

STATE OF VERMONT
PUBLIC SERVICE BOARD

Petition of Entergy Nuclear Vermont Yankee,)
LLC, and Entergy Nuclear Operations, Inc., for a)
certificate of public good, pursuant to 30 V.S.A.)
§ 248 and 10 V.S.A. § 6522, authorizing the)
construction of a second independent spent fuel) Docket No. 8300
storage installation storage pad and related)
improvements, including installation of a new)
diesel generator with an electrical rating of)
approximately 200 kW, at the Vermont Yankee)
Nuclear Power Station in the Town of Vernon,)
Vermont)

PREFILED REBUTTAL TESTIMONY AND EXHIBITS OF T. MICHAEL TWOMEY

Mr. Twomey's rebuttal testimony explains why Entergy VY has demonstrated that adequate financial assurances exist for the management of spent fuel at the Vermont Yankee Nuclear Power Station until the fuel is removed by the Department of Energy for permanent disposal, in accordance with 10 V.S.A. § 6522(b)(1). Mr. Twomey responds to the prefiled testimony of Christopher Recchia on behalf of the Department of Public Service and Chris Campany on behalf of the Windham Regional Commission. It also provides a minor amendment to his June 30, 2014 prefiled testimony.

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PREFILED TESTIMONY AND EXHIBITS OF T. MICHAEL TWOMEY

1 Q1. Please state your name, occupation and business address.

2 A1. My name is T. Michael Twomey. I am the Vice President, External Affairs, for Entergy
3 Wholesale Commodities, 440 Hamilton Avenue, White Plains, New York. I am testifying
4 on behalf of Entergy Nuclear Operations, Inc. (“ENO”) and Entergy Nuclear Vermont
5 Yankee, LLC (“ENVY”, ENVY and ENO are collectively referred to as “Entergy VY”)
6 in the same capacity in which I did so in my May 11, 2015 supplemental prefiled
7 testimony.

8

9 Q2. Did you previously submit prefiled testimony in this docket?

10 A2. Yes. I submitted prefiled testimony on June 30, 2014 and supplemental prefiled
11 testimony on May 11, 2015.

12

13 Q3. What is the purpose of your rebuttal testimony?

1 A3. My testimony explains why the Board should find that adequate financial assurance
2 exists for the management of spent fuel at the Vermont Yankee Nuclear Power Station
3 (“VY Station”) in accordance with 10 V.S.A. § 6522(b)(1). I also will address some of
4 the concerns raised in the prefiled testimony submitted by Mr. Company on behalf of
5 Windham Regional Commission (“WRC”) and provide a minor amendment to my June
6 30, 2014 prefiled testimony.

7
8 Q4. How does Entergy VY plan to provide financial assurance for the management of spent
9 fuel at the VY Station?

10 A4. As stated in my supplemental prefiled testimony dated May 11, 2015, Entergy VY
11 intends to pay for spent fuel management costs in two ways. First, costs for the
12 construction of the second Independent Spent Fuel Storage Installation (“ISFSI”) pad,
13 procurement of dry storage systems and transfer of the fuel from the spent fuel pool to the
14 ISFSI will be funded by two revolving credit facilities totaling approximately \$145
15 million. Entergy VY plans to repay borrowings on these credit facilities with funds
16 recovered from the U.S. Department of Energy (“DOE”) for breach of its contract to
17 remove spent nuclear fuel from the VY Station. Second, Entergy VY plans to fund
18 operational spent fuel management activities from the nuclear decommissioning trust
19 (“NDT”). The Nuclear Regulatory Commission (“NRC”) on June 23, 2015 issued an
20 exemption from its regulations, authorizing the use of VY NDT funds for operational
21 spent fuel management activities. As the Department of Public Service notes in the
22 prefiled testimony of Christopher Recchia, the State and other parties have filed an appeal

1 in the U.S. Court of Appeals of the D.C. Circuit challenging the NRC's issuance of that
2 exemption.

3
4 Q5. Do you agree with the Department of Public Service's conclusion that there is adequate
5 financial assurance for management of spent nuclear fuel?

6 A5. Yes. I agree with Mr. Recchia that whether or not NDT funds can be used to pay for
7 operational spent fuel management activities, adequate financial assurances are provided
8 by the combination of (1) Entergy VY's \$145 million in credit facilities to fund the
9 construction of the second ISFSI pad and transfer of the spent nuclear fuel from the spent
10 fuel pool to dry cask storage, (2) Entergy VY's ability to recover spent fuel management
11 costs from the DOE, as demonstrated by the judgment it received that provided for its
12 recovery of nearly \$41 million of costs incurred through April 2008, and (3) the NRC's
13 requirement that Entergy VY annually provide a report on the status of funding for spent
14 fuel management activities.¹ I should note that the NRC's standards for evaluating the
15 ability to cover spent fuel management costs are quite conservative because they do not
16 take into account any recovery of these costs from DOE.

17
18 Q6. Turning now to the prefiled testimony of Mr. Company, WRC expresses concern that the
19 use of decommissioning trust funds to pay for spent fuel management costs may delay the
20 commencement of decommissioning. How do you respond?

¹ Because Vermont Yankee has entered into decommissioning, the applicable regulation is now 10 C.F.R. § 50.82(a)(8)(vii) rather than the provision cited by Mr. Recchia, 10 C.F.R. § 50.54(bb).

1 A6. WRC’s concern is misplaced. Initially, Mr. Campany proceeds from the assumption that
2 “Entergy VY apparently intends to pay for these costs [for “a pair of spent fuel storage
3 pads”] from the Decommissioning Trust Fund and the Site Restoration Fund and then
4 hope for reimbursement from DOE, which is not assured” (p. 12: 9-11). As I explained,
5 however, including in my supplemental prefiled testimony, Entergy VY plans to fund the
6 construction of the second ISFSI pad, procurement of dry storage systems and transfer of
7 the fuel from the spent fuel pool to the ISFSI with two revolving credit facilities totaling
8 approximately \$145 million, rather than from the NDT. Moreover, Entergy VY’s ability
9 to recover ordinary spent fuel management costs for DOE has now been proven. While
10 Entergy VY was unable to recover certain costs such as the Clean Energy Development
11 Fund payments and a flood study that the U.S. Court of Appeals for the Federal Circuit
12 found were subject to a preemption defense,² those costs are not recurring and will not be
13 a part of Entergy VY’s future claims against DOE.

14
15 Q7. Mr. Campany also recommends that the Board should require consideration of a single
16 consolidated pad far removed from the reactor complex, and should hold ENVY, ENO
17 and Entergy Corporation jointly responsible for all costs associated with constructing that
18 pad and moving fuel from the original pad to it, rather than imposing those costs on the
19 Decommissioning Trust Fund. What is your response to Mr. Campany’s
20 recommendation?

² *Vermont Yankee Nuclear Pwr. Corp. v. Entergy Nuclear Vermont Yankee, LLC*, 683 F. 3d 1330, 1346-49 (Fed. Cir. 2012).

1 A7. The prefiled rebuttal testimony of George Thomas explains why a single consolidated
2 pad away from the reactor complex is not an appropriate alternative, including the
3 important fact that it would significantly delay the transfer of spent fuel from the spent
4 fuel pool to dry cask storage. Mr. Thomas also explains the concerns of Entergy VY's
5 project manager for the first ISFSI that led him to consider a single consolidated pad
6 elsewhere on the site and why those concerns are no longer determinative.

7 In response to Mr. Campany's recommendation regarding funding, requiring
8 Entergy Corporation or ENO to pay for the costs of associated with a consolidated ISFSI
9 pad away from the reactor complex would be contrary to the terms established by the
10 Board when it approved Entergy VY's acquisition of Vermont Yankee. In Docket 6545,
11 the Board approved the sale of the VY Station to ENVY – not ENO or Entergy
12 Corporation. The structure of Entergy Corporation and its affiliates, including ENVY,
13 was directly addressed by the Board in Docket 6545. The Board's order approving the
14 acquisition clearly stated that ENVY was a limited liability company. *Investigation into*
15 *General Order No. 45*, Docket 6545, Order of 6/13/02 at 110. The only financial
16 obligation imposed by the Board on Entergy Corporation was a \$60 million guarantee, a
17 sum sufficient to operate the VY Station for a period of six months that could be canceled
18 when ENVY obtained access to at least twenty percent of the NDT.

19
20 Q8. Mr. Campany also asserts that Entergy VY “deferr[ed] costs for a second consolidated
21 pad to the post-operations period such that those costs would be assigned to the
22 Decommissioning Trust Fund” (p. 13:5-6). How do you respond to that assertion?

1 A8. I strongly disagree with Mr. Company.

2 The Board's April 26, 2006 order approving construction of the first ISFSI in
3 Docket 7082 made clear that another ISFSI would be required in the future to hold all of
4 Vermont Yankee's spent nuclear fuel: "Entergy VY now proposes to install a dry cask
5 storage facility at Vermont Yankee to temporarily store a portion of the spent nuclear fuel
6 generated by Vermont Yankee." Docket 7082, Order of 4/26/06 at 17, emphasis added).
7 WRC was a party in that proceeding and could have taken the position that this additional
8 ISFSI should be funded from revenues received from operations before the plant shut
9 down. I do not find any evidence in the Board's order that WRC did so.

10 Indeed, the Board made clear in its April 26, 2006 Docket 7082 order that NDT
11 funds would be used for spent fuel management immediately upon plant closure. In
12 determining whether adequate financial assurance existed for spent fuel management for
13 as long as was reasonably expected to be necessary, including through decommissioning,
14 as required by 10 V.S.A. § 6522(b)(1), the Board concluded that "from the period after
15 the plant's closure at which time Vermont Yankee can access the full decommissioning
16 funds, adequate financial assurance exists for the management of spent fuel at Vermont
17 Yankee." Docket 7082, Order of 4/26/06 at 70. In reaching that conclusion, the Board
18 did not cite or rely on any source of funding for spent fuel management other than the
19 NDT after the plant's closure. Rather, it found that dry fuel storage costs "will be borne
20 by Entergy VY, and paid out of operating revenues until plant shutdown. After closure,
21 Entergy VY expects to obtain access to decommissioning funds to cover its costs."
22 Docket 7082, Order of 4/26/06 at 37. The Board also found that "if the decommissioning

1 funds were insufficient to complete immediate decommissioning upon plant closure,
2 Vermont Yankee could be placed in SAFSTOR to allow the funds to increase in value
3 until sufficient funds exist...” Docket 7082, Order of 4/26/06 at 69.

4 The Board’s statements concerning the use of NDT funds for spent fuel
5 management did not exclude the costs of the additional ISFSI that it recognized would
6 have to be built later. Nevertheless, as I have explained, Entergy VY is not using NDT
7 funds for the construction of the second ISFSI pad, procurement of dry storage systems
8 and transfer of the fuel from the spent fuel pool to the ISFSI, but rather is funding these
9 costs with two revolving credit facilities totaling approximately \$145 million.

10
11 Q9. Mr. Campany asserts that “Entergy VY elected to sell property in the area known as the
12 “North 40’ to VELCO for a switchyard, raising capital for itself, but potentially rendering
13 that area unsuitable for a consolidated ISFSI.” How do you respond to that assertion?

14 A9. I strongly disagree with it. ENVY sold the property at issue to enable construction of the
15 Vernon Switchyard, which the Board determined in Docket 7373 was needed for
16 purposes of maintaining the reliability of the electric system. WRC was a party to that
17 proceeding and, as far as I am able to determine from the Board’s order in that case, did
18 not oppose the construction of the Vernon Substation, did not dispute that it was needed
19 for reliability purposes, did not contend that its construction would interfere with the
20 installation of a consolidated ISFSI in the same location, did not assert that the Vernon
21 Substation’s location and construction were contrary to the public good, and did not argue

1 that the proceeds from the sale should be used by ENVY to pre-fund the construction of
2 another ISFSI in the future.

3

4 Q10. Do you have any amendment to make to your previous testimony?

5 A10. Yes. In my June 30, 2014 prefiled testimony, I indicated that Entergy VY's current plan
6 for transferring all spent fuel from the spent fuel pool to dry cask storage involved two
7 loading campaigns planned in in 2019 and 2020. As discussed in George Thomas'
8 rebuttal testimony, Entergy VY is now considering modifying the fuel transfer schedule
9 to begin transferring fuel to the ISFSI as early as 2017.

10

11 Q11. Does this conclude your testimony?

12 A11. Yes.