

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 6217

Investigation into Vermont Electric)	Hearing at
Cooperative, Inc.'s Integrated Resource Plan)	Montpelier, Vermont
filed on January 8, 1999)	November 17, 1999

Order entered: 12/15/99

I. BACKGROUND

Vermont Electric Cooperative, Inc. ("VEC") filed its second Integrated Resource Plan ("IRP") on January 8, 1999.

On April 9, 1999, a prehearing conference was held in this docket. Appearances were entered by Michael Burak, Esq., of Burak Anderson & Melloni for VEC, and Geoffrey Commons, Esq., for the Vermont Department of Public Service ("DPS"). At the April 9, 1999, prehearing conference, the parties requested (and I granted) time for informal discussions to try to resolve the DPS's concerns regarding the content of VEC's IRP.

On October 13, 1999, VEC filed a Stipulation ("Exhibit Joint-1" or "Stipulation") between it and the DPS. (A copy of the Stipulation is attached hereto as Appendix I.) The Stipulation provides that "the parties agree that full-scale review and possible revision of VEC's IRP is not warranted at this time, provided that VEC complies with the agreements and obligations set forth herein." Stipulation, ¶ 2, at 1. These "agreements and obligations" relate primarily to certain transmission and distribution ("T&D") issues which are explained in more detail below. The Stipulation does not address whether the Board should approve VEC's filed IRP.

On November 5, 1999, VEC filed a revised IRP. This filing stated that the revisions incorporate the Stipulation's provisions, as well as the provisions of the Memorandum of

Understanding ("MOU") and Bilateral Agreement between the DPS and VEC in Docket 5980. The filing also requested that the Board approve VEC's revised IRP.¹

On November 17, 1999, a Technical Hearing was held on the Stipulation. Appearances were entered by Michael Burak, Esq., of Burak Anderson & Melloni for VEC, and Geoffrey Commons, Esq., for the DPS. The parties entered into evidence the Stipulation and sworn testimony supporting the Stipulation. No one appeared in opposition to the Stipulation.

On December 1, 1999, VEC filed a request for a two-month extension (until February 1, 2000) of the filing date in ¶ 7 of the Stipulation.² (Paragraph 7 of the Stipulation requires VEC to file with the Board by December 1, 1999, an evaluation of the appropriateness and cost-effectiveness of using 1.5kVA and 5kVA transformers on VEC's system.) VEC stated it was authorized to report that the DPS does not object to this extension.

I have reviewed the record in this docket. I conclude that the Stipulation will result in a reasonable resolution of the issues raised to date by the DPS regarding VEC's IRP, and will promote the general good of the State. Accordingly, I recommend that the Stipulation be approved by the Board in its entirety.

II. FINDINGS OF FACT

Based upon the evidence of record, including the agreements contained in the Stipulation and its Attachments, I hereby report the following findings and conclusions to the Board in accordance with 30 V.S.A. § 8.

1. VEC filed its second Integrated Resource Plan with the Board on January 8, 1999.
2. The DPS and VEC engaged in negotiations regarding this IRP which have resulted in a Stipulation that recommends that the Board not fully review VEC's IRP at this time, provided that VEC complies with the Stipulation's other terms. The Stipulation was filed with the Board on October 13, 1999. Stipulation, ¶ 2.

1. November 5, 1999, letter from Michael L. Burak, Burak Anderson & Melloni on behalf of VEC to Ann Thompson, Hearing Officer, Public Service Board.

2. December 1, 1999, letter from Michael L. Burak, Burak Anderson & Melloni on behalf of VEC to Susan Hudson, Clerk, Public Service Board.

3. The Stipulation reaffirms VEC's commitment to meeting its obligations set forth in the MOU and VEC's Bilateral Agreement in Docket 5980. Stipulation, ¶ 3.

4. Under the terms of the Stipulation, VEC will:

- a. Use, for T&D equipment acquisition, planning, and implementation purposes, the statewide avoided costs and externalities adders approved by the Board in Docket 5980 for use in "System-wide Programs", as that phrase is defined in the Docket 5980 MOU. VEC may propose area-specific avoided costs for the T&D portion of avoided costs. Stipulation, ¶ 4.
- b. Adhere to the terms of A Voluntary Program for the Control of Stray Voltage on Farms,³ and adopt a proactive program that, by June 1, 2001, tests for stray voltage at all VEC dairy farm customers and installs, at VEC's expense, a neutral isolation device if neutral-to-earth voltages in excess of 0.5 Volts are encountered. Stipulation, ¶ 5.
- c. Replace regulator controls to maintain substation voltages at one substation by December 31, 1999, four additional substations by December 31, 2000, and three additional substations by December 31, 2001. Stipulation, ¶ 6.
- d. File an evaluation (and implementation plan, if any) of the appropriateness and cost-effectiveness of using 1.5kVA and 5kVA transformers on VEC's system with the Board and the DPS by December 1, 1999. Stipulation, ¶ 7.
- e. Complete the conversion of the Derby Line distribution system from 4.16kV to 12.47kV within seven months of the issuance of a final PSB order in Docket No. 5246, if the order results in VEC's retention of Derby Line distribution facilities. Stipulation, ¶ 8.

3. In response to proposed legislation in 1994, the Department of Agriculture, Food and Markets, the Department of Public Service, and electric utilities cooperated to write a proposal describing stray voltage problems on farms, and identifying the steps necessary to mitigate those problems. The proposal outlines a set of actions that would mitigate stray voltage on farms, and requests that each utility voluntarily implement the program.

- f. Complete the installation of high-side substation reclosers at its Fairfax #1, Pleasant Valley #13, and Johnson #14 substations by December 31, 2000. Stipulation, ¶ 9.
- g. Develop its distribution transformer evaluation multipliers using the spreadsheet appended to the Stipulation as Attachment 3. Stipulation, ¶ 10.

5. The Stipulation's provision regarding avoided costs and externalities adders for T&D equipment acquisition, planning, and implementation purposes (¶ 4) will enable VEC to assign a dollar value to the line losses it knows will be incurred by T&D equipment over its lifetime. Increased upfront capital spending can result in lower line losses; the agreed-upon values, combined with the option for VEC to use area-specific T&D avoided costs if it so chooses, will enable VEC to make the appropriate tradeoff between upfront capital spending and line losses, thereby providing least-cost solutions. Tr. 11/17/99 at 11-13 (Litkovitz).

6. The Stipulation's provision regarding the replacement of regulator controls (¶ 6) will enable VEC to implement "conservation voltage regulation" in which voltage delivered to the customer is targeted to the lower end of the acceptable range. This causes end-use devices to use somewhat lower energy and capacity. VEC has already begun replacing its regulator controls; the Stipulation's provision establishes an end date for the replacement program. Tr. 11/17/99 at 14-15 (Litkovitz).

7. The Stipulation's provision regarding the evaluation of the appropriateness and cost-effectiveness of using 1.5kVA and 5kVA transformers on its system (¶ 7) recognizes that currently VEC's standard smallest transformer is a 10kVA transformer, and that, in general, the smaller the transformer, the smaller the losses that the transformer will incur over its life. This evaluation will determine whether it might be possible for VEC to lower the losses incurred by transformers as well as to lower the initial cost of the transformers, as smaller transformers generally cost less than larger ones. Tr. 11/17/99 at 15-16 (Litkovitz).

8. The Stipulation's provision regarding the installation of high-side substation reclosers at three substations (¶ 9) takes into account the fact that VEC has already replaced high-side fuses with reclosers at all its other substations. The benefits of reclosers, as opposed to fuses, are: (1) they prevent single phasing which can damage three-phase motors; and (2) while it

takes approximately one hour for a crew to get to a blown fuse, replace it, and restore service, a recloser will automatically reclose and attempt to restore service, thereby potentially reducing the length of an outage. Tr. 11/17/99 at 6-8 (Litkovitz).

9. The Stipulation's provision regarding the distribution transformer evaluation multipliers (§ 10) will enable VEC to provide transformer manufacturers with information they need to design the least-cost transformer for VEC, given the trade-offs between the upfront cost of the transformer and the energy losses that the transformer will see over its lifetime. Tr. 11/17/99 at 8-10 (Litkovitz).

10. The Stipulation does not address whether the Board should approve VEC's IRP. Stipulation, generally.

11. VEC has asked the Board to approve the IRP as revised on November 5, 1999. November 5, 1999, letter from Michael L. Burak, Burak Anderson & Melloni on behalf of VEC to Ann Thompson, Hearing Officer, Public Service Board.

12. VEC and the DPS have agreed to a schedule whereby the DPS will file a recommendation as to the disposition of VEC's IRP with the Board by December 17, 1999. Tr. 11/17/99 at 16-17 (Commons).

13. VEC has represented that its Chief Engineer, who negotiated the Stipulation, has left the company, and that VEC is in the process of hiring a new Chief Engineer who will be responsible for complying with the terms of the Stipulation. December 1, 1999 letter from Michael L. Burak, Burak Anderson & Melloni on behalf of VEC to Susan Hudson, Clerk, Public Service Board.

14. VEC has requested that the Board grant a two-month extension, until February 1, 2000, to the deadline for filing an evaluation of using 1.5 kVA and 5 kVA transformers (§ 7 of the Stipulation) because of the personnel changes described in Finding 13, above. December 1, 1999, letter from Michael L. Burak, Burak Anderson & Melloni on behalf of VEC to Susan Hudson, Clerk, Public Service Board.

15. VEC has committed to refrain from purchases of 10kVA or 15kVA transformers until it has complied with § 7 of the Stipulation. December 1, 1999, letter from Michael L. Burak, Burak Anderson & Melloni on behalf of VEC to Susan Hudson, Clerk, Public Service Board.

III. DISCUSSION

The Stipulation filed in this docket has two major components: (1) various T&D provisions; and (2) a recommendation that the Board not conduct a full-scale review of VEC's IRP at this time.

As discussed in the Findings of Fact above, the Stipulation's various T&D provisions all promote the goal of least-cost T&D planning and implementation by VEC. Therefore, they are in the best interests of VEC's ratepayers and the State as a whole. I recommend that the Board approve them.

The Stipulation also recommends that the Board not conduct a full-scale review of VEC's IRP at this time. One reason for this recommendation is that the DPS does not believe VEC should be devoting significant resources toward revision of its IRP at this time because of "the specific circumstances of VEC, as well as, to a lesser extent, circumstances affecting the Vermont electric industry generally."⁴ These general circumstances include: the need to devote key resources to electric power supply reform; the creation of an efficiency utility; and electric industry restructuring. The second reason for this recommendation is that VEC has reaffirmed its obligations set forth in the MOU and its Bilateral Agreement in Docket 5980.⁵ These agreements were reached after VEC filed its original IRP, and the arrangements for the provision of DSM services included in them have already been approved by the Board. Since the DSM portions of VEC's filed IRP have been superceded, there is no need to review them. A third reason for not conducting a full-scale review of VEC's IRP at this time is that the DPS and VEC have negotiated a resolution to several issues associated with VEC's T&D planning and implementation efforts. In other words, the T&D component of VEC's original IRP has been reviewed, and VEC has agreed to implement the various T&D initiatives included in the Stipulation, thereby ensuring that its T&D planning and implementation efforts continue in a manner that is least-cost.

4. June 15, 1999, letter from Geoffrey Commons, Department of Public Service, to Ann Thompson, Hearing Officer, Public Service Board. This letter is cited in ¶ 2 of the Stipulation.

5. Stipulation, ¶ 3.

The combination of these reasons is persuasive: the T&D components of VEC's IRP have been reviewed; the DSM components have been superseded; and other issues are demanding VEC's attention. VEC is focusing its resources on areas of critical importance to its ratepayers, while supporting the implementation of demand-side management programs in its service territory, and improving its T&D system in a manner that is least-cost. Therefore, I agree that a full-scale review of VEC's IRP should not be conducted at this time.

This does not, however, address the issue of whether VEC's IRP should be approved by the Board. At the November 17, 1999, Technical Hearing, the DPS explained that it had not had a chance to fully review VEC's revised IRP as filed on November 5, 1999. The DPS requested an opportunity to review it and file a recommendation with the Board. VEC supported the Department's request. I granted the request at the Technical Hearing. Accordingly, this Proposal for Decision takes no position on what action the Board should take with respect to VEC's revised IRP. Instead, it focuses solely on review of the Stipulation.

VEC has also asked the Board for a two-month extension in the deadline for filing its evaluation of using 1.5 kVA and 5 kVA transformers. Given the recent personnel changes at VEC, VEC's commitment to refrain from purchasing 10kVA or 15kVA transformers until it has complied with this filing requirement, and the lack of an objection from the DPS to this request, I find this extension to be reasonable. Accordingly, I recommend that the Board grant VEC a two-month extension, until February 1, 2000, to file this evaluation.

IV. Conclusion

I have reviewed the Stipulation, its attachments, and the testimony of the various parties. I find that based upon all of the foregoing and the evidence in the record, the Stipulation between VEC and the DPS (1) requiring VEC to implement various T&D initiatives, and (2) recommending that the Board not conduct a full-scale review of VEC's IRP at this time, promotes the general good of the State and is a reasonable resolution to the issues raised so far in this docket. I, therefore, recommend that the Stipulation be approved in its entirety by the Board.

I have also reviewed VEC's request for a two-month extension, until February 1, 2000, of the filing date for the evaluation described in ¶ 7 of the Stipulation. I find this request to be reasonable, and recommend that the Board grant this extension.

The parties have waived their right to service of this Proposal for Decision in accordance with 3 V.S.A. § 811.

DATED at Montpelier, Vermont, this 14th day of December, 1999.

s/Ann Thompson
Ann Thompson
Hearing Officer

V. BOARD DISCUSSION

While this Order approves the Stipulation in its entirety, we do note that VEC's circumstances have changed significantly since the date the Stipulation was signed. Specifically, on November 15, 1999, the Board issued an Order in Docket 6200 dismissing the petition by the Villages of Barton, Morrisville, and Swanton and the Rural Utilities Service of the United States Department of Agriculture to own and operate VEC's assets. Given the resolution of this critical issue, we are unsure whether the resources are now available to conduct a full-scale review of VEC's IRP.

We note that the DPS will file its recommendation on whether the Board should approve VEC's IRP on December 17, 1999. This filing should also make a recommendation for the next steps in this docket (including whether this docket should be closed). Finally, if the DPS recommends that the Board not approve VEC's IRP and not conduct a full-scale review of it at this time, we would like the DPS to explain the reasoning that leads to this conclusion, in light of current circumstances.

VI. ORDER

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

1. The Findings and Conclusion of the Hearing Officer are adopted.
2. The Stipulation filed October 13, 1999, between Vermont Electric Cooperative, Inc., and the Vermont Department of Public Service is approved in its entirety.
3. VEC shall use, for T&D equipment acquisition, planning, and implementation purposes, the statewide avoided costs and externalities adders approved by the Board in Docket 5980 for use in "System-wide Programs", as that phrase is defined in the Docket 5980 MOU. VEC may propose area-specific avoided costs for the T&D portion of avoided costs.
4. VEC shall adhere to the terms of A Voluntary Program for the Control of Stray Voltage on Farms, and adopt a proactive program that, by June 1, 2001, tests for stray voltage at all VEC dairy farm customers and installs, at VEC's expense, a neutral isolation device if neutral-to-earth voltages in excess of 0.5 Volts are encountered.

5. VEC shall replace regulator controls to maintain substation voltages at one substation by December 31, 1999, four additional substations by December 31, 2000, and three additional substations by December 31, 2001.

6. VEC shall file an evaluation (and implementation plan, if any) of the appropriateness and cost-effectiveness of using 1.5kVA and 5kVA transformers on VEC's system with the Board and the DPS by February 1, 2000.

7. VEC shall complete the conversion of the Derby Line distribution system from 4.16kV to 12.47kV within seven months of the issuance of a final PSB order in Docket No. 5246, if the order results in VEC's retention of Derby Line distribution facilities.

8. VEC shall complete the installation of high-side substation reclosers at its Fairfax #1, Pleasant Valley #13, and Johnson #14 substations by December 31, 2000.

9. VEC shall develop its distribution transformer evaluation multipliers using the spreadsheet appended to the Stipulation as Attachment 3.

10. The Department of Public Service shall file its recommendation on what action the Board should take with respect to VEC's IRP by December 17, 1999.

DATED at Montpelier, Vermont, this 15th day of December, 1999.

<u>s/Michael H. Dworkin</u>)	
)	PUBLIC SERVICE
)	
<u>s/Suzanne D. Rude</u>)	BOARD
)	
)	OF VERMONT
<u>s/David C. Coen</u>)	

OFFICE OF THE CLERK

FILED: December 15, 1999

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 of any technical errors, in order that any necessary corrections may be made. 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.