

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 6960

Investigation into Vermont Marble Power)
Division of OMYA, Inc.'s Integrated Resource)
Plan)

Order entered: 7/20/2005

I. INTRODUCTION

On December 19, 2003, Vermont Marble Power Division of OMYA, Inc. ("VMPD" or "Vermont Marble") filed its Integrated Resource Plan ("IRP") with the Vermont Public Service Board ("Board"). In this Proposal for Decision, I recommend that the Board approve Vermont Marble's IRP, and also approve the Stipulation between VMPD and the Vermont Department of Public Service ("Department"), filed March 18, 2005.

II. PROCEDURAL HISTORY

On May 26, 2004, I convened a prehearing conference in this proceeding. Appearances were entered by Geoffrey Commons, Esq., for the Department, and Edward V. Schwiebert, Esq., Kenlan Schwiebert & Facey, P.C., for VMPD. At the prehearing conference I set a schedule for this investigation that included an August 31, 2004, deadline for the filing of either a stipulation between the parties or a jointly-proposed litigation schedule. The parties filed several requests to modify the schedule, each of which I granted.¹

I conducted a duly-noticed public hearing in this Docket on June 21, 2004, in the gymnasium of Proctor Junior-Senior High School in Proctor, Vermont. Five members of the public attended and three posed questions and provided comments. The parties submitted a stipulated settlement to this Docket on March 18, 2005 ("Stipulation").

1. I concluded schedule modifications were justified on the basis of requests received on August 31, 2004, November 30, 2004, January 31, 2005, and February 16, 2005.

III. FINDINGS

Based upon the evidence in this Docket, I hereby report the following findings and conclusions to the Board in accordance with 30 V.S.A. § 8.

1. Vermont Marble's IRP includes an evaluation of Vermont Marble's projected load and resources, an analytical framework for identifying a least-cost mix of resources, and an action plan for implementing the conclusions of Vermont Marble's analysis. Allard pf. at 3.

2. In preparing its IRP, Vermont Marble first developed a load forecast with three separate growth rates – a high-, mid-, and low-range – with a high case nearly double the low case. *Id.*

3. The State of Vermont relies upon the service of the Energy Efficiency Utility ("EEU") to deliver system-wide demand-side-management ("DSM") services. Vermont Marble's load projections are net of the results of DSM expected to be achieved by the EEU. *Id.*

4. Vermont Marble used different methods to forecast loads for different customer classes. Vermont Marble developed a residential and light commercial load forecast in a simplified manner based on two components: load for (1) residential/small commercial/lighting; and (2) Danby-Imperial Quarry. The growth rate for the first category is 1.02 percent, and 1.77 percent for the second. Vermont Marble used these growth rates to project sales through the forecast period. Allard pf. at 5; IRP at 20-22.

5. Vermont Marble's industrial load forecast is based upon capital-expansion, production, and sales forecasts of the industrial sector served by VMPD. The industrial sector dominates the total load of the VMPD system, accounting for 95.1 percent of the total system energy usage in 2002. Allard pf. at 6.

6. Combined results for all customer classes indicate that system load is projected to increase from 208,807 MWh in 2003 to 319,176 MWh in 2013, and 402,532 MWh in 2023. This growth represents a 4.33 percent compound annual growth rate over the next ten years and a 3.34 percent compound annual growth rate over the entire forecast period. Allard pf. at 4, VMPD IRP at 20-22.

7. Vermont Marble projects that system peaks will likewise increase from 35.9 MW in 2003 to 52.7 MW in 2013, and 66.4 MW in 2023, constituting a 1.94 percent compound annual

growth rate over the next ten years and a 3.13 percent compound annual growth rate over the entire forecast period. *Id.*

8. After developing a load forecast, Vermont Marble assessed supply options to serve that projected load. *Id.*; IRP at 34-36.

9. Vermont Marble's IRP includes a qualitative assessment of supply generation technologies and supply contractual arrangements. The IRP then reviews and evaluates a range of options based on factors designed to represent a range of resource strategies that Vermont Marble might reasonably pursue. The goal of the analysis is to develop a portfolio strategy, rather than to define a single set of resources to meet future needs. Allard pf. at 7-8.

10. Vermont Marble developed four portfolios that take into account Vermont Marble's existing generation and contracts for generation. The four portfolios then add the following four resource strategies, respectively, to meet Vermont Marble's projected incremental needs:

- **Spot**, i.e., meet all of the incremental needs through purchases from the spot market;
- **Bilateral**, i.e., meet 75 percent of its needs through annual bilateral contracts, and 25 percent of its needs through spot market purchases;
- **Wind**, i.e., develop or purchase 10 MW of wind generation (assuming a capacity factor of 33 percent), with back-up purchases on the spot market; and
- **CT**, i.e., develop 12 MW of combustion turbines designed to serve as peaking units.

Allard pf. at 3-4.

11. Vermont Marble evaluated the four portfolios on the basis of cost and risk over a 20-year planning horizon. The analysis indicates that to meet forecasted energy requirements, the least-cost and lowest-risk (lowest deviations) portfolio would be the "bilateral" portfolio, i.e., the one that would meet 75 percent of Vermont Marble's incremental needs through annual bilateral contracts, and 25 percent of its needs through spot market purchases. *Id.* at 4.

12. Vermont Marble's IRP also evaluated its current transmission and distribution system, and its future requirements. The current transmission and distribution system is ample for the existing load with current total system losses less than 1 percent. *Id.*; VMPD IRP at 36-39.

13. Vermont Marble's IRP analyzes VMPD's transmission and distribution system. It concludes that future transmission projects will include the replacement of the Florence VELCO transformer and bus work to accommodate future load growth. Allard pf. at 14.

14. Additionally, Vermont Marble has analyzed several distribution projects recently, including voltage conversion as well as alternative distribution-feed configurations. Vermont Marble represents that these projects will be evaluated periodically in the future as conditions such as energy costs change. Currently, VMPD's transmission and distribution systems appear to be adequate. *Id.*; IRP at 36-39, 43.

15. Vermont Marble's IRP recognizes the central role of Vermont's state-wide Energy Efficiency Utility ("EEU") in delivering efficiency services to VMPD's service territory. Vermont Marble's IRP also describes additional potential energy-efficiency improvements that could be made by VMPD in its distribution system. IRP at 43-44.

16. Load shedding and load management are currently being explored by VMPD. The OMYA West plant may provide a significant opportunity for load shedding. However, OMYA West's ability to shed load is variable and may not be easily captured or integrated into a formal arrangement. Allard pf. at 14.

17. The Department and Vermont Marble (collectively, the "Parties") have reached agreement regarding the IRP, filed in December 2003, and they agree that the Board's final order in this docket may incorporate conditions and agreements contained in their Stipulation (attached hereto). Stipulation at 1.

18. The Stipulation includes the agreement between the Department and VMPD that, provided the other terms of this stipulation are approved, the Board should determine that the decision-making process described in VMPD's IRP meets the requirements of Title 30 of the Vermont Statutes Annotated, § 218c. Stipulation at ¶ 1.

19. The Stipulation includes the Department and Vermont Marble's agreement that Vermont Marble has a continuing duty to monitor key uncertainties and the accuracy of assumptions and data in the IRP, as well as to continue to reevaluate the merits of its decision-making processes and the merits of its decisions. *Id.* at ¶¶ 2-7.

20. Specifically, Vermont Marble will determine the measures and costs that would be required to keep the Proctor #5 Unit on-line when the Proctor distribution load is supplied directly from the 46 kV tie to the B-10 circuit. VMPD then will assess and report on the viability and cost-effectiveness of supplying the Proctor distribution load directly from the B-10 circuit while keeping the Proctor #5 Unit on-line. Such determination, assessment, and report will be made not later than six months following Board approval of Vermont Marble's IRP. *Id.* at ¶ 6.

21. Vermont Marble will also evaluate all cost-effective phase balancing and feeder balancing available on its distribution system no later than six months following Board approval of this IRP. Results of the evaluation will be filed with the Board and Department promptly following completion of such evaluation. All cost-effective phase balancing and feeder balancing will be performed no later than one year following Board approval of Vermont Marble's IRP. *Id.* at ¶ 7.

22. Furthermore, as it prepares its next IRP, VMPD agrees specifically to undertake the following efforts:

- a. Recognizing that the sales of renewable energy credits ("RECs") may significantly change the value of an investment or purchase of renewable energy, VMPD agrees to incorporate the potential range of values of present and future RECs into its decision-making process in its next IRP. *Id.* at ¶ 8a.
- b. In order to better demonstrate the range of alternatives tested, their relative ranking, and the favored alternative, in the course of developing its next IRP, Vermont Marble will clarify the exact selection process that it undertakes in the development of its next IRP. *Id.* at ¶ 8b.
- c. Vermont Marble agrees to identify and discuss the role of its cogeneration units in its next IRP. *Id.* at ¶ 8c.
- d. In its next IRP, VMPD agrees to provide a more detailed discussion and thus greater transparency into its portfolio strategy decision-making process. *Id.* at ¶ 8d.
- e. Because load growth at OMYA's industrial operations is the significant driver of VMPD's expected future system growth, and this may have a significant effect upon VMPD's remaining ratepayers, Vermont Marble agrees to include in its next IRP a more detailed description and discussion of the factors and analyses to be employed to guide least-cost investment strategy for existing and future industrial loads. *Id.* at ¶ 8e.

f. In its next IRP, VMPD agrees to provide a more detailed description and discussion of its evaluation of demand alternatives, including a discussion of how energy efficiency, strategic peak load management, and demand response initiatives may be analyzed and/or deployed with respect to an integrated least cost strategy to reduce resource portfolio risk. *Id.* at ¶ 8f.

g. VMPD agrees to include in its next IRP a more detailed description and discussion of its decision-making criteria for evaluating DSM measure screening in light of recent (and anticipated) changes in market conditions. *Id.*

23. For purposes of this Stipulation, with regard to the filings to be made in accordance with paragraphs 6 and 7 of the Stipulation [Findings 21 and 22 above], VMPD should submit its filings simultaneously to the Department and the Board. The Department should have an opportunity to review and comment on all such filings (30 days) and should submit any comments it may have to VMPD at the same time as it files such comments with the Board. The Board should retain jurisdiction to resolve any disputes that arise regarding such filings. *Id.* at ¶ 9.

24. The Parties agree that this Stipulation relates only to the Parties and should not be construed by any party or tribunal as having precedential or any other impact on proceedings involving other parties. The Parties have made compromises on specific issues to reach this Stipulation. The Stipulation should not be construed by any party or tribunal as having precedential impact on any future proceedings involving VMPD. The Parties reserve the right in future proceedings to advocate positions that differ from those set forth in this Stipulation, and this Stipulation may not in any future proceeding be used against either of the Parties. *Id.* at ¶ 10.

25. The Parties agree that this Stipulation shall be effective and shall bind the Parties hereto only if the Board issues an order in this docket containing terms consistent with this Stipulation and any attachments in all respects. *Id.* at ¶ 11.

IV. DISCUSSION

30 V.S.A. § 218c(a)(1) defines a least-cost integrated plan as:

. . . a plan for meeting the public's need for energy services, after safety concerns are addressed, at the lowest present value life cycle cost, including environmental and economic costs, through a strategy combining investments and expenditures

on energy supply, transmission and distribution capacity, transmission and distribution efficiency, and comprehensive energy efficiency programs.

The statute provides that the Board may approve a company's least-cost plan if it complies with the requirements of this definition.

VMPD's IRP adequately addresses the supply-side and the transmission-and-distribution components of least-cost integrated resource planning. The energy-efficiency component is largely addressed through the EEU,² and through VMPD's agreement, on a forward-going basis, "to more fully include in its next IRP more detailed description and discussion with respect to its decision-making criteria for evaluating DSM measure screening in light of recent (and anticipated) changes in market conditions."³

Paragraph 8 of the Stipulation [Finding 23 a-g] also requires Vermont Marble to include additional information in its next IRP. Doing so will significantly improve the IRP, making it more useful to Vermont Marble, the Department, the Board, and the public. With the requirements of Paragraph 8 in mind, and based on the evidence presented in this Docket, I conclude that Vermont Marble's 2003 IRP satisfies the requirements of Section 218c(a)(1).

One final note, the Parties have agreed that Vermont Marble shall file its next IRP on or before December 31, 2006, the three-year anniversary of the filing of Vermont Marble's IRP in this Docket. I recommend that the Board agree to this date.

Since none of the recommendations are adverse to the parties, this Proposal for Decision has not been served on the parties to this proceeding in accordance with 3 V.S.A. § 811.

V. CONCLUSION

Based upon the evidence presented, and for the reasons set forth above, I recommend that the Board approve Vermont Marble's IRP. I further recommend that the Board approve the March 18, 2005, Stipulation between VMPD and the Department, and require Vermont Marble to file its next IRP on December 31, 2006.

2. In Docket No. 5980, the Board approved a memorandum of understanding which stated that the creation of the EEU fulfills the future obligations of each distributed utility "to plan for and conduct System-wide Programs under 30 V.S.A. § 218c" Docket No. 5980, Order of 9/30/99, at Appendix A ¶ 16.

3. See Stipulation at ¶ 8.

Dated at Montpelier, Vermont, this 13th day of July, 2005.

s/David Farnsworth

David Farnsworth, Esq.
Hearing Officer

VI. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that:

1. The Findings and Conclusions of the Hearing Officer are adopted.
2. Vermont Marble's Integrated Resource Plan filed on December 19, 2003, is approved.
3. The Stipulation between VMPD and the Department, filed on March 18, 2005, is approved.
4. In all other respects, the Parties shall comply with the terms and conditions of the Stipulation.
5. Vermont Marble shall file in its next integrated resource plan a more detailed description and discussion of its decision-making criteria for evaluating demand-side management measure screening in light of recent (and anticipated) changes in market conditions. Vermont Marble shall file its next integrated resource plan on December 31, 2006.

Dated at Montpelier, Vermont, this 20th day of July, 2005.

s/James Volz)	PUBLIC SERVICE
)	
s/David C. Coen)	
)	
)	BOARD
)	
)	OF VERMONT
s/John D. Burke)	

OFFICE OF THE CLERK

FILED: July 20, 2005

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.