STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 18-0974-TF

Tariff filing of Green Mountain Power Corporation requesting a 5.45% increase in its base rates effective with bills rendered January 1, 2019, to be fully offset by bill credits through September 30, 2019

# PREFILED DIRECT TESTIMONY OF

# EDWARD MCNAMARA

ON BEHALF OF THE

VERMONT DEPARTMENT OF PUBLIC SERVICE

August 10, 2018

Summary: The purpose of Mr. McNamara's testimony is to provide an overview of the Department of Public Service's position with respect to Green Mountain Power Corporation's ("GMP") power supply portfolio. Mr. McNamara discusses GMP's innovative services, and recommends that the Public Utility Commission ("Commission") include the JV microgrid projects in rate rates, but exclude the Tesla Powerwall pilot program until that program is tariffed as a permanent service offering from GMP. Mr. McNamara also recommends that the Commission adjust GMP's power supply costs downward by $397,682 to reflect the actual, as opposed to estimated, rate for Regional Network Service ("RNS") charges. Mr. McNamara also recommends that $4.08 million of renewable energy credits ("RECs") be removed from GMP's rate base.

# Direct Testimony
of
Edward McNamara

**Q1. Please state your name and title.**

A1. My name is Edward McNamara. I am the Director of Energy Policy and Planning for the Vermont Department of Public Service ("Department"). My business address is 112 State Street, Montpelier, Vermont.

**Q2. Please describe your professional background and experience.**

A2. I have worked for the Department since 2012. Prior to becoming Director of Energy Policy and Planning I was Director of Regional Policy for the Department, focusing on wholesale electric markets and transmission planning. I was also a staff attorney and hearing officer for the Public Utility Commission (the "Commission") from 2003 until 2012.

**Q3. Have you previously testified before the Commission?**

A3. Yes, in Dockets 8400, 8685, 8887, 17-3087-PET, and 17-3112-INV, among others.

**Q4. Please provide an overview of the Department's position with respect to the power supply component of GMP's rate filing.**

A4. While the Department is generally supportive of the need to transform the power sector through innovative services, the Department is concerned that GMP's approach in this area leads to a disproportionate share of the financial risks being borne by ratepayers compared to the risks borne by GMP's shareholders. Unlike start-up companies, where investors are taking all of the risks associated with being innovative, GMP is a monopoly that is able to recover its costs from, and therefore able to shift risk to, ratepayers. While the Department agrees that ratepayers should share some portion of both the risks and rewards of innovative services, the Commission should ensure that GMP's development and implementation of innovative services adequately balances these risks.

The prefiled testimony of Mr. Christopher Dawson details concerns with some of GMP's new innovative services, including the underlying assumptions used by GMP to justify the proposed Joint Venture ("JV") microgrids and the Tesla Powerwall pilot program. In addition, as described in detail by Mr. Dawson, the Department has some concerns with GMP's strategy for meeting its energy, capacity, and renewable energy ("REC") requirements. The Department is supportive of GMP's decision to hedge against market volatility and recognizes the need to be open to opportunities (including resource acquisition and purchase power agreements) as they arise; however, the Department believes that a more structured approach to power supply acquisition would better benefit ratepayers.

**Q5. Does the Department recommend that the Commission remove the JV microgrid projects from rate base in this case?**

A5. No. The Department recognizes that the issues that Mr. Dawson and Mr. Terry Myers identified in their testimony raise concerns as to whether the JV microgrid projects should be allowed into rates under traditional ratemaking standards. However, in this case, there are sound policy reasons for allowing some flexibility to those traditional regulatory standards. There will be an ongoing need to manage intermittent distributed generation and increasing amounts of less traditional load profiles as the amount of electric vehicles and cold climate heat pumps increase and battery storage will be a useful tool in this endeavor. Additionally, as more battery storage projects come on-line, the peak will flatten and it will become increasingly difficult to discharge the units to lower these peaks; accordingly, allowing GMP with flexibility in developing these projects now will provide greater economic benefit to customers.

These projects, however, do present significant operation and financial risk, and the Department is concerned that ratepayers are shouldering a disproportionate share of that risk. Accordingly, while the Department supports inclusion of these projects in rate base, that support is contingent on the development of a reasonable financial assurance requirement related to the expected value of the storage projects that appropriately balances risks between GMP and its ratepayers. The Department set out is recommendation for a financial assurance in Case No. 17-5003-PET (Milton microgrid § 248 review), and contends that such an assurance should be adopted by GMP or imposed by the Commission for all three of the JV microgrid projects before they are allowed in rates.

**Q6. Does the Department have the same recommendation for the Tesla Powerwall project?**

A6. No. The Tesla Powerwall program presents a different set of facts and ratepayer risks. First, the Powerwall program is being conducted as a pilot program subject to the requirements of GMP's current alternative regulation plan, which was approved by the Commission in Case 17-3232. While GMP's alternative regulation plan does not set a dollar cap for innovative pilot programs, it is important to note that when approving the plan, the Commission expressly found that "[t]he innovative pilot program does not guarantee rate recovery for any innovative services."[1] Second, the overall financial scope of the Powerwall program raises a concern. The approximately $15 million that GMP proposes to include in rate base for this pilot program comprises a substantial portion of GMP's overall capital budget. While the there is no financial cap for innovative pilots, the Department anticipated that the pilot programs would have much smaller scale and more modest financial impact on ratepayers, thus the term "pilot." Third, there is significant uncertainty associated with whether GMP will be able to achieve the full deployment of 2,000 Powerwalls.

Ultimately, although the Department supports GMP's innovative approach to the Powerwall program, the Department recommends that the Powerwall program be removed from rate base in this case. To be clear, the Department is not recommending that the Powerwall program be permanently disallowed. Rather, it would be appropriate

[1] *Petition of GMP for approval of a temporary limited regulation plan*, case No. 17-3232, Order of 11/29/17, at 18.

to require that GMP defer placing the Powerwall program into rate base until the Powerwall program's full 18 month pilot period has been completed and GMP can present meaningful data to demonstrate whether the program achieved its intended ratepayer benefits and warrants treatment as tariffed permanent service offering.

**Q7. What is the Department's position with respect to GMP's proposed sales and revenue forecast?**

A7. GMP proposes using forecasted sales and revenue rather than test-year sales and revenue. The use of forecasted sales is a departure from the traditional ratemaking approach used in Vermont. However, based on the factual circumstances of this case, which are discussed below, the Department believes that this approach is reasonable and is more likely to provide rate stability than using test year data. This stability is beneficial for ratepayers.

The primary effect of using forecasted load (as opposed to test-year load) is added stability in rates. Stability in rates is particularly important to large users of electricity such as industrial and large commercial customers. Under GMP's current alternative regulation plan, adjustments are calculated each quarter to account for variation in sales. Energy efficiency and net metering are causing year-over-year reductions in load, resulting in test-year sales that are likely to be higher than forecasted sales.[2] Using higher test-year sales and adjusting for lower true sales would result in a subsequent rate

[2] At some point in the future, electrification efforts associated with electric vehicles and cold climate heat pumps may well reverse the trend of year-over-year reductions in sales.

increase for customers. By using forecasted sales, customers should expect to see a slightly larger rate increase up-front, but less rate volatility due to declining sales over the course of the rate period.[3]

The methods and assumptions used by Itron, GMP's consultant in the case, are generally sound and reasonable and are also consistent with those used in the 2018 VELCO Long Range Transmission Plan.

**Q8. Does the Department agree with the projected net-metering numbers included in GMP's petition?**

A8. Yes. GMP filed its rate case before the Commission issued its biennial net-metering rate adjustment, which lowered rates for net-metered systems downward beginning in July, 2018 and again in January, 2019. Lower rates are expected to decrease deployment and decrease costs associated with the net-metering program. However pacing of net-metering in the first half of 2018 has already greatly exceeded both the Department's and GMP's projections. It is unclear what impact the lower rates will have on net-metering deployment, and therefore the Department recommends that GMP's projected net-metering expenses remain unchanged in this case. If pacing deviates from the projection, the true costs of net-metering will be flowed through to customers through the Power Supply Adjuster from GMP's alternative regulation plan.

[3] Using forecasted sales compared to test-year sales will not address the impact of weather variability on sales.

**Q9. Are the Regional Network Service ("RNS") rates presented in GMP's prefiled testimony reasonable?**

A9. At the time that GMP filed its petition and accompanying testimony, the actual RNS rate for the rate period was not known; however, GMP did provide a good faith projection of the RNS rate: $111.96/kW-year for January to May and $115.69/kW-year for June to September.[4] Subsequent to GMP's filing, the actual RNS rate for the January to May period was established: $110.44/kW-year.[5] Recalculating the transmission component of the Power Supply Model with the actual number results in a downward adjustment of $397,682 for that period.

**Q10. Does the Department have any concerns with GMP's accounting treatment of renewable energy credits ("RECs")?**

A10. When a generator produces energy it also produces environmental attributes. In New England, all environmental attributes are settled and traded through the NEPOOL Generator Information System ("GIS"). For qualified renewable generators, a REC is minted in NEPOOL GIS for each MWh of generation and serves as proof of renewable generation. In New England, RECs are minted on a quarterly basis (in July, October, January, and April) for generation that occurred two quarters prior. For example, a MWh generated in Q1 (January, February, March) of 2019 will have its associated RECs minted and available for trading in July 2019. As a result of this lag in creating RECs

[4] See Smith pf. at 13, lines 3–4.
[5] This is the rate that is filed with the Federal Energy Regulatory Commission, it is still subject to challenges during the FERC review process.

and the structure of GMP's power purchase agreements, GMP pays for both energy and RECs when the MWh is generated, but does not actually receive the RECs until two quarters later.

Based on information that GMP provided during discovery and further direct conversations with GMP personnel, the Department understands that GMP's REC inventory balance reflects RECs that have been paid for, but not yet delivered due to a lag in the creation of the RECs. In other words, GMP is including RECs in rate base (often for a relatively short period of time) and therefore collects a return on the RECs. The Department agrees with the accounting method that GMP has applied to purchased RECs; where power supply costs are reduced by the imputed REC cost and those costs are moved to an inventory account until the RECs are delivered, at which time revenue from the sale credits the inventory account. However, the ultimate use of the RECs should determine whether or not GMP is entitled to receive a return on its investment in these RECs. If RECs are required for RES compliance purchases, then GMP should be able to earn a return on these RECs. If RECs are not needed for compliance, and are purchased with the intent to resell, then GMP should not be able to earn a return on these RECs. There is insufficient detail in GMP's accounting of RECs to determine the exact quantity of RECs that will be resold; however, GMP's discovery responses (DPS2.Q20(b)) indicates that approximately 95% of the RECs included in rate base will be resold.

GMP-ER-1 Schedule 6 shows the REC inventory average balance in rate base is $4.295 million. The Department recommends that GMP not be permitted to earn a return on 95% of this amount – or $4.08 million.

**Q11. Does this conclude your testimony?**

A11. Yes.