

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 6895

Investigation into Green Mountain Power Corporation's)
Integrated Resource Plan)

Order entered: 7/13/2006

REPORT AND RECOMMENDATION REGARDING STIPULATION

I. INTRODUCTION

The Public Service Board ("Board") opened this investigation to consider Green Mountain Power Corporation's ("GMP" or "the Company") Integrated Resource Plan ("IRP") that was filed on August 14, 2003, and supplemented on April 16, 2004.¹ GMP and the Vermont Department of Public Service ("Department") entered into a Stipulation which they filed with the Board on April 21, 2005 ("Stipulation").² The Stipulation provides that, among other things: (1) the Board should approve GMP's IRP; and (2) GMP should include several specific items in its next Integrated Resource Plan, scheduled to be filed by February 15, 2007. Paragraphs 4 and 5 of the Stipulation ask the Board to approve specific analytic methods that inform the decision-making processes included in the IRP.

In this Proposal for Decision, I recommend that the Public Service Board ("Board") approve the Stipulation except for Paragraphs 4 and 5. Approval of Paragraphs 4 and 5 would be contrary to the Board's recent decision reviewing similar provisions in the IRP of Central Vermont Public Service Corporation.³ Therefore, I recommend that the Board not approve those two paragraphs.

1. In this Proposal for Decision, I use the term "IRP" to refer to the combination of GMP's August 14, 2003, Integrated Resource Plan and the Supplemental Analysis that GMP filed on April 16, 2004. I use the term "Original IRP" to refer just to GMP's August 14, 2003, filing.

2. GMP and the Department also submitted an amendment to the Stipulation as part of the Comments on this Proposal for Decision. The Stipulation and Amendment are attached to this Order as Attachment A.

3. Docket 6854, Order of 9/6/05 at 13-15.

II. PROCEDURAL HISTORY

GMP filed its Initial IRP with the Board on August 14, 2003. At the request of the Department, GMP subsequently performed a separate study using a decision analysis methodology. GMP filed this Supplemental Analysis on April 16, 2004.

On May 18, 2004, I convened a status conference to establish a schedule for further proceedings.

On July 14, 2004, I conducted a public hearing in South Burlington. One member of the public spoke expressing a desire to expand public involvement in the resource acquisition plans for GMP.

After several extensions of time for negotiation, on April 21, 2005, the parties filed a Stipulation. I conducted a further status conference on May 31, 2005, at which I raised several issues concerning the Stipulation. The parties subsequently filed responses to these questions. Neither party requested an evidentiary hearing.

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

III. FINDINGS

A. GMP's IRP

1. GMP's IRP uses two different decision-making frameworks to analyze its supply options: scenario analysis and decision analysis. Brown pf., generally.
2. The scenario analysis forecasts future conditions based on scenarios that include a number of interdependent factors, which enables GMP to understand better the strengths and weakness of particular portfolios. Brown pf. at 3.
3. The scenarios are based on a twenty-year horizon, consistent with the Department's Twenty-Year Plan, and are designed to reflect variations in price volatility, fuel type, and location. Brown pf. at 7.
4. GMP considered both new supply acquisition (primarily in the period beyond 2011) and replacement of portions of its existing supply portfolio (for the periods through 2011). Brown pf. at 8–9.

5. GMP selected eight portfolios for analysis, including spot market purchases, one-year contracts, ownership of a gas or coal plant, renewable resources, and combinations of the above. Brown pf. at 7–8.

6. The decision analysis incorporated an assessment of the probability of conditions that would affect the Company's energy balance. Brown pf. at 6.

7. GMP concluded that it was not in the Company's interest to replace significant portions of its existing supply portfolio. Brown pf. at 11.

8. GMP considers demand-side management ("DSM") as a load reduction. GMP determines the optimal amount of DSM society is anticipated to choose by dispatching measures and programs from a supply curve in competition with other resources. Brown pf. at 14–15.

9. Because of the existence of the statewide Energy Efficiency Utility ("EEU"), GMP does not assume that DSM measures outside of distributed utility planning are funded by the utility. GMP does reflect the costs of DSM in its analysis since society ultimately bears these costs. Brown pf. at 15; Stipulation at ¶ 6.

10. GMP's planning efforts extend to the sub-transmission and distribution delivery systems. This includes Distributed Utility Planning ("DUP") analysis, area-specific collaboratives ("ASCs") and periodic evaluations of system capacity, efficiency, and reliability. Brown pf. at 11.

11. GMP completed a five-year distribution system loading study in 2002. The study identified specific items that will need attention during 2002–2007. Initial IRP at 33.

12. GMP completed an efficiency study of its subtransmission and distribution systems in 1999 which identified several significant opportunities. GMP is reviewing the feasibility of some of these projects. Initial IRP at 34–35.

13. GMP is currently involved in or planning five ASCs. Initial IRP at 37–38.

Action Plan

14. GMP's IRP includes an action plan that describes the actions the Company intends to take to implement its IRP over the next three years. These actions are grouped into the following

categories: supply, demand and power delivery systems, and improvements to the planning process. Initial IRP at 78–83.

15. GMP's next IRP will describe the status of each step in this action plan and the actions GMP has taken toward achieving each step. Stipulation at ¶ 17.

B. Stipulation

16. Paragraph 2 of the Stipulation provides that, if paragraphs 6 through 23 of the Stipulation are approved, the Board should also approve GMP's IRP, in accordance with the requirements of 30 V.S.A. § 218c. This approval would encompass the decision-making processes included in the IRP and would not include a review or approval of any particular decision or resource commitment entered into by GMP or a determination that such decision or commitment is or is not prudent. Stipulation at 2.

17. Paragraph 3 provides that if approved by the Board, GMP's IRP should be used during its term to evaluate the compliance with 30 V.S.A. § 248(b)(6) of petitions by GMP requesting the issuance of a certificate of public good. Stipulation at ¶ 3.

18. Paragraph 4 provides that, during the term of the IRP, the scenario analysis and decision analysis described in the IRP are reasonable analytic methods that inform the decision-making processes contemplated under the IRP. Stipulation at ¶ 4.

19. Paragraph 5 provides that, during the term of this IRP, the methods that GMP has used to define the supply planning assumptions described in the IRP are reasonable methods that inform the decision-making processes contemplated under the IRP, and that the decision-making processes set forth in the T&D section of the IRP are reasonable. Stipulation at ¶ 5.

20. The Stipulation requires GMP to include many items in its next IRP, including:

- a description of the efforts and actions taken to date, and that GMP plans to undertake in the future, to explore new opportunities to increase the value of and manage the Company's resource portfolio through purchases and sales with credit-worthy market participants or other appropriate hedging or risk-mitigating strategies or mechanisms (Stipulation at ¶ 9);
- a description of actions GMP is prepared to undertake to respond to unexpected contingencies involving its primary supply sources, including GMP's plan for replacing the current Vermont Yankee and HQ-VJO contracts should such contracts be terminated or the resources otherwise become

unavailable to GMP prior to their current expiration dates (Stipulation at ¶ 10);

- an evaluation of efforts to develop a diverse mix of resources to replace the Vermont Yankee and the HQ-VJO contracts when they terminate and, based on that evaluation, an identification of what GMP believes is the appropriate course of action with respect to such replacement (Stipulation at ¶ 8);
- an examination of portfolio alternatives to address the need to replace contracts that are terminating within the planning horizon, including but not limited to its Vermont Yankee and HQ-VJO contracts (Stipulation at ¶ 11);
- an examination of the mechanisms to be used to build and implement GMP's new portfolio over time, including but not limited to ownership, short- and long-term contracts, and various mechanisms for managing financial risk (Stipulation at ¶ 11);
- an evaluation of the effect, if any, of current ratemaking policy or methodology on the selection of the portfolio, including estimates of the cost of service and rates that are likely to result from the selected portfolio (Stipulation at ¶ 11);
- an identification of the level of efficiency resources expected to be available from the Energy Efficiency Utility during the planning period (Stipulation at ¶ 12).;
- a description of the status of each ongoing Area-Specific Collaborative, including the progress made to date and planned future activities, as well as, to the extent feasible, how potential transmission and non-transmission solutions to the constraints being addressed in the Area-Specific Collaboratives may affect other portions of the IRP (Stipulation at ¶ 14);
- for any Area-Specific Collaboratives involving GMP that have terminated by the filing of GMP's next IRP, an explanation of why the Area-Specific Collaborative terminated, a summary of the resolution reached, if any, and a statement regarding how any such resolution is reflected in the IRP (Stipulation at ¶14);
- a description of GMP's process for monitoring its T&D system and identifying areas potentially subject to DUP, including a statement of the monitoring GMP has performed to date, the results of such monitoring, and GMP's evaluation of each area identified by GMP as potentially subject to DUP (Stipulation at ¶ 15);
- an identification of any need for increased bulk transmission services from the Vermont Electric Power Company, Inc. ("VELCO") to transport incremental power resources that are remote from GMP's load, and a determination (made in consultation with VELCO) of the appropriate method

by which to evaluate in-state resources in GMP's planning studies (Stipulation at ¶ 20); and

- a description of how GMP's resource portfolio decision-making process identifies, evaluates and incorporates opportunities for strategic peak load management, demand response programs, direct load control programs, rate designs based on marginal cost, and other non-energy efficiency resources besides supply (Stipulation at ¶ 21).

Stipulation at ¶¶ 8–12, 14–15, 20–21.

21. The Stipulation provides that GMP will provide the Department with information in its possession requested by the Department to perform tasks under paragraph 11 of the Memorandum of Understanding approved by the Board in its September 30, 1999, Order in Docket 5980,⁴ including but not limited to:

- power supply and transmission information to evaluate the design and deployment of energy efficiency programs approved by the Board for implementation by the Energy Efficiency Utility; and
- information on how wholesale energy prices and other locational marginal pricing may affect and inform the development and screening of potential system-wide demand-side opportunities.

Stipulation at ¶ 13.

22. Under the terms of the Stipulation, GMP will support VELCO in its planning efforts by making clear what incremental local resources it plans to rely on in serving load, thereby potentially limiting the need for VELCO bulk transmission services. Stipulation at ¶ 20.

23. The Stipulation provides that GMP will implement the following certain measures for the purpose of implementing projects identified as cost-effective in its February 1999 Transmission and Distribution Efficiency Study ("ES"):

- GMP will review the projects identified as cost-effective and provide a report to the Department by January 9, 2006 describing the results of its review as of that date, including at least 105 projects;

4. Paragraph 11 of the Memorandum of Understanding approved by the Board in its September 30, 1999, Order in Docket 5980 states that the Department will: (1) provide for formal evaluation of the energy efficiency programs approved by the Board for implementation by the Energy Efficiency Utility; (2) update avoided costs used in Energy Efficiency Utility program and measure screening; and (3) update estimates of economically achievable energy efficiency potential. Docket 5980, Order of 9/30/99 at A-9.

- GMP will provide further reports to the Department no later than April 21, 2006, July 25 2006, and October 30, 2006, each addressing circuits specified in the amendment to the Stipulation;
- GMP will identify any synergies among these cost-effective projects and between these projects and non-efficiency-driven projects; and
- GMP will implement the cost-effective projects, subject to GMP's project approval process, budgetary constraints and schedules, and attempt to include the high priority projects in the 2006 capital plan. In addition, GMP will create a multi-year plan to implement the cost-effective projects, to be provided the Department in accordance with the dates in 2006 set forth in the amendment to the stipulation, and updated semi-annually.

Stipulation at ¶ 16.

24. In the Stipulation, the Department and GMP recognize the need for VELCO and the Vermont distribution utilities to work cooperatively to assure the provision of bulk transmission services that meet the standards of 30 V.S.A. § 218c in a manner that allows timely consideration of energy efficiency and distributed generation resources. Stipulation at ¶ 19.

25. Paragraph 22 of the Stipulation provides that the term of the IRP that is the subject of this Docket commenced on the date on which it was filed with the Board and will run through February 15, 2007. Stipulation at ¶ 22.

26. The Stipulation provides that GMP will file its next IRP on or before February 15, 2007, and that GMP will consult with the Department as it prepares its next IRP. GMP will provide quarterly updates to the Department concerning (1) GMP's portfolio management activities and (2) GMP's plans for replacing its current Vermont Yankee and HQ-VJO contracts should they be terminated prior to their current termination dates or at their current termination dates.

Stipulation at ¶ 23.

IV. DISCUSSION

30 V.S.A. § 218(c) sets out the statutory standard that GMP's IRP must meet. Section 218(c) describes 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 possible present value life cycle cost, including environmental and economic costs, through a strategy combining investments and

expenditures on energy supply, transmission and distribution efficiency, and comprehensive energy efficiency programs.⁵

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

After reviewing GMP's IRP, the Stipulation, and the evidence in the record, I find that the Stipulation promotes the general good of the State and provides a reasonable basis for concluding that the requirements of 30 V.S.A. § 218(c) have been met. In addition, the Stipulation incorporates numerous specific action items designed to ensure that GMP's next IRP, due in February 2007, will analyze specific resource planning issues.⁶ These studies will help provide a firm foundation for the next IRP. Therefore, I recommend that the Board approve the Stipulation, but with the following limitation.

I do not recommend that the Board's approval encompass Paragraphs 4 and 5. These two paragraphs ask the Board to approve specific analytic methods that inform the decision-making processes included in the IRP. The Board recently considered the issue of approval for these processes in Docket 6854. In that proceeding, the Board found that approval of the IRP would encompass the decision-making processes included in the IRP, but that it would not include the specific decision-making tools, analytical methods, or outcomes described in the IRP.⁷ The parties have not shown any reason to depart from this precedent. The limited approval of the IRP is consistent with the terms of the Stipulation, which specifically provides that it will remain effective even if the Board does not approve these paragraphs.

V. COMMENTS ON THE PROPOSAL FOR DECISION

The Proposal for Decision ("PFD") was circulated to the parties on May 18, 2006. The Department and GMP both submitted comments. These fall into two categories. First, the

5. 30 V.S.A. § 218(c)(a)(1).

6. I note that, among GMP's commitments is an assessment of resource decisions that GMP will need to make when the Vermont Yankee and Hydro-Quebec purchases end in the 2012 to 2015 period. Such planning for replacement of nearly two-thirds of GMP's power supply is critical, particularly as the failure to do so could leave GMP and its ratepayers exposed to market-based prices. As part of its analysis, GMP should give serious consideration to both long-term contract options, such as a new Power Purchase Agreement for Vermont Yankee, and the possibility of constructing additional generation to serve some or all of GMP's load.

7. Docket 6854, Order of 3/9/04 at 18, Order of 9/6/05 at 13, 15.

Department asked for changes to several of the findings, stating that the PFD did not precisely reflect the agreement set out in the Stipulation. In addition, the Department submitted an amendment to the Stipulation relating to transmission and distribution projects which it requests that the Board reflect in the PFD. GMP agrees with all of these changes. I find these requested changes to be reasonable and have revised the PFD accordingly.

Second, both GMP and the Department ask that the Board reject my recommendation that the approval of the Stipulation not encompass approval of paragraphs 4 and 5. I have not modified the PFD based upon these comments, but will instead refer this issue to the Board.

VI. CONCLUSION

In conclusion, I recommend that the Board approve the April 21, 2005, Stipulation between GMP and the Department, except for Paragraphs 4 and 5 of the Stipulation. This means that I am recommending that the Board approve GMP's IRP as filed on August 14, 2003, and supplemented on April 16, 2004, including the decision-making processes incorporated in that IRP.

This Proposal for Decision has been served on all parties to this proceeding in accordance with 3 V.S.A. § 811.

Dated at Montpelier, Vermont, this 28th day of June, 2006.

s/ George E. Young

George E. Young
Hearing Officer

VII. BOARD DISCUSSION

GMP and the Department both submitted comments on the PFD. The Hearing Officer has modified the PFD to address the technical changes sought by the parties and to reflect the Amendment to the Stipulation that GMP and the Department submitted as part of their comments. We accept those changes. In this discussion, we consider the remaining issue: the question of whether our approval of the IRP and the Stipulation should encompass paragraphs 4 and 5 of the Stipulation.

As the PFD explains, we recently considered this issue in Docket 6854, in which we examined CVPS's IRP. We concluded then that we would not approve paragraphs 4 and 5 of a similar Stipulation (except to approve the decision-making processes set forth in the Transmission & Distribution portions of the IRP) so that the approval extended to the decision-making process, but not to the analytical tools and methodologies that CVPS had employed. At this time, we reach the same conclusion and for the same reasons that we did in Docket 6854.

Moreover, we note that GMP is required to file its next IRP by February 15, 2007; other utilities also will be filing new IRPs during 2007. Rather than changing our policy on the scope of approval at this time, we will reexamine the scope of our approval of IRP's during the next round of IRPs. Considering the expiration of the Vermont Yankee contract in 2012 and the Hydro-Quebec contract a few years later, we expect that the next IRP will need to focus on concrete resource acquisition decisions. Although we will continue to decline to grant pre-approval for resource acquisitions in the IRP process, it is appropriate in the context of these decisions to examine whether a greater degree of approval of GMP's methodologies is warranted.

The parties should not, however, interpret our decision not to affirmatively approve the specific analyses that GMP performed as a concern with the overall approach GMP employed and the use of scenario analysis and decision analysis as part of that review. Both the scenario analysis and decision analysis methodologies constitute useful tools in GMP's broader resource planning process; it is reasonable for GMP to employ these methodologies.

VIII. 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. The Stipulation filed April 21, 2005, between Green Mountain Power Corporation ("GMP" or "Company") and the Vermont Department of Public Service ("Department") is approved, except that paragraphs 4 and 5 are not approved, except for the conclusion in paragraph 5 that the decision-making process set forth in the Transmission and Distribution section is reasonable.
3. Consistent with the Stipulation, GMP's Integrated Resource Plan ("IRP") as filed on August 14, 2003, and supplemented on April 16, 2004, is approved. The term of this IRP shall be from August 14, 2003, to February 15, 2007.
4. GMP shall file its next IRP on or before February 15, 2007.
5. GMP's next IRP shall include:
 - a description of the efforts and actions taken to date, and that GMP plans to undertake in the future, to explore new opportunities to increase the value of and manage the Company's resource portfolio through purchases and sales with credit-worthy market participants or other appropriate hedging or risk-mitigating strategies or mechanisms;
 - a description of actions GMP is prepared to undertake to respond to unexpected contingencies involving its primary supply sources, including GMP's plan for replacing the current Vermont Yankee and HQ-VJO contracts should such contracts be terminated or the resources otherwise become unavailable to GMP prior to their current expiration dates;
 - an evaluation of efforts to develop a diverse mix of resources to replace the Vermont Yankee and the HQ-VJO contracts when they terminate;
 - an examination of portfolio alternatives to address the need to replace contracts that are terminating within the planning horizon, including but not limited to its Vermont Yankee and HQ-VJO contracts;
 - an examination of the mechanisms to be used to build and implement GMP's new portfolio over time, including but not limited to ownership, short- and long-term contracts, and various mechanisms for managing financial risk;

- an evaluation of the effect, if any, of current ratemaking policy or methodology on the selection of the portfolio, including estimates of the cost of service and rates that are likely to result from the selected portfolio;
- an identification of the level of efficiency resources expected to be available from the Energy Efficiency Utility during the planning period;
- a description of the status of each ongoing Area-Specific Collaborative, including the progress made to date and planned future activities, as well as, to the extent feasible, how potential transmission and non-transmission solutions to the constraints being addressed in the Area-Specific Collaboratives may affect other portions of the IRP;
- for any Area-Specific Collaboratives involving GMP that have terminated by the filing of GMP's next IRP, an explanation of why the Area-Specific Collaborative terminated, a summary of the resolution reached, if any, and a statement regarding how any such resolution is reflected in the IRP;
- a description of GMP's process for monitoring its Transmission & Distribution system and identifying areas potentially subject to Distributed Utility Planning ("DUP"), including a statement of the monitoring GMP has performed to date, the results of such monitoring, and GMP's evaluation of each area identified by GMP as potentially subject to DUP;
- an identification of any need for increased bulk transmission services from the Vermont Electric Power Company, Inc. ("VELCO") to transport incremental power resources that are remote from GMP's load, and a determination (made in consultation with VELCO) of the appropriate method by which to evaluate in-state resources in GMP's planning studies; and
- a description of how GMP's resource portfolio decision-making process identifies, evaluates and incorporates opportunities for strategic peak load management, demand response programs, direct load control programs, rate designs based on marginal cost, and other non-energy efficiency resources besides supply.

6. GMP shall provide the Department with information requested by the Department to perform tasks under paragraph 11 of the Memorandum of Understanding approved by the Board in its September 30, 1999, Order in Docket 5980, including but not limited to:

- power supply and transmission information to evaluate the design and deployment of energy efficiency programs approved by the Board for implementation by the Energy Efficiency Utility; and
- information on how wholesale energy prices and other locational marginal pricing may affect and inform the development and screening of potential system-wide demand-side opportunities.

7. GMP shall support VELCO in its planning efforts by making clear what incremental local resources it plans to rely on in serving load, thereby potentially limiting the need for VELCO bulk transmission services.

8. GMP shall implement the following certain measures for the purpose of implementing projects identified as cost-effective in its February 1999 Transmission and Distribution Efficiency Study:

- GMP will review the projects identified as cost-effective and provide a report to the Department by January 9, 2006, describing the results of its review as of that date, including at least 105 projects;
- GMP will provide further reports to the Department no later than April 21, 2006, July 25 2006, and October 30, 2006, each addressing circuits specified in the amendment to the Stipulation;
- GMP will identify any synergies among these cost-effective projects and between these projects and non-efficiency-driven projects; and
- GMP will implement the cost-effective projects, subject to GMP's project approval process, budgetary constraints and schedules, and attempt to include the high priority projects in the 2006 capital plan. In addition, GMP will create a multi-year plan to implement the cost-effective projects, to be provided to the Department in accordance with the dates in 2006 set forth in the amendment to the stipulation, and updated semi-annually.

9. Future GMP subtransmission and distribution efficiency studies will include consideration of all appropriate upstream avoided transmission, subtransmission, and distribution capacity. GMP and the Department shall consult on the appropriate methods to be used to consider this capacity in efficiency studies.

10. GMP shall provide quarterly updates to the Department concerning (1) GMP's portfolio management activities and (2) GMP's plans for replacing its current Vermont Yankee and HQ-VJO contracts should they be terminated prior to their current termination dates or at their current termination dates.

Dated at Montpelier, Vermont, this 13th day of July, 2006.

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

OFFICE OF THE CLERK

FILED: July 13, 2006

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.