

**STATE OF VERMONT  
PUBLIC UTILITY COMMISSION**

Case No. 18-1633-PET

Petition of Green Mountain Power for approval of     )  
a multi-year regulation plan pursuant to 30 V.S.A.     )  
§§ 209, 218, and 218d     )

**Green Mountain Power's Responses to the  
First Set of Discovery Requests Served by Renewable Energy Vermont**

Green Mountain Power ("GMP" or "Petitioner"), by and through the undersigned counsel, hereby responds to the first set of discovery requests served by Renewable Energy Vermont ("REV") on September 12, 2018.

**General Objections**

The following General Objections of Petitioner GMP are incorporated by reference into its responses to each Interrogatory, Request to Produce, and Request for Admissions reproduced below, whether or not an objection is stated in any particular response. Any response to one of the Interrogatories, Requests to Produce, or Requests for Admission given below is given without waiver of any objection, whether or not an objection is stated.

1. Petitioner objects to each Interrogatory, Request to Produce, and Request for Admission reproduced below to the extent that it is overbroad, irrelevant, unduly burdensome, or not proportional to the needs of the case.
2. Petitioner objects to each Interrogatory, Request to Produce, and Request for Admission reproduced below to the extent that it calls for the disclosure of information or production of material privileged under the attorney-client, work-product, or any other applicable privilege.
3. Petitioner objects to each Interrogatory, Request to Produce, and Request for Admission reproduced below to the extent that it is unreasonably cumulative or duplicative, or calls for the disclosure of information or production of material that is obtainable from some other source that is more convenient, less burdensome, or less expensive, including, but not limited to, information or material that is publicly available or that has already been disclosed or produced to you in connection with another proceeding.
4. Petitioner objects to each Interrogatory, Request to Produce, and Request for Admission reproduced below to the extent that it calls for the disclosure or production of confidential or proprietary information, trade secrets, or material.

5. Petitioner objects to each Interrogatory, Request to Produce, and Request for Admission reproduced below to the extent that it is vague, unintelligible, requires speculation as to the information being sought, or is otherwise incapable of a reasonable answer.
6. Petitioner objects to each Instruction and Definition listed in the requesting party's discovery requests to the extent that it exceeds the bounds of permissible discovery or is unduly burdensome.
7. Petitioner objects to each Interrogatory, Request to Produce, and Request for Admission to the extent that the request exceeds the scope of Petitioner's testimony and exhibits.
8. Petitioner objects to each Interrogatory, Request to Produce, and Request for Admission to the extent that the request would require Petitioner to conduct extensive document review, additional studies, analyses, and/or tests as part of its response.
9. Petitioner objects to each Interrogatory, Request to Produce, and Request for Admission to the extent that the request exceeds the scope of the requesting party's intervention.
10. Petitioner objects to each Interrogatory, Request to Produce, and Request for Admission to the extent that the request exceeds the scope of the issues on review.
11. Petitioner objects to each Interrogatory, Request to Produce, and Request for Admission to the extent that it calls for a legal conclusion.

**INTERROGATORIES AND REQUESTS TO PRODUCE**

**Q:REV:GMP.1-1: With respect to Mary Powell’s testimony at page 2, lines 6-11 which states:**

**Vermont has not yet truly grappled with how we can keep ourselves on a transformational path for energy delivery while ensuring that customers (both residential and commercial) are protected from the potentially skyrocketing costs associated with promoting self-supply, integrating additional renewables, meeting regional transmission needs, recovering from more frequent storms, and hardening the grid physically and digitally.**

- a. Identify, describe and produce all documents that support your claim that “promoting self-supply” may lead to “potentially skyrocketing costs”.**
- b. Explain what you mean by “integrating additional renewables” as stated at line 9.**
- c. Identify and describe the “additional renewables” that your testimony references.**
- d. Identify, describe and produce all workpapers, data, financial and empirical analyses relied upon that quantifies the potential “skyrocketing costs” associated with “additional renewables.”**

**A:REV:GMP.1-1:**

- a. The risk derives from the fact that the effective cost of additional net-metered generation (including reduced retail sales, siting and REC adjustors, and net metered excess) to GMP customers is much higher than the near-term value of the output, and much higher than the cost to procure equivalent volumes of solar PV from alternative Vermont sources like Standard Offer and Power Purchase Agreements. In addition, the pace of net-metered generation growth is not presently capped. See Attachment GMP.REV1.Q1.1.

Please also see the Vermont Public Service Department’s March 1, 2018 comments in Case No. 18-0086-INV, in which the Department explains fundamental changes to the Vermont electric system that cause incremental distributed solar generation to provide minimal transmission and distribution benefits. See Attachment GMP.REV1.Q1.2. The Department also describes (page 11) the widening gap between the cost and value of incremental net-metered generation to customers.

- b. Integrating additional renewables refers to the installation and interconnection of additional renewable energy resources, along with the potential for increasing ISO-NE operating reserve requirements.

- c. The response was not referring to any specific projects, but rather was noting that integration of additional renewable resources may potentially lead to further increased costs for customers. To the extent that additional renewables increase required operating reserves in the ISO-NE market, this would likely be driven by the penetration of renewables across the region as a whole.
- d. See response to subpart (a), above.

Person/s Responsible for Response: Doug Smith, Kristin Carlson  
Title of Person/s: Chief Power Supply Executive; VP, External, Strategic and Regulatory Affairs  
Date: October 8, 2018

**Q:REV:GMP.1-2: Admit that GMP's power supply costs decreased by over \$33 million between the 2014 test year and 2018. If denied, explain in detail why denied and produce all documents supporting your explanation.**

Objection: GMP reasserts General Objection 5. The question is vague and ambiguous in its reference to the "2014 test year." This phrase could refer to the calendar year period 2014, or to the test year in the 2014 rate case, which was April 2012 to March 2013. The phrase "power cost" is also vague because it does not define which components of GMP's cost of service are included in the term. Nevertheless, without waiving its objection, GMP responds as follows.

A:REV:GMP.1-2: Denied. This question appears to be based on statements made by Mr. Winn in his prefiled direct testimony in the 2019 rate case, Case No. 18-0974-TF. The data reported by Mr. Winn in his testimony did not provide an apples-to-apples comparison and therefore the assumptions drawn there are incorrect. GMP's reported purchased power and production costs in the test period of April 2012 to March 2013 were about \$323 million and estimated net power costs contained in the settled rate case for calendar year 2018 were about \$289 million, which would indicate a decrease of over \$33 million. However, a large portion (approximately \$29 million) of the nominal change in power costs over this period was due to a change in how resale revenues were reported, as opposed to a decline in GMP's net power costs. Moreover, a portion of the decline is directly attributable to the addition of Kingdom Community Wind to GMP's owned generation portfolio, which was a rate base investment in generation designed to reduce power costs. See also GMP's Responses to the Third Set of Discovery Requests Served by the Department of Public Service ("DPS," "PSD," or "Department"), Answers 17, 18, 26 (Case No. 18-0974-TF, Sept. 28, 2018).

Person/s Responsible for Response: Chuck Watts, Doug Smith  
Title of Person/s: Power Supply Analyst; Chief Power Supply Executive  
Date: October 8, 2018

**Q:REV:GMP.1-3: Admit that between 2013 and 2018, GMP's power costs decreased by approximately 10.37%. If denied, explain in detail why denied and produce all documents supporting your explanation.**

Objection: GMP reasserts General Objection 5. The phrase "power cost" is also vague because it does not define which components of GMP's cost of service are included in the term. Nevertheless, without waiving its objection, GMP responds as follows

A:REV:GMP.1-3: Denied. Please see response to REV:GMP.1-2.

Person/s Responsible for Response: Chuck Watts, Doug Smith  
Title of Person/s: Power Supply Analyst; Chief Power Supply Executive  
Date: October 8, 2018

**Q:REV:GMP.1-4: Mary Powell’s testimony at p. 18, A19, lines 26–27 states that “transmission expense has increased by roughly 20% in the last three years ... .” Please reconcile this claim with the following testimony from Mr. Winn in the 2019 Base Rate Case regarding transmission costs between 2013-2018: “Net Transmission costs have remained relatively stable with a \$2.8 million decline.”<sup>1</sup>**

Objection: GMP reasserts General Objection 6. The question is argumentative and calls for GMP to adopt the premise that Mr. Winn’s testimony is correct and requires “reconciliation” with Ms. Powell’s testimony. Nevertheless, without waiving its objection, GMP responds as follows.

A:REV:GMP.1-4: Ms. Powell’s testimony refers to expenses paid to third-party transmission providers, which are primarily ISO-New England and Transco/VELCO. Mr. Ryan, in his rebuttal testimony in Case No. 18-0974-TF, discusses the issues with Mr. Winn’s assertion that transmission costs between 2013 – 2018 “have remained relatively stable with a \$2.8 million decline.” This assertion does not accurately reflect the transmission cost increases because Mr. Winn has combined the transmission expenses paid to third parties with the equity in earnings received from Transco/VELCO. *See* GMP’s Responses to the Third Set of Discovery Requests Served by the DPS, Answers 17, 18, 26 (Case No. 18-0974-TF, Sept. 28, 2018); Ryan Rebuttal Testimony at 4, 13 (Case No. 18-0974-TF, Sept. 12, 2018).

Person/s Responsible for Response: Eddie Ryan, Karen Young  
Title of Person/s: Controller; Budget/Forecasting Supervisor  
Date: October 8, 2018

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<sup>1</sup> PSD Direct Testimony of Brian E. Winn. August 10, 2018, Page 11 of 29.

**Q:REV:GMP.1-5: Mary Powell’s testimony at page 8 lines 20-21 states that GMP’s proposal regarding capital expenses “[i]s supported by a well-informed capital planning process.” How do you reconcile this assertion in light of the following testimony of DPS Witness Brian Winn in the 2019 Rate Case:**

**Kevin Mara of GDS Associates conducted a review of GMP’s capital spending proposals and identified the following weaknesses in the support documentation: cost estimate errors; failure to use an industry standard method to value and prioritize reliability projects; insufficient data to justify capital spending proposals; unnecessary capital projects; and overuse of blanket projects. Additionally, GMP did not evaluate, or solicit requests for proposals for, viable alternatives to the Storage/Solar JV or Tesla Powerwall projects.<sup>2</sup>**

Objection: GMP reasserts General Objection 6. The question is argumentative and calls for GMP to adopt the premise that Mr. Winn’s testimony is correct and requires “reconciliation” with Ms. Powell’s testimony. Nevertheless, without waiving its objection, GMP responds as follows.

A:REV:GMP.1-5: GMP disagrees with the characterization implied in the question about capital planning. GMP has delivered strong operational performance and results for our customers over recent years, as have been described in other areas of our testimony. All aspects of our operations, including our capital planning process, drive our performance. While we respect the feedback from Mr. Winn and the Department’s hired consultants, we also know that good operating performance and planning can be achieved through a variety of methods. See also Otley Rebuttal Testimony at 4 (Case No. 18-0974-TF, Sept. 12, 2018); Fiske Rebuttal Testimony at 11–30 (Case No. 18-0974-TF, Sept. 12, 2018).

Person/s Responsible for Response: Brian Otley  
Title of Person/s: Senior VP and Chief Operations Officer  
Date: October 8, 2018

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<sup>2</sup> PSD Direct Testimony of Brian E. Winn. August 10, 2018, Page 15 of 29.



**Q:REV:GMP.1-6: What actions is GMP planning to undertake during the MYRP to improve its capital planning process in light of these DPS concerns?**

Objection: GMP reasserts General Objection 6. The question is argumentative and calls for GMP to adopt the premise that its capital planning process requires improvement in light of DPS's perceived need for improvement. Nevertheless, without waiving its objection, GMP responds as follows.

A:REV:GMP.1-6: GMP has worked with the Department over the past two rate proceedings to establish the documentation standards by which our capital projects are described and reviewed. We believe the current standard we are conforming to provides the appropriate documentation to support the projects we recommend to be delivered on behalf of our customers. In addition, the multi-year proposal requires GMP to meet set base capital spending amounts, with specific process regarding additional spending for innovative projects or unanticipated initiatives that benefit customers. This is a difference from the current process that puts additional risk on GMP to manage its capital spending compared to the status quo. See Otley Prefiled Direct Testimony at 14 (Case No. 18-1633-PET, June 4, 2018); Otley Rebuttal Testimony at 19 (Case No. 18-0974-TF, Sept. 12, 2018); GMP's Responses to the First Set of Discovery Requests Served by the DPS, Answers 38 and 39 (Case No. 18-0974-TF, June 15, 2018).

Person/s Responsible for Response: Brian Otley  
Title of Person/s: Senior VP and Chief Operations Officer  
Date: October 8, 2018

**Q:REV:GMP.1-7: Admit that growth in GMP rate base is the single largest driver of GMP's proposed rate increase in the 2019 Rate Case. If denied, explain in detail why denied and produce all documents supporting your explanation.**

A:REV:GMP.1-7: Denied. Please see Attachment GMP.REV1.Q7 which contains both the chart showing the rate drivers as well as the backup calculations. See also GMP's Responses to the Third Set of Discovery Requests Served by the DPS, Answer 17 (Case No. 18-0974-TF, Sept. 28, 2018); Otley Rebuttal Testimony at 1 (Case No. 18-0974-TF, Sept. 12, 2018); Ryan Rebuttal Testimony at 12–14 (Case No. 18-0974-TF, Sept. 12, 2018). Change in Purchased Power Supply expense combined with declining retail sales are the two largest drivers, lower sales also mean that local and regional infrastructure costs must be spread over fewer kWh.

Person/s Responsible for Response: Rob Bingel  
Title of Person/s: Manager, Forecasting & Analytics  
Date: October 8, 2018

**Q:REV:GMP.1-8: Admit that the growth in GMP's rate base between 2014 and (as proposed in 2019) represents a 34.1% increase in less than 5 years. If denied, explain in detail why denied and produce all documents supporting your explanation.**

A:REV:GMP.1-8: Denied as stated. The 34.1% figure does not represent a fair breakdown of GMP's rate base change: 16.1% of the increase from 2014 to GMP's filed 2019 cost of service comes from Transco investments, which actually reduce costs for customers, with the remaining 18% coming from non-Transco investments. In a cost of service filing, GMP includes the Transco investment in rate base and *credits* the cost of service for the Transco equity in earnings to benefit customers. The proposed 2019 filing includes a cost of service credit of \$53.2M for the Transco earnings for the nine-month period ended September 30, 2019. This represents a nine-month return on the filed 2019 Transco rate base of 11.03%, which is well above the 2019 filed pre-tax weighted average cost of capital of 6.62% for the nine-month period ended September 30, 2019. That means that the Transco rate base investment saves customers' money, not the opposite as this question presumes. The Transco investment is great for our customers. Every dollar invested results in a lower cost of service. Every GMP investment in Transco provides a net benefit for our customers—the benefits exceed the costs—particularly since without the benefits generated by the investment, GMP's customers would still pay any increased transmission expenses incurred in connection with VELCO projects. *See* GMP's Responses to the Third Set of Discovery Requests Served by the DPS, Answers 17, 18, 26 (Case No. 18-0974-TF, Sept. 28, 2018); Ryan Rebuttal Testimony at 4, 13 (Case No. 18-0974-TF, Sept. 12, 2018).

2014 Data Source: ESAM Filing

Dollars in Thousands	<u>Rate</u>		<u>Percentage</u>	
	<u>Period</u>		<u>Change of</u>	
	<u>2019</u>	<u>FY2014</u>	<u>Difference</u>	<u>Total Rate Base</u>
Transco Investment Rate Base	\$482,539	\$294,442	\$188,097	16.1%
Non-Transco Rate Base	\$1,081,247	\$871,343	\$209,905	18.0%
Total Rate Base	\$1,563,786	\$1,165,784	\$398,002	34.1%
Transco Equity in Earnings	\$53,236			
Return on Transco Investment	11.03%			

Person/s Responsible for Response: Rob Bingel, Karen Young, and Eddie Ryan  
Title of Person/s: Manager, Forecasting & Analytics; Budget/Forecasting Supervisor;  
Controller  
Date: October 8, 2018

**Q:REV:GMP.1-9: Admit that in the 2019 Rate Case, GMP is proposing that its investments in subsidiaries to increase by \$143.1 million. If denied, explain in detail why denied and produce all documents supporting your explanation.**

A:REV:GMP.1-9:

Denied. The \$143.1 million represents the 10-month average test year to rate year change in investments in affiliates. The increase in investment in affiliates reflected in existing rates (GMP's 2018 base rate filing) to the level proposed in GMP's 2019 filing is \$52.9 million.

**Comparison of 2018 and 2019 Ratebases**

in (\$000s)

	2018 Filing (11-9-17)	2019 Filing (4-13-18)
Investment in Affiliates		
Generation Vermont Yankee	939	939
Generation Maine Yankee	43	39
Generation Connecticut Yankee	34	36
Generation Yankee Atomic	52	52
Green Lantern	1,003	957
Transmission NE Hydro Trans	191	209
Transmission NE Hydro Trans Electric	522	1,149
Transmission VELCO - Common	10,414	10,253
JV Microgrid	0	31,632
JV Solar	56,337	53,290
Transmission TRANSCO LLC	<u>579,926</u>	<u>603,839</u>
	649,461	702,395

Person/s Responsible for Response: Rob Bingel, Karen Young, and Eddie Ryan  
Title of Person/s: Manager, Forecasting & Analytics; Budget/Forecasting Supervisor;  
Controller  
Date: October 8, 2018

**Q:REV:GMP.1-10: Please explain why Exh. GMP-ER-1 Attachment 1 (the proposed Multi-Year Regulation Plan), lists Investments in Affiliates as being subject to annual forecast adjustments instead of the \$85 million fixed capital spending you discuss in A9 to your prefiled testimony.**

A:REV:GMP.1-10: In a cost of service filing, GMP includes the investments in affiliates in rate base and also includes the equity in earnings from affiliates as a reduction to the cost of service. Transco represents GMP's single largest investment in affiliate constituting more than 85% of GMP's total investments in affiliates. As discussed in more detail in response to REV:GMP.1-8, additional investments in Transco result in a lower cost of service because of the equity in earnings credit earned on our investment. Because of the clear benefits to customers created by these investments, it is best to incorporate the most current forecasts of affiliate investments and earnings when preparing the annual cost of service under the Multi-Year Regulation Plan (MYRP). It should also be noted the MYRP requires Commission approval for any equity contributions to new affiliates.

Person/s Responsible for Response: Rob Bingel, Karen Young, and Eddie Ryan  
Title of Person/s: Manager, Forecasting & Analytics; Budget/Forecasting Supervisor;  
Controller  
Date: October 8, 2018

**Q:REV:GMP.1-11: Admit that this proposed \$143.1 million increase in GMP's investments in subsidiaries will increase the base rate revenue requirement (excluding the impact of the lower tax rates and one-time credits) by approximately \$14.5 million from the test year period. If denied, explain in detail why denied and produce all documents supporting your explanation.**

A:REV:GMP.1-11: Denied as stated. See REV:GMP.1-8 and -9 above. A \$143.1 million test period to 2019 rate period increase in rate base will increase the 2019 rate period revenue requirement by \$9.5 million (\$143.1 million times 6.62% (2019 rate period pre-tax weighted average cost of capital)). However, the \$9.5 million is *not* the amount reflected in the 2019 rate period revenue deficiency from ultimate consumers. This deficiency is calculated by deducting expected rate period revenue from the rate period revenue requirement. The rate period revenue is based on rates currently in effect which incorporate the impact of the approved GMP 2018 base rate filing. As noted in the response to REV:GMP.1-9, the increase in investment in affiliates from the 2018 filing to the proposed 2019 filing is \$52.9 million, not the much higher figure cited. Also, this question does not reflect the benefits customers receive from these investments which are discussed more fully in the response to REV:GMP.1-8.

Person/s Responsible for Response: Eddie Ryan, Karen Young  
Title of Person/s: Controller; Budget/Forecasting Supervisor  
Date: October 8, 2018

**Q:REV:GMP.1-12: With respect to the previous question, admit that the targets grow from \$1.73 billion for the period ending in 2017 to \$2.086 billion for the period ending in 2020. If denied, explain in detail why denied and produce all documents supporting your explanation.**

Objection: GMP reasserts General Objection 5. The question is vague and ambiguous – the term “the targets” is not defined and not clear from the context of the question or the referenced preceding question. Nevertheless, without waiver of this objection:

A:REV:GMP.1-12: Denied. If the “target” is investments in subsidiaries as set forth in the prior question, please see response to REV:GMP1-11 above for the inaccurate premise of the question. Please see also GMP’s Responses to the Third Set of Discovery Requests Served by the DPS, Answer 20 (Case No. 18-0974-TF, Sept. 28, 2018); Otley Rebuttal Testimony at 4 (Case No. 18-0974-TF, Sept. 12, 2018).

Person/s Responsible for Response: Mari McClure  
Title of Person/s: VP, Chief Talent Officer, System & Support Operations  
Date: October 8, 2018

**Q:REV:GMP.1-13: Powell’s testimony at page 8, lines 18-19, states with respect to GMP’s proposal regarding capital expenses: “[W]e propose to cap spending each year to the level of approximately \$85 million, with limited opportunities for exceptions.” With respect to this statement, please answer the following questions:**

- a. With respect to the \$85 million annual cap amount, please describe how this amount was established and produce all documents relating to same.**
- b. Explain if and how any rate base adjustments made by the PUC in the 2019 Rate Case would impact the annual \$85 million cap proposed for the MYRP.**
- c. Explain if and how the Departments proposed rate base adjustments in the 2019 Rate Case for the Tesla Powerwall and the hot water heaters for the air source heat pump program, if approved by the PUC, would impact the \$5 million annual spending allocation for New Initiatives under the MYRP.**
- d. What do you mean by “limited opportunities for exceptions” as it applies to “New Initiatives”? Will there be an annual or cumulative cap on the exceptions allowed for New Initiatives? Please explain in detail, including the amount(s), rationale, and produce all documents relating to your response.**

**A:REV:GMP.1-13:**

- a. Q9 of Otley’s prefiled testimony describes how the \$85 million annual cap limit was established. That testimony is provided here:

*We developed the overall proposed level of capital investment based on two types of analysis that include both a bottom-up and top-down analysis of what is needed to safely and reliably deliver service. In the bottom-up approach, we asked our department leaders to identify the minimum levels of investment required, based upon known projects and programs, which will be needed to serve our customers effectively over the three-year term of the Plan. These departmental levels of investment do not artificially reduce capital budgets by deferring needed work, which ultimately would drive up costs for customers in later periods. Rather they are based on a realistic assessment of investment levels needed to maintain our current levels of performance, reliability, and customer service.*

From the top-down perspective, we evaluated how varying levels of capital investment might impact overall rate pressures during the term of the plan, with a focus on setting the annual capital investment at a level that minimizes any potential rate pressure. See GMP’s Response DPS1.Q14.

- b. GMP’s Multi-Year Regulation Plan testimony discusses capital investment in terms of capital spending and capital spending that will close to plant (plant additions) during the term of the Plan. The Plan fixes the plant additions that will occur during the term of the Plan, which directly affects the rate calculation, not



the overall annual capital spending. The expectation is capital spending and the fixed plant additions will be essentially equivalent during the term of the Plan, though there is always annual variability due to timing and other factors. Rate base adjustments made by the PUC in the 2019 Rate Case impact the plant additions that will occur in the 2019 rate period (January 1, 2019 to September 2019) and would have no impact on the annual Multi-Year Regulation Plan plant additions that would occur in the 2020, 2021, and 2022 rate periods. Also, these adjustments would not impact the annual capital spending that will occur during the Multi-Year Regulation Plan.

- c. Any Rate base adjustments made by the PUC in the 2019 Rate Case for the Tesla Powerwall and the heat pump hot water heaters will impact the plant additions that will occur in the 2019 rate period (January 1, 2019 to September 2019). Those specific proposed investments would have no impact on the annual Multi-Year Regulation Plan plant additions that would occur in the 2020, 2021, and 2022 rate periods; any similar investments within the multi-year period would have to fit within the plan as proposed.
- d. GMP's plan seeks an exception to the proposed innovating spending limits simply to avoid a situation where GMP is unable to expand a customer beneficial program and/or customers may not be able to participate in programs they seek to because of capital constraints within the MYRP period. Having that limited flexibility is important to be responsive to customer demand.

There is an annual plant additions limit within the MYRP, but there is also the flexibility to manage variances year-to-year within the cumulative plant additions limit of the entire MYRP period, along with the exceptions that allow for PUC approval of additional spending.

Person/s Responsible for Response: a, c–d. Brian Otley; b. Brian Otley, Eddie Ryan, Karen Young

Title of Person/s: Senior VP and Chief Operations Officer; Controller; Budget/Forecasting Supervisor

Date: October 8, 2018

**Q:REV:GMP.1-14: The MYRP (Exh. GMP-ER-1) at section 4.1.d (page 10 of the MYRP) refers to the New Initiatives spending levels as an “annual \$5M cap” for “the coming fiscal year. The section then discusses documenting proposed spending above the \$5M cap in an annual base rate filing. With respect to this section:**

- a. Please produce examples of the documentation that would provide “appropriate financial analysis” as referenced in this section.**
- b. Identify and describe the “other capital projects that qualify under this provision” as referenced in this section of the MYRP.**
- c. Explain if and how this annual Base Rate review process for adjustments to base rates for Innovative Pilots is any different under the MYRP than under the current temporary limited alternative regulation plan.**
- d. If the answer to the previous question is that there is no difference in the review process, admit that effectively there is no cap on capital spending in place under the MYRP for Innovative Pilots or any other investment that may qualify for this “limited exception.”**

**A:REV:GMP.1-14:**

- a. GMP recommends using Exhibit 2 of the 2018 and 2019 rate proceedings as the documentation standard. The Exhibit has been developed in collaboration with the Department and approved by the PUC.
- b. Other capital projects that might qualify under this provision would be either expansions of existing innovative programs that are being piloted or have been tariffed, or new innovative programs being recommended for piloting but that were not foreseen as part of the development of the MYRP.
- c. It is indeed different. The Temporary Limited Regulation Plan does not contain New Initiative documentation provisions similar to the provisions contained in the New Initiatives Capital Expenditure provision of the Multi-Year Regulation Plan (MYRP Section IV.1.d).
- d. Denied. The MYRP establishes a limit for innovative pilot capital investment during the period of the plan. This is the level of capital investment that can occur as the plan has been defined. The plan does provide for the possibility of gaining an exception to the set limit, but only via a process of review with the Department and the PUC to determine that the exception is in our customers’ best interest and that realizing the benefits associated with the exception is better for customers than conforming to the original limits. As with any plan that spans longer time periods, it is impossible to know or contemplate all variables and opportunities for customers that the future may hold. Therefore, in our MYRP we have recommended a limited and transparent mechanism to gain approval to

respond to opportunities that may come along but that could not be known at the time the plan was set.

Person/s Responsible for Response: Brian Otley  
Title of Person/s: Senior VP and Chief Operations Officer  
Date: October 8, 2018

**Q:REV:GMP.1-15: Department witness Winn made the following statement in his testimony in the 2019 Rate Case concerning GMP capital spending on Innovative Pilots:**

*As noted in prior cases, instead of requiring GMP to conduct this type of business in an unregulated subsidiary, as in commonplace across the nation, the Department has developed a list of conditions that should be met if generally available consumer products are to be included in rate base. These requirements are: that the Company must have the ability to control the usage of those products for the benefit of all ratepayers; benefits of the program must exceed the costs to non-participating ratepayers; any bad debt expense should be borne by the program or shareholders; and that GMP must open its billing system to companies offering similar competing products.* The Department and GMP have discussed these conditions throughout the pilot review process, and ultimately these discussions led to resolution in Docket 8794, in which GMP sought to tariff its heat pump and heat pump water heater pilots. The ability for GMP to exercise control of these products for the benefit of all ratepayers was generally not implemented for heat-pump water heater products offered in 2016 and part of 2017.

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Until GMP has implemented the ability to control these devices for the benefit of all ratepayers, the Department recommends excluding them from rate base to remedy the competitive advantage created by the regulated rate of return on the investment.<sup>3</sup>

**With respect to the bolded and italicized text in this statement:**

- a. **Explain why GMP is not offering New Initiatives or Innovative Pilots through an unregulated affiliate.**
- b. **What cost benefit analysis, if any, has GMP undertaken to evaluate whether its customers would receive greater benefits or incur less costs if generally available consumer products were offered through an unregulated affiliate instead of under its monopoly utility rate structure? Produce all documents relied upon or produced in connection with any such analysis**
- c. **Explain how GMP satisfies the conditions set forth above with respect to each of its Innovative Pilots currently offered or planned for the MYRP period. Produce all documents relied upon or produced in connection with this analysis.**
- d. **Explain why the MYRP does not list or require satisfaction of the four conditions discussed above - e.g., (1) ability to control the usage of those products for the benefit of all ratepayers;(2) benefits of the program must exceed the costs to non-participating ratepayers; (3) any bad debt expense should be borne by the program or shareholders; and that (4) GMP must open its billing system to companies offering similar competing products?**

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<sup>3</sup> PSD Direct Testimony of Brian E. Winn. August 10, 2018, Page 17-18 of 29 (emphasis added).

- e. **Explain why GMP proposes to rate base its investment in generally available commercial products like electric batteries and air source heat pumps, rather than simply informing customers about the benefits / availability of these energy technologies, which are offered competitively by non-monopoly utility entities in Vermont products to customers directly?**
- f. **What market failure exists to warrant that GMP rate base generally available energy products such as electric batteries (energy storage), cold climate heat pumps, electric vehicle chargers, etc.?**
- g. **Please explain how GMP has opened its billing system to companies offering products similar to those offered by GMP under its “pilot” projects such as electric storage batteries, air source heat pumps, and other offerings. Please produce all documents relating to same.**

Objection: GMP reasserts General Objection 5 to subpart (e), as it is vague and unintelligible. The term “non-monopoly utility entities” is undefined and its meaning is unclear. GMP also reasserts General Objection 5 to subpart (f), insofar as it calls for GMP to adopt the unsupported premise that there must be a “market failure” in order for GMP to sell products such as batteries and heat pumps. Nevertheless, without waiving these objections, GMP responds as follows.

A:REV:GMP.1-15:

- a. One of the most important factors of our programs, as Mr. Winn states, is for us to deliver value to non-participating customers through a reduction of costs or through providing new revenue that reduces GMP’s revenue requirement. Performing this work as an unregulated subsidiary would not provide those benefits to all customers.
- b. There is no analysis and no analysis is necessary. Performing the work in an unregulated subsidiary would by definition mean it is outside of the regulated business and therefore does not provide the financial benefits to the cost of service or to customers. See GMP’s Response to DPS1.Q23.
- c. Each pilot program, and ultimately any innovative tariff program delivered by GMP, must provide value to all customers. Our pilot filings detail the financials of each program and are referenced in Response to REV1.Q23 below.
- d. Attachment 2 of the MYRP addresses the inclusion of innovative pilot costs in rates. Such costs must be known and measurable and the inclusion in rates is subject to Department review and Commission approval. Specifically, “[a]ny Annual Rate Base filing during the term of the Multi-Year Plan in which GMP seeks to reflect the costs and revenues of Innovative Pilots developed under th[e] Plan that are not already included in rates at the start of the Plan shall include a

schedule setting forth the costs and revenues of all Innovative Pilots offered as well as known and measurable information supporting the addition to rate base and shall be subject to Department review and Commission approval.” See also Response DPS1.Q22.

- e. Many of these products are available from a variety of sources and GMP is taking an “all of the above” approach. For example, for our heat pump offerings, we have partnerships with a Vermont credit union, installers and suppliers, and we regularly educate customers so they can go on to purchase their own units from other sources if they desire. We believe that our efforts selling heat pumps were critical to starting the market in Vermont and are authorized under 30 V.S.A. § 8805(a)(3), Tier III of the Renewable Energy Standard. We view the utilization of rate base as a tool to assist customers who may not want, or are unable, to undertake other options that may be available in the market. It is also important to note that in many instances, our offering that utilize rate base to support the program cost are not the least expensive options so customers are choosing these programs are selecting them for other reasons.
- f. As stated above, we believe that our efforts were critical to the development of these markets in Vermont, and these offerings are authorized under 30 V.S.A. § 8805(a)(3), Tier III of the Renewable Energy Standard.
- g. GMP has a tariff providing the rules and regulation for third-party billing for energy-related equipment financing that advance the goals of the State of Vermont. Please see Attachment GMP.REV1.Q15.g.

Person/s Responsible for Response: Josh Castonguay  
Title of Person/s: VP & Chief Innovation Executive and Power Supply  
Date: October 8, 2018

**Q:REV:GMP.1-16: With respect to Mr. Brian Otley's testimony at A6 and Table 1 with the breakout of the \$85 million annual capital investment cap, please explain whether the \$5 million annual cap for New Initiatives will result in an aggregate cap of \$15 million for the MYRP. If an aggregate spending cap of \$15 million for New Initiatives is not being proposed, explain what is?**

A:REV:GMP.1-16: The MYRP, as part of establishing an annual plant additions limit, includes \$15 million of New Initiative investment over the plan period. Please also see GMP's response to REV Questions 13(b-d), 14, 15, 18, and 21.

Person/s Responsible for Response: Brian Otley  
Title of Person/s: Senior VP and Chief Operations Officer  
Date: October 8, 2018

**Q:REV:GMP.1-17: At page 9 of Mr. Brian Otley’s prefiled testimony, A7, he discusses the 2019 spending levels in Table 1 of your testimony as a budget number. Please explain how the 2019 budget for New Initiatives in the amount of \$5,129,795 in your Table 1 reconciles with the \$17,451,000 in 2019 capital spending for energy transformation projects as set forth in Mr. Castonguay’s prefiled testimony in the 2019 Rate Case at pages 3-4 (the following table is directly from Mr. Castonguay’s testimony at page 4):**

Category	Interim Year (10/1/17 – 12/31/18) (\$000)	Rate Year (1/1/19 – 9/30/19) (\$000)	Total (\$000)
Tesla Powerwall 2.0	\$9,671	\$5,558	\$15,229
Residential Battery Storage	\$12	\$0	\$12
Cold Climate Heat Pumps	\$1,173	\$189	\$1,362
Heat Pump Water Heaters	\$278	\$256	\$534
Level 2 EV Home Chargers	\$0	\$84	\$84
BTM Controls	\$75	\$0	\$75
ePark	\$155	\$0	\$155

A:REV:GMP.1-17: Table 1 in Mr. Otley’s testimony shows the spending levels for fiscal year 2019. The table above shows the closed to plant numbers for the 15-month interim year and the nine-month rate year. See also Mr. Otley’s testimony at page 9.

Person/s Responsible for Response: Brian Otley, Josh Castonguay  
Title of Person/s: Senior VP and Chief Operations Officer; VP & Chief Innovation Executive and Power Supply  
Date: October 8, 2018



**Q:REV:GMP.1-18:** At page 6, lines 3-6 of your prefiled testimony, Mr. Otley describe as one of the a “limited exceptions” to the \$85 million spending cap, potential growth in GMP’s “New Initiatives” investments in energy transformation projects. With respect to this testimony:

- a. Why is GMP proposing a \$5 million per year capital spending budget line item in MYRP, if this amount can be exceeded during the term of the MYRP?
- b. Identify, describe and produce all documents for all planned, forecasted, estimated, evaluated New Initiatives for the MYRP timeframe.
- c. Identify, describe and produce all workpapers, estimates, forecasts and financial data reviewed or relied upon concerning potential New Initiatives for the MYRP timeframe.
- d. The table presented in Exhibit GMP-BO-1, which includes the same table as Table 1 in your prefiled testimony, is prefaced by the following statement: “The capital investment forecast by department for the multi-year period is: ... .” Please identify, describe and produce the New Initiatives capital spending forecast, and all documents relied upon, referred to or developed in connection with formulating such New Initiatives capital investment forecast.

**A:REV:GMP.1-18:**

- a. See pages 24-25 of Mr. Otley’s prefiled testimony and GMP’s responses to questions 13–16 above.
- b. All current pilots, which have all been previously provided to the DPS and PUC, are programs we expect to be active during the plan period and may evolve into tariff offerings for customers before or during the MYRP timeframe. In addition, GMP will continue to develop proposals for pilot programs that add value for customers as the energy landscape continues to change. Those pilots and any ultimately any tariffs that utilize inclusion in rate base to benefit customers, would be a part of this New Initiatives group.
- c. See response to b, above. All current pilot filings, as submitted to the DPS and PUC, contain this indicative information. See Response to REV1.Q23. See also, capital folders for New Initiative Projects, already provided in Case No. 18-0974-TF.
- d. The by department spending referred to in the question is for each of GMP’s traditional expense categories. By contrast, the new initiatives’ spending is, by intention and design, a place to prototype program design offerings that will appeal to customers who participate and save all customers money. With respect to pilot programs that may require capital expenditures, we have reviewed our spending on pilots to date and the overall level of capital spending we believe we

can responsibly pursue in the regulation plan period (as extensively described in testimony) and calculated a soft cap for new initiative spending at \$5 million that provides GMP, the Department, the PUC and customers at large with the ability to understand the level of spending we intend (subject to all the strictures of the innovative pilot filings) while allowing GMP to seek specific review and approval if additional opportunities arise in the regulation plan period that warrant higher investment.

Person/s Responsible for Response: Brian Otley, Josh Castonguay  
Title of Person/s: Senior VP and Chief Operations Officer; VP & Chief Innovation Executive and Power Supply  
Date: October 8, 2018

**Q:REV:GMP.1-19: With respect to Mr. Otley's testimony at A9 regarding the methods of analysis used to develop the proposed capital investment levels, please produce the top-down and bottom-up analysis you reference with respect to the New Initiatives forecasted spending levels, together with all documents referred to, relied upon, or developed in connection with such forecasts.**

A:REV:GMP.1-19: See Response to DPS Question #14.

Person/s Responsible for Response: Brian Otley  
Title of Person/s: Senior VP and Chief Operations Officer  
Date: October 8, 2018

**Q:REV:GMP.1-20: With respect to Mr. Otley’s statement at page 10 lines 16–20 regarding the purpose of this planning exercise to develop a “planning scale level of investment” that GMP anticipates, please explain why GMP is proposing an exception for New Initiatives spending when it has already gone through a top-down and bottoms-up analyses to develop a planning scale level of investment for New Initiatives?**

A:REV:GMP.1-20: The location of this reference is actually page 13 lines 16-20. We propose an exception for New Initiative spending because most of these programs’ growth is driven by customer demand for them. Customer demand is difficult to forecast, especially over a multi-year period when technologies and programs that utilize them are likely to evolve rapidly. Because we believe our customers and their demand for new energy solutions will drive real energy transformation, we did not want to have limiting restrictions on the growth of these types of programs within the MYRP. Limits on the growth of these programs by the MYRP might frustrate customers who were denied access to them or delay the realization of the benefits these programs can provide. See also answer to REV:GMP.1-18(d) above.

Person/s Responsible for Response: Brian Otley  
Title of Person/s: Senior VP and Chief Operations Officer  
Date: October 8, 2018

**Q:REV:GMP.1-21: Describe in detail the proposed documentation, review and approval process that GMP plans to implement to justify if a New Initiatives exception to the \$85 million cap should be permitted. With respect to this process, please describe both internal planning and review as well as the notice, review and approval process contemplated to be undertaken by the PUC to authorize exceeding the annual \$85 million cap.**

A:REV:GMP.1-21: GMP will collaborate with the Department and the PUC to determine the process for seeking approval for exceptions to the \$85 million capital limit. As described in prior testimony, exceptions would be pursued for projects that would take us beyond the capital amounts in the MYRP, and for which sufficient benefits for GMP customers could be realized if an exception to the capital limit were approved. We will collaborate with the Department and PUC in developing this process but anticipate that documentation, review, and approval will be similar to the current capital project review process.

Person/s Responsible for Response: Brian Otley, Josh Castonguay  
Title of Person/s: Senior VP and Chief Operations Officer; VP & Chief Innovation Executive and Power Supply  
Date: October 8, 2018

**Q:REV:GMP.1-22: With respect you the previous question, explain where this process is discussed in your testimony or the MYRP.**

A:REV:GMP.1-22: Answer 20 in Mr. Otley's prefiled testimony describes the concept of the exception. With regard to the process for seeking an exception, Response REV.Q21, above, discusses that issue.

Person/s Responsible for Response: Brian Otley, Josh Castonguay  
Title of Person/s: Senior VP and Chief Operations Officer; VP & Chief Innovation Executive and Power Supply  
Date: October 8, 2018

**Q:REV:GMP.1-23: Please list and describe each Pilot currently offered by GMP, and with respect to each:**

- a. Produce the semi-annual status reports filed with the Commission and DPS to date.**
- b. Produce the annual Customer Satisfaction Measurement reports.**
- c. The GMP rate of earnings / return for each pilot.**
- d. State whether each Pilot satisfies the following four conditions: (1) ability to control the usage of those products for the benefit of all ratepayers; (2) benefits of the program must exceed the costs to non-participating ratepayers; (3) any bad debt expense should be borne by the program or shareholders; and that (4) GMP must open its billing system to companies offering similar competing products? Explain how these conditions are satisfied and produce all documents supporting your response.**
- e. State whether the Pilot was advanced to a tariff-based offering. If so, why. If not, why not.**
- f. State whether the Pilot will be advanced to a tariff-based offering. If so, why. If not, why not.**

Objection: GMP reasserts General Objection 3. Since GMP has previously produced the requested pilot reports to REV, the request calls for the disclosure of information and production of material that is obtainable from another source that is more convenient, less burdensome, and less expensive. GMP also reasserts General Objection 5 to subpart (c). The phrase “rate of earnings/return for each pilot” is vague and unintelligible. Without waiving this objection, GMP responds as follows.

**A:REV:GMP.1-23:**

- a. Please see GMP’s Responses to the Second Set of Discovery Requests Served by the DPS, Answer 66 (Case No. 18-0974-TF, June 27, 2018).
- b. The DPS and GMP agreed to conduct annual customer satisfaction measurement reports for any new pilots beginning after the Data Collection and Reporting Plan was put in place, which was filed in Case No. 17-3232-PET on January 29, 2018. GMP committed to work with the Department to develop pilot specific surveys. There is currently only one pilot that began after that point in time, which is the Heat Pump/Heat Pump Water Heater – VSECU pilot. This pilot commenced on May 18, 2018, so it does not yet have an annual customer satisfaction measurement report associated with it.
- c. The question is unclear. To the extent it refers to anticipated benefits returned to customers, please see the pilot filings list above. Please see also Response to

DPS1.Q25, which provides revenue generated by each pilot program, which helps lower the cost of service for all customers.

d. Tesla Powerwall 2.0

1. Yes, GMP has the ability to control the use of the Powerwalls for the benefit of all customers.
2. Yes, the benefits outweigh the costs. See answer to subpart c.
3. Yes, bad debt is not borne by non-participating customers.
4. Yes, See GMP's Rules and Regulations for Third-Party Billing.

eWater

1. Yes, GMP has the ability to control the use of the water heaters for the benefit of all customers.
2. Yes, the benefits outweigh the costs. See answer to subpart c.
3. Not applicable.
4. Yes – see GMP's Rules and Regulations for Third Party Billing

BYOD

1. Yes, GMP has the ability to control the use of the BYOD devices for the benefit of all customers.
2. Yes, the benefits outweigh the costs. See answer to subpart c.
3. Not applicable
4. Yes, see GMP's Rules and Regulations for Third-Party Billing

Level 2 EV Charger

1. Yes, GMP has the ability to control the use of the EV Chargers for the benefit of all customers.
2. Yes, the benefits outweigh the costs. See answer to subpart c.
3. Not applicable.
4. Yes, see GMP's Rules and Regulations for Third-Party Billing.

Heat Pump/Heat Pump Water Heater – VSECU

1. Yes, GMP has the ability to control the use of the heat pumps for the benefit of all customers. A Sensibo unit is installed with every heat pump that customers put in as a result of this program.
2. Yes, the benefits outweigh the costs. See answer to subpart c.
3. Not applicable.
4. Yes, see GMP's Rules and Regulations for Third-Party Billing.

e. Each of the Pilots above still are existing pilots, and as such have not been advanced to tariffs. GMP will be analyzing whether to transition each pilot to a tariff during the course of and after completion of the pilot and will report consistent with the Data Collection and Reporting Plan.

f. See above.



Person/s Responsible for Response: Josh Castonguay  
Title of Person/s: VP & Chief Innovation Executive and Power Supply  
Date: October 8, 2018

**Q:REV:GMP.1-24: Identify which of the following programs identified by Mr. Castonguay in the 2019 Rate Case are currently Pilots offered under the company's Limited Alternative Regulation Plan: Tesla Powerwall 2.0 home batteries, Cold Climate Heat Pumps, Heat Pump Water Heaters, residential battery storage, Level 2 home electric vehicle ("EV") chargers, the ePark project, and Behind the Meter ("BTM") controls.**

A:REV:GMP.1-24:

Of the pilot programs listed above, the following pilots are offered under the current regulation plan:

- Tesla Powerwall 2.0 home batteries
- Level 2 home electric vehicle ("EV") chargers
- Heat Pumps and Heat Pump Water Heaters are offered under a pilot with the VSECU partnership; the original Heat Pump and Heat Pump Water Heaters pilot has expired.

Person/s Responsible for Response: Josh Castonguay  
Title of Person/s: VP & Chief Innovation Executive and Power Supply  
Date: October 8, 2018

**Q:REV:GMP.1-25: Identify which of the following programs identified by Mr. Castonguay in the 2019 Rate Case have been moved to tariff-based offerings or are planned to be moved to tariff based offerings during the MYRP: Tesla residential battery storage, Level 2 home electric vehicle (“EV”) chargers, the ePark project, and Behind the Meter (“BTM”) controls.**

A:REV:GMP.1-25: None of the above pilots have yet been advanced to tariff status. The Powerwall 2.0 Pilot and the EV Charging Pilot still are in the pilot stage. They are already showing customer benefits, and GMP is learning from the pilots and will decide whether to advance them to a tariff upon completion of each one. GMP will continue to explore ePark projects, and should the opportunity arise, it is possible that GMP will complete another project of this nature, however this is not a project that lends itself to a tariff. BTM Controls are used in a number of our innovative Pilots, but it is not itself a pilot and therefore will not become a tariff.

Person/s Responsible for Response: Josh Castonguay  
Title of Person/s: VP & Chief Innovation Executive and Power Supply  
Date: October 8, 2018

**Q:REV:GMP.1-26: With respect to the previous programs, explain whether each of the Pilots satisfies the following four conditions: (1) ability to control the usage of those products for the benefit of all ratepayers;(2) benefits of the program must exceed the costs to non-participating ratepayers; (3) any bad debt expense should be borne by the program or shareholders; and that (4) GMP must open its billing system to companies offering similar competing products? Explain how these conditions are satisfied and produce all documents supporting your response.**

A:REV:GMP.1-26: See Response to REV1.Q23 & Q25.

Person/s Responsible for Response: Josh Castonguay  
Title of Person/s: VP & Chief Innovation Executive and Power Supply  
Date: October 8, 2018

**Q:REV:GMP.1-27: Identify each Innovative Pilot that has been advanced to a GMP tariff-based offering and the criteria that were applied to justify moving the pilot to a tariff-based program.**

A:REV:GMP.1-27: To date, no GMP pilots have been fully advanced to a tariff-based offering after the pilot period.

Person/s Responsible for Response: Josh Castonguay  
Title of Person/s: VP & Chief Innovation Executive and Power Supply  
Date: October 8, 2018

**Q:REV:GMP.1-28: Admit that electric storage batteries are generally available from non-utility entities to residential and commercial consumers in Vermont.**

A:REV:GMP.1-28: Admitted. Please note that our storage pilot and BYOD specifically seek the device control and associated savings designed to lower costs for all customers.

Person/s Responsible for Response: Josh Castonguay  
Title of Person/s: VP & Chief Innovation Executive and Power Supply  
Date: October 8, 2018

**Q:REV:GMP.1-29: Admit that electric hot water heaters are generally available from non-utility entities to residential and commercial consumers in Vermont.**

A:REV:GMP.1-29: Admitted. Please note that our pilots for these devices specifically include control designed to produce savings for all customers.

Person/s Responsible for Response: Josh Castonguay  
Title of Person/s: VP & Chief Innovation Executive and Power Supply  
Date: October 8, 2018

**Q:REV:GMP.1-30: Admit that electric vehicle chargers are general available from non-utility entities to residential and commercial consumers in Vermont.**

A:REV:GMP.1-30: Admitted. Please note that our pilots include control designed to provide benefits for all customers.

Person/s Responsible for Response: Josh Castonguay

Title of Person/s: VP & Chief Innovation Executive and Power Supply

Date: October 8, 2018



**Q:REV:GMP.1-31: Admit that cold climate heat pumps are generally available from non-utility entities to residential and commercial consumers in Vermont.**

A:REV:GMP.1-31: Admitted. Please note that our pilots include control designed to provide benefits for all customers.

Person/s Responsible for Response: Josh Castonguay  
Title of Person/s: VP & Chief Innovation Executive and Power Supply  
Date: October 8, 2018

**Q:REV:GMP.1-32: For the products or services offered through its Pilots, does or has GMP in the past had exclusivity agreements with the non-GMP providers of those products or services. Please provide rationale for such agreements and documentation/contracts.**

A:REV:GMP.1-32: GMP has not had any exclusivity arrangements with non-GMP providers of the devices used in our pilots, other than the ConnectDER. GMP was the sole reseller of the ConnectDER in GMP service territory. The purpose of this arrangement was to increase efficiency of getting the product into the hands of solar installers, while maximizing the pilot value to all GMP customers. That program is no longer in existence.

Person/s Responsible for Response: Josh Castonguay  
Title of Person/s: VP & Chief Innovation Executive and Power Supply  
Date: October 8, 2018

**Q:REV:GMP.1-33: Your testimony at page 42, line 18, references the “bring your own device” program. With respect to this program:**

- a. Is this a Pilot offering? If so, please produce all filings submitted to the PUC regarding this program.**
- b. Identify the number of participating customers.**
- c. Identify the amount of bill credits provided to date.**
- d. Explain why this program is designed to offer only a net-meter like credit whereby there is no cash out, and credits may be forfeited if a customer has self-generation?**

**A:REV:GMP.1-33:**

- a. Yes. See Response to REV1.Q23a for reference to the requested documents.
- b. There is currently one customer enrolled in the BYOD Pilot. The pilot does not have a set number of customers allowed, but rather a 2MW cap on the amount of power participating in the pilot.
- c. \$0.00. The first customer enrolled in September 2018, so we anticipate the first credits showing up in the October billing cycle.
- d. The BYOD pilot allows customers to offset charges on the bill-through credits, including those not covered by solar, i.e. ‘non-bypassable’. Additionally, monthly bill credits will be allowed to accrue, and are able to be used to pay all charges on the GMP bill. At any time, but no more frequent than once annually, if a customer has excess bill credits, they are able to request an Energy Transformation Rebate in the amount of the excess bill credit with proof of purchase of any product that meets the requirements of the Renewable Energy Standard under Tier 3, such as:
  - i. Smart Thermostat
  - ii. Heat Pump
  - iii. Heat Pump Water Heater
  - iv. Qualified Electric Vehicle

Credits are not forfeited if a customer has self-generation.

Person/s Responsible for Response: Josh Castonguay  
Title of Person/s: VP & Chief Innovation Executive and Power Supply  
Date: October 8, 2018

**Q:REV:GMP.1-34: With respect to the performance metrics discussed at A24 of Otley's testimony and Attachment 7 to Exh. GMP-ER-1:**

- a. You state at page 30, lines 15-16, that the metrics "align with state energy policy". Please identify the specific statutes and policy.**
- b. Identify and describe all performance metrics evaluated or considered by GMP and produce all documents relating to same.**
- c. Describe the process undertaken by GMP to develop the performance metrics listed in Attachment 7 to Exh. ER-1. Produce all documents relating to same.**
- d. Were other performance metrics considered? Please identify and describe.**
- e. Identify which if any of the performance metrics is intended to promote the 10 V.S.A. § 580(a) "25 by 25" state air quality goal, which calls for Vermont to generate by 2025, 25% of the electric energy consumed within the State through the use of renewable energy sources, particularly from Vermont's farms and forests? Explain how the metric advances this goal, and produce all documents relating to same. If no metric addresses this goal, explain why not.**
- f. Identify which if any of the performance metrics is intended to promote GHG reduction goals in the law (10. V.S.A. § 578 that call for a 50% reduction in emissions from the 1990 level of 8.1 million tons by 2028 and a 75% reduction by 2050. Explain how the metric advances this goal, and produce all documents supporting same. If no metric addresses this goal, explain why not.**
- g. Identify which of the metrics is intended for consistency with Vermont's Comprehensive Energy Plan for 90% total renewable energy by 2050. Explain how the metric advances the plan goal, and produce all documents relating to same.**
- h. In May 2015, Vermont was one of the initial 12 signatories of the Under 2 MOU, committing to limit emissions to less than 80-95% below 1990 levels by 2050. Explain whether any of the performance metrics advance this legal commitment and how. Please produce all documents relating to same. If a metric does not advance this goal, why not?**
- i. Describe the first category of metrics on Attachment 7 listed as "DER Capacity w Shared Access". What does this mean and what state policy does this advance? Produce all documents related to the development of this metric.**
- j. Attachment 7 references as a metric to be measured: "number of behind the meter DERs installed by 3rd party suppliers." What is this performance goal is this metric intended to address and measure? Explain in detail and also describe how this relates in any way to achieving state energy goals.**
- k. Describe in detail how GMP will measure "our efforts to encourage aggressive peak management measures which reduce costs", and produce all documents relating to same.**

A:REV:GMP.1-34:

- a. Each of the measures proposed has a connection to state energy policy or legislation. Vermont's legislature has set explicit statewide energy goals and policies in statutes including 10 V.S.A. § 578 (greenhouse gas reduction goals), 30 V.S.A. §§ 202a (state energy policy), 202b (state comprehensive energy plan), and 8001 (renewable energy goals). Many other statutes promote and give shape to these high-levels goals, including 30 V.S.A. §§ 8004 (the RES standard), 8005a (the Standard Offer program), 8010 (self-generation and net metering), 8015 (the Vermont Clean Energy Development Fund), 3 V.S.A. § 2291 (state agency energy plan). At a high level, the connections can be made as follows:
  - (1) the percent of customers that have elected to receive paperless bills, pay through auto-draft, have on-line accounts, and have signed up for text alerts: least-cost utility operations.
  - (2) the total aggregate capacity of connected distributed energy resources ("DER") on our system: least-cost utility operations and State Comprehensive Energy Plan.
  - (3) the number of third-party installed DER resources per year: RES legislation encourages utility-private partnerships.
  - (4) the percent of load that can be safely and reliably islanded: RES legislation encourages distributed energy systems.
  - (5) the percentage of time GMP accurately forecasts peak events and dispatches peak management resources: least-cost utility operations and State Comprehensive Energy Plan.
- b. The list of proposed performance metrics in Attachment 7 to the MYRP represents GMP's best thinking on these new measures and is expected to serve as a starting point for collaboration with the Department on this topic. There are no documents responsive to this question regarding other considered measures; the list was meant to be broad.
- c. Same response to question (b).
- d. GMP did not document measures not being recommended; the list was meant to be broad.
- e. No metric is being specifically recommended to address this goal.
- f. No metric is being specifically recommended to address this goal.

- g. No metric is being specifically recommended to address this goal.
- h. No metric is being specifically recommended to address this goal.
- i. Distributed Energy Resource Capacity with Shared Access. This means the aggregate capacity of distributed energy resources (storage devices, water heaters, heat pumps, car chargers, etc.) that are connected to GMP control platforms and are therefore available to be dispatched during peak management and other grid events to improve the efficiency of energy deliver. This capability can lower costs, increase the use of renewable generation and improve customer reliability among other benefits for all GMP customers. No documents were prepared in the recommendation of this measure.
- j. Third Party DERs with Shared Access. This measure will track the quantity and capacity of DERs that are connected to GMP control platforms that have been implemented at customer locations by 3rd party suppliers. The benefits of these devices can be similar to those discussed in response (i). The potential benefits of this measure are aligned with Vermont energy policy with regard to lowering costs, reducing carbon and improving reliability, among others.
- k. GMP measures performance around peak management by evaluating the aggregate capacity of our peak management resources (storage, shared access devices, etc.) against the aggregate dispatch of that capacity during forecasted peak periods.

Person/s Responsible for Response: Brian Otley  
Title of Person/s: Senior VP and Chief Operations Officer  
Date: October 8, 2018

**REQUESTS TO PRODUCE**

**RTP:REV:GMP.1-1: Identify and produce all documents each witness relied on or referred to in preparing his or her prefiled testimony and exhibits.**

Objection: GMP reasserts General Objection 2, to the extent that the request encompasses all material in GMP's possession used in the preparation of prefiled direct testimony and exhibits, including material protected by the attorney-client and work-product privileges. Without limiting or waiving this objection, GMP responds as follows.

A:RTP:REV:GMP.1-1: Please see the answer to question PSD:GMP.1.1 provided by GMP in its Responses to the First Set of Discovery Requests Served by the Department of Public Service, filed on October 8, 2018.

**RTP:REV:GMP.1-2: Identify and produce all documents relied on or referred to in responding to these discovery requests.**

Objection: GMP reasserts General Objection 2, to the extent that the request encompasses all material in GMP's possession used in the preparation of discovery responses, including material protected by the attorney-client and work-product privileges. Without limiting or waiving this objection, GMP responds as follows.

A:RTP:REV:GMP.1-2: Please see the answer to question PSD:GMP.1.1 provided by GMP in its Responses to the First Set of Discovery Requests Served by the Department of Public Service, filed on October 8, 2018.

Dated at Burlington, Vermont this 8<sup>th</sup> day of October, 2018.

**As to Objections:**




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*Attorneys for Green Mountain Power*




Dated at Colebrook, Vermont this 5<sup>th</sup> day of October, 2018.

**Respondent Signature**

By:   
Mari McClure  
Green Mountain Power

Subscribed and sworn before me this 5<sup>th</sup> day of October, 2018.

  
Notary Public  
Name of Notary: Scott M Fraser  
Commission Expires: 2-10-19



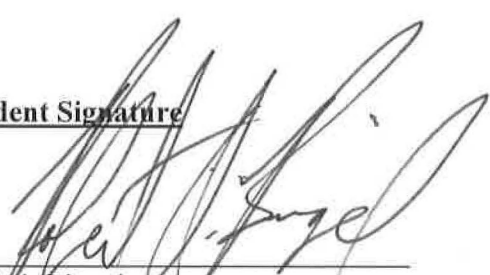
Case No. 18-1633-PET  
Petitioner Green Mountain Power's  
Responses to REV First Set of Discovery Requests

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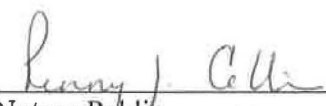
Dated at September, Vermont this 24 day of September, 2018.

Respondent Signature

By:

  
Rob Bingel  
Green Mountain Power

Subscribed and sworn before me this 24 day of September, 2018.

  
Notary Public

Name of Notary: Henry Collins


Commission Expires: 2-10-19

Case No. 18-1633-PET  
Petitioner Green Mountain Power's  
Responses to REV First Set of Discovery Requests


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Dated at Colchester, Vermont this 21<sup>st</sup> day of September, 2018.

Respondent Signature

By:   
\_\_\_\_\_  
Kristin Carlson  
Green Mountain Power

Subscribed and sworn before me this 21<sup>st</sup> day of September, 2018.

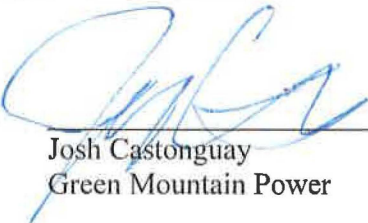
  
\_\_\_\_\_  
Notary Public  
Name of Notary: Penny Collins  
Commission Expires: 2-10-19

Case No. 18-1633-PET  
Petitioner Green Mountain Power's  
Responses to REV First Set of Discovery Requests

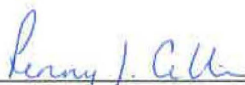
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Dated at Colchester, Vermont this 24<sup>th</sup> day of September, 2018.

Respondent Signature

By:   
Josh Castonguay  
Green Mountain Power

Subscribed and sworn before me this 24<sup>th</sup> day of September, 2018.

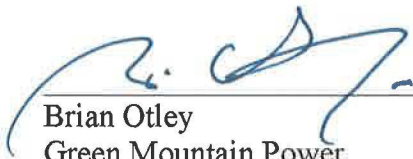
  
Notary Public

Name of Notary: Penny Collins

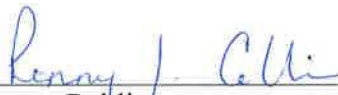
Commission Expires: 2-10-19

Dated at Colchester, Vermont this 21<sup>st</sup> day of September, 2018.

**Respondent Signature**

By:   
Brian Otley  
Green Mountain Power

Subscribed and sworn before me this 21<sup>st</sup> day of September, 2018.

  
Notary Public

Name of Notary: Penny J. Collins

Commission Expires: 2-10-19

Case No. 18-1633-PET  
Petitioner Green Mountain Power's  
Responses to REV First Set of Discovery Requests

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Dated at Rutland, Vermont this 21<sup>st</sup> day of September, 2018.

**Respondent Signature**

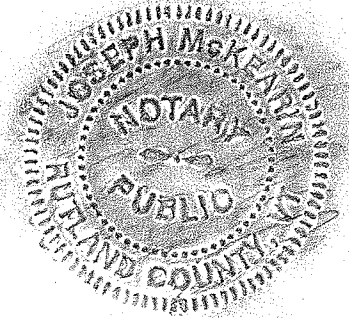
By: Eddie Ryan  
Eddie Ryan  
Green Mountain Power

Subscribed and sworn before me this 20<sup>th</sup> day of September, 2018.

Joseph McKearin  
Notary Public

Name of Notary: Joseph McKearin

Commission Expires: 2-10-19



Dated at Coldchester, Vermont this 20<sup>th</sup> day of September, 2018.

Respondent Signature

By: Douglas Smith  
Doug Smith  
Green Mountain Power

Subscribed and sworn before me this 20<sup>th</sup> day of September, 2018.

Penny J. Collins  
Notary Public  
Name of Notary: Penny J. Collins  
Commission Expires: 2-10-19


Case No. 18-1633-PET  
Petitioner Green Mountain Power's  
Responses to REV First Set of Discovery Requests

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Dated at Rutland, Vermont this 21<sup>st</sup> day of September, 2018.

Respondent Signature

By:



Charles "Chuck" Watts  
Green Mountain Power

Subscribed and sworn before me this 21<sup>st</sup> day of September, 2018.

  
Notary Public

Name of Notary: BONNIE LOROUX

Commission Expires: 2-10-19



Case No. 18-1633-PET  
Petitioner Green Mountain Power's  
Responses to REV First Set of Discovery Requests

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Dated at Rutland, Vermont this 25<sup>th</sup> day of September, 2018.

**Respondent Signature**

By: Karen Young  
Karen Young  
Green Mountain Power

Subscribed and sworn before me this 25<sup>th</sup> day of September, 2018.

Melissa Stevens

Notary Public

Name of Notary: Melissa Stevens

Commission Expires: 2-10-19