STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 6545

Investigation into General Order No. 45 Notice filed by Vermont Yankee Nuclear Power Corporation re: proposed sale of Vermont Yankee Nuclear Power Station to Entergy Nuclear Vermont Yankee, LLC, and related transactions	)))))	Schedule of Hearings *See Appendix A*

Order entered: 6/13/2002

PRESENT: Michael H. Dworkin, Board Chairman
David C. Coen, Board Member
John D. Burke, Board Member

APPEARANCES: *See Appendix B*

I. Introduction and Overview 3
A. Summary 3
B. Overview 5
II. Background 12
A. The Status Quo 12
B. The Proposal Before the Board 14
C. The Option That No Party Proposed: Prompt Closure 15
III. Concerns of the Parties and the Public 16
A. The Parties 16
B. The Public 18
IV. Criteria for Our Decision 19
A. Introduction 19
B. Factual Issues 20
C. Vermont Statutes 21
V. Analysis of Proposed Transactions 22
A. The Proposed Transactions 23
B. Merits of the Proposals, if Vermont Yankee's Operating Characteristics and Risks are Similar to the Recent Past 25
C. Merits of the Proposals if Vermont Yankee's Operating Characteristics and Risks Are Different from the Past 59
D. Summary of Economic Analyses 75
E. Non-Financial Elements of Sale 78
VI. Requested Rulings on Prudence, Use, and Economic Usefulness 87
A. Introduction 87

B. The Long-Standing Criterion 90
C. Board Authority to Issue Requested Findings 93
D. The Rate-Guarantee Findings Requested by Petitioners 98
VII. Should ENVY and ENO Receive a Certificate of Public Good? 104
A. Introduction 104
B. Service In-State and Service Territories 105
C. Technical Qualifications and Structure 108
D. Financial Assurances 113
E. Safety 121
F. Limited Term Certificate of Public Good 130
VIII. Use and Treatment of Sales Proceeds 132
A. Proposed Use of Funds by Central Vermont and Green Mountain 132
B. CLF's Proposed Renewable Energy Fund 137
C. Green Mountain and Central Vermont Accounting Orders 141
D. Vermont Yankee Nuclear Power Corporation's Pledge 144
IX. Discussion of Concerns Expressed by the Board in Docket 6300 and by the Public in This Case 144
A. Concerns Expressed in Docket 6300 144
B. Concerns Expressed by the Public 148
X. Conclusion 156
XI. Order 157
Appendix A — Schedule of Hearings i
Appendix B — Parties ii
Appendix C — Procedural History iv
Appendix D — Modifications to Memorandum of Understanding ix

I. Introduction and Overview

A. Summary

Sixteen months ago, this Board rejected a request to sell the Vermont Yankee Nuclear Power Station ("Vermont Yankee") to AmerGen Energy Company, L.L.C. ("AmerGen"). We concluded that the proposal could not "as a matter of law, be found to promote the general good."[1] Today, we apply that same standard and substantially approve a much improved proposal to sell Vermont Yankee, this time to Entergy Nuclear Vermont Yankee, LLC ("ENVY").[2] The major components of the transaction are the sale of Vermont Yankee for a fixed price coupled with a commitment by the current owners of VYNPC to purchase power from Vermont Yankee for the remaining term of its license (*i.e.*, through 2012).

In today's Order, we approve the sale of Vermont Yankee and the associated commitment for the present owners to purchase 510 MW of power from the station until 2012.[3] We do so for two primary reasons. First, we conclude that ENVY and ENO will be likely to operate the plant as well as, or better than, the current owners. Second, we find that, under most reasonably foreseeable scenarios, the transactions are highly likely to produce an economic benefit for Vermont ratepayers. Together, these findings lead us to conclude that the sale will promote the general good.

The safe operation of Vermont Yankee is a critical concern for residents of Vermont. ENVY and ENO (on their own and through the ability to tap the broader resources of their

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1. *Investigation into General Order No. 45 Notice filed by Vermont Yankee Nuclear Power Corporation re: proposed sale of Vermont Yankee Nuclear Power Station and related transactions*, Docket 6300, Order of 2/14/01 at 2.

2. Vermont Yankee Nuclear Power Corporation ("VYNPC"), Central Vermont Public Service Corporation ("Central Vermont") and Green Mountain Power Corporation ("Green Mountain") have now requested that the Vermont Public Service Board ("Board") approve the sale of Vermont Yankee to ENVY. Central Vermont and Green Mountain own (between them) 55 percent of the shares in VYNPC, the company that in turn owns Vermont Yankee. These are the only owners selling electricity at retail in Vermont. In this Order, we refer to VYNPC, Central Vermont, Green Mountain, ENVY, and Entergy Nuclear Operations, Inc. ("ENO") (the company that will operate Vermont Yankee following the sale) collectively as the "Petitioners." We also refer to ENVY and ENO jointly as "Entergy," whereas we refer to their parent corporation as the Entergy Corporation.

The Vermont Department of Public Service ("Department") (the entity charged by law with representing the interests of the people of the state) also recommends that we authorize the sale of Vermont Yankee. The Petitioners and the Department entered into a Memorandum of Understanding ("MOU") in which the Department agrees to support the sale, upon certain conditions. Exh. VY-42.

3. Exh. VY-1 at exh. E, Schedule B. The actual power purchase amounts are expressed in terms of energy purchases (rather than capacity); they vary monthly.

parent, Entergy Corporation) have expertise in the ownership and safe operation of nuclear facilities and the ability to access greater resources than the present owners. These capabilities persuade us that Vermont Yankee will continue to be a safe source of power.

Green Mountain and Central Vermont will continue to receive power from Vermont Yankee following the sale, but the costs they pay for that power will be lower than their current commitments. Therefore, the sale will reduce the electric rates for Central Vermont and Green Mountain customers over the next ten years below the levels consumers would face if Green Mountain and Central Vermont continued to own and operate Vermont Yankee.

In addition, the sale has the advantage of transferring to ENVY significant financial risks associated with continued ownership of Vermont Yankee. If the costs of operation increase (due to equipment failures, increased security or other reasons), ENVY will bear the additional expenses; Green Mountain, Central Vermont, and Vermont ratepayers will be shielded. Similarly, increases in the contributions needed to ensure decommissioning upon shutdown will not be passed on to Vermont consumers.

The sale also provides significantly greater economic benefits to Vermont ratepayers than would an earlier closure of Vermont Yankee. Under all scenarios, an immediate shutdown of Vermont Yankee would increase costs, yet would still leave radioactive spent fuel on-site, perhaps for decades.

Our approval of the proposal before us is not absolute. We find that the proposal before us will promote the general good only if modified in the following four ways:

- Green Mountain and Central Vermont shall, in April 2003, submit updated costs of service adequate to determine the propriety of a rate decrease.
- If VYNPC receives Nuclear Electric Insurance Limited disbursements, access to excess funds in the Spent Fuel Disposal Trust, or claims related to the Department of Energy's defaults under the DOE Standard Contract under Section 2.2(i) of the Sale Agreement**,** Green Mountain and Central Vermont shall submit a plan for using their share of those funds to benefit ratepayers. The plan shall consider the application of a significant portion of these benefits towards the development and use of renewable resources.
- We do not accept Paragraph 3 of the MOU, which provides that ENVY will share any excess decommissioning funds with ratepayers. Instead, all money remaining in the fund shall be returned to ratepayers, consistent with the present Decommissioning Trust.

- We do not accept Paragraph 16 of the MOU, in which the Petitioners and the Department request that the Board treat costs associated with the sale and power purchased from ENVY *as if* they were prudent and used-and-useful, thus essentially waiving long-standing regulatory principles designed to protect ratepayers. We are convinced that, among the three options now available to Vermont Yankee's Sponsors (continued ownership, early closure, or sale to ENVY), the sale is the best choice and, therefore, the prudent one. Also, as a factual matter, it seems unlikely that a future Board would be presented with facts that could persuade it to order a substantial cost disallowance arising from the proposed transactions. To the contrary, the evidence presented to the Board in the current record suggests that the transactions are likely to be considered both used and economically useful. However, the Petitioners have not here persuaded us that we should now depart from consistent and long-standing regulatory practices and provide an unprecedented "before-the-fact" guarantee of future rate recovery.

B. Overview

Vermont Yankee is one of 103 operating nuclear power plants in the United States and is the largest generating station within the state of Vermont. Since it began operating in 1972, Vermont Yankee has been providing almost one-third of Vermont's electricity. To date, it has proven to be a reliable source of power, with one of the best operating records of boiling water reactors in the country over the past years.[4]

At the same time, Vermont Yankee has been the source of much public controversy; most of it concerning the concept of nuclear power in general, and some of it specifically directed at the plant and its current management. Many members of the public who commented oppose the continued operation of Vermont Yankee. These public commenters cite concerns about continued on-site storage and subsequent disposal of high-level radioactive waste. They also point to the possibility of terrorist actions directed at Vermont Yankee. In sharp contrast, a smaller, but significant number of other public commenters urge us to approve the sale, praising Vermont Yankee for its safe operation, its actions as a good corporate citizen, and its role as a major employer in southeastern Vermont. Commenters supporting the sale also argued that ENVY will maintain Vermont Yankee as a favorable source of power for Vermont at stable prices.

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4. Barkhurst reb. pf. at 20.

Throughout our consideration of the proposed transaction, we have relied upon the formal evidentiary record before us; but we have looked at it with every effort to give serious consideration to the views of members of the public. In other words, we have seen the public comments as a great aid in determining what questions to ask; but we have relied upon record-tested evidence when reaching our answers. This includes the extensive sworn testimony from expert witnesses presented by the numerous parties in this case. Vermont law mandates that we weigh this evidence, consider the public comments, and determine whether the sale promotes the general good of the state.

Petitioners' proposal was presented primarily as a choice between continued ownership and operation of Vermont Yankee by VYNPC, as compared to the sale of Vermont Yankee to ENVY. However, as we declared in Docket 6300, and affirmed in this Docket's Scoping Order, a third option is also relevant. At the present time, VYNPC has the option of closing Vermont Yankee. Although none of the intervenors opposing approval of the petition recommended that the Board take steps that would lead to the imminent shutdown of Vermont Yankee, and no witness recommended that action, the Board received many public comments suggesting that the Board should require the immediate closure of Vermont Yankee. The Board has carefully considered whether the benefits of closure exceed those likely to accrue either through approval of the proposed transactions or retention of ownership by VYNPC. We have also considered whether we should deny approval of the proposed transactions for the option-value of allowing Vermont utilities the possibility of closing Vermont Yankee at some future time.

After comparing the three fundamental choices — (1) continued ownership and operation by VYNPC, (2) sale to ENVY, and (3) early shutdown — we conclude that approval of the Purchase and Sale Agreement ("Sale Agreement") is the preferred option and will promote the general good. The six following factors lead us to this conclusion.

First, we have looked at Entergy's record of plant operation and its current staff, resources, expertise, and incentives. The record on these points persuades us that ENVY and ENO are likely to run the plant as well as or better than the current owners. The proposed owner and operator of Vermont Yankee, ENVY and ENO, respectively, are capable companies. These companies, and their parent, the Entergy Corporation, have demonstrated the financial capability and technical expertise needed to operate Vermont Yankee safely. As added protection, Entergy

Corporation has committed to financial guarantees that will assure that ENVY has sufficient capital to operate Vermont Yankee or to transition to decommissioning should ENVY decide to close the station. Also, they will retain the facility's current staff, with its site-specific expertise.

ENVY and ENO also have (on their own or through their affiliates) significant experience operating nuclear plants and the ability to draw on experience from the other nuclear stations owned by Entergy Corporation. This expertise — and their resources — exceeds that of VYNPC, which is a single-asset owner. Because of these greater resources and expertise, we expect that ownership and operation by ENVY and ENO will be at least as safe as it would be under continued ownership.

Second, we have tested the economic effects of the proposal over a range of possible scenarios, including the following:

- Likely changes in the prices of power on the wholesale markets;
- Changes in operating expenses, including contributions to the fund to pay for eventual decommissioning;
- Increase in power production resulting from a potential power "up-rate" at Vermont Yankee;[5]
- The possible extension of Vermont Yankee's operating license beyond 2012;
- Increased costs to address security needs; and
- The effects of a major outage at Vermont Yankee due to equipment failure or sabotage.

The economic analyses presented by the parties show that under almost all scenarios (including the most likely ones), Vermont ratepayers will benefit from the transfer of ownership to ENVY. Over the remaining ten years of Vermont Yankee's operating license, the net costs to Green Mountain, Central Vermont, and (as a result) Vermont ratepayers are likely to be substantially less if the station is sold to Entergy pursuant to the Sale Agreement than they would be if VYNPC retained ownership or if the owners closed Vermont Yankee this autumn.[6] The

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5. Vermont Yankee's current capacity is approximately 510 MW. It is possible to make operational changes and physical improvements to Vermont Yankee that will increase the capacity from between 1.5 and 20 percent, depending upon the specific changes. These changes are generally referred to as a power "up-rate."

6. As we explain below, there are certain combinations of events that could make it more cost-effective for the present owners to retain ownership of Vermont Yankee. The evidence demonstrates that these scenarios are unlikely to develop.

substantial purchase price also provides Vermont Yankee's owners with significant up-front capital, allowing them to repay all Vermont Yankee debt, and avoiding the "front-loaded costs" problem of the AmerGen proposal.

Third, we find that the sale of Vermont Yankee transfers operating cost and decommissioning cost risks to ENVY. At the present time, the costs associated with major repairs or outages at Vermont Yankee are passed on to Vermont ratepayers. Ratepayers thus bear the risk of outages or increased operating costs. They also face the risk that the costs of decommissioning will exceed current estimates. Following the sale, in the event of an outage, Vermont ratepayers will still need to pay to replace the power normally supplied by Vermont Yankee, but they will be shielded from any increased operation and maintenance, shutdown, or decommissioning costs. This protects Vermonters *and* creates an incentive for ENVY to close the plant if its operating costs seem likely to exceed market value.

Fourth, the Purchase Power Agreement sets out fixed prices at which VYNPC (and thereby Green Mountain and Central Vermont) will purchase power from ENVY. These prices are substantially below the "currently committed" operating costs of Vermont Yankee over the remaining term of its license. Over the remaining term of the license, this will reduce costs for ratepayers. The fixed prices also establish a cap on the charges for Vermont Yankee power. This cap protects ratepayers from higher prices for power that they would incur if the Vermont Sponsors purchased power under higher wholesale market prices. Accompanying the cap is a Low Market Adjuster (commencing in November 2005), which will reduce the otherwise fixed prices under the Power Purchase Agreement if wholesale market prices for power turn out to be less than 95 percent of the price caps set out in the contract. The Low Market Adjuster means that ratepayers will pay *the lower of* the market price for uncapped power (plus a 5 percent premium for a price cap) or the fixed prices set out in the Power Purchase Agreement. In effect, it has the post-2005 benefit of allowing roughly one-third of the Vermont Sponsors' power costs to benefit from low market prices; at the same time, the fixed prices mean that, in conjunction with other major components of Green Mountain's and Central Vermont's supply portfolios,

more than three-quarters of those companies' total energy purchases are shielded against very high price markets.[7]

Fifth, ENVY has made other important commitments. The MOU provides increased access to Vermont Yankee by the state's nuclear engineer. It also grants Vermont Yankee's Sponsors, including Green Mountain and Central Vermont, the first opportunity to negotiate for additional power if ENVY increases the output of Vermont Yankee or extends the operating license. ENVY also agrees, through the MOU, that the Board has complete jurisdiction to decide whether to renew ENVY and ENO's Certificates of Public Good ("Certificate") if ENVY seeks to extend its operating license past the expiration of its present term. This clarification of authority and the contractual commitment with the Department (on which our approval relies) provide assurances to Vermont that ENVY and ENO cannot thwart state review if ENVY plans to operate Vermont Yankee beyond 2012.

Finally, our analysis of an early closure of Vermont Yankee indicates that it would almost certainly lead to higher rates for Vermont consumers than would either the sale to ENVY or continued ownership and operation by VYNPC. This conclusion that early closure would increase costs is the same whether the owners immediately decommission Vermont Yankee or delay decommissioning. Early closure also does not achieve many of the environmental and safety benefits suggested by members of the public. Even if the owners were to immediately decommission Vermont Yankee, the highly radioactive spent fuel would remain on-site for a protracted period (testimony suggested that it would not be removed before 2030).[8]

We cannot assume, as urged by several members of the public, that the power from Vermont Yankee can be quickly replaced by renewable resources. Vermont already gets a higher percentage of its power from renewable sources (mostly large hydro-power dams) than many other states.[9] With the exception of large hydro dams, renewable energy resources tend to be relatively small sources of generation, particularly in relation to Vermont Yankee. Thus, instead of renewable sources, Vermont utilities would need to rely on fossil fuel generating stations to

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7. Green Mountain and Central Vermont obtain more than 75 percent of their power from Vermont Yankee, Hydro-Québec, or qualifying facility purchases under 30 V.S.A. § 209(a)(8) and Board Rule 4.100. The price of all of this power is capped and will not rise, even if wholesale market prices increase greatly.

8. Tr. 4/1/02 at 111 (Cloutier)

9. *Funding Vermont's Future: Comprehensive Energy Plan and Greenhouse Action Plan*, VTDPS, July 1998.

replace much of the power now provided by Vermont Yankee. This option would have the very serious disadvantage of significantly increasing the emission of air contaminants and greenhouse gases.

While we do not find that Vermont can promptly replace Vermont Yankee with renewable resources, we *are* convinced that more effort to encourage the development of renewable sources of power would be beneficial. Vermont needs to take more steps to help renewable energy overcome the market barriers that it faces. CLF has proposed a renewable fund to achieve these goals. We do not accept CLF's proposal, which we find to be insufficiently developed, at the present time. Nonetheless, we will consider further investigation of the establishment of a renewable energy fund in the future. We are also convinced that Vermont utilities should more fully integrate renewable energy sources into their planning so that they can meet incremental needs for power through such sources. To this end, in this Order we require, that, if VYNPC receives additional money due to Nuclear Electric Insurance Limited distributions, excess funding of the Spent Fuel Disposal Trust (after payment of the one-time fee for pre-1983 spent fuel obligations under the Department of Energy's Standard Contract), or claims related to the Department of Energy's defaults under the DOE Standard Contract under Section 2.2(i) of the Sale Agreement, Green Mountain and Central Vermont submit a plan for ensuring that their share of the funds are used to benefit ratepayers. The plan shall consider the application of a significant portion of these benefits towards the development and use of renewable resources.

We conclude for the reasons cited above that the proposed transactions are in the best interest of ratepayers. However, two aspects of the proposal before us are not acceptable. First, in the MOU, the Department and the Petitioners agreed to ask the Board to treat the transactions, the Petitioners' actions prior to the close of evidence, the MOU, and the power purchased from Vermont Yankee as part of the transaction *as if* they were both prudent and used-and-useful. Granting the request would effectively assure Central Vermont and Green Mountain of rate recovery for all costs associated with the sale, including the purchase of their share of the current power output of Vermont Yankee.

The principle that utility investments and purchases must be both prudent and used-and-useful is long-established in this state and throughout our nation. These standards are intended to

protect ratepayers from the effects of unwise or uneconomic decisions by utilities. The Petitioners' requests, however, would eliminate these ratepayer protections and convert them, instead, to a shield for utilities. Although the transactions provide significant benefits to Vermont ratepayers, we do not find them so beneficial as to justify fundamentally altering the balance of risks and responsibilities between the companies and ratepayers and completely waiving these long-standing ratepayer protections.

We do conclude that, as a factual matter, Green Mountain and Central Vermont face little risk of material future disallowance based upon these regulatory doctrines. The evidence demonstrates that the proposed sale to ENVY represents the best of the three options now available to VYNPC and its owners. Although VYNPC retains the responsibility to reevaluate the merits of the sale before making its final decision, *based on the facts as presented to us in the record now*, completing the sale appears to be the prudent choice at the present time.[10] As we explain in more detail below, we also expect that the factual conditions necessary to find the Power Purchase Agreement payments "unused" could not be met (since no payments are required if Vermont Yankee does not deliver power), and that conditions showing the Power Purchase Agreement to not be "economically useful" over its full term are very unlikely, given the up-front initial payments and the Low Market Adjuster protection in later years.

The second aspect of the transactions that we do not accept is set forth in Paragraph 3 of the MOU between the Petitioners and the Department. At the present time, if (following decommissioning of Vermont Yankee) excess money remains, the Decommissioning Trust mandates that it be returned to the consumers of VYNPC's Sponsors.[11] Under the Sale Agreement, as modified by Paragraph 3, ENVY retains all excess funds if decommissioning is completed before 2022. If decommissioning is completed later, ENVY would share 50 percent of the excess funds with customers of VYNPC's Sponsors. The Petitioners have not persuaded us why it is reasonable to change the status quo so that the ratepayers who have contributed to the fund no longer receive all of the excess money following decommissioning. This is

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10. We see no reasonable basis for VYNPC to use our decision not to grant the requested regulatory guarantees as a reason for abandoning the sale; however, VYNPC still retains, to the time of closing, an independent affirmative duty to close the transaction only if it appears beneficial.

11. VYNPC's Sponsors are shown on p. 13, below.

particularly so since ENVY did not demonstrate that it considered such funds to be an important component of the sale.[12] Even more importantly, we do not wish to approve a term that creates an incentive for Entergy to "cut corners" in any future decommissioning process.

Our Order also requires Green Mountain and Central Vermont to file an updated cost-of-service in April 2003. The retail rates of those utilities are currently based, in significant part, upon the payments that they currently make to VYNPC based upon Vermont Yankee's operating costs; beginning next year, these exceed the fixed charges set out in the Power Purchase Agreement. Green Mountain and Central Vermont have not proposed to reduce their rates. The filing of an updated cost-of-service, based upon a test year ending December 31, 2002, will enable the Board and Department to assess whether changes in retail rates are needed to ensure customer benefits.

II. Background

A. The Status Quo

The Vermont Yankee Nuclear Power Station was constructed in the late 1960's and early 1970's, and began commercial operation in November 1972. It is located on approximately 125 acres in Vernon. Vermont Yankee has a nominal capacity of 540 MW, although its normal output is closer to 510 MW.[13] The generating station includes a nuclear reactor, steam generator, cooling system, pool for storage of spent fuel, on-site storage facilities for low-level radioactive waste, facilities for connection to the Vermont Electric Power Company, Inc. ("VELCO") electric transmission system, and other facilities (including office buildings).[14]

VYNPC now holds a Certificate of Public Good issued under Sections 101 through 103 of Title 30 authorizing it to manufacture, transmit and sell the capacity and associated energy of Vermont Yankee within and outside of Vermont.[15] Vermont Yankee is presently owned by VYNPC, a corporation with eight sponsor utilities as shareholders.

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12. We also find that the likelihood of large excess decommissioning funds is remote.
13. Wiggett pf. at 3.
14. Wiggett pf. at 3–4.
15. Wiggett pf. at 4; exh. VY-BW-2.

Sponsor	Sponsorship Percentage
Central Vermont	35.0%
New England Power Company	22.5%
Green Mountain	20.0%
The Connecticut Light and Power Company	9.5%
Central Maine Power Company	4.0%
Public Service Company of New Hampshire	4.0%
Western Massachusetts Electric Company	2.5%
Cambridge Electric Light Company[16]	2.5%

Each Sponsor is currently committed to purchase a portion of Vermont Yankee's output under a Power Contract approved by the Federal Energy Regulatory Commission ("FERC"). The original Power Contract would have expired on November 30, 2002, but the Sponsors entered into an Additional Power Contract in 1984 (eighteen years ago) which extended the purchase obligation until the present expiration of Vermont Yankee's operating license: March 21, 2012. Under these contracts, each Sponsor must purchase a share of the capacity and associated energy produced by Vermont Yankee equal to the Sponsor's ownership share.[17] The power purchased by the Vermont Sponsors is about one-third of each Vermont utility's total power needs. The rates for the power purchased under these contracts are set by FERC and are based upon the operating costs at Vermont Yankee. Under traditional rate-making principles, federal statutes, and Supreme Court decisions, these wholesale payments to VYNPC are a legitimate part of the costs-of-service that Central Vermont and Green Mountain are entitled to collect from their customers in retail rates.

16. Wiggett pf. at 4.

17. Wiggett pf. at 5–6; exhs. VY-BW-3 and VY-BW-4. Green Mountain and Central Vermont have resold a portion of their share to nine other Vermont utilities through a Superseding Three Party Power Agreement with the Vermont Electric Power Company ("VELCO"). These sales were originally scheduled to end November 30, 2002. However, during the course of this proceeding, Green Mountain and Central Vermont reached agreements with most of the secondary purchasers and terminated these sales effective February 28, 2002. *See* Secondary Purchaser Settlement Agreements filed 2/14/02.

B. The Proposal Before the Board

On August 22, 2001, VYNPC provided the Board with notice, in accordance with General Order No. 45 ("G.O. 45"), of VYNPC's intent to enter into a Sale Agreement with ENVY and certain related transactions concerning the sale of Vermont Yankee. In its G.O. 45 filing of August 22, 2001, VYNPC indicated its intent to:

> (1) enter into the [Sale Agreement] with ENVY, as buyer, and Entergy Corporation, as guarantor – upon closing under the [Sale Agreement], VYNPC will transfer to ENVY essentially all of [VYNPC's] rights, title and interest in [Vermont Yankee's] assets, and ENVY will assume all responsibility for the operation, maintenance, and the eventual decommissioning of Vermont Yankee;
>
> (2) enter into certain ancillary agreements, in addition to the [Sale Agreement], including a [Power Purchase Agreement] by which [VYNPC] will purchase 100 percent of the current capacity and associated energy and all ancillary products from Vermont Yankee through the term of Vermont Yankee's current NRC operating license; and
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> (3) continue to sell capacity and associated energy, and to recover its other costs from its Sponsors, including [Central Vermont] and [Green Mountain], through various amended power-sales agreements amended by the "2001 Amendatory Agreements," — [VYNPC] also proposes to pledge a portion of its interest in, and rights under, the amended Power Contracts.[18]

VYNPC also requested that the Board order a reduction in the period of advance notice required under G.O. 45, open an investigation into the proposed transactions and approve all aspects of the transactions.[19] In its filing, VYNPC noted that the transactions are subject to various regulatory approvals, including approval under 30 V.S.A. §§ 108, 109, and 231.[20] To the extent that the transactions do not require advance Board approval, VYNPC asked the Board to initiate an investigation thereof and approve the transactions in all respects under 30 V.S.A. § 209.[21]

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18. Order Opening Investigation, Docket No. 6545, Order of 9/4/01 at 1–2.
19. *Id.* at 2.
20. *Id.*
21. *Id.*

By Order dated September 4, 2001, the Board waived the G.O. 45 notice period.[22] We also opened an investigation, pursuant to 30 V.S.A. §§ 2(c), 109, 203, 209 and 231, into the G.O. 45 notice filing of VYNPC's intent to execute the Sale Agreement with ENVY as well as certain other agreements related to the proposed sale of Vermont Yankee.[23]

C. The Option That No Party Proposed: Prompt Closure

Our decision of whether to approve or deny the proposed sale to Entergy is not simply a binary choice between continued ownership and operation of Vermont Yankee by the current owners or the sale to Entergy. At this time, the owners of Vermont Yankee also have the option to shut down Vermont Yankee now or at some time prior to the expiration of its operating license in 2012, if they find it more cost-effective than continuing operation. Consideration of whether to deny the proposed sale because closure would be in the best interest of ratepayers or in order to preserve the option to later close Vermont Yankee is necessary to accurately compare the choices now faced by the Vermont Sponsors. Many members of the public urged the Board to take actions that would lead to closure of Vermont Yankee in the near future; however, no party specifically recommended premature shutdown and no witnesses were presented for examination of the reasons that might lead to such a recommendation.[24]

The issues in this case revolve around the economic benefits to the ratepayers in Vermont as well as the risks that may affect those benefits. These economic analyses also encompass the costs associated with ensuring that the owner of Vermont Yankee operates the plant safely.[25] During the course of our examination of the economic and risk effects of the transfer, we have considered this third option carefully. Our review of early closure also encompasses the negative effects of such closure, including the need for Vermont utilities to replace the power from Vermont Yankee. One likely source of power would be from fossil fuel generation, which would

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22. *Id.* at 3–4.

23. *Id.* at 4.

24. In particular, the Intervenors have actively opposed the sale of Vermont Yankee. Yet they advocated that this Board deny the sale, not that the Board take steps that would lead to shutdown.

25. 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. *Pacific Gas and Electric Company v. State Energy Resources Conservation and Development Commission*, 461 U.S. 190, 207–208 (1983).

produce additional air pollution, with corresponding economic costs, both priced and external. The evidence in the record allowed us to seriously evaluate the economic value of shutting down Vermont Yankee in the near future. As this Order explains in Part V, below, we conclude that the sale of Vermont Yankee to Entergy will provide greater benefits to Green Mountain and Central Vermont and their ratepayers than would retained ownership combined with premature shutdown of the nuclear generating station.

III. CONCERNS OF THE PARTIES AND THE PUBLIC

A. The Parties

The parties in this case include the Petitioners and the Department, a statutory party. In addition, the Board granted party status to sixteen intervenors.[26] Of those sixteen intervenors, five participated actively in this investigation.[27]

The Petitioners urge the Board to approve the proposed sale and associated transactions. The Petitioners argue that the sale and transactions will promote the general good of the state because they (1) result in positive net present value benefits to the Vermont Sponsors that can be passed on to ratepayers, (2) result in the transfer of operating and decommissioning risks and liabilities to Entergy, and (3) ensure continued operation of Vermont Yankee, and the resulting benefits to the local economy, by a company that has a long-term incentive to operate Vermont Yankee efficiently.

The Department has concluded that the proposed transaction, as amended by the Memorandum of Understanding ("MOU"), promotes the general good, and joins Petitioners in supporting the amended proposal.

Vermont Yankee's workforce is approximately 550 persons and 137 of them are subject to a collective bargaining agreement between Vermont Yankee and IBEW. Consequently, IBEW is concerned primarily about reductions, relocations and reorganizations of the work force that may result from a sale to ENVY.

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26. *See* Order of 10/26/01 and Appendix B.

27. The active parties were: Citizens Awareness Network, Inc. ("CAN"); Conservation Law Foundation ("CLF"); the International Brotherhood of Electrical Workers Local 300 ("IBEW"); New England Coalition on Nuclear Pollution, Inc. ("NECNP"); and Vermont Electric Consumers Coalition ("VECC").

According to VECC, the sale of Vermont Yankee offers a prime opportunity to provide rates that are lower than Green Mountain and Central Vermont would pay if VYNPC continued to own the plant and that are lower than the amount included in current rates for purchase of Vermont Yankee power under the current arrangement. VECC wants to see the Vermont Sponsors pass the benefits from the sale directly to their ratepayers in the form of rate reductions.

The other actively-participating intervenors, including CAN, CLF, and NECNP, oppose the proposed sale and argue that the Board should not approve it because the proposal does not promote the general good of the state. CLF asserts that long-term, fixed-price, unit-contingent power contracts are bad policy and, in a growing market for wholesale power, not the type of resource that a utility should have in its portfolio. CLF also argues that the 10-year fixed-price Power Purchase Agreement proposed here is excessively priced. CLF suggests alternatives to the Power Purchase Agreement that it argues will be better in the long run for Vermont ratepayers, and each Sponsor's generation portfolio. CAN, CLF, and NECNP also argue that the bid design was not sufficiently robust, and that various alternatives to the Power Purchase Agreement were not adequately considered.

CAN argues that Entergy's agreement to submit to the jurisdiction of the Public Service Board for relicensing, to provide the State Nuclear Engineer access to Vermont Yankee, and to provide financial assurances and guarantees are preempted by federal law; thus, the Board must reject the MOU as it fails to provide the adequate assurances of a Board role in deciding whether to permit relicensing of the Vermont Yankee Nuclear Power Station, and the minimum assurances the Department has deemed necessary to support a Certificate. CAN also argues that agreement to allow Entergy/ENO/ENVY to keep half or more of what is left in the decommissioning trust post decommissioning is against public policy and should not be the basis for issuing a Certificate in this case.

NECNP argues that, for a number of reasons, ENVY and ENO do not qualify for a certificate of public good. A certificate of public good, argues NECNP, should be denied since ENVY will not serve in-state need and will have no service territory. NECNP argues that the petition in this case ought to be dismissed because the Petitioners' request illegally waives statutory review. It also argues that the granting or sharing of excess decommissioning funds is, for a number of reasons, illegal. NECNP argues that the general good requires the Board to

consider, among other things, how public safety will be affected by (1) the age of Vermont Yankee, (2) the emergency preparedness of Vermont Yankee, and (3) Vermont Yankee's ability to prevent terrorist attack. The general good, according to NECNP, also requires the Board to reject the waiver of review of prudence and used-and usefulness, and to consider the State Comprehensive Energy Plan, loss of local control over Vermont Yankee, and reasonable alternatives to the proposed sale.

B. The Public

In addition to hearing from formal parties in this docket, the full Board conducted two public hearings in order to gather information and opinion from the public at large. The first was held at the Vernon Elementary School in Vernon, Vermont, on November 26, 2001. The second public hearing was broadcast to eleven locations over Vermont Interactive Television Network on January 10, 2002, with each site hosted by Board Members or Board staff.

Numerous members of the public attended the public hearings and submitted comments by mail or e-mail, with several commenters submitting multiple mailings. The Board Members have read each of these.[28]

The public concerns with the sale, and the continued operation of Vermont Yankee, fell into the following categories:

- A belief that all nuclear power is inherently unacceptable as unduly dangerous or immoral;
- Entergy's corporate structure and the sufficiency of financial safeguards;
- Entergy as an "absentee landlord";
- Entergy's labor promises, and effect of the sale on other jobs;
- Loss of local control over the proposed new owners of Vermont Yankee;
- Costs of power to ratepayers;
- Price-Anderson liability, *i.e.*, concerns that the liability of VYNPC, if an accident occurred, is limited by federal law;[29]
- Risks associated with waste creation, storage and disposal;

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28. Many comments were filed after the close of hearings in this case. The Board has read these as well. The comments are in a public file for review by anyone upon request.

29. 42 U.S.C.A. § 2011 *et seq.*

- Safety issues: including (1) Vermont Yankee as a potential terrorist target; (2) inadequacy of the emergency management plan; (3) risks associated with the age of Vermont Yankee; (4) harm due to emissions from Vermont Yankee; (5) leaking fuel rods as an example of the lack of safety at Vermont Yankee; and (6) general concerns that Vermont Yankee is unsafe;
- Potential for Entergy to build another plant on the Vermont Yankee site;
- Establishment of a renewable energy fund if Vermont Yankee is sold;
- Potential for Entergy to fail to appropriately decommission the plant or to misuse the decommissioning fund;
- Implications of possibly lowering VYNPC's commitment from a green field clean up to Nuclear Regulatory Commission cleanup criteria;
- Concern that security upgrades will make the sale uneconomical; and
- Need for an independent safety study.

Comments in favor of the sale concerned:

- Entergy's track record and experience managing nuclear power plants;
- Need to keep jobs in the area;
- Safety, in general, of nuclear power, and, in particular, of Vermont Yankee;
- Benefits to ratepayers of (1) Entergy's assumption of financial risks, including decommissioning costs, associated with Vermont Yankee, and (2) the availability of power whose costs are capped and thereby stabilized;
- Environmental benefits by avoiding other power sources that produce serious air pollution affecting human health, the environment and climate change; and
- Vermont Yankee's willingness to volunteer with community groups and to provide charitable contributions to the local community.

IV. Criteria for Our Decision

A. Introduction

Broadly speaking, the issues before us can be considered on three levels: findings of fact; conclusions of law; and determinations of policy. The first category of analysis requires us to evaluate the parties' positions on contested factual matters; we resolve those with specific findings of fact on contested factual issues, and with discussions of our bases for those findings. The next two categories focus upon questions of law and policy. We base our holdings on these

points upon our review of legal precedents, the parties' briefs, the policy arguments of their expert witnesses, and our administrative expertise. Ultimately, we derive our answer to the questions of whether the proposed transfer of Vermont Yankee and the entry into a long-term power purchase contract are good for the State of Vermont from our consideration of those preliminary sets of issues.

B. Factual Issues

The factual level of analysis falls into two major categories — the first relating to the proposed transfer to ENVY and operation of the plant by ENO; and the second concerning the associated power purchase contracts under which the Vermont Sponsors (Central Vermont and GMP) commit to purchase output from Vermont Yankee. For purposes of exposition here, we discuss the power plant transfer and the power purchase contracts separately. However, these two categories are complementary parts which must be taken together. Thus, it is essential to consider the elements of this transaction as a whole after examining each point in detail.

1. The Transfer

With regard to the first category, the analysis considers the following issues:

- Consideration of the potential effects of the transfer on the safe and reliable operation and closure of the plant, including a comparison of VYNPC's and ENVY and ENO's relative technical and financial capacities.
- Consideration of whether ratepayers derive greater benefits if: (1) VYNPC continues to own and operate Vermont Yankee; (2) Vermont Yankee is sold to ENVY; or (3) Vermont Yankee is shutdown early.
- Consideration of the methods, scenarios and underlying assumptions by which the alternatives have been compared, including consideration of risk and uncertainty associated with decommissioning cost exposure, future market prices of wholesale power purchases, and the contingent events that would cause an extended plant outage or necessitate early closure.
- Identification and consideration of the accounting and financial effects of the transfer on the Vermont Sponsors and their ratepayers, including the Sponsors' equity investments in VYNPC and the use of funds received by the Vermont Sponsors as a result of the transfer of their ownership interests.

- Consideration of whether among the three choices now available to VYNPC — continued ownership and operation, sale, or closure — the proposed transactions are reasonable and prudent.

2. The Power Purchase Agreement

With regard to the second category of factual determinations, *i.e.*, those related to the proposed power purchase contracts, our analysis focuses upon the following issues:

- Quantification of the difference, if any, between the contract prices and forecast market prices for alternative sources of wholesale power.
- Evaluation of the consideration received by the Vermont Sponsors in exchange for any commitments to long-term power purchases that exceed forecast market prices.

C. Vermont Statutes

With regard to the second and third categories of analysis, those which focus upon questions of law and policy, the Board must analyze a complex set of transactions, involving numerous elements subject to multiple statutes. In particular, the Petitioners have asked that we review their proposed transactions pursuant to 30 V.S.A. §§108, 109, 201, 203, 209, and 231. Furthermore, pursuant to Section 209 of Title 30, Petitioners and the Department request a Board order in which the Board finds, among other things, that the electricity purchased pursuant to the proposed Amendatory Agreements should be treated as if it were used and useful and therefore that the costs arising from the Amendatory Agreements will be fully recoverable in rates pursuant to Sections 218, 225–227 of Title 30.[30]

The applicable statutes, while not setting identical standards, are broadly consistent, essentially requiring that the Board determine whether the transactions as a whole "promote the public good" or are "consistent with the general good." While we have considered each of these statutes, we see no reason to believe that any of the small or subtle distinctions among them

30. Exh. VY-42 at ¶ 16.

would materially affect the conclusions that are set out today. We agree that each of the statutes cited by the Petitioners applies.[31]

Under 30 V. S.A. § 109, a sale of the assets of a company subject to Board jurisdiction can be completed only if approved by the Board.[32] Similarly, 30 V. S.A. § 108 requires a company subject to the jurisdiction of the Board to receive Board approval prior to issuing bonds or other securities or pledging assets. Section 231 requires a person desiring to own or operate a Board-jurisdictional business to obtain a certificate of public good.[33]

V. ANALYSIS OF PROPOSED TRANSACTIONS

In this Section, we analyze the merits of the proposed transactions. Part V.A. describes the principle elements, particularly the seriously contested ones. In Part V.B., we examine whether the proposal is in the best interest of the state of Vermont if Vermont Yankee's operating costs and performance remain as they have been in the recent past. Specifically, we examine the merits of transferring risks associated with operational costs and funding decommissioning to ENVY. In addition, we examine the financial costs and benefits of the proposed sale.

In Part V.C., we examine whether the proposed transactions are beneficial if Vermont Yankee's costs and performance varies from recent experience. In particular, several parties have suggested that VYNPC can reduce costs, increase power output and sales, and extend Vermont Yankee's operating license, thus providing more benefit to the current owners. We examine the merits of the proposed sale under each of these scenarios, as well as under situations in which a major outage or sabotage cause a shutdown.

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31. *See* Petition of October 30, 2001, 1–3. 30 V.S.A. § 201 defines the types of "companies" subject to Board jurisdiction. 30 V.S.A. § 201(a). 30 V.S.A. § 203(1) provides for Board jurisdiction over companies engaged in the manufacture of electricity. Section 209 provides the Board with jurisdiction "to hear, determine, render judgment . . . in all matters provided for in the charter or articles of any corporation subject to supervision under this chapter . . . ." The same section, furthermore, provides the Board with jurisdiction in all matters respecting . . . "[t]he manner of operating and conducting any business subject to supervision under [30 V.S.A.]," and "the price, toll, rate or rental charged by any company subject to supervision under this chapter, when unreasonable or in violation of law."

32. 30 V. S.A. § 109.

33. 30 V. S.A. § 231. In Docket 6039, Order of 2/18/98, the Board concluded that it would approve a transfer of utility property to an uncertified entity only if simultaneously issuing a certificate of public good pursuant to § 231.

Finally, in Part V.D., we synthesize the economic analyses presented in the preceding parts and conclude that the proposed transactions promote the general good of the state.

A. The Proposed Transactions

1. The proposed ENVY purchase of Vermont Yankee is comprised of two principal parts, a Purchase and Sale Agreement governing the terms of the transfer of the nuclear facility's ownership, and a Power Purchase Agreement, which commits Vermont Yankee's current owners to purchase the facility's expected power output through March 21, 2012, the remainder of Vermont Yankee's current NRC license. *See findings 2–13 below.*

2. Under the Sale Agreement, ENVY is to pay a total of $180 million in cash for Vermont Yankee: $116.2 million for the plant and switch yard; an estimated $35 million for the adjusted book value of the fuel inventory; and $28.7 million for non-fuel inventories. Items included in the Sale Agreement are the nuclear generating facility, including fuel and non-fuel inventory, decommissioning trust funds, decommissioning liability, switch yard, assets associated with defined benefit and welfare plans, and pre and post-closing nuclear liabilities. Exh. VY-1; Wiggett pf. at 12.

3. Excluded from the Sale Agreement are: (1) Nuclear Electric Insurance Limited account balance; (2) VYNPC's obligation to pay the Department of Energy's one-time fee under the DOE Standard Contract with respect to fuel used to generate electricity prior to April 7, 1983, and the Vermont Yankee Spent Fuel Disposal Trust that provides funding for that payment; (3) claims of VYNPC related to the Department of Energy's defaults under the DOE Standard Contract; (4) liabilities related to pre-closing off-site disposal of hazardous substances; and (5) pre-closing employee liabilities. Exh. VY-1; Dabbar pf. at 24–26.

4. The fuel and non-fuel inventory payments are subject to adjustment at closing. The fuel adjustment is essentially neutral since Vermont Yankee will have paid more for the fuel to be loaded at the next refueling outage (scheduled for this autumn) than originally estimated but will be reimbursed more by ENVY at closing. Non-fuel inventories are estimated to be $28.7 million at closing. Exh. VY-1; tr. 4/4/02 at 290 (Wiggett).

5. The approximately $180 million purchase price will be sufficient to repay all of VYNPC's debt, and a significant portion of the investment in VYNPC carried on the balance sheet of Green Mountain and Central Vermont. Sherman pf. at 6.

6. Five million dollars of the purchase price will not immediately be returned to the Sponsors, but will be retained in VYNPC. This $5 million in equity capital will be used to meet ongoing Vermont Yankee expenses. In the future, VYNPC will be responsible for liabilities not transferred to ENVY, and for distributions from Nuclear Electric Insurance Limited. Wiggett pf. at 13–14, 21; Sherman supp. pf. at 3.

7. VYNPC will continue to have certain obligations under the Purchase Power Agreement. Wiggett pf. at 16–17.

8. Vermont Yankee's current owners may be required to make an additional contribution to the decommissioning fund of up to $6.4 million. This amount covers fund contributions previously scheduled to be made in the period between the Sale Agreement and the closing, as well as potential shortfalls in the decommissioning fund due to lower-than-expected investment returns for the period prior to closing. Tr. 4/4/02 at 289 (Wiggett).

9. The Sale Agreement provides that adjustments may be made to the purchase price if certain events constitute a "Material Adverse Effect."[34] Exh. VY-1 § 1.1(90), 7.1.

10. The proposed transaction includes a two-stage obligation for VYNPC to continue to purchase 100 percent of the Vermont Yankee generating facility's anticipated electricity output through the term of its existing license. The first stage extends from the transactions' closing date to the earlier of the completion of Refueling Outage #25 or November 1, 2005, and is a commitment to take Vermont Yankee's output of up to 510 net megawatts, at prices specified in the Purchase Power Agreement.[35] The second stage is a commitment running from November 1, 2005, through March 21, 2012. During this period, VYNPC will purchase power at either the lower of specified annual prices or market prices (plus a premium), through the Low Market

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34. A "Material Adverse Effect" is defined as any change adversely affecting the operations of Vermont Yankee that (a) could require the expenditure within three years of closing of over $1 million (as a result of a single change), or in excess of $2.5 million in aggregate, or (b) would be reasonably likely to prevent any party of the transaction from performing any of its material obligations. Specifically excluded from the definition are changes generally affecting the electric industry or nuclear generating facilities as a group.

35. Entergy agreed to this start date for the Low Market Adjuster in a letter from V. Brown to the Board dated April 22, 2002.

Adjuster. Energy market prices will be increased by 15 percent to pay for installed capacity charges, ancillary services and the value to the consumer of having a price cap. Exh. VY-1, exh. E; Dabbar pf. at 29.

11. The Low Market Adjuster provides for VYNPC (and as a result Central Vermont and Green Mountain) to pay the lower of either the base price or an adjusted price using a specified formula. Under the Low Market Adjuster's formula, if the market price falls below 95 percent of the base price of the Power Purchase Agreement, the adjusted price is 105 percent of the 12-month average "market price", as defined in the Power Purchase Agreement. Market price is defined as the average spot clearing price of the previous 12 months, plus the actual published clearing price for installed capability ("ICAP"). If there is no published clearing price for ICAP in New England, a proxy value for ICAP of 10 percent (or such other ancillary cost as the parties may mutually agree is the nearest equivalent to ICAP) will be added to the trailing 12-month ISO New England average monthly energy clearing price to establish the "market price." Exh. VY-1, exh. E; exh. VY-42 at ¶ 14; tr. 2/4/02 at 215 (Wiggett).

12. The Power Purchase Agreement's base prices range from $42/MWh in 2003, to $39 in 2006. Each year after 2006, base prices increase by $1 per year until the 2012 base price is $45/MWh. Exh. VY-1, exh. E; Dabbar pf. at 29.

B. Merits of the Proposals, if Vermont Yankee's Operating Characteristics and Risks are Similar to the Recent Past

1. Transfer of Risks Through the Sale to Entergy

As detailed above, the transaction before us calls for the exchange of the Vermont Yankee Nuclear Power Station, for a $180 million cash payment at closing, plus the assumption of an obligation to purchase Vermont Yankee's output for roughly the next ten years at specified or formula defined prices that are estimated to have a net present value cost of approximately $1 billion.[36] One effect of the sale is to transfer the risk of increased operating costs or future outages to the new owners. Likewise, the new owners assume all risk relating to the costs of future decommissioning of the facility.

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36. Exh. VY-Wiggett-10.

The Petitioners and the Department argue that transfer of these risks are a significant benefit of the proposed sale.[37] CLF contests these assertions, particularly as to the significance of transferring the decommissioning fund risks.

The following sections examine in turn: (1) the potential that Vermont Yankee's operating costs will increase; and (2) the scope of decommissioning risks being transferred.

a. Transfer of Operating Cost Risks

(1) Findings

13. Consumers face substantially greater exposure to increased costs if the plant is kept, as opposed to sold. Under current ownership, Central Vermont and Green Mountain are exposed to increased operating costs at Vermont Yankee. A benefit of the proposed sale is the shift in risk of increased operating costs to Entergy. Sherman supp. pf. at 4; Biewald sur. pf. at 9; Cater/Deehan reb. pf. at 10–14; findings 14–21, below.

14. Under the present ownership structure and power contract arrangements, Vermont Yankee's Sponsors and their customers bear the financial risk of any increase in the costs to operate or shut down Vermont Yankee. Biewald pf. at 12; tr. 2/14/02 at 224–25 (Biewald).

15. Currently, increases in VYNPC's prudent costs are passed on to consumers through FERC-regulated tariffs. During unplanned outages, Central Vermont and Green Mountain ratepayers would pay both VYNPC's outage expenses and replacement power costs. The proposed sale shields consumers from the need to pay outage expenses, although they would still need to pay for replacement power. It does so through the asset transfer and the fixed-price power purchase agreement for delivered power. If ENVY produces no power at Vermont Yankee, Central Vermont and Green Mountain are required to make no payments to ENVY. Biewald pf. at 21; tr. 2/14/02 at 224–225 (Biewald).

16. The Power Purchase Agreement in this Docket is a unit contingent contract. Central Vermont and Green Mountain have rights and obligations under the power purchase contract only when Vermont Yankee is operating. Biewald pf. at 21.

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37. Tr. 2/7/02 at 222 (Brock); Sherman reb. pf. at 10; Cater/Deehan reb. pf. at 10–14.

17. Following completion of the sales transactions, when Vermont Yankee is not producing electricity, Central Vermont and Green Mountain will be responsible for obtaining their respective power needs elsewhere. Wiggett pf. at 26; Kansler pf. at 22.

18. Unexpected occurrences such as equipment failures and regulatory non-compliance have been common in this industry in the past and are likely in the future; they could result in unplanned outages and higher operating costs. Biewald pf. at 21.

19. Vermont Yankee has experienced unanticipated costs in the past, such as those associated with an extended outage in 1998 or the design basis documentation program in the late 1990's. Biewald pf. at 23.

20. Four recent examples of operating risks with financial consequences are: (1) increased security costs; (2) the need to buy a new transformer due to equipment failure of the current transformer; (3) refurbishment of the main generator because of aging wiring; and (4) costs arising from fuel defects discovered in the reactor. Such risks in the future would be passed from ratepayers to ENVY if ENVY were the owner of Vermont Yankee. Sherman sur. pf. at 10; Sherman pf. at 25; Schlissel pf. at 8; Wiggett reb. pf. at 6–8; tr. 4/4/02 at 298–300, 330–31 (Wiggett).

21. On February 26, 2002, the NRC issued orders to all 104 commercial nuclear power plants to implement interim security measures in response to the high level-threat environment existing as a result of the terrorist attacks of September 11, 2001. The costs of these measures will be borne by current owners if no sale occurs. Order Modifying Licenses, EA-02-26 (Nuclear Regulatory Commission Feb. 26, 2002).

22. The economics show that, in the event of an early shutdown, it would always have been beneficial to ratepayers to have sold Vermont Yankee, rather than to have maintained the current ownership. Page reb. pf. at 16.

(2) Discussion re: Transfer of Operating Cost Risks

Under the present ownership and contractual structure, VYNPC, its sponsors, and ratepayers bear the risk of operating cost changes or outages.[38] Each of Vermont Yankee's

38. Biewald pf. at 12; tr. 2/14/02 at 224–25 (Biewald).

Sponsors are currently obligated to pay VYNPC monthly for a proportionate share of Vermont Yankee's fuel costs, decommissioning costs, operating expenses (including an allowed return on equity) and a portion of the net investment in Vermont Yankee.[39] These charges paid by Green Mountain and Central Vermont are set in a FERC-regulated tariff, with the precise payments based upon Vermont Yankee's operating costs.[40] If operating costs or net investment change materially, these changes flow through to the FERC-approved wholesale rates and ultimately to Green Mountain and Central Vermont ratepayers.

In addition to placing the risks of operating increases upon ratepayers, this current payment structure places all risks associated with outages at Vermont Yankee upon VYNPC, its Sponsors and their customers.[41] During outage periods (whether normal refueling outages or unplanned outages), Green Mountain, Central Vermont and their ratepayers are required to pay their share of all outage-related costs.[42] In *addition*, when Vermont Yankee is not providing them with power, Vermont Yankee's Sponsors must purchase replacement power during the outage and, thus, must face the risk that the market price of replacement power will be high. Indeed it is almost a certainty that, even in low markets, the replacement cost of power will be higher than any incremental cost savings VYNPC obtains because the plant is shut-down, since the fixed costs that must still be paid are much larger than the avoided operating costs.

By contrast, if Vermont Yankee is sold, the present Sponsors and ratepayers will no longer be affected by changes in operating costs or the additional costs to repair the facility following an outage. Under the Sale Agreement and Power Purchase Agreement, the price of power from Vermont Yankee is fixed for three years, then becomes the lower of a fixed price or the price set through the Low Market Adjuster formula (*i.e.*, 5 percent above the average market price plus ICAP). VYNPC's sponsors still must purchase replacement power, in the event of an outage, but they will not need to pay additional costs associated with the outage nor do they need to charge rates that include recovery of the capital investment.

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39. Exhs. VY-BW-3 at 2 and VY-BW-4 at 3.

40. Tr. 2/4/02 at 243 (Wiggett).

41. Outages are one aspect of operational cost risks. Unplanned outages generally require VYNPC to incur additional costs to remedy the cause of the outage. The primary differences between outage periods and normal operational cost increases are the magnitude (outage costs can be significantly higher) and the fact that during an outage, the companies normally supplied by power from Vermont Yankee must obtain replacement power.

42. Tr. 2/14/02 at 224–225 (Biewald).

There is no certainty that the operating costs at Vermont Yankee will increase significantly, that VYNPC could not achieve noticeable gains in operating efficiency (thereby lowering the cost of power production and charges to ratepayers), or that Vermont Yankee will have frequent or prolonged outages.[43] The trend in the nuclear industry and at Vermont Yankee has been increasingly better economic performance. Vermont Yankee's operating performance has been very strong, with the nuclear station experiencing high load factors.

Notwithstanding these factors, our determination that the sale promotes the general good is significantly influenced by the shift of operational risks to Entergy. We give more weight to a number of other factors demonstrating that operating cost risks are significant. For example, just in the past year, Vermont Yankee experienced increased and unanticipated costs associated with increased security, transformer replacement, and rewinding of the generator. Collectively, these costs were approximately $20 million.[44]

Outages due to problems at the plant also are possible. Vermont Yankee was shut down for an extended period in the mid-1980's, leading to significant increased costs for Vermont consumers.[45] Two other outages occurred in the late 1990's.[46] And, even during the course of this proceeding, Vermont Yankee was forced to shut down to repair leaking fuel rods.[47] These recent problems highlight the fact that, although Vermont Yankee operates at a high load factor, it still faces operational risks that could increase costs.

We are also cognizant of the fact that events could cause a permanent shutdown of Vermont Yankee. Unanticipated problems have forced the premature closure of many nuclear power plants, including three nuclear stations within New England: Maine Yankee, Connecticut Yankee, and Yankee Rowe. In each case, the nuclear station experienced difficulties that would

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43. The Department suggests that VYNPC could reduce operating costs; Entergy expects that it (Entergy) will be able to do so) the same once it assumes responsibility.

44. Sherman surr. pf. at 10; Sherman pf. at 25; Schlissel pf. at 8. Some of these costs are recurring, such as increased costs to address safety. Others, such as the transformer replacement, are one time costs. But, as they were unanticipated, they demonstrate the possibility of large cost increases due to unexpected events. Replacement of leaking fuel rods in May 2002 was another unplanned expense. *See* Barkhurst reb. pf. at 10–12.

45. *Petition of Central Vermont Public Service Corp.*, Docket 4905A, Order of 7/9/85 at 1-3 (authorized an 8.7 percent surcharge).

46. Biewald pf. at 23.

47. Barkhurst reb. pf. at 10–12.

have required significant additional expenditures to correct, thus making early shutdown the preferred economic choice of the owner.[48]

Additional risks of rising operating costs may arise from events that do not occur in Vermont. The discovery of generic problems affecting boiling water reactors generally could affect Vermont Yankee, no matter how well VYNPC carries out its operational responsibilities. A nuclear accident at another plant also could lead to operational changes or significant cost increases for other nuclear reactors. In either case, the result would be an increase in the costs that VYNPC would need to incur to safely operate Vermont Yankee and hence, under continued ownership, the charges to ratepayers.[49]

We also must consider the fact that if a prolonged outage occurs, Vermont ratepayers will likely face significant cost increases to pay for both the costs associated with the outage and replacement power costs. Similarly, if either a significant event or economic changes lead to shutdown of Vermont Yankee prior to license expiration, Vermont ratepayers will continue to pay for cost recovery of the investment in Vermont Yankee and decommissioning costs, as well as replacement power.

Quantification of these risks is difficult. The difficulty of reducing the risk transfer benefit to a numeric value, however, does not mean that the benefits are not real.[50] In fact, the analyses presented to the Board in this proceeding, demonstrate that the risk transfer provides a tangible benefit to Green Mountain, Central Vermont and their ratepayers.[51]

Balancing these risks against the option of retaining ownership of Vermont Yankee, we conclude that the transfer of operational risk is a strong positive aspect of the proposed sale.[52] In other words, under each of these scenarios, Vermonters will be better off if ENVY (rather than

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48. *See* Shadis pf. generally; tr. 4/2/02 at 109–119 (Keane).

49. Biewald pf. at 23–24.

50. Sherman surr. pf. at 10; Barkhurst reb. pf. at 10–12.

51. Cater/Deehan reb. pf. at 10–14.

52. As we discuss in Part V.C.4., a license extension could increase the benefits of retaining the present ownership. However, these benefits depend upon the assumption that the NRC extends the license *and* Vermont Yankee continues to operate as it does presently. Considering the operating risks described above, and the increased likelihood of cost increases as Vermont Yankee ages (particularly after 2012), we cannot rely upon the latter assumption.

Vermont utilities) owns the facility and bears the relevant costs.[53] It is possible that Vermont Yankee may continue to perform at current load factors and presently-anticipated costs through the end of its current license and beyond. At the same time, the potential for outages or large increases in operating costs remains real. And these costs would have direct and unavoidable impacts upon Green Mountain, Central Vermont, and Vermont ratepayers.[54]

Finally, we note that transferring the risk of operation to ENVY has the effect of *increasing* the likelihood that Entergy will shutdown Vermont Yankee in the event of a significant cost increase or outage. Unlike the current cost-of-service owners, ENVY will receive no sales revenue when Vermont Yankee is not operating other than business interruption insurance which would potentially provide a limited revenue stream for a finite period during an unplanned outage. Because of the absence of income during an outage, Entergy would not wish a lengthy decision-making process before moving towards decommissioning. Entergy's economic interest would be to make an early economic evaluation to return the plant to operation or move to a timely shutdown in the event of an unforeseen problem at the plant.[55] By contrast, the current owners would be more inclined to keep Vermont Yankee open since a majority of its owners are traditional cost of service and rate base companies whose costs are borne by monopoly ratepayers.

b. Transfer of Decommissioning Risks

(1) Findings

(a) Risks of Increased Decommissioning Costs

23. Following the sale, ENVY bears the risk of all costs in completing decommissioning. Sherman pf. at 52.

24. ENVY agrees to assume all liability associated with decommissioning Vermont Yankee; the management, storage, transportation and disposal of Spent Nuclear Fuel (except for fuel

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53. Practically, there is a cap on the operational cost risk, as CLF suggests. CLF Brief at 33. If the operational cost increases are too great, shutdown of Vermont Yankee will become the most cost-effective scenario. However, the basic point remains: from the standpoint of Vermont ratepayers, the shift of risk is beneficial either if operational costs increase *or* if Vermont Yankee shuts down.

54. For example, during the mid-1980 outage, this Board authorized a substantial surcharge for Green Mountain and Central Vermont customers. Docket 4906A, Order of 12/31/85 at 10.

55. Keuter reb. pf. at 10; Crane supp. pf. at 5–6; Wells reb. pf. at 6; tr. 4/4/02 at 208–09 (Keuter).

burned prior to April 7, 1983, as per the DOE standard contract); the Texas Compact; and any other post-shutdown disposition of the facility or any other acquired asset. Exh. VY-1 at §§ 2.3(f) and 2.4(m).

25. Considerable uncertainties remain in the decommissioning process that continue to affect the cost to dismantle a reactor and the ability of the licensee to release the site for alternative use. Cloutier reb. pf. at 16–17; exh. VY-25.

26. Cost risks associated with decommissioning include (1) radioactive waste disposal (both low and high-level radioactive waste), (2) spent fuel management, (3) development of an acceptable criteria for the release of bulk material from a decommissioning facility, (4) the lack of consistent criteria/standards for the release of the property, and (5) the uncertainty as to whether decommissioned plants will have to meet tougher environmental-cleanup requirements of the U.S. Environmental Protection Agency and the states. Exh. VY-25 at 4–5, 37–39, 51–53; Cloutier reb. pf. at 17; tr. 2/15/02 at 265–67 (Sherman); *see* tr. 2/7/02 at 222–24 (Brock); Sherman pf. at 53.

27. Agencies other than the Nuclear Regulatory Commission can, and have, imposed additional and more stringent criteria on the cleanup effort, increasing the overall cost to release the site from further regulation. Exh. VY-25 at 39.

28. The Department has stated that nuclear facility sites should be returned to greenfield status, a site clean-up standard more stringent than federal standards. Tr. 4/18/02 at 174–75, 179–82 (Sherman).

29. ENVY will comply with all state requirements regarding site restoration and has committed to full site restoration following decommissioning, unless it reuses the site. Tr. 4/1/02 at 130–32 (Wells); exh. DPS-42 at ¶¶ 3 and 9.

30. While uncertainties still exist, the risks leading to highly escalating decommissioning costs are lower today than they have been in the past. Sherman pf. at 53.

31. 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.[56] Such an approach would not expose the State to any unnecessary risk, as SAFESTOR is a safe alternative to immediate decommissioning. Keuter reb. pf. at 11; Sherman supp. pf. at 25, fn. 10.

32. Delayed decommissioning of Vermont Yankee and its placement into SAFESTOR does not fully alleviate the risk of increased decommissioning costs. SAFESTOR also raises other societal cost issues, as it delays the time at which the Vermont Yankee site will be restored. Tr. 2/15/02 at 40 (Schlissel); tr. 2/6/02 at 18–20 (Kansler); Deehan-Cater reb. pf. at 15–18; tr. 4/2/02 at 298–300.

(b) Additional ENVY Decommissioning Commitments

33. At the time of the transfer of ownership of Vermont Yankee, the decommissioning fund will have a pre-paid trust fund balance of close to $304 million. Sherman pf. at 4.

34. Both the qualified and non-qualified decommissioning funds, as well as the decommissioning risks and liabilities, will be transferred to ENVY. ENVY would be required to make up any shortfalls, but, as proposed, ENVY would also benefit from any excess funds. Sherman pf. at 51; Kansler pf. at 20; exh. VY-42 at ¶¶ 9–10.

35. ENVY will provide the Department and the Board updated decommissioning fund status reports at the same time such reports are required by the NRC. ENVY also will conduct site-specific decommissioning cost studies at least once every five years. ENVY will file these reports with the Department and the Board. Exh. VY-42 at ¶ 5–6; tr. 4/18/02 at 210 (Sherman).

36. Under current ownership, any surplus in the decommissioning fund will be returned to the Sponsors' ratepayers. Tr. 4/18/02 at 172–79 (Sherman).

37. If the decommissioning is delayed beyond March 31, 2022, an agreement between Entergy and the Department provides for an equal sharing between ENVY and the Sponsors' ratepayers of any excess funds in the decommissioning fund upon completion of Vermont Yankee's decommissioning. Kansler pf. at 21; exh. VY-2 at ¶ 3.

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56. SAFESTOR is defined by the NRC as:

> the alternative in which the nuclear facility is placed and maintained in a condition that allows the nuclear facility to be safely stored and subsequently decontaminated (deferred decontamination) to levels that permit release for unrestricted use.

Exh. VY-2.

38. ENVY will modify its Decommissioning Trust to include the sharing commitment and will not modify it without further Board approval. Exh. VY-42 at ¶ 9.

(2) Discussion re: Transfer of Decommissioning Risks

(a) Risk of Increased Decommissioning Costs

At the present time, VYNPC and its owners are responsible for ensuring the safe decommissioning of Vermont Yankee upon closure. To achieve this, VYNPC has established a Decommissioning Trust Fund and collects money in its wholesale rates to contribute to the fund. Effectively, retail ratepayers of the Vermont Sponsors provide the contributions. This means that if the anticipated costs of decommissioning change so that added contributions are needed, VYNPC and ultimately ratepayers, must provide the requisite funds. These charges are not insignificant; VYNPC's operating costs include $11.4 million annually to fund the eventual decommissioning.[57]

The Sale Agreement transfers the decommissioning fund to ENVY.[58] At the same time, ENVY assumes responsibility for paying for decommissioning.[59] This is consistent with the normal industry practice in nuclear plant transfers; 13 of the 15 nuclear plant transfers to date have included such a transfer.[60] Unlike the present, where the decommissioning costs are included in VYNPC's operating costs and higher contributions are passed on to ratepayers, ENVY cannot simply raise the prices embedded in the Power Purchase Agreement if higher contributions to the decommissioning fund are needed. Thus, the sale transfers to ENVY the risk of a shortfall in the decommissioning fund.

The transfer of the decommissioning fund is an improvement over the status quo. Many events, such as under earnings on investments or unanticipated cost overruns could cause increases in the eventual costs of decommissioning. As the federal Government Accounting

57. Tr. 2/15/02 at 167-68 (Sherman).
58. Exh. VY-42, ¶ 10.
59. Exh. VY-42, ¶ 9.
60. Exh. VY-25 at 23.

Office has pointed out: "[t]he actual cost incurred to decommission the nuclear power plant site is affected by many factors, some of which lie beyond the licensee's control."[61]

We recognize that the value of shedding the future liabilities for decommissioning can not be known until after decommissioning of Vermont Yankee is completed. Some parties have suggested that this risk may not be significant. For example, both the Department and ENVY have suggested that decommissioning can be accomplished for less than projected by VYNPC. By contrast, VYNPC suggests that the estimated costs of decommissioning are growing. We have no way to know which scenario is more probable. Even if we conclude that the risk of higher decommissioning costs is low, transfer of the decommissioning liability eliminates them.

ENVY has also made several commitments that enhance the value of the risk transfer. ENVY will completely restore the Vermont Yankee site following decommissioning (unless it chooses to reuse the site), rather than simply completing decommissioning as required by the NRC. To allow the state to monitor the status of decommissioning fund collections, ENVY will report to the Board and Department on the fund at the same time it submits reports to the NRC. ENVY will also provide the Department with semi-annual reports on the fund's status.[62] Furthermore, ENVY also will update its cost estimates for decommissioning every five years and submit the results to the Board and Department.[63] Finally, ENVY will seek Board approval for any disbursements from the decommissioning trust fund, unless the disbursements are used for decommissioning.[64] Collectively, these commitments will increase the information available to the Department and Board.

(b) Sharing of Excess Decommissioning Funds

Paragraph 3 of the MOU provides that if ENVY completes the decommissioning of Vermont Yankee after March 31, 2022, ENVY will receive 50 percent of the remaining funds in the Decommissioning Trust Fund, and the electric consumers of VYNPC will receive the other

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61. Exh. VY-25 at 51.
62. Exh. VY-42 at ¶ 5. ENVY should also file these reports with the Board.
63. Exh. VY-42 at ¶ 6.
64. Exh. VY-42 at ¶ 7.

50 percent. If decommissioning is completed before 2022, all excess funds, if any, would belong to ENVY.

NECNP contends that this provision violates Vermont common law, statutes, and the state and federal Constitutions, and is a breach of fiduciary duty, a taking, and a denial of procedural due process.[65] NECNP's principle basis for its argument is found in Article VII, Section 7.02 of the Vermont Yankee Decommissioning Trust ("Trust"), dated March 11, 1988, which states:

> Any property remaining in the Trust Fund upon termination of the term hereof . . . shall be distributed by the Trustee for the benefit *of the customers of* Vermont Yankee's sponsors . . . .

According to NECNP, the proposed transaction will result in the loss of this contingent benefit. CAN further argues that the sharing provision violates federal regulations.[66]

The Petitioners counter that the transactions do not violate applicable legal requirements. The Petitioners state that the funds in the Decommissioning Trust will be transferred to a new, successor trust established by ENVY, consistent with the terms of the current Trust. As a result, they assert no funds would be left in the trust and none would remain to be distributed to Sponsors for the benefit of customers upon termination. Any contingent claims on the part of Vermont Yankee's Sponsors' customers would, therefore, no longer exist. The Petitioners base their position on Article VII, Section 7.01 of the Trust (among others), and contend that the NRC's and FERC's orders approving the license transfer from VYNPC to ENVY support their analysis.[67] The Department, in support of the MOU and the Petitioners, assert that the transfer of the decommissioning funds is in the ratepayers' interest, and promotes the general good. The

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65. NECNP Initial Brief at 14–18. NECNP further claims that New Hampshire Statutes require that 100 percent of excess decommissioning funds must go to ratepayers. Tr. 4/1/02 at 139.

66. CAN cites NRC and FERC regulations at 10 CFR 50.75, 10 CFR Part 50 generally, [*see* CAN brief at 15]; and 18 CFR §33.32(a)(6),(7). Careful reading of these sections demonstrates that they apply to rate-regulated electric utilities, and not to market-based exempt wholesale generators such as ENVY would be. However, they do reflect a recognition of a ratepayer interest in such excess funds and the incentives created by their allocation. We note that the NRC Order cited by Petitioners does not address the allocation of *residual*, excess, funds left after the purposes of the fund are met.

67. Letter to Susan M. Hudson, dated June 3, 2002.

Department reiterates its belief that "[i]f all the excess were returned to ratepayers, ENVY would have no incentive to keep decommissioning costs down."[68]

We begin our analysis with the Department's final point which we find unpersuasive for the simple reason that minimizing the costs of decommissioning does not necessarily serve the public good. Our primary goal should be to encourage ENVY to conduct the most safe and thorough decommissioning possible, without providing any incentive to "cut corners." Fundamentally, we believe it is inconsistent with the general good for there to be any financial incentive for ENVY to minimize costs in decommissioning Vermont Yankee. Similarly, we do not wish the potential for profits from such a fund to be a factor in any decision about whether or not to seek renewal of the plant's license.

We also conclude, based on testimony from Mr. Cloutier, that the Decommissioning Trust Fund is unlikely to contain substantial excess revenues at any time in the near or mid-term future.[69] This is particularly true since Entergy's commitment to go beyond NRC minimums in a clean-up at the time of decommissioning means that the chance and magnitude of excess funds is even less than Mr. Cloutier's estimates suggest.[70] Based upon this testimony, we thus infer that ENVY's assessment of the overall value of this transaction should not be impaired by our ruling on this issue. ENVY did not present any evidence demonstrating that it relied upon excess proceeds in the Decommissioning Trust Fund as adding value to the transaction.[71]

We conclude that the customers of Vermont Yankee's Sponsors should receive any and all funds remaining in the trust after completion of decommissioning. To the extent that Paragraph 3 provides for equal sharing between ENVY and VYNPC, we find that it creates incentives for cost-cutting in decommissioning that are not consistent with the public good. We, therefore, approve Paragraph 3 of the MOU only with the following amendments. Instead of the provision for sharing between ENVY and VYNPC, the paragraph shall be amended to require 100 percent of the funds remaining in the trust to be returned to "the customers of Vermont

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68. Department Initial Brief at 28.

69. Mr. Cloutier, Vice President, Decommissioning Programs, TLG Services, Inc., was presented by VYNPC as an expert on decommissioning.

70. *See* exh. VY-42 at ¶¶ 3, 9.

71. Tr. 4/4/02 at 136 and 181 (Keuter) (financial projections confidential, but consistent with the above).

Yankee's Sponsors," as provided for in Section 7.02 of the current Decommissioning Trust; this provision shall apply regardless of the date of decommissioning.[72]

We do not base this decision on NECNP's or CAN's legal arguments, nor are we ruling upon whether the Petitioners have interpreted the terms and conditions of the Decommissioning Trust correctly. We do not rule here on the legality of the proposed sharing provision.[73] Rather, we condition our approval of the sale on the modification of this provision because we believe that rewarding Entergy with the savings of reduced decommissioning efforts would be inconsistent with the general good of Vermont.

2. Financial Value of The Transaction

a. The financial merits of the transaction as a whole

In this section we examine the financial merits of the proposed sale of Vermont Yankee. In this analysis, we assume that Vermont Yankee keeps operating as it is now, *i.e.,* that overall there is no significant change in Vermont Yankee's capacity factor and available output; that operating costs remain in line with company projections, and that the plant continues to generate power for the remaining current license life. In the following section (Part V.C. at 59), we examine various adjustments to the costs of operation and other risks that could alter the conclusions we reach in this section.

Overall, we conclude that if Vermont Yankee continues operating as it has recently, the transaction as a whole has economic benefits when compared to the status quo due to: (1) the $180 million initial payment from ENVY to VYNPC; (2) Power Purchase Agreement prices which are below projected costs to continue to operate Vermont Yankee under status quo

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72. The MOU at ¶ 3 further explains that excess funds shall be paid to VYNPC "for the benefit of electric consumers in pro rata shares in proportion to the stated ownership percentage of the VYNPC sponsors." We note that the language is substantially similar to Article 7.02 of the Decommissioning Trust: "for the benefit *of the customers of* Vermont Yankee's sponsors . . ." as discussed below. *See*, Appendix D for the complete, amended language of ¶ 3.

73. In general, we find some merit in the Petitioners' arguments, although it is not clear that the technical requirements of Section 7.01 — which requires either legislative action to create a new trust, or the *merger* of the existing trust into a successor trust — have been met. The technical question of whether the relevant NRC Order which requires a "transfer" of the funds into the new trust is equivalent to a "merger" under Section 7.01 of the current Trust is one that we need not address here; this is because we rely upon the general-good standard and deterrence of perverse incentives, rather than upon possible technical differences between the Petitioners' Trust instruments and the recent Nuclear Regulatory Commission Orders.

conditions; (3) the Low Market Adjuster price resetting mechanism which limits Central Vermont and Green Mountain's Power Purchase Agreement-related exposure to above-market power costs; and (4) recoupment of the bulk of Central Vermont and Green Mountain's investment in Vermont Yankee, which decreases their respective rate bases and substantially limits potential stranded cost liabilities.

(1) Findings

39. The essential method of analysis used by the Department, Green Mountain and Central Vermont is one in which annual cost streams are projected and then discounted to present value dollars. The net benefits (or cost) of the transaction are determined by comparing the status quo case to the proposed transaction. Biewald pf. at 7.

40. If Vermont Yankee's operating costs and performance are similar to recent experience, the sale to ENVY will provide a net present benefit of between $263 million and $383 million as compared to continued ownership.[74] The benefit depends upon whether wholesale market prices activate the Low Market Adjuster (which would reduce prices and increase benefits). Exh. DPS-WKS-9.

41. If VYNPC were to reduce operating expenses and achieve a power uprate (as described below, the expected net present value benefit of the sale ranges from $39 million to $383 million when comparing the sale of Vermont Yankee to continued ownership of the plant. Exh. DPS-WKS-9; Sherman sur. pf. at 7–8.

42. Use of the proceeds will reduce Central Vermont's rate base by $12.2 million, and reduce Green Mountain's rate base by $7.6 million. Exh. CPVS-Boyle-4 Revised; exh. GMP-2.

43. In every year except 2002 and 2003, the Power Purchase Agreement prices are lower than forecasted Vermont Yankee operating costs. Because of these reduced power costs, and a smaller rate base, rate request filings by Central Vermont and Green Mountain should be delayed beyond what they otherwise would have been. Exh. Wiggett-9 (revised).

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74. These net benefits are based upon Vermont Yankee's estimate of its future operating costs. Although we do not necessarily adopt all of these costs as accurate, they are reasonably representative of future costs.

Also, as we discuss in Finding 52, below, the parties presented many projections of future market power costs. We find the range represented by two of these forecasts — the CVPS 2002 and DPS 2001 — to be a reasonable representation of future wholesale market prices.

(a) Power Purchase Agreement Prices Compared to Status Quo Operating Costs

44. Vermont Yankee projects $1.337 billion (present value) in costs through the remaining license term. In contrast, the Power Purchase Agreement represents an aggregate cost obligation of $1.066 billion, excluding potential benefits from the Low Market Adjuster. Exh. CPVS-Rebuttal-Page-1 at 1; exh. VY-Wiggett-9 Revised.

45. The annual prices in the Power Purchase Agreement as compared to VYNPC's projected operating costs expressed on a dollars per KWh basis are as follows:

Projected Operating Costs Under Current Ownership vs. ENVY Power Purchase Agreement											
Date	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
VY Costs	$4.99	$4.22	$5.37	$5.52	$4.57	$5.68	$5.94	$5.18	$6.40	$6.68	$14.57
PPA	$5.14	$4.20	$4.28	$3.95	$3.90	$4.00	$4.10	$4.20	$4.30	$4.40	$4.50

Exh. GMP-NRB-12; exh. VY-1, exh. E.

46. The net present value of Central Vermont's share of projected Vermont Yankee operating costs from July 2002 through March 2012 are estimated at $438 million. The net present value of Central Vermont's commitment under the Power Purchase Agreement over this same time period is $332 million. Exh. GMP-NRB-12; exh. GMP-NRB-9A.

47. The net present value of Green Mountain's share of projected Vermont Yankee operating costs from July 2002 through March 2012 are estimated at $250 million. The net present value of Green Mountain's commitment under the Power Purchase Agreement over the same time period is $190 million. Exh. GMP-NRB-12; exh. GMP-NRB-9A.

48. The net present value of Central Vermont's and Green Mountain's purchases under the Power Purchase Agreement would be lower if the Low Market Adjuster is triggered. Exh. GMP-NRB-12.

49. When compared with the status quo, under the Power Purchase Agreement Central Vermont and Green Mountain will save $106 million and $60 million, respectively, in power costs between July 2002 and March 2012. These savings would increase if the market price for power is more than 5% below the prices in the Power Purchase Agreement. Findings 46–48, above.

(b) Power Purchase Agreement Prices Compared with Forecasts of Wholesale Prices

50. The Power Purchase Agreement sets fixed power purchase prices for specific amounts of Vermont Yankee power through November 1, 2005, and contains a mechanism that ties contract prices to the wholesale market for the remaining duration of the contract. Kansler pf. at 22; exh VY-42, exh. E.

51. The Power Purchase Agreement is a unit contingent contract. Central Vermont and Green Mountain will receive power from ENVY under the power purchase contract only when Vermont Yankee is operating. Kansler pf. at 22.

52. The Board heard evidence on nine forecasts of power costs during the remaining ten years of Vermont Yankee's operating license and proposed Certificate: (1) the Department's April 2000 forecast (referred to here as DPS 2002); (2) the Department's December 2000 forecast (DPS 2000a); (3) the LaCapra 2001 forecast prepared for Green Mountain (GMP 2/01); (4) the Green Mountain 2001 forecast (GMP 7/01); (5) the Central Vermont 2001 forecast (CVPS 2001); (6) the Department's 2001 forecast (DPS 2001); (7) the LaCapra 2002 forecast prepared for GMP (GMP 1/02); (8) the Central Vermont 2002 forecast (CVPS 2002); and (9) CLF's price projections (CLF).[75] The power cost projections contained in these forecasts, and the prices in the Power Purchase Agreement (assuming that low market prices do not trigger the Low Market Adjuster) are as follows:

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75. CLF generated its forecast by adjusting the assumptions used in the GMP 2001 forecast and the DPS 2000 forecast. Weiss pf. at 42–44.

SUMMARY OF VARIOUS PRICE FORECASTS Nominal Market Price (in Dollars per MWh, including energy and ICAP)												
	Date	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
DPS2000	Apr-00	$39.74	$42.03	$43.11	$44.54	$46.01	$47.52	$49.09	$50.72	$52.52	$54.40	$56.35
DPS2000a	Dec-00	$46.94	$43.04	$44.14	$45.68	$47.27	$48.74	$50.44	$52.19	$54.09	$56.05	$58.09
GMP 2/01	Feb-01	$37.72	$35.19	$34.02	$33.66	$33.82	$35.65	$35.65	$37.05	$39.00	$40.09	$41.22
GMP 7/01	Jul-01	$42.05	$39.18	$37.86	$37.45	$37.14	$37.63	$39.70	$41.29	$43.50	$44.74	$46.01
CVPS 01	Jul-01	$45.85	$43.04	$38.02	$39.07	$40.16	$41.29	$42.46	$43.67	$45.03	$46.46	$47.93
DPS2001	Jan-02	$38.84	$36.34	$34.36	$37.66	$40.95	$44.25	$47.55	$50.85	$52.74	$54.62	$56.56
CLF	Jan-02	$35.18	$32.65	$31.48	$31.12	$30.85	$31.28	$33.11	$34.51	$36.46	$38.54	$40.74
GMP 1/02	Jan-02	$30.68	$26.36	$25.87	$26.52	$27.54	$28.92	$30.30	$31.68	$33.80	$35.41	$37.44
CVPS 02	Feb-02	$30.87	$31.44	$32.18	$32.48	$32.67	$35.26	$40.34	$41.55	$42.86	$44.21	$45.60
PPA w/o LMA		$51.42	$42.00	$42.80	$39.50	$39.00	$40.00	$41.00	$42.00	$43.00	$44.00	$45.00

Exh. GMP-NRB -12.

53. The range bounded by the Central Vermont 2002 forecast and the DPS 2001 forecast reasonably represent likely future market prices. They are both based upon recent Natsource market price information. Tr. 2/8/02 at 85 and 119 (Weiss); exh. DPS-DFL-1 at 6; tr. 4/7/02 at 261–62 (Biewald).

54. Washington Electric Cooperative, Inc. and the City of Burlington Electric Department arranged for alternative replacement power for the years 2002–2007 at prices in the range of $32.50 to $36/MWh. Lamont surr. pf. at 8–9.

55. Based upon the DPS 2001, Central Vermont and GMP 2002 forecasts, the annual *above market* payments by VYNPC for years 2002–2005 range from $82 million to $205 million. Weiss pf. 3/29/02 at 14; exh. CLF-JW-R2.

56. The amount of power covered under the Power Purchase Agreement is consistent with Vermont Yankee's nominal output, and does not result in substantial lost opportunity value. Exh. VY-1, exh. E, Schedule B; exh. CLF-2 at 37.

57. From July 1, 2002, through November 1, 2005, Central Vermont is committed to buying 4,697,516 megawatt hours of Vermont Yankee output at a net present value cost of $151 million. Exh. GMP-NRB-12.

58. From July 1, 2002, through November 1, 2005, Green Mountain is committed to buying 2,684,295 megawatt hours of Vermont Yankee output at a net present value cost of $86 million. *Id.*

59. Purchasing the same amount of power under the full range of market price forecasts would cost Central Vermont between $94 million and $156 million. Using the range of wholesale market prices bounded by the DPS 2001 and CVPS 2002 forecasts, the costs to Central Vermont are between $112 million and $128 million.[76] *Id.*

60. Purchasing the same amount of power under the market price forecasts would cost Green Mountain between $54 million and $89 million. Using the range of wholesale market prices bounded by the DPS 2001 and CVPS 2002 forecasts, the costs to Green Mountain are between $64 million and $73 million. *Id.*

61. Using the range of wholesale market prices bounded by the DPS 2001 and CVPS 2002 forecasts, Central Vermont's above-market payments under the Power Purchase Agreement are between $23 million and $39 million. Using the same assumptions, Green Mountain's above-market payments under the Power Purchase Agreement are between $13 million and $22 million. Findings 52–60, above.

62. Over the entire life of the Power Purchase Agreement, projected payments under the contract could be below market prices by as much as $27 million if the prices in the DPS 2000 forecast occur. Exh. GMP-NRB-12.

63. The 10% default value for ICAP will probably be too high. If another measure is more appropriate, the MOU allows the parties to replace ICAP with that measure. Biewald pf. at 19; tr. 4/18/02 at 45–56 (Weiss); exh. VY-42 at ¶ 14.

64. In the event that ENVY increases the output from Vermont Yankee, or the facility is relicensed, ENVY will give the Vermont Yankee sponsors a thirty-day exclusive period to negotiate the purchase of the additional power. Keuter supp. pf. 3/15/02 at 21; exh. VY-42.

(c) Rate Base Effects and Other Transfers

65. By using its cash proceeds from the proposed sale to reduce its rate base, Central Vermont will reduce the revenue requirement to recover its pre-tax cost of capital by $1.8 million in the first full year after implementation. Exh. Central Vermont Boyle-5 Revised.

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76. *See* table on p. 50, below.

66. By reducing its rate base $8.6 million, , Green Mountain will lower its overall cost of capital. Green Mountain plans to reduce high-cost equity. Brock reb. pf. at 24–25.

(2) Discussion

The economic analyses demonstrate that the sale of Vermont Yankee to ENVY will have strong economic benefits. Indeed, if Vermont Yankee's operating costs and performance over the next ten years are similar to the recent past, those benefits are substantial, ranging from $263 million to $383 million as compared to continued ownership and operation.[77] These savings amount to approximately 20 percent of the costs that VYNPC's Sponsors (and as a result, ratepayers) would otherwise pay for power from Vermont Yankee and they provide a real and tangible benefit. Moreover, if wholesale market prices for power are low, the Low Market Adjuster mechanism will cause prices for power from ENVY to fall and further increase the benefits of the proposed transactions.

The proposed transaction has two main components that produce this result. First, ENVY will purchase Vermont Yankee, providing an initial $180 million payment to VYNPC. As we explain below, this initial payment has immediate benefits to VYNPC and its owners. It also permits Central Vermont and Green Mountain to recoup the bulk of their investment in Vermont Yankee, decreasing their respective rate bases and substantially limiting potential stranded cost liabilities. Second, accompanying the sale, VYNPC will enter into a Power Purchase Agreement, whose prices are below projected costs to continue to operate Vermont Yankee under status quo conditions. Included in the Power Purchase Agreement is a Low Market Adjuster, which could produce lower prices for VYNPC's Sponsors if wholesale market prices are low.

In the following discussion we examine the financial ramifications of each of the major aspects of the proposed sale and purchase power transactions.

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77. Exh. DPS-WKS-9; exh. CVPS-Page-Rebuttal-1. VYNPC's estimated savings are consistent with these figures. Exhs. VY-Wiggett-6 Revised and VY-Wiggett-10 Revised.

(a) Upfront Cash Payment

One of the key components of the transaction is the *immediate* and *real* transfer from ENVY to Vermont Yankee of approximately $180 million. This initial payment has several direct benefits. It allows VYNPC to completely repay its debt obligations, removing from Green Mountain and Central Vermont ultimate responsibility for a proportion of these obligations. The cash payment also permits Green Mountain and Central Vermont to recover a significant portion of their investment in Vermont Yankee. By recouping their Vermont Yankee investment from ENVY instead of ratepayers, Vermont Yankee's Sponsors substantially, albeit not totally, alleviate potential stranded cost recovery concerns.[78]

The upfront cash payment is tangible and definite. It will provide benefits to Central Vermont and Green Mountain irrespective of the benefits of other aspects of the transaction or whether Vermont Yankee operates at all. Specifically, VYNPC receives the initial payment, which allows for the payback of $99 million in Vermont Yankee obligations, for which Central Vermont and Green Mountain Power would have a proportional responsibility. The cash payment also provides for Central Vermont and Green Mountain to receive $13.1 million and $8.6 million from the sale, respectively, as a return of their investment. These payments are real dollar flow benefits, and are not dependent on estimates of future market prices. It is possible that over the remaining ten years of operation other provisions of the proposed transaction *could* have greater returns. For example, the Power Purchase Agreement is expected to save ratepayers millions of dollars. Nonetheless, the most striking economic benefit occurs at closing when the $180 million purchase price is received.

(b) Status Quo Operating Costs versus Power Purchase Agreement Prices

The second major benefit of the proposed transaction is the long-term purchase power contract which replaces the current wholesale power rate based upon Vermont Yankee's operating costs. The evidence shows that in all years except 2002 and 2003, the prices embedded

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78. Substantial stranded costs were an issue in the AmerGen sale proposal.

in the Power Purchase Agreement are below the wholesale rates that the Sponsors would pay based upon current expectations.

Projections provided by Vermont Yankee show an aggregate cost to continue to own and operate the facility of $1.329 billion which, barring a sale, would ultimately be borne by ratepayers in proportion to their respective ownership interests. Vermont Yankee projects that its costs to produce a megawatt hour of power range from a low of $42.20 in 2003 to $66.80 in 2011.[79] Central Vermont's share of Vermont Yankee's operating costs, as projected, represent a present value obligation of $438 million.[80] Similarly, Green Mountain's obligation is $250 million.[81]

During this same period, stated Power Purchase Agreement prices range from a low of $39 in 2006 to a high of $44 in 2011.[82] Under the Power Purchase Agreement, the same power will cost Central Vermont $332 million, present value, and Green Mountain $190 million.[83] The substantial difference in prices means that, over the next ten years, Central Vermont will save an estimated $107 million on its power costs (compared to what it would have spent as an owner of Vermont Yankee), while Green Mountain's savings are estimated at $60 million.[84]

The gap between Vermont Yankee's projected operating costs and prices for power under the Power Purchase Agreement will widen if New England wholesale market prices are more than 5 percent below the prices set out in the Power Purchase Agreement. This event would trigger the Low Market Adjuster, and would provide an additional benefit to the Vermont utilities, and by extension their ratepayers.

Overall, we conclude that the Power Purchase Agreement sets power purchase levels which are below the projected costs of continuing to own and operate Vermont Yankee through the end of its license.

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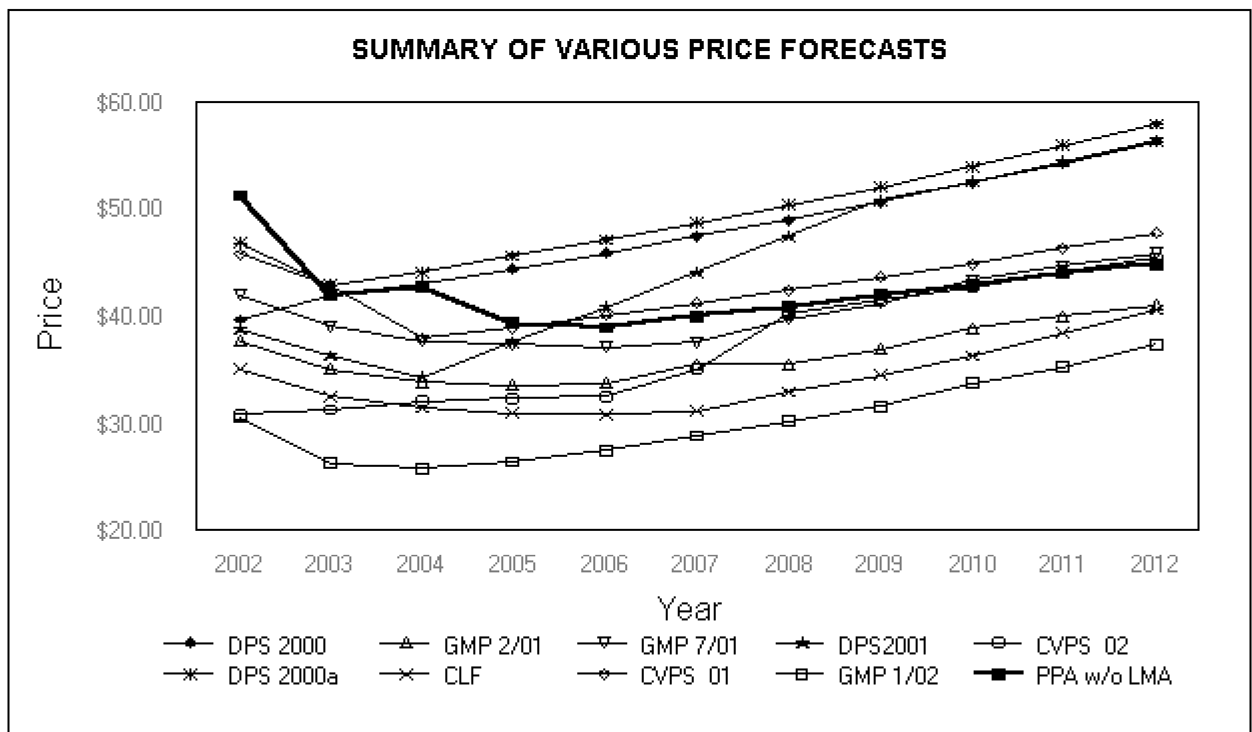
79. *See* Finding 45, above. For this comparison, we have excluded prices for the partial years of 2002 and 2012.
80. *See* Finding 46, above.
81. *See* Finding 47, above.
82. *See* Finding 45, above. For this comparison, we have excluded prices for the partial years of 2002 and 2012.
83. *See* Findings 46 and 47, above.
84. *See* Finding 49, above.

(c) Power Purchase Agreement Prices compared with Forecasts of Wholesale Prices

The Power Purchase Agreement, while providing real savings by comparison to the continued operation of Vermont Yankee, appears to be priced substantially above the expected wholesale market prices, primarily during the period between closing and the onset of the Low Market Adjuster. This fact causes us to question (1) whether the Power Purchase Agreement prices are unreasonable because they exceed market prices and (2) whether the risk that the above-market prices pose is acceptable.

During the course of this docket the parties presented a variety of projections concerning future energy prices. These projections, which range from the Department's 2000a forecast to GMP's 2002 LaCapra study, are shown below.[85]



85. Forecast market prices for power in New England are subject to a number of uncertainties such as fluctuation in oil and natural gas prices, the timing of new generating capacity, and developments in the regional wholesale marketplace. Any of these could cause actual market prices to diverge significantly from a particular forecast. Exh. GMP-1 at 1.

After examining these forecasts, we conclude that the range bounded by the CVPS 2002 projection and the DPS 2001 model reasonably represent expected future New England wholesale prices of power.[86] The older forecasts, such as the DPS 2000 and DPS 2000a, no longer appear to reflect market prices. Similarly, we discount the GMP 1/02 forecast, which appears unrealistically low.[87] In aggregate, the graph shows that the Power Purchase Agreement base prices are above the DPS 2001 market forecasts through 2005, and then below that forecast's projections of market after that date. The graph also shows that the Power Purchase Agreement base prices are above the CVPS 2002 market forecast through 2009, and below that forecast's projections of market prices after that date.

In evaluating the degree to which the Power Purchase Agreement exceeds market prices, it is appropriate to focus on the period from 2002–2005. Beyond the first three years of the contract, the Low Market Adjuster ensures that ratepayers will not pay more than 5 percent above the New England wholesale market prices. During this period, the range of market price forecasts as compared to the Power Purchase Agreement are as follows.

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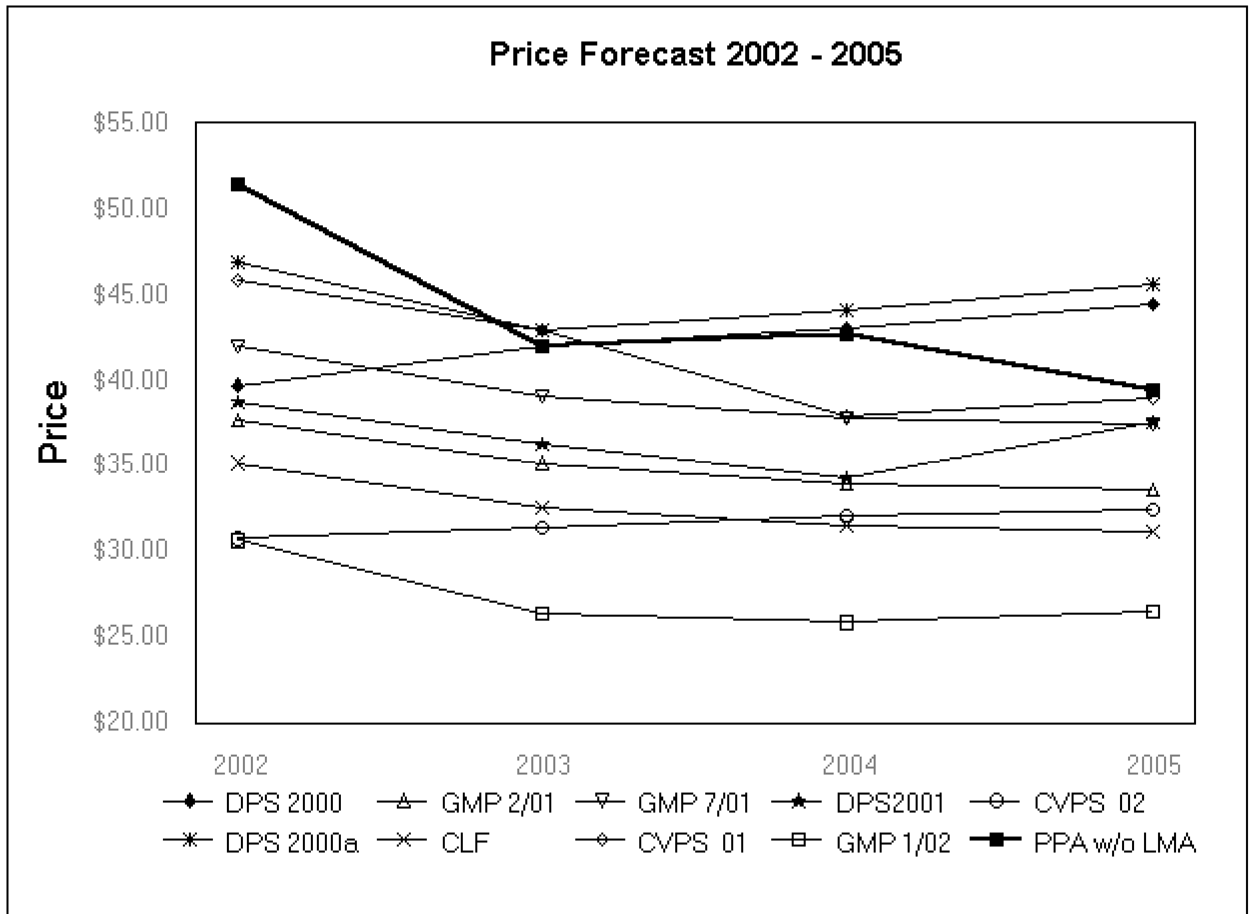
86. Tr. 2/8/02 at 85 and 119 (Weiss). Both forecasts incorporate recent information concerning capacity and demand factors, as well as market fundamentals, and we believe they will be most likely to accurately reflect the future. Both the DPS 2001 forecast and the Central Vermont 2002 forecast build upon actual short-term forward market energy prices to develop their near-term price levels, and, longer term, assume a return to market equilibrium.

87. The GMP 1/02 forecast projects 2003 and 2004 prices which are *below* current forward power prices in New England. The forecast also appears to project that new generating plants will operate at a deficit for more than a decade. Biewald supp. pf. at 6; Lamont sur. pf. at 1–2.



The above table demonstrates that all of the recent price forecasts project that the Power Purchase Agreement prices will be above the wholesale market prices in at least part of the period before the Low Market Adjuster takes effect. These price differences translate directly to higher costs for ratepayers. Under almost all of the price forecasts presented for the 2002–2005 period, Central Vermont and Green Mountain will pay above wholesale market prices in the early years of the Purchase Power Agreement. Using the forecasts that we consider most representative of the future (as discussed above), the likely range of these excess costs is between $23 – $39 million for Central Vermont and $13 – $22 million for Green Mountain.

The following table shows the degree to which Green Mountain and Central Vermont could incur above-market energy costs for power purchases under the Power Purchase

Agreement in the pre-Low Market Adjuster period (negative numbers represent above-market price payments).[88]

Net Present Value PPA Power Costs Versus Forecasts for the period 7/02-11/05				
($MM)	VY Power Costs	PPA	VY Power Costs	PPA
Forecast	GMP	Savings/Excess	CVPS	Savings/Excess
DPS 2000	85.4	-0.8	149.4	-1.4
DPS 2000a	89.2	3	156.1	5.3
GMP 2/01	69.9	-16.3	122.3	-28.5
GMP 7/01	77.8	-8.4	136.1	-14.7
CVPS 2001	82.5	-3.7	144.4	-6.5
DPS 2001	73.1	-13.1	127.9	-22.9
GMP 2/02	53.8	-32.4	94.1	-56.7
CVPS 2002	63.8	-22.4	111.6	-39.2
PPA	86.2		150.8	

These power cost forecasts also demonstrate a degree of market price risk inherent in the Power Purchase Agreement. Commencing no later than November 1, 2005, the low market adjuster will allow Power Purchase Agreement prices to move with wholesale prices, substantially eliminating wholesale market price risk at that time. But until that time, that risk — of how much ratepayers may have to pay above the wholesale market prices — is real. For example, if the lowest wholesale price forecast (GMP 1/02) turned out to be correct, Central Vermont's ratepayers would incur $57 million net present value of above market payments and Green Mountain customers would pay rates $32 million in excess of the market.[89]

Ultimately, the reasonableness of the above-market costs likely to occur in the early years of the Power Purchase Agreement must be analyzed in the context of the transaction as a whole. The initial $180 million payment and the pricing structure of the Power Purchase Agreement are linked. Also since Green Mountain, Central Vermont, and their ratepayers are locked into paying what appears to be above-market prices for the next three years, they receive the benefits that flow from the initial payment.[90] More importantly, from the perspective of VYNPC and the Sponsors, the real questions are whether ratepayers are better off following the sale and whether the auction price represents the fair market value of Vermont Yankee. On the latter question, we

88. Exh. GMP-NRB-12.

89. *Id.*

90. It is not clear from the record that ratepayers would have received greater benefits from a smaller initial cash payment and a Power Purchase Agreement set at wholesale market prices.

conclude that, based upon the specific elements in the offering Memorandum, the auction appears to have produced fair market value.[91] As to the former, as we have described above, the initial $180 million payment, coupled with the fact that the prices in the Power Purchase Agreement will provide real savings over the present operating costs, will represent a significant improvement for ratepayers over the remaining ten years of Vermont Yankee's Certificate.

In evaluating the Power Purchase Agreement, an additional question revolves around the reasonableness of the Low Market Adjuster mechanism. That mechanism takes effect if the market price for power is more than 5 percent below the Power Purchase Agreement prices. Market price is defined to mean the New England monthly wholesale spot market price plus the value for ICAP. In the absence of an established ICAP, the Power Purchase Agreement specifies that a 10 percent adder will be used.

A separate market analysis on the appropriateness of the 10 percent adder for ancillary services, as opposed to the 3 percent adder originally proposed by the Vermont Yankee sellers in the offering memorandum,[92] or any other number, was never conducted. The evidence strongly suggests that given New England's energy situation, future ICAP charges in New England are likely to be below 10%. Certain of Green Mountain's projections valued ICAP and ancillary services at 8.8% of the energy clearing price.[93] However, the pertinent question to our analysis is not whether the ICAP figure will be below 10%, but *whether there will be* an ICAP figure. If there is a market ICAP figure, the Power Purchase Agreement calls for use of the market ICAP figure, not the 10 percent adder. We have considered potential market changes in New England, which include a possible combination of ISO-NE with one or more market areas, and potential FERC rules mandating an installed capacity payment. We are convinced that some form of capacity payment for reserves will be in place in New England.

Opponents of the sale have argued that, even when the Low Market Adjuster is in place, the Power Purchase Agreement exposes Vermont utilities to power costs significantly above those in the actually-occurring New England wholesale markets.

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91. *See* p. 56, below.
92. Exh. CLF-2 at 11.
93. Tr. 2/6/02 at 285 (Brock); Exh. CLF-9.

This claim may arise from a mistaken view that the "energy clearing price" in wholesale electric markets is equivalent to the market value of the product the Vermont utilities would have to buy in the absence of the ENVY purchase agreement. However, whatever the cause of the confusion, a rigorous examination of the Low Market Adjuster's terms, when compared to the alternative, shows that it is likely to match or better the value of market equivalents:

Low Market Adjustment Price = the sum of:

(1) Energy Clearing Price, plus
(2) 5% payment for a fixed price cap, plus
(3) the lesser of ICAP or 10%.

and

Market Price of Equivalent Product = the sum of:

(1) Energy Clearing Price, plus
(2) unknown payment for a fixed price cap, plus
(3) ICAP, or its functional equivalent, plus
(4) other unavoidable "ancillary" uplift services, plus
(5) transaction and administrative costs.

To find the difference (delta) between the Low Market Adjuster price and the market price of an equivalent product, one compares the terms of the two products. Doing so shows that the energy clearing price element will be the same for both products and, thus is irrelevant to which is better. Unless of course, the Energy Clearing Price is high enough to trigger the fixed price cap. If so, the clause shields Vermont utilities from that high market price, thus producing a real value.

Next we examined the 5% payment for a fixed price cap. We cannot tell what price markets will demand for such a cap in the future, but we have no doubt that 5% is a reasonable estimate of its value, given historic volatility in wholesale power markets. Thus, this element balances out the Low Market Adjuster in comparison to future market prices.

The third element is payments for ICAP or equivalent mechanisms to compensate power producers for unused but necessary reserve margins. In the Power Purchase Agreement, the Low Market Adjuster will equal market costs if ICAP prices are 10% or less. At paragraph fourteen of the Memorandum of Understanding, the signatories to that document indicated their intent to

amend the definition of the term "market price," as defined in Article 2 (t) of the Power Purchase Agreement, by adding the following language:

> In the event there is no clearing price for Installed Capability, the Market Price shall be the product of (x) the amount set forth in clause (a) of the preceding sentence and (y) 110 % (or such other percentage mutually acceptable to [VYNPC] and the Seller to accurately reflect the price of Installed Capability).

This amendment leaves open the possibility that the functional equivalent of ICAP might be adopted under some other name and provide that it will be treated like ICAP if both parties mutually agree. We regard this as a good faith commitment by ENVY to accept reasonable changes to this effort and will require ENVY to so certify as a condition of this Order.[94]

The fourth cost-element is the potential for ancillary costs (other than ICAP) to be unavoidably charged as part of the cost of power purchased in wholesale markets. These costs have the potential to be significant, and the Low Market Adjuster's provisions will not be adjusted to reflect these market elements, and thus shield Vermont utilities from that financial risk. This is a very significant favorable element of the Power Purchase Agreement before us.

Finally, the Low Market Adjuster's prices are not set to reflect the administrative and transactional costs that Vermont utilities would have to bear if they were to rely further on market purchases rather than the Power Purchase Agreement before us. Again, this element makes the Low Market Adjuster compare favorably with the costs of future wholesale markets. In sum, these factors cumulatively demonstrate that (because of the Low Market Adjuster clause and the fixed price cap) the Power Purchase Agreement places the Vermont utilities in a balanced or favorable position when compared to market costs of power for the 2006–2012 period.

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94. The key point here is that the "adder" to the energy clearing price is intended to reflect the capacity payments for necessary reserve margin that are unavoidable costs of wholesale markets. Thus, it is that substance, not the ICAP name, that matters:

> "What's in a name? That which we call a rose
> By any other name would smell as sweet . . . ."

Romeo and Juliet, II. ii. 42–43

b. This Sale Compared to Others

(1) Findings

67. Using Vermont Yankee's summer-rated capacity of 510 MW, the $180 million purchase price equals $353 per kW.[95] Exh. DPS-PLC-2.

68. Excluding the pending Seabrook Station purchase agreement by FPL Group (see Finding 70, below), over the past six and a half years, there have been 16 nuclear power plant sale announcements. The cash purchase price for these facilities ranges from $16 per kW to $779 per kW. Since 1999, announced sale prices have ranged from $322 kW, to $779 kW. *Id.*; Chernick pf. at 6–18.

69. Nuclear power plant sales which occurred before 1999, including Pilgrim and Oyster Creek which in terms of age, size and technology are the most similar to Vermont Yankee, had lower per-kilowatt values than more recent sales. Chernick pf. at 11; tr. 2/16/02 at 123–124 (Chernick).

70. On April 15, 2002, FPL Group offered a total consideration of $837 million for an 88.2 percent ownership interest in the Seabrook nuclear facility. Making the adjustment for 100 percent ownership, the Seabrook purchase price is $817 per kilowatt. Adjusted for a $57 million required decommissioning fund top-off, the proposed acquisition price is $761 per kilowatt. Tr. 4/18/02 at 218 (Brown); exh. VY-46.

71. Vermont Yankee's age, a remaining license life of under ten years, its relatively small size and its status as a stand-alone entity are factors which limit the premium potential buyers are willing to pay for Vermont Yankee. Chernick pf. at 18.

72. As part of the auction process, JP Morgan contacted the likely parties which would have been expected to bid on Vermont Yankee. JP Morgan also followed the standard design for auctions of generating facilities, and properly identified the high bidder. Chernick pf. at 19–22.

95. Vermont Yankee has a nominal rated capacity of 540 megawatts, but its most recent summer ratings from ISO-New England was 506 megawatts.

(2) Discussion

The prices paid for other nuclear power plants also provide a benchmark, albeit an imperfect one, for judging the sale. The evidence demonstrates that taking into consideration the facility's age, small size and limited remaining life, the price offered by ENVY of $353/kW is generally consistent with that paid for other nuclear assets in the recent past.

During the period from 1996 to the close of the evidentiary record in this docket, there have been 17 proposed and/or consummated sales of nuclear power facilities in the U.S., 11 of which were announced prior to January 2000. Most of the sales announced prior to 2000 were for prices in the $100/kW–$200/kW range. The prices for Pilgrim and Oyster Creek (two older single-unit boiling water reactor plants that are physically the most comparable to Vermont Yankee) were both under $200/kW.[96]

More recent sales reflect the increased value that purchasers have placed on nuclear facilities, which we noted in dismissing the AmerGen proposal.[97] The value of these later sales (including all elements of the transactions) range from roughly $400/kW – $900/kW. The most recent nuclear plant sale announcement was FPL Group's $780 million offer for 88.2 percent of Seabrook Station, adjusted for a required decommissioning top-off of $57 million. The purchase price computes to $761/kW, substantially similar to the $779/kW value paid by Dominion Energy for Millstone 3 in March 2001.[98] The $180 million cash portion of the proposed Vermont Yankee sale equates to a value of $353 per/kW, which a cursory analysis puts at the bottom of the range of recent sales.

Several factors lead us to conclude that, although the price for Vermont Yankee is at the low end of recent sales, it is nonetheless reasonable. First, the price is within the range of prices obtained over the last six years. Second, the Vermont Yankee/ENVY transactions include many non-financial elements designed to benefit the Vermont Sponsors; thus a fair comparison to other prices may not reflect all of the value VYNPC receives. Third, the analysis is inherently imperfect. There is a great deal of variation in the form in which the value of a nuclear plant sale may be stated, and the same information about nuclear plant sales can produce widely different

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96. Dabbar pf. at 36; Chernick pf. at 10.
97. Docket 6300, Order of 2/14/01 at 25.
98. Exh. DPS-PLC-2; tr. 4/17/02 at 218-220 (Brown).

valuations of the transaction.[99] Fourth, other recent sales, particularly Millstone Units #2 and #3, Nine Mile Island #2, and Fitzpatrick, and most recently Seabrook, are for significantly larger and newer nuclear facilities.

Fifth, the price in the proposed transaction is the result of an auction process intended to elicit fair market value for Vermont Yankee. Auctions are geared to reflect the fair market value from a bidders' perspectives, and thus are able to take into consideration various complex valuation components. Overall, the auction process was generally structured reasonably.[100] It appears that Vermont Yankee's auctioneer, JP Morgan, followed standard auction design and that the auction's structure was appropriate. During the marketing phase of the auction, JP Morgan solicited interest from an array of likely potential bidders, primarily based on their already being participants in the nuclear power industry.[101] After the bids were received, JP Morgan and Vermont Yankee, as well as Green Mountain and Central Vermont, reviewed the bids and voted to select Entergy's $180 million proposal which included a Power Purchase Agreement for 100 percent of Vermont Yankee's output. In response to an instruction from this Board, the Boards of Directors of VYNPC, Green Mountain, and Central Vermont reexamined the proposed transaction, and reiterated their desire to proceed with it on the agreed-upon valuation and terms.[102]

We thus conclude that, overall, considering the differences between the characteristics of Vermont Yankee and other recent nuclear facility bids, the price proposed in this transaction is consistent with other nuclear plant sales and reflects the facility's fair market value.[103]

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99. Chernick pf. at 6.

100. Chernick pf. at 5. As we explain in Part VI.D.1., below, we decline to rule on whether the steps leading up to the auction, the actions VYNPC and its owners took during the auction, and the negotiation of the Sale Agreement were prudent.

101. Dabbar pf. at 7–11.

102. Tr. 2/15/02 at 109; exh. CVPS-Rebuttal-Brown-2; exh. NRB-11.

103. Chernick pf. at 18.

c. Comparison to early closure

(1) Findings

73. Other nuclear power generators, as well as other plants in the Yankee group, including Yankee Rowe, Connecticut Yankee, and Maine Yankee, have shut down before the end of their license terms. In those cases, the FERC directed that costs be recovered over the planned full-term life of the plants. Sherman supp. pf. at 27.

74. Shutdown will cost ratepayers more than would sale or continued operation. Findings 75–79, below.

75. Continued operation is less costly to ratepayers than shutdown before the end of VYNPC's license term. Sherman pf. at 30–35; Sherman sur. pf. at 8.

76. All comparisons of the net present value costs of early shutdown scenarios show net present value benefits to shutdown under ENVY ownership versus the current ownership, under all forecast market prices, and each of the shutdown cost projections presented. Exhs. DPS-WKS-9, DPS-WKS-10; exh. CLF-JW-R7.

77. Under continued current ownership, even in the event of early shutdown, ratepayers would continue to pay depreciation expenses of approximately $15 million per year through 2012. Exhs. DPS-WKS-9, DPS-WKS-10; exh. CLF-JW-R5; exh. VY-BW-10.

78. If early shutdown (prior to 2012) were to occur, it would be less costly to ratepayers if ENVY owned Vermont Yankee. Sherman surr. pf. at 8.

79. It is unlikely to be economic to shutdown Vermont Yankee before 2005. Sherman supp. pf. at 17–20.

(2) Discussion

In the previous sections, we concluded that the sale to ENVY under the terms of the Sale Agreement provides greater benefits to Vermont ratepayers than does continued ownership and operation by VYNPC. In fact, if Vermont Yankee continues to operate as it has recently, the evidence shows that the sale of Vermont Yankee has a net present value benefit of between $263 million and $383 million.[104]

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104. Exh. DPS-WKS-9.

The parties also presented evidence comparing the sale and continued ownership options to the possibility of early closure of Vermont Yankee.[105] The economic comparisons demonstrate that an early shutdown of Vermont Yankee would provide significantly less benefit than a sale to ENVY. Specifically, if we use Vermont Yankee's projected operating costs for the future (which reflect the costs to ratepayers if Vermont Yankee continues to operate), shutdown of Vermont Yankee is worse than the sale by between $245 million and $426 million on a net present value basis, depending upon the price forecast used to determine replacement power costs.[106] Moreover, the lower end of this range depends upon replacing Vermont Yankee's output at wholesale market prices based upon the GMP 2002 forecast, which as we explain above, we consider unlikely to occur. Incorporating the range of price forecasts that we find reasonable, the benefits of the sale are between $299 million and $426 million.[107]

The economic advantage of selling Vermont Yankee also remains if we assume that VYNPC can place Vermont Yankee into SAFESTOR while decommissioning revenues increase. VYNPC estimates that use of SAFESTOR will not alter the decommissioning costs. By comparison, the Department argues that by implementing SAFESTOR, VYNPC could achieve some savings, primarily through reduced contributions to the Decommissioning Fund.[108] Even if we incorporate the Department's assumptions, however, the economic preference for selling Vermont Yankee remains, producing a net present value benefit of between $180 million and $307 million.[109]

The conclusion set out above is confirmed by every projection of future operating costs presented during this proceeding. For example, CLF, which opposes approval of the transaction, introduced several scenarios, all of which demonstrated that early shutdown was more costly than selling the station. Even if we assume unreasonably low wholesale market prices, the economic benefits of shutdown do not match those obtained by selling Vermont Yankee to

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105. For operational reasons, the earliest possible closure would be during the next scheduled refueling cycle in the fall of this year. Sherman pf. at 32.

106. Exh. DPS-WKS-9.

107. Exh. DPS-WKS-9. Early closure is more economic if wholesale market prices are very low.

108. We discuss the possible reduction in Decommissioning Fund contributions in Part V.C.3., below.

109. Exh. DPS-WKS-9.

ENVY.[110] Thus, all of the economic and financial evidence points to the conclusion that early closure is not the preferred option.[111]

C. Merits of the Proposals if Vermont Yankee's Operating Characteristics and Risks Are Different from the Past

In the previous section we evaluated the merits of the proposed transaction assuming Vermont Yankee's operating environment and performance in the future remain similar to those of the recent past. And we have found that under a continuation of the present performance, transfer of Vermont Yankee to ENVY provides greater benefits than the other alternatives now available.

In this section, we test whether that conclusion holds true if we assume that Vermont Yankee's operating costs and performance vary from the past. Parties have suggested several alternative events or performance changes that could increase or decrease the costs and benefits of the sale of Vermont Yankee. Most of the scenarios improve the net present value of continued ownership and operation by VYNPC and lower the value of the proposed sale to ENVY. We find, however, that even with the variations, the sale to ENVY remains the preferred option. In the few instances where a narrow economic analysis suggests that the sale is no longer the most cost-effective alternative, we find that other factors demonstrate that those scenarios are unlikely to occur.

1. Adjustments That Increase the Value of Continued Ownership

Some potential adjustments to Vermont Yankee's operating characteristics and costs would increase the value of continued ownership and operation by any owner, regardless of

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110. Exh. CLF-JW-R5.

111. Sherman reb. pf. at 7. An additional two factors reinforce our conclusion. First, the decision to close Vermont Yankee is likely to be permanent. This fact introduces a measure of caution into our analysis. Second, closure of Vermont Yankee becomes more economic in low market-price scenarios. But as the last few years have demonstrated, wholesale market prices can be very volatile. The differences between price forecasts developed in 2000 (e.g., DPS 2000 and DPS 2000a) and more recent ones that we find more reasonable are noticeable. Thus, even if some market forecast suggested a short period of low market prices sufficient to marginally recommend shutdown (and none does), it would take materially more evidence to require closure of a generating station that is authorized to operate for an additional ten years.

whether Vermont Yankee is sold. Primary among these are uprate, reduced decommissioning contributions (costs and trust fund growth), operating and maintenance (O&M) cost savings, potential payment for spent fuel damages from the Department of Energy (DOE), and license extension.

a. Power Uprate

(1) Findings

80. A power uprate increases the output of a nuclear power plant by employing new techniques, making modifications or adding equipment to the plant. Schlissel pf. at 25–26.

81. The sale of Vermont Yankee to ENVY will make an uprate of the facility more likely. Barkhurst pf. at 2–10.

82. As of August, 2001, 57 power uprate amendments had been approved by the NRC, including 20 Boiling Water Reactors (of similar design to Vermont Yankee). Schlissel pf. at 5, 26.

83. The NRC has never denied an application for a power uprate. Schlissel pf. at 27.

84. A 5 percent uprate would require minor equipment modifications, and capital investments of up to $10M. Schlissel pf. at 25; exh. CVPS-Page-5 at 1.

85. A capacity uprate of 13 percent at Vermont Yankee is achievable by the year 2005. Sherman reb. pf. at 22.

86. If VYNPC continues to own and operate Vermont Yankee, it is likely to pursue a 13 percent power uprate. Sherman reb. pf. at 21–22.

87. The cost of achieving a 13 percent capacity uprate, implemented in 3 steps in the years 2002 to 2005, is $36.6 million (in 2002 dollars). Schlissel pf. at 32; Biewald pf. at 12.

88. A 13 percent capacity uprate would increase the net present value of retaining ownership of Vermont Yankee by $56 million. Schlissel pf. at 31–32; Biewald pf. at 12; exhs. DPS-BEB 4 and 8.

89. The MOU states that if ENVY performs an uprate during the term of the Power Purchase Agreement, ENVY will provide VYNPC a commercially reasonable opportunity for a period of 30 days to negotiate on an exclusive basis its purchase of the added energy. Exh. VY-42 at ¶1.

(2) Discussion: Uprate

Vermont Yankee is rated as a 540 megawatt generating plant. The station typically produces at 510 megawatts, and the Power Purchase Agreement is based on that amount. Recently, it has become a common industry practice to increase the thermal power produced by nuclear power plants.[112] This is referred to as a capacity uprate. The NRC sorts uprates into three categories: smaller enhanced power calculating techniques called measurement uncertainty recapture power uprates (about 1.5 percent); "stretch power uprates," which require minor plant modifications and increase output by approximately 5 percent; and extended uprates. Extended uprates usually require plant modifications (*e.g*. turbines, pumps, motors, generators, transformers). For a relatively small capital investment, some plants' output can be increased by as much as 20 percent, although a smaller figure is likely to be the engineering limit at a plant as old as Vermont Yankee.[113]

A power plant owner must obtain NRC approval to implement a power uprate.[114] As the NRC has approved 57 uprates so far, it is very likely an uprate of Vermont Yankee would be approved as well, if the owners sought to increase its output.

The evidence demonstrates that an uprate of 5 percent is easily obtainable in the short term, and that it is reasonable to assume a 13 percent uprate may be feasible in engineering terms over a 4 to 5 year time frame but may or may not occur under current ownership.[115] In fact, VYNPC is now doing preliminary work to accomplish a 5 percent uprate.[116] The estimated range of costs and net present value effects of various uprate scenarios is summarized as follows:[117]

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112. Tr. 2/15/02 at 98 (Schlissel).

113. Schlissel pf. at 26.

114. *Id.*

115. Schlissel pf. at 31; Sherman reb. pf. at 21–22.

116. Tr. 2/15/02 at 27, 105 (Schlissel).

117. Our analysis here focuses on the costs and benefits of an uprate to continued operation through 2012. 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. The additional revenue generated from uprate power after 2012 is considered in the discussion of license extension (Section V.C.1.e.) below.

% Uprate	Cost	NPV Benefit (revenue - costs)
5%	up to $10M	$17–32M
13%	$37M[118]	$39–57M[119]

The additional revenue resulting from an uprate reflects the value of the excess output. Estimates of the net present value benefits of a 13 percent uprate of Vermont Yankee range from $39 million to $57 million. This depends on the market price forecast used, with higher market prices producing higher value to an uprate; thus, overall consideration of this factor must be limited to higher-priced market scenarios under which Vermont's exposure to below-Power Purchase Agreement market prices is much less (in lower market price scenarios, the value of an uprate is less and, because of the Low Market Adjuster, the value of a sale increases).[120] An uprate of Vermont Yankee would increase the value to owning and operating the station, after taking into account the increased cost of the uprate. However, we discount this increased value, though not completely, by the claims of the current owners that they would not pursue an uprate.[121] Even if we assume the maximum benefit to be obtained by an uprate under current ownership ($57 million net present value), it does not alter our conclusion that the transfer provides net present value benefits to VYNPC and the Sponsors. Moreover, this conclusion is reinforced when we weigh the considerable risk associated with operational costs for Vermont Yankee, the discounted likelihood of an uprate, and market price uncertainty (see Part V.B.2.).

118. Page reb. pf. at 13, exh. CVPS-Page-5, using Green Mountain 2002 (low) and DPS 2001 (high) market price forecasts. Central Vermont estimates a $36.6M investment for a 13 percent uprate. VYNPC claims an additional $13M cost for a 13 percent uprate (Wiggett pf. reb. at 15–16), based on its belief that the Department misunderstood VYNPC's estimate. But, we find the Department's estimating methodology credible, and do not rely on the VYNPC amount.

119. The Department estimates a 13 percent uprate would lead to net present value benefits from $39–56M. Biewald pf. at 31; exh. DPS-BEB-8. Central Vermont estimates net present value benefits from a 13 percent uprate to be $39–57M. Exh. CVPS-Page-5 at 2–3.

120. The value of "uprate power" is directly proportional to the prevailing market price for that power.

121. We recognize that uprate is not certain under current ownership. Some of the present owners have opposed an uprate and they could try to block attempts to increase Vermont Yankee's capacity in the future. Nonetheless, an uprate produces definite benefits for the owners and it is reasonable to assume that if Vermont Yankee is not sold, the majority owners would take all possible steps to obtain this value.

b. Decommissioning

(1) Findings:

90. In its September 2001 decommissioning-cost analysis, TLG Services, which provided decommissioning estimates to VYNPC, estimates that immediate decommissioning for Vermont Yankee in 2012 will cost $621M and delayed decommissioning (SAFSTOR) for Vermont Yankee in 2012 will also cost $621M. Exh. VY-2; Cloutier reb. pf. at 4-5.

91. In the absence of a sale, VYNPC will seek to collect from Sponsors amounts to ensure that the Decommissioning Trust funds have approximately $564 million available for decommissioning; the remaining $57 million in decommissioning costs estimated by TLG will be charged to Sponsors as on-going operating costs in 2012. Wiggett pf. at 263–70.

92. Decommissioning fund growth may reduce or eliminate the need for more contributions to the fund. Sherman reb. pf. at 25; tr. 2/25/02 at 170–174.

93. The balance of the decommissioning fund will be approximately $304 million in July 2002. Exh. VY-1; Sherman pf. at 4. It is possible that decommissioning could cost less than TLG Services predicts, and that it would not be necessary to continue to make decommissioning fund contributions at the present levels. Sherman supp. pf. 3/11/02 at 25; tr. 2/15/02 at 141–143.

94. Decommissioning cost risk can be lessened by placing the plant in "SAFESTOR (also called "SAFSTOR")," which is defined by the NRC as

> the alternative in which the nuclear facility is placed and maintained in a condition that allows the nuclear facility to be safely stored and subsequently decontaminated (deferred decontamination) to levels that permit release for unrestricted use.

The facility is left intact (during the SAFESTOR period), with structures maintained in a sound condition. Systems not required to operate in support of the spent fuel pool or site surveillance and security are drained, de-energized, and secured. Exh. VY-2 (TLG Decommissioning Cost Analysis, September, 2001) at 13–14.

(2) Discussion: Decommissioning

Ratepayers have made significant contributions, and are currently being charged costs, to fund the eventual decommissioning of Vermont Yankee. VYNPC estimates that decommissioning in 2012 will cost $621 million (in 2001 dollars). The present fund balance of

approximately $304M would be inadequate to pay for complete dismantlement. In order to bridge the gap and assure adequate funding for decommissioning in 2012, VYNPC plans to collect $19–23M per year as a portion of its FERC-approved rates to build the fund.[122] Under the proposed sale to ENVY, ratepayers no longer have this obligation; instead, ENVY would be responsible for any needed decommissioning contributions and could not pass them on to ratepayers.

The Department and ENVY have shown several scenarios where contributions are either reduced, or no longer needed at all.[123] This could occur because decommissioning costs are less than anticipated, or because the current fund grows enough to completely pay all expenses. And while ENVY expects to realize measurable savings through economies of scale, efficiencies, and decommissioning expertise, there is some chance, though a lesser chance than under ENVY's ownership, that many of these cost savings could be also realized by the current owners of Vermont Yankee indirectly. For example, VYNPC might be able to contract with other companies to supply the needed expertise; however, this is less than certain since Entergy recently bought, primarily for internal use, the leading company supplying such expertise.[124] Therefore, we have considered, but not relied upon, the probability that VYNPC would be able to reduce decommissioning fund contributions if they continued to own Vermont Yankee, and there would be a net present value benefit from these reductions.

However, we are not convinced that VYNPC would be able to eliminate all future decommissioning fund contributions. For example, part of the Department's assumptions are based on particularly strong growth in the stocks in which decommissioning funds have been invested over the recent past, and those returns are not likely to be sustainable into the near and intermediate future.[125]

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122. Exh. Wiggett-9; exh. DPS-BEB-11.

123. Sherman pf. at 24. For example, DPS witness Biewald reduces contributions to $11.4 million in his analysis. DPS-BEB-11.

124. Schlissel pf. at 45; exh. NECNP-13.

125. While Vermont Yankee's returns have exceeded those stated returns in recent years, it is more prudent for a limited-life, regulated entity to use more conservative returns like those allowed in the recent FERC settlement. In VYNPC's last settlement at FERC, the parties agreed that an appropriate, conservative assumption would be to assume a decommissioning-cost rate of inflation of 4.25 percent and growth in investment funds of 4.96 percent for the qualified and 3.64 percent for the nonqualified trusts. Wiggett reb. pf. at 19.

Considering these factors, we find it reasonable to assess, but not rely upon, the chance that VYNPC could reduce its decommissioning fund contribution substantially, thereby lowering VYNPC's operating cost. These assumptions do not, however, alter our overall conclusion that ratepayers will pay lower decommissioning costs if Vermont Yankee is sold to ENVY.

Both the Department and ENVY operate from the assumption that if either decommissioning costs are inadequate, or if the fund has not grown sufficiently to pay all decommissioning costs, the owners would be able to place Vermont Yankee in SAFESTOR while the fund grows to make up the difference. They claim this would obviate or reduce the need to raise additional money from ratepayers.

SAFESTOR is a process in which the nuclear plant is drained, de-energized and secured. Used fuel assemblies are placed into on-site storage (an Independent Spent Fuel Storage Installation (ISFSI). The period of dormancy is not indefinite,[126] and — as VYNPC witness Cloutier points out — SAFSTOR should not be seen as a panacea for funding decommissioning. However, the SAFESTOR option provides a form of protection against under-collected decommissioning funds. Using SAFESTOR, the rate of return on the invested balance of the decommissioning fund determines the time at which the fund balance equals the anticipated costs, and decommissioning can be accomplished.

It is important to recognize that we find a reasonable possibility that decommissioning fund contributions would be lower than presently expected under continued ownership. But, it is also possible that costs could increase, or that fund growth would be insufficient. When we weigh the financial savings that may result from lower decommissioning fund contributions, we must consider that these savings are a *potential* benefit under current ownership. By contrast, the sale to ENVY provides the *actual* elimination of all ratepayer contributions. Indeed, ENVY's commitment to make whole any future deficiencies in necessary decommissioning monies —

126. Decommissioning is required to be completed within 60 years, absent public health and safety exigencies. Exh. VY-2 at viii, referencing U.S. Code of Federal Regulations, Title 10, Parts 30, 40, 50, 51, 70, and 72.

whether caused by technology changes, lower fund investment returns, or NRC regulatory changes — is a very positive aspect of the proposal before us.[127]

c. O&M Cost Savings

(1) Findings

95. ENVY assumes it can reduce the costs of operating Vermont Yankee. The current owners may be able to achieve some of the same operating cost savings. Schlissel pf. at 5; Kansler pf. at 10–17; Keuter reb. pf. at 14.

96. A reasonable manager and director of VYNPC would choose to pursue each of these improvements. With a moderate amount of regulatory attention, each of these improvements has a high probability of occurring under current ownership. Sherman supp. pf. at 21.

97. Operating costs have increased to reflect higher security needs. The Department estimates a one-time capital expenditure of $1.1M in 2002, and $1.5M annual increases to reflect additional security requirements following the events of September 11, 2002. Biewald pf. at 11.

(2) Discussion: O&M Cost Savings

Vermont Yankee has had an excellent operating history over the past decade; particularly in terms of high percentage of hours on-line.[128] ENVY assumes that it can both maintain those high on-line achievements and also reduce operating and maintenance costs. The Department believes the current owners could do the same thing, even when taking into account the increased security costs resulting from the terrorist attacks on September 11, 2001. Department witness Schlissel highlights efficiencies that could be gained by reducing capacity costs, lowering annual operating and refueling outage costs, and lengthening the plant's refueling cycle. We find it reasonable that cost savings can be achieved by VYNPC, though such savings are difficult to quantify. For example, the Department estimates savings of $3 million in non-refueling years and $5 million in those years in which there is a refueling outage and characterizes these

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127. Opposing Intervenors argue that this commitment is not significant because it leaves Vermont companies and ratepayers liable, if ENVY fails to meet federal decommissioning requirements. We conclude, for reasons stated in ENVY's initial brief at 20–23, that such a risk is "quite remote."

128. Exh. CLF-2 at 16, 37.

estimates as conservative in light of Vermont Yankee's recent operating history,[129] its current 2002 Operating and Capital Budgets, and its Three Year Operating Forecast.[130] We recognize that it is possible that Vermont Yankee will not attain all of these savings and, therefore, do not necessarily adopt the Department's assumptions. However, as a "sensitivity analysis," we have considered the financial effects that would accrue if the current owners were to achieve the Department's cost savings; if so, the savings are small enough that our conclusion regarding the economic value of the sale would not change.

Conversely, ENVY's ability to pool its resources and expertise, to exploit economies of scale, and to take advantage of its market position, overshadow the relative decrease in O&M costs that could be achieved by VYNPC. When coupled with the exposure to the operating risks discussed in Section V.B.1.a., the O&M cost savings potential under continued ownership[131] are not sufficient to make continued VYNPC ownership the preferred alternative.

d. Potential Damages From DOE

(1) Findings

98. The courts have found that DOE has failed to fulfill its contractual obligations to nuclear plant owners under the contracts for spent nuclear fuel disposal. It is expected that DOE will provide payments to nuclear operators to compensate them for costs incurred as a result of DOE's failure to perform. Biewald pf. at 11.

99. VYNPC would receive damages if it continued to own and operate Vermont Yankee. If the transaction as proposed is approved, Entergy would receive any damages resulting from a DOE settlement. Sherman pf. at 28; Biewald pf. at 11.

100. The Department estimates the value of damages at $27 million. Exh. DPS-BEB-4.

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129. *Id.*

130. Schlissel pf. at 15.

131. The Department estimates a net present value benefit of $44 million. Biewald pf. at 16.

(2) Discussion: Potential Damages From DOE

The United States Department of Energy ("DOE") was obligated by the Nuclear Policy act of 1982 to begin removing spent nuclear fuel from reactor sites in 1998.[132] The DOE has failed to do so. Owners of nuclear power plants have sought payment for damages, and courts have ruled that the DOE is liable.[133] Several petitioners have actions pending in the Court of Federal Claims. Under the terms of the Sale Agreement,[134] ENVY will receive any damages that would result from such litigation.[135]

We agree with the Department that an estimate of DOE damages should have been included in VYNPC's analyses.[136] We do not now know whether or how much VYNPC may ultimately recover, but in assessing possible benefits of continued ownership, it is reasonable to reflect some payment during the remaining life of Vermont Yankee.[137] It is not completely clear how the Department estimated damages at $27 million.[138] But, assuming that amount is reasonable, we find that a $27 million net effect on the net present value comparisons is insufficient to change the economic preference for approving the sale.

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132. Vermont Yankee's first shipment should have been removed from the site in 1999. Sherman pf. at 27.

133. One case that has settled so far, *Northern States Power Co. v. DOE*, 128 F.3d 754, 761 (D.C. Cir. 1997), held that the petitioners were entitled to damages.

134. Exh. VY-1, Article 2.1(n) transfers to ENVY ". . . any claims of the Seller related to the Department of Energy's defaults under the DOE Standard Contract . . . excluding such claims as may relate to the one-time fee with respect to fuel used to generate electricity prior to April 7, 1983."

135. However, ENVY agrees "to use commercial best efforts to assure that spent fuel is removed from the VY station as quickly as possible." ENVY will also include the Department in any litigation discussions or decisions. Kansler pf. at 27.

136. In fact, Department witness Sherman states: "Witness Wiggett is just wrong in his rebuttal testimony at 12–13. The dispute is not whether receipt of DOE damages will occur, but rather how much it will be." While it is understandable that DOE damages may not meet the known-and-measurable standard for an analysis to set current rates, a reasonable manager would have included some best estimate of DOE damages in a long-term forecast to compare KEEP with SELL for the proposed transaction because of their 100 percent probability of occurrence. Sherman pf. 3/11/02 at 23.

137. ". . . it is not unreasonable to consider 100 percent, or something very nearly 100 percent for DOE damages." Sherman pf. reb. at 23. Cloutier disagrees (pf. reb. 2/25/02 at 14, tr. 4/1/02 at 103–104).

138. VYNPC discovery response DPS 1-13, incorporated as exh. DPS-WKS-6, in which Sherman says "VYNPC . . . has calculated an amount for these damages." Sherman pf. at 28. But $27 million is nowhere in this document (or anywhere else in Sherman's testimony), and only appears in Biewald's summaries (though Biewald's testimony refers this amount to Sherman). Biewald pf. at 11,15–16. Sherman explains the methodology in his prefiled testimony at 29, but gives no amount there or in tr. 2/15/02 at 179–185.

e. License Extension

(1) Findings

101. A plant owner can seek to obtain NRC approval to extend its operating license. License renewal is becoming common industry practice. Schlissel pf. at 40–42.

102. ENVY and ENO have committed that they will not attempt to operate Vermont Yankee beyond its current term without obtaining an extension or renewal of its Certificate from the Board. ENVY and ENO have agreed that the following conditions can be imposed:

> ENVY agrees that the order in this case may state that operation of [Vermont Yankee] beyond its current operating license termination date (March, 2012) is not permitted and will be allowed only if application to the Board for renewal of the [Certificate] is made and granted. ENVY and ENO expressly and irrevocably agree to waive any claim they or their affiliates may have that the jurisdiction of the Board to issue the [Certificate] is preempted by federal law.

Wells pf. reb. at 7–8.

103. The current regulatory environment at the NRC regarding license extensions is quite favorable. Schlissel pf. at 35.

104. The cost of seeking and obtaining NRC approval for license extension is $10–20 million. Schlissel pf. reb. at 7; Biewald pf. at 13.

(2) Discussion: License Extension

Vermont Yankee's current operating license expires on March 1, 2012. A plant owner can seek approval from the NRC to renew its license. Owning and operating Vermont Yankee after 2012 is potentially a very profitable enterprise. At that time, under the current ownership, almost all of the plant assets will be paid for. The increased value to the owner after license extension is greater if market prices for power are higher. A capacity uprate would further add to this net present value. Operating cost savings and capacity factors would also significantly improve the value of operating Vermont Yankee beyond 2012.[139]

Other factors, however, cause us to discount these benefits. We recognize that the economic, political, and operational risks and uncertainty of continued operation of an aging

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139. Exh. DPS-BEB-7.

Vermont Yankee will increase significantly over the next decade, and considerably more in the two decades beyond. Alternative technologies, spent nuclear fuel storage capabilities, low market power costs, and a changing political and economic environment all increase the uncertainty surrounding the operation of the plant beyond 2012. Even minor adjustments to Vermont Yankee's operating costs and capacity factors have a very substantial effect on the valuation of license extension. For example, if we reduce the capacity factor by 1 percent a year and increase operational costs by 1 percent beyond inflation per year after 2012, the net present value of license extension in an own and operate scenario declines by half ($102 million).[140] Even a single extended outage, such as occurred in the mid-1980's, would vastly reduce the economic benefit of license extension.

The likelihood of license renewal under continued ownership also raises questions about whether we can reasonably reject the current proposal out of a belief that Vermont ratepayers, in the period from 2012–2032 would benefit from life-extension by the current owners. The Petitioners have asserted that the current owners would not pursue a license extension. We are not persuaded that the owners would make the affirmative decision to shut down Vermont Yankee rather than obtain the potential value that a license extension would bring. Nonetheless, we must recognize that the opposition of certain owners may reduce the possibility of obtaining a license extension, or increase its cost for Vermont owners.

It is entirely possible that license extension would not provide benefits to VYNPC and its owners if they retain Vermont Yankee. The above risks, however, highlight the perils of relying upon that assumption in deciding whether to approve the sale. Although the evidence shows that if VYNPC obtains license extension *and* Vermont Yankee continues to operate as it has in the recent past, continued ownership would be more beneficial, these are both assumptions rather than certainties. Once we discount them to take into account the risks of obtaining license extension and the risks that operating costs will increase or output will decrease, we must place a low probability on the chance receiving the economic benefits of continued ownership and operation of Vermont Yankee beyond 2012.

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140. Biewald surr. pf. at 3; exh. DPS-BEB-7; *see* Schlissel pf. at 8.

It is important to note that the economic benefits of license extension are greatest if market prices rise above currently-projected levels. Through the MOU, ENVY has made some of these benefits available to Vermont ratepayers. In particular, Paragraph 4 provides that if Vermont Yankee's average energy price exceeds $61/MWh (adjusted for inflation beginning in 2013), ENVY will share 50 percent of the excess revenues with VYNPC and its Sponsors.[141] This sharing mechanism captures some of the value that Vermont Yankee's owners would obtain if they had not sold the station and successfully relicensed.[142]

Finally, ENVY has also provided VYNPC and its Sponsors a "commercially reasonable opportunity" to negotiate on an exclusive basis (for 30 days) to purchase the output of Vermont Yankee if license extension occurs.[143] This exclusive negotiating period will give VYNPC's Sponsors, including Green Mountain and Central Vermont, a chance to reappraise and, if desirable, to seek some of the benefit of extended output from VYNPC before that power is marketed to other potential purchasers.

f. Other Risks/Adjustments

(1) Early Shutdown for Operating or Market Reasons

In Section V.B.1., we concluded that the transfer of risks associated with operating costs was a significant benefit of the proposed sale. Here, we examine a similar scenario — the possibility that Vermont Yankee is forced into an early shutdown for either operating or market price reasons. We conclude that the sale of Vermont Yankee to ENVY would always be financially beneficial to ratepayers if such an event occurred. After the sale, the only obligation Central Vermont and Green Mountain will have to ENVY is a commitment to buy the facility's output. By contrast, the two companies currently have an obligation to cover Vermont Yankee's costs, plus purchase power from alternative sources in the event of an outage or early closure.

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141. Exh. VY-42 at ¶ 4. Excess revenues are defined as the difference between Vermont Yankee's average energy price and $61/MWh, multiplied by the number of MWhs sold.

142. We note that the $61 strike price is higher than the prices that any party has forecast for wholesale market power in 2012 (for example, it is approximately 10 percent above the DPS 2001 forecast that we find represents one end of the reasonable range of price projections). *See* Finding 52. Thus, based upon present projections, this sharing provision is not likely to have any value to ratepayers. Nonetheless, it does provide protection should energy market prices change precipitously.

143. Exh. VY-42 at ¶ 1.

Today, Green Mountain and Central Vermont are obligated to pay Vermont Yankee monthly an amount equal to each company's entitlement percentage of Vermont Yankee's total fuel costs, operating expenses, decommissioning costs, and an allowed return on equity, regardless of whether or not the plant is operating. Also, the Sponsors are committed to make funds available for changes or replacements needed to maintain or restore operation of the plant, or to obtain or maintain licenses necessary for its operation. In addition, during those periods when Vermont Yankee is not operating, Green Mountain and Central Vermont both face the necessity of arranging and paying for replacement power to meet their load servicing needs.

The record shows that there are many instances of nuclear facility plant closures prior to the expiration of their expected operating lives, including other nuclear plants in the Northeast with similar ownership structures. In these cases, the FERC has allowed the yet unrecovered costs at the time of the shutdown, if it is determined that the decision to shut down was prudent, to be recovered.[144] Thus, it can be assumed that if Vermont Yankee were to be forced to an early shutdown under current ownership, the remaining obligations of the facility would be the responsibility of its owners, with Vermont ratepayers at risk for such costs.

For these same reasons, if market prices for power became so low that ENVY would choose to prematurely close Vermont Yankee, ratepayers would be better off than under continued current ownership.

(2) Sabotage or Terrorism Costs

Many members of the public expressed, and NECNP raised,[145] concern about the threatening new reality facing this nation's nuclear power plants in general, and Vermont Yankee in particular, after the events of September 11, 2001. We share this concern. The question before us is whether Vermont ratepayers are better off if ENVY or VYNPC owns Vermont Yankee should a terrorist attack occur. The risks fall into two categories. First, but less significant, are the economic effects of a breakage or malfunction of equipment, as a result of a terrorist attack at Vermont Yankee, which could be material for Central Vermont and Green

144. VY annual report page 11.
145. Shadis pf. at 22–28.

Mountain ratepayers under continued ownership. As to that risk, the sale to ENVY will substantially shield ratepayers from the economic costs resulting from a terrorist event.

The second, greater issue is the public harm of such an attack. Regardless of jurisdictional ambiguities, we would not approve a sale that increased the risk of such harm. However, on the record before us, we conclude that Entergy would operate Vermont Yankee as well or better than the current owners. This specifically applies to security.[146] We disagree with NECNP's assertion that "retention of present ownership ensures the availability of resources to protect the public from serious public health risks arising from terrorist threats."[147] To the contrary, the availability of *Entergy's* greater resources and experience better protect the public from the effects of terrorism. To the extent that concern over terrorism is linked to continued operations, we repeat our conclusion that ENVY ownership is more likely to shut down Vermont Yankee early because it faces greater market exposure (through the Low Market Adjuster) than does VYNPC under current cost-of-service FERC-regulated rates.

2. Alternate Events That Might Increase the Value of Early Shutdown

a. Findings

105. Under certain assumptions and inputs deemed reasonable by the Department and Entergy (e.g, cessation of decommissioning collections after 2002), early shut-down could be the economically preferable solution when compared to continued operation. Weiss pf. reb. 3/29/02 at 21.

106. CLF had Central Vermont run scenarios through its model, yielding between a $60 million and $275 million net present value benefit to shutdown in 2002 versus continued owners' operation, (SAFESTOR, no additional decommissioning contributions), and "marginal" benefits to sale versus shutdown. Weiss pf. reb. at 21–22.

107. Prior to the present transactions, Entergy proposed (by letter of October 13, 1998), that it could reduce Vermont Yankee's decommissioning expense by $100 million. Exh.DPS-WKS-5.

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146. *See* Finding 176.

147. NECNP Initial Brief at 48–49.

108. VYNPC could contract with companies who have the expertise to implement decommissioning savings. Sherman pf. at 23.

109. VYNPC did not give serious consideration to using management contracts to decommission the plant. Weiss pf. at 7; Schlissel pf. at 45.

110. ENVY is more likely to shutdown Vermont Yankee than the current owners. Keuter reb. pf. at 10; Crane supp. pf. at 5–6; Wells reb. pf. at 6; tr. 4/04/02 at 208–09 (Keuter).

b. Discussion: Alternate Assessments of Early Shutdown

As we noted in Section II, no party in this proceeding directly requested, nor was any witness presented who advocated, the shutdown of Vermont Yankee. Nevertheless, we cannot overstate the importance of a thoughtful consideration of all the alternatives. For that reasons, our Scoping Order specifically invited parties to address the economic merit of shutting down Vermont Yankee prior to the end of its license term.

CLF asserted that, under certain decommissioning assumptions and market price forecasts, early shut-down might be the economically preferable solution when compared to continued ownership and operation.[148] We recognize that, *given those assumptions*, the net present value difference between sale and shutdown would be "marginal."[149] However, we balance the low probability of the simultaneous realization of these assumptions and forecasts against three other factors: price risk; few incentives for VYNPC to close under cost of service rate regulation; and the likelihood that ENVY would shutdown Vermont Yankee earlier than would VYNPC.[150] This comparison leads to the conclusion that the relatively low likelihood of instances in which early shutdown makes economic sense are insufficient to overcome the evidentiary weight of the many more likely scenarios under which continued operation is financially preferable.

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148. Weiss reb. pf. at 21.

149. Exh. JW-R7 (calculating a minimum $5.8 million net present value difference (benefit) to sale versus shutdown).

150. See p. 31, above.

D. Summary of Economic Analyses

In Part V.B.2., we found that if Vermont Yankee's operating characteristics and costs were consistent with recent experience, sale of Vermont Yankee would produce lower costs for ratepayers than either both continued ownership or early closure. In fact, the net present value benefits are as follows:[151]

Additional NPV of Costs Greater Than Sale Scenario ($ millions)		
Forecast	Keep	Shutdown
DPS 2001	$263	$426
CVPS 2002	$289	$299
GMP 1/02	$383	$245

As we have explained above, the main variation in the valuation of these scenarios is the wholesale market price forecast used. Two things are clear, the sale to ENVY becomes more favorable relative to continued ownership if one assumes lower wholesale market prices for power; and shutdown will impose greater costs on ratepayers, under all persuasive price forecasts and even under the market prices assumed in the GMP 1/02 (which appear unrealistically low based upon present information).

In Part V.C., we examined several ways in which VYNPC could decrease costs or increase the value of its investment in Vermont Yankee. In each case we examined the likely benefits of the savings or increased revenues was less than the estimated net present value benefit of the sale. To fully assess the merits of the sale, it is important to consider the possibility that these adjustments may be accomplished jointly. For example, VYNPC may be able to perform a 13 percent uprate, *and* reduce decommissioning fund contributions, *and* reduce operating expenditures. Evaluation of the cumulative effect of such changes (excluding the possible extension of Vermont Yankee's operating license) shows that even if VYNPC could complete an uprate, and also achieve the savings discussed above (as well as some additional, smaller value

151. Exh. DPS-WKS-9; exh. CVPS-Page-Rebuttal-1. VYNPC and Green Mountain both presented analyses that are substantially consistent with the above. Exh. VY-Wiggett-6; exh. VY-Wiggett-10; exh. GMP-NRB-12.

savings), the sale to ENVY remains the preferred scenario. For example, the Department incorporated each of these changes in its assessment, producing the following comparison:[152]

Additional NPV Costs Above Sale Scenario (with DPS Adjustments in $ Millions)		
Forecast	Keep	Shutdown
DPS 2001	$39	$307
CVPS 2002	$91	$180
GMP 1/02	$201	$116

Other analyses, even those presented by CLF, reached similar conclusions as to the relative merits of each option, although CLF argued that the additional net present value cost of shutdown could be as low as $60 million.[153] These scenarios demonstrate that (excluding license extension scenarios), it is only when *all* of the operating efficiencies, uprate capabilities, and decommissioning savings occur *in concert* with market price forecasts on the extreme edges of the ranges estimated here, that the economic benefits of the continued ownership begin to approximate the benefits of selling.[154] Moreover, these analyses do not incorporate the value of the transfer of operating cost and decommissioning cost risks, which are substantial. To the contrary, all of these analyses assume that Vermont Yankee achieves capacity factors consistent with past performance. Any outage or large cost increase would further enhance the economic benefit of selling Vermont Yankee.

Combining the above analyses, it is clear that transfer to ENVY is superior to the other options.

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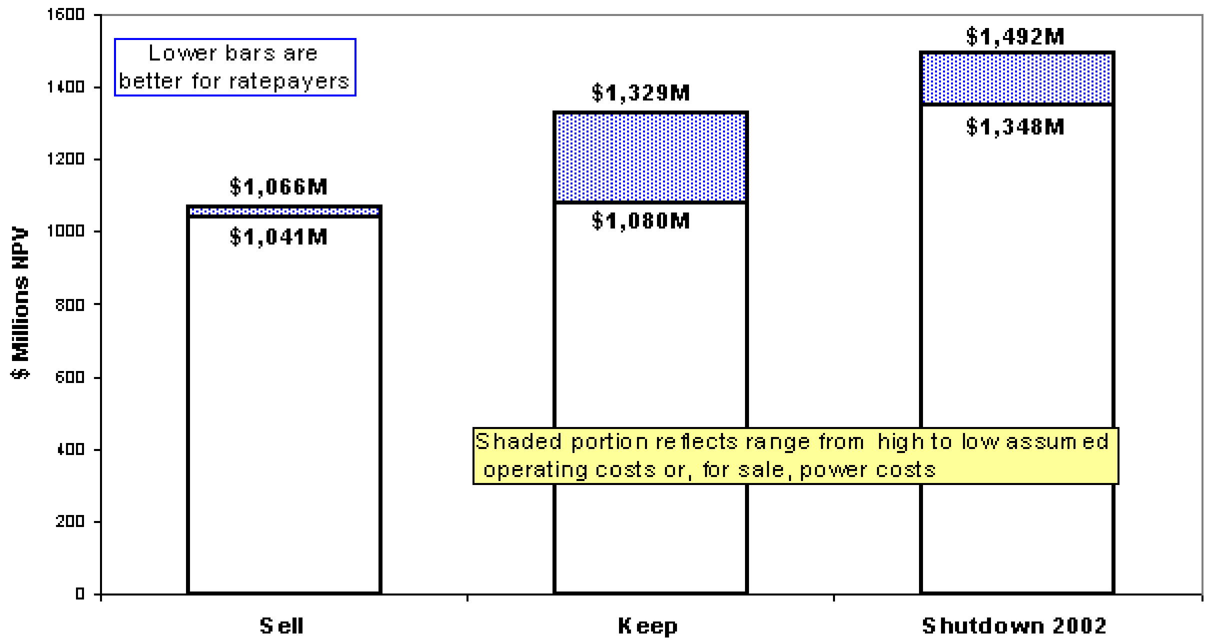
152. Exh. DPS-WKS-9.

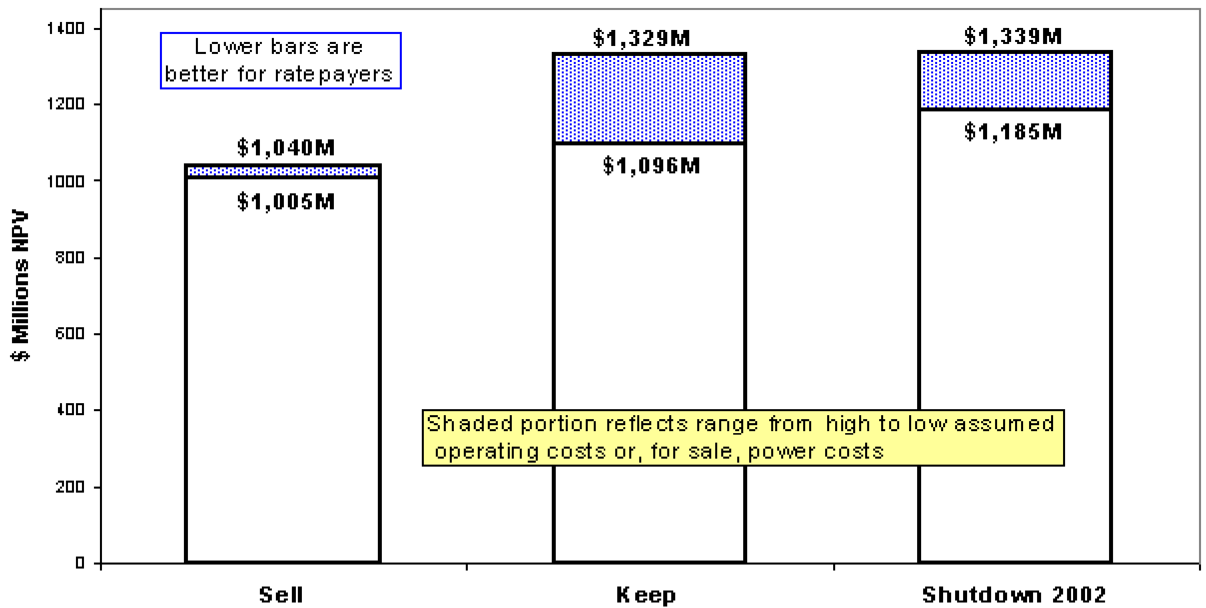
153. Exh. CLF-JW-R7 (comparing the net present value of the sale ($1.037 billion), with that of shutdown ($1.103 billion), using an adjusted GMP 1/02 market price forecast, yielding additional net present value for shutdown of $66 million); Weiss reb. pf. at 21-22.

154. This assumed synchronicity of those events reduces the likelihood of the concurrent-savings scenario occurring, for reasons that CLF witness Weiss recognized:

> by lumping a set of assumptions together that all go in one direction (*i.e.*, either favorable or unfavorable to the transaction) one can get a misleading view of the risks. If, for example, in a situation with discrete probabilities, and each individual sensitivity having a ten percent chance of occurring, then the combination of three such sensitivities all occurring would be one tenth of one percent (0.1 x 0.1 x 0.1 = 0.001).

Weiss surr. pf. at 10.


Highest Reasonable Market Price Forecast
(DPS 2001)
Lower bars are better for ratepayers
$ Millions NPV
1600
1400
1200
1000
800
600
400
200
0
$1,066M
$1,041M
$1,329M
$1,080M
$1,492M
$1,348M
Shaded portion reflects range from high to low assumed operating costs or, for sale, power costs
Sell
Keep
Shutdown 2002


Lowest Reasonable Market Price Forecast
(CVPS 2002)
Lower bars are better for ratepayers
$ Millions NPV
1400
1200
1000
800
600
400
200
0
$1,040M
$1,005M
$1,329M
$1,096M
$1,339M
$1,185M
Shaded portion reflects range from high to low assumed operating costs or, for sale, power costs
Sell
Keep
Shutdown 2002

As the Charts show,[155] the sale appears economically preferable to keeping or shutting down the plant, over a wide range of expected variables. Only in one combination of events would an economic comparison suggest that retaining ownership might turn out to be more beneficial; this is the scenario in which license extension is simultaneously combined with least-cost resolution of essentially all operating cost projections. If so, license extension has the potential to provide increased value for any owner of Vermont Yankee. In other words, if Vermont Yankee were to operate at high capacity factors for thirty years, without any major increase in costs or outage, the present owners might be better off to have retained ownership. However, as we discuss in Part V.C.4., above,[156] we significantly discount the expected value of a license extension because of the low probability that all of these assumptions would simultaneously occur.

In sum, of the three basic choices now available, the sale of Vermont Yankee will provide the greatest economic benefits to Green Mountain, Central Vermont, and their ratepayers.

E. Non-Financial Elements of Sale

1. "Local Control" or "Vermont Influence" Over Vermont Yankee

Several parties expressed concern that the sale of Vermont Yankee would greatly reduce, if not eliminate, the Board's and the state's ability to regulate operations at Vermont Yankee. As expressed by NECNP, "the loss of local control is the central theme that permeates every other issue in this case."[157]

The term "local control" is clearly a misnomer if it is meant to describe either the current situation, or the one that would exist if we rejected the proposed transactions. A far more

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155. Exh. DPS-WKS-9 (Revised). Previously, we explained that the range bounded by the CVPS 2002 and DPS 2001 forecasts was reasonable.

In the "low market price" scenario, the highest costs ($1.040 billion "Sell," $1.329 billion "Keep," $1.339 billion "Shutdown") represent VYNPC's Base Case assumed operating costs, while the lower values ($1.050 billion "Sell," $1.096 billion "Keep," $1.185 billion "Shutdown") are based on the Department's Base Case operating assumptions.

For the "high market price" scenario, the maximum amounts ($1.066 billion "Sell," $1.329 billion "Keep," $1.429 billion "Shutdown") reflect VYNPC's Base Case operating assumptions, while the minimum figures ($1,041 billion "Sell," $1.080 billion "Keep," $1.348 billion "Shutdown") employ the DPS Base Case operating costs.

156. See p. 70.

157. NECNP Brief at 61.

appropriate term would be "Vermont influence." In that context, the reductions in the Board's authority are not large and are partially offset by several enhancements in the MOU. The Board's direct control of VYNPC at the present time is limited. The following table summarizes the effect of the transactions on the Board's regulatory authority. We discuss each of these components below.

Effect of Sale on Regulatory Authority			
	Unchanged	Lesser	Greater
Direct Control	• CPG for owner of Vermont Yankee • Power Purchase, including wholesale price • Section 248 approval of plant additions or modifications that require construction • Retail rates of Central Vermont and Green Mountain		• Clarified State authority over license extensions or renewal • Increased and clarified power For Vermont State Inspections
Indirect Control		• Authority to influence Green Mountain and Central Vermont in their actions as majority owners of Vermont Yankee (ROE adjustment)	

We turn first to the Board's ability to directly regulate VYNPC. Contrary to NECNP's assertions, the sale has no effect on the Board's direct authority. At the present time, the Board has limited direct regulation of VYNPC (as opposed to its Vermont owners). The Board's primary authority to directly regulate VYNPC is through the Certificate issued under Title 30. VYNPC now holds a Certificate authorizing the company to manufacture, transmit and sell the capacity and associated energy of Vermont Yankee within and outside of Vermont.[158] This Certificate will remain in effect following the sale (as VYNPC will still sell energy under the Amendatory Agreements). As part of this proceeding, the Board will issue a similar Certificate

158. Wiggett pf. at 4; exh. VY-BW-2.

to ENVY and ENO under Section 231. The Board has the authority under Section 231(a) of Title 30 to amend or revoke any Certificate for good cause. Thus, if the Board were to find upon a compelling record that any owner's ownership of Vermont Yankee no longer promoted the general good, the Board could revoke the Certificate, regardless of whether it was held by ENVY or VYNPC.[159]

A second area in which the Board has direct regulation of Vermont Yankee pertains to activities at the station that constitute construction or site preparation. Under 30 V.S.A. § 248, VYNPC must obtain prior approval for plant additions or upgrades that require construction, "except for the replacement of existing facilities with equivalent facilities in the usual course of business." For example, when VYNPC constructed a new office building on the Vernon site, the company first obtained approval under Section 248.[160] This authority is also unchanged.

Vermont Yankee's primary purpose is to generate and sell power in *wholesale* markets. Wholesale power sales are regulated by FERC and not by state utility commissions.[161] At the present time, the sale of power from Vermont Yankee is not within the Board's jurisdiction.[162] Rather, the power sale under the Power Contract and Amended Power Contract is regulated by FERC.[163] The sale does not alter the Board's authority.

The sale will reduce the Board's ability to influence actions at Vermont Yankee in one respect. The Board presently has the authority to establish the *retail* rates for Green Mountain and Central Vermont. Although the Board's ability to use its retail rate-setting authority to disallow costs associated with Vermont Yankee is limited, the Board does have broad authority to oversee the manner in which Green Mountain and Central Vermont operate. In particular, as (collective) majority owners of VYNPC, Green Mountain and Central Vermont have the capability to exert great (if not unfettered) influence over the actions of VYNPC. Our supervisory authority and rate-setting authority enables the Board to evaluate Green Mountain's and Central Vermont's management of VYNPC. If we concluded that the Vermont Sponsors had

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159. This assumes, of course, both a fair *and* thorough administrative proceeding and a set of concerns that would be adequate despite federal preemption as to radiological safety. *See*, *PG&E vs. SERCDC*, above.

160. Vermont Yankee Nuclear Power Corp., Docket 6054, Order of 8/10/98.

161. 16 U.S.C. § 4 791c *et seq.*

162. This Board retains the power to review Vermont utilities' decisions to buy power *from* wholesale sources, at wholesale rates approved by the FERC for sale of power *by* those wholesale sellers.

163. FERC also has jurisdiction over the Amendatory Agreements.

not acted reasonably, we could take limited steps to indirectly encourage the companies to act more in line with their public service obligations to Vermont consumers. For example, the Board could adjust the rate of return for the utilities.[164]

We note that such Board influence over VYNPC through regulation of its owners is very indirect and, inevitably, quite delayed. Even if the Board decided that actions of Vermont Yankee's owners of Vermont Yankee were not reasonable, the Board could not directly order a changed position, but would adjust the owners' rates of return and rely upon the financial effects of those adjustments to motivate the companies to alter their behavior. It would require an extreme case — and a careful balance against the ratepayers' interest in a stable company — to order a financial penalty sufficient to encourage an immediate change in the company's management of Vermont Yankee. Thus, we see the "loss of control" cited by NECNP as more accurately labeled a reduction in influence, and one of less import than asserted.

This reduced indirect influence is offset by two direct commitments from ENVY that augment or clarify the state's authority over Vermont Yankee. First, ENVY and the Department have reached an agreement that will provide greater access to Vermont Yankee for the state's nuclear engineer.[165] The Department has struggled through a variety of arrangements on this issue with VYNPC in the past. The agreement with ENVY preserves the Department's present ability to monitor Vermont Yankee; it enhances the Department's capabilities by granting the Department access to specific performance indicator information and computer data bases, ensuring notification of meetings, and obtaining ENVY's commitment to participate in the Vermont State Nuclear Advisory Panel.[166]

The second, very significant enhancement is ENVY's agreement in the MOU that its Certificate will terminate in 2012 and that this Board will have the full authority to review any request by ENVY to extend its license for an additional period of time. Intervenors argue that this commitment is valueless because federal preemption will render it unenforceable. Upon review of state and federal law, we conclude that Vermont's authority to determine whether a

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164. In Docket 5701/5724, the Board found that Central Vermont had not prudently managed its power supply portfolio. As a result, the Board imposed a seventy-five basis point penalty upon Central Vermont's rate of return. Docket 5701/5724, Order of 10/31/94 at 171.

165. Exh. VY-42, exh. A.

166. Sherman 3/15/02 supp. pf. at 4–5.

license extension promotes the general good is not preempted. By entering into a binding contractual commitment with the Department, upon which we expressly rely in reaching our decision today, ENVY has eliminated much of the jurisdictional uncertainty.

Finally, we consider, and are unpersuaded by, the arguments that "out-of-state" corporations cannot be allowed to own vital Vermont utility infrastructure, or that Central Vermont and Green Mountain, as "local companies" will act on behalf of state interests. The first argument conflicts with the equal treatment required by the Commerce Clause of the United States Constitution (and with Vermont's *generally* satisfactory experience with Verizon New England, Inc. d/b/a Verizon Vermont as the state's dominant telecommunications provider). The second argument ignores Central Vermont and Green Mountain's fiduciary commitment to their shareholders, many of whom (including the largest voting blocks) are beyond Vermont's borders.

Overall, we cannot conclude, as NECNP argues, that consummation of the sale to ENVY will produce either a significant loss of local control over the facilities, or an unacceptable reduction in state influence.

2. Site Restoration by ENVY

a. Findings

111. When the NRC evaluates ENVY's decommissioning fund, and ENVY submits a post-shutdown decommissioning activities report for Vermont Yankee, ENVY will provide additional funds or other acceptable financial assurances, as needed, to ensure that funding will be sufficient to accomplish decommissioning, including site restoration and spent fuel management. Kansler pf. at 27; exh. VY-42 at ¶ 9.

112. At that time, ENVY will demonstrate that it possesses funding sufficient to accomplish decommissioning, and furthermore, to complete site restoration and spent fuel management. Signatories to the MOU agree that such demonstration may include the implementation of SAFESTOR or other forms of delayed decommissioning. *Id.*

113. The MOU contains, and ENVY has committed to, no specific "greenfield" standards. However, Paragraph 9 of the MOU provides that ENVY will perform site restoration according to Paragraph 3 of the MOU which provides that "Site restoration shall mean that, once the [Vermont Yankee] site is no longer used for nuclear purposes or non-nuclear commercial,

industrial or other similar uses consistent with the orderly development of the property, the site will be restored by removal of all structures and, if appropriate, regrading and reseeding the land. Exh. VY-42 at ¶ ¶3, 9; tr. 4/18/02 at 101–04, 172–89 (Sherman).

b. Discussion

ENVY has committed to return the Vermont Yankee site to "greenfield" conditions. ENVY's witness Wells provided the following testimony:

> Q. But you're willing to go forward with the existing decommissioning trust fund, are you not?
> A. As is to meet the NRC minimum.
> Q. Will it be adequate to meet the NRC minimum and also to return the site to greenfield condition?
> A. After a period of time.
> Q. Using SAF[E]STOR?
> A. Yes, sir.[167]

While directing ENVY to restore the Vermont Yankee site once it is no longer used for nuclear purposes or non-nuclear commercial, industrial or other similar uses consistent with the orderly development of the property, the MOU provides no definition of greenfield, nor standards by which to measure that status.[168] Given Ms. Well's testimony, we interpret the term "restored" within the context of paragraph 3 of the Memorandum of Understanding to mean that, once the Vermont Yankee site is no longer used for nuclear purposes or non-nuclear commercial, industrial or other similar uses consistent with the orderly development of the property, "the site will be restored by removal of all structures and, if appropriate, regrading and reseeding the land."[169]

3. Proportion of Utility Power Supply in Long-term Fixed-Price Contracts

An additional non-financial consideration is the effect of the sale and entry into a Power Purchase Agreement on the power supply mix of the Vermont Sponsors, Green Mountain and Central Vermont. At the present time, these companies have more than 75 percent of their power

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167. Tr. 4/1/02 at 138 (Wells).
168. NECNP Brief at 44; *see* also MOU at ¶ 9 and ¶ 3.
169. Exh. VY-42 at ¶ 3.

supplied through long-term fixed price contracts. Specifically, Green Mountain and Central Vermont acquire approximately one-third of their power from Vermont Yankee under the Power Contract and Additional Power Contract, another third from Hydro-Québec through the Hydro-Québec Joint Owners Contract, and another significant portion from small power producers under PURPA and Board Rule 4.100. In Docket 6300, the proposed sale of Vermont Yankee to AmerGen, we expressed concern that completion of the sale would result in too much of Green Mountain's and Central Vermont's power being supplied by long-term, fixed-price contracts and forego the opportunity to reduce this reliance. We observed that:

> This high commitment hampers the ability of Vermont's utilities to participate actively in the emerging power market and continues to lock-in a high percentage of the state's energy load to above-market price contracts.[170]

Several parties have suggested that proposed transactions suffer from the same defect. These parties argue that, if we approve the proposed sale, Green Mountain and Central Vermont will lose the opportunity to move away from long-term fixed price contracts and will again commit to an above-market contract.

We find that the Power Purchase Agreement, as a part of the Sale Agreement, contains provisions that are very different from those present in the AmerGen proposal, and that address our fundamental concerns. The ENVY proposal is similar to AmerGen in that both contain a long-term power contract. But unlike the November 2000 AmerGen proposal, the majority of the power purchases from ENVY are not at a fixed price.[171] Instead, beginning no later than November 2005, the price of power will be at the lower of market price (with a small premium) or a fixed-price cap. Thus, the ENVY proposal does give Vermont ratepayers the chance to benefit from low future market-based prices, while at the same time protecting them from the effects of high market prices. This is a major benefit that captures the advantages of the market and simultaneously (at very reasonable cost) avoids the negative risks of market exposure.

We recognize that during the first three years, the Power Purchase Agreement viewed alone does have fixed prices that are expected to be well above-market. But these high fixed prices are offset by the substantial $180 million cash payment that VYNPC will receive at its

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170. Docket 6300, Order of 11/17/00, Appendix A.

171. Sherman supp. pf. at 32.

outset. From the standpoint of VYNPC and its Sponsors, they are essentially receiving a large cash payment, part of which they will subsequently return to ENVY in the form of above-market Power Purchase Agreement prices.[172] In this context, the combination of purchase price, plus power prices in the first three years is not truly above-market. Thus, we conclude that the Power Purchase Agreement reasonably puts Vermont on a path to address the market-risk of excess reliance on fixed-price power agreements.

4. Effect of Power Purchase Agreement on New England Energy Market

CLF argues that the Power Purchase Agreement does not promote the general good because it has an adverse effect on the New England wholesale energy market. CLF relies on the fact that the Power Purchase Agreement commits VYNPC and its Sponsors to a unit-contingent power purchase that is not market-based. This, according to CLF, creates incentives for ENVY to operate Vermont Yankee even when it would be more cost-effective from a market perspective to shut down.

We find CLF's arguments unpersuasive. As we explained in the previous section, for most of the term of the Power Purchase Agreement, the Low Market Adjuster will be in effect. This will ensure exposure to the market — except to the extent the wholesale market prices exceed the fixed Power Purchase Agreement prices (to the benefit of ratepayers). Thus, after 2005, ENVY will have the same market-based incentives to operate or shut down Vermont Yankee as they would have if the parties had agreed to a system-power contract.[173]

In the period before the onset of the Low Market Adjuster, ENVY (as owner of Vermont Yankee) may face non-market-based incentives to operate because of the Power Purchase Agreement. This does not, however, lead us to conclude that that Agreement will disrupt the New England wholesale market. The current situation already provides fixed-price revenue for Vermont Yankee, thus rejecting the contract before us would perpetuate, rather than avoid, the

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172. This would have the same effect as a Power Purchase Agreement priced at market values, coupled with a smaller initial payment. The evidence suggested that this structure would lead to an initial payment of approximately $65 million, but the same overall net present value for VYNPC. Wiggett reb. pf. at 26.

173. Tr. 2/8/02 at 92–93 (Weiss). CLF argues that the premium over market included in the Low Market Adjuster still distorts the market. As we find that premium small (5 percent) and reasonably priced in exchange for a price cap, we do not accept CLF's argument.

problem that CLF complains of. In addition, Vermont Yankee is a small part of the overall New England market, representing only about 2 percent of the peak capacity.[174] The small size, the fact that it begins a transition to market incentives, and the fact that any non-market-based incentives are short-lived, cause us to conclude that the effect of the proposal on New England's wholesale markets will be beneficial, if any exists at all.

5. Vermont Yankee Station Service/Black Start Contract Assignment

a. Findings

114. Green Mountain provides electrical service to Vermont Yankee at times when the plant is not operating. Green Mountain offers station service in order to maintain the plant's systems during scheduled and unscheduled outages. Green Mountain also offers black-start service which enables Vermont Yankee to shut down in the event there is an outage on the electrical grid. These services, provided pursuant to an Amended Agreement approved by the Board in Docket 5116, are priced at 140 percent of Green Mountain's marginal energy cost. Brock pf. at 16; exh. GMP-NRB-6.

115. Green Mountain, Vermont Yankee and ENVY have executed a Consent to Assignment and Amendment ("Assignment"), dated as of February 21, 2002. Brown reb. pf. at 13-14; exh. GMP-JWB-5.

116. The term of Green Mountain's station service obligation ends on March 21, 2012. Green Mountain's obligation to provide emergency back-up power extends until October 31, 2005. J. Brown reb. pf. at 14; exh. GMP-JWB-5.

117. Green Mountain's ability to provide black-start power to Vermont Yankee in the event of a transmission-system failure is dependent on an existing arrangement with New England Power Company ("NEP") for power from the Vernon Dam. This arrangement expires on October 31, 2005. Exh. GMP-JWB-5 at 2.

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174. Tr. 2/8/02 at 27 (Weiss).

b. Discussion

In Docket 5116, VYNPC and Green Mountain settled a dispute whereby both parties agreed that a fair rate for station service and black start at Vermont Yankee should be 140 percent of Green Mountain's hourly marginal energy cost.[175] The term of Green Mountain's station service obligation ends on March 21, 2012, and its obligation to provide emergency back-up power extends until October 31, 2005. At the time of the rebuttal hearings, Green Mountain had yet to put in place an arrangement to extend beyond that date. Green Mountain testified that it expects such arrangement to reflect the terms contained in the Assignment that, once negotiated, will be incorporated into a revised Assignment that will be filed with the Board upon execution.[176] We conclude that this is a reasonable proposal and approve the Consent to Assignment and Amendment.

VI. Requested Rulings on Prudence, Use, and Economic Usefulness

A. Introduction

The Petitioners have requested that the Board make certain findings that would essentially provide Green Mountain and Central Vermont with guaranteed rate recovery for all their prior actions related to the Purchase and Sale and Purchase Power Agreements and purchases thereunder. In the MOU, the Petitioners and the Department request that the Board find that the Sale Agreement, the purchase of power under the Power Purchase Agreement, the MOU, and all related utility actions shall be treated *as if* they were prudent and *used* and

175. Docket 5509, Order of 11/24/92.
176. J. Brown reb. pf. at 14.

useful.[177] Paragraph 15 of the MOU requests that the Board's Order make the following determinations:

> 1. Finding that the transactions described in the Sale Agreement, as modified by the commitments set forth herein (made for purposes of such settlement), and the process by which VYNPC sold its assets shall be treated as if it were prudent as to all decisions and actions taken by Petitioners prior to the close of evidence in Docket No. 6545 and which were reviewed by the Board in Docket No. 6545;
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> 2. Finding that the purchase of capacity and associated energy by VYNPC from ENVY and subsequent resale by VYNPC to Central Vermont and Green Mountain, including all other products sold under the Power Purchase Agreement and costs incurred by Central Vermont and Green Mountain under the Power Purchase Agreement and Amendatory Agreements, shall be treated as if it were used and useful for the Power Purchase Agreement's and Amendatory Agreement's term;
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> 3. Finding that the execution of this Memorandum of Understanding and of the Amendatory Agreements for the continued purchase of capacity, associated energy and other products from VYNPC and payment of the costs incurred thereunder by Central Vermont and Green Mountain shall be treated as if it were prudent as to all decisions and actions taken by Petitioners prior to the close of evidence in Docket No. 6545 and which were reviewed by the Board in Docket No. 6545;
>
> 4. Stating that the above provisions are intended to provide the same level of assurance to the financial community and ENVY that each would obtain from a declaration that (a) such transactions and process, and the execution of the MOU and Amendatory Agreements and payments of costs thereunder are in fact prudent and (b) that such purchases of power under the Power Purchase Agreement and the Amendatory Agreements and costs and payments thereunder are in fact used and useful.

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177. The Petitioners originally requested a direct Board ruling that the actions were both prudent and used and useful. Specifically, Section 1 of Schedule 4.3(b) of the Sale Agreement (which identifies the Seller's Required Regulatory Approvals) provides that VYNPC must obtain an Order from the Board that, among other things, approves:

> participation by [Central Vermont] and [Green Mountain] and, to the extent applicable, by other Sponsors, in Sale Agreement, Power Purchase Agreement and Amendatory Agreements, including an order *(a) that the execution and performance of the Amendatory Agreements is prudent, (b) that the electricity purchased thereunder is used and useful, and (c) allowing full recovery of costs arising therefrom, including appropriate accounting orders as deemed necessary by [Central Vermont] and/or [Green Mountain].*

The Petitioners no longer request that the Board make the above determinations. *See* Petitioners's Brief at 3, note 3. "Petitioners do not ask the Board to adjudicate the Transactions' prudence or the Station's used and usefulness and will accept the non-precedential "as if" treatment agreed in the MOU;" *see also* exh. VY-42 at ¶ 15.

The Petitioners argue that these rulings are necessary to avoid "adverse financial consequences for Central Vermont and Green Mountain." The absence of such rulings, Petitioners suggest, may cause the financial community to view Central Vermont and Green Mountain in a negative fashion.[178] By contrast, NECNP asserts that the Board cannot, in this proceeding, grant the requested rulings. NECNP claims that the Board cannot make such rulings outside of a rate case.[179]

The Petitioners' request raises two separate issues. The first is the question of whether the Board *can*, as a matter of law, find now that the execution and performance should be treated as if they were prudent and find now that the electricity should be treated as if it were used and useful.[180] As we explain below, the Board concludes that we do have the legal authority to grant the requested approvals, *except* as they relate to the utilities' future performance of their obligations under the transactions and under their continuing obligation to operate in a prudent manner.

The second question is whether the Board *should*, as a matter of policy, issue the requested findings. This issue is more difficult. These requests are extraordinary, and granting them would require the Board to alter long-standing and consistently-applied principles of utility rate-making. Here, we find that the evidentiary record permits us to make a limited finding that, among the three present options available to the Petitioners, the sale to ENVY under the terms of the Power Purchase Agreement is reasonable and prudent upon the information presented to us on the record. As to the other requested findings, we decline to issue the rulings sought by Petitioners. Nonetheless, we find the risk of a material future disallowance of costs to be small.

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178. Petitioners' Brief at 67–68.

179. NECNP Brief at 12.

180. To be precise, the Petitioners now seek a Board ruling that we will treat the transactions *as if* they were prudent and used-and-useful, rather than actually deciding now that these transactions *are* prudent and used-and-useful. In the context of this proceeding, we see no difference between the two requested rulings. In both instances, the Board is essentially asked to assure rate recovery and waive long-standing regulatory principles.

B. The Long-Standing Criterion

Traditional utility rate-making practices employed in Vermont and in other American jurisdictions start from the presumption that utility expenditures are, in fact, reasonable and prudent. This presumption provides companies a reasonable measure of certainty as they exercise their discretion and manage their affairs. However, across our nation, for more than a century, this presumption has *not* "guaranteed" rate recovery, but rather has been rebuttable.[181] In particular, long-standing utility rate-making principles have required that, in order to be fully recoverable in rates, expenditures must be prudent and used-and-useful for the provision of service to customers.

Requiring an investment or a company action to be prudent is one safeguard imposed upon a regulated business to protect ratepayers when a utility makes unreasonable decisions.[182] A prudence determination is simply an inquiry into the reasonableness of utility management decision-making. Imprudent expenditures by utilities are not recoverable from ratepayers absent extraordinary circumstances.[183] The Board explained the criteria we apply in examining the prudence of utility actions in Docket 5132, *In re Seabrook*, and has consistently applied the standard.[184]

The Board has long recognized that the obligation for utilities to operate in a prudent manner applies not solely to investments in specific projects, but to the full range of utility actions, including the negotiation and management of purchased power contracts.[185] In the case of purchased power contracts (such as the Power Purchase Agreement), utilities have responsibilities paralleling those applicable to investments. Initially, a company must consider

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181. *See* extensive examples cited in Docket 5132, Order of 5/15/87, 83 PUR 4th 532, 566 (1987).

182. *Jersey Central Power and Light Co. v. FERC*, 810 F.2d 1168 (D.C. Cir. 1987).

183. Dockets 5630/5631/5632, Order of 12/30/93; Docket 5983, Order of 2/27/98 at 214; Docket 6107, Order of 1/23/01 at 76–81; Docket 6460, Order of 6/26/01 at 20–24, 67.

184. Docket 5132, Order of 5/15/87, 83 PUR 4th 532, 566 (1987).

185. *See, e.g.,* Docket 5983, Order of 2/27/98 at 218 and n. 352; Docket 5854, Order of 12/30/96 at 67; Dockets 5630/5631/5632, Order of 12/30/93 at 52; Dockets 5841/5859, Order of 6/16/97 (finding Citizens Utilities' managerial practices imprudent); Docket 5270-GMP-3, Order of 9/5/91 at 110 (reiterating that Green Mountain must operate its DSM programs in a prudent manner); *In the Matter of the Application of Interstate Power Company for Authority to Increase Its Rates for Electric Service in the State of Minnesota*, Docket No. E-001/GR-95-601, Minn. P.U.C. (April 8, 1996 and June 26, 1996) (affirming previous finding that the entry into certain long-term power contracts was imprudent); *Re: Puget Sound Power and Light Company*, Docket No UE-920433, W.U.T.C. (Sept. 27, 1994) (holding both buy and build options to the same prudence standards).

the contract's full range of costs and benefits, including the availability of alternative means to achieve the same result.

Like the concept of prudence, the used-and-useful doctrine serves as a safeguard and is a utility rate-making practice consistently employed by regulators in Vermont and across America to assure that ratepayers do not pay the entirety of expenditures for which they receive no benefit.[186]

The used-and-useful principle is a two-part standard.[187] A utility's expenditures for a particular resource (or other item) can be included in rates if the resource is both *used* — that is, necessary to provide service to ratepayers — and *useful* — which is to say, economic for the purposes it is serving.[188] An investment or cost is not used and useful, *i.e.,* has failed, when it is not expected to yield net present value benefits, after consideration of non-price benefits, over its remaining lifetime. Both parts of the standard must be satisfied in order for the overall principle to be met and rate recovery permitted.[189]

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186. *See* Docket 5983, Order of 2/27/98 at 242-245; Docket 5854, Order of 12/30/96 at 67–69; Dockets 5630/5631/5632, Order of 12/30/93 at 57–59; Dockets 5810/5811, Order of 2/8/96 at 34–39. We found in Docket 5132 that a "long-standing principle of regulatory law has been that an investment must be 'used and useful' for the provision of public service before the public should be asked to bear its cost." In Docket 5132, we also cited a Massachusetts DPU decision that held that "the prudence test . . . determines whether cost recovery is allowed at all, while the used and useful analysis determines the portion of prudently incurred costs on which the Company is entitled to a return." Docket 5132, Order of 5/15/87 at 129–130, citing Mass. DPU 85-270, Order of June 30, 1986, at 27.

In cases where the Board has found utility investments to be uneconomic, the Board usually fashions a remedy that shares the resulting burden of uneconomic costs between shareholders and ratepayers; typically, but not necessarily, in equal divisions. Docket 5132, Order of 5/15/87, 83 PUR 4th 590–594. The Board has done this to allocate the costs of failed investments in major power plants between ratepayers and shareholders. *See, e.g., In re Central Vermont Public Service Corp.*, Docket No. 5132, 83 PUR. 4th 532, 594 (Vt. PSB 5/15/87); *In re Central Vermont Public Service Corp.*, Docket Nos. 4496/4504, Order of 12/4/81, at 11–14; *In re Central Vermont Public Service Corp.*, Docket No. 4634, 49 PUR. 4th 372, 376 (Vt. PSB 9/16/82); *In re Central Vermont Public Service Corp.*, Docket No. 5030, 72 PUR. 4th 733, 747–49 (Vt. PSB 2/18/86).

187. Docket 5983, Order of 2/27/98 at 246. *See also* Docket 5132, Order of 5/15/87.

188. *Id.*

189. Docket 5983, Order of 2/27/98 at 242. One exception to the literal "used and useful" rule provides that it need not be stringently applied if a greater recovery is "necessary to ensure efficiency and progress in the art and the continued attraction of capital to the enterprise." *Washington Gas Light Co. v. Baker*, 188 F. 2d 11, 19 (D.C. Cir. 1950), *cert. denied*, 340 U.S.952 (1951). However, that exception is limited by the overriding rule that it must not result in unfairness to ratepayers. *Id*.

We have also applied this principle to purchased power contracts.[190] Just as ratepayers should not have to pay the entire costs of failed investments, they should not bear the entire risk that utility-purchased power contracts will not be used and useful.[191] Failure to apply the used-and-useful principle to both investments and power purchases would create perverse incentives to fill resource needs with purchased power contracts simply because rate-making practices would make doing so less risky, notwithstanding the merits of the particular power sources and the obligation to meet demand at the least societal cost.[192]

These two rate-making tenets both look at the reasonableness of utility actions, but from different perspectives. As the Court of Appeals for the District of Columbia concluded, a used-and-usefulness review works best in tandem with, but subsequent to, a prudence determination.[193] Neither should be applied mechanically, but rather with an eye to factual and equitable considerations:

> Prudence is, of course, relevant to the process of striking a reasonable balance in rate-setting for public utilities. Requiring an investment to be prudent when made is one safeguard imposed by regulatory authorities upon the regulated business for benefit of ratepayers. As I see it, the "used and useful" rule is but another such safeguard. The prudence rule looks to the time of investment, whereas the "used and useful" rule looks toward a later time. The two principles are designed to assure that the ratepayers, whose property might otherwise of course be "taken" by regulatory authorities, will not necessarily be saddled with the results of management's defalcations or mistakes, or as a matter of simple justice, be required to pay for that which provides the ratepayers with no discernible benefit.[194]

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190. Docket 5983, Order of 2/27/98; *In re Central Vermont Public Service Corp.*, Dockets 5701/5724, Order of 10/31/94. Other jurisdictions have reached the same conclusion. *See, e.g.*, *In the Matter of the Application of Interstate Power Company for Authority to Increase its Rates for Electric Service in the State of Minnesota*, Docket No. E-001/GR-95-601, Minn. P.U.C. (June 26, 1996); *Re Section 712 of the Energy Policy Act of 1992*, Case No. 2512, N.M.P.U.C. (October 7, 1993).

191. *See, e.g.*, 5983, Order of 2/27/98; Dockets 5701/5724, Order of 10/31/94 at 121–127.

192. Docket 5983, Order of 2/27/98, n. 352, citing *Re: Puget Sound Power and Light Company*, Docket No. UE-920433, W.U.T.C. (Sept. 27, 1994) (holding both buy and build options to the same prudence standards).

193. *Jersey Central Power and Light Co. v. FERC*, 810 F.2d 1168, 1189–91 (D.C. Cir. 1987).

194. *Id.* (footnotes omitted). "The two principles thus provide assurances that ill-guided management or management that simply proves in hindsight to have been wrong will not automatically be bailed out from conditions which government did not force upon it." *Id.*

The prudence and used-and-useful standards also reflect the principles that underlie the regulation of electric utilities. Utility regulation is intended, at least in part, as a substitute for competition. Companies in competitive markets that make unwise investment or purchase decisions or that invest in assets that prove to be too expensive are generally unable to recover their full cost of those investments. Rather, the pressure of the competitive marketplace force companies to write off investments, even if they were reasonable at the time they were made.[195] The prudence and used-and-useful principles have the same effect of preventing utilities from recovering the full cost of investments that they would need to write off in a competitive marketplace.

C. Board Authority to Issue Requested Findings

Although we have consistently applied the prudence and used-and-useful principles, the Board retains the authority to permit rate recovery in certain circumstances even if costs do not meet these standards. These regulatory doctrines are not statutory requirements. Instead, they are well-established principles intended to achieve our ultimate obligation under Vermont law to apply the standard in 30 V.S.A. § 218(a), which requires that we establish just and reasonable rates. We have previously noted that the statutory standard of "just and reasonable" affords us broad discretion in the manner in which we determine rates.[196] The Vermont Supreme Court has stated:

> The statutory basis of the Board's regulatory authority is extremely broad and unconfining with respect to means and methods available to that body to achieve the stated goal of adequate service at just and reasonable rates. 30 V.S.A. § 218 authorizes the Board to set rates, tolls, charges or schedules or to change regulations, measurements, practices or acts of the utility relating to its service in order to insure those reasonable rates and adequate service. The choices the Board makes in this area are

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195. For example, one of the Petitioners, Green Mountain, made significant investments in unregulated subsidiaries. For a variety of reasons, these unregulated ventures lost money. Although there was no suggestion that Green Mountain had been imprudent in making these investments or that they were not still being "used," Green Mountain ultimately had to write off a substantial portion of its investment simply because it had become uneconomic. *See* Docket 6107, Order of 1/23/01 at 26–30.

196. *See, e.g.*, Docket 5983, Order of 6/8/98 at 2, 22–23, 25; Docket 6107, Order of 1/23/01 at 16–19.

> subject to great deference in this Court so long as it can be shown they are directed at proper regulatory objectives.[197]

In exercising our statutory discretion, however, we are mindful that Vermont's rate-making policies explicitly *balance* after-the-fact reviews against the fact that utilities have substantial discretion to manage their own affairs without day-to-day regulatory intervention. Certain statutorily-defined actions require Board approval, but otherwise, oversight is limited to after-the-fact reviews, usually in the context of rate cases. Similarly, the balancing test inherent in the used-and-useful analysis is intended to provide some protection to ratepayers in the event a decision, while prudent, ultimately turns out to be economic. The rate-making process embodies these principles, by granting utility actions a presumption of reasonableness, subject to challenge and by requiring that ratepayers and stockholders share the uneconomic costs of investments that prove to be uneconomic and thus, not used-and-useful.[198]

Thus, the Board has moved from relying upon after-the-fact reviews primarily where it involves a single, finite, utility action that requires prior Board approval. For example, site preparation or construction of a transmission line or generating station may not commence without prior Board approval under 30 V.S.A. § 248. Although the Board's review of such a petition may not be styled a review of the prudence of utility actions, it has the same effect as to those issues under review during the proceeding.[199] Thus, as to the *entry* into a proposed transaction, a finding that the proposal promoted the general good would provide the utility with substantial assurance that its entry into the transction will not subsequently be determined to have been imprudent, without a need for the extraordinary relief requested here.

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197. *In re Green Mountain Power Corp.*, 142 Vt. 373, 380 (1983) (citations omitted); *accord*, *In re Citizens Utilities Co.*, 171 Vt. 447, 451-52 (2000).

198. The Vermont Supreme Court has found that the appropriate function of the Public Service Board "is that of control and not of management, and regulation should not obtrude itself into place of management." *In re Green Mountain Power Corp.*, 162 Vt. 378, 386 (1994) (Board found not to have attempted to dictate individual salaries, but merely to set an overall cap on salary increases); *Latourneau v. Citizens Utilities Co.*, 125 Vt. 38 (1965) (Public Service Commission intruded into the affairs of the utility when it made a finding indicating the appropriate salary of the company president).

199. *See* Docket 5983, Order of 2/27/98 at 215. In that proceeding, the Board did not revisit issues that were considered during the review of the Hydro-Québec contract under Section 248. Rather, the Board found Green Mountain's actions subsequent to Board approval to be imprudent.

The Petitioners ask us to alter this balance between management responsibility and certainty of rate recovery, arguing that only a heightened level of certainty of rate recovery will allow them to enter into the proposed transactions. In essence, the Petitioners request that the Board continue to abstain from contemporaneous intervention, while also agreeing not to exercise after-the-fact review of prudence or usefulness.

Instituting such a change in policy essentially constitutes a request that we waive the ratepayer protections provided by the prudence and used-and-useful standards. Although the statute would permit the Board to abstain from applying these principles, as long as the resulting rates were just and reasonable, we conclude that we should only do so in rare circumstances and only when the requesting party makes a greater showing than a mere demonstration that the proposed transaction promoted the general good. As the Vermont Supreme Court has observed:

> If a utility's income were guaranteed, the company would lose all incentive to operate in an efficient, cost-effective manner, thereby leading to higher operating costs and eventual rate increases.[200]

A party seeking to significantly alter the long-standing balance of responsibilities must make a strong showing of clear and compelling benefits to ratepayers that would not be attainable without such recovery guarantees.[201]

We have found such a clear and compelling benefit once. Specifically, we concluded in a number of cases that the purchase of power by Vermont electric utilities from Hydro-Québec under the Hydro-Québec Vermont Joint Owners Contract should be treated as if those purchases were prudent and used-and-useful. There are three significant aspects of these waivers, however. First, the evidence demonstrated that continued rate disallowance could lead to serious financial consequences for the state's two largest utilities. We found that avoiding such an outcome was beneficial to Vermont ratepayers and justified an exception to our application of the prudence and used-and-useful standards.[202] Second, waiver of these rate-making principles was needed in order to allow the rate recovery necessary to avoid serious financial consequences. The Board

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200. *In re Central Vermont Public Service Corp.*, 144 Vt. 46, 55 (1983).

201. This is particularly true with respect to a party's *management* of its rights and responsibilities under a proposed transaction. It is virtually impossible to *pre*-determine that future actions left to the discretion of a utility will be reasonable, prudent, and used-and-useful.

202. Docket 6107, Order of 1/23/01 at 76–81; Docket 6460, Order of 6/26/01 at 29–34.

had previously determined that the lock-in to the purchase of power from Hydro-Québec by Vermont's largest two electric utilities had been imprudent (and rulings on the prudence of the other utilities were pending).[203] In addition, the Board had ruled that, as to Green Mountain, the Hydro-Québec Vermont Joint Owners Contract was not economically useful (the Board had not yet resolved the issue for other utilities).[204] Thus, under long-standing rate-making practices, we could not allow Green Mountain and Central Vermont (and potentially other utilities) to recover their full Hydro-Québec costs *unless* we waived the application of these principles and treated the Hydro-Québec Vermont Joint Owners Contract as if it were prudent and used-and-useful.

NECNP argues that, notwithstanding our authority to grant the requested regulatory determinations, we cannot do so in this proceeding. Instead, asserts NECNP, the Board can only make such rulings in a proceeding examining utility rates under 30 V.S.A. §§ 225–227.

We find this argument unconvincing. Nothing in those sections, or in other provisions of Vermont law, limits the Board's authority to decide, outside of a rate proceeding, whether specified expenditures or investments meet the criteria of Section 218(a) and thus may be recovered in rates. To the contrary, the legislative grant of authority to the Board is quite broad. Section 203 provides that the Board's jurisdiction over regulated utilities shall be exercised by the [B]oard and the [D]epartment *so far as may be necessary* to enable them to perform the duties and exercise the powers conferred upon them by law."[205] As the Board pointed out in Docket 5224, if the Board approves an action, "the utility's prudence in doing so is generally not subject to further challenge, at least not by parties who participated in, or were given the opportunity to participate in, the proceedings."[206] Similarly, Section 9 clearly grants the Board (as a "court of record") power of both law *and equity* to make orders necessary to benefit the general good. In the exercise of that jurisdiction, Sections 9 and 209 of Title 30 allow the Board to address "all matters" concerning "the manner of operating and conducting any business" and

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203. Docket 5983, Order of 2/27/98; Dockets 5701/5724, Order of 10/31/94; *see also Central Vermont Public Service Co.*, 172 Vt. 14 at 26–28(2001).

204. Docket 5983, Order of 2/27/98 at 241–248.

205. 30 V.S.A. § 203. The Board opened this investigation pursuant to 30 V.S.A. §§ 2(c), 109, 203, 209, and 231. Order of 9/4/01 at 4.

206. Docket 5224, Order of 12/18/87 at 9–10.

"the rates of companies subject to its supervision." It is difficult to imagine a broader statutory mandate pursuant to which an agency such as the Board might review the Petitioners' filings.[207]

In practice, the Board has ruled, outside of rate cases, on the prudence of certain actions, even though the rate effect of these decisions did not occur until a subsequent rate investigation. For example, in Docket 5270-GMP-1, the Board found that it would be prudent for Green Mountain to commit certain funds to effect a proposed heating system conversion.[208] In Docket 5224, the Board reviewed the reasonableness of Central Vermont's entry into a power purchase contract, concluding that it was imprudent.[209] As we observed in that case, such reviews do not determine retail rates. Rather, they determine a "part of the cost upon which such rates would be based."[210] The Board has not issued similar rulings related to whether an investment or purchase was used-and-useful except during a rate case. However, the statutory authority cited above would permit us to make such a determination in the appropriate situation, even though the rate effects would only occur later.

Thus, we conclude that statutes, logic, and precedent all indicate that the Board has the legal authority under which we *could* issue the requested findings as they relate to the entry into the transactions (but *not* as to future performance). As always, such a determination is limited to the facts presented to the Board. To the extent that the Petitioners have or should have

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207. Section 209 provides as follows:

> (a) On due notice, the board shall have jurisdiction to hear, determine, render judgment and make orders and decrees in *all matters* provided for in the charter or articles of any corporation owning or operating any plant, line or property subject to supervision under this chapter, and shall have like jurisdiction in all matters respecting:
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> . . .
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> > (3) The manner of operating and conducting *any business* subject to supervision under this chapter, so as to be reasonable and expedient, and to promote the safety, convenience and accommodation of the public;
> >
> > (4) The price, toll, rate or rental charged by *any company* subject to supervision under this chapter, when unreasonable or in violation of law.

(Emphasis added).

208. Docket 5270-GMP-1, 7/18/90. "[I]t would be prudent for Green Mountain, as part of its conservation and energy management program, to commit now to fund the proposed heating system conversion at Highgate in an amount not to exceed $785,000 for installation, engineering, architects' fees, and general contractors' fees, as identified in Attachment A to the Memorandum of Understanding." *Id.* at 17.

209. *General Order 45 Notice filed by Central Vermont Public Service Corp.*, Docket 5224, Order of 12/23/87 at 25–26, affirmed on other grounds, *In re Vicon Recovery Systems*, 153 Vt. 539 (1990). The Board conducted this proceeding pursuant to, among other statutes, 30 V.S.A. § 209.

210. Docket 5224, Order of 12/18/87 at 20.

information relevant to the Board's decision that has not been presented in evidence, a ruling by the Board would not limit future consideration of that new evidence and, with a potentially different conclusion.

As to Petitioners' *future performance* of (as opposed to the *entry* into) their obligations under the transaction, we are skeptical that such a ruling would have any value. As with any prudence or rate recovery determination, the Board's ruling would be limited to the facts that are presented in the record before the time of the decision. Quite clearly, future events do not fall within this category. Thus, from a practical perspective, it would not be possible to issue rulings related to future performance.

D. The Rate-Guarantee Findings Requested by Petitioners

Turning to the specific questions raised in this proceeding, we conclude that the Petitioners have not demonstrated sufficient basis for departing from our long-standing regulatory practices by granting the requested findings. Although the record demonstrates that the transactions will provide valuable benefits to Vermont ratepayers, the Petitioners have not shown that the benefits are both so clear and convincing as to outweigh the value of long-standing revenue recovery rules *and* unattainable absent extraordinary relief. We make one exception to this determination: we affirmatively find that the entry into the Sale Agreement and related transactions by VYNPC, Green Mountain and Central Vermont is the preferred option among those reasonably available at the present time and, therefore, promotes the general good.[211] This conclusion has the same effect as a finding that the sale is the prudent option.

We also conclude that the risk of a future rate disallowance based upon the prudence and used-and-useful doctrines is greatly overstated. Although we decline to waive our traditional rate-making practices, the evidence demonstrates that there is little likelihood that a future Board would find the transactions not to be used-and-useful. In addition, we see no basis on which to disallow costs based upon flaws in the process VYNPC and its owners employed in selling

211. This finding is, of course, dependent upon the assumption that the record before us includes all relevant information that Central Vermont and Green Mountain have or should have in their possession for the evaluation of such a decision. *See also*, text at fn. 216, below.

Vermont Yankee. Our analysis of the application of these regulatory doctrines to the facts before us is set out below.

We recognize that Petitioners have argued that treatment of all transaction-related costs as if they were prudent and used-and-useful is a necessary component of the sale. ENVY has argued that these findings are necessary to ensure that the Vermont Sponsors will be able to pay for power under the Power Purchase Agreement. These comments raise two concerns. First, we are extremely disturbed with the concept that Vermont utilities are unwilling to take actions that benefit themselves and their ratepayers unless we waive normal regulatory principles. This Board compensates utilities for the risks they take by including in rates a reasonable rate of return that incorporates a significant premium above the rate of risk-free financial instruments. In exchange, we expect that utilities will take actions consistent with their public service obligations, including pursuing transactions such as the proposal before us. Utilities should not require extraordinary relief as a precondition of meeting these obligations.

Our second concern is the suggestion that rate guarantees are necessary to assure ENVY that the Vermont Sponsors can meet their purchase obligations. There has been no suggestion that rate disallowances in the past have placed Vermont utilities in a position where they could not meet their payment obligations. Even in Green Mountain's situation, the Company's financial difficulties stemmed less from the disallowance of costs associated with the Hydro-Québec Vermont Joint Owners Contract than with other factors (*e.g.*, investments in *un*regulated ventures).[212] Moreover, the Purchase Agreement itself includes mechanisms by which ENVY can obtain financial assurances from purchasers if ENVY has valid concerns about their ability to fulfill purchase obligations.[213] And in neither case did either Central Vermont or Green Mountain *ever* fail to meet all purchase obligations.

Overall, it appears that the Petitioners seek a waiver of traditional standards in this area largely because of an apparent misunderstanding of what those criteria actually mean.

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212. Docket 6107, Order of 1/23/01 at 25–30.
213. Exh. VY-Wiggett-7.

1. Prudence

The Petitioners requested findings related to prudence have two aspects: the prudence of the transactions themselves and the prudence of the process that led to the transactions. Our analysis of future rate treatment examines each of these issues separately.

The prudence of the transactions is essentially the same as the question of whether the sale, under the terms set out in the Sale Agreement, promotes the general good of the state. As we explain in Part V, above, VYNPC and its owners have three basic choices at the present time.[214] VYNPC can continue to own and operate Vermont Yankee and seek to improve the value of the asset by pursuing options such as power uprate and license extension. VYNPC can also decide to close Vermont Yankee on economic grounds. The third choice is the sale to ENVY. The evidence shows that under the most likely scenarios, VYNPC, its owners, and Vermont ratepayers will benefit from pursuing the sale to ENVY. For this reason, we concluded above that the sale would promote the general good of the state. This conclusion has the same effect as a finding that the sale is prudent.[215]

In fact, the benefits to the Vermont Sponsors and ratepayers from the sale to ENVY are such that we would find it unreasonable for VYNPC and its owners to use our decision not to issue the requested regulatory rulings as a basis for declining to complete the sale. Based upon the evidence presented in hearings, failure to close on the Sale Agreement would subject Vermont ratepayers to much higher costs over the next ten years than would completion of the sale. Central Vermont and Green Mountain should seek to secure these benefits for ratepayers.

We do emphasize that Central Vermont and Green Mountain retain an affirmative obligation to continue to reevaluate the merits of the transaction. If the bases for their decision to sell Vermont Yankee and purchase power from ENVY have changed (such as, for example, due to changes in wholesale markets or in their assessment of the value of ownership), Central Vermont and Green Mountain have the affirmative duty up to and through the date of closing to evaluate the changes and determine whether the proposed transactions still are in the best interest

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214. Arguably, there is a fourth choice: to reject the present sale and make new efforts to sell Vermont Yankee. The evidence offers no basis for believing that such a future sale would be at a materially greater value than that in the pending Sale Agreement. Moreover, after two failed sales attempts, we question whether a future sale would even generate much interest. Thus, we do not consider this to be a realistic option.

215. Docket 5983, Order of 2/27/98 at 175–77.

of ratepayers. We do not, however, see our decision not to grant the extraordinary regulatory approvals sought in Paragraph 15 of the MOU as a reasonable basis for declining to enter what would otherwise be a favorable transaction.[216]

Our finding that the transactions promote the general good does not translate to a conclusion relative to the *process* that produced the Sale Agreement. On this issue, as on the question of treating the transactions as if they were used-and-useful, we decline to rule on the Petitioners' requests. Instead we will adhere to the standard American utility rate-making practice of not providing assurance of rate recovery in advance of a challenge to the inclusion of associated costs in rates. We do observe, however, that the risks of a rate disallowance associated with the auction and negotiation process appear to be small. To the extent that imperfections in the process leading up to the Sale Agreement may exist, it would be virtually impossible to quantify the effect of those imperfections, since we would have no way of determining what would have occurred if VYNPC had taken different actions. We have concluded that, within the parameters of the offering memorandum, the process yielded fair-market-value for the offer made for VYNPC; *i.e.*, sale of the plant with an associated Power Purchase Agreement for the remaining license term.[217] We find the record inconclusive as to the value that would have been received for the plant with a shorter or non-existent Power Purchase Agreement. We do not see any likelihood that this question can ever be definitively resolved. While we are not here formally ruling on this point, we cannot now see any basis for quantifying a rate disallowance for this reason.

2. Use

This Board has previously made clear that we should treat an investment or purchase decision as used-and-useful only if it meets both prongs of the test; *i.e.*, is both used *and* economically useful.[218] To be "used," the asset must be actually providing service to ratepayers and must be necessary to provide service to ratepayers. The reverse is also true: assets that do

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216. Green Mountain and Central Vermont are compensated through their rate of return precisely because they take such risks. Ratepayers should not be forced to pay such compensation to utilities, yet have the utilities then refrain from pursuing the most cost-effective avenue simply because the Board declines to remove the risk.

217. *See* p. 56, above.

218. Docket 5983, Order of 2/27/98 at 242.

not provide service to ratepayers (or are not expected to provide such service in the near future), are not considered to be used and their costs may be excluded from rates.[219]

As we examine the characteristics of the transactions here, we find it difficult to envision a set of circumstances in which the Power Purchase Agreement would have costs, yet not be used.[220] This is because VYNPC's purchase obligations under the Power Purchase Agreement (and those of Green Mountain and Central Vermont under the Amendatory Agreement) require VYNPC to purchase power *only* when ENVY supplies it.[221] If Vermont Yankee is operating and supplying power, VYNPC must purchase it. But at these times, Vermont Yankee, through the Power Purchase Agreement, *will* be supplying power that is "used" to Green Mountain and Central Vermont customers.

When Vermont Yankee is not operating — and therefore is not being used to provide service to Green Mountain and Central Vermont ratepayers — VYNPC incurs no costs. Thus, even though the Power Purchase Agreement may not be used at such times, there would also be no associated costs that could be subject to disallowance.

Although we conclude that a future disallowance is highly unlikely, we decline to provide a ruling on this issue in advance of a challenge to the recovery of the costs during a rate investigation.

3. Economic Usefulness

The second prong of the used-and-useful doctrine is that the asset or purchase must be economically useful. In assessing the economic usefulness of a purchase, we have generally compared the value of the payments for the purchase to the value of market-based alternatives. For example, we excluded costs associated with Green Mountain's purchases under the Hydro-

219. *See Letourneau v. Citizens Utilities Co.*, 128 Vt. 129.

220. Although the Petitioners' request for findings relates to the transactions as a whole, we need only examine the Power Purchase Agreement. After the closing of the sales transactions, the only future costs that VYNPC and its Vermont Sponsors will incur are those arising from the purchase of power under the Power Purchase Agreement. Thus, these are the only costs that would be included in the adjusted test year for future rate proceedings and which would be subject to possible disallowance.

221. *See* exh. VY-Wiggett-7.

Québec Vermont Joint Owners Contract by comparing the degree to which that contract was expected to be above-market over the remainder of the Contract.[222]

In examining the application of the economic usefulness test to the Power Purchase Agreement, it is simplest to look at the Power Purchase Agreement in two segments: the initial three years and the period after November 2005 when the Low Market Adjuster takes effect, and to consider it overall. The evidence demonstrates that viewed alone, the Power Purchase Agreement is well above currently predicted market prices for the initial three years. However, appropriate application of the economic usefulness test cannot simply compare the Power Purchase Agreement to market prices. Rather, it is necessary to examine the sales transaction as a whole. It is clear from the structure of the Sale Agreement and Power Purchase Agreement that ENVY has agreed to provide a sizeable up-front payment, in return for an above-market sale of power through the Power Purchase Agreement. ENVY's testimony on the adjustment to the purchase price based upon an earlier start date for the Low Market Adjuster demonstrates this relationship.[223] For example, by starting the Low Market Adjuster in January 2003, ENVY would reduce the purchase price by approximately $115 million. This figure offsets the above-predicted-market component of the Power Purchase Agreement prices during the first three years of the Power Purchase Agreement. Thus, if we evaluated the sales transaction as a whole for the period from July 2002 through 2005, there appears to be no basis to conclude that the Power Purchase Agreement is above-market and thus not economically useful.

As we examine the period of time after the Low Market Adjuster begins, we reach a similar conclusion. During this period, VYNPC, Green Mountain, Central Vermont, and, as a result, ratepayers, will pay the lower of two rates: a fixed price set out in the Power Purchase Agreement or the price triggered by the Low Market Adjuster, which reflects the market price, an adder for installed capacity, and a 5 percent payment for the contract's price cap, which creates an upper limit and still allows any remaining drop in market prices to be passed through to ratepayers. Essentially, the economic usefulness test would look at the reasonableness of the 5 percent payment. In the context of a Power Purchase Agreement with a price cap to protect

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222. Docket 5983, Order of 2/27/98 at 208.

223. Keuter reb. pf. at 8; *see also* exh. VY-43 at 12.

ratepayers in the event of higher market prices, it is highly probable that any future Board would find this small payment for a price cap to be reasonable.

Finally, when we consider the entire term of the transactions (the initial payment, plus the 2002–2005 period, plus 2006–2012), we see that if each part is likely to be economically useful, the total term would be so, too.[224] We do not, however, rule upon this issue at the present time, but will make a formal decision when some party seeks to disallow recovery of costs in a future rate case.

VII. Should ENVY and ENO Receive a Certificate of Public Good?

A. Introduction

Section 231 of Title 30 requires companies to petition the Board for a certificate of public good to own or operate a Board-jurisdictional business. The statute also requires the Board to determine that the operation of a business promotes the general good. Below, we conclude that Entergy Corporation, and its subsidiaries, ENVY and ENO, are at least as qualified as the VYNPC to own and operate Vermont Yankee, and we conclude that they ought to be issued certificates of public good.

The Petitioners and the Department sponsored testimony in support of ENVY and ENO's qualifications to acquire, own and operate Vermont Yankee through the current term of Vermont Yankee's operating license.[225] Several Intervenors oppose the issuance of a Certificate, and present various legal arguments in support of their positions. CAN contends that Entergy Corporation's agreement to provide financial assurances and guarantees on behalf of ENVY is preempted by Nuclear Regulatory Commission regulations. It makes similar arguments with regard to the Inspection Memorandum of Understanding between the Department and ENVY that is contained in the broader Memorandum of Understanding. Because of this, argues CAN, the Board must reject the Memorandum of Understanding as it fails to actually provide the adequate assurances that the DPS has deemed necessary to support approval of the sale.

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224. This is particularly so, since a key beneficial effect of the transactions is to replace high existing cost-of-service FERC-approved wholesale power commitments with the lower prices of the Power Purchase Agreement. *See, e.g.*, discussion above at 40. (§V.B.2.a)

225. *See generally*, exh. VY-42, Memorandum of Understanding among ENVY, VYNPC, Central Vermont, Green Mountain, and the Department.

B. Service In-State and Service Territories

NECNP argues that, because ENVY and ENO will not serve in-state need and will have no service territory, as a matter of law, ENVY and ENO cannot qualify for a Certificate.[226] We are not persuaded by NECNP's "in-state" need argument. It relies on factual circumstances that are not present here. The proposal before the Board is not a proposal for the sale of electricity out of state, as NECNP suggests. Rather, it calls for Central Vermont and Green Mountain to continue to receive fifty-five percent of Vermont Yankee's output, which provides approximately one-third of their power needs through this contract. This is the manner in which Vermont Yankee electricity is being sold to Vermont Yankee Sponsors today.

We are also unpersuaded by with NECNP's convoluted statutory argument, based upon Sections 203, 231 and 249 of Title 30, that ENVY cannot be granted a Certificate because it has no service territory. NECNP correctly notes differences in the precise language used in the statutes. However, NECNP's conclusions regarding the ambiguity results in a reading which either renders Section 231 meaningless for companies engaged in manufacture and transmission, but not distribution, of electricity, or results in the imposition upon all companies seeking a Certificate of a requirement found in Section 249 and meant only for distribution utilities. Neither outcome is a reasonable interpretation of Title 30.[227]

Section 203 gives the Board broad authority over companies engaged in "the manufacture, transmission, distribution or sale of . . . electricity."[228] More narrowly-worded, Section 249 of Title 30 provides the Board with authority "to *establish service territories* for companies . . . which are *engaged in the distribution* of electrical energy in the state . . . ."[229] Section 231 requires companies to petition the Board for a Certificate if they want "to own or

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226. NECNP Brief at 2. As we discuss below, NECNP also argues that the right of eminent domain makes clear that the Vermont General Assembly intended that the issuance of Certificates be restricted to only those companies that provide utility service to Vermonters.

227. An interpretation of a statute should give effect to all the language in the statute and avoid a reading that results in surplus language. *State v. Brennan*, 775 A.2d 919, 921–22 (Vt. June 1, 2001).

228. 30 V.S.A. § 203 (emphasis added).

229. 30 V.S.A. § 249 (emphasis added). *See also* § 250.

operate a business over which the [Board] has jurisdiction . . . ."[230] Section 231 also requires the Board to determine that the operation of a business promotes the general good and to grant a certificate to that effect "specifying the business and the territory to be served . . . ."[231]

The facts of this case indicate that both ENVY and ENO will be Board jurisdictional companies requiring certification. Upon the closing, ENVY will manufacture electricity and Section 203 gives the Board broad authority over companies engaged in "the manufacture, transmission, distribution or sale of . . . electricity."[232] Similarly, ENVY and ENO intend to own and operate Vermont Yankee, and the plain language of Section 231 indicates that the threshold test for a Certificate is simply whether a company wants "to own or operate a business over which the [Board] has jurisdiction . . . ."[233] If the Board were to determine that, because ENVY has no service territory, it needs no Certificate as NECNP has suggested, Sections 203 and 231 would be rendered meaningless.

NECNP's position is equally untenable with regard to Section 249. The plain language of Section 249 applies only to companies "engaged in distribution."[234] Section 249 places no such requirement upon companies engaged in only the "manufacture" and "transmission" of electricity. The language of Sections 249 and 231, thus, point to the conclusion that the territory referred to in Section 231 must be something other than the service territory specified by Sections 249 and 250.[235] For manufacturing and transmission, a service territory is not necessarily limited to a defined area, as it is for distribution.

The Board has already addressed this topic repeatedly and we have consistently ruled that "the general good of the state" standard includes a recognition of the value to Vermont of the benefits to the entire New England Power Pool, from which Vermont purchases much of our power and upon which Vermont depends for reliability.

First, in Dockets 4622/4724, we reviewed the application by VELCO for a Certificate of Public Good to construct the Vermont portion of a transmission interconnection between Hydro-

230. 30 V.S.A. § 231.
231. *Id.*
232. 30 V.S.A. § 203.
233. 30 V.S.A. § 231.
234. 30 V.S.A. § 249.
235. DPS Reply Brief at 16.

Québec and the New England Power Pool.[236] In Dockets 4622/4724, the Board responded to arguments that Vermont should not be a "corridor for a project which will serve primarily the needs of the southern New England States." We disagreed and found that the most eloquent response to this objection was made by Douglas Kitchel, at a public hearing in Waterford, Vermont:

> Most of our farm products go [to southern New England]. Many of our [other] products go there [too]. If we say "why should we let them have power through here?" we are also saying "go away, go south, move your industries, don't be so foolish as to live there." Then where would we be? We would be in a very uncomfortable uneconomical situation.[237]

Second, the Board reaffirmed this concept in Docket 5323 by approving the petition filed by Arrowhead Cogeneration Company, L.P., requesting a Certificate pursuant to Section 248 of Title 30 to construct a gas-fired cogeneration facility in Georgia, Vermont, whose entire load would be bought out of state.[238] In that case the Board determined that "the project will not unduly interfere with the orderly development of the region [and] is required to meet the need for present and future demand for service."[239]

Finally, in addition to its statutory argument, NECNP also argues that, due to such corporations' rights to exercise eminent domain, the legislature meant to restrict Certificates to corporations providing public utility service to the people of Vermont. We are not persuaded. In order for a certified utility to exercise eminent domain, that company must meet the requirements of 30 V.S.A. §§ 110–114. The plain language of Section 110 requires a finding that the condemnation by a utility be "necessary . . . that it may render adequate service to the public."[240] According to Section 110, unless ENVY can demonstrate that its ability to exercise the right of

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236. Dockets 4622/4724, Order of 2/25/83.

237. *Id.* at 17–18.

238. Docket 5323, Order of 9/26/89.

239. *Id*. at 45; for a similar concept, *see also* North Carolina Utility Commission Docket Nos. E-100, Sub 85, and EMP-3, Sub 0, establishing North Carolina's regulations for certification of merchant plant, which require applicants to show the need for the facility in the state *and/or the region*.

240. *See, e.g., Vermont Electric Power Co. v. Anderson*, 121 Vt. 72, 82 (1959). Section 112(2) requires that "the condemnation of such property or right is necessary in order that the petitioner may render adequate service to the public in the conduct of the business which it is authorized to conduct, and in conducting which it will, according to the laws of this state, be under an obligation to serve the public on reasonable terms, and pursuant to the regulations of the board." DPS Reply Brief at 17.

eminent domain will serve the needs of the public of Vermont, it cannot exercise such a right. Rather than implicitly limiting access to Certificates, the plain language of Section 110 requires a demonstration by companies seeking to exercise that authority. There has been no indication here that ENVY has any plans to enter into condemnation proceedings.

Therefore, we find that we can issue a certification that would define the area to be served as the entire state. The requirements of section 231 to designate a service area are met because ENVY, as owner, and ENO, as operator of Vermont Yankee may sell power at wholesale wherever permitted by law, including the entire state of Vermont.[241]

C. Technical Qualifications and Structure

1. Findings

a. Technical Qualifications

118. ENVY and ENO, the proposed owner and operator, respectively, of Vermont Yankee, are sufficiently qualified and experienced to own, operate and decommission Vermont Yankee. See Findings 119–137, below.

119. Entergy Corporation is a registered Public Utility Holding Company under the Public Utility Holding Company Act of 1935, headquartered in New Orleans, Louisiana. Kansler pf. at 4, 10.

120. Entergy Corporation's reported earnings in 2001 were $726 million on revenues of $9,620 million. It is engaged in several businesses: domestic utility; non-utility nuclear; and energy commodity services; and all were positive contributors to earnings and cash flow in 2001. Domestic utility reported earnings contributed $550 million, non-utility nuclear $128 million and energy commodity services $106 million. O'Connell reb. pf. at 4.

121. Entergy Corporation is the third largest power generator in the nation with more than 30,000 megawatts of generating capacity. Entergy Corporation and its affiliates are the second largest operators of nuclear plants, both in terms of number of plants and megawatts generated in the country. Kansler pf. at 4, 10; O'Connell reb. pf. at 12–13; tr. 2/5/02 at 178–79 (Kansler).

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241. *Id.*

122. Through its subsidiaries, Entergy Corporation owns and operates Units 2 and 3 at Indian Point, the James A. FitzPatrick plant in New York, and the Pilgrim Nuclear Station in Plymouth, Massachusetts. An Entergy Corporation subsidiary owns the Indian Point Unit 1 plant, which is not operational. Entergy Corporation also owns and operates five nuclear power reactors at four locations in Arkansas, Mississippi and Louisiana. An Entergy subsidiary, Entergy Operations, Inc., operates the Arkansas Nuclear One Units 1 and 2 in Arkansas, the Grand Gulf nuclear power station in Mississippi, and the Waterford 3 station in Louisiana. In 1993, Entergy Corporation merged with Gulf States Utilities, Inc. and an Entergy Corporation subsidiary became the licensed operator of the River Bend nuclear station in Louisiana. *Id.*

123. Entergy Corporation, through its subsidiaries, is also managing decommissioning activities at Maine Yankee in Wiscasset, Maine, and has recently put the Millstone Unit 1 in Waterford, Connecticut, into SAFESTOR. *Id.*

124. Entergy Corporation's Nuclear Committee reviews on a regular basis (approximately five times per year) the operation and performance of all Entergy nuclear plants. It provides summaries of its reviews to Entergy Corporation's Board of Directors. Kansler pf. at 12.

b. Structure

125. ENVY and ENO, the proposed owner and operator, respectively, of Vermont Yankee, are indirect subsidiaries of Entergy Corporation. Kansler pf. at 4, 6, 11; Kansler supp. pf. at 2; exh. ENVY-Kansler-3.

126. 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. Exh. ENVY-Kansler-3.

127. 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. Wells reb. pf. at 9–10.

128. Entergy Nuclear Holding Company currently owns Entergy Nuclear Holding Company #3 which, in turn, owns Entergy Nuclear Vermont Investment Company. Entergy Nuclear

Vermont Investment Company was established to hold the company which would purchase the Vermont Yankee Nuclear Power Station. *Id.*; Kansler pf. at 3–4; exh. ENVY-Kansler-3.

129. Although formed in Delaware, Entergy Nuclear Vermont Investment Company will be a taxpayer in Vermont. One of its functions is to ensure that its immediate parent, Entergy Nuclear Holding Company #3, will retain its status as a passive holding company in all taxing jurisdictions. Kansler pf. at 4.

130. ENVY is to be 100 percent equity-funded by Entergy Nuclear Vermont Investment Company which has a capital structure containing a mixture of equity and debt. Wells reb. pf. at 10.

131. 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. Kansler pf. at 6.

132. ENVY may be treated as a division of Entergy Nuclear Vermont Investment Company for accounting and tax purposes. Wells reb. pf. at 9–10.

133. 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. Tr. 2/5/02 at 174–75 (Kansler).

134. ENO holds licenses from the NRC to operate or maintain the nuclear units owned by Entergy Corporation's subsidiaries in the Northeast. ENO currently operates Indian Point Units 2 and 3 and the James A. FitzPatrick nuclear power plants. ENO also maintains the non-operational Indian Point Unit 1. The Pilgrim Nuclear Station is currently operated by Entergy Nuclear Generation Company, another Entergy Corporation affiliate. However, a request is pending at the NRC to change the existing Pilgrim license to allow ENO to become the licensed operator of Pilgrim. Kansler pf. at 11; Kansler supp. pf. at 2.

135. ENO and Entergy Nuclear Generation Company, the Pilgrim Station's current owner, together employ approximately 3,150 persons at their nuclear power stations and at ENO's offices in White Plains, New York. ENO also employs personnel in Maine and Mississippi, and,

after the closing, expects to employ the personnel at Vermont Yankee. Kansler supp. pf. at 2; tr. 2/5/02 at 174–75 (Kansler).

136. Upon approval of Petitioners' proposal, a Site Vice-President position will be established at Vermont Yankee. Michael Kansler will become ENVY's Chief Operating Officer. Mr. Kansler reports to Jerry Yelverton, Chief Executive Officer and Chief Nuclear Officer. Certain support functions such as fuel management, business services, and procurement services will be provided by ENO through its regional office in White Plains, New York. Kansler pf. at 11–12.

137. Entergy Corporation has significant experience and expertise in owning, operating and decommissioning nuclear power plants. Kansler pf. at 4, 10; tr. 2/5/02 at 178–79 (Kansler); *see* Findings 119-136, above.

2. Discussion: Technical Qualifications and Structure

We find that ENVY and ENO are qualified to purchase, operate and decommission Vermont Yankee.[242] ENVY, ENO and their affiliates possess significant technical qualifications and expertise, and they have at their disposal substantial human resources.

ENVY is a limited liability company, a wholly-owned indirect subsidiary of Entergy Corporation. Entergy Corporation is the third largest power generator in the nation with more than 30,000 megawatts of generating capacity, and the second largest operator of nuclear plants, both in terms of number of plants and megawatts generated in the country.[243] Entergy Corporation is a company that reported earnings in 2001 of $726 million on revenues of $9,620 million.[244]

By virtue of their affiliations, ENVY and ENO have at their disposal a sizeable pool of managerial, financial and technical talent. Entergy Corporation and its affiliates currently own

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242. The focus of the discussion in this section is on the general qualifications and expertise of ENVY and ENO. In the next sections we review ENVY and ENO's capitalization and its access to further funding, and the safety implications of a transfer of ownership and operations to companies such as ENVY and ENO.

243. Kansler pf. at 4, 10; O'Connell reb. pf. at 12–13; tr. 2/5/02 at 178–79 (Kansler).

244. O'Connell reb. pf. at 4.

and manage nine nuclear units. They represent an extensive knowledge base and possess substantial experience in operating nuclear power plants.[245]

Access to the broader resources of Entergy Corporation also leads us to conclude that ENVY and ENO will be able to achieve any economies of scale that exist. They can benefit from the expertise of Entergy employees rather than having to contract for that experience. It is also likley that joint purchasing will permit cost savings as well. By contrast, Vermont Yankee is a small, single unit power plant. This strongly suggests that ENVY and ENO would operate Vermont Yankee more economically than VYNPC.[246] Even more importantly, Entergy operates nine plants, and should have a broader base of experience and expertise, allowing it to anticipate problems before they occur and thus operate more safely and reliably.

The evidence demonstrates that Entergy Corporation's decommissioning experience, while limited, still provides significant knowledge base to ENVY and ENO than VYNPC itself has. Entergy Corporation, through its subsidiaries, is managing decommissioning activities at Maine Yankee in Wiscasset, Maine, and has recently put the Millstone Unit 1 in Waterford, Connecticut, into SAFESTOR. The work that Entergy has done at Maine Yankee, and at Millstone Unit 1 have much in common with, and are likely to be transferable to, the eventual efforts that will be undertaken at Vermont Yankee.

By comparison, VYNPC has no decommissioning experience, and would need to hire an experienced contractor to decommission Vermont Yankee. VYNPC also lacks ENVY's and ENO's ability to call upon affiliates for assistance in decommissioning. Although Entergy Corporation is an extremely large company, its resources and expertise can benefit this State, and should ensure ENVY's and ENO's safe and reliable operation of Vermont Yankee. For these reasons, we conclude that ENVY and ENO are sufficiently qualified and experienced to own, operate and decommission Vermont Yankee.

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245. Findings 137–140, above.

246. *See, e.g.*, Docket 6054, Order of 8/10/98 (authorizing the construction of an office building on the Vermont Yankee site to house personnel needed as a result of the end of the centralized support service that Yankee Atomic Energy Company had provided before the other nuclear units in its fleet shut down).

D. Financial Assurances

Below, we find that Entergy Corporation is capable of providing the financial safeguards enumerated in the MOU. In addition, we find that these safeguards, in the form of Power Purchase Agreement revenues, credit agreements, insurance, and explicit guarantees are sufficient to ensure that ENVY has sufficient capital at its disposal to own, operate and decommission Vermont Yankee.

1. Findings

a. Entergy Corporation's Financial Situation

138. Entergy Corporation, the third largest electricity generator in the United States, will own and operate Vermont Yankee through its subsidiaries ENVY and ENO. O'Connell reb. pf. at 4; findings 139–147, below.

139. Entergy Corporation guarantees $60 million, a sum that Entergy asserts is sufficient to operate Vermont Yankee for a period of six months, which would provide time to gain access to the decommissioning fund. Exh. VY-42 at ¶ 13 and Exhs. B and C; Sherman supp. pf. 3/11/02 at 13; findings 160–161, below.

140. Relying upon revenues from the Power Purchase Agreement, credit agreements from Entergy Corporation affiliates, insurance and an Entergy Corporation guaranty, ENVY can provide adequate guarantees that it will be able to operate safely and to maintain solvency during the extended period necessary to plan and execute a shutdown of Vermont Yankee, and to prepare for full access of decommissioning trust funds. Kansler pf. at 9–10; tr. 2/5/02 at 184–86 (Kansler); tr. 2/7/02 at 66 (Wells); Wells reb. pf. at 6; exh. VY-42, exhibit B.

141. The primary source of financial support for the ongoing operations of ENVY will be revenues under the Power Purchase Agreement which ENVY can expect to receive until 2012 as long as ENVY produces power. However, additional financial resources will be available as needed up to a limit of $70 million which should be sufficient. Kansler pf. at 9; tr. 2/5/02 at 185–86 (Kansler).

142. Due to Entergy Corporation's business model and hard assets, it is more financially stable than ENRON Corporation or Pacific Gas and Electric Corporation. O'Connell reb. pf. at 3; exh. ENVY-O'Connell-1.

143. As a company regulated under the Federal Power Act, Entergy Corporation is required to comply with the Act's Uniform System of Accounts with regard to its utility operations. There has been no evidence presented of aggressive or unorthodox accounting by Entergy Corporation. O'Connell reb. pf. at 9.

144. Unlike other companies that have experienced pressures, such as Dynegy Inc., Calpine, Inc., and Mirant Inc., Entergy Corporation's unregulated utility operations are a small part of its overall assets and earnings. *Id*. at 9.

145. Entergy Corporation's credit rating, BBB, is consistent with ratings of other companies in the industry, especially holding companies. From a banking perspective, BBB is acceptable. Higher ratings for electric utilities are rapidly becoming less common due to the high weighted cost of capital which is not necessarily justified by lower debt financing costs. *Id*. at 5; exh. ENVY-O'Connell-2.

146. By comparison with other companies regulated under the Public Utility Company Holding Act of 1935, Entergy Corporation's financial ratios are adequate to ensure access to capital markets. In addition, its earnings, as a percent of revenues, are healthy. O'Connell reb. pf. at 6.

147. Entergy Corporation's profile contains elements that will help it contend in an uncertain marketplace, including a strong capital position, limited risk to oversupply, and internal growth opportunities. O'Connell reb. pf. at 6–7.

b. Credit Agreements

148. Upon closing, credit agreements will be established between ENVY and two Entergy affiliates. Entergy Global Investments, Inc.("EGI") and Entergy International Holdings, Ltd., LLC ("EIHL") are holding companies and financing vehicles for Entergy affiliates that will provide lines of credit to ENVY to fund working capital and to provide further financial assurances. Taken together, these two agreements provide ENVY with up to $70 million upon which it can draw to meet its financial obligations. Tr. 2/7/02 at 66 (Wells); Kansler pf. at 9–10.

149. The $35 million credit agreement with EGI, is intended to function as a revolving credit facility to fund ENVY's needs for working capital. Kansler pf. at 9.

150. According to terms of the EGI/ENVY credit agreement, the $35 million to be made available initially may be reduced to no less than $20 million after the fifth anniversary of the closing date of the purchase and sale agreement. Exh. ENVY-Kansler-4 at §1.01.

151. Agreements similar to the EGI/ENVY credit agreement were adopted at other Entergy nuclear plants, including Pilgrim, Indian Point Units 1, 2, and 3, and FitzPatrick. Kansler pf. at 9.

152. The Pilgrim nuclear plant drew $5.3 million from its credit facility after closing in August 1999, and paid that amount back by December 1999. Pilgrim now retains cash in sufficient amounts to cover its cash needs and has not drawn on this facility since December 1999. The other plants use their credit facilities in a similar manner. *Id.*

153. The $35 million credit agreement with EIHL is intended to function as a standby financial assurance. According to the terms of the EIHL/ENVY credit agreement, ENVY may not draw upon it in the normal course of business. It is available only in the event of a problem at Vermont Yankee. *Id*. at 10.

154. The primary purpose of the EIHL/ENVY credit agreement is to pay costs during a period between an unplanned, premature shutdown of the plant and the eventual access by ENVY of funds from the decommissioning trust. *Id.*

155. EIHL must report to the NRC each time it intends to draw funds from the facility provided in the EIHL/ENVY Credit Agreement. Funds cannot be reduced, replaced or withdrawn without express NRC approval. Pilgrim, Indian Point Units 1, 2 and 3, and FitzPatrick have similar lines of credit. *Id.*

156. As of December 31, 2000, EIHL's audited consolidated Statement of Financial Position (which includes EGI) shows that its assets exceed liabilities by almost $700,000,000. Its total assets were $864,983,000 and its total liabilities were $188,131,000. For 1999, those numbers were $1,136,664,000 and $146,599,000, respectively. *Id.*; exh. DPS-5.

157. The Inter-Company Credit Agreement between EIHL and ENVY will remain in place until ENVY has access to at least twenty percent of the decommissioning trust fund. Wells reb. pf. at 5.

c. Insurance

158. In order to protect itself from an outage caused by an accident at the plant site that results in a complete shutdown of the plant, ENVY intends to purchase business interruption insurance coverage from Nuclear Electric Insurance Limited. Wells reb. pf. at 6.

159. ENVY intends to purchase a weekly indemnity limit of $1,000,000 which would potentially provide a limited revenue stream in a shutdown that could be considered in the economic evaluation of returning the plant to operation or moving to a shutdown. *Id.*

d. Entergy Corporation Guaranty

160. In addition to the lines of credit available through EGI and EIHL, ENVY has been granted further guaranty of $60 million by Entergy Corporation. If either line of credit has been drawn upon, Entergy Corporation agrees to make up any deficiency up to a total of $60 million. Exh. VY-42, Exh. B; Wells reb. pf. at 3; tr. 2/5/02 at 190 (Kansler); Crane supplemental pf. at 6–7.

161. The $60 million corresponds approximately to six months of Vermont Yankee's operating costs. ENVY expects that this amount will be adequate to get ENVY to the point where it can access the decommissioning fund. Wells reb. pf. at 3.

162. The Securities and Exchange Commission has issued an order placing a $2 billion cap on the amount of Entergy Corporation parent guaranties that can be outstanding at any time. O'Connell reb. pf. at 12–13.

163. As of December 31, 2001, Entergy Corporation had outstanding guaranties for its affiliates in the range of $488 million. Wells reb. pf. at 4.

164. Entergy Corporation's guaranty will remain in place until ENVY has access to at least twenty percent of the decommissioning trust fund. *Id*. at 5.

165. ENVY will notify the Board on a semi-annual basis of the amount of Entergy Corporation guaranties that are presently outstanding. It will file such information when it files its reports on its decommissioning trust fund. Tr. 4/1/02 at 126–27 (Wells).

e. Availability of Decommissioning Funds

166. Under the NRC regulations regarding the Termination of License at 10 CFR 50.82, three percent of Vermont Yankee's decommissioning trust fund is available at any time for preplanning of decommissioning activities. Wells reb. pf. at 4.

167. Once the fuel has been removed from the core, a licensee is able to submit to the NRC a notice of permanent cessation of operations and a Post Shutdown Decommissioning Activities Report ("PSDAR"). *Id.*

168. Ninety days after submittal of the PSDAR, a licensee may access an additional 20 percent of the decommissioning fund, which should be adequate to commence decommissioning activities. Entergy Corporation's guaranty of $60 million terminates once it receives access to this portion of the decommissioning fund. *Id.*

169. Upon the submission to the NRC of a site-specific study, the remainder of the decommissioning fund may be available for decommissioning use by the licensee. *Id.* at 3–4.

170. ENVY has stated that it will preplan its decommissioning and have certain information available so that, once a decision has been made to close permanently, it can promptly file both its PSDAR and site-specific study. *Id.* at 4.

171. Six months from the time of an unplanned shutdown is sufficient time for ENVY to make a decision to permanently shut down Vermont Yankee and to take appropriate steps to access decommissioning funds. Keuter reb. pf. at 9–10; tr. 4/4/02 at 232–33.

2. Discussion: Financial Assurances

a. Introduction

We conclude that Entergy Corporation has put in place sufficient financial guarantees to ensure that ENVY has sufficient capital at its disposal to own, operate and decommission Vermont Yankee.

CAN contends that Entergy Corporation's agreement to provide financial assurances and guarantees is preempted by NRC regulations, and that the MOU thus cannot provide the assurances that the Department has indicated are necessary for its support of the MOU. We first consider CAN's preemption arguments, and then our findings and conclusions regarding the adequacy of the proposed financial assurances.

b. Preemption

According to CAN, because Entergy's agreement to provide financial assurances is preempted by NRC regulations, the Board must reject the MOU, as it fails to actually provide the adequate assurances that the Department deemed necessary to support approval of the sale. We find CAN's preemption argument unpersuasive. A decision by this Board based upon this state's traditional police power, limited to issues associated with the manner in which Vermont meets its energy needs, does not conflict with the Atomic Energy Act or the NRC's regulations.

In *Pacific Gas and Electric Co. v. State Energy Resources Conservation & Development Commission* ("PG&E"), the U.S. Supreme Court held that the Atomic Energy Act[247] preempts state jurisdiction as to the "radiological safety aspects involved in the construction or operation of a nuclear plant . . ." but also that "States retain their traditional responsibility in the field of regulating electrical utilities for determining questions of need, reliability, cost and other related state concerns."[248]

The Court explained, however, that even when a statute, such as the Atomic Energy Act, does not expressly preempt state authority, 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.[249] Upon review of the Atomic Energy Act and its legislative history, the Court concluded that the federal government occupies the entire field of nuclear-safety concerns, although it does not displace states' traditional authority over "the need for additional generating capacity, the type of generating facilities to be licensed, land use, rate-making, and the like." [250] The Court also

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247. Atomic Energy Act of 1954, §§ 1–320, 274(k), as amended, 42 U.S.C.A. §§ 2011–2286i, 2021(k).

248. *Pacific Gas and Electric Co. v. State Energy Resources Conservation & Development Commission*, 461 U.S. at 205 (1983). Although *PG&E* considered the preemptive effect of Section 274 of the Atomic Energy Act, the Supreme Court interpreted Section 274(k) as a reflection of the general distinction between federal and state authority to regulate activities covered by the Atomic Energy Act, as amended.

249. *Id.* at 204. Congress can preempt state authority through either express terms of legislation or by enactment of a scheme of federal regulation that is "so pervasive as to make reasonable the inference that Congress left no room for the States to supplement it," or where an Act of Congress "touch[es] a field in which the federal interest is so dominant that the federal system will be assumed to preclude enforcement of state laws on the same subject." *Id.* citing *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947).

250. *Id.* at 212–13. *PG&E* involved a California statute that imposed a moratorium on the construction of nuclear plants until a state administrative board "finds that there has been developed and the United States through its authorized agency has approved and there exists a demonstrated technology or means for the disposal of high level nuclear waste." *Id.* at 198. Upon a challenge by utility companies that, among other things, the state of

(continued...)

indicated that state regulation is preempted where it actually conflicts with federal law, *i.e.*, in a case where compliance with both federal and state regulations is an impossibility, or when state regulations serve as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress.[251]

The Department and the Petitioners have willingly entered into a Memorandum of Understanding designed to, among other things, ensure that ENVY is appropriately capitalized. The proposed financial assurances are designed to provide ENVY with access to credit during periods of regular operation and, if necessary, during an extended period necessary to plan and execute a shutdown of Vermont Yankee, and to prepare for full access of decommissioning trust funds.

Neither the Atomic Energy Act nor Nuclear Regulatory Commission regulations are implicated by our approval of the MOU. In the MOU, Entergy Corporation agrees to provide sufficient capitalization to its affiliate, ENVY. It is a consensual document which neither imposes safety standards upon ENVY, nor impedes ENVY's ability to meet safety standards to which it is otherwise subject. The MOU ensures that Entergy Corporation makes available a minimum amount of funding to ENVY which we have determined is in the good of the state. This requirement need have no impact on decisions by ENVY and ENO regarding radiological safety. Therefore, we conclude Entergy Corporation's voluntary agreement to capitalize ENVY to the level agreed upon in the MOU is not preempted by federal law.

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250. (...continued)
California was preempted by the federal statutory scheme, the Court held first that the federal government has occupied the entire field of nuclear safety concerns, but also that the California statute was based on economic considerations, and thus fell within the broad responsibilities traditionally held by the states in the field of public utility regulation. *Id.* at 206.

251. *PG&E*, *supra*, at 204. There was no inherent conflict between a Nuclear Regulatory Commission decision that a plant's operation was safe and California's decision that its operation might not be economically wise, *id.* at 218–19. *See Kerr-McGee v. City of West Chicago*, Nuclear Reg. Rep. P 20,515, 59 USLW 2243, 32 ERC 1095, 20 Envtl. L. Rep. 21,369 (1990). In Kerr-McGee, the U.S. Court of Appeals for the Seventh Circuit held, among other things, that the Atomic Energy Act did not preempt West Chicago's application of its erosion and sedimentation regulations to Kerr-McGee's on-site nuclear waste disposal project. Even though erosion and sedimentation are mentioned in the federal regulations, the city's regulations did not directly interfere with the regulation of radiological hazards.

3. Entergy's Structure and Financial Safeguards

Above, we concluded that Entergy's structure will not pose a problem to ENVY's and ENO's ownership and operation of Vermont Yankee. We reach this conclusion, in large part, because of Entergy Corporation's financial situation and the financial safeguards it has agreed to put into place.

In this investigation we have sought to determine how well financed ENVY is today and whether the State of Vermont can assure that ENVY will continue to have sufficient funds in case operational difficulties at Vermont Yankee create financial hardships for ENVY. We believe that the financial assurances that Entergy Corporation has agreed to provide ENVY will be sufficient to ensure that ENVY has the resources it needs to operate and to eventually close and decommission Vermont Yankee.[252]

ENVY can expect to be financially sound for a number of reasons. First, it will have revenues from the power purchase agreement that it has entered into with the current owners of Vermont Yankee. VYNPC's Sponsors have agreed to buy nearly all of the electricity that Vermont Yankee produces until 2012. Second, two Entergy Corporation affiliates have entered into credit agreements with ENVY. One agreement provides a $35 million line of credit for ENVY's ongoing operational needs. The other agreement provides a $35 million line of credit in case ENVY has to shut down Vermont Yankee and is unable to get any income from selling electricity. Third, ENVY has also agreed to purchase and maintain an insurance policy in case it has to shut down Vermont Yankee and cannot sell electricity. Finally, Entergy Corporation has given ENVY a guaranty of $60 million in case ENVY uses up the money provided by the other two credit agreements.

The Power Purchase Agreement, credit agreements, insurance and Entergy's guaranty are designed to protect ENVY for enough time for ENVY to consider and to decide whether to repair and restart or to close and to decommission Vermont Yankee.[253] If ENVY chooses the latter

252. Exh. VY-42 at ¶ 13 and exhs. B & C; Sherman supp. pf. at 13.

253. Six months from the time of an unplanned shutdown is sufficient time for ENVY to make a decision to permanently shut down Vermont Yankee and to take appropriate steps to access decommissioning funds. Keuter reb. pf.. at 9–10; tr. 4/4/02 at 232–33. Requiring Entergy Corporation to provide a guaranty of one year's operating costs, as suggested during hearings, is not justified because ENVY expects that it will make a decision to permanently shutdown with sufficient speed so that six months after an unplanned shutdown ENVY will be able to

(continued...)

option, then it will seek access to the decommissioning fund which is designed to cover the costs of fully-closing and dismantling the plant. On the basis of these protections, we conclude that ENVY has in place adequate guarantees that it will be able to operate safely and to maintain solvency during the extended period necessary to plan and execute a shutdown of Vermont Yankee, and to prepare for full access of decommissioning trust funds.

E. Safety

We find that Entergy Corporation, ENVY, and ENO can and should own and operate Vermont Yankee in a safe and reliable manner. We also conclude that we have heard no testimony sufficient to warrant this Board requiring an additional independent safety assessment at Vermont Yankee.

1. Findings

a. Vermont Yankee's Safety History

172. VYNPC has operated Vermont Yankee safely and reliably during the plant's nearly thirty-year history. Sherman pf. at 36.

173. Vermont Yankee has been one of the top-performing boiling water reactors in the nation. Barkhurst reb. pf. at 20; Keane reb. pf. at 18; tr. 4/18/02 at 232 (Sherman); Keane reb. pf. at 18; Schlissel pf. at 10; tr. 2/15/02 at 30–31 (Schlissel).

174. The NRC has recently made significant changes in many of the ways it performs its role. Sherman pf. at 36–37.

175. Until 1998, the NRC evaluated nuclear facilities, like Vermont Yankee, by a numerical ranking system called the Systematic Assessment of Licensee Performance, a numerically-based ranking system. Tr. 4/19/02 at 42 (Sherman).

176. After October, 1998, the NRC rating system changed to a color-based system whereby performance indicators were color coded. According to this newly-devised scheme, inspection findings could be labeled green (very low safety issue), white (low to moderate safety issue),

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253. (...continued)
access its decommissioning fund. Keuter reb. pf. at 9–10; tr. 4/4/02 at 232–33.

yellow (substantial safety issue), and red (high safety issue). Based upon those inspection findings, a licensee would be subject to the following responses by the NRC: green (only baseline inspection); white (may increase oversight); yellow; and red (requires more oversight). Tr. 4/19/02 at 42, 46 (Sherman); exh. DPS-21.

177. A major factor in the recent changes the NRC's oversight is the evolution of probabilistic risk assessment technology. The new method was intended to enable inspectors to distinguish areas important to plant safety from areas that are not. Sherman pf. at 38.

178. The Department had initially indicated that one of its concerns over the new NRC rating-based system was that it would not focus sufficiently on cost-cutting incentives to which merchant plants would be subject by virtue of being part of a competitive power market. Tr. 4/19/02 at 45–46 (Sherman).

179. The Department's initial fear was that, as implemented at Vermont Yankee, the new NRC rating-based system would result in a reduction in resident inspector hours. *Id*. at 42, 46 (Sherman).

180. The current system, although it does not allow for relative comparison of various plant performances, appears to be working well. *Id*. at 43 (Sherman); Sherman pf. at 37.

181. The NRC's new system has not appeared to result in the reduction of resident staff inspections at Vermont Yankee as the Department had expected upon review of the proposed new system. Tr. 4/19/02 at 46 (Sherman).

182. In April 2002, the NRC held a public meeting to address questions and concerns, including the issue of safety assessments. Tr. 4/18/02 at 218–19 (Sherman).

183. At the April 2002 meeting, the NRC reported on its safety assessment of Vermont Yankee over the last year. The NRC assigned a yellow level finding to Vermont Yankee for a year 2001 degradation in Vermont Yankee's safety performance with regard to physical protection safeguards. The NRC concluded that, apart from an unsatisfactory security test, Vermont Yankee, overall, had performed adequately on safety issues. *Id*. at 218 (Sherman).

184. The NRC has determined that, with the exception of security issues, the overall performance of Vermont Yankee in 2001 was satisfactory. *Id*. at 218 (Sherman).

185. The NRC has also performed subsequent reviews of the new security issues and the NRC is satisfied with the progress that Vermont Yankee is making. Tr. 4/19/02 at 36 (Sherman).

186. An independent safety assessment may be, and has been in the past, conducted by the NRC at the request of members of the public. Tr. 4/18/02 at 215–16 (Sherman).

187. In the past, when the Department concluded that there was a need for the NRC to consider particular safety questions at Vermont Yankee, the Department convinced the NRC to conduct specialized safety assessments. *Id*. at 216–18 (Sherman).

188. According to the Vermont State Nuclear Engineer, there is no evidence that an independent safety assessment is either merited or needed. Tr. 4/18/02 at 214, 219 (Sherman).

189. The NRC is the regulatory body charged with regulating nuclear safety. Sherman pf. at 36–37; tr. 2/6/02 at 146 (Shadis); tr. 4/18/02 at 227 (Sherman).

b. Implications on Safety of the Transfer to Entergy

190. Through its regular review of operations and performance of all nuclear plants owned by Entergy Corporation affiliates, Entergy Corporation's Nuclear Committee seeks to ensure that best practices from Entergy plants are incorporated at all nuclear plants owned by Entergy Corporation affiliates. Kansler pf. at 12.

191. As part of its effort to promote industry best practices at its facilities, Entergy Corporation management and employees participate in peer groups that have representatives from other plants. Peer groups are organized around various substantive topics including operations, radiation protection, and industrial safety. *Id*. at 13.

192. ENVY and the Department agreed on specific terms for cooperation, notification, and access to Vermont Yankee should the plant be sold to ENVY. The agreement is memorialized as the Memorandum of Understanding on Cooperation, Notification and Access Between Entergy Nuclear Vermont Yankee LLC and Vermont Department of Public Service for the Vermont Yankee Nuclear Power Plant ("Inspection Memorandum of Understanding"), which is an attachment to the general Memorandum of Understanding. Exh. VY-42 at ¶2 and Exh. A.; Sherman supp. pf. at 4–5.

193. The Inspection Memorandum of Understanding expands the access to Vermont Yankee currently provided under the existing MOU between VYNPC and the Department. *Id.*

194. The Department will be granted access to specific performance indicator information including: maintenance request and event report backlogs; backlogs of review and resolution of industry issues; overall staffing levels; and uses of overtime. *Id.*

195. Review of specific performance indicator information could assist in determining if cost cutting appears to be affecting aspects at the plant. *Id.*

196. The Department will also be notified of and allowed to attend various plant-related meetings. Prior to the Inspection Memorandum of Understanding, this privilege was not specifically available to the Department. Sherman supp. pf. at 5.

197. The Department will be granted access to computer data bases at the plant. This privilege was not previously available to the Department. *Id.*

198. The Inspection Memorandum of Understanding also includes ENVY's agreement to participate in Vermont State Nuclear Advisory Panel meetings. In the past, VYNPC participated voluntarily in advisory panel meetings. *Id*. at 5.

199. The NRC's oversight of safety at Vermont Yankee and the Inspection Memorandum of Understanding between the Petitioners will result in adequate safety oversight and protection of Vermont Yankee in the future. Findings 172–198, above.

2. Discussion: Safety

a. Introduction

We conclude below that Vermont Yankee currently is operated safely and reliably, and that Entergy Corporation, ENVY, and ENO are likely to own and operate Vermont Yankee in at least as safe and reliable a manner.[254] We further conclude that we have heard no testimony sufficient to warrant an independent safety assessment at Vermont Yankee, and thus, that no such investigation is necessary at this time.

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254. *See also Safety Evaluation by the Office of Nuclear Reactor Regulation, Proposed Transfer of Operating License for Vermont Yankee Nuclear Power Station from Vermont Yankee Nuclear Power Corporation to Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc., and Conforming Amendment,* Docket No. 50-271, May 17, 2002 (the NRC concluded that ENO would have adequate resources to provide technical support for the safe operation of Vermont Yankee "under both normal and off-normal conditions" after the transfer of licensed operating authority from VYNPC to ENO). *Id.* at 12–13.

Seven months ago, in our Scoping Order, we defined the degree to which we would be considering safety issues in this Docket. Due to limitations in our jurisdiction and the extent to which Congress has given the NRC responsibility to regulate nuclear safety, we reached the following conclusions:

> The safety of the nuclear generating station is a matter of great concern to the citizens of Vermont and to this Board. The recent terror attacks on this country have heightened those concerns. At the same time, this Board does not have the authority to consider matters outside of its jurisdiction. It also is neither fair nor appropriate to expand the scope of this investigation to include matters that are not germane to the specific actions this Board must rule upon, despite the importance of those issues.
>
> The purpose of this proceeding is to examine a proposal to transfer ownership of the Station to Entergy VY. As the above rulings on the appropriate scope of the investigation make clear, we envision a wide-ranging investigation of all aspects of the transaction, including the exploration of options other than those proposed by petitioners (e.g., closure). As part of this broad investigation, we must consider the effects, if any, of the proposed transfer on health and safety.[255]

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.

b. Background

In this investigation, the Board heard testimony that described Vermont Yankee as a nuclear power plant that has a history of nearly thirty years of safe and reliable operation. In its most recent rating period, Vermont Yankee also performed well. During the NRC's review in April of 2002, Vermont Yankee was found, with one exception, to be operating safely. Vermont

255. Order of 11/5/01 at 6.

Yankee's overall performance for 2001 was satisfactory. With regard to security performance, Vermont Yankee has been subjected to subsequent reviews by the NRC which (with expertise and authority well beyond our own on safety issues) has indicated its satisfaction with the progress that Vermont Yankee is making.

c. Nuclear Regulatory Commission Oversight

The NRC, the regulatory body charged with regulating nuclear safety, has recently made significant changes in many of the ways it performs its role.[256] Until 1998, the NRC evaluated nuclear facilities, like Vermont Yankee, by a numerical ranking system called the Systematic Assessment of Licensee Performance, a numerically-based ranking system.[257]

After October, 1998, the NRC rating system changed to a color-based system. The Department's witness has testified that the current system appears to be working.[258] Also, the NRC's new system has not resulted in the reduction of residential staff inspections.[259]

A major factor in the recent changes of the NRC's oversight is the evolution of probabilistic risk assessment technology.[260] This method has resulted in an ability to distinguish areas important to plant safety from areas that are not.[261]

In this investigation, the Department initially expressed the view that proposed changes in NRC oversight of nuclear facilities could be a significant factor which might affect safety at Vermont Yankee.[262] Outside this Docket, in an NRC rulemaking, the Department argued that the then proposed inspection regulations were potentially "blind" to the potential effects of cost-cutting measures at merchant nuclear plants. In its testimony in this Docket, however, the Department indicated that, as implemented, the NRC regulations have not appeared to result in less conscientious safety monitoring by Vermont Yankee. While the Department indicated that it took a certain amount of time for stakeholders to become accustomed to the new regulations,

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256. Sherman pf. at 36–37; tr. 2/6/02 at 146 (Shadis); tr. 4/18/02 at 227 (Sherman); exh. DPS-21.
257. Tr. 4/19/02 at 42 (Sherman).
258. *Id.* at 43; Sherman pf. at 37.
259. Tr. 4/19/02 at 46 (Sherman).
260. Sherman pf. at 38.
261. *Id.*
262. *See*, *e.g.*, Department witness Sherman's discussion of industry-wide safety. Sherman pf. at 37.

according to the Department, the NRC's new system has not resulted in the reduction of residential staff inspections at Vermont Yankee as the Department had originally been concerned that it might when first reviewing the proposed new system.[263]

d. Memorandum of Understanding re: Inspection

Over the course of this investigation, the Department worked with Petitioners and eventually fashioned and submitted, among other things, an Inspection Memorandum of Understanding between itself and those parties. This agreement establishes specific terms for cooperation, notification, and access to Vermont Yankee should the plant be sold to ENVY. Due to the provisions of this agreement, the Department has altered its concerns regarding possible detrimental effects on safety from the market-place. In its testimony in support of the Inspection Memorandum of Understanding, the Department concluded that Vermont Yankee's proposed status as exempt wholesale generator, "which could create a negative effect of nuclear safety from competitive pressure on operations funding at Vermont Yankee," can be managed through the Inspection Memorandum of Understanding.

Entergy has testified that it recognizes that a competitive market will create operational pressures on its plant operators; however, Entergy has taken the position that, in running Vermont Yankee, safety is its first priority. Entergy convincingly stated its expectations that in a deregulated environment the most successful plants will be those with the highest safety record and the best regulatory reputation.[264]

The Board heard evidence that various Entergy nuclear power plants have had favorable outage performance, and have shown improvement in reducing the length of their scheduled outages over the last several years. Entergy plant capacity factors have improved along with the improvement in outage duration. Entergy demonstrated a record of successful performance, which is confined to the NRC's review. No party presented evidence raising any doubt about safety records at any of Entergy's facilities, or Entergy's ability to operate Vermont Yankee safely.

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263. Tr. 4/19/02 at 46 (Sherman).
264. Kansler pf. at 15–16; tr. 2/5/02 at 177 (Kansler).

CAN argues that the Inspection Memorandum of Understanding is preempted by NRC regulations. According to CAN, the Board must, therefore, reject the MOU as it fails to actually provide the adequate assurances that the DPS has deemed necessary to support approval of the sale. As we concluded above in our assessment of CAN's arguments regarding preemption of Entergy's financial assurances, here we are also unpersuaded. A decision by this Board is not subject to federal preemption if our decision is based upon this state's traditional police power, limited to issues associated with the manner in which Vermont meets its energy needs, and not in conflict with provisions of the Atomic Energy Act or the NRC's regulations.

The Inspection Memorandum of Understanding is an agreement by ENVY to allow the State of Vermont to observe and monitor activities at Vermont Yankee. For the following two reasons, the terms of the Inspection Memorandum of Understanding do not run afoul of the NRC's authority. First, it is a consensual document. It imposes no safety standards upon ENVY, nor does it impede ENVY's ability to meet safety standards to which it is otherwise subject. Second, the Inspection Memorandum of Understanding in no way enables the Board or the Department to regulate safety at Vermont Yankee. In fact, no decision by this Board to approve this sale on the basis of, among other things, Entergy Corporation's proposed financial assurances or permission to the Department to inspect Vermont Yankee need have any impact on decisions by ENVY and ENO regarding radiological safety. Therefore, we conclude that ENVY's voluntary agreement to allow the state's nuclear engineer access to the Vermont Yankee site and to sources of information there, is not preempted by federal law.

e. Independent Safety Assessment

Apart from the safety implications of transferring Vermont Yankee to ENVY, we received many public comments suggesting that unspecified "Vermont Statutes" give this Board the authority to call for (or require) an "Independent Safety Assessment" of Vermont Yankee by the NRC. This is also the position argued by NECNP.[265] Review of the relevant statutes

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265. NECNP's brief indicated that the term *Independent Safety Assessment* is "similar to what Maine's Governor requested" with respect to Maine Yankee. NECNP recommends that "[a Nuclear Regulatory Commission] top-to-bottom Independent Safety Assessment" should be completed prior to ENVY or any other buyer assuming operation of the plant. Shadis pf. 1/7/02 at 18.

indicates that the Vermont Legislature has actually specified the Vermont State Nuclear Advisory Panel, and not this Board, as the primary state body for this purpose.[266] It would require a strong and compelling evidentiary demonstration to persuade us to rely upon the general powers implied in Section 209 of Title 30 to act in lieu of a more specific legislative statement to address these issues. No party has presented evidence to that effect in this case.

In fact, the evidence on this issue includes two factors that suggest that an additional independent safety assessment at this time would add little to what is already known. First, Entergy Corporation (with the resources and expertise to find such flaws) had every incentive to identify any mechanical or engineering problems relevant to safety in either of the two due-diligence reviews that it has conducted at the site. This is because flagging these issues would allow Entergy Corporation to deduct the cost of the curative measures from its purchase payments pursuant to sections 1.1(90), 3.2, and 3.3 of the Sale Agreement.[267] Secondly, the

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266. *See, e.g.*, 18 V.S.A. section 1701. (Emphasis added below).

§ 1701 Duties

The duties of the panel shall be:

(1) To hold regular public meetings for the purpose of discussing issues relating to the present and future use of nuclear power and to advise the governor, the general assembly and the agencies of the state thereon with a written report being provided annually to the governor and to the energy committees of the general assembly;

(2) *To define the responsibilities of state agencies for assuring the safety and health of the public as the result of the operation of a fixed nuclear facility* and to assess the ability of state and local governments to meet this responsibility in terms of both technical expertise and financial support;

(3) To discuss proposed changes in operations or specific problems that arise in the operation of a fixed nuclear facility, and to prepare and present technical data to serve as a basis for establishing the state's position on such changes or problems;

(4) To maintain communications with the operators of any fixed nuclear facility, including the receipt of written reports and presentations to the panel at its regular meetings;

(5) To develop awareness in the state and in the state government of the potential liabilities, benefits or repercussions of nuclear power generation in the state in comparison to other electrical energy sources; and

(6) *To review the current status of state relations with the Nuclear Regulatory Commission and to seek some agreement on federal and state regulatory efforts.*

As to "special nuclear materials," it is similarly clear that the General Assembly has designated the Department of Health, and not this Board, to carry out Vermont's role in setting safety standards and coordinating State and Federal activities. *See* 18 V.S.A. §1652.

267. *I.e.*, respectively, provisions of the Asset Purchase Agreement concerning Material Adverse Effects, Purchase Price Payment, and Adjustment to Cash Purchase Price. Due diligence efforts by potential purchasers of Maine Yankee likely resulted in the identification of a sufficient number of problems so that a purchase and sale

(continued...)

NRC indicated that in the year 2001, they had conducted 5500 hours of inspections or related activities at Vermont Yankee with two resident inspectors on site and 19 regional inspector visits, including four team inspections.[268] Indeed, the NRC discussed its conclusions regarding a safety assessment of Vermont Yankee over the last year at a formal public meeting on April 16, 2002. The NRC did identify an adverse assessment with regard to a security test that occurred prior to September 11, 2002, an operational issue (not an engineering one) that management (new or current) must correct. It also indicated that the rest of the safety issues concerning the plant were adequate.[269] Without substantial new evidence on this subject, we see no likelihood that the NRC will change its position on this issue, and we see nothing in the record that presents a basis for substituting our limited judgment for the NRC's technical expertise on these engineering safety questions.

F. Limited Term Certificate of Public Good

ENVY and ENO agree, through the MOU that the Board has complete jurisdiction to decide whether to renew ENVY and ENO's certificates of public good if they seek to run Vermont Yankee past the expiration of its present term. The signatories to this MOU agree that any order issued by the Board granting approval of the sale of Vermont Yankee to ENVY and any certificate of public good issued by the Board to ENVY and ENO will authorize operation of Vermont Yankee only until March 21, 2012, and thereafter will authorize ENVY and ENO only to decommission Vermont Yankee.

CAN argues that "Entergy's agreement to submit to the jurisdiction of the Public Service Board for *relicensing* is preempted by federal law; thus, the Board must reject the MOU as it fails to provide any adequate assurances of a Board role in deciding whether to permit relicensing of the Vermont Yankee Nuclear Power Station."[270] CAN maintains that if "Entergy is in

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267. (...continued)
agreement was never pursued with that power station. Tr. 4/18/02 at 226 (Sherman).

268. Tr. 4/18/02 at 218 (Sherman); exh. DPS-21.

269. *Id.*

270. CAN Brief at 6–7 (emphasis added).

reorganization under the bankruptcy laws, the bankruptcy court will have jurisdiction over all matters related to that reorganization."[271]

We find CAN's arguments unpersuasive. As a preliminary matter, the factual circumstances at issue here do not comport with CAN's characterizations. The issues before us have nothing whatever to do with the question of whether, for example, a utility commission such as the Board has authority over a utility's bankruptcy reorganization plan, or the need to get Board approval prior to seeking a federal relicensing, as CAN maintains. Likewise, the cases CAN cites are inapposite.[272] This case involves no such conflicts.

In this Docket, ENVY and ENO are seeking certificates of public good, respectively, to own and operate Vermont Yankee. They have agreed to certificates of public good for terms limited to March 21, 2012.[273] They are not seeking a "license" or to be "relicensed," as CAN has indicated.

If, instead of the current request for certification, CAN is referring to the possibility of ENVY and ENO seeking a post-2012 state certification, CAN is still not persuasive. First, while at some time in the future these companies may seek certificates of public good for additional terms, these are not the facts before us. Second, regardless of whether a company seeks bankruptcy protection, it remains illegal for a company to own or operate a plant that manufactures electricity in this state without state certification to do so.[274] CAN has provided no authority indicating otherwise.

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271. *Id.*

272. *See, e.g.*, CAN Brief at 7–10, citing to *In re: Public Service Company of New Hampshire v. State of New Hampshire and New Hampshire Public Utilities Commission,* 108 B.R. 854 (NH Bankr.Ct.1989)(in reviewing the statutory history of the Bankruptcy Act, Bankruptcy Code, 11 U.S.C. §§ 101 *et seq.*, court notes that sections of bankruptcy code requiring state regulatory approval by public service commissions of bankruptcy court public utility reorganization plans were deleted from the Code under the Bankruptcy Reform Act of 1978). *Id.* at 863–866. CAN also cites to *National Fuel Gas Supply Corporation v. Public Service Commission of the State of New York*, 894 F.2d 571 (2d Cir. 1990)(Second Circuit found that the state regulatory scheme governing construction of natural gas transmission lines was preempted by Federal Energy Regulatory Commission regulations of natural gas companies, which required issuance of certificates of public convenience and necessity from FERC before constructing or operating interstate natural gas pipeline facilities, and which vested exclusive jurisdiction to regulate interstate gas transmission pipelines in FERC).

273. Implicit in that limited grant is a requirement that, if these companies intend to continue to own and operate Vermont Yankee past that date, they must come to the Public Service Board and once again demonstrate their suitability, including their financial soundness.

274. See the discussion above of Board jurisdiction and at pages 105–108.

If, instead of state certification, CAN is referring to NRC licensing or relicensing, our conclusion does not change.[275] While a bankruptcy court has many remedies available to it, CAN has provided no indication that it has authority to license a nuclear power plant. Furthermore, the Board has recognized that preemption by bankruptcy courts involving bankrupt electric utilities is not likely because "the federal statutes require Bankruptcy Courts to coordinate with, rather than preempt, state regulatory powers . . . ."[276]

VIII. Use and Treatment of Sales Proceeds

A. Proposed Use of Funds by Central Vermont and Green Mountain

As a result of the proposed transaction, VYNPC will receive an immediate payment of $180 million, subject to closing adjustments. After paying off all corporate debt obligations, VYNPC will make a cash distribution to its owners. This distribution will be a partial return of the owners' investment in VYNPC, and therefore will reduce Central Vermont and Green Mountain's rate bases.[277] In addition, Central Vermont and Green Mountain have proposed to use their respective cash proceeds to repurchase debt and equity which should result in lower revenue requirements for both companies.

1. Findings

200. The $180 million cash payment at closing will be sufficient to repay all of VYNPC's existing debt, and to eliminate almost all of its residual costs. Boyle pf. at 4.; Sherman supp. pf. at 2.

201. After the application of proceeds by VYNPC to pay debt, closing costs and other adjustments at closing, and retention of $5 million to meet ongoing obligations, working-capital needs and VYNPC's need for cash, VYNPC will buy back or return approximately $39.5 million of the outstanding common equity. Boyle pf. at 19 (revised).

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275. It is hard to imagine that the NRC would grant a license extension to a nuclear plant owner who is undergoing bankruptcy proceedings. Demonstrating financial soundness is an integral part of relicensing before that agency. *See, e.g.*, Kansler pf. at 6–7.

276. Dockets 5630/5631/5632, Order of 12/30/93 at 73.

277. Green Mountain and Central Vermont's investments are in VYNPC are presently included in their ratebases under Investments in Affiliates.

202. Central Vermont and Green Mountain will receive a cash distribution of approximately $13.1 million and $8.6 million, respectively. After-tax, the distributions to the two companies are estimated at $12.2 million and $7.5 million, respectively. Boyle reb. pf. at 3.

203. The cash distributions to Central Vermont and Green Mountain as a result of the sale will be less than the companies' complete investment in Vermont Yankee. *Id*. at 5; exh. DPS-7.

204. Both companies anticipate recovering the residual investment from ratepayers in future revenue collections. Tr. 4/4/02 at 53–55 (Brock).

205. When Central Vermont receives its estimated $13.1 million of the sale proceeds from VYNPC, it will record that amount as a return of the company's VYNPC investment, thus reducing the remaining Central Vermont VYNPC investment to approximately $3.8 million. Boyle pf. at 19 (revised); Boyle reb. pf. at 3.

206. After paying any income taxes (assumed to be approximately $900,000), Central Vermont proposes applying the after-tax cash proceeds, assumed to be $12.2 million, in a manner consistent with the company's Vermont utility capital structure. Boyle pf. at 19–20; Boyle reb. pf. at 3 and 27.

207. Central Vermont proposes to apply the after-tax proceeds to: (a) reduce debt through the funding of a $5.6 million mandatory debt sinking fund; (b) redeem $0.9 million in preferred stock early at par; and (c) reduce its utility common equity account balances for rate-making purposes by $5.7 million, shifting this amount of equity to other below-the-line accounts. Boyle reb. pf. at 26–29; exh. CVPS-Boyle-3 (revised).

208. To the extent that a reduction in Central Vermont's revenue requirement causes it to earn in excess of 11% in calendar years 2002 and 2003, Paragraph 30 of the Memorandum of Understanding between Central Vermont and the Department in Dockets 6120/6460 requires Central Vermont to use such excess earnings to reduce regulatory asset accounts that would otherwise have to be recovered from consumers through rates established in future rate cases or as otherwise provided under that Memorandum of Understanding. Boyle reb. pf. at 30.

209. When Green Mountain receives its estimated $8.6 million of the sale proceeds from VYNPC, it will record that amount as a return of the company's VYNPC investment. Brock reb. pf. at 25.

210. Green Mountain plans to apply the after-tax cash proceeds, estimated at $7.5 million, over the next two years to increase its ratio of long-term debt to equity. *Id.*

211. Green Mountain's allowed return on equity is capped at 11.25 percent until the next time the Board adjusts Green Mountain's rates. Docket 6107, Order 1/23/01 at 86–87, 121.

212. Neither Central Vermont nor Green Mountain have proposed any rate reductions. Central Vermont and Green Mountain's repurchase of debt and common equity should increase their returns on equity. Brock reb. pf. at 26; exh. CVPS-1.

213. If this transaction causes Central Vermont and Green Mountain to experience reductions in costs and, as a result, increases in earnings in excess of their allowable returns, such excess earnings will be used to reduce regulatory asset accounts. Brock pf. at 14; tr 2/6/02 at 115 (Boyle).

214. Central Vermont anticipates that some or all of the $5 million retained by VYNPC will be distributed by VYNPC to its stockholders by 2012 as VYNPC evaluates its financial needs and obligations. Boyle pf. at 19.

2. Discussion

VYNPC received its initial capital from its owners, including Green Mountain and Central Vermont. Those companies include their investments in VYNPC, which are significant, in their respective rate bases and recover a return on this equity investment in retail rates. VYNPC has also incurred substantial debt. VYNPC plans to use the $180 million payment to retire all of its existing debt. In addition, VYNPC will distribute most of the remaining funds to the Sponsors (retaining $5 million), reducing the equity investment that each of the Sponsors has in VYNPC. From the perspective of Green Mountain and Central Vermont, these distributions represent a recovery of most of their investments in Vermont Yankee.[278] We find this use of the sales proceeds to be reasonable.

In turn, Central Vermont plans to use the distributions (approximately $13.1 million) from Vermont Yankee to reduce the company's debt, redeem some preferred stock, and reduce the regulated common equity account balances. Green Mountain is investigating using the

278. Central Vermont will still have approximately $3.8 million invested in VYNPC. Boyle pf. at 19.

money to reduce debt or preferred stock and ultimately to rebalance its debt to equity ratio.[279] The Vermont Sponsors do not seek any specific approvals in connection with their use of the proceeds from this transaction. Accordingly, we do not need to make any rulings on this issue.

These planned uses of proceeds will have several effects. The return of investment will reduce the equity on which both companies earn returns and thus serves to lower their costs of service. (Offsetting these savings in part, both companies are likely to have reduced dividend income from VYNPC.) In addition, the use of the proceeds to repurchase debt and reduce regulated common equity also should, over time, reduce costs for ratepayers.

However, the largest reductions to Green Mountain's and Central Vermont's costs of service are likely to result from the Power Purchase Agreement, since its prices are, in all years except 2002 and 2003, below the anticipated operating costs of Vermont Yankee. VECC has argued that because of the significant savings engendered by the Power Purchase Agreement, the Board should direct Green Mountain and Central Vermont to immediately reduce their rates. We do not accept their recommendation. Although it is important for ratepayers to see the benefits of this transaction as soon as possible, we find that there is no support in the record for a finding that the overall cost of service of Central Vermont or Green Mountain is less than that currently reflected in rates.[280] This docket is not a rate case. Moreover, the Board has in place mechanisms that will pass through benefits to ratepayers if the savings are significant and result in excess earnings for the Vermont Sponsors. In the case of Central Vermont, if it earns more than its authorized return on common equity, those excess earnings will be credited to the benefit of ratepayers pursuant to our Order in Dockets 6120/6460.[281] Similarly, if Green Mountain's earnings exceed its earnings cap as established in Docket 6107,[282] the excess must be used to reduce a regulatory-asset account, thus providing savings to ratepayers.

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279. Tr. 2/7/02 at 215–16 (Brock).

280. In addition, we reach this decision partly due to the Vermont Supreme Court prohibition against single-issue ratemaking, and partly due to the already applicable cap on earnings.

281. Dockets 6120/6460, Order of 6/26/01 at 67.

282. Docket 6107, Order of 1/23/01 at 86–87, 121. The earnings cap will remain in place until the Board establishes new rates.

Nonetheless, the savings do create the potential that, absent an adjustment to rates, ratepayers will not receive an appropriate share of the benefits arising from the transactions.[283] To ensure that the rate impacts of these changes flow through to ratepayers, we are ordering Central Vermont and Green Mountain to each file, on or before April 15, 2003, a cost-of-service study based upon actual 2002 data.[284] The cost of service study will enable the Board and Department to determine whether an adjustment to rates is justified in 2003 or 2004.

Finally, we note that, in addition to its obligations under the Sale Agreement, VYNPC retains certain liabilities and assets after the sale. Several of these create the possibility that VYNPC will receive additional income, which VYNPC anticipates passing through to its owners. In particular, VYNPC retains responsibility for paying the one-time fee for fuel burned prior to April 7, 1983, under the Department of Energy Standard Contract.[285] VYNPC has established the Spent Fuel Disposal Trust to pay this fee, which the company expects will be sufficient to meet the obligation.[286] However, there is a significant possibility that investment returns will lead to over-funding of the Spent Fuel Disposal Trust. If so, the Trust requires the distribution of any excess funds to VYNPC Sponsors for the benefit of their ratepayers.

Similarly, VYNPC retains the right to receive distributions from Nuclear Electric Insurance Limited a mutual-insurance company providing coverage for Vermont Yankee.[287] Depending on the performance of Nuclear Electric Insurance Limited investments, VYNPC may in the future receive distributions which would be passed along to its Sponsors.[288] Witnesses for VYNPC and the Department estimate the value of likely Nuclear Electric Insurance Limited insurance reimbursements to be in the realm of $8 million.

It is important that these excess funds (and any others received by VYNPC, such as from claims related to the Department of Energy's defaults under the DOE Standard Contract under

283. We recognize that the approval of the transactions may delay the time when Central Vermont and Green Mountain next seek a rate increase. While the delay would benefit ratepayers when compared to a rate *increase*, it may still leave a disproportionate share of the benefits of the sale to ENVY with Green Mountain's and Central Vermont's shareholders rather than ratepayers.

284. Plus known and measurable adjustments for a forward calendar year.

285. Exh. VY-1 at 24.

286. Wiggett pf. at 19.

287. Exh. VY-1 at 24.

288. Wiggett pf. at 21.

Section 2.2(i) of the Sale Agreement), inure to the benefit of ratepayers. Consequently, if VYNPC receives a distribution of these funds, we direct Green Mountain and Central Vermont to report the receipt of such funds by VYNPC to the Board. In addition, we require that, within 60 days of receipt of such funds, Green Mountain and Central Vermont each submit a plan for the use of their shares of the funds for the benefit of ratepayers. The plan shall consider the application of a significant portion of these benefits towards the development and use of renewable resources.

B. CLF's Proposed Renewable Energy Fund

1. Findings

215. Renewable energy development can result in environmental, public health, and economic development benefits and can benefit ratepayers. Renewable energy can reduce air pollution, improve reliability, and create additional jobs. Kennelly pf. at 13, 17–18.

216. Many of the benefits of renewables such as reduced air pollution and greater energy diversity, are not reflected in market prices, thus eliminating incentives for renewable energy. *Id.* at 20.

217. Renewable energy development faces several barriers, including higher up-front costs, high transaction costs, technology and industry immaturity, price information distortions, lack of customer information, and market factors. *Id.* at 19.

218. Renewable energy may not reach commercial viability without public funding and policy support. Additional funding could be very beneficial to the sustained development of renewable energy technologies. *Id.* at 13–14; Parker surr. pf. at 4.

219. Based on the early experience of other states, creation of a renewable fund in Vermont should prove an effective mechanism to overcome market barriers to commercialization of renewable energy and to encourage entrepreneurial activity and technological innovation in the state. Kennelly pf. at 24–25.

220. Renewable funds could provide grants, support research towards commercialization, and educate consumers. *Id.* at 32–33.

221. The creation and implementation of a $25 million fund has practical impediments. The fund as proposed implies the creation of a substantial decision-making and administrative

structure. The required administrative structure and its costs could be quite large relative to the total amount in the fund. Parker pf. 3/18/02 at 8.

222. The CLF proposal is not developed enough for implementation. *Id*. at 9.

2. Discussion

CLF recommends that, assuming the Board approves the sale, the Board reject Green Mountain's and Central Vermont's proposed use of the proceeds of the sale. Instead, CLF requests that the Board use $25 million of the sale proceeds to establish "an investment fund for the development and commercialization of renewable energy in Vermont."[289] CLF argues that other states have developed renewables funds and that these provide significant public benefits. According to CLF, the sale of Vermont Yankee provides the only meaningful opportunity to develop renewable energy resources in Vermont as an eventual replacement of Vermont Yankee power.[290]

The Petitioners oppose CLF's recommendation, stating that it is contrary to sound policy for several reasons. First, they point out that the fund would have to be created at the cost of other uses that would more directly stabilize or reduce ratepayer costs.[291] In addition, the Petitioners assert that the renewables fund proposal is flawed, by intruding into Central Vermont and Green Mountain management, and depriving those companies of the right to recover invested capital. They also argue that there is insufficient nexus between the creation of a renewables fund and the ultimate replacement of Vermont Yankee.[292] The Department starts with a mid-road position, but winds up agreeing with the Petitioners as to the next actions and opposes the establishment of a renewables fund. The Department's objections focus on the size of the proposed fund and the fact that CLF's proposal is not sufficiently developed.[293]

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289. CLF Brief at 4–5.

290. *Id.* at 5.

291. Petitioners' Brief at 109. The Petitioners do not oppose a separate investigation to examine the potential development of a renewables fund in Vermont.

292. Petitioners' Brief at 113.

293. DPS Brief at 44–47.

Development and encouragement of cost-effective renewable energy has been a consistent policy of the Board and the state of Vermont. As we stated in approving Green Mountain's proposed construction of the Searsburg wind project:

> The state of Vermont has a well-established policy tradition supporting development of in-state, small-scale renewable resources. We remain convinced that such resources must be included in a responsible, diverse electric portfolio for the long-term good of the state and the nation, whatever structure the industry may take in the future.[294]

We went on to observe that "[w]e, too, recognize that renewable resources can provide risk mitigation benefits that are not easily quantifiable but are extremely valuable, nonetheless."[295] Section 202a of Title 30, which defines the state's energy policy also speaks to the use of renewable energy resources as a component of fulfilling the state's energy needs in a least cost manner.[296]

All parties that spoke agreed that more effort to encourage renewable sources of energy supply would be beneficial. Renewable energy can reduce air pollution, by displacing generating units that produce air emissions. Over time, it could also improve system reliability.[297] And, renewable energy production may reduce costs for ratepayers.

It is also uncontested that the development of renewable energy supplies faces a number of barriers. For one thing, traditional generation sources (including coal, gas, and nuclear) receive many explicit and implicit subsidies. In addition, while hydro resources have been used for years, other renewable sources such as wind power, are less well-established and have higher up-front costs.[298] Also, many of the benefits of renewables such as reduced air pollution and

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294. Docket 5823, Order of 5/16/96 at 38.

295. *Id.* at 41.

296. In relevant part, that Section states:

> It is the general policy of the state of Vermont:
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> . . . .
>
> (2) To identify and evaluate on an ongoing basis, resources that will meet Vermont's energy service needs in accordance with principles of least cost integrated planning; including efficiency, conservation and load management alternatives, wise use of renewable resources and environmentally sound energy supply.

297. Kennelly pf. at 13.

298. *Id.* at 19

greater energy diversity, are not reflected in market prices, thus eliminating incentives for renewable energy.[299]

We recognize that a renewable energy fund could be beneficial in addressing some of these concerns. As CLF argues, a renewables fund could help lower market barriers to the deployment of renewable energy sources, through the distribution of grants and loans, implementation of demonstration projects and by educating consumers[300]

Although more support for renewable energy is desirable, we are not persuaded that the renewable fund as proposed by CLF should be adopted at this time. In large part, we reach this decision because we find CLF's proposal inadequately developed.[301] CLF has not shown how the fund should be structured and what administrative mechanisms would be implemented to make the fund effective. In addition, it is not clear why the appropriate fund size should be $25 million. In fact, the $25 million fund capitalization is close to the total budget for Efficiency Vermont for its first three years of operation.[302] We recognize that CLF has proposed that we decide many of these issues in a follow-on proceeding. However, at the present state of development, we cannot find that the proposed renewable fund is superior to the use of the sales proceeds in other ways that benefits ratepayers, as put forth by Green Mountain and Central Vermont.

We do want to consider further steps to encourage investment in cost-effective renewable sources of energy supply. As an option, the Petitioners have suggested that we open a new investigation to explore a possible renewable fund. We will consider such an approach in the future. Moreover, the need to encourage the development of renewable resources is one of the reasons that we require Central Vermont and Green Mountain to consider renewable resources

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299. *Id.* at 20.

300. Exh. CLF-RK-6 at 11; Kennelly pf. at 32.

301. Considering that all active parties acknowledge that a renewables fund may be beneficial, we are surprised that neither Green Mountain, Central Vermont, nor the Department attempted to engage in serious discussions with CLF during this proceeding designed to fashion a more definite proposal. For example, while the Department acknowledged that it might have looked at a smaller fund differently, it apparently did not seek to develop an alternative fund size and structure. And there is no evidence that Central Vermont and Green Mountain did any more than object to the concept of adopting a renewables fund.

302. Parker pf. 3/18/02 at 8.

when determining the appropriate use of certain funds VYNPC may receive after the sale (as we discussed in the previous section).[303]

C. Green Mountain and Central Vermont Accounting Orders

In this section, we grant Central Vermont and Green Mountain's requests for accounting orders,[304] and emphasize that these are approvals for accounting treatment only.

1. Findings

a. Green Mountain Accounting Order

223. According to Green Mountain, due to a difference between the tax and book basis in Vermont Yankee and the difference between book income and dividends received over the life of the Vermont Yankee plant, Green Mountain requests an accounting order permitting it to defer any associated tax expense. Brock pf. at 15.

224. Green Mountain expects that the deferral of taxes will extend to interest and penalties, if any, that may arise in connection with the matters addressed in the accounting order. Brock supp. pf. at 4.

225. Although Green Mountain has represented that it waives any claim that Board approval of Green Mountain's proposed accounting order mandates that the deferred costs be recognized in rates, Green Mountain does claim that rate recognition would be appropriate pursuant to its request for prudence and used/useful rulings. Tr. 4/4/02 at 23–25 (Zamore).

b. Central Vermont Accounting Orders

226. Under the MOU, Central Vermont seeks approval for two accounting orders. Exh. VY-42 at ¶ 15 (5); Boyle reb. pf. at 44; exhs. CVPS-Boyle-6 and CVPS-Boyle-7.

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303. *See* p. 137, above.

304. By letter dated March 29, 2002, Green Mountain indicated that, depending on the level of costs associated with Vermont Yankee's May 2002 shutdown, Green Mountain may seek another accounting order requesting deferral of those costs. However, according to Green Mountain, since such costs will be incurred irrespective of the outcome in this investigation, any request for another accounting order would take place outside this proceeding. Letter of Green Mountain to Susan M. Hudson, March 29, 2002.

227. Approval of the first would authorize Central Vermont to defer any incremental income tax expense recorded under Statement of Financial Accounting Standard ("SFAS") 109 as a result of its receipt of the cash proceeds resulting from the sale of Vermont Yankee and the related transaction agreements. Boyle reb. pf. at 45.

228. Approval of the second proposed accounting order would permit Central Vermont to defer incremental costs (excluding incremental income tax expenses covered under the first accounting order arising as a result of the receipt of the cash proceeds) that occur in 2002 after the sale of Vermont Yankee and consummation of the related transaction agreements. *Id.*

229. Central Vermont requests the issuance of these accounting orders because the company seeks to preserve its opportunity to argue that the recovery of these costs should be permitted in future rates. *Id.*

230. The establishment of the requested CVPS accounting orders does not commit the Board to the approval of the company's recovery of such costs unless or until they are requested and approved in a subsequent rate case. *Id.*

231. The issuance of the requested Central Vermont accounting orders does not prejudice any party's interest in this proceeding or in a subsequent Central Vermont rate case where Central Vermont will likely seek to include such deferred costs in the company's retail rates. Boyle reb. pf. at 45.

2. Discussion: Accounting Orders

Green Mountain has represented that a proposed accounting order would permit Green Mountain to defer certain tax expenses relating to tax-book timing differences and undistributed earnings until its next retail ratemaking proceeding.[305] For similar reasons, Central Vermont seeks an accounting order that would allow it to defer incremental income-tax expense that Central Vermont alleges will arise as a result of the company's receipt of cash proceeds from

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305. Green Mountain Pet. at 3; Brock pf. at 15. Green Mountain submitted its proposed accounting order on February 8, 2002. Brock reb. pf. at 23; exh. GMP-NRB-10.

Vermont Yankee.[306] Central Vermont has also asked for an additional accounting order to allow it to book and defer the incremental costs arising on account of the transaction currently being reviewed by the Board that would accrue to Central Vermont in 2002.[307]

Green Mountain has argued that an accounting order is necessary to preserve the issue of whether the deferred costs should be included in rates.[308] CVPS, similarly, requests these accounting orders to preserve its ability to seek to recover the tax and other incremental expenses that are expected to arise in connection with the proposed transactions. These requested accounting orders are recognized as part of the terms of the MOU, and their issuance is supported by all the signatories to that stipulation.[309]

VECC opposes the Board's approval of these accounting orders. VECC argues that they ought to be rejected unless the lower costs associated with the sale are passed back immediately to customers through rate reductions or deferred for future consideration.[310]

We disagree. Rather than authorizing rate treatment, the proposed accounting orders authorize accounting treatment only. Whether such costs ought to be included in company rates is an entirely different and unrelated question. Under current practice, a regulated company has an opportunity to recover its costs and to earn a return on the investments it makes for public service purposes, if the company manages its business prudently. If a company can demonstrate this in a rate investigation, then, presumably, it can recover such costs in its rates.[311] Therefore, our approval of these proposed accounting orders, rather than being a consideration of the merits of any particular company costs, will merely allow Green Mountain and Central Vermont to book these costs in order to preserve for the future the question of whether they deserve to be

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306. Central Vermont submitted its proposed accounting orders to the Board on March 6, 2002, and April 3, 2002, respectively. The deferral of taxes by both companies is intended to include associated interest and penalties, if any, that may arise. Brock supp. pf. at 4; exh. CVPS-Revised-Boyle-6; Central Vermont Pet. at 6(d).

307. Exh. CVPS-Revised-Boyle-7; Central Vermont Pet. at 6(d).

308. Although, Green Mountain does claim that their recognition is appropriate pursuant to its requests for prudence and used-and-useful findings in this case. Tr. 4/4/02 at 23–25 (Zamore).

309. *See* MOU at ¶ 15(5).

310. VECC Brief at 9.

311. Docket 6495, Order of 11/9/01 at 35.

included in rates.[312] If and when the companies choose to pursue those rate treatment, these costs can be challenged on any basis.[313]

D. Vermont Yankee Nuclear Power Corporation's Pledge

1. Findings

232. In order to provide security to ENVY for Vermont Yankee's payment obligations under the Power Purchase Agreement and Sale Agreement, the Sale Agreement requires VYNPC to pledge its right to receive income under the Power Contracts, as amended by the 2001 Amendatory Agreements. Wiggett pf. at 21–22; exh. VY-1 (and Security Agreement attached as Exhibit K thereto).

2. Discussion

The transactions contemplated by the Sale Agreement will benefit the general good of Vermont. We, consequently, find that VYNPC's associated pledge of its income under the Power Contracts is reasonable. We also conclude that the consent of Vermont Yankee's Sponsors to that pledge is appropriate and that the overall arrangement establishes a favorable credit structure. For these reasons, we therefore conclude that the proposed pledge and consent are consistent with the general good of the state.

IX. Discussion of Concerns Expressed by the Board in Docket 6300 and by the Public in This Case

A. Concerns Expressed in Docket 6300

In Docket 6300, we considered the proposed sale of Vermont Yankee to AmerGen. Just prior to the issuance of the Board's Order in that proceeding, the petitioners and the Department requested that the Board provide them an opportunity for further negotiations. A month later, those parties filed a partial settlement agreement. In anticipation of further proceedings to

312. Docket 5983, Order of 6/8/98 at 20–21 (recognizing that the accounting order at issue was "limited to the accounting treatment for the subject costs and revenues and does not bar any party from contesting, or the Board from determining, or disallowing, the reasonableness or prudence of such costs, or the ratemaking treatment for such revenues, in whole or part, in any rate proceeding.") *Id.* at 20.

313. Docket 6495, Order of 11/9/01 at 35.

consider the settlement agreement, the Board issued a procedural Order. As non-binding, illustrative, guidance to the parties, that procedural Order included an attached "Conclusion" section of the Order that the Board had been prepared to issue if the partial settlement had not been proposed.[314]

In this proceeding, we asked the parties to explain whether and how the proposed sale to Entergy was consistent with the concerns expressed in that non-binding, illustrative, section.[315] We noted there that:

> The Board has examined the transaction as a whole. Our conclusion on these factors should not be viewed as a determination that a future sale must contain different terms and conditions on each of these points. Each sale must be examined on its own merits. Nonetheless, we would expect to find the balancing of these considerations relevant in any future proposal to sell Vermont Yankee.[316]

In this Section, we consider each of those issues.

- *The sale to AmerGen provided minimal benefits to ratepayers.*

In Part V, above, we have explained that the proposed sale to ENVY will provide significant benefits to ratepayers. The evidence shows that over the remaining ten years of Vermont Yankee's operating license, the cost that ratepayers pay for power from Vermont Yankee under the Power Purchase Agreement will be less than they would pay if the current owners retained the station. Customers of Central Vermont will save approximately $106 million in power costs during the remaining term of Vermont Yankee's operating license. Green Mountain customers will see a reduction of approximately $60 million.[317]

- *The sale to AmerGen locked Green Mountain and Central Vermont into a long-term, above market price power contract.*

The proposed sale to ENVY will lock Green Mountain and Central Vermont into a long-term power contract for the remaining ten years of Vermont Yankee's operating license. If we

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314. Docket 6300, Order of 11/17/00 at 4 and Attachment A.
315. Tr. 2/15/02 at 109 (Dworkin).
316. Docket 6300, Order of 11/17/00, Attachment A at 2, n. 279.
317. *See* Finding 49.

view the Power Purchase Agreement separately, we find that it is likely to lead to above-market prices for its first three years (after that time, the power purchases will not be more than a small premium above-market — a premium that is offset by the valuable price cap in the Agreement). However, as we explain above, we view the Power Purchase Agreement in conjunction with the $180 million initial purchase price; thus, the sale transaction essentially front-loads the benefits. Considering the overall transaction, we do not view the power purchase component as above-market.[318] Thus, our Docket 6300 concern is not valid here.

- *The power contract was front-end loaded. AmerGen could close Vermont Yankee when the Power Purchase Agreement becomes favorable.*

The ENVY Power Purchase Agreement appears to be front-end loaded; if viewed *alone*, in fact, it is preceded by a $180 million initial cash payment. As we explain in Section VB2a(2)(a), above, this initial payment has the effect of offsetting — and probably more than offsetting — the Agreement's exposure to the years of above-market prices. It also means that the transaction as a whole has many of the benefits at the outset, rather than being structured so that the benefits occur later. Similarly, if ENVY were to close Vermont Yankee once the Low Market Adjuster begins, VYNPC and its Sponsors still have received the $180 million, so that the sale remains favorable. Moreover, a shutdown in this scenario would benefit Vermont ratepayers even more; they would be able to replace Vermont Yankee at the same low market rates that caused its shutdown — with prices well below the anticipated operating costs if they retain ownership. In sum, the benefits of the current agreements are actually *front*-loaded for Vermont.

- *With the AmerGenPower Purchase Agreement, Green Mountain and Central Vermont would have had have more than 75 percent of their long-term, fixed-price arrangements.*

We address this issue in Part V.B.3., above, and conclude that our previous concerns are adequately addressed. Most importantly, after only three years, the current low-market adjuster gives Vermont the dual benefit of "tracking" close to market power costs if prices are low, yet

318. *See* Part V.B.2.

being shielded if market power costs go high. This substantially cures the major risk of high commitment to a long-term fixed price contract.

- *Vermont ratepayers would still face the risk of buying replacement power.*

Risks associated with the purchase of replacement power during periods in which Vermont Yankee does not generate electricity are unchanged. In the overall context of the proposed transactions, we do not consider this concern to be as significant as the positive elements of the sale.

- *Although the AmerGen sale transferred risks associated with the adequacy of the decommissioning, that risk was not great enough to justify the AmerGen purchase proposal.*

As we describe in Part V.B.1.b., sale of Vermont Yankee to ENVY transfers the risks associated with funding the eventual decommissioning. Based upon present projections, this risk may not appear large, but it remains a risk nonetheless. The sale eliminates the risk and constitutes a real benefit.

- *The transfer of Vermont Yankee to AmerGen would have relinquished the valuable option to close Vermont Yankee for economic or other reasons.*

Following the sale to ENVY, VYNPC will no longer have control over whether to close Vermont Yankee. We conclude, however, that the significant benefits of the proposed transaction outlined in this Order far outweigh that loss of control. Moreover, as we discuss in Part V.B.1., above, ENVY will have greater incentive to close Vermont Yankee for economic reasons than would the present owners.[319]

- *Approval of the AmerGen transactions would have required the Board to guarantee rate recovery for the Vermont Sponsors.*

The Petitioners, with the support of the Department, state that the present, ENVY, Sales Agreement is conditional upon a similar rate guarantee. In Part VI of this Order, we explain that

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319. *See* p. 31, above.

we decline to provide the specific findings relative to rate recovery that the Petitioners seek — with one exception. We find that the sale to ENVY is preferred among the three options now available (which is functionally equivalent to a finding that, upon the record presented, the sale to ENVY is the prudent choice). Because this conclusion is implicit in our determination to approve the sale, it does not require us to grant extraordinary relief or adjust normal rate-making principles and thus is reasonable.

B. Concerns Expressed by the Public

As we noted in Part III - B, above, many members of the public commented on this proceeding, in public hearings, in phone calls, in e-mails, and in written comments. Here we address seven of the major topics raised by the public:

(1) Ordering Vermont Yankee to shut-down because of nuclear safety concerns;
(2) Rejecting the sale in order to make shut-down more likely;
(3) Ordering an Independent Safety Assessment of the Facility;
(4) Rejecting the sale because Entergy is an out-of-state profit-making company "like Enron;"
(5) The use of Decommissioning Trust Funds;
(6) Replacing Vermont Yankee's Power with Renewable Resources; and
(7) Avoiding long-term, fixed-price contracts "like Hydro-Québec."

(1) *Ordering Vermont Yankee to shut-down because of nuclear safety concerns*

Many public comments (but no witnesses in this case) argued that the Board should order a prompt or immediate shut down of Vermont Yankee because of issues related to nuclear safety, with particular reference to radiological emissions, nuclear waste, emergency response deficiencies, potential terrorism, and the aging of the plant.

We begin, but do not end, our thoughts on this issue with a pragmatic observation. To the extent that early closure might be justified for *non-financial reasons, such as nuclear waste and radiological safety*, we have limited authority because Congress has placed nuclear waste and safety issues with the federal Nuclear Regulatory Commission, and not with this Board. Our

power over Vermont Yankee, like the NRC's power over safety issues, is limited to what is conferred by law. If we did not respect the choice of Congress in giving the NRC it's power, we would have no right to expect Vermont Yankee's owners — who ever they might be — to respond to the authority that we *have* been given by law. Thus, we did not take testimony upon, and we do not rule upon, the question of the safety of nuclear power as a general policy for our nation. However, this does not end our consideration of safety issues.

At the beginning of this case we asked for evidence upon whether the *transfer* of Vermont Yankee to Entergy would create increased safety risks, when compared with current ownership. We asked for this because we believed that we had a credible claim to legal power over the transaction upon that basis, and because we knew that — if evidence persuaded us that the *transfer* would lead to increased risks — we would say so bluntly and clearly and would oppose such a transfer. In fact, however, the evidence on this question persuades us that Entergy should operate the facility *at least as safely as the current owners*. We would not approve this proposal otherwise.

(2) Rejecting the sale in order to close Vermont Yankee more promptly

This recommendation relies upon the belief that Vermont Yankee's current owners would be likely to shut the plant down sooner than would Entergy. We recognize that this argument was made in many public comments and we have tried, with care, but without success, to see the basis for the belief. In fact, the opposite seems true. The current owners have a very high expectation of recovering their costs through cost-of-service regulation, and (at least for the Vermont Owners) the plant represents such a high proportion of the assets upon which they earn a return, that they have extraordinarily high incentives to keep it operating as long as they own it. Entergy, in contrast, will not be able to pass on increased operating costs and faces a risk of lower than expected revenues after 2005. Further, the plant is a far less significant part of its total assets. Thus, Entergy should have much less incentive than the current owners to keep the plant operating if it is not economically rational to do so. The same incentives will apply when — or if — Vermont Yankee's owners evaluate seeking a license extension.

(3) Ordering an Independent Safety Assessment of the Facility

Many comments asked for an independent engineering assessment of the Vermont Yankee plant, specifically looking for any mechanical or engineering factors relevant to safety, and citing the 1996 assessment of Maine Yankee by the NRC as a model. Partly in response to those comments, we specifically ordered and reviewed additional evidence on this issue. The evidence showed that the NRC had recently conducted several thusand hours of detailed on-site appraisals at Vermont Yankee and had not seen a need to replicate its Maine Yankee type analysis. We also noted that Entergy, in two due diligence reviews making independent engineering assessments *before* buying the plant , had every incentive to find and formally identify any mechanical or engineering defects (just as the buyer of a house or car would want to identify any defects before closing).

We have also considered comments that Vermont Yankee's need to replace defective fuel rods demonstrates the need to shut down the plant until a new safety assessment is conducted. To the extent that such repairs are typical of unexpected maintenance costs that will no longer have to be borne by Vermont ratepayers, we see this as a factor favoring sale; but we do not see a basis for this Board to substitute our limited technical expertise for the NRC's engineering determination that rod-replacement does not require prolonged termination of plant operations. See Part VII.E.2.e., above.

(4) Rejecting the sale because Entergy is an out-of-state, profit-oriented company "like Enron"

Many comments suggested that Entergy's proposal should be denied because Entergy is: (a) driven by a search for profits; (b) large; (c) an out-of-state company; (c) with a bad record as a corporate citizen; and (d) with a corporate structure that would make its commitments unenforceable.

In looking at such concerns, we first note that Vermont Yankee is currently owned by profit oriented companies; thus, we cannot see the transfer as a significant change in this regard. As to size, we find that Entergy's large size is in many ways beneficial, since it offers a combination of 1) ready access to the skills and expertise of a pool of nuclear plant operators, and 2) a company with *lower* proportionate reliance on nuclear assets than Central Vermont and

Green Mountain now have and, thus, a greater freedom to make decisions about continuing or ending production of such plants.

We have considered "loss of local control" to an out-of-state company and concluded that the change in control was better characterized as a change in state influence and did not require rejection of the proposal for reasons explained in detail in that section. See Part V.E.1., above. We also offered an opportunity for opposing intervenors to present evidence upon Entergy's record as a corporate citizen, and, after examining the very limited critiques that were filed, we see no basis to find Entergy unfit to operate facilities in Vermont.

Issues of corporate structure, capital resources, and a limited liability were very real at the start of this proceeding. Since then, the Department, in negotiations with Entergy, has successfully addressed these questions. Critically, the proposal before us now presents committed funds that are at least as significant as the available liquidity of companies such as Green Mountain and Central Vermont and — even more importantly — are adequate when measured against funds necessary to ensure safe maintenance and shut down of the plant in the event it ceases to produce power. In other words, the financial assurances that Entergy has agreed to provide ENVY will be sufficient to ensure that ENVY has the resources it needs to operate and to eventually close and decommission Vermont Yankee. In addition, commitments and obligations from Entergy's parent corporation now back the most important commitments proposed for its proposed Vermont subsidiaries.

As to Entergy being "like Enron," we heard detailed testimony showing that Entergy has a different business model, a different set of assets, a stronger balance sheet, and safer accounting practices than Enron did, even in the days before Enron's troubles became apparent.

The bottom line is that, when compared with current situation, approval of the transaction leads to equal or improved availability of capital for operation, maintenance, and closure of Vermont Yankee. See Part VII, above.

(5) The Use of Decommissioning Trust Funds

We carefully considered two dangers in this area: (1) the risk that there might be insufficient funds for proper decommissioning: and (2) the risk that Vermont ratepayers might turn out to have contributed more than necessary to the relevant Decommissioning Trust Fund.

As to the first risk, the record shows that the fund is likely to be deficient (not excess) if decommissioning takes place before the end of Vermont Yankee's license term in 2012. However, Entergy has committed sufficient funds to make whole any such deficiency. Indeed, transferring that obligation from Vermont utilities to Entergy is a significant benefit of the current proposal. There is some (quite small) potential for the fund to turn out to have excess amounts in it before 2012, and a probability of excess funds some decades later if a license extension ever occurs. The prospect of excess funds grows over time *if* the Fund's investments grow at a rate faster than increases in actual and required decommissioning costs. We do not believe the potential for this is of high value (particularly when discounted to reflect the many years before it is likely to occur). However, we believe that these funds were collected from ratepayers for a specific purpose and, if not needed for that purpose, should be returned. Even more importantly, we wish to make sure that potential recoveries from the decommissioning fund create no incentive for Entergy to cut corners in decommissioning, or to delay decommissioning in hopes of earning benefits from the Fund; therefore, we are approving the proposed transactions only with a requirement that any of these funds remaining after decommissioning is completed be returned for the benefit of ratepayers.

(6) Replacing Vermont Yankee's Power with Renewable Resources[320]

This Board has strongly encouraged increased use of renewable resources, in orders, in rules, in Federal advocacy, and in Legislative testimony. We have done so largely to gain for Vermonters the benefits of diversity of resources, to lower the externalized costs of fossil fuel production, and to insulate our state from the volatility of fossil fuel prices. For many reasons, including such efforts by the Board, Vermont now gets its power from a resource mix with extraordinarily low carbon emissions. We strongly believe that such efforts should continue. However, we are not persuaded that the specific renewable fund mechanism proposed by CLF should be mandated at this time. All proposals for use of sales funds already require that they be used in ways that benefit ratepayers. Thus, such a fund would have to come at the expense of

320. Some of the public comments on this point make contentions that were not presented in the record and, thus, the parties had no obligation to formally rebut. In order to respond to the comments, this discussion speaks to a context larger than the docket's formal record alone.

ratepayer benefits that would otherwise be possible. This requires careful comparative analysis of the value of differing benefits for ratepayers, and this docket has not produced such an analysis (we note that Vermont already obtains most of its electric power from renewable, hydro-electric, resources).

We do, however, believe that this idea is of significant merit and deserves more consideration. We also note that there is a meaningful chance that Vermont utilites will receive future funds — that they are not currently relying upon — as a result of distributions from (1) Nuclear Electric Insurance Limited, (2) excess funds in the Spent Fuel Disposal Trust, or (3) claims related to the Department of Energy's defaults under the DOE Standard Contract under Section 2.2(i) of the Sale Agreement. Today's Order requires Central Vermont and Green Mountain, upon the receipts of funds from any of those sources, to propose a plan for their distribution for the benefit of their customers, with specific consideration to applying a significant portion of these benefits towards the development and use of renewable resources. We expect that, in the preparation of any such proposal, they will engage in good faith negotiations with other interested parties about how such a fund, or alternative mechanism, might best be implemented, if at all.

We have also considered public comments to the effect that we should close down the Vermont Yankee plant and replace it with renewable energy sources. This may well be appropriate at some time (and we note that the Department's long range plan recommends such action after 2012). Indeed, after prices become indexed to market prices in 2005, Vermont Yankee will face more competitive pressure from renewable resources than it does under current ownership. However, if we are to turn the idea of reliance on renewables from a dream to a reality, it is important — indeed vital — not to underestimate the magnitude of the transition.

For example, Vermont Yankee's installed capacity is 90 times that of the largest wind-power project now in Vermont — Green Mountain's Searsburg wind project.[321] Wind projects also typically run for only one-third of the hours in a year, unlike Vermont Yankee which runs almost 90 percent of the hours in a year. Thus, it would require hundreds of projects the size of

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321. *See Petition of Green Mountain Power Corporation for a Certificate of Public Good for Authority to Construct a 6 MW Wind Generation Facility and Associated Line Extensions in Searsburg*, Docket 5823, Order of 5/16/96.

Searsburg to produce the same energy output as Vermont Yankee. Those projects would also need some capability for storing power, and for releasing it in times of low production; in addition, it would be necessary to expand current transmission lines to move power from those hundreds of sites to where it is needed.

Photo-voltaic (solar power) panels are also an important renewable resource. However, providing as much power as Vermont Yankee produces would require more than a thousand sites with the same acreage as exists at the Vermont Yankee site, as well as ways to store and release power, plus transmission links.[322]

Such patterns of development are not inconceivable, and they may even be desirable; but we do not believe that, as responsible stewards of the public good, we can rely on their actually being developed, constructed and installed fast enough to provide an immediate replacement for Vermont Yankee.

Similarly, we have considered energy efficiency investments, which are not precisely a renewable resource, but which are a critical part of Vermont's future. Efficiency Vermont is already saving over 60 gWh per year. However, this is equal to only between one and two percent of what Vermont Yankee produces.[323] Thus, even a strong expansion of Vermont's efficiency efforts (to or beyond current statutory limits) would not replace Vermont Yankee's 510–540 MW of power.

Overall, it is clear that many years of serious effort will be necessary before replacement of Vermont Yankee's power would be possible without major new reliance on power plants fired by fossil fuels; the result would be significant increases in air pollutants such as sulfur dioxide, nitrogen oxides, particulate emissions, and greenhouse gases such as methane and carbon dioxide. As our world struggles to deal with climate change, this is an important factor.

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322. *Funding Vermont's Future: Comprehensive Energy Plan and Greenhouse Action Plan*, VTDPS, Vol 2, July 1998, pp. 3–111. This response assumes 100 acre sites, with 50 acres of actual solar cells at each, at typical 1998 PV conversion efficiencies for Vermont locations.

323. Efficiency Vermont's 2001 Annual Report at 1.

(7) Avoiding long-term, fixed-price contracts "like Hydro-Québec"

Many comments said that the proposal before us should be rejected because they believed it locked Vermont utilities into long-term fixed price contracts at above-market rates.[324] We have analyzed this issue in great detail above, but a few basic points can be simply summarized. The first is that the proposal actually replaces current power purchase agreements with a contract that is lower than current price commitments. The second is that, after a three-year period the proposed contract becomes the lower of a price-cap or a market-based price.[325] Thus, the proposal before us substantially reduces Vermont's current risks of being tied to power sources that are more costly than competitive wholesale prices in New England. There is a high probablilty (though not a certainty) that New England's wholesale power prices will be substantially lower than the proposed contract price over the next three years; however, without the sale of the plant, Vermont utilities would not have been able to benefit from those prices, anyway (absent an almost immediate plant closure, with accompanying costs that would more than offset the value of access to potentially lower wholesale markets). Thus, we have weighed the prospects of lower wholesale market prices as part of a total package including (among many other elements) the up-front purchase price for Vermont Yankee. On that basis, the proposed power purchase agreement appears favorable, not merely after 2005, but overall.

Having considered these seven major issues and dozens of significant comments, we are left with two fundamental conclusions. The first is that ENVY is likely to operate Vermont Yankee at least as well and safely as the current owners. The second is that the proposed transactions, taken as a totality, shift many financial risks from Vermont Yankee's current owners to ENVY and are highly likely to be financially better for Vermont than retained ownership with either continued operation or early shutdown of the facility.

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324. They were referring to "the Hydro-Québec Vermont Joint Owners Contract" which has created serious price pressures for Central Vermont and Green Mountain for the last decade. *See, e.g.*, Dockets 5983, 6018, 6107, 6120, and 6460.

325. Some comments suggested that, after 2005, the power purchase would require payments 15% greater than market-value of purchased electricity. This is simply erroneous, for reasons explained above at pp. 51–53.

X. Conclusion

We find that the sale of the Vermont Yankee Nuclear Power Station to Entergy Nuclear Vermont Yankee will promote the general good of the state and we, therefore, grant our approval. The evidence demonstrates the sale of Vermont Yankee will procure continued safe operation of the station. It will simultaneously reduce costs for VYNPC, its Sponsors, and their ratepayers, including the customers of Green Mountain and Central Vermont.

In summary, we conclude the following:

- ENVY and ENO are capable companies that will operate Vermont Yankee at least as safely as would the present owners. These companies also have access to financial resources and broad expertise of the Entergy Corporation, resources and experience that exceed those available to the present owners.
- The transfer of Vermont Yankee and the purchase of power from ENVY will produce lower costs for ratepayers during the remaining term of Vermont Yankee's operating license than would continued ownership of the nuclear generating station by the present owners. In particular, the Power Purchase Agreement prices are below Vermont Yankee's current operating costs.
- The proposed sale will reduce risks now faced by VYNPC's owners, including the risks of increased costs of operation or funding the eventual decommissioning of Vermont Yankee.
- In addition to embodying fixed prices that are lower than current operating costs, the Power Purchase Agreement includes a Low Market Adjuster beginning in 2005 that will pass through market-based prices if wholesale markets are below the fixed prices in the Agreement.
- ENVY has made additional commitments to ensure state jurisdiction over a possible license extension, provide increased access to the Vermont nuclear engineer, and permit Green Mountain and Central Vermont the first opportunity to obtain power if ENVY increases Vermont Yankee's output or if this Board permits ENVY to operate past 2012.
- Early shutdown of Vermont Yankee would increase costs for Vermont ratepayers and is not in the best interest of the state.
- Among the three options now available to VYNPC — continued ownership, consummation of the Sale Agreement, and shutdown — the sale is the most cost-effective and reasonable option and, for that reason, prudent.
- To ensure that the proposed sale promotes the general good, we adopt several conditions:

  (1) We do not grant the Petitioners' extraordinary request in Paragraph 16 of the MOU that we waive our long-standing ratemaking doctrines and guarantee rate

recovery by treating all transaction-related costs as if they were prudent and used-and-useful (with the exception of our limited finding on prudence noted above). Although we find it unlikely that a future material disallowance could occur, we expressly decline to rule on any issues related to whether the transactions and power purchases are used-and-useful and whether the process was prudent.

(2) At such times as VYNPC receives Nuclear Electric Insurance Limited insurance disbursements, access to excess funds in the Spent Fuel Disposal Trust, or claims related to the Department of Energy's defaults under the DOE Standard Contract under Section 2.2(i) of the Sale Agreement, Green Mountain and Central Vermont each shall submit a plan for using its share of those funds to benefit ratepayers. The plan shall consider the application of a significant portion of these benefits towards the development and use of renewable resources.

(3) All money remaining in the decommissioning fund following completion of decommissioning shall be returned to consumers of VYNPC's Sponsors. This condition modifies Paragraph 3 of the MOU (which provides that ENVY will share any excess decommissioning funds with ratepayers).

(4) Green Mountain and Central Vermont shall submit updated costs of service in April 2003.

XI. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that:

1. The sale of substantially all of the assets of Vermont Yankee Nuclear Power Corporation, including those constituting or used in the operation of the Vermont Yankee Nuclear Power Station, to Entergy Nuclear Vermont Yankee, LLC, as described in the Findings, is approved, and a Certificate of Consent under 30 V.S.A. § 109 shall be issued.

2. The transactions required or contemplated by the Purchase and Sale Agreement between and among Vermont Yankee Nuclear Power Corporation, and Entergy Nuclear Vermont Yankee, LLC, and Entergy Corporation, as guarantor, including:

(a) the execution and performance by all parties of the Purchase and Sale Agreement;

(b) the Power Purchase Agreement;

(c) the 2001 Amendatory Agreements;

(d) the Interconnection Agreement between Entergy Nuclear Vermont Yankee, LLC and Vermont Electric Power Company, Inc.;

(e) the Security Agreement between Vermont Yankee Nuclear Power Corporation and Entergy Nuclear Vermont Yankee, LLC;

(f) the First Supplemental to Vermont Yankee Amended and Restated Spent Fuel Disposal Trust; and

(g) all ancillary agreements with respect to the transactions required or contemplated by the Purchase and Sale Agreement are approved.

3. With the exception of the following subsections, which shall be amended in accordance with this Order (as set out in Appendix D) or excluded from approval, the Memorandum of Understanding among Entergy Nuclear Vermont Yankee, LLC, Entergy Nuclear Operations, Inc., Vermont Yankee Nuclear Power Corporation, Central Vermont Public Service Corporation ("Central Vermont"), Green Mountain Power Corporation ("Green Mountain"), and the Vermont Department of Public Service ("Department") is approved:

Section 3;
Sections 15.1, 15.2, 15.3, 15.4;
Section 16.6.; and
Section 16.7.

4. Upon completion of the decommissioning of Vermont Yankee, any property remaining in ENVY's Decommissioning Trust funds shall be distributed by the Trustee for the benefits of the customers of Vermont Yankee's sponsors.

5. The Accounting Orders proposed by Central Vermont Public Service Corporation are approved.

6. The Accounting Order proposed by Green Mountain Power Corporation is approved.

7. Pursuant to 30 V.S.A. § 231, a Certificate of Public Good, to expire on March 21, 2012, shall be issued to Entergy Nuclear Vermont Yankee, LLC to own the Vermont Yankee Nuclear Power Station and to Entergy Nuclear Operations, Inc. to operate the Vermont Yankee Nuclear Power Station as described in the foregoing findings.

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

9. Entergy Nuclear Vermont Yankee, LLC shall notify the Board and the Department every six months, beginning January 1, 2003, as to the status and amounts of guaranties of Entergy Corporation that are outstanding at the time of the filing.

10. Entergy Nuclear Vermont Yankee, LLC shall report to the Board and to the Department the status of the decommissioning funds and the latest Nuclear Regulatory Commission ("NRC") calculation of such responsibility at the same time such report is required by the NRC. ENVY shall make this information available to the public and will participate in a public discussion, on the adequacy of the decommissioning funds at a meeting or meetings or some other forum to be determined in conjunction with the Department.

11. Every five (5) years, beginning with the fifth anniversary of the closing under the Sale Agreement, Entergy Nuclear Vermont Yankee, LLC shall update the site-specific decommissioning study and submit the results to the Board and the Department. Following the completion of each study, Entergy Nuclear Vermont Yankee, LLC shall (i) inform the public of the estimated cost of decommissioning which resulted from the analysis, and (ii) participate in a public discussion of the results at a forum to be determined in conjunction with the Department.

12. Within nine months of the date of this Order, Entergy Nuclear Vermont Yankee, LLC shall file with the Board and the Department a copy of the Post Shutdown Decommissioning Activities Report ("PSDAR") which it has pledged it would prepare and maintain in the event of an unexpected shutdown. ENVY shall update the PSDAR, once a year on the anniversary of the issuance of its Certificate of Public Good, and file the update with the Board and the Department.

13. The amendment of and assignment to Entergy Nuclear Vermont Yankee, LLC, of the station-service agreement between Green Mountain Power Corporation and Vermont Yankee Nuclear Power Corporation, are approved.

14. The Board hereby consents to and approves the pledge by Vermont Yankee Nuclear Power Corporation of its rights to receive certain payments under the Power Contracts and Additional Power Contracts, as amended by the 2001 Amendatory Agreements, to secure the Corporation's obligation to pay Entergy Nuclear Vermont Yankee, LLC, under the Power Purchase Agreement and the Purchase and Sale Agreement, and consents to and approves the Security Agreement between Vermont Yankee Nuclear Power Corporation and Entergy Nuclear Vermont Yankee, LLC.

15. Entergy Nuclear Vermont Yankee, LLC shall file a letter notifying the Board of the date of the closing within ten days following the closing.

16. Green Mountain and Central Vermont shall file, in April 2003, an updated cost-of-service based upon a test year ending December 31, 2002, with appropriate additional information as necessary to determine whether a rate decrease is appropriate in 2003 or 2004.

17. If VYNPC receives Nuclear Electric Insurance Limited disbursements, access to excess funds in the Spent Fuel Disposal Trust, or claims related to the Department of Energy's defaults under the DOE Standard Contract under Section 2.2(i) of the Sale Agreement, Green Mountain and Central Vermont shall submit a plan for using their share of those funds to benefit ratepayers. The plan shall include consideration of renewable resources. The plan shall consider the application of a significant portion of these benefits towards the development and use of renewable resources.

18. ENVY shall certify, within 30 days of this Order, that, in the case that a functional equivalent of Installed Capability is adopted under some other name, the equivalent term adopted shall be treated in the same manner as Installed Capability as described in this Order.

19. All findings and rulings requested by the parties, other than those addressed above, are hereby denied, except that ENVY's Motion of June 7, 2002, shall be considered separately.

Dated at Montpelier, Vermont, this 13th day of June, 2002.

s/ Michael H. Dworkin	)	
	)	PUBLIC SERVICE
	)	
s/ David C. Coen	)	BOARD
	)	
	)	OF VERMONT
s/ John D. Burke	)	

OFFICE OF THE CLERK

FILED: June 13, 2002

ATTEST: s/ Susan M. Hudson

Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: Clerk@psb.state.vt.us)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.

Appendix A — Schedule of Hearings

Public Hearings

Vernon, Vermont, December 11, 2001

With the assistance of Vermont Interactive Television, January 10, 2002, in:

Bennington
Brattleboro
Canaan
Castleton
Colchester
Johnson
Lyndonville
Middlebury
Newport
Randolph
Rutland
St. Albans
Springfield
Waterbury

Technical Hearings

Montpelier, Vermont

December 7, 2001 (NECNP Motion to Dismiss)
February 4, 5, 6, 7, 8, 14, 15, 2002
April 1, 2, 3, 4, 17, 18, 19, 2002

Appendix B — Parties

Vermont Department of Public Service
represented by: James Volz, Esq., Director for Public Advocacy
Sarah Hofmann, Esq.
Aaron Adler, Esq.

Vermont Yankee Nuclear Power Corporation
represented by: Nancy S. Malmquist, Esq.
John H. Marshall, Esq.
Robert A. Miller, Jr., Esq.
Christopher D. Roy, Esq.
Downs Rachlin & Martin, PLLC

Entergy Nuclear Vermont Yankee, LLC
represented by: Victoria J. Brown, Esq.
Peter F. Young, Esq.
Eggleston & Cramer, Ltd.

Central Vermont Public Service Corporation
represented by: Kenneth C. Picton, Esq.
Kimberly A. Pritchard, Paralegal
and
Morris L. Silver, Esq.

Green Mountain Power Corporation
represented by: Peter H. Zamore, Esq.
Sheehey Furlong Rendall & Behm, PC
and
Donald J. Rendall, Jr., General Counsel

International Brotherhood of Electrical Workers Local 300
represented by: Brian Lederer, Esq.
and
George Clain, President

Town of Vernon
represented by: Charles R. Cummings, Esq.
Kristensen, Cummings, Phillips & Carroll, PC
and
Robert Upton, II, Esq.
Upton Sanders & Smith, LLP

Town of Brattleboro
represented by: Robert M. Fisher, Esq.
Fisher & Fisher Law Offices

Conservation Law Foundation
represented by: Mark Sinclair, Esq.

Citizens Awareness Network, Inc.
represented by: Jonathan M. Block, Esq.
and
Frederick Katz, President

Vermont Electricity Consumers Coalition
represented by: Leonard H. Singer, Esq.
James S. King, Esq.
Couch White, LLP

New England Coalition on Nuclear Pollution
represented by: James A. Dumont, Esq.
Dumont & Lee, PC

*City of Burlington Electric Department
represented by: William Ellis, Esq.
McNeil, Leddy, & Sheahan

*Washington Electric Cooperative, Inc.
represented by: M. Jerome Diamond, Esq.
Diamond & Robinson, PC

**Vermont Electric Cooperative, Inc.
represented by: Michael Burak, Esq.
Burak, Anderson, & Melloni, PLC

*Town of Hardwick Electric Department, Town of Stowe Electric Department, Village of Lyndonville Electric Department, Village of Morrisville Water and Light Department, Village of Northfield Electric Department, and the Village of Orleans Electric Department
represented by: William B. Piper, Esq.
Primmer & Piper PC

*Motion to withdraw filed on 1/22/02. Granted in Board Order issued 1/31/02.
**Motion to withdraw filed on 1/24/02. Granted in Board Order issued 1/31/02.

Appendix C – Procedural History

G.O. 45 Filing and Opening of Investigation

On August 22, 2001, Vermont Yankee Nuclear Power Corporation ("VYNPC") provided the Public Service Board ("Board") with notice, pursuant to General Order No. 45 ("G.O. 45"), of VYNPC's entrance into a Purchase and Sale Agreement ("Sale Agreement") and its intent to enter into related ancillary agreements, concerning the sale of the Vermont Yankee Nuclear Power Station ("Vermont Yankee") in Vernon, Vermont, with Entergy Nuclear Vermont Yankee, LLC ("ENVY").

VYNPC requested that the Board waive the 90-day notice requirement of G.O. 45. The proposal was supported by the Vermont Department of Public Service ("Department"). On September 4, 2001, the Board opened this docket to investigate the proposed transactions pursuant to 30 V.S.A. §§ 2(c), 109, 203, 209, and 231.[326]

Interventions

On September 12, 2001, the Board convened a Prehearing Conference in this proceeding. By the date of the prehearing, however, VYNPC, its Sponsors — Central Vermont Public Service Corporation and Green Mountain Power Corporation — and ENVY (collectively, the "Petitioners") had not submitted prefiled testimony or delineated the specific approvals that they expected the Board to issue. As a result, we found that other parties would not be in a position to decide whether to intervene or to make recommendations on an appropriate schedule. Consequently, by Order of 9/13/01, we established a preliminary schedule which required Vermont Yankee and other Petitioners to file completed sales contract, Purchase Power Agreement and other documentation, including prefiled testimony, by September 27, 2001. We also set an October 15, 2001, deadline for intervention, and an October 22, 2001, deadline for responses to motions to intervene.

326. Order of 9/4/01.

By Order of October 26, 2001, the Board established a schedule for this Docket and issued rulings on eleven motions to intervene. Motions were filed collectively by the Town of Hardwick Electric Department, the Town of Stowe Electric Department, the Village of Lyndonville Electric Department, the Village of Morrisville Water and Light Department, the Village of Northfield Electric Department, and the Village of Orleans Electric Department (the "Six Municipals"); by the Town of Vernon; the Town of Brattleboro; the International Brotherhood of Electrical Workers Local 300 ("IBEW"); Vermont Electric Cooperative, Inc. ("VEC"); Washington Electric Cooperative, Inc. ("WEC"); the City of Burlington Electric Department ("BED"); the Conservation Law Foundation ("CLF"); the New England Coalition on Nuclear Pollution ("NECNP"); Citizen's Awareness Network ("CAN"); and the Vermont Electricity Consumers Coalition ("VECC").

The Board determined that all of the entities that had moved to intervene demonstrated requisite interest and are in a position to provide the Board with valuable perspectives on the many implications of Petitioners' proposal. The Board, consequently granted all movants permissive intervention.[327]

Scope of Proceeding

At two points in this investigation, the Board addressed the scope of this investigation. First, on November 5, 2001, before commencement of the direct phase of the investigation, the Board issued a Scoping Order. Next, prior to the rebuttal phase of these hearings, the Board issued an Order establishing a revised schedule which also addressed a change to the scope of the investigation. This modification came in response to the newly-filed Memorandum of Understanding ("MOU") between Petitioners and the Department. By Order of March 12, 2002, the Board directed questions regarding the testimony on the MOU that the Board wanted parties to consider in the rebuttal phase of the investigation.[328]

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327. Order of 10/26/01.
328. Order of 3/12/02.

Motions

NECNP Motion for Stay

On December 26, 2001, NECNP, joined by CAN, filed a Notice of Appeal under 3 V.S.A. § 815, challenging the Board's December 14, 2001, Order denying NECNP's Motion to Dismiss. On January 2, 2002, NECNP filed a Motion for Stay Pending Appeal, requesting that the Board stay further proceedings in this docket pending resolution of the appeal. CAN joined that Motion. Petitioners and the Department opposed issuance of a Stay. By Order of January 24, 2002, the Board denied NECNP's Motion for Stay.

Motions for Confidential Treatment of Testimony/Exhibits

During the course of this investigation, certain portions of the record were held confidential because of proprietary business concerns. At the request of various Parties, the Board issued Protective Orders on November 9, and December 18, 2001, January 16, March 21, and 29, 2002.

On April 8, 2002, Vermont Public Radio ("VPR") requested release of "some or all of the transcripts" of closed hearings conducted in this Docket. The Board responded to VPR, by letter of April 10, 2002. On April 12, and April 16, 2002, Entergy and VYNPC, respectively, requested that the Board release confidential material from under seal. On April 17, the Board indicated that the materials proposed for release by Entergy and VYNPC should be unsealed and put into the public transcripts kept on file in the Office of the Clerk of the Public Service Board which are available to the public during business hours. Entergy and VYNPC also released several exhibits that had been under seal.

Withdrawals of Parties

The Board received motions to withdraw from these proceedings filed by the Six Municipals, Vermont Electric Cooperative, Inc., the City of Burlington Electric Department, and Washington Electric Cooperative, Inc. No party opposed these motions. They were granted by Order of January 31, 2002.

Motion to Strike

On March 6, 2002, NECNP filed a motion to strike portions of ENVY's and ENO's prefiled rebuttal testimony. On the same date, CAN joined in NECNP's motion. On March 13, 2002, the Department filed a letter with the Board indicating that the Department had no comments regarding NECNP's motion. ENVY filed an objection to NECNP's motion on March 14, 2002. ENVY argued that the testimony in question was appropriately before the Board. By Order dated March 21, 2002, the Board issued an Order denying, in part, and granting, in part, NECNP's motion.

Hearings

By Order dated October 26, 2001, the Board established a schedule for this Docket. It provided for two rounds of formal discovery of Petitioner's case in mid- and late November, prefiled testimony by the Department and Intervenors, one formal round of discovery on the Department and Intervenor cases, a week of technical hearings in February, prefiled rebuttal testimony in late February, a week of rebuttal hearings in March, briefs in mid-April and reply briefs in late April. By Order dated January 31, 2002, the Board recognized a need to establish additional hearing days and, therefore, added two days, February 14 and 15, to the existing schedule.

During the initial round of hearings in February, Parties proposed modifications to the schedule, and by Order dated February 14, 2002, the Board issued additional revisions to the schedule. This Order provided for the filing of Petitioner's prefiled rebuttal testimony in late February, discovery during early and mid-March, Department and Intervenors filings of surrebuttal testimony in mid-March, evidentiary hearings on Petitioners' rebuttal in late March, discovery on the Department and Intervenors and hearings on surrebuttal testimony in late March and early April, initial briefs near the end of April, and reply briefs in early May.

On March 6, 2002, the Petitioners and the Department filed a Memorandum of Understanding ("MOU"). The MOU allegedly resolves issues raised by the Department earlier in this proceeding and requests that the Board approve the proposed transactions. NECNP, joined by CAN, requested that the Board modify the schedule to permit additional time to respond to the MOU. In an Order dated March 12, 2002, the Board adopted a schedule for the

remainder of this proceeding. This Order provided for the filing of Petitioner and Department prefiled supplemental testimony in mid-March, discovery on the Petitioners and Department during mid- to late March, filing of Intervenor surrebuttal testimony in late March, evidentiary hearings on Petitioners and Department's Rebuttal and MOU testimony in early April, discovery on the Intervenors and hearings on surrebuttal testimony in mid-April, initial briefs at the end of the first week in May, and reply briefs at the end of the second week in May.

Appendix D — Modifications to Memorandum of Understanding
Section 3.
The Use of Excess Funds on Delayed Decommissioning:

the purposes of this provision as plant dismantlement and decontamination to NRC standards plus the completion of additional activities agreed to or imposed in the course of Docket No. 6545 or pursuant to any subsequent law or proceeding, but excluding spent fuel management and any site restoration. Completion of Decommissioning shall be deemed to have occurred for purposes of this MOU notwithstanding that ENVY may choose to re-use the site, and portions of existing structures, systems and components, and that spent fuel is not removed from the site. Site restoration shall mean that, once the VYNPS site is no longer used for nuclear purposes or non-nuclear commercial, industrial or other similar uses consistent with the orderly development of the property, the site will be restored by removal of all structures and, if appropriate, regrading and reseeding the land.

Return of excess funds, in accordance with the second following paragraph, shall occur following the earliest of (i) the date Completion of Decommissioning has occurred and ENVY has satisfied all of its responsibilities for spent fuel management and site restoration or (ii) the date on which Completion of Decommissioning occurs and any of the following occur: (x) settlement between ENVY and the US Department of Energy ("DOE") with respect to spent fuel management responsibilities for VYNPS, (y) final resolution of litigation by ENVY against DOE with respect to spent fuel management responsibilities for VYNPS, or (z) satisfactory performance by DOE of its spent fuel responsibility with respect to VYNPS.

Excess Funds shall mean all funds remaining in the transferred trust funds following the Completion of Decommissioning, less those funds necessary for management of spent nuclear fuel (including reasonable contingencies for delays in removal of the spent fuel from the VYNPS site, or cost overruns associated with the storage or removal of the spent fuel) and site restoration costs not otherwise payable by the federal government in accordance with (x), (y), or (z) above.

The Excess Funds remaining shall be paid to VYNPC for the benefit of electric consumers in pro rata shares in proportion to the stated ownership percentage of the VYNPC sponsors. VYNPC shall notify the Department of the payment at the time of receipt. For sponsors that remain under rate regulation, such pro rata share shall be refunded by VYNPC to such sponsors in accordance with their aliquot shares pursuant to the power agreements between VYNPC and such sponsors. For sponsors that no longer remain under rate regulation, VYNPC shall notify the Department and the state public utility commission or comparable regulatory body, that either presently exercises or formerly exercised rate regulation authority over each VYNPC sponsor, that the pro rata share of Excess Decommissioning Funds is available. It shall be the responsibility of each state public utility commission or comparable regulatory body to effect the final distribution of such Excess Funds. In the event VYNPC shall have ceased to exist at the time Excess Funds are to be shared as provided above, ENVY shall notify the

Department and the state public utility commission or comparable regulatory body, that either presently exercises or formerly exercised rate regulation authority over each VYNPC sponsor, that the pro rata share of Excess Funds is available. Upon compliance with the instructions of each such state public utility commission or comparable regulatory body, ENVY and the trustee of the trust(s) holding such funds shall have no further obligation with regard to the Excess Funds or their distribution.

Section 8.
Board Approval for Amendment to Trust Regarding Distribution of Funds

ENVY agrees that the trust agreement with respect to its Qualified Decommissioning Trust Fund and Non Qualified Decommissioning Trust Fund will contain a provision incorporating paragraph 3, as amended by the Board's Order in Docket No. 6545, and that such provision shall not be further amended without Board approval. ENVY also agrees that it will give the Board and Department notice of intent to change any other provision of the trust agreement at least 30 days in advance of such change.

Section 10.
Transfer of Decommissioning Funds

Pursuant to Section 6.10(b) of the PSA, at Closing the entire fund balance in the VYNPC Qualified Decommissioning Trust Fund and Non Qualified Decommissioning Trust Fund will be transferred to the funds established by Buyer's Post Closing Decommissioning Trust Agreement, as defined in the PSA, and amended by the Board's Order in Docket 6545.