

STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 18-2850-TF

Tariff filing of Green Mountain Power Corporation re: proposed rate design changes to take effect April 1, 2019	Hearings at Montpelier, Vermont November 27, 2018
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Order entered: 12/21/2018

PRESENT: Anthony Z. Roisman, Chair
Margaret Cheney, Commissioner
Sarah Hofmann, Commissioner

APPEARANCES: Daniel C. Burke, Esq.
for Vermont Department of Public Service

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ORDER APPROVING RATE DESIGN

I. INTRODUCTION

This case concerns the Vermont Public Utility Commission's ("Commission") investigation into Green Mountain Power Corporation's ("GMP") request for rate design changes to take effect April 1, 2019. These rate design changes do not affect the total amount of costs GMP is authorized to recover from ratepayers for the services it provides to customers (the "cost of service").¹ Instead, the rate design changes provide for the reallocation of costs among GMP's rate classes and adjust rates for Residential, General Service, Commercial & Industrial, and Transmission customers accordingly. In today's Order, the Commission finds that the rate schedules and other changes proposed by GMP in this case will result in just and reasonable rates

¹ The current rate case proceeding, Case No. 18-0974-TF, addresses GMP's proposed changes to its cost of service.

and approves the rate design changes to take effect with bills rendered on or after on January 3, 2019.²

Over the course of this proceeding, the Vermont Department of Public Service (“Department”) raised concerns regarding whether GMP’s rate design proposal adequately addresses the policy considerations that were contemplated in the Memorandum of Understanding between the parties in Docket 8525 (the “Docket 8525 MOU”), GMP’s last rate design case. The Docket 8525 MOU provided that GMP’s next rate design proposal would reflect rate structures designed “to leverage the benefits of smart meters... and to provide opportunities and incentives for customers to participate in real-time grid conditions through intelligent control and choreography of customer devices.”³ GMP asserts that its current petition and supporting testimony describe several rates and riders currently offered to customers that meet the terms of the Docket 8525 MOU. This issue was further explored by the Commission and the parties at the evidentiary hearing.

In post-hearing briefs, GMP and the Department agreed that the Commission does not need to decide whether the tariff petition satisfies the terms of the Docket 8525 MOU so long as the Commission includes as a condition of approval a requirement that the parties report by the end of 2019 on the status of rate design innovation efforts. We accept the parties’ proposal for reporting requirements and do not decide in today’s order whether GMP’s tariff filing satisfies the terms of the Docket 8525 MOU. Though the parties have not identified the specific content of the reports, we expect that the parties will incorporate the guidance and expectations described below in the report submissions. Further, we require the parties to file an interim report by July 1, 2019, in addition to the final report that is due by December 30, 2019.

² GMP’s initial petition requested an effective date of April 1, 2019. However, the Commission established a schedule in this case to align implementation of rate design changes with other rate changes as a result of the final orders issued in the rate case proceeding (Case No. 18-0974-TF) and in the proceeding reviewing the special contract between GMP and GlobalFoundries (Case No. 18-3160-PET). Accordingly, the effective date for the rate design changes is January 3, 2019.

³ See PSD-Cross-1 at 4.

II. PROCEDURAL HISTORY

On August 3, 2018, GMP filed its proposed rate design reallocation, requesting changes to the design of its rate structure.

On August 6, 2018, GlobalFoundries U.S. 2 LLC filed a motion to intervene.

On August 21, 2018, the Commission issued a memorandum requesting that the Department file its recommendation on whether an investigation should be opened and the appropriate hearing process for the case given the April 1, 2019, effective date.

On September 6, 2018, the Department recommended that the Commission open an investigation and proposed a schedule that would allow the rate design changes to be implemented in conjunction with the changes authorized in the rate case proceeding, Case No. 18-0974-TF (the “2019 Rate Case”).

On September 20, 2018, the Commission held a status conference to discuss the schedule for this proceeding. Notice of the status conference was also provided in the 2019 Rate Case as well as in Case Nos. 18-1633-PET and 18-3160-PET, which concern GMP’s proposal for a multi-year rate plan and GMP’s proposed special contract with GlobalFoundries, respectively.⁴ At the status conference, the Commission granted the motion to intervene filed by GlobalFoundries.

On September 21, 2018, the Commission issued an order opening this investigation into GMP’s proposed rate design changes and adopted a schedule that would allow implementation of changes in conjunction with the effective date of changes authorized in the 2019 Rate Case.

On October 10, 2018, the Commission conducted a public hearing in Rutland, Vermont.

On November 27, 2018, an evidentiary hearing was held in the Susan M. Hudson Hearing Room at the Commission’s offices in Montpelier, Vermont. The parties stipulated to the admission of the prefiled testimony and exhibits identified in a document labeled Exhibit Commission-1.

On December 4, 2018, GMP, the Department, and GlobalFoundries filed briefs. GMP also filed its proposed findings of fact and a proposed order. No reply briefs were filed.

⁴ On October 18, 2018, the Commission issued an order in Case No. 18-3160-PET finding good cause to issue a final decision on GMP’s proposed special contract with GlobalFoundries concurrently with decisions in this proceeding and in the 2019 Rate Case proceeding. Accordingly, the special contract is addressed in a separate order.

III. PUBLIC COMMENTS

A public hearing in this proceeding was held at the Rutland Free Library on October 10, 2018. No members of the public spoke at the public hearing. One individual indicated that her questions were answered at the information session hosted by the Department that was held just prior to the public hearing. The Commission received a handful of written public comments. Although these comments were not directly related to the rate class allocation issues being investigated in this case, the commenters raised concerns regarding the cost of electricity, the utilization of renewable energy sources, and the need to upgrade electric lines.^{5,6}

IV. FINDINGS

A. Overview of GMP's Rate Design Proposal

1. GMP's proposed rate design is based on an embedded cost-of-service study. A fully allocated embedded cost-of-service study assigns the utility's costs to provide service to each rate class based on the principle of cost causation. Scott Anderson, GMP ("Anderson") pf. at 19.
2. When the embedded cost-of-service study results are applied to GMP's existing rate design, only 3.9% of revenue is identified to be redistributed among the customer classes. Therefore, the current class allocations are generally consistent with the class allocations called for in the study. As a result, GMP has proposed modest allocation shifts from some customer classes to other customer classes in its rate design proposal. Anderson pf. at 20; exh. GMP-SRA-5.
3. In the embedded cost-of-service study, GMP allocated its total revenue requirement of \$626,580,000 among the rate classes. This amount represents the revenue requirement

⁵ Two comments expressed concern that customers did not receive notice of the public hearing in their GMP bills until after the date that the public hearing was held. Unfortunately, a portion of GMP's customers did not receive notice of the public hearing on their bills in advance of the hearing. However, notice of the hearing was published on the Commission's website as well as in the October 3 or 4 editions of nine newspapers around the state.

⁶ The Commission also received an anonymous comment that raised specific issues about the Department's advocacy in the 2019 Rate Case proceeding. Parties in related proceedings concerning GMP were given an opportunity to respond to the anonymous comment. The Commission addresses these issues in the 2019 Rate Case final order.

approved for the 2018 rate year. Accordingly, GMP's proposed rate design is revenue-neutral. David Heintz, GMP ("Heintz") pf. at 8; Anderson pf. at 32.

4. When GMP acquired Central Vermont Public Service Corporation ("CVPS"), it committed to a process to integrate the CVPS legacy rates. The proposed rate design will result in minimal disruption to the remaining schedule of phase-in rates for affected customers. The rate-class integration process will be complete on April 1, 2020. Anderson pf. at 6, 8.

5. GMP's proposed rate design results in percentage changes across an entire rate class. There are no changes to individual unit prices within a rate class (such as increasing kWh prices and decreasing kW prices). Anderson pf. at 8-9.

6. GMP's proposed rate design changes are reasonable, and the class reallocations will provide for rates that are just, reasonable, adequate, efficient, and fair. Riley Allen, Department ("Allen") pf. at 6-7.

B. Rate Design Methodology

7. GMP primarily relied on an embedded cost-of-service study in developing its rate design proposal. An embedded cost-of-service study relies on historical costs and directly allocates "current accounting costs associated with past investments that were made to deliver past and current levels of service." Sean Foley, Department ("Foley") pf. at 4.

8. An embedded cost-of-service study is adequate and sufficient to support GMP's proposed rate design. Anderson pf. 27-28; tr. 11/27/18 at 18-19 (Anderson).

9. A marginal cost-of-service study identifies the incremental costs of serving additional customers in the future and is useful for informing rate designs because of the relationship between well-informed prices and economic decisions. Foley pf. at 4.

10. A marginal cost-of-service study "provides utilities with valuable information for crafting appropriate price signals" when determining rate design adjustments. Allen pf. at 8.

11. Marginal cost studies provide an additional point of reference to ensure that prices are set to at least cover marginal cost and to identify the rationale for price differentiation among classes based on the forecasted marginal costs to serve each customer class. Foley pf. at 5.

12. GMP maintains an understanding of its marginal costs for all rate classes. The class allocations proposed under this rate design cover marginal costs for each rate class. Anderson pf. 27-28; tr. 11/27/18 at 18-19 (Anderson).

13. It would be appropriate for GMP to conduct a formal marginal cost-of-service study with its next rate design proposal. Tr. 11/27/18 at 19 (Anderson) and 86 (Allen).

C. Specific Design Changes to Rate Class Allocations

14. GMP's rate design consists of 13 rate classes. Of those 13 rate classes, the following five rate classes constitute 96% of GMP's overall revenue requirement: Residential Rate 1, General Service Rate 6, General Service Rate 8, Commercial & Industrial Rate 63/65, and Transmission Rate 70. Anderson pf. at 21-22; exh. GMP-SRA-2.

15. The embedded cost-of-service study suggests a 2.8% decrease to the Residential Rate 1 class revenue requirement. GMP's proposed rate design provides for a 0.44% decrease to Rate 1. Anderson pf. at 22.

16. The embedded cost-of-service study suggests an 8.0% decrease to General Service Rate 6 and a 4.5% increase to General Service Rate 8. GMP proposes a 1.0% decrease to Rate 6 and 1.0% increase to Rate 8. Anderson pf. at 22.

17. The embedded cost-of-service study suggests a 3.4% increase to Commercial & Industrial Rate 63/65. GMP proposes a 1.0% increase to Rate 63/65. Anderson pf. at 23.

18. The embedded cost-of-service study suggests a 2.9% increase to Transmission Rate 70. GMP proposes a 2.73% decrease to Rate 70. Anderson pf. at 23.

19. The embedded cost-of-service study results should not be exclusively adopted without other considerations. The study should be used as an indicative tool. Anderson pf. at 19.

20. Maintaining rate stability is an important consideration in any rate design proposal. GMP's proposed allocation avoids immediate, significant cost shifts for any customer class. Allen pf. at 6.

21. It is sometimes appropriate to deviate from the embedded cost-of-service study results by allocating less of the “common costs” suggested by the study to a customer class. Anderson pf. at 28.

22. GlobalFoundries is the only customer currently served under Rate 70. It is the largest private employer in the state (approximately 2,500 employees) and pays its employees well above the average wage and total compensation package earned by most working Vermonters. Anderson pf. at 26; exh. GF-AW-1 at 8.

23. GlobalFoundries owns and pays to maintain its own distribution system and step-down transformers that connect to GMP’s transmission system. GlobalFoundries does not use GMP’s distribution system. Exhs. GF-PF-1 at 5-7 and GF-AW-1 at 4.

24. Energy costs are a primary determinant of the competitiveness of GlobalFoundries’ operations in Vermont. GlobalFoundries faces competition from other semiconductor manufacturers around the country and internationally with facilities that pay significantly less for electricity than GlobalFoundries does in Vermont. Exh. GF-PF-1 at 8.

25. To maintain its ability to compete in the semiconductor manufacturing market, GlobalFoundries states that it is imperative to reduce electricity costs. Any increase in electricity costs would have a direct and harmful impact on the competitiveness of the Vermont facility. Exh. GF-PF-1 at 8.

26. Although the allocation for Rate 70 deviates from the embedded cost-of-service study because GMP proposes a reduction rather than an increase, GlobalFoundries will contribute “significant revenue” beyond its marginal cost of service under GMP’s rate design proposal. Anderson pf. at 27.

27. The proposed Rate 70 allocation provides an incentive for GlobalFoundries to maintain ongoing manufacturing operations in Vermont. Allen pf. at 7.

28. GMP’s rate design approach strikes an appropriate balance of promoting affordability while encouraging economic development. Allen pf. at 6.

29. GMP’s rate design proposal puts “downward pressure on residential rates without overburdening business and commercial rates.” Allen pf. at 6.

D. Innovative Rate Offerings

30. Residential customers may elect to receive service under Rate 9 or 14, both of which provide critical peak pricing. Residential customers may also elect to control their water-heating and storage-space-heating equipment via separate meters under Rates 3 and 13, which offer reduced rates. Residential customers may elect for time-of-use pricing under Rate 11, which offers lower-priced, off-peak prices. Anderson pf. 15-16; exh. GMP-SRA-2.

31. Residential customers may also participate in load control initiatives via the Tesla Powerwall rider. Anderson pf. at 16.

32. General Service customers that average more than 7,600 kWh per month during any four consecutive months are required to take service under time-of-use rates. Commercial & Industrial customers have mandatory time-of-use rates. Anderson pf. at 15-16.

33. GMP bills customers under each of these demand-response options using the information gathered through its advanced metering infrastructure equipment. Anderson pf. at 16.

34. GMP's proposed rate design does not reflect any new innovative approaches that further leverage the benefits of smart meters or any new rate structures designed to provide opportunities and incentives for customers "to participate in real-time grid conditions through intelligent control and choreography of customer devices." Allen pf. at 5.

V. DISCUSSION

In this proceeding, GMP proposes a revenue-neutral rate design that involves the reallocation of less than 4% of its total revenue collection. GMP conducted an embedded cost-of-service study and presented additional analysis described in the findings above. The proposal also includes administrative changes and clerical corrections to the terms and conditions of GMP's tariffs.

The Department testified that a marginal cost-of-service study would have been helpful to provide additional points of information, which might have allowed GMP to design appropriate price signals. Such signal could allow GMP customers to make informed decisions about their electricity use. Importantly, the Department also testified that it "does not find that the lack of a

marginal cost-of-service [study] is a fatal flaw for the pending rate design.”⁷ We agree that the embedded cost-of-service study and additional analysis performed by GMP are sufficient to support the proposed rate design in this proceeding. We conclude that GMP has appropriately addressed the fundamental rate design principles of adequacy, efficiency, and fairness as set forth by James Bonbright in *Principles of Public Utility Rates* (1961) and find that the proposed rate design will result in just and reasonable rates.

The Department recommends that the Commission require GMP to undergo and present a marginal cost-of-service study in its next comprehensive rate design proposal filing.⁸ GMP accepts the Department’s recommendation.⁹ We recognize the importance of using marginal cost study results to inform GMP’s next rate design proposal and hereby require GMP to perform a marginal cost-of-service study, to present the findings, and to demonstrate how the results were used in its next comprehensive rate design proposal filing.

GMP’s rate design proposal includes a 2.73% reduction for Rate Class 70, GMP’s only transmission class. GlobalFoundries is the only customer served under this rate class.¹⁰ GMP asserts that the proposed adjustment will “provide important incentives for GMP’s largest customer, and Vermont’s largest manufacturer and private employer, to continue its manufacturing operations in Vermont to the benefit of all GMP customers and in keeping with state energy policy as outlined in 30 V.S.A. § 218e.”¹¹ In further support, GMP states that this allocation proposal “includes a contribution to fixed costs in excess of GMP’s marginal cost to serve GlobalFoundries...”¹² The Department agrees that GMP’s proposed rate reallocation for Rate Class 70 will “promote Vermont energy policy as codified under 30 V.S.A. § 218e and result in rates that are adequate, efficient, and fair for GMP’s entire customer base.”¹³ We recognize the importance of GlobalFoundries’ contributions to Vermont’s economy and agree

⁷ Allen pf. at 5.

⁸ Department brief at 2.

⁹ GMP brief at 6.

¹⁰ The proposed adjustment is also presented as a component of GMP’s proposed special contract with GlobalFoundries that is being considered by the Commission in Case No. 18-3160-PET.

¹¹ 30 V.S.A. § 218e states that “it is critical to retain and recruit manufacturing and other businesses and to consider the impact on manufacturing and other businesses when issuing orders, adopting rules, and making other decisions affecting the cost and reliability of electricity and other fuels.”

¹² GMP brief at 2.

¹³ Allen pf. at 8.

with GMP's and the Department's assessments that the proposed adjustment to Rate Class 70 is appropriate and aligned with the policies identified in 30 V.S.A. § 218e.

GMP states that its petition and supporting testimony describe "in detail the several rates and riders currently offered to customers that meet the terms of the Docket 8525 MOU, and the petition supports the continued use of innovative rate structures."¹⁴ The Department testified that GMP's proposed rate design does not reflect any new innovative approaches, while GMP argued that the Docket 8525 MOU did not require "new offerings beyond what GMP has developed prior to this rate design proposal."¹⁵ The Department testified that GMP could do more to offer dynamic rate design options to its customers.¹⁶ GMP and the Department have agreed that if the Commission requires a reporting condition on GMP's innovative tariff offerings and other dynamic rate service, it is not necessary to resolve whether the proposed rate design complies with the Docket 8525 MOU.

We adopt the parties' proposal for a reporting requirement and require GMP and the Department to report by no later than December 30, 2019, on the status of: "(1) the Department's policy discussions with Vermont's distribution utilities regarding dynamic rates; and (2) proposed next steps and timing regarding additional innovative tariff offerings and other dynamic rate services [offered] by GMP."¹⁷ In addition, we require an interim report to be filed by no later than July 1, 2019. These reports should be filed in the compliance portion of this case.

It is important for the Commission to understand in these reports how GMP is making its decisions related to innovative rate offerings. Therefore, in addition to the information described above, the Commission requires GMP to include in its reports more detail on the programs currently being offered to its customers that it believes are innovative services. GMP should include a quantitative assessment that shows participant numbers and other relevant information as well as a qualitative assessment that explains GMP's efforts to ensure appropriate levels of participation (including details on marketing strategies and efforts to educate customers on rate

¹⁴ GMP brief at 4.

¹⁵ GMP brief at 4.

¹⁶ Tr. 11/27/18 at 57 (Foley).

¹⁷ GMP proposed findings of fact and order at 32.

choices), how GMP intends to grow each successful program, and cost/benefit breakdowns, as appropriate.

VI. CONCLUSION

In conclusion, based on the evidence presented in this case, the Commission finds that GMP's rate design will result in just and reasonable rates. The record supports GMP's proposal to deviate from the embedded cost-of-service study results. Furthermore, the deviations are reasonable and justified, and they promote rate stability for GMP's ratepayers. All proposed changes to GMP's tariffs are hereby approved.

VII. ORDER

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED by the Vermont Public Utility Commission (“Commission”) that:

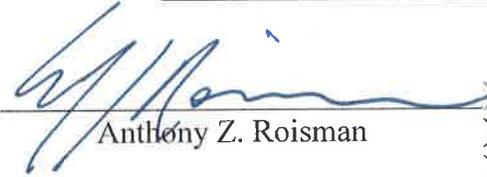
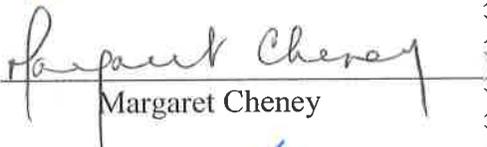
1. The rates proposed by Green Mountain Power Corporation (“GMP”) are just and reasonable, and are therefore approved, to be effective with bills-rendered on or after January 3, 2019. All changes proposed in GMP’s tariff filing petition are also approved and shall take effect on the same date.

2. GMP and the Department of Public Service (“Department”) shall file in the compliance portion of this case an interim report by July 1, 2019, and a report by December 30, 2019, jointly if they agree, or separately if they do not, on the information described above regarding innovative rate design efforts.

3. GMP shall include a formal marginal cost-of-service study with its next comprehensive rate design proposal.

4. Within 10 days, GMP shall file tariffs in compliance with this Order that reflect the approved rate design, the January 3, 2019, effective date, and any other tariff changes approved by the Commission in related cases.

Dated at Montpelier, Vermont this 21st day of December, 2018.

)	PUBLIC UTILITY
Anthony Z. Roisman)	
)	COMMISSION
Margaret Cheney)	
)	OF VERMONT
Sarah Hofmann)	

OFFICE OF THE CLERK

Filed: December 21, 2018

Attest: 
Clerk of the Commission

Notice to Readers: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Commission (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: puc.clerk@vermont.gov)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Commission within 30 days. Appeal will not stay the effect of this Order, absent further order by this Commission or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Commission within 28 days of the date of this decision and Order.

PUC Case No. 18-2850-TF - SERVICE LIST

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