, Entergy VY is free to modify its petition at any time, and the Board can likewise strengthen the value sufficiently to support the general good.⁶⁸ Thus, there remains ample opportunity for Entergy VY to meet the standard of the general good and secure a CPG for ongoing operations.

This petition is also unique in that Entergy VY has been operating within Vermont for more than ten years, and the Board now has an established relationship with the company. One factor often considered by the Board under the general good standard is whether the petitioner is a “fair partner.” There are many ways of approaching that evaluation, and the Board has done so respectfully with other petitioners in other dockets.⁶⁹ WRC will not make a determination whether Entergy VY, one of our business neighbors, is a “fair partner.” WRC accepts that

⁶⁶ Entergy VY is also well aware that the Board considered the sale of the Station to AmerGen in docket 6300, but in spite of two modifications to the agreement, the Board was unable to find that the package of benefits offered in that case would serve the general good.

⁶⁷ In docket 6545 Entergy VY argued that the doctrine of preemption precluded the Board from adding certain conditions to a CPG. The Board responded by stating that it has the authority to issue a CPG with conditions. “The issuance of certificates subject to necessary conditions has been a routine practice of this Board and of all administrative agencies in Vermont in literally thousands of instances for almost a century.” (Dkt 6545 Order Re: Motion to Alter or Amend, 7/11/02, page 12, footnote 38 citing other cases)

⁶⁸ Entergy VY witness Michael Twomey had a conversation with Mr. Young (Board staff member) regarding Entergy VY’s financial commitments, and its ability and willingness to address shortcoming in the petition. Mr. Twomey stated: “What I’m simply trying to communicate is that I know frequently matters such as this are resolved among the parties and then ultimately presented to the Board for approval. I’m trying to communicate that we are not foreclosing a constructive resolution of these items if there are specific matters that parties would like to see addressed.” (TR, 2/19/13, Vol. I, Twomey, page 71, line 17)

⁶⁹ Examples: docket 5900, docket 7770, both as referenced in docket 7862 Order Re: Motion for Partial Summary Judgment, 6/19/13, pages 6-7, footnotes 14 and 15

Entergy VY and other parties to this docket will fully brief this issue, and that the Board is capable of establishing an appropriate standard and then applying that standard to the record evidence.

In evaluating the standard of the general good the Board should begin with a review of relevant criteria in § 248, including § 248(b)(1) encompassing the Orderly Development of the Region, and then carefully weigh all those factors among others within the general good standard of § 231. However, the “fair partner” criteria in which the company is evaluated as part of the general good standard is necessarily different than the evaluation of the facility, process, and physical operation of the Station, and should be judged separately. Further, WRC recognizes that Entergy VY may appeal an adverse ruling from the Board, and we consider it is important for the concluding Order to treat each issue separately so that conditions are clearly understood and easily severable. Thus we suggest that the Board should determine first whether and under what conditions the continued operation of the Vermont Yankee Station would serve the general good, and only then determine if Entergy VY is a “fair partner” capable of meeting that standard.

WRC now turns to the operation of the Station for the purpose of producing electricity during the period since March 21, 2012. This ongoing operation has been conducted by Entergy VY with full knowledge that the Board, which issued the enabling CPG’s, has ruled conclusively that continued operations are not permitted by the existing Certificates.⁷⁰ As discussed above, the Board should determine what (if any) conditions would serve the general good, and only then determine if Entergy VY is a “fair partner.” Whether or not Entergy VY is offered a CPG, the identified conditions should be applied retroactively to that time period through which the Station has operated without an authorizing CPG.

⁷⁰ Dkt 7440, Order Re: Entergy VY Motion For Declaratory Ruling, 3/19/12, (et.al)

PART TWO

FINDINGS AND CONCLUSIONS:

Orderly Development of the Region⁷¹

I) THE BOARD SHOULD RECOGNIZE THE VALUE OF THE STATION TO THE REGIONAL ECONOMY, AND THAT UPON SHUTDOWN THE ORDERLY DEVELOPMENT OF THE REGION REQUIRES THE PROMPT DECOMMISSIONING OF THE VY STATION AND COMPLETE SITE RESTORATION

1. The VY Station is an existing facility that has been in more or less its current visual state since the late 1960s. (PWT, 6/29/12, Dodson, page 5, line 1)
2. In total, Entergy VY owns approximately 148 acres. Approximately 94 acres of these 148 acres—primarily along the Connecticut River—are used fairly intensively. Another eight acres are largely open with some development, such as the fields to the north around the transmission towers, and about 46 acres are undeveloped. This undeveloped area lies between the residences along Governor Hunt Road and the VY Station and consists of open meadows and a wooded buffer area. (PWT, 6/29/12, Dodson, page 16, line 14)
3. As of December 2011, Entergy VY employed 623 people. In 2011 Entergy VY paid total compensation of about \$65.7 million. (PWT, 6/29/12, Twomey, page 11, line 2)
4. Of the 623 total Entergy VY employees, 238 reside in Vermont (most of those in Windham County), 210 reside in New Hampshire, 167 reside in Massachusetts, and 8 reside elsewhere. 78 Entergy VY employees reside in Vernon. (WRC-Cross-36)
5. Through its payroll, procurement of goods and services, and payments to government, Entergy VY provides substantial economic benefits to the state and its residents, especially in Windham County and the surrounding area in neighboring states. (PWT, 6/29/12, Twomey, page 11, line 3)
6. The VY Station accounts for 2% of employment and 5% of the compensation earned in Windham County. (PWT, 6/29/12, Heaps, page 10, line 2)

⁷¹ Discussion of this issue was included in WRC Reply Brief, docket 7440, August 7, 2009. Please see page 22 (Economic Benefit to the State) and page 25 (The General Good)

Discussion

The Entergy VY docket 7862 petition has been filed under 30 V.S.A. section 231, which requires the Board to find the project will “promote the general good of the state.” Entergy VY has agreed that the project must also meet selected criteria under 30 V.S.A. section 248, and has filed testimony seeking positive findings under § 248(b)(1) which requires in part that the project:

Will not unduly interfere with the orderly development of the region with due consideration having been given to the recommendations of the municipal and regional planning commissions, the recommendations of the municipal legislative bodies, and the land conservation measures contained in the plan of any affected municipality.

The review of section 248(b)(1) should be approached in two ways. First, the project should be evaluated relative to the Land Use Policies of the 2006 Windham Regional Plan, and next it should be evaluated relative to all of the recommendations of the Commission, including 2006 Regional Plan policies other than land conservation measures.⁷²

The review should recognize the VY Station is an existing facility that employs 623 workers, with 238 of those workers living in Vermont. Most of the Vermont workers reside in the Windham Region,⁷³ and the region derives substantial economic benefit from the operation of the Station. It is clear that the Station will inevitably close, perhaps in 2032, or perhaps at some point before that date. When the Station ceases operation the regional economy and land use will change significantly. Entergy VY’s petition covers the entirety of the period from the present until the site is fully remediated and all spent fuel has been removed, and thus the Board should evaluate the effect of the operating period and the post-operating period.

The site is a long established industrial development that is ideally situated with access to road, river, rail, and electrical power. This highest use of the land as an industrial site serves the surrounding communities and workforce, and brings substantial benefit to the region. However, we are not convinced that the Entergy VY proposal that is before the Board will conform to the WRC 2006 Regional Plan land use policies after the Station ceases operation, nor are we convinced that upon cessation of operation that it will, “not unduly interfere with the orderly development of the region.”

Although we are disappointed in the petition offered by Entergy VY, we do not view it as a fatally flawed because Entergy VY can still amend its offering to better serve the general good

⁷² The full Plan is available at: <http://windhamregional.org/publications>

⁷³ WRC-Cross-36

and meet the standard of the orderly development of the region, and the Board can of course impose conditions that will serve the orderly development of the Region.

WRC greatly values the jobs and economic benefit of the Station, and we are surprised that Entergy VY did not call attention to the Economic Policies of the 2006 Regional Plan as follows:⁷⁴

1. Promote activities and development that contribute to a strong and diverse economy, providing satisfying and rewarding job opportunities for all citizens in all parts of the region and supporting a strong municipal tax base, while maintaining environmental standards and promoting environmental justice.
6. Generate a variety of stable, year-round jobs with wages and other compensation that provide a livable income, and that include skills training programs and other benefits that contribute to the personal development and quality of life for all workers.

We are also cognizant of the Energy Policies of the 2006 Regional Plan,⁷⁵ which state:

4. With regard to all energy generation, transmission, and distribution projects:
 - c. Adequately address all areas of concern regarding proposed developments; and
 - d. Effectively and adequately address all issues related to facility operation and reliability, recognizing that in some instances they are inextricably intertwined with public health and safety concerns.

Entergy VY chose not to address this set of regional plan policies, and has made new and expanded use of preemption claims to avoid addressing critical regional interests regarding the operation of the site, and especially the long-term management of spent nuclear fuel.⁷⁶ Likewise Entergy VY has not addressed the many consistent recommendations of the Regional Commission that were filed in docket 7440 and docket 7600. There can be no question that Entergy VY has been given full and adequate notice of the recommendations of WRC, and has

⁷⁴ 2006 Windham Regional Plan, page 55-56. We do not believe these Plan policies have been entered into the docket 7862 record.

⁷⁵ 2006 Windham Regional Plan, page 47; WRC-Cross-10

⁷⁶ Please see Regional Plan policies related to spent nuclear fuel filed as WRC-Cross-11

had ample opportunity to address them in its petition or through an MOU at any point in during the long period this docket has been before the Board.⁷⁷

Entergy VY has secured an NRC license to operate until 2032, and is now seeking PSB approval for the same operating period. It is inevitable that the Station will cease operations at some point, and as has been detailed elsewhere in this brief the reliability of the Station for the entire 20 year period is questionable. Thus WRC takes great interest in what will occur when the Station ceases operation, and hopes the Board will pay special attention to all aspects of the post-closure period.

We appreciate the analysis of the various economists who testified, and especially appreciate the retrospective analysis provided by Robert Unsworth. In our first comments to Entergy VY and the Board offered as a docket 7440 prefile letter on January 18, 2008, WRC asked about projected employment changes, and specifically asked Entergy VY to, “address actual job and economic experience in places where decommissioning has taken place, such as Maine, Massachusetts, and Connecticut.”⁷⁸ We repeated this request throughout the docket 7440 process to no avail, and again in our concluding Reply Brief.⁷⁹ We remain disappointed that Entergy VY, having been advised of our interest in other regions that have experienced the closure of nuclear power generating facilities, declined to provide such a study, and we are grateful to the Department for doing so in this docket. Having reviewed all the data provided in docket 7862, we repeat our conclusion regarding the inevitable closure of the Station as filed in docket 7440:

We encourage the Board to recognize some level of uncertainty regarding statewide economic impacts, but hope the Board will likewise recognize that within this immediate region there is no uncertainty whatsoever---the negative economic impact of plant closure will be significant whether it occurs in 2012 or 2032.⁸⁰

How the region and the state will weather the inevitable closure will depend on how it occurs, and the commitments the Board requires of Entergy VY in this docket. WRC has advocated for prompt and complete decommissioning and site restoration, and we have advocated for assurance that the owners and operators of the Station will be financially capable of providing that level of site restoration.

⁷⁷ WRC offered prior recommendations in a Motion to Take Notice on May 23, 2013. Entergy VY filed a response in opposition to that Motion on June 10, 2013. The Board issued an Order on June 18, 2013 that denied the WRC Motion.

⁷⁸ Filed in docket 7440 as WRC-TB-2, page 4, 1a, also filed in docket 7862 as WRC Notice 1, but not available in docket 7862

⁷⁹ Dkt 7440, WRC Reply Brief, 8/7/09, page 22

⁸⁰ Dkt 7440, WRC Reply Brief, 8/7/09, page 23

WRC recognizes the importance of rapidly returning the VY site to productive economic use as being essential to the orderly development of the region. We ask the Board to be especially mindful of conditioning any CPG on ensuring that the site will be promptly and completely restored following the inevitable cessation of operations, and to recognize this condition as necessary to support the long-term orderly development of the region.

Ownership Responsibilities Are Held Jointly and Severally⁸¹

II) THE BOARD SHOULD HOLD ENTERGY NUCLEAR VERMONT YANKEE, LLC (ENVY), ENTERGY NUCLEAR OPERATIONS, INC. (ENO), AND ENTERGY CORPORATION JOINTLY AND SEVERALLY RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH CONTINUED OPERATIONS, AND DECOMMISSIONING AND SITE RESTORATION

7. In docket 6300 Entergy Nuclear Corporation requested that the Board dismiss a pending purchase proposal from AmerGen, and instead consider its proposal to meet or exceed all elements of the AmerGen proposal. (Dkt 6300, Order Dismissing Petition, 2/14/01, page 3 and pages 13-14)⁸²
8. Entergy Corporation will own and operate Vermont Yankee through its subsidiaries ENVY and ENO. (Dkt 6545 Order, finding 138)
9. ENVY and ENO, the owner and operator, respectively, of Vermont Yankee, are indirect subsidiaries of Entergy Corporation. (Dkt 6545 Order, finding 125)
10. ENVY and ENO are sufficiently qualified and experienced to own, operate and decommission Vermont Yankee. (Dkt. 6545, Order, 6/13/02, finding 118)
11. "The facts of this case [docket 6545] indicate that both ENVY and ENO will be Board jurisdictional companies requiring certification." (Dkt 6545 Order, discussion page 106)
12. Entergy Corporation has advanced capital investment funding needed for the VY Station to be operated safely and reliably. (TR, 6/18/13, Vol. I, Twomey, page 83, line 24)
13. ENVY was formed as a limited liability company ("LLC"). An LLC is similar to a traditional corporation in that they both limit the legal liability of the owners of the entity. The LLC form provides more flexibility than a traditional corporation with respect to a company's organization and management. ENVY was formed as an LLC, in part, to facilitate tax planning. (Dkt. 6545, Order, 6/13/02, finding 131)
14. ENO, a Delaware corporation, is an indirect wholly-owned subsidiary of Entergy Corporation and a direct wholly-owned subsidiary of Entergy Nuclear Holding Company #2.(Dkt 6545 Order, finding 133)

⁸¹ Discussion of this issue was included in WRC Reply Brief, docket 7440, August 7, 2009. Please see page 3

⁸² Dkt 6300, Order Dismissing Petition, 2/14/01, see the terms that Entergy agreed to match as listed on page 14, footnote 55

15. There are three intermediary affiliates between Entergy Corporation and ENVY. They are Entergy Nuclear Vermont Investment Company, Entergy Nuclear Holding Company #3, and Entergy Nuclear Holding Company. There is one intermediary affiliate between Entergy Corporation and ENO: Entergy Nuclear Holding Company #2. (Dkt 6545 Order, finding 126)
16. Entergy Nuclear Holding Company is a direct, wholly-owned subsidiary of Entergy Corporation. It was established in order to eventually hold all the subsidiaries associated with Entergy's nuclear operations.(Dkt 6545 Order, finding 127)
17. Entergy Nuclear Holding Company currently owns Entergy Nuclear Holding Company #3, LLC, which in turn, owns Entergy Nuclear Vermont Investment Company, LLC. Entergy Nuclear Vermont Investment Company was established to hold the company which would purchase the Vermont Yankee Nuclear Power Station. (Dkt 6545 Order, finding 128)
18. Entergy Nuclear Holding Company has six officers, all of whom serve as officers of Entergy Nuclear Holding Company #3, LLC, and Entergy Nuclear Vermont Investment Company, LLC. (EN. Reb.Redirect-Twomey-2)
19. Entergy Nuclear Vermont Investment Company, LLC, has eight officers, seven of whom serve as officers of Entergy Nuclear Holding Company #3, LLC, and six serve as officers of Entergy Nuclear Holding Company. (EN Reb.Redirect-Twomey-2)
20. Entergy Nuclear Vermont Yankee has ten officers, nine of whom are also officers with Entergy Nuclear Operations. (EN Reb.Redirect-Twomey-1, and TR, 6/17/13, Vol. II Twomey, page 157, line 17; see also WRC-Cross-24⁸³)
21. Entergy Nuclear Vermont Yankee has no employees, other than its officers. (TR, 6/17/13, Vol. II, Twomey, page 159, line 17)
22. ENVY and ENO have been joint petitioners for each CPG requested since the purchase of the VY Station in 2002.
23. ENVY and ENO have jointly sought a new or amended CPG in this docket. (Dkt 7862, Petition, 4/16/12)

Discussion:

Entergy Corporation is the undisputed corporate parent of both ENVY and ENO. Each benefits directly through the operation of the Station, and there is no doubt that ENVY and ENO jointly manage the Station and are petitioners in this docket. Both ENVY and ENO are subject to Board jurisdiction while the Station is operating, and Board jurisdiction does not expire when the Station ceases operation. In granting the authority to own and operate the Station the

⁸³ WRC-Cross-24 shows eight officers hold positions in ENVY and ENO. In this exhibit Mary Ann Vallardes is listed as an officer of ENO, but her name was inadvertently left off the boxed list of other positions. Ms. Vallardes is an officer of both ENO and ENVY, as indicated in EN Reb.Redirect-Twomey-1, which brings the total to nine. Entergy VY confirmed the inadvertent oversight via email to WRC on July 31, 2013, and in an email dated August 8, 2013 Entergy VY agreed to supplement the record.

qualifications of both ENO and ENVY were considered by the Board, including their qualifications to decommission the site.

The parent, Entergy Corporation, is the ultimate beneficiary of operations at the Station, and exerts direct influence through financial guarantees, direct investment, management of budgets and local decision making, and the structure and composition of its corporate subsidiaries. It was Entergy Corporation, through its subsidiary Entergy Nuclear Corporation, which interceded in docket 6300 to block the sale of the Station to AmerGen, and then posted a performance bond to secure its own opportunity to purchase the Station.

WRC urges the Board to find ENVY, ENO, and Entergy Corporation jointly and severally responsible for all operational costs, and for the costs of prompt and complete decommissioning and site restoration. At the very least, ENVY and ENO as direct certificate holders and joint petitioners in this docket, should be held jointly and severally responsible for those costs. In the event that one of the responsible entities is not capable of meeting the obligations, the others should be held fully liable.

Value of PPA/RSA⁸⁴

III) THE BOARD SHOULD IDENTIFY THE BENEFITS DERIVED FROM PPA'S AND RSA'S IN PRIOR DOCKETS, AND REQUIRE COMPERABLE VALUE BE DELIVERED THROUGH ANY NEW OR AMENDED CPG

1. When compared to the pre-sale status quo, under the Power Purchase Agreement Central Vermont and Green Mountain were expected to save \$106 and \$60 million, respectively, in power costs between July 2002 and March 2012. (Dkt 6545 Order, 6/13/02, page 40, finding 49)
2. The difference between spot energy prices and PPA prices from 2008 through 2012 was projected to be \$61 million (Dkt 7082, Order, 4/26/06, page 34, finding 79)
3. The most significant benefit of an uprate would be obtained after 2012, when costs (principally depreciation) are diminished, and upon successful implementation of a license extension. (Dkt 6545 Order, 6/13/02, page 61, footnote 117)
4. The operation of the Vermont Yankee Station represents an economic benefit to Vermont, mostly as a result of its favorably priced PPA (Dkt 7082, Order, 4/26/06, page 34, finding 74)
5. The Revenue Sharing provision outlined in the docket 6545 MOU captures some of the value that Vermont Yankee's owners would obtain if they had not sold the

⁸⁴ Discussion of this issue was included in WRC Reply Brief, docket 7440, August 7, 2009. Please see pages 23-25

- station and successfully relicensed. (Dkt 6545 Order, 6/13/02, page 71, discussion)
6. At the time of the sale, the docket 6545 Revenue Share Agreement was not projected to have any value to ratepayers, nonetheless, it did provide protection should energy market prices have changed precipitously. (Dkt 6545 Order, 6/13/02, page 71, footnote 142)
 7. In docket 7440 the Department calculated the value of the RSA as between \$159 million and \$908 million, but recognized the value could be “quite small or conceivably zero.” (Dkt 7440 Initial Brief of the Department , 7/17/09, pages 46-47, findings 109-114, entered in docket 7862 as EN-Cross-Hopkins-16)
 8. In October 2012, the Department calculated the value of the RSA as “zero.” (PWT, Hopkins, 10/22/12, page 43, line 21)
 9. The Department recognizes the RSA has some value as a hedge (PWT, Hopkins, 10/22/12, page 45, line 5)
 10. Entergy VY has projected the total current value of the RSA as between zero and \$120 million. (TR, 2/11/13, Vol. II, Potkin, page 149, line 4; TR, 6/20/13, Vol. I, Tranen, page 43, line 17 through page 46, line 24, and page 53, line 18 -- changing his projections based on market trends)
 11. The term of the RSA benefit agreed to in docket 6545 is 10 years (2012-2022).
 12. The term of the PPA in docket 6545 was 10 years (2002-2012).
 13. The term of the CPG requested in this docket is 20 years (2012-2032)(Dkt 7862, Entergy VY Amended Petition, 4/16/12, page 1 and page 3 paragraph 4)
 14. Entergy VY has not filed a new PPA in this docket.
 15. Entergy VY has not filed a new RSA in this docket.
 16. Entergy VY could have evaluated the economic benefits of operations up until 2012 and compared them with the projected benefits after 2012, but did not do so (TR, 6/19/13, Vol. I, Heaps, page 76, line 10)

Discussion:

The operation of the Vermont Yankee Station offers many benefits. Among these are jobs for Vermont residents, taxes receipts to the state of Vermont, and one-time or time limited payments made under various MOU’s and commitments. These benefits are substantial, but in all major dockets involving Vermont Yankee the Board has identified a favorably priced PPA as one of the most important components of the total value necessary to find operation of the Station provides an adequate economic benefit. In the most recent major docket (7082), the Board identified the value of the PPA as the primary component of the economic benefit.

WRC will not address the economic benefits of employment, taxes, and other direct payments in this section of our brief. We ask the Board to calculate and balance those benefits separately (including payments associated with docket 6812 State Benefit Fund, and the docket 7082 Clean

Energy Development Fund). Here, we ask the Board to calculate the value of the docket 6545 PPA and RSA, and to require comparable value (in addition to all other benefits) in this docket.

As described in Part One of the WRC initial brief, the Board is prohibited by the Dormant Commerce Clause of the United States Constitution from *requiring* a favorably priced PPA or RSA, and Entergy VY has not offered either a PPA or RSA in this docket. Nevertheless, the Board can determine the value of prior PPA's and RSA's offered by Entergy VY, and require that comparable additional value be provided in this docket in a form other than a PPA or RSA.

PPA

Entergy VY has had ample opportunity to provide testimony regarding the value of the PPA agreed to in past dockets, but an adequate record has not been established. Thus, it is the Board that must now look back at prior dockets and determine how much value was necessary to secure supporting CPG's, and how that value can be realized in any period of extended operations.

Docket 6545 includes multiple benefits. The docket 6545 PPA had a projected value of \$106 million for Central Vermont (Power Corporation) and \$60 million for Green Mountain (Power Corporation) in 2002. That PPA, with a total projected value of \$166 million extended over a roughly ten year period, was projected to produce an average annual value of \$16.6 million in ratepayer savings (in 2002 dollars).

Docket 7082 which approved the use of dry casks in 2006 provides the most recent Board Order to define the value of the docket 6545 PPA. In docket 7082 the value of the docket 6545 PPA was found to be \$61 million for the four year period between 2008 and 2012. The average annual benefit under this analysis was projected to be approximately \$15.25 million (in 2006 dollars).

It is reasonable to calculate an annual value of the PPA established in docket 6545 based on the projected total value in 2002 and the projected total value in 2006. While a more accurate value could be calculated from the actual cost of electricity sales during the period from 2002 through 2012, there is insufficient testimony from which to make any such determination. Therefore, the Board is encouraged to use a combined average of the projected PPA benefit as calculated in dockets 6545 and 7082 as a starting point, and then adjust for inflation and its own regulatory experience. Based on the two available data points, it is reasonable to calculate a minimum value of the docket 6545 PPA as \$16 million per year, which would represent \$320 million over the 20-year period of operations contemplated in this docket.

WRC urges the Board to recognize that in lieu of an ongoing PPA Entergy VY should provide new value equivalent to at least \$320 million. This is value that was required to meet the

standard of the General Good in docket 6545 and should be required here too, in spite of Entergy VY's reluctance to enter into a viable PPA or to offer comparable value in another form.

RSA

The RSA agreed to in docket 6545 was not expected to have much financial value, but even so it was thought to have some future value, and at the very least it was expected to provide protection should energy prices change precipitously. In docket 7440 energy market trends lead the Department to identify the value of the RSA as between \$159 million and \$908 million, but the Department has since described the value as "zero." Entergy VY has calculated the value of the RSA as between zero and \$120 million, with its most recent projections at or near zero.

WRC recognizes the RSA in docket 6545 as a discrete transaction that added value to that petition and delivered that value only if the Station operated after 2012. We agree that at the present time under currently projected power market trends the value may be zero. We also recognize some value as a hedge against shocks and unexpected upward market change. WRC agrees with the docket 7440 analysis of the Department which stated "the value of the RSA, whatever it may be, was already accounted for in the Board's determination of general good in the sale of the plant to Petitioners and it therefore cannot be counted again in this proceeding for the same purpose. Any Vermont-related value generated by the RSA already belongs to the ratepayers of CVPS and GMP."⁸⁵

WRC urges the Board to recognize that the value of the RSA agreed to in docket 6545 should only be counted as value needed to secure approval for the sale in 2002, and should be matched with comparable new value in this docket. And we urge the Board to recognize the projected financial value of the RSA as zero to \$20 million, with additional value as a hedge against unpredictable market prices.

Projections of Reliability⁸⁶

- IV) THE BOARD SHOULD RECOGNIZE THAT THE VY STATION HAS BEEN OPERATED RELIABLY, BUT SHOULD ALSO RECOGNIZE FUTURE RELIABILITY AND ASSOCIATED ECONOMIC BENEFITS ARE NOT ASSURED FOR ANY PERIOD OF TIME**

⁸⁵ Dkt 7440, Reply Brief of the Department, 8/7/09, page 8, section "C" (docket 7862 exhibit EN-Cross-Hopkins-17)

⁸⁶ Discussion of this issue was included in WRC Reply Brief, docket 7440, August 7, 2009. Please see page 4, and discussion regarding replacement of the condenser on page 5.

24. The VY Station's capacity factor has been at 93%, which is considered to be above average in the nuclear industry. (PWT, 1/29/12, Twomey, page 2, line 2)
25. "Acceptable reliability of VY for operation beyond 2012 is possible if the recommendations of [the Public Oversight Panel] report and the NSA Report are taken. Specifically, there must be a credible and public verification put in place to assure the recommendations are implemented satisfactorily and in a timely manner. . . . The events covered in this supplement [to the report of the Public Oversight Panel] do not cause us to change this fundamental conclusion, but they do introduce new notes of caution in the areas on which this supplement focuses." (Board-4, Supplemental Report of the Public Oversight Panel, 7/20/10, conclusion of the Panels March 2009 Report, as quoted and then discussed on page 17 of the supplemental report)
26. "Entergy cannot operate VY reliably for an additional 20 years unless it successfully reestablishes a corporate culture where its individual employees and the organization as a whole have a questioning attitude, and where adequate resources are consistently spent on non-safety systems." (Board-4, Supplemental Report of the Public Oversight Panel, 7/20/10, Conclusion, page 18)
27. Based on historical experience with other nuclear units, there remains a non-trivial risk that Vermont Yankee would need to close abruptly during the life extension period. (TR, 2/25/13, Chernick, page 64, line 12)
28. There have been several recent closures of nuclear facilities prior to the end of their NRC licenses. These include the Crystal River facility, the San Onofre facility, and the Kewaunee facility. The shutdowns were by a combination of economics and some technical issues. (TR, 6/17/13, Vol. I, Cloutier, page 84, line 10)
29. Most plant closings to date have been because expected profitability was insufficient to support necessary future expenditures. (PSD-PAB-2, page 20, note 11)
30. Merchant plants like the VY Station face greater economic challenges such as low power market prices. Older reactor operating in smaller power market regions – reactors like the VY Station – will be particularly challenged by these circumstances, especially when they confront significant capital investments. (PWT, 4/29/13, Bradford, page 10, line 13)
31. The VY Station faces significant capital investments. (PWT, 4/29/13, Bradford, page 11, line 1)
32. Nuclear merchant plants are facing negative trends in the wholesale price of power, and are under a lot of pressure financially from the cost of inflation experienced in the area of O&M expense, fuel expense, and maintenance cap. (TR, 6/18/13-CONFIDENTIAL-Twomey, page 101, line 25 – unredacted)
33. UBS Investment Research has issued guidance that both the NY Fitzpatrick and Vermont Yankee plants are at risk of retirement given their small size. (CLF-Redirect -1, 1/2/13, bullet 1; CLF-Redirect-2, 2/4/13, page 2)

Discussion

WRC recognizes that the VY Station will cease operation in 2032 or at some point before that time, and that the region must plan for the associated economic impacts of inevitable closure. It is especially important to fully understand the expected reliability of the station because of the extensive problems identified through the investigation into a tritium leak from aging underground pipes that is still being litigated in docket 7600.⁸⁷ It was those leaking pipes that lead WRC to write:

“at the very least, the release of tritium and other radioisotopes from the Vermont Yankee station has added significant uncertainty as to the cost and timing of decommissioning, has illuminated a potential problem regarding aging infrastructure, has contributed to heightened public concern and doubt regarding the long term reliability of the station, and has further brought into question the adequacy of the decommissioning fund.”⁸⁸

The Board has heard concerns from the public and from other parties about many troubling incidents at the VY Station, including those listed in the February 15, 2013 stipulation between CLF and Entergy VY.⁸⁹ We are not going to offer comments here about these issues or problems, for they are already documented within the record. We will note that the plant has operated at a capacity factor of 93%, which is considered to be above average in the nuclear industry. To our mind the plant has been reliable, but we question that reliability in the future.

Entergy VY has argued extensively that since the company has not entered into a PPA, reliability is not a viable concern of the state of Vermont. WRC strongly disagrees. The economic impacts of operation within the Windham region are significant, and an assurance of reliability is essential so that the region can plan for the inevitable closure of the Station whether that occurs in 2032 or at an earlier point. An anticipated and well-planned shutdown is preferable to an unexpected and unplanned shutdown.

The state of Vermont has a beneficial RSA that is unit contingent. Questionable future reliability makes it impossible for regulators and planners to give value to the RSA, or anticipate changes in the regional power markets and in-state electrical production. There are substantial tax

⁸⁷ Part of the chain of events that led to this series of leaks is detailed in the Supplemental Report of the Public Oversight Panel, filed as Board-4, page 7, and page 11; See also EN-GT-23, Investigation Summary, 2/14/10

⁸⁸ Please see docket 7600, Direct Brief of Windham Regional Commission Concerning The Scope and Jurisdiction Of The Public Service Board In Docket 7600, 8/20/10, page 22

⁸⁹ CLF-1

benefits that are dependent on continued operation, and here too state economists and planners need assurance of reliability to prepare for the inevitable loss of revenue following closure of the Station. WRC is especially concerned that the decommissioning trust fund is not currently adequate to provide for immediate decommissioning and site restoration (and may never be), and Entergy VY is relying on 20 years of continued operation and fund growth before the Station shuts down. If the Station cannot be operated reliably for the entire 20 year period, then the decommissioning trust fund is far more likely to be inadequate whenever the Station does cease operations, and addressing that issue now becomes of paramount importance.

WRC is in agreement with Entergy VY that the plant can be operated reliably for some period of time beyond 2012, but we are not convinced the plant can operate with certainty for the entire 20 year period of the requested authorization. We believe assurance of reliability through the 20 year term being sought by Entergy VY is not supported in the record. We emphasize that this point is not based solely on issues of the physical reliability of the plant, but also on the likelihood that the owner could make an economic decision to shut down prior to the end of an approved extension. We worry that a need for significant capital investments such as the replacement or retubing of the condenser could present insurmountable financial barriers to continued operation. We also worry that needed repairs brought about by unexpected problems encountered with 5 or 10 years remaining in the permit period might not be approved by the parental owners of Entergy VY if power markets would not allow recovery of the investment.

WRC urges the Board to carefully consider the uncertainty of long term reliability, and to factor this uncertainty in the assessment of all issues related to continued operation including (but not limited to) tax benefits, the value of the RSA, the effect on regional power markets, and most especially the effect on growth of the underfunded decommissioning trust.

Need to Identify a Second ISFSI⁹⁰

- V) **THE BOARD SHOULD REQUIRE ENTERGY VY TO IDENTIFY THE LOCATION OF A REQUIRED SECOND ISFSI AS A NECESSARY PRECURSOR TO DETERMINING WHETHER THE STATION WILL SUPPORT THE OPRDERLY DEVELOPMENT OF THE REGION**

34. The Vermont Yankee site covers a total of 148 acres; approximately 94 acres are developed, eight are marginally developed, and 46 are undeveloped. (PWT, 6/29/12, Dodson, page 8, line 1)

⁹⁰ Discussion of this issue was included in WRC Reply Brief, docket 7440, August 7, 2009. Please see page 9

35. “The Supreme Court’s ruling and federal law thus reserves substantial jurisdiction to the state of Vermont over nuclear facilities and the dry fuel storage facility, so long as we are not regulating radiological safety and are acting within areas of traditional state concern. These areas encompass the criteria in 30 V .S.A. § 248 and 10 V.S.A. § 6522 (b). State authority remains unless in direct conflict with federal requirements.” (Dkt 7082 Order,4/26/06, Legal Framework, page 16)
36. An ISFSI large enough to accept all the fuel from plant operations and to accommodate the full offload of the spent fuel pool would require space for approximately 60 overpacks (for a 2012 plant shutdown) and 80 overpacks (for a 2032 plant shutdown); an ISFSI of sufficient size to meet these needs would not fit within the plant’s existing, high-protected security area. (Dkt 7082 Order, 4/26/06, page 22, finding 43)
37. The Board required that if Entergy VY requests an extension of its CPG beyond March 21, 2012, the amended Spent Fuel Management Plan must address the possibility of reducing the number of fuel rods stored in the pool, and also address the possibility of constructing an additional ISFSI to accommodate the larger number of dry casks that would result. (Dkt 7082 Order, 4/26/06, discussion page 81-82)
38. The Decommissioning Cost Analysis assumes that a second ISFSI is constructed at the site to accommodate all of the spent fuel generated from reactor operations. (EN-TLG-2, section 1, page 6)
39. Under the current assumptions for DOE performance, a second ISFSI will be required to completely off-load the spent fuel pool at the cessation of plant operations. (EN-TLG-2, Section 3, page 7-8)

Discussion

The Board considered the issue of a second ISFSI in docket 7082, and required that this issue be addressed if the petitioners requested an extended CPG. WRC has raised this issue consistently since 2008, most recently in an April 17, 2013 Motion seeking an Amended Spent Fuel Management Plan in which we asked that Entergy VY provide a witness to answer questions at the docket 7862 technical hearings. Entergy VY opposed the Motion, and then provided WRC with a paper copy of an amended Spent Fuel Management Plan that does not offer a proposed location for a second ISFSI.⁹¹ Entergy VY has not entered that SFMP into this record and has

⁹¹ The WRC Motion to Require Entergy Nuclear Vermont Yankee and Entergy Nuclear Operations to file an Amended Spent Fuel Management Plan was filed on April 17, 2013. In addition to the filing of an amended Spent Fuel Management Plan, WRC also sought an opportunity for discovery on the Plan, a witness to provide testimony about the Plan, and specific resolution of the underlying issues (page 4). The Board ruled from the Bench that since Entergy VY had provided the Plan outside the hearings, the WRC Motion was moot. (TR, 6/17/13, Vol. I, page 7, line 2)

declined to present an expert witness to testify about the placement of a second ISFSI, or otherwise offer an affirmative response to the Docket 7082 Order of the Board.⁹²

WRC recognizes a number of important issues regarding the placement of a second ISFSI, among these are the density of development at the site, and the potential for future projects to be placed in space that might later be needed for a second ISFSI. WRC is also concerned that a decision by the NRC to require accelerated movement of fuel assemblies from wet to dry storage as a condition of continued operation could be precluded if there is not a viable location for a second ISFSI. A regulatory requirement that unexpectedly cuts short the operating term of the Station would have an effect on the regional economy and land use, and would of course reduce the economic benefits the petitioners have advocated as consideration for the amendment of their CPG.

It is unlikely that there would be a need for a second ISFSI if the Department of Energy (DOE) had complied with its contract for the removal of spent nuclear fuel. Nevertheless, DOE has not met its contractual obligation, and thus it is apparent that a second ISFSI will become necessary at some point. While management of spent fuel should be a matter for federal jurisdiction, the failure of DOE to meet its contractual terms increases the importance of the issue as a matter of state land use, and the orderly development of the property and region.⁹³ Entergy VY has previously recognized Board jurisdiction regarding spent fuel management by seeking a CPG before constructing the existing ISFSI in docket 7082, and thus it is surprising that the company is resistant to providing sufficient information to confirm a viable location for a second ISFSI.

WRC brings this issue forward with vigor because it is specifically addressed in the Windham Regional Plan with a policy to “Encourage a requirement that spent nuclear fuel (SNF) storage be resolved prior to any consideration of extending or reviewing the operating license of Vermont Yankee” (WRC-Cross-11, page 95). This is an important issue that will have profound

⁹² Entergy VY has had ample opportunity to present an affirmative case on this and all other issues. Entergy VY addressed the reasonableness and ability of Entergy VY to offer an affirmative case in spite of preemption concerns elsewhere as follows: “We have put Mr. Cloutier's testimony in with respect to radiological decommissioning spent fuel management because we don't have a ruling yet on the scope of this proceeding, and we needed to have an affirmative case on those subjects in case the Board rules that radiological decommissioning is an area of its jurisdiction and the spent fuel management is an area of its jurisdiction.” (TR, 2/12/13, Vol. I, attorney John Marshall page 36, line 22) Entergy VY has willingly addressed other areas that it considers preempted, but for whatever reason has opted to ignore several longstanding issues, including the citing of a second ISFSI.

⁹³ Dkt 7082, Order, 4/26/06, page 64, The Board addressed the preemption of financial considerations related to spent fuel management as follows: “We also find it hard to understand the validity of a preemption argument where, as here, there has been such a failure by DOE to fulfill its statutory responsibilities to take ownership of and remove the spent nuclear fuel in a timely manner, with the result that the state of Vermont may need to absorb some risk.”

land use implications for decades to come. We do not expect the Board to resolve final disposition of spent fuel through the thousands of years of required SNF management, but we do ask that all issues regarding on-site storage be fully addressed.

The location of a second ISFSI is important to consider at this juncture because the Board recognized in docket 7082 that identifying a site for such a facility is difficult. An ISFSI must be located in a secure area with appropriate soil composition that is protected from flooding. The location of any ISFSI could have an effect on how the surrounding land is reused, and could have an effect of the visual character of the facility. And, the placement of a second ISFSI will have an effect upon fence line radiation which is regulated by the state of Vermont.

Because it is known that a new ISFSI will be required under any scenario; because the Board has previously acknowledged the need for an additional ISFSI in a new location and instructed the petitioner to identify a location; because the petitioners themselves have stated their agreement that a new ISFSI will almost certainly be needed; and because it is prudent to assume that no spent fuel will leave the site in the foreseeable future, specific documentation of an acceptable on-site location for a long-term ISFSI should be required prior to any new or amended CPG and payment for such should come from current operating budget, not the decommissioning fund.

Costs of Spent Fuel Management⁹⁴

VI) THE BOARD SHOULD RECOGNIZE THE ECONOMIC IMPLICATIONS OF STORAGE OF SPENT FUEL IN WET VS. DRY STORAGE, AND REQUIRE ENTERGY VY TO AGREE TO THE MOVEMENT OF SPENT FUEL TO DRY STORAGE OR ALTERNATIVELY ADD COMPARABLE VALUE TO THE DECOMMISSIONING FUND; AND SHOULD HOLD ENTERGY VY DIRECTLY RESPONSIBLE FOR FUNDING THE MANAGEMENT OF SPENT FUEL GENERATED BETWEEN 2012 AND 2032

40. The Board determined that dry cask storage is a better storage option than is storage in the spent fuel pool, and that similarly, storage in a less-dense spent fuel pool configuration is also preferable. (Dkt 7082 Order, 4/26/06, discussion page 81)
41. The Board required that if Entergy VY requests an extension of its CPG beyond March 21, 2012, the amended Spent Fuel Management Plan must address the possibility of reducing the number of fuel rods stored in the spent fuel pool. (Dkt Order, 7082, Order, 4/26/06, discussion page 81)

⁹⁴ Discussion of this issue was included in WRC Reply Brief, docket 7440, August 7, 2009. Please see page 6, and please see discussion of “Post Shutdown Use of Spent Fuel Pool,” page 11. Please also see the Dkt 7862 WRC Motion to Require a Spent Fuel Management Plan, (and the associated attachments), 4/17/13

42. Entergy VY has not filed a current Spent Fuel Management Plan in this docket.
43. Entergy has prepared an inventory of spent fuel that does not contemplate reducing the density of the pool to any meaningful degree, unless DOE begins fuel pick-ups. (WRC-Cross-18)
44. There are currently 2,627 assemblies in the spent fuel pool, and 884 in dry casks on the existing ISFSI. (WRC-Cross-18)
45. Each dry cask holds 68 spent fuel assemblies (Dkt 7082, Order, 4/26/06, page 19, finding 18)
46. The costs for SNF management during operations are paid out of operational expenditures (subject to recoupment from DOE) and do not come from any decommissioning funding or other commitments. (PWT, 6/29/12, Twomey, page 18, line 4; TR, 2/12/13, Vol. I, Cloutier, page 115, line 4)
47. The costs for spent fuel management after the Station stops producing electricity are paid for out of the Decommissioning Trust (subject to recoupment from DOE). (EN-TLG-2)
48. The decommissioning trust fund is currently not sufficient to promptly decommission the site. (TR, 2/12/13, Vol. I, Cloutier, page 44, line 9 through page 46, line 8)
49. Recovery of costs from DOE for storage of spent nuclear fuel can take many years, and may not be on a dollar-for-dollar basis. (PWT, 10/22/12, Brewer, Page 36, line 11)
50. The Court of Appeals for the Federal Circuit has ruled that some costs of loading spent fuel that would have been incurred if DOE had met its obligations may not be recoverable from DOE. These costs could be on the order of \$10 to \$20 million. (PWT, 10/22/12, Brewer, page 37, line 10)
51. The decommissioning cost analysis includes the cost of a second ISFSI at approximately \$24 million, and 84 casks at approximately \$880,000 each. (TR, 2/12/13, Vol. 1, Cloutier, page 114, line 9; WRC-Cross-3)
52. An ISFSI large enough to accept all the fuel from plant operations and to accommodate the full offload of the spent fuel pool would require space for approximately 60 overpacks (for a 2012 plant shutdown) and 80 overpacks (for a 2032 plant shutdown. (Dkt 7082 Order, 4/26/06, page 22, finding 43)

Discussion

In docket 7082 Entergy VY sought and received authorization to construct a spent fuel storage facility. In evaluating that petition the Board determined that dry cask storage is a better option than storage in the pool, and directed that if Entergy VY sought an extension of its CPG beyond March 21, 2012 it must consider reducing the density of the spent fuel pool. Entergy accepted the Order and CPG, but has failed to appropriately consider reducing the density of the spent fuel pool, or provide any testimony that addresses this requirement of the Board.

Entergy VY argues that spent fuel management is regulated by the NRC, and that no role is left for the states.⁹⁵ WRC agrees that the state of Vermont cannot compel Entergy VY to actually move spent fuel. However the Board does have the authority to address areas of spent fuel management that affect land use and other traditional state concerns. And, even where the Board cannot assert direct authority it can seek the cooperation of Entergy VY in addressing related land use issues and then credit a voluntary cooperative response as part of serving the general good of the state. Likewise, the Board can consider Entergy VY's failure to meet the standards established in the docket 7082 Order that required consideration of reduced pool density (among other things) as it contemplates the general good standard.

WRM does not (and has not) addressed spent fuel management as a safety issue. Rather, WRC recognizes that a cask loaded when the Station is operating is treated as an operational expense, while a cask loaded after the Station ceases operation is treated as a decommissioning expense and imposes a cost on the decommissioning trust fund. Entergy VY has voluntarily maintained a comingled decommissioning trust fund which is not currently adequate to provide for prompt and complete decommissioning, spent fuel management, and site restoration. Entergy VY has not agreed to make any payments into the trust fund, and thus under the status quo the only way the fund could ever be sufficient to cover site restoration expenses is by allowing time to pass with the hope that the fund will grow, which necessarily limits the use of this prime industrial land and negatively effects the orderly development of the region.⁹⁶

As contemplated by the petitioner, continued operation for an additional 20 years will necessitate roughly 20 additional dry casks, and a larger additional ISFSI than would otherwise be necessary. The cost of an ISFSI to hold all the fuel generated over 60 years is \$24 million; 1/3 of that cost (20 years) is \$8 million. Each cask costs \$880,000; 20 casks will cost \$17.6 million. **The additional direct spent fuel storage costs associated with 20 years of continued operation are expected to be approximately \$25.6 million, plus 1/3 of the general operating overhead. These costs should be borne exclusively by Entergy VY through its present day operating budget, and**

⁹⁵In docket 7082 the Board considered financial assurances for the management of spent fuel required by Title 10 § 6522(b)(1) and concluded "This is not a matter for which the Atomic Energy Act has left no room for the states. Instead, this requirement falls squarely within traditional economic and land use regulation reserved to the states. Like the economic considerations that led California to impose the moratorium on nuclear plants considered in PG&E, this requirement is designed to ensure that economic costs were not passed on to the state of Vermont. We also find it hard to understand the validity of a preemption argument where, as here, there has been such a failure by DOE to fulfill its statutory responsibilities to take ownership of and remove the spent nuclear fuel in a timely manner, with the result that the state of Vermont may need to absorb some risk." Dkt 7082, Order, 4/26/06, page 64

⁹⁶ WRC is further concerned that even allowing for a long period of fund growth does not assure the decommissioning trust fund will ever be sufficient, and that the fund could lose value relative to the cost of decommissioning, spent fuel management, and site restoration.

not imposed on the decommissioning trust. To the extent the costs are recoverable from DOE, Entergy will not be harmed, but Entergy VY should nevertheless incur the capital costs and risk of under-recovery, rather than impose those burdens on the decommissioning trust fund. The Board is urged to require that Entergy make a minimum one-time payment to the decommissioning trust (or a new segregated trust discussed elsewhere in this brief) in the amount of \$30 million to cover the cost of managing spent fuel to be generated between 2012 and 2032.

Compelling Entergy VY to cover the costs of spent fuel management for the fuel generated in the 20 year extension period using operating funds is one important means of protecting the viability of the decommissioning trust to assure site restoration, but it does not address a reduction in density of the existing spent fuel pool. Given that Entergy VY has not provided meaningful support to help resolve this issue despite multiple requests, and that the Board found in docket 7082 that a reduced density level is preferable, WRC is requesting that the Board order a substantial reduction in pool density or the payment of monies in kind into the decommissioning trust (or a segregated trust). Specifically, WRC asks for a 50% reduction in pool density from the current level of 2,627 assemblies to 1,313. This level of reduction would require the use of roughly 20 casks at a cost of approximately \$17.6 million. While the Board cannot compel the actual reduction of density without running afoul of federal preemption, it should order Entergy VY to voluntarily make the change or, as an alternative make a one-time payment of \$17.6 million into the decommissioning trust (or a new segregated trust) in lieu of actual fuel movement.

Removal of Spent Fuel From Vermont

VII) THE BOARD SHOULD RECOGNIZE THAT ENTERGY VY HAS NOT USED ITS COMMERCIAL BEST EFFORTS TO REMOVE SPENT FUEL FROM VERMONT, AND SHOULD REQUIRE SPECIFIC ACTIONS TO COMPLY WITH THIS MOU REQUIRMENT

53. In docket 6545 Entergy VY entered into an MOU and agreed “that it must use its commercial best efforts to assure that the spent fuel is removed from VYNPS site in a reasonable manner and as quickly as possible rather than stored at VYNPS. ENVY shall allow the Department to participate in the discussions with DOE that involve VYNPS and to participate in the decision whether to pursue the discussions or to litigate.” (Dkt 6545 MOU, paragraph 11; entered in docket 7862 as PSD-01)
54. The docket 7082 MOU used language that is different than the docket 6545 MOU, and Entergy VY agreed, “The company will use its commercial best efforts

to ensure that high-level SNF stored at the Station is removed from the site in a reasonable manner and as quickly as possible to an interim or permanent location outside of Vermont.” (Dkt 7082 MOU, paragraph 8, entered in docket 7862 as PSD-09)

55. In the docket 7082 MOU Entergy VY agreed that “it will not file an action or petition based on or otherwise seek, claim, defend or rely on the doctrine of federal preemption to prevent enforcement of its express obligations under this MOU.” (Dkt 7082 MOU, paragraph 12, entered in docket 7862 as PSD-09)
56. In docket 7082 the Board found that at that time, “shipping the fuel to a private contractor such as a private storage facility is not currently an option.” (Dkt 7082 Order, 4/26/06, page 22, finding 41)
57. In 2006 Entergy VY anticipated that fuel from Vermont Yankee would be removed by the DOE beginning in 2018.(Dkt 7082, Order, 4/26/06, discussion page 77)
58. In 2006 it was unlikely that spent nuclear fuel would be removed from nuclear plants according to the then-current schedule from DOE. (Dkt 7082, Order, 4/26/06, page 75, finding 224)
59. In 2012 Entergy VY anticipated that fuel from Vermont Yankee would be removed by DOE beginning in 2020 (PSD-Cross-14, PSDAR, June 13, 2012, page 9.
60. In 2013 the schedule had slipped further, and Entergy VY anticipated that fuel from Vermont Yankee would be removed by DOE beginning in 2025 (PSD-Cross-WC-15, PSDAR, June 13, 2013, page 9)
61. For planning purposes the Board greatly discounted the likelihood that the DOE would adhere to its schedule because DOE has consistently failed to meet its obligations to take title to and remove spent nuclear fuel from Vermont Yankee and other nuclear plants. (Dkt 7082, Order, 4/26/06, discussion page 77)
62. The Board concluded in 2006 that based on conditions at the time “Entergy VY, by contracting with the DOE for such removal, has taken reasonable steps to meet its obligations to remove the fuel.” (Dkt 7082, Order, 4/26/06, discussion page 77)
63. In 2008, the DOE issued a report to Congress in which it concluded that it did not have authority under present law, to accept spent nuclear fuel for interim storage from decommissioned commercial nuclear power reactor sites. (EN-TLG-2, page xiii, footnote 14)
64. Entergy VY has sued DOE and asserted its rights to ensure the spent fuel is removed from Vermont as quickly as it can be done. Mr. Twomey, speaking on behalf of Entergy VY, believes that is the extent of the MOU obligation that Entergy VY committed to. (TR, 6/18/13, Vol. I, Twomey, page 40, line 16)

65. Entergy has failed to present evidence to demonstrate that it has adequately planned for its spent nuclear fuel obligations other than indefinite long term storage of spent nuclear fuel on site, and these obligations are likely to impose burdens and costs on Vermont, regardless of Entergy's responsibilities to the NRC, that would not promote the general good of the state. (PWT, 10/22/12, Hinkley, page 14, line 11)
66. Completion of the decommissioning process is dependent upon the DOE's ability to remove spent fuel from the site in a timely manner. (EN-TLG-2, page xiii)
67. Long-term storage of spent nuclear fuel restricts future use of the land on which the VY Station is currently located, as well as the surrounding areas. (PWT, 10/22/12, Hinkley, page 7, line 8)
68. Long-term storage of spent nuclear fuel on site also imposes environmental, aesthetic, and economic burdens on Vermont long after the VY Station ceases operations, most notably the continued existence of the spent nuclear fuel storage pools and dry cask storage facilities and the concomitant local and state oversight and regulation that the existence of these facilities creates. (PWT, 10/22/12, Hinkley, page 7, line 10)
69. Entergy Corporation and its affiliates own and operate eleven nuclear power plants. (PWT, 6/29/12, Twomey, page 2, line 12)
70. Other nuclear plants owned by Entergy do not have MOU conditions that advocate the removal of spent fuel to an alternate location or state (TR, 6/18/13, Vol. I, Twomey, page 39, line 4)
71. Entergy VY is not aware of any state laws that preclude movement of spent fuel from one of its owned sites to another, other than in Michigan (TR, 2/19/13, Vol. I, Twomey, page 8, line 9)
72. It is possible for a reactor operator to apply to the Nuclear Regulatory Commission for authorization to move spent nuclear fuel to another reactor site that is already licensed to store spent nuclear fuel. (TR, 2/25/13, Chernick, page 66, line 10; see also WRC-Cross-45 answer d)
73. It is possible to receive NRC authorization for consolidated spent fuel storage (TR, 6/17/13, Vol. I, Cloutier, page 81, line 11; see also TR, 2/25/13, Chernick, page 66, line 10)
74. Progress Energy has successfully consolidated fuel from its Robinson and Brunswick nuclear plants to its Shearon Harris nuclear unit. (WRC-Cross-45, answer f)
75. Entergy has not made any effort to consolidate its spent nuclear fuel (TR, 6/18/13, Vol. I, Twomey, page 37, line 22)

76. Neither ENVY nor ENO have taken any concrete action that would lead to the movement of spent fuel from Vermont to another ENO operated site, nor have they taken any concrete action to secure storage space for spent fuel at a site already licensed to another Entergy owned company. (TR, 6/18/13, Vol. I, Twomey, page 40, line 1; page 42, line 7)
77. Neither ENVY nor ENO have contemplated moving spent nuclear fuel from Vermont to Massachusetts or New York. (TR, 6/18/13, Vol. I, Twomey, page 41, line 4)
78. Neither ENVY nor ENO have attempted to negotiate placement of spent fuel from Vermont at the sites of Maine Yankee, Connecticut Yankee, or Yankee Rowe. (TR, 6/18/13, Vol. I, Twomey, page 43, line 8)
79. Neither ENVY nor ENO have participated in lobbying at the municipal level to secure support for movement of spent fuel from Vermont to another existing ISFSI. (TR, 6/18/13, Vol. I, Twomey, page 43, line 16)
80. Neither ENVY nor ENO have participated in lobbying efforts at the state level in Maine, Connecticut, Massachusetts, or any other state to secure support for the storage of spent fuel from Vermont to that state. (TR, 6/18/13, Vol. I, Twomey, page 43, line 25)
81. Entergy Corporation participates in lobbying at the state level and has individuals that participate in the legislative process in Vermont. (TR, 6/18/13, Vol. I, Twomey, page 46, line 16; Board 18)
82. Neither ENVY nor ENO have established a budget that would fund the movement of spent fuel from Vermont to another state. (TR, 6/18/13, Vol. I, Twomey, page 41, line 1)

Discussion

Entergy VY has entered into two distinct MOU's in which it has committed to use its "commercial best efforts" to ensure spent nuclear fuel is removed from the VY Station. The "best efforts" clause is not further defined, but it's inclusion in two separate MOU's, in two different versions, makes clear that there is a high expectation that Entergy VY will take significant affirmative actions to move the spent fuel from the Station. The second of those MOU's includes a clause in which Entergy VY agreed that it will "not file an action or petition based on or otherwise seek, claim, defend or rely on the doctrine of federal preemption to prevent enforcement of its express obligations under this MOU. Thus, Entergy VY's standing claims to preemption should carry no weight with this issue.

Entergy VY has presented no testimony in this docket to show that it has made "reasonable efforts" to locate an appropriate alternative location for the spent fuel, nor has it taken any action

that would meet a more stringent “best efforts” standard. Instead, Entergy VY has made clear it is relying solely on the contractual obligation of DOE. Entergy VY appears to believe that its only commitment is to work with DOE, and that the best efforts clause does not require anything further. WRC understands the difficulty of locating a site that is willing and able to take delivery of the VY spent fuel, but recognizes that continued storage of the spent fuel on the VY site presents a unique burden to the region, and precludes redevelopment of the site following cessation of operations (whenever that might occur).

The first relevant MOU was in 2002, in docket 6545. In this MOU Entergy VY committed to “use its commercial best efforts to assure that the spent fuel is removed from VYNPS site in a reasonable manner and as quickly as possible, rather than stored at VYNPS.” The agreement also allowed the Department to participate in discussions with DOE regarding the acceptance of spent fuel and the potential for litigation. At the time, DOE was in breach of a contractual obligation to remove the spent fuel but there was every expectation that DOE would shortly meet its obligation, and there were no known alternatives.

The second relevant MOU was in 2006, in docket 7082. In this MOU Entergy VY committed to “use its commercial best efforts to ensure that high-level SNF stored at the Station is removed from the site in a reasonable manner and as quickly as possible to an interim or permanent location outside of Vermont.” Unlike the docket 6545 MOU the docket 7082 MOU specified that spent fuel must be removed from Vermont and that it should be removed to an *interim* or permanent location. The docket 7082 MOU included nothing about DOE. It was still expected that DOE would meet its obligations, and there were no known alternatives to DOE. The Board was suspicious of the DOE schedule, but determined that under the given circumstances there was little else that Entergy VY could be expected to do.

In 2008 DOE concluded that it did not have authority to accept spent nuclear fuel. DOE currently does not have a location to which that fuel can be moved, nor is there any resolution on the horizon that would allow DOE to meet its obligations.

Entergy VY has presented testimony in this docket that other nuclear operators have successfully consolidated spent fuel from multiple reactors to a single location, and under certain circumstances the NRC will allow the movement of spent fuel from one licensed site to another.

Entergy VY and its affiliates own and operate eleven nuclear power plants, and they have been unable to identify any state or local laws that would prohibit the consolidation of spent fuel at these sites (except in Michigan). Entergy VY hasn’t taken any concrete action to identify an alternative storage location or to move fuel from VY, and has not even ‘contemplated’ movement of spent fuel to licensed facilities in New York or Massachusetts. Entergy VY has not

attempted to negotiate placement of VY fuel elsewhere, nor has it lobbied at the local or state level to secure agreement to move the spent fuel elsewhere.

The MOU agreement Entergy VY made to use its “commercial best efforts” to remove the spent fuel was not a hollow agreement, nor was it limited to simply asking DOE to do what DOE is otherwise obligated to do. The differences between the two MOU’s make clear that in 2006 a different standard—removal of the fuel from Vermont—rather than simply negotiating with DOE, was expected. Indeed, by 2006 it had become clear that DOE was not likely to meet its obligations in the foreseeable future, and if other options became available they should certainly be explored.

The expectations upon Entergy VY were likely limited in the early years because DOE was expected to meet its obligations, and because there were no other alternatives. The passage of time has made it clear that DOE does not have a location to which the fuel can be moved, has no plans for such a location, and is not capable of meeting its obligations. And we are now aware that other alternatives such as fleet consolidation or placement at another ISFSI are possible.

WRC is guided by its Regional Plan, which includes a policy to “Encourage a requirement that permanent spent nuclear fuel (SNF) storage be resolved prior to any consideration of extending or reviewing the operating license of Vermont Yankee.”⁹⁷ We are acutely aware that other communities may not wish to house the spent fuel from Vermont Yankee. However, we are also mindful that some communities that are already storing spent nuclear fuel may find value in spent fuel placement fees, or additional tax revenue from an expanded ISFSI. We are troubled that Entergy VY appears to have done nothing to identify or encourage these communities, or to structure a deal that would remove the spent fuel from Vermont while also benefiting a willing recipient community.

WRC is acting pro se and is unable to fully brief the legal distinction between typical “good faith” requirements, “reasonable effort” standards, and the higher “best effort” standard that Entergy VY agreed to. However, the record appears clear that Entergy VY has an obligation to do more than simply wait on DOE, and yet has made no effort to meet its duty to the state. Apart from a strict legal interpretation, a reasonable person would read “best efforts” as the highest of a continuum of good, better, best. Nothing less should be expected of Entergy VY.

Entergy VY maintains an aggressive lobby effort directed at state and local governments, and uses all of its corporate might to achieve its desired goals. Entergy VY should be compelled to expend at least as much effort finding a suitable site for the Vermont Yankee spent fuel in a

⁹⁷ WRC-Cross-11, 2006 WRC Regional Plan, page 95

willing host community. In short, Entergy VY agreed to use its “best effort,” which is a very high standard, and that standard has not been met.

The Board is urged to require Entergy VY to establish a robust budget and internal program with dedicated staffing to identify all possible locations for consolidation of fleet fuel, and identify any operating reactor or ISFSI site that might be willing to receive the VY spent fuel. Entergy VY should be compelled to fully fund an aggressive lobbying effort to secure authorization to move the fuel to a willing community, and should be required to periodically report its efforts and progress to the Department and the Board, including any offers it has made or received for alternate fuel hosting.⁹⁸

WRC stresses that this issue is important because the housing of spent fuel on the VY site after closure presents significant land use restrictions which will have an effect on redevelopment and the regional economy. We are not seeking the movement of spent fuel to a community that objects to housing the spent fuel, but rather believe the time has come for Entergy VY to actively and aggressively seek a willing recipient, and to do so outside of the failed DOE process.

Prompt Decommissioning⁹⁹

VIII) THE BOARD SHOULD REQUIRE THE PROMPT DECOMMISSIONING OF THE VY STATION AND COMPLETE SITE RESTORATION UPON CESSATION OF OPERATIONS

83. In 2002 the Board recognized that in the case of a premature shutdown at a time when the decommissioning fund is not fully funded, Vermont Yankee could be placed in SAFESTOR to allow the decommissioning trust fund to increase in value until sufficient funds exist. (Dkt 6545 Order, 6/13/02, page 32, finding 31)
84. SAFESTOR is a “safe” alternative to immediate decommissioning. (Dkt 6545 Order, 6/13/02, page 32, finding 31)
85. The period allowed for SAFSTOR is not indefinite. Decommissioning is required to be completed within 60 years. (Dkt 6545 Order, 6/13/02, page 65, footnote 126; PSD-Cross-12, page viii)
86. Entergy VY testified that the decommissioning fund would be adequate to meet NRC requirements, and would be adequate to return the site to greenfield status after a period of SAFSTOR. (Dkt 6545 Order, 6/13/02, page 83, quoting witness Wells)

⁹⁸ DOE is responsible for costs of spent fuel management necessitated by its breach of contract. To the degree there are any costs associated with identifying alternative sites, they may be reimbursable by DOE.

⁹⁹ Discussion of this issue was included in WRC Reply Brief, docket 7440, August 7, 2009. Please see page 11

87. Delayed decommissioning of Vermont Yankee and its placement into SAFSTOR does not fully alleviate the risk of increased decommissioning costs. SAFSTOR also raises other societal cost issues, as it delays the time at which the Vermont Yankee site will be restored. (Dkt 6545 Order, 6/13/02, page 33, finding 32)
88. SAFSTOR should not be seen as a panacea for funding decommissioning. (Dkt 6545 Order, 6/13/02, discussion, page 65)
89. When Entergy VY purchased the Station, completion of decommissioning was expected to occur by March 31, 2022. (6545 MOU, paragraph 3; docket 7862 exhibit PSD-01)
90. In its docket 6545 Proposal for Decision, Entergy VY stated: “If the VY Station shut down at the end of its current license, ENVY could start immediate decommissioning based on reasonable decommissioning fund growth rates between now and then. If the inflation rates are higher than expected or growth rates lower than expected, ENVY would go into SAFSTOR until the funds grew. In the latter case, ENVY would most likely start decommissioning activities after all the spent fuel was placed in dry cask storage in 2017. In the worst case, ENVY would start decommissioning activities in 2022 and finish in 2031, which corresponds to the earliest that Department of Energy would finish taking the spent fuel.” (WRC-Cross-27, Entergy VY docket 6545 Proposal For Decision, paragraph 41)
91. The 2001 TLG Decommissioning Cost Analysis provided a schedule for DECON and SAFSTOR following cessation of operations in 2012. If SAFSTOR became necessary it was assumed to use a short period of dormancy until 2021, with site restoration complete by 2028, and all spent fuel removed by 2032. (PSD-Cross-12, section 3, page 23; SAFSTOR defined as 10 years for the VY site on page viii; SAFSTOR timelines presented consistently through text, graphics, and spreadsheets throughout the document)
92. In the case of a 2003 shutdown, ENVY would place the plant in SAFSTOR until 2022 and then start decommissioning activities. Decommissioning could still be completed by 2031. (WRC-Cross-27, Entergy VY docket 6545 Proposal For Decision, paragraph 42)
93. When weighing the advantages and disadvantages of DECON and SAFSTOR, DECON is the preferable approach because it provides greater certainty and less risk, both technically and financially. SAFSTOR may provide some potential for reduced cost and greater financial growth, but at the price of greater uncertainty and more risk. (PWT, 10/22/12, Brewer, page 4, line 19)

94. If the TLG estimates are incorrect and the period of SAFSTOR is longer, that would necessarily delay restoring the site into commerce. (TR, 2/19/13, Vol. I, Twomey, page 14, line 20)
95. Delaying decommissioning by necessity delays the time period over which you may have other uses of the site. (TR, 2/19/13, Vol I, Twomey, page 13, line 6)
96. When the Station shuts down, the workforce will shrink to approximately 250 over a 9-12 month period. (TR, 2/12/13, Vol I, Cloutier, page 109, line 1)
97. Approximately 50-60 people are employed on site during a period of SAFSTOR when fuel is on site. (TR, Cloutier, 2/12/13, Vol. I, page 110, line 1; WRC-Cross-2)
98. As envisioned by Entergy VY, the immediate decommissioning scenario initially employs a larger workforce than the SAFSTOR scenario, which then dissipates over approximately ten years. (WRC-Cross-1 and WRC-Cross-2)
99. The economic impact studies provided by Entergy VY suggest that DECON provides a stronger buffer against overall job loss than SAFSTOR. (WRC-Cross-35, Resiliency Action Plan for the Town of Vernon, page 9)

Discussion

When Entergy VY purchased the Station in 2002 the Board and all parties expected that if the Station continued to operate until 2012 or beyond, Entergy VY would likely use immediate decommissioning rather than SAFSTOR. SAFSTOR was recognized as a safe but less desirable alternative. It was agreed that SAFSTOR would be available in the event of a premature shutdown, if the decommissioning trust fund did not grow as quickly as predicted, or if expenses grew more rapidly than predicted. SAFSTOR might also have been necessary in the event of a damaging accident at the Station, or if specialized labor was not available for prompt decommissioning. The maximum term of SAFSTOR was recognized as having a legal limit of 60 years, but throughout the 2001 Decommissioning Cost Analysis (PSD-Cross-12) and in testimony, the expectation was that if SAFSTOR became necessary the term would be very short. SAFSTOR was viewed as unlikely, and was not to be used as a panacea for growth of the decommissioning trust fund.

The Station has completed its intended license period and has not closed prematurely, and fund growth has been reasonable. Entergy VY should be held to its commitment to promptly decommission the site (absent an unusual future event), and should not be permitted to use SAFSTOR as the default option.

Prompt decommissioning provides many benefits including a softer economic transition for the local and regional economies. In a SAFSTOR scenario the local workforce shrinks rapidly, and within about five years the remaining workforce drops to roughly 50 full time equivalents and

remains at that level until the beginning of delayed decommissioning, at which time employment jumps dramatically to roughly 300 workers but for just a few years (WRC-Cross-2). Prompt decommissioning on the other hand, maintains a larger workforce for a longer period of time, and avoids the employment shock (and temporary housing shock) that occurs at the end of a SAFSTOR period (WRC-Cross-1). Prompt decommissioning returns some of the land to productive use more rapidly, and will return all of the land to productive use once the remaining spent fuel has been removed. Prompt decommissioning also allows for the use of existing plant workers to assist with the dismantling of structures, which provides critical legacy knowledge that can add efficiency. And, prompt decommissioning provides greater certainty and less risk, both technically and financially. Finally, prompt decommissioning releases the site from regulatory control sooner than SAFSTOR, which increases regulatory efficiency and avoids the costs of having government and non-government organizations tied up in expensive oversight and litigation.

The record shows that immediate decommissioning is preferable to the use of SAFSTOR, and we believe it is necessary to meet the standards of the orderly development of the region. We also believe that at the time of purchase the petitioners accepted all risks that the decommissioning fund might be insufficient, and made a commitment to make that fund whole, should it become necessary. SAFSTOR was not accepted by the Board as a de facto means of making the fund whole. Indeed, the Board recognized that SAFSTOR should not be seen as a panacea for funding decommissioning, which is what Entergy is now proposing.

We are concerned that the petitioners sought approval to purchase the plant, and the Board granted that authorization, under the assumption that full funding of decommissioning in 2012 was more likely to occur under Entergy's ownership than under continued ownership by the utility consortium, but given Entergy's decision to cease funding the decommissioning trust, the exact opposite appears to be true.¹⁰⁰

WRC urges the Board to require prompt and complete decommissioning of the VY site upon its eventual closure, and to prohibit the use of SAFSTOR unless unforeseen conditions - excluding insufficient fund growth - make SAFSTOR the only available option. We also note that Entergy VY has not committed to actually decommission the site within any timeframe, even if the decommissioning trust fund is sufficient to do so. The Board should require an iron clad commitment from Entergy VY to promptly decommission the site upon shutdown as a condition of any CPG.

¹⁰⁰ Please see WRC Reply Brief, docket 7440, August 7, 2009, page 15 (Payments to the Decommissioning Fund)

Removal of All Structures¹⁰¹

IX) THE BOARD SHOULD REQUIRE ENTERGY VY TO MEET ITS MOU COMMITMENT TO REMOVE ALL STRUCTURES AS PART OF SITE RESTORATION

100. The NRC does not regulate site restoration at all. (TR, 2/12/13, Vol. II, Cloutier, page 18, line 3)
101. The San Onofre nuclear reactor site must be restored by removing all structures regardless of depth, at an additional cost of \$300 million above the cost of removing them to just three feet below the surface. (TR, 6/17/13, Vol. 2, Brewer, page 93, line 16-Note: San *Onofrio* was corrected to San *Onofre* by DPS letter to the Board, 8/1/13)
102. The 2001 Decommissioning Cost Analysis prepared by TLG Services assumes that VY foundations and exterior walls are removed to a nominal depth of three feet below grade. (PSD-Cross-12, section 2, page 11)
103. In 2002 Entergy VY entered into an MOU commitment that the site would “be restored by removal of all structures and, if appropriate, regarding and reseeded the land.” (Dkt 6545 MOU, paragraph 3; entered in docket 7862 as PSD-01)
104. William Sherman, testifying for the Department in docket 6545 defined one of the standards of decommissioning as “returning a site to a condition near its original condition.” (WRC-Cross-25, page 182, line 24; see also WRC-Cross-28, brief of the Department, finding 61)
105. ENVY committed that decommissioning will include “complete site restoration and spent fuel disposal.” (WRC-Cross-27, Entergy VY Proposal For Decision, finding 35 quoting Entergy witness Kansler)
106. New England Coalition on Nuclear Pollution identified ambiguity in the definition of greenfielding, writing in its docket 6545 brief “If the sale and MOU paragraph 3 are approved, therefore, decommissioning will be implemented under state greenfielding standards not yet agreed upon, under state radiological standards ENVY has not yet agreed to comply with, under potential Board review that will lack any sanctions, and with strong incentives for ENVY to minimize the expenditures in order to maximize its gain.” (WRC-Cross-29, finding 12)

¹⁰¹ Discussion of this issue was included in WRC Reply Brief, docket 7440, August 7, 2009. Please see page 17

107. New England Coalition on Nuclear Pollution made note in its docket 6545 reply brief that neither Entergy nor the Department had addressed greenfielding standards in their briefs (WRC-Cross-30, page 3, section C)
108. The Board reviewed decommissioning with regard to the return of any excess funds and said “our primary goal should be to encourage ENVY to conduct the most safe and thorough decommissioning possible, without providing any incentive to cut corners.” (Dkt 6545 Order, 6/13/02, discussion page 37)
109. The Board reviewed greenfielding standards in its docket 6545 Order and recognized “the MOU provides no definition of greenfielding, nor standards by which to measure that status.” The Board then established that “the site will be restored by removal of all structures, and if appropriate, regarding and reseeded the land.” The Board added footnote 168 which referenced the NECNP Brief. (Dkt 6545, Order, 6/13/02, page 83; see also Dkt 6545 Order re: Motion to Alter or Amend, 7/11/02, page 7, footnote 23)
110. ENVY committed to comply with all state requirements regarding site restoration and committed to full site restoration following decommissioning, unless it reuses the site. (Dkt 6545 Order, 6/13/02, page 32, finding 29)
111. The 2007 Decommissioning Cost Analysis provided by Entergy VY in docket 7440 assumed the site structures addressed by the analysis are removed to a nominal depth of three feet below grade. (PSD-Cross-16, page xv; section 2, page 8)
112. In docket 7440 WRC identified the discrepancy in removal of structures contained in the docket 6545 MOU and the 2007 Decommissioning Cost Analysis. (Dkt 7440, Reply Brief of WRC, 8/7/09, page 17, filed as an attachment to this brief)
113. The 2012 Decommissioning Cost Analysis provided by Entergy VY assumes that site structures addressed by the analysis are removed to a nominal depth of three feet below the local grade level whenever possible. (EN-TLG-2, page xv; section 2, page 8)
114. The 2012 Decommissioning Cost Analysis defined site conditions and treatment of underground pipes as follows “A significant amount of the below grade piping is located around the perimeter of the plant. For purposes of the cost estimate, this area was assumed to be excavated to an average depth of four feet to expose the piping, duct banks, any near-surface grounding grid, etc... Steel and transite piping was assumed to be removed. Large non contaminated concrete piping, located at a depth of less than 20 feet, was assumed to be excavated, breached and backfilled. Large non contaminated concrete piping, located at a

depth greater than 20 feet was abandoned in place (with access ways sealed).”
(EN-TLG-2, Section 3, page 15)

115. Concrete piping that is “assumed to be abandoned in-place” includes the circulating water system that moves water from the intake structure, through and around the turbine building, and then to and through the cooling towers and discharge structure. (WRC-Cross-7)
116. Some of the pipes to be abandoned in place have an inside diameter as large as 126 inches, and are big enough for a man to stand in. (TR, 2/12/13, Vol. II, Cloutier, page 8, line 22; WRC-Cross-7)
117. Structures with foundations below three feet that are expected to be left in place include the power-block structures, cooling tower basins, CST pipe chases, intake and discharge structures, stack, and circulating-water, concrete piping. (WRC-Cross-4.) This list may not be complete (TR, 2/12/13, Vol. II, Cloutier, page 6, line 23).
118. The reactor building and turbine building extend to roughly 40 feet to 50 feet below the surface. (TR, 2/21/13, Vol. II, Maret, page 199, line 9; WRC-Cross-5)

Discussion

Entergy VY entered into an agreement to restore the Vermont Yankee site by, among other things, removing all structures. The company now wishes to use a less expensive alternative and only remove structures to three feet below grade. **The Board should view this issue as little more than a simple contract dispute, and should require Entergy VY to remove all structures as originally agreed, and as directed by the Board in its docket 6545 Order approving the sale.**

In 2001, the prior owners of the VY Station commissioned a decommissioning study that was based on removing structures to just three feet below grade. The state of Vermont sought a higher standard, and after a period of negotiation Entergy VY agreed by MOU to a different standard that required removing “all structures.” The MOU was entered into docket 6545 and became an important element in the approval of the sale. Throughout that docket the new standard was referred to as “complete site restoration,” and returning the site to “near its original condition.” The New England Coalition on Nuclear Pollution recognized some level of ambiguity in the record, and through its direct and reply brief urged the Board to establish once and for all a clear and enforceable standard. The Board Order favored a decommissioning and site restoration standard that would be “the most safe and thorough decommissioning possible.” The Board recognized the concerns of NECNP and unequivocally established the standard as the “removal of all structures” in its concluding Order. The Board repeated this position in its Order re: Motions to Alter or Amend.

In 2006 Entergy VY filed an updated Decommissioning Cost Analysis that utilized the obsolete three foot standard. WRC objected to this approach through the docket 7440 process, and briefed our concern at the conclusion. Entergy VY continued to utilize the obsolete standard in its 2012 updated Decommissioning Cost Analysis filed in docket 7862, and has budgeted site restoration based on removal of structures to just three feet, rather than the removal of all structures agreed to by MOU and embraced by the Board in the docket 6545 Order.

The standard that Entergy VY hopes to utilize would leave behind giant foundations extending 40-50 feet deep, as well as pipes and tunnels, some of which are big enough for a man to stand in. The Entergy VY proposal would even leave behind the intake structure and discharge structure, and foundations for the power block structures, all elements that Entergy VY identifies by name as “structures.” It is axiomatic that intake and discharge structures and a power block structure are “structures,” and that they should be removed under the terms of the docket 6545 MOU.

Beyond the simple contract consideration, it is important to understand the disputed structures cover a large area of the property and would likely inhibit redevelopment. Some remaining structures may include non-radiological contaminants that would meet contemporary standards for abandonment, but that might be listed as harmful in the future when redevelopment is proposed. Remaining structures could contain many materials other than concrete, some of which could pose potentially serious environmental impacts. For example asphalt, wood, steel, drywall and many other elements may be part of the structures. This debris may include contaminants such as mercury, lead, arsenic, asbestos and other harmful substances. All of this material should be removed. WRC has encountered this situation multiple times in our very successful Brownfield program, and is concerned the costs for the future redevelopment of the Vermont Yankee site might be imposed on taxpayers through restoration requirements we are not presently aware of. It is not possible to know what standards will exist at the time of redevelopment long in the future, and thus it is important to remove any potentially suspect material at the time of decommissioning and site restoration.

WRC first brought this conflict to the attention of Entergy VY at a public meeting on March 20, 2008, and thoroughly briefed the issue at the conclusion of docket 7440. Throughout that process WRC sought from Entergy VY a list of structures with their depths and removal costs so that a reasonable alternative could be negotiated. Entergy VY declined to provide the requested information and thus WRC has asked the Board to hold Entergy to the “all structures” standard. WRC recognizes that at the time of site restoration some structures may be so deep or otherwise inconsequential that they might better be left in place. However, in the absence of adequate information we have been unable to identify specific structures that could remain in place

without undue negative impacts, and ask that the decommissioning plan, budget, and trust fund assure removal of all structures as committed to in the docket 6545 MOU.¹⁰²

The language in the MOU is clear, and the Board embraced this language in its docket 6545 Order. Entergy agreed to the language and the standard, and accepted responsibility for the removal of all structures. The abandonment in place of multiple structures, pipes, and tunnels will inhibit redevelopment of the site, and could impose costs on future generations of Vermonters. Entergy VY should not be allowed to cling to an obsolete standard that it voluntarily surrendered more than a decade ago. **The Board should require Entergy VY to produce an updated decommissioning Cost Analysis that assures removal of all structures, and should require Entergy VY to budget for this level of agreed upon remediation, and to fully fund decommissioning and site restoration to assure this standard can be met.**

Decommissioning Fund is Inadequate¹⁰³

X) THE BOARD SHOULD RECOGNIZE THE DECOMMISSIONING COST ANALYSIS, THE DECOMMISSIONING BUDGET, AND THE DECOMMISSIONING TRUST FUND ARE INADEQUATE, AND SHOULD REQUIRE ENTERGY VY TO FULLY FUND RADIOLOGICAL DECOMMISSIONING, SPENT FUEL MANAGEMENT, AND COMPLETE SITE RESTORATION

119. TLG estimated the cost to decommissioning the VY site in 2013, including spent fuel management and site restoration as \$1.011 billion. (TR, 2/12/13, Vol. I, Cloutier, page 70, line 1; PSD-Cross-14, page 14; PSD-Cross-WC-15, page 13 which lists the cost as \$1.031 billion)

120. As of March 31, 2013 the balance of the decommissioning trust was \$570 million (TR, 6/20/13, Vol. II, Pecquet, page 29, line 6)

121. The decommissioning trust fund is currently not sufficient to promptly decommission the site. (TR, 2/12/13, Vol. I, Cloutier, page 44, line 9)

122. The costs to decommission the VY Station and restore the site can be divided into three categories: License Termination (radiological decontamination), Spent Fuel Management, and Site Restoration (PWT, 6/29/12, Cloutier page 10, line 1)

¹⁰² Our concerns are further clarified in the docket 7440 WRC Reply Brief beginning on page 17.

¹⁰³ Discussion of this issue was included in WRC Reply Brief, docket 7440, August 7, 2009. Please see page 12, and please see discussion of "Payments to the Decommissioning Fund" on page 15

123. The estimated cost of decommissioning continues to rise much faster than inflation (PWT, 10/22/12, Chernick, page 27, line 18; page 28, Table 8 and Table 9)
124. Between 2001 and 2011/2012 the increase in just radiological decommissioning has been in line with the CPI. (TR, 6/17/13, Vol. II, Cloutier, page 28, line 23)
125. The annual cost to maintain the site in SAFSTOR after the fuel has been moved to dry casks and before the fuel is picked up by DOE is approximately \$7 million. (EN-TLG-2, section 3, pages 21-32; PSD-Cross-14, PSDAR, June 13, 2012, page 15-16, ISFSI operational through 2045 as detailed on page 14; PSD-Cross-WC-15, PSDAR, June 13, 2013, page 15-16, ISFSI operational through 2051, as detailed on page 14)
126. Entergy VY has estimated the cost of site restoration as approximately \$47 million (TR, 6/17/13, Vol. I, Cloutier, page 15, line 12; EN-TLG-2, page xix)
127. ABZ Inc., on behalf of the Department, has estimated the cost of site restoration as ranging from \$94.3 million to \$126.2 million (PSD-WB-03, page 11)
128. The additional cost for site restoration (above the TLG estimate assuming the same scope) is \$80 million (TR, 6/17/13, Vol. II, Brewer/Maret, page 96, line 5; page 99, line 20)
129. The decommissioning cost analysis provided by Entergy VY (EN-TLG-2) does not evaluate whether there is enough money in the decommissioning fund for site restoration that includes removal of all structures regardless of depth. (TR, 6/28/13, Vol I., Cloutier, page 92, line 15)
130. An evaluation of the removal of all structures at Maine Yankee, rather than just removing structures to three feet below grade, would have added approximately \$100 million. (PSD-Cross-WC-20, page 6-6; TR, 7/17/13, Vol. II, Cloutier, page 26, line 8)
131. The additional cost to expand the scope of work and remove all structures at Vermont Yankee is approximately \$100 million (TR, 6/17/13, Vol. II, Brewer and Maret independently, page 100, line 15)
132. The 2001 Entergy VY decommissioning cost analysis estimated annual property tax payments through SAFSTOR of \$1.47 million in 2001 dollars (PSD-Cross-12)¹⁰⁴

¹⁰⁴ Example: Section 3, page 24 shows the SASTOR period beginning in 2002, with spent fuel removed from the site by 2028 (26 years). Appendix D, pages 9-15 show period expenses for this scenario. Property taxes are listed for each of five periods under the heading undistributed costs. The total for all property taxes through the five periods is

133. The 2007 decommissioning cost analysis recognizes that property taxes would most likely be assessed under normal property tax rules, but includes no allowance for post operation tax payments (PSD-Cross 16, section 3, page 19)
134. The 2012 Entergy VY decommissioning estimates include an allowance for post-operation tax payments with the assumption that the property would be assessed as vacant land. (EN-TLG-2, Section 3, page 19)
135. The 2012 Entergy VY decommissioning estimates assume average annual property taxes to be between \$7,614 (scenario 2) and \$16,428 (scenario 5). (EN-TLG-2¹⁰⁵)
136. After the Station ceases operations it will support at least one ISFSI and will function as a long-term spent fuel storage facility that will employ close to 50 workers on a continuous basis. (WRC-Cross-1 and WRC-Cross-2)
137. The land will not be vacant until after the site has been radiologically decommissioned, the spent fuel has been removed, and all structures (including the second ISFSI) have been removed and the site fully restored.
138. The 2012 decommissioning cost analysis includes the cost of a second ISFSI at approximately \$24 million, and 84 casks at approximately \$880,000 each. (TR, 2/12/13, Vol. 1, Cloutier, page 114, line 9; WRC-Cross-3) The total cost for the ISFSI and 84 casks would be approximately \$97,920,000.
139. In total, Entergy VY owns approximately 148 acres. (PWT, 6/29/12, Dodson, page 16, line 14)
140. The current statewide tax rate for non-residential property in the state of Vermont is \$1.59 per \$100 of assessed value. (32 V.S.A., Chapter 135, § 5402(a)(1). Municipal taxes are calculated separately.
141. The Maine Yankee site is limited to storage of spent nuclear fuel, and is not taxed as vacant land. The tax payments at Maine Yankee are at a substantially higher value than vacant land. (TR, 6/28/13, Vol. II, Bradford, page 59, line 16)
142. Following the sale, ENVY bears the risk of all costs in completing decommissioning (Dkt 6545 Order, 6/13/02, page 31, finding 23)
143. Both the qualified and non-qualified decommissioning funds, as well as the decommissioning risks and liabilities, will be transferred to ENVY. ENVY

approximately \$38,376,000 in 2001 dollars. The average property tax for each year can be calculated as approximately \$1,476,000.

¹⁰⁵ Example: Scenario 2 covers 70 years beginning with the plant closing in 2012, and spent fuel off site in 2082. The total property tax expense is listed as \$533,000, or approximately \$7,614 per year (EN-TLG-2, section 6, pages 4-5); Alternatively, in scenario 2 the period of dormancy is between 2013 and 2066 (EN-TLG-2, section 4, page 5), property taxes for this 53 year period are listed as \$30,000 (2a) and \$363,000 (2b), for an average annual period property tax of approximately \$7,415. (EN-TLG-2, appendix C, page 17-18).

would be required to make up any shortfalls, but as proposed, ENVY would also benefit from any excess funds. (Dkt 6545 Order, 6/13/02, page 33, finding 34)

144. ENVY's commitment to make whole any future deficiencies in necessary decommissioning monies-- whether caused by technology changes, lower fund investment returns, or NRC regulatory changes—is a very positive aspect of the proposal before us. (Dkt 6545 Order, 6/13/02, Discussion, page 65-66)
145. In the event that the decommissioning trust was not sufficient at the time of decommissioning, under the proposed sale to ENVY, “ENVY would be responsible for any needed decommissioning contributions and could not pass them on to ratepayers.” (Dkt 6545 Order, 6/13/02, page 63-64 Discussion: Decommissioning)
146. “If the fund proves to be insufficient, ENVY may need to make additional contributions to the fund.” (Dkt 6545, Order re: Petition for Temporary Restraining Order and Preliminary Injunction, 7/26/02, page 10)
147. The possibility of Entergy VY contributing additional revenues to the decommissioning fund was contemplated during the sale docket. The Board specifically recognized such contributions, if made, would not be subject to a split if excess funds remained at the conclusion of decommissioning. (6545 Order, Re: Motion to Alter or Amend, July 11, 2002, page 6 and footnote 21)
148. Guidance offered by UBS Investment research sees “the greatest risk in decommissioning related to concerns by states such as Vermont over the protracted use of SAFSTOR periods to accrue adequate decommissioning funding. Additionally, while plants operating through the tenor of their current licenses are likely okay from a funding perspective (the approval of 20-year license extensions in recent years muted much of the concern following the financial crisis for funding levels on many of these funds); however, if a plant retires prior to the expiration of its operating license (i.e. VY among others), funding levels would appear to pose a more prevalent risk if states force reduced SAFSTOR periods. That said, the NRC is likely to prove an ardent advocate of SAFSTOR in order to ensure adequate funding throughout the decommissioning process.” (CLF-Redirect-2, 2/4/13, page 2)

Discussion

The Decommissioning Cost Analysis offered as EN-TLG-2 does not accurately identify all known costs, nor does it provide an adequate budget for radiological decommissioning, spent fuel management, and site restoration. Even if the analysis provided by Entergy VY were accurate, the trust fund which currently stands at approximately \$570 million is insufficient to cover the projected billion dollar cost of radiological decommissioning, spent fuel management,

and site restoration, and it is quite possible that without augmentation the fund would never gain enough value to fully restore the site.

Entergy VY projects the cost of site restoration as \$47 million, while Department witnesses Warren K. Brewer and Gregory A. Maret estimate site restoration using the same scope of work as proposed by Entergy VY will cost approximately an additional \$80 million. Other parties have presented ample testimony and evidence that the Entergy VY decommissioning cost analysis is flawed, and that the fund is not now and may never be sufficient. WRC urges the Board to carefully consider that evidence and testimony.

WRC will not address all of the shortcomings in the Entergy VY decommissioning analysis, but will instead highlight two areas in which Entergy VY has failed to properly calculate costs. Specifically, WRC addresses a failure to calculate the cost of removing all structures as agreed to in the docket 6545 MOU, and a dramatic under calculation of property taxes.

Removal of Structures

In docket 6545 Entergy VY agreed to meet a site restoration standard that includes the removal of all structures, but Entergy VY has presented a decommissioning plan in this docket that only budgets for removal of structures to three feet below grade.¹⁰⁶ If the Board holds Entergy VY to the agreed upon standard and orders the removal all structures, the additional cost for expanding the scope of site restoration will be roughly \$100 million. WRC urges the Board to recognize the “all structures” standard, and to require the full funding of the decommissioning trust to cover this expense.

Property Taxes

Vermont calculates property taxes at the state and local level separately. Since 2004 Vermont Yankee has paid the state property tax based on megawatts of production. When the Station does not produce electricity no tax is due. When the Station ceases operation the state level tax will most likely revert to a tax based on traditional property assessment.

The 2001 Decommissioning Cost Analysis recognized property taxes as a likely expense, and estimated the annual taxes for SAFSTOR scenarios between \$1.24 million and \$1.47 million in 2001 dollars. The 2007 Decommissioning Cost Analysis recognized that property taxes would most likely be due after shutdown, but nevertheless used a zero value for that expense. WRC raised the issue of under calculating of property taxes in docket 7440 which concluded with

¹⁰⁶ The requirement to remove all structures is discussed in detail elsewhere in this brief. The cost of removal is discussed in this section.

briefs in 2009.¹⁰⁷ The 2012 Decommissioning Cost Analysis prepared subsequent to the docket 7440 arguments addressed the under calculation of property taxes by assuming the site would be taxed as “vacant land,” and included maximum average annual tax payments of \$16,428.

It is inconceivable that a developed 148 acre industrial site with access to road, water, rail transmission level electricity, and employing close to 50 people on a permanent year-round basis, would be taxed as vacant land. It is unclear what the actual tax rate would be following cessation of operations, but taxing the site as “vacant land” is clearly unrealistic. A more realistic tax rate was used in the 2001 analysis, which indicates that TLG Services and Entergy VY understand how to approximate property taxes, and they should have offered a more reasonable estimate in the 2012 analysis.¹⁰⁸

Entergy VY could have calculated a better approximation of the post-shutdown property tax based on how shuttered nuclear plants in other jurisdictions are taxed, but it did not do so and offered no testimony or evidence in support of the “vacant land” standard. Entergy VY has used a tax rate that is not supportable, and the effect of this tax rate is to substantially under calculate the cost of decommissioning and ongoing management of spent nuclear fuel.

In docket 7440 WRC offered an approximation of a partial property tax by calculating the cost of the new construction associated with the required second ISFSI. In docket 7862 the evidence shows a second ISFSI with 84 casks would require construction costs of roughly \$97,920,000. The current unadjusted statewide property tax rate is .0159%. If the new construction alone were to be taxed at the standard state-wide rate, it would yield an annual property tax of approximately \$1.55 million. This calculation does not include any of the surrounding industrial property, nor does it include the local property tax which is assessed separately.¹⁰⁹

The failure to account for realistic property taxes is not trivial. The difference between the property taxes Entergy VY has included in its 2012 Decommissioning Cost Analysis and a more likely annual tax is at least \$1.5 million based on either the assessment of new construction or the rate used in the 2001 analysis. Entergy VY lists a total operating cost for complete site management and spent fuel management through SAFSTOR of approximately \$7 million

¹⁰⁷ Dkt 7440 Reply Brief of WRC, 8/7/09, page 12

¹⁰⁸ The Decommissioning Cost Analysis offered in this docket by Entergy VY was prepared by TLG Services, a subsidiary of Entergy Corporation. TLG Services prepared the 2001 Decommissioning Cost Analysis for VYNPC before Entergy VY purchased the site, and has prepared each subsequent Decommissioning Cost Analysis.

¹⁰⁹ After the record in this docket closed the Town of Vernon set its 2014 municipal tax rate at \$0.4326 per \$100 of assessed value (Brattleboro Reformer, Saturday, August 10, 2013, retrieved from web site: http://www.reformer.com/localnews/ci_23833151/vernon-town-taxes-down-but-rising-ed-costs)

annually. An allowance for a reasonably expected property tax assessment would require an additional \$1.5 million, which would effectively increase the annual operating cost by about 21%. WRC cannot know for certain what the actual property taxes for state and local assessments will be following cessation of operations, however, the rate used by Entergy VY is nonsensical, and Entergy VY has offered no testimony or evidence to support its number. WRC is particularly dismayed at this under calculation because it is of such great local and state-wide importance, which is why we raised the issue with vigor in docket 7440.

The under calculation is especially troubling because if the Station is placed in SAFSTOR the trust fund must cover all costs of on-going operations including realistic property taxes, and must exceed inflation sufficiently so that growth will eventually allow the decommissioning of the Station with full site restoration. The under calculation of expenses, and especially the dramatic under calculation of on-going expenses such as property taxes, gives us reason to doubt the trust fund will ever be sufficient to fully restore the site.

WRC Urges the Board to recognize that annual property taxes paid to the state of Vermont and the municipality will be at least \$1.5 million, and to factor this calculation into the cost of decommissioning, spent fuel management, and site restoration.

WRC urges the Board to carefully review all the costs of decommissioning, including the costs to remove all structures regardless of depth, reasonable property taxes, and all other expenses identified by parties to this proceeding, and to require Entergy VY to fully fund the decommissioning trust such that all potential contingencies are addressed. WRC urges the Board to reduce long-term uncertainty by requiring the prompt decommissioning and restoration of the site upon closure, and urges the Board to require that ENVY, ENO, and Entergy Corporation be held fully responsible for these costs.

Segregated Funds

XI) THE BOARD SHOULD REQUIRE ENTERGY VY TO ESTABLISH SEPARATE AND ADEQUATE FUNDS TO COVER THE COSTS OF PROMPT RADIOLOGICAL DECOMMISSIONING, SPENT FUEL MANAGEMENT, AND SITE RESTORATION

149. Entergy VY maintains a single comingled fund to cover radiological decommissioning and license termination costs, spent fuel management, and site restoration.

150. If completion of decommissioning is delayed beyond March 31, 2022, any excess funds remaining in the decommissioning trust fund shall be shared between ENVY and electric consumers. (Dkt 6545 MOU, paragraph 3, filed in docket 7082 as PSD-01)¹¹⁰
151. The NRC's view is that the fund is dedicated first and foremost to radiological license termination. Only then could any surplus be applied to those other two categories. (TR, 2/12/13, Vol. II, Cloutier, page 17, line 11; TR, 6/17/13, Vol. I, Cloutier, page 76, line 5)
152. The NRC does not regulate site restoration at all. (TR, 2/12/13, Vol. II, Cloutier, page 18, line 3)
153. The NRC has recommended that trust funds that are designed to cover radiological decommissioning, spent fuel management, and site restoration should have segregated sub accounts. (TR, 2/21/13, Vol. II, Brewer, page 134, line 12)
154. It would be easier to fund and manage concurrent radiological decommissioning, spent fuel management, and site restoration activities if there were separate and dedicated funds for each type of activity. (TR, 6/17/13, Vol. I, Cloutier, page 79, line 6; page 80, line 18)
155. Other nuclear licensees have maintained sub accounts or separation in their trust agreements for different activities. (TR, 6/17/13, Vol. I, Cloutier, page 79, line 15)

Discussion

The existing decommissioning fund was established with ratepayer contributions to cover the costs of radiological decommissioning, spent fuel management, and site restoration. Radiological decommissioning is within the exclusive jurisdiction of the NRC, and spent fuel management is the responsibility of DOE. Neither NRC or DOE regulate site restoration to the Vermont standards agreed to by Entergy VY in docket 6545.

The docket 6545 MOU provides that if completion of decommissioning is delayed beyond March 31, 2022 there will be a sharing of any excess trust funds after the completion of radiological decommissioning, but before the completion of spent fuel management and site restoration, assuming certain conditions are met. It is not clear how prospective costs associated with site restoration will be handled. There is also a possibility that Entergy VY (or VYNPC) might delay decommissioning to allow the fund to grow solely for the purpose of generating a sharable surplus.

¹¹⁰ This condition has been modified by the Board in subsequent Orders.

Any delay in site restoration will delay the point at which the site can be returned to productive economic use, and would have a negative effect on the orderly development of the region, and the local, regional, and state economies.

In this docket Entergy VY has argued that Vermont can only regulate site restoration, and may not consider any element of radiological decommissioning or spent fuel management. According to this line of argument advanced by Entergy VY, the Board is preempted from considering whether the fund is sufficient for radiological decommissioning and spent fuel management, but must assume that it is regardless of the evidence presented. WRC disagrees with this argument because Entergy VY has voluntarily maintained a co-mingled fund, and in doing so it has invited Board authority.

Considerable uncertainty exists regarding the sufficiency of the decommissioning trust to cover the cost of radiological decommissioning and spent fuel management. And there is considerable doubt whether it will be sufficient to cover site restoration. Likewise, there is testimony in the record that the fund could grow at a lower rate than the costs of radiological decommissioning, spent fuel management, and site restoration, which could cause the fund to become depleted.

It would be simpler and more efficient to manage the fund and to calculate any excess funds for the purpose of the sharing clause if the funds were segregated for specific uses including radiological decommissioning, spent fuel management, and site restoration. Likewise, segregated funds would eliminate much of the conflict over consideration of fund adequacy within the context of the Entergy VY preemption argument.

WRC urges the Board to require segregated trust funds that could retain the existing fund balance for radiological decommissioning and spent fuel management, and require sufficient additional contributions from Entergy VY to cover any and all costs associated with complete site restoration. Since the funds proposed to be held for radiological decommissioning and spent fuel management have been contributed by ratepayers, any excess funds should be shared with ratepayers through the mechanism established in docket 6545. Since any funds in the proposed new segregated site restoration fund will have been contributed by Entergy VY, any excess site restoration funds could be returned to Entergy VY without a sharing provision. In the event that any of the segregated funds are insufficient to cover the costs of prompt decommissioning and complete site restoration at the time of shutdown, ENVY, ENO, and Entergy Corporation should be held responsible for making the insufficient fund(s) whole without the use of SAFSTOR.

SUMMARY AND CONCLUSION:

The issues before the Board in this docket have been extensively litigated, first in docket 7440 beginning in 2008, and now in docket 7862 which has already spanned well over a year through a complex and demanding bifurcated hearing process. The record is deep. WRC has endeavored to highlight selected issues of importance, and solutions that will help the Board to establish a balance that will serve the orderly development of the region and the general good of the State of Vermont.

Windham Regional Commission takes a long view of the decisions the Board will make. We neither support nor oppose continued operation, but recognize that whatever the outcome, the decisions of the Board will have a lasting effect on regional and state land use and upon regional and state economies.

WRC is appearing *pro se* on behalf of our municipal and individual constituencies. We ask the Board to carefully review and define the underlying structures of the case, and to clarify the overarching legal issues in language that can be easily understood by the lay public.

Specifically, we ask the Board to clarify whether Entergy VY is seeking a new or amended CPG, or a simple renewal of the CPG's it already has. There are numerous complex issues in play that define the authorizations in-hand and being sought, and they should be fully clarified within a final Order that leaves no room for ambiguity.

The Board should fully address the federal preemption arguments that Entergy VY has advanced, and should reject its expansive claims as overbroad. The issue of federal preemption has been at the core of nearly every issue litigated in this docket, and is likely to dominate the regulatory landscape as Vermont Yankee moves through any period of continued operation, DECON or SAFSTOR, and final site restoration. The Board should once again clarify its position, and should do so in clear terms that are consistent with federal law.

The Board should address the Commerce Clause claims that Entergy VY has made, and should confirm that the state of Vermont cannot compel Entergy VY to provide a beneficial PPA or RSA that disadvantages consumers in another state, but can command sufficient value through other mechanisms to serve the general good. Since this petition is a follow-on to an existing petition, the Board should recognize the value offered in the prior CPG's and Orders, and should require comparable value going forward.

The Board should review each issue raised by the various parties to this docket and compile a balanced decision that first determines what (if any) conditions would serve the general good, and only then determine if Entergy VY is a "fair partner." Whether or not Entergy VY is offered

a CPG, the identified conditions should be applied retroactively to that time period through which the Station has operated without an authorizing CPG.

WRC does not take a position on whether Entergy VY is a “fair partner.” Nor have we addressed many of the other issues raised by the other parties. WRC is instead focused on issues related to ongoing regional interests, and most specifically issues related to the distant effects of spent fuel management, decommissioning, and site restoration. We ask that whether or not a CPG is granted, the Board consider the following:

1. Recognize the value of the Station to the region and state while it is operating, and that the general good would be best served if, upon cessation of operations, the Station is promptly decommissioned with complete site restoration so that the site can be reused and serve the orderly development of the region and state.
2. Require that ENVY, ENO, and Entergy Corporation be held jointly and severally responsible for all costs associated with operations, decommissioning, spent fuel management, and site restoration.
3. Determine the value of the PPA’s, RSA’s, and all other commitments made by Entergy VY in prior dockets, and require comparable value going forward.
4. Recognize the VY Station has been operated reliably but that future reliability is questionable, which could have a significant effect on many important issues including the adequacy of the decommissioning fund.
5. Require Entergy VY to identify a suitable location for a second ISFSI.
6. Require Entergy VY to consider shifting spent fuel from wet to dry storage, or alternatively require a payment-in-kind into the decommissioning trust as if fuel had been moved. Additionally, the Board should require that Entergy VY provide funding to the decommissioning trust to cover all the costs of managing spent fuel derived from any period of extended operations after March 21, 2012.
7. Require specific actions from Entergy VY to comply with its commitment to use its “commercial best efforts” to have the spent fuel removed from Vermont.
8. Require the prompt and complete decommissioning and site restoration of the VY Station after shutdown (whenever that occurs) and prohibit the use of SAFSTOR. The best way to accomplish this is to ensure the decommissioning trust is adequate.
9. Require Entergy VY to meet its MOU commitment to remove “all structures” as part of site restoration, rather than just removing structures to three feet below grade.
10. Recognize the Decommissioning Cost Analysis prepared by TLG is inadequate. The Board should specifically recognize the Decommissioning Cost Analysis and Decommissioning Trust Fund do not adequately account for the costs of removing all structures, reasonable property taxes, and additional elements identified by other parties.

The Board should require that Entergy VY fully fund the decommissioning trust to cover all potential costs associated with radiological decommissioning, spent fuel management, and complete site restoration without the use of SAFSTOR.

11. Require Entergy VY to establish separate and adequate funds to cover radiological decommissioning, spent fuel management, and site restoration, and require substantial additional payments into those funds.

Vermont Yankee is an important economic engine within the Windham region. Although WRC does not support or oppose continued operation, we are greatly concerned about the economic and social issues underlying this docket, both while the Station is operating and following cessation of operations.

We ask the Board to give weight to all of the recommendations in this brief as those of a typical intervener, and to give them added "due consideration" under Section 248(b)(1) as the recommendation of the Regional Planning Commission.

Dated at Brattleboro, Vermont this 16th day of August, 2013

Windham Regional Commission

By: 

Christopher Campany, AICP
Executive Director