

STATE OF VERMONT  
PUBLIC UTILITY COMMISSION

Case No. 19-3167-TF

Tariff filing of Green Mountain Power Corporation for approval of an Energy Storage System tariff effective on bills rendered on or after September 15, 2019	
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and

Case No. 19-3537-TF

Tariff filing of Green Mountain Power Corporation for approval of a Bring Your Own Device tariff to be effective October 31, 2019	
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Order entered: 05/20/2020

**FINAL ORDER**

**I. INTRODUCTION**

These cases concern the investigations opened by the Vermont Public Utility Commission (“Commission”) into two proposed tariffs filed by Green Mountain Power Corporation (“GMP”) – an Energy Storage System tariff (the “ESS Tariff”) and a Bring Your Own Device tariff (the “BYOD Tariff”). The ESS Tariff is a voluntary offering to GMP’s customers interested in leasing a battery storage system from GMP. GMP proposes to offer the BYOD Tariff alongside the ESS Tariff. Customers who opt to participate in the BYOD Tariff will receive an upfront incentive payment upon purchase and installation of a battery storage system through a separate, third-party energy services company in exchange for allowing GMP to access the customer-owned battery system during peak events.

GMP presents evidence that the ESS and BYOD Tariffs meet the just and reasonable standard and will advance the State’s regulatory objectives and the broader public interest. The Vermont Department of Public Service (“Department”) recommends that the Commission deny, without prejudice, both the ESS and BYOD Tariffs. While the Department does not support the proposed tariffs, the Department supports the deployment of battery storage systems in Vermont. The Department argues that the proposed tariffs do not satisfy the just and reasonable standard.

The Department asserts that GMP should refile a new, single pay-for-performance tariff for the Commission's consideration and that this new tariff would serve to promote the deployment of batteries in the state. Renewable Energy Vermont ("REV") urges the Commission to deny the ESS Tariff and approve the BYOD Tariff.

In today's Order, the Commission determines that the ESS and the BYOD Tariffs, as modified and subject to conditions, meet the just and reasonable standard. As discussed below, the tariffs are designed to provide net positive benefits to all GMP customers. Further, the Commission recognizes the potential for small-scale battery storage in GMP's service territory to reduce peak power costs, better integrate renewable generation, and provide reliable power for homes in which batteries are deployed.

The Commission is cognizant of the Department's and REV's concerns regarding fair competition in the battery storage market in Vermont. However, these tariffs are time-limited, and the number of system installations is also limited. The tariffs are proposed to be in effect until September 30, 2022, to coincide with the end of GMP's Multi-Year Regulation Plan, and there is an annual cap of 5 MW for each tariff. Implementation of the ESS and BYOD Tariffs will allow GMP to continue to deploy its own utility-owned batteries and to grow the battery storage market while at the same time providing an alternative option for customers to work with third-party energy services companies to install customer-owned battery storage systems. The Commission is also requiring GMP to comply with certain reporting requirements so that the results of the tariffs may be evaluated by the parties and interested stakeholders. Additionally, to mitigate the financial risks to non-participating customers, the Commission directs GMP to propose the creation of a loan-loss reserve fund for the ESS program. The Commission expects that any future battery tariff offerings will be adjusted to allow the competitive battery storage market to continue to grow after this initial period of growth is facilitated by GMP's direct participation in the market through utility-owned equipment in homes. For the reasons discussed below, the ESS and BYOD Tariffs are approved.

## **II. PROCEDURAL HISTORY**

On August 1, 2019, GMP filed its proposed ESS Tariff with the Commission.

On September 3, 2019, the Department recommended that the Commission suspend and open an investigation into GMP's proposed ESS Tariff.

On September 12, 2019, the Commission issued an order suspending and opening an investigation into the ESS Tariff and setting the date for a scheduling conference.

On September 17, 2019, GMP filed its proposed BYOD Tariff with the Commission. GMP filed revised versions of the BYOD Tariff and supporting documents on September 20, 2019, and September 23, 2019.

On September 18, 2019, the Department recommended that the Commission suspend and open an investigation into GMP's proposed BYOD Tariff and join any investigation into the BYOD Tariff with the Commission's investigation into the ESS Tariff.

On September 25, 2019, the Commission held a scheduling conference for the ESS Tariff.

On October 2, 2019, the Commission issued an order suspending and opening an investigation into the BYOD Tariff, joining the BYOD Tariff investigation with the ESS Tariff investigation for purposes of hearing, and setting a date for a scheduling conference for the BYOD Tariff.

Also, on October 2, 2019, the Commission issued an order establishing the schedule for the joint investigation into the ESS and BYOD Tariffs, subject to any changes resulting from the scheduling conference for the BYOD Tariff. In the scheduling order, the Commission directed the parties to file all documents in both case numbers going forward.

On October 7, 2019, REV filed a motion to intervene in the joint investigation.

On October 8, 2019, GMP filed a letter stating that it had no objection to REV's motion to intervene.

Also, on October 8, 2019, the Commission held a scheduling conference for the BYOD Tariff. At the scheduling conference, the Department stated that it had no objection to REV being admitted as a party in the joint investigation.

On October 9, 2019, the Commission issued an order granting REV's motion to intervene and providing a deadline for GMP to file an initial round of testimony in the joint investigation.

On October 16, 2019, in Montpelier, Vermont, the Department held a public information session on the tariffs that was immediately followed by a public hearing hosted by the Commission. No members of the public provided any comments at the public hearing.

On November 8, 2019, GMP filed direct testimony and exhibits sponsored by Josh Castonguay.

On November 20, 2019, REV filed a motion for summary judgment denying approval of the ESS Tariff.

On November 26, 2019, the Department filed direct testimony and exhibits sponsored by Edward McNamara, Riley Allen, Sean Foley, and Carol Flint. REV filed direct testimony and exhibits sponsored by Leslie Cadwell, Christopher Rauscher, and James Moore.

On December 18, 2019, the Department filed its response to REV's motion for summary judgment.

On December 20, 2019, GMP filed its response to REV's motion for summary judgment.

On January 10, 2020, GMP filed rebuttal testimony and exhibits sponsored by Josh Castonguay and Edmund Ryan.

On January 13, 2020, REV filed its reply to the Department's and GMP's responses to its motion for summary judgment.

On January 30, 2020, the Commission issued an order denying REV's motion for summary judgment.

On February 13 and 14, 2020, the Commission conducted an evidentiary hearing in the Susan M. Hudson Hearing Room at the Commission's offices in Montpelier, Vermont. Cross exhibits admitted at the hearing were made available in ePUC on February 13, 2020.

On February 21, 2020, GMP filed responses to the Commission's information requests from the evidentiary hearing. The responses included revised versions of the ESS and BYOD Tariffs. GMP's Response to the Commission's Information Requests and the associated exhibits included in GMP's List of Exhibits filed on February 24, 2020, are admitted as if presented at a hearing, subject to timely objection by the parties.<sup>1</sup>

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<sup>1</sup> If any party has an objection to these documents being entered into evidence, the party shall submit its objection within 14 days of the date this Order is entered.

On March 6, 2020, the parties filed post-hearing briefs and proposed findings of fact and conclusions of law.

On March 16, 2020, GMP and REV filed replies to the post-hearing briefs.

On March 30, 2020, the Commission issued a procedural order requesting further briefing on an issue raised in REV's reply brief and requesting that GMP notify the Commission whether it consented to an extension of the seven-month statutory review period for the tariffs.

On April 17, 2020, the Department and GMP filed briefs in response to the Commission's request and GMP notified the Commission that it consented to an extension of the seven-month statutory review period for the tariffs.

### **III. POSITIONS OF THE PARTIES**

#### *GMP*

GMP requests that the Commission approve the ESS and BYOD Tariffs and authorize their implementation as soon as possible but no later than June 5, 2020. GMP maintains that the ESS and BYOD Tariffs meet the just and reasonable standard and will advance the State's regulatory objectives and the broader public interest because, among other benefits, the tariffs are designed to provide net positive benefits to all GMP customers.

#### *The Department*

The Department recommends that the Commission deny, without prejudice, both the ESS and BYOD Tariffs. The Department argues that the tariffs do not satisfy the just and reasonable standard because they place a disproportionate share of risk on non-participating customers, are not accurately priced, and unfairly stifle competition. While the Department does not support the tariffs as proposed, the Department supports the deployment of battery storage systems generally and proposes that GMP refile a new, single pay-for-performance tariff, as opposed to an upfront incentive tariff, covering both GMP- and privately-owned small-scale battery systems and that GMP use "below-the-line" accounting for all utility-owned batteries.

Additionally, the Department, while maintaining its recommendation that the Commission deny the tariffs, supports the revisions that GMP made to the tariffs after the evidentiary hearing, including limiting the terms of the tariffs to September 30, 2022, removing

the proposed lease terms from each tariff, and revising the BYOD Tariff to provide additional flexibility for new battery technologies as they become available. The Department acknowledges that the revisions mitigate several of its concerns and provide meaningful ratepayer protections.

*REV*

REV urges the Commission to deny the ESS Tariff and approve the BYOD Tariff. REV argues that the ESS Tariff is unduly preferential, unjust, and unreasonable because the record does not sufficiently support the ESS Tariff and the ESS Tariff gives a single product advantages that allow GMP and that product to dominate the marketplace. Conversely, REV maintains that the BYOD Tariff meets the just and reasonable standard because it poses less risk to GMP's customers and has the potential to produce more value for GMP's non-participating customers than the ESS Tariff.

#### **IV. PUBLIC COMMENTS**

The Commission received ten written comments regarding the ESS and BYOD Tariffs. The Commission considered the comments that it received before the evidentiary hearing in developing questions to ask the witnesses testifying at the hearing. Additionally, the Commission considered all the comments while reviewing the record to make its final decision in this case.

Four comments were made in support of the ESS Tariff, one comment was made in support of the BYOD Tariff, and five comments opposed or expressed concerns about the ESS Tariff.<sup>2</sup> The comments opposing or raising concerns about the ESS Tariff fell into the following categories:

- Concerns about the effects of the ESS Tariff on the competitive battery storage market; and

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<sup>2</sup> One of the comments in opposition to the ESS Tariff was a comment filed by REV before REV became a party to this proceeding. In its comment, REV raised concerns about the ESS Tariff and requested that the Commission open an investigation into the tariff. Subsequently, the Commission opened an investigation, REV moved to intervene, and the Commission granted REV's motion. Because REV became a party to this proceeding, REV's arguments are addressed in the discussion section later in the order.

Another comment filed in opposition to the ESS Tariff misunderstood what GMP proposed. The commenter thought the proposal would levy a tax or charge on the installation of battery storage systems, which it does not.

- Concerns about the sufficiency of the amount of backup power that participants will have available, the lack of control that participants will have over the batteries, and the costs of the tariff to participants compared to the benefits provided to them.

### *The Battery Storage Market*

As discussed in greater detail later in this Order, the battery storage market in Vermont is not yet mature. Therefore, GMP may play a role in growing and developing that market. However, the Commission agrees that as the battery storage market matures, it may be necessary for GMP's role in the market to change. Thus, the Commission will be closely following the ESS Tariff and reevaluating the tariff at the end of its term, which expires September 30, 2022, to determine, in part, GMP's role, if any, in the small-scale battery storage market going forward.

### *Participation in the ESS Tariff*

Participation in the ESS Tariff is entirely voluntary. If a GMP customer does not believe that the terms of the ESS Tariff meet that customer's battery storage needs regarding the amount of backup power available, the customer's control over the battery, or the costs of the tariff compared to the benefits, the customer need not participate and may lease or purchase a battery storage system through alternative avenues. Customers who lease or purchase batteries independently have the option of participating in the BYOD Tariff and reaping the benefits of that tariff.

## **V. LEGAL STANDARD**

GMP has an obligation to file with the Commission schedules of "all rates . . . for any service performed or any product furnished by it within the State, and as a part thereof shall file the rules and regulations that in any manner affect the tolls or rates charged or to be charged for any such service or product."<sup>3</sup> The Commission has a statutory responsibility to ensure that utility rates and service terms are just and reasonable and not discriminatory.<sup>4</sup> The Commission considers traditional ratemaking principles when reviewing proposed tariffs, such as adequacy,

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<sup>3</sup> 30 V.S.A. § 225(a).

<sup>4</sup> 30 V.S.A. §§ 219, 225(b).

efficiency, and fairness.<sup>5</sup> The application of these principles to the design of rates for new services does not lend itself to a “one-size-fits-all calculation purely based on science, accounting, and mathematics.”<sup>6</sup>

The evidentiary burden of proof in a rate case is on the company. If the Commission, after hearing, determines that rates are unjust, unreasonable, or unjustly discriminatory, the Commission “may order and substitute . . . such rates, tolls, charges, or schedules, and make such changes in any regulations, measurements, practices, or acts of such company relating to its service, and may make such order as will compel the furnishing of such adequate service as shall at such hearing be found by it to be just and reasonable.”<sup>7</sup> With these standards in mind, the Commission makes the following findings of fact.

## **VI. FINDINGS AND DISCUSSION**

### **A. ESS Tariff Findings**

1. The proposed ESS Tariff is a voluntary program available to GMP customers. Customers that opt to participate in the ESS Tariff offering will lease an ESS system owned by GMP and consisting of two Tesla Powerwall batteries and a gateway device. Castonguay pf. at 4; exh. PUC-Info Request-2.a.
2. The aggregate amount of energy storage capacity to be installed in a single calendar year through the ESS Tariff will not exceed 5 MW. Exh. PUC-Info Request-2.a.
3. The ESS Tariff will be available to up to 500 customers per year until September 30, 2022, which coincides with the end of GMP’s existing Multi-Year Regulation Plan (“MYRP”). No more than 1,500 customers will be able to participate in the ESS Tariff offering. Exh. PUC-Info Request-2.a; exh. PUC-Info Request-1.c.
4. The ESS system is a 10-kilowatt (“kW”) capacity system that is capable of providing approximately 27.5 kilowatt hours (“kWh”) of energy. The system will provide backup power to the participating customer’s entire home. Tr. 2/13/20 at 49 (Castonguay); Castonguay pf. at 4.
5. Participating customers may choose to pay either a lease charge of \$55 per month for ten years (120 months) or an upfront one-time lease payment of \$5,500. At the end of ten years,

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<sup>5</sup> *Petition of Green Mountain Power Corp.*, Dockets 4637, 4661, and 4665, Order of April 2, 1986, at 4.

<sup>6</sup> *Tariff filing of Washington Electric Cooperative, Inc.*, Docket 7575, Order of December 30, 2010, at 3.

<sup>7</sup> 30 V.S.A. § 218(a).



the customer may elect in writing to renew the lease for up to five additional years at no additional cost. Castonguay pf. at 4; exh. PUC-Info Request-2.a; exh. PUC-Info Request-2.c at ¶ 4, 18.

6. In the event an ESS customer terminates its agreement with GMP early, the customer must pay a \$450 disconnection fee. If the customer fails to surrender the ESS upon termination, the customer incurs an equipment charge for the total system cost, prorated by the remaining lease term. Exh. PUC-Info Request-2.c at ¶¶ 6–9; exh. PUC-Info Request-2.a.

7. Customers may choose to work directly with Tesla or may select any other certified Tesla installer on GMP's participating installer list to install their systems. Castonguay pf. at 4; exh. PUC-Info Request-2.a.

8. GMP will pay the installer \$16,300 for each installed Powerwall system, which includes \$2,200 for installation costs. Castonguay pf. at 4; exh. PUC-Info Request-2.a.

9. Participating customers must sign a customer agreement to execute the lease. The customer agreement describes the customer's and GMP's obligations. GMP is responsible for maintenance and warranty issues throughout the life of the lease. GMP has secured a ten-year warranty from Tesla for the functioning of the batteries leased to customers. Exh. PUC-Info Request-2.a; exh. PUC-Info Request-2.c at ¶ 16, 18, Exhibit A.

10. The warranty provision covers potential operational issues that may occur during the first ten years of a battery's life. Tesla warrants to GMP the performance of the ESS Powerwall batteries for ten years and 2,800 cycles. GMP anticipates using the batteries for only approximately 1,000 cycles over that ten-year period. Ryan pf. reb. at 15.

11. The ESS Tariff offering was developed based on GMP's Tesla Powerwall 2.0 Pilot program (the "Powerwall Pilot"). Castonguay pf. at 3.

12. The Powerwall Pilot was well subscribed by customers throughout GMP's service territory and continues to deliver benefits to both participating and non-participating customers. Castonguay pf. at 3.

13. As in the Powerwall Pilot, GMP will use the installed capacity of the batteries to reduce demand during peak periods, thereby reducing costs for all GMP customers, including non-participating customers. The batteries will also be available for customer use as whole-

home backup power during outages, subject to GMP's grid management usage. Castonguay pf. at 4; exh. PUC-Info Request-2.a; exh. PUC-Info Request-2.c at ¶ 1.

14. Tesla has provided GMP with a performance guarantee. This guarantee ensures that Tesla's software will accurately dispatch the batteries during peak events. If the batteries do not meet or exceed the agreed-upon peak rate annually, Tesla will reimburse GMP and its customers. Castonguay pf. reb. at 19, 22; tr. 2/13/20 at 65–66 (Castonguay); exh. REV-LAC-2 at 26–27.

15. Tesla likewise guarantees that the GridLogic software will reduce GMP's coincident demand during the ISO New England maximum hourly demand and will reimburse GMP for any under-performance of the projected results. Exh. REV-LAC-2 at 27–28.

16. The Tesla performance guarantee ensures that GMP's customers receive the predicted power supply savings benefits. Tr. 2/13/20 at 65–66 (Castonguay).

17. This performance guarantee strengthens the likelihood that GMP achieves the results presented in its financial model and minimizes risks associated with the tariff. A tariff without a similar guarantee would be susceptible to the risk that the batteries do not perform as described. Castonguay pf. reb. at 19.

18. The Tesla warranty and performance guarantee limit the risk of the tariff for non-participating customers. Tr. 2/14/20 at 20 (McNamara).

19. GMP modeled the expected financial costs and benefits of the ESS Tariff using the same financial model that was used for the original Powerwall Pilot. Tr. 2/13/20 at 134 (Ryan).

20. The actual performance results of the Powerwall Pilot show that GMP's modeling is conservative. The original model for the Powerwall Pilot projected that the program would be a net cost to customers in year one. The program actually generated a net benefit for customers in year one. Tr. 2/13/20 at 107 (Castonguay).

21. For example, the model assumed that the batteries would hit the peak for the Forward Capacity Market ("FCM") approximately 80% of the time, but the batteries have actually hit the FCM peak 100% of the time. Tr. 2/13/20 at 107 (Castonguay).

22. Similarly, the model assumed a 90% availability for the batteries due to potential communication issues between the battery and GMP's control platform. In fact, actual performance shows that the batteries are available 96% of the time. Exh. PUC-Info Request-1.d.

23. GMP updated its financial model in response to Commission questions and after receiving the Department's input regarding recent FCM auction results and Tier III benefits. Exh. PUC-Info Request-1.a.

24. GMP's model shows that if the ESS Tariff is subscribed with 500 10-kW systems installed annually over three years, its customers will see a net present value ("NPV") benefit of \$3,821,555 over the 18-year period of analysis. Exh. PUC-Info Request-1.a; exh. PUC-Info Request-1.c.

25. GMP's model shows that its customers will see net positive benefits starting in Year 8 of the analysis. Exh. PUC-Info Request-1.a.

26. If the ESS Tariff's actual performance is more in line with the actual results of the Powerwall Pilot, the ESS results will become net positive earlier than projected and will result in a higher overall NPV benefit for GMP's customers. Tr. 2/13/20 at 134 (Ryan); tr. 2/13/14 at 106–07 (Castonguay).

27. One of the reasons GMP is pursuing innovative energy transformation projects such as small-scale battery storage resources is to reduce carbon emissions associated with Vermont's energy use. Castonguay pf. at 3, 13; tr. 2/13/20 at 50–54 (Castonguay).

28. Battery resources controlled by GMP are able to reduce carbon emissions whether or not they are charged directly from a renewable energy resource, because batteries reduce demand during the most emission-intensive peak demand periods and are recharged during periods of lower emissions. Tr. 2/13/20 at 50–54 (Castonguay).

29. Prior to the implementation of GMP's Powerwall pilot programs, there was little, if any, interest in or awareness of small-scale battery storage in Vermont. Castonguay pf. reb. at 16.

30. GMP's innovative work has helped foster the development of new services and technologies like batteries that promote State energy policy. Allen pf. at 5.

31. As demonstrated by the pilots, GMP's leadership in this area is creating customer interest in and demand for storage alternatives, which is benefiting local companies and installers as well as GMP's customers. Castonguay pf. at 12.

32. The battery storage market in Vermont is still nascent. Outside of GMP's service territory, there does not appear to be a significant number of installations of these systems in Vermont. Castonguay pf. reb. at 16.

33. GMP continues to play an important role in maintaining and expanding this market in Vermont and in keeping Vermont on pace to achieve levels of installation that can produce meaningful benefits. Castonguay pf. reb. at 16.

34. If the ESS Tariff is not approved, GMP's presence will be removed from the small-scale storage market and battery installations will slow for a period of time. Maintaining momentum in installations is important to the continued success of the small-scale battery market. Tr. 2/13/20 at 254 (Moore); tr. 2/14/20 at 47–49 (McNamara); tr. 2/14/20 at 119 (Allen).

35. Given the significant barriers to participation that still exist in this young market, it makes sense at this time to continue to allow regulated utility ownership, or above-the-line treatment of GMP's small-scale battery market investments, to encourage customer participation and to maximize the benefits of these resources for all customers. Ryan pf. reb. at 12.

36. Below-the-line treatment of GMP's small-scale market battery investments, could result in lease payments as much as two or three times higher than proposed. A higher cost barrier would deter participation. Ryan pf. reb. at 11.

37. The small scale of GMP's battery installations as set forth in the ESS Tariff will not materially affect the continued development of the private market. Ryan pf. reb. at 12-13.

38. GMP has jointly proposed a BYOD Tariff that is a parallel, competitive offering to the ESS Tariff that encourages and supports participation in the small-scale battery storage market by energy services companies. Castonguay pf. reb. at 17.

39. GMP designed both the ESS Tariff and BYOD Tariff to provide customers with options for participation. Both tariff offerings include opportunities for local energy services companies and installers to participate in these innovative programs that will help build a more home-, business-, and community-based energy system. Castonguay pf. at 9.

40. The proposed ESS Tariff also incorporates the option for other installation companies to sell and install Powerwall systems to customers and leverage the GMP leasing program, providing the same flat monthly price or upfront payment option. Castonguay pf. at 12–13.

41. The BYOD Tariff provides another option for customers to participate in the small-scale battery storage market. Customers participating in the BYOD Tariff may use batteries from other approved battery manufacturers, which can be purchased through and installed by local companies that offer these products or services. Castonguay pf. at 10.

**B. BYOD Tariff Findings**

42. A customer enrolled in the BYOD Tariff must own an energy storage system compatible with GMP's energy management platform. Upon installation, a BYOD customer must enroll the system in GMP's energy management platform. GMP may then access the customer's energy storage system to provide energy during peak events over a ten-year period. Castonguay pf. at 6.

43. The aggregate amount of energy storage capacity to be installed in a single calendar year through the BYOD Tariff will not exceed 5 MW. GMP will notify customers when the maximum annual capacity is reached via its website. Exh. PUC-Info Request-2.b.

44. The BYOD Tariff will also expire September 30, 2022, to coincide with the end of GMP's existing Multi-Year Regulation Plan. Exh. PUC-Info Request-2.b.

45. Customers enrolled in the BYOD tariff may choose to allow GMP to manage their system during peak events in either three-hour or four-hour increments. Castonguay pf. at 6.

46. In exchange for access to a customer's system, GMP will provide an upfront incentive to the customer of \$850 per kW for a three-hour resource, or \$950 per kW for a four-hour resource, up to a maximum of 10 kW. Exh. PUC-Info Request-2.b.

47. An additional \$100 per kW incentive will be available for storage systems installed in a constrained area as shown on GMP's website. Castonguay pf. at 6; exh. PUC-Info Request-2.b.

48. The customer elects the level of system capacity to provide to GMP during peak events. Customers may enroll the entire capacity of the system or a portion of the capacity. Castonguay pf. at 6; exh. PUC-Info Request-2.b.

49. All customers participating in the BYOD Tariff will incur a software fee of \$3.97 per month. Exh. PUC-Info Request-2.b.

50. Under the BYOD Tariff, early termination requires the customer to reimburse GMP with a one-time repayment of the incentive, prorated to the remainder of the ten-year term. Exh. PUC-Info Request-2.d at ¶ 7.

51. If communication is disrupted between the BYOD device and GMP's management platform and not restored within 30 days, the customer will incur a charge of \$12.70 per kW per month until communication is restored. Exh. PUC-Info Request-2.d at ¶ 2.

52. If a BYOD device fails to perform within +/- 10% of the enrolled capacity, GMP may elect to terminate the BYOD agreement if performance is not restored. Exh. PUC-Info Request-2.d at ¶ 3.

53. Currently, the following customer equipment is compatible with the BYOD Tariff offering: Tesla Powerwall 2.0, Sonnenbatterie, Pika Energy Systems, SolarEdge StorEdge Compatible Systems, and Sunverge Batteries. Updated BYOD Tariff (Exh. PUC-Info Request-2.b).

54. The BYOD Tariff describes a process for adding new compatible batteries to GMP's energy management platform as they become available and are able to connect to GMP's system. Tr. 2/13/20 at 15–16 (Castonguay); exh. PUC-Info Request-2.b.

55. The BYOD Tariff language will reference all battery systems that are eligible at the time of approval and will direct interested participants to a page on GMP's website that will identify any new eligible systems. Exh. PUC-Info Request-2.b.

56. When communicating with customers regarding available battery storage opportunities, GMP promotes all products and services. GMP jointly promotes the ESS Tariff and parallel opportunities through energy services companies such as the BYOD Tariff. Castonguay pf. reb. at 40-41.

57. GMP updated its financial model for the BYOD Tariff in response to Commission questions and after receiving the Department's input regarding recent FCM auction results and Tier III benefits. Exh. PUC-Info Request-1.b.

58. Through savings on power supply costs achieved by peak shaving, the BYOD Tariff is projected to provide a net benefit to all GMP customers, including those customers who are not participating in the tariff. Exh. PUC-Info Request-1.b.

59. Under GMP's modeling assumptions, if the annual 5-MW cap is met for three years with 500 customers providing a full 10 kW as modeled for the ESS Tariff, the BYOD Tariff would generate a net-present value of approximately of \$4.6 million to GMP customers over the 13-year evaluation period. Exh. PUC-Info Request-1.b.

60. Some inputs for the two models were different based on historical and expected performance. Forecast accuracy, the predicted ability for the batteries to dispatch during peak events, actual available system capacity, accounting treatment, and other variables were different in the two models due to differences in the program design underlying the two tariffs. Exh. PUC-Info Request-1.d.

61. While the ESS Tariff includes a financial performance guarantee provided by Tesla, there is no equivalent guarantee from other battery manufacturers installed by energy services companies for customers participating in the BYOD Tariff. Tr. 2/13/20 at 79–81 (Castonguay).

62. Discrepancies between the value to non-participating customers as well as compensation levels for customers enrolled in the ESS Tariff and the BYOD Tariff reflect real differences in the flow of costs and benefits as well as differences in the risk profile of each tariff. While these differences reflect structural differences between the tariffs, the models also reflect the conservatism GMP built into the ESS model so as to not favor it in any particular way. Tr. 2/13/20 at 79-81 (Castonguay); exh. PUC-Info Request-1.d.

63. Acquiring BYOD capacity through incentive payments will be booked as a direct power supply expense by GMP. Tr. 2/14/20 at 66–68, 71–72 (Ryan).

64. Effective competition in the small-scale storage market will over time drive efficiency, lower prices, result in a diversity of services, and provide better-quality service for the benefit of all consumers. When utilities are engaged in competitive markets, there is the potential for them to exert market power that harms the development of competitive markets. Allen pf. reb. at 11.

65. It is important to establish clear ground rules and guardrails to address the potential concerns associated with a distribution utility's participation in markets that are served by competitive providers. Allen pf. reb. at 5.

66. Limiting the timeframe for GMP to offer the ESS and BYOD Tariffs will help to mitigate the potential to stifle future development of the competitive battery market. Tr. 2/14/20 at 100 (Allen).

### **C. Discussion**

The deployment of small-scale battery storage in GMP's service territory has the potential to reduce peak power costs, better integrate renewable generation such as net-metering, and provide reliable power for homes and businesses where batteries are deployed. Depending on the use-case for storage systems, storage represents a significant opportunity in the electric sector to modernize and decentralize the production and consumption of electricity. It is in the interests of the State and of GMP customers to facilitate the development of small-scale storage both through utility-owned resources, as is the case in the ESS Tariff, and in competitively developed resources, as is the case in the BYOD Tariff.

Where robust competitive markets for energy technologies and services exist, competition fosters innovation, improved customer service, and a diversity of offerings, which in the long run will benefit consumers and promote State energy goals. Monopoly distribution utilities enjoy a number of market advantages that can be used to “squeeze out competitors and control the market.”<sup>8</sup> It is the role of regulators to ensure that “utilities and private entities can compete toe-to-toe in a fair and robust market.”<sup>9</sup> Under robust and mature market conditions, monopoly distribution utilities, such as GMP, should be expected to move competitive services “below-the-line” – for example, by creating a separate, unregulated business unit to compete on equal terms with independent providers. However, in circumstances where markets are immature and new technologies are still in the process of developing, monopoly distribution utilities have a role to play in fostering the development of markets through above-the-line treatment for would-be competitive services.

There are many factors that make GMP well positioned to deploy storage. GMP has unique access to capital, software platforms that can optimize the charging and discharging of batteries to maximize value, and distribution grid congestion data that can be used to deploy storage to alleviate congestion caused by distributed renewable generation. GMP can leverage

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<sup>8</sup> Exh. DPS-JRA-2 at 2.

<sup>9</sup> Exh. DPS-JRA-2 at 2.



these resources and abilities to maximize the value of small-scale storage to shave peaks, save on power supply costs, integrate renewables, and provide reliability.

While GMP has a role to play in an immature market, that role is expected to diminish as markets mature.<sup>10</sup> In a mature market, independent service providers should be ensured equal access to deployment software platforms, market revenue streams, load and generation forecasting and other resources necessary to optimize the use of storage. However, the market today is immature. While GMP is working with partners in the private sector and the Department to improve access to platforms, value streams, and data, there are many technical and commercial barriers to overcome before the independent private sector can be fully relied upon to deploy storage at a level appropriate to achieve State energy objectives.

Some barriers, such as the cost of battery systems, the creation of new markets for fast-regulation resources at the regional level, or the ongoing development of integration software platforms, stem from larger economic and technological forces. Other barriers exist at the distribution-utility level. GMP is, and should be, seeking to break down these barriers to move to a truly competitive marketplace. The BYOD Tariff represents a significant step in this direction.

The BYOD Tariff is a critical component of the overall strategy to develop the private, unregulated market and fully integrate distributed storage resources with various upstream values they can provide. Through the BYOD Tariff, GMP will improve software integration, modeling, and deployment of independently owned resources to optimize performance. GMP will seek to add additional technologies to the list of storage systems that can be integrated. An amendment to the list of systems eligible to participate in the BYOD Tariff will not require a full tariff amendment process, so new types of systems can be added to the tariff more rapidly. The BYOD tariff also significantly improves financial access to privately owned systems by providing incentives up-front rather than spread across the life of the system.

While the private market continues to develop and battery technology continues to improve and become more affordable, GMP has a role to play in deploying storage to achieve State energy objectives. The ESS Tariff, limited in scope and duration, will allow small-scale battery storage to continue to be deployed in Vermont in the interim.

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<sup>10</sup> Allen pf. at 6.

If the Commission were to adopt the Department's recommendation to reject both tariffs and require GMP to move storage deployment "below-the-line," there would be a significant gap in the deployment of small-scale storage in Vermont because the private sector is not fully prepared to step in, and the success of independent storage deployment relies largely on the incentives offered by the BYOD Tariff.<sup>11</sup> Approving both the BYOD and ESS Tariffs, with appropriate limitations on scale and duration as well as rigorous reporting requirements, will bridge that gap and allow deployment to continue while the market matures.

The ESS Tariff, which allows GMP to treat investments as above-the-line costs, will be available for only a limited duration. Over the course of this limited duration, GMP will be able to meet a portion of its customers' demand for small-scale battery installations through the ESS Tariff. It is important in the Commission's consideration of the ESS Tariff that approval would allow GMP to meet the demand for small-scale battery installations in the short term. The ability to meet the demand in the short term will allow the momentum in the small-scale battery market to continue to build in Vermont.

The Commission previously approved above-the-line accounting treatment of the capital investments associated with small-scale battery installations as pilot programs. Because GMP proposes to continue the above-the-line accounting treatment that was authorized in the pilot programs in the implementation of the ESS Tariff, it is important to recognize the safeguards in place, especially the relatively short amount of time that the ESS Tariff will be offered to customers. It is also important for the Commission to monitor impacts on the development of the small-scale storage battery market as the tariffs are implemented.

GMP has proposed that the ESS and BYOD Tariffs be in effect until September 30, 2022, to correspond with the end of its Multi-Year Regulation Plan. Enrollment in each tariff will be capped at 5 MW total capacity each year. These measures limit both the potential for exertion of monopoly power and the risk to non-participating ratepayers that investments and incentives under the tariffs may not yield the expected positive net-present-value.

While the financial modeling presented in support of both tariffs shows a high likelihood of a positive net-present-value to non-participating ratepayers, there is a risk that the financial benefits of the ESS Tariff may not materialize. To mitigate that risk, the Commission is asking

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<sup>11</sup> Tr. 2/14/20 at 119-124 (Allen).

GMP explore the creation of a “loan loss reserve fund” to replace any revenue lost due to lease default, un-warranted equipment failure or loss, or other unforeseeable circumstances that may result in the loss of revenue or the loss of physical assets associated with the ESS and BYOD Tariffs. The loan loss reserve fund may be funded by some portion of the lease payment collected from those enrolled in the ESS Tariff. Within six months of this order, GMP shall file with the Commission and Department either (1) a plan for the creation, size, funding, and terms of use for the loan loss reserve fund including the disposition of funds remaining in the account after the conclusion of the ESS Tariff; or (2) justification with supporting documentation to explain why creation of a loan loss reserve fund is not feasible or is unnecessary.

While GMP continues at this time to have a role in developing the nascent market in battery storage through the ESS Tariff, the Commission seeks to ensure that discrimination against independent providers is minimized in regard to access to essential infrastructure and services, access to upstream revenue sources, modeling assumptions, and compensation levels. Although there are differences between the modeling and compensation levels for the ESS and BYOD Tariffs, those differences are firmly based in real costs and do not constitute discrimination against independent providers. In the future, as utilities seek to spark new markets for innovative services, equal access and terms for independent providers should be a guiding principle.

To that end, the Commission will require thorough reporting from GMP regarding both tariffs to shed light on the success of each, both in terms of deployment and in delivering benefit for all customers. In response to questions raised during the evidentiary hearing, GMP proposed filing a report annually with the Commission on the following metrics: (1) the number of systems and total kW installed under each tariff; (2) the number of installers participating in each tariff; (3) the names of the installers; and (4) the battery type/size installed by manufacturer. In addition, GMP shall include in its annual report information on the following metrics: (5) the number of monthly peaks during which discharge successfully occurred during the regional network service (“RNS”) peak and the total capacity available during discharge; (6) whether the batteries were successfully discharged during the ISO annual forward capacity peak and total capacity available during that discharge; (7) the financial savings from peak shaving actually achieved; (8) the total lease revenue; (9) any payments requested and/or received from Tesla

under the performance guarantee; (10) the annual program costs by program (including cost to service debt and equity associated with the investments for the ESS Tariff); (11) the number and capacity of systems defaulting on lease payments; (12) the number and capacity of systems that fail to respond to more than three discharge signals; and (13) when the ESS Tariff enters its eleventh year, and each year thereafter, the number and total capacity of systems re-enrolled in the tariff.

GMP shall report this data annually concurrent with reporting under its Multi-Year Regulation Plan. When the Multi-Year Regulation Plan concludes, GMP shall continue to report on these 12 metrics until all the lease terms and five-year extensions of those terms expire and until systems in the BYOD Tariff reach the end of their ten-year enrollment term.

#### **D. Responses to the Department's Arguments**

The Department recommends that the Commission deny, without prejudice, both the ESS and BYOD Tariffs, and argues that the tariffs do not satisfy the just and reasonable standard because they place a disproportionate share of risk on non-participating customers, are not accurately priced, and unfairly stifle competition. The Department proposes that GMP refile a new, single pay-for-performance tariff, as opposed to an upfront incentive tariff, covering both GMP- and privately-owned small-scale battery systems and that GMP use “below-the-line” accounting for all utility-owned batteries. The Department’s arguments are addressed below.

##### **1. The pricing of the tariffs**

The Department contends that the way GMP priced the tariffs was flawed. The Department bases its position on three factors: (1) the tariffs are not based on the actual value they will provide in the form of reduced RNS and FCM costs, but instead are based on their projected value; (2) for the ESS Tariff, which has a ten-year lease period, GMP performed a 16-year discounted cash flow analysis,<sup>12</sup> which could lead to an under-collection of revenues to meet GMP’s cost-of-service during the first ten years; and (3) GMP did not seriously consider or analyze any alternative pricing mechanisms that could reduce risks for non-participating

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<sup>12</sup> In its revised financial model, GMP adjusted the 16-year analysis period to an 18-year analysis period (*see* findings of fact). This section refers to the 16-year analysis period to align with the arguments as described by the Department and GMP. *See* Exh. PUC-Info Request-2.a.

customers, such as a higher lease fee, a below-the-line offering, or on-bill financing. Each of the issues raised by the Department is addressed in turn below.

First, basing the tariffs on the projected value they will provide in the form of reduced RNS and FCM costs, rather than the actual value they provide, does not make them flawed. The Department did not challenge GMP's RNS or FCM forecasts. In fact, the Department agreed that the forecasts provided by GMP are reasonable.<sup>13</sup> Additionally, the Department acknowledged that the tariffs are likely to provide value for GMP's non-participating customers.<sup>14</sup> If concerns had been identified with GMP's projected values or if the tariffs were not likely to provide value to GMP's non-participating customers, then the Commission might take issue with the structure of the tariffs. However, based on the record before the Commission, the fact that the tariffs are based on projected values, rather than their actual value, does not make them unjust or unreasonable. Further, the tariffs are limited in their scope; each will be offered for up to 5 MW of installed capacity per year only. They are also limited in time; each is set to expire September 30, 2022. These limits on the tariffs will mitigate any risks posed to non-participating customers of the tariffs being based on projected rather than actual values and will allow the Commission to reassess the projected values of the tariffs after just a little over two years of implementation.

As to the Department's second issue, GMP's 16-year discounted cash flow analysis for the ESS Tariff is just and reasonable based on the structure of the customer lease agreement and how GMP conducted its analysis. Under the ESS Tariff lease agreement, customers have the option to continue their battery leases for an additional five years beyond the initial ten-year lease period at no additional cost to them.<sup>15</sup> Therefore, it would be unreasonable and would add unnecessary costs to the ESS Tariff to assume zero additional value from the batteries in those later years. While not all customers may choose to renew their leases, it is reasonable to assume some customers will do so, especially considering there will be no cost to them. Additionally, to account for non-renewal of leases and battery failures, GMP conservatively modeled the anticipated benefits from the batteries in those additional years with the benefits declining

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<sup>13</sup> McNamara pf. at 3-4; Tr. 2/14/20 at 6 (McNamara).

<sup>14</sup> McNamara pf. at 4; Tr. 2/14/20 at 7 (McNamara).

<sup>15</sup> Exh. PUC-Info Request-2.c at 7.

significantly after year 10 and then dropping to zero by year 16.<sup>16</sup> These factors serve to mitigate the risk of under-collection of revenues to meet GMP's cost-of-service during the first ten years.

Finally, as to the Department's third issue, GMP considered both its prior experiences and certain alternative pricing mechanisms when developing the ESS and BYOD Tariffs. Based on its experiences and analyses, GMP determined that the proposed tariffs were the most likely to drive customer participation and therefore were the most likely to provide net positive benefits to all customers and thus reduce risks to non-participating customers. First, GMP considered providing financial benefits to customers over time rather than upfront, as with the pay-for-performance model proposed by the Department. In the original BYOD Pilot, customers were provided a monthly bill credit.<sup>17</sup> Initially only nine customers enrolled, so GMP amended the BYOD Pilot to include an upfront incentive option.<sup>18</sup> Over the remainder of the pilot only 12 more customers enrolled in the bill-credit option, whereas 89 customers chose the upfront incentive.<sup>19</sup> This pilot provided GMP with data to support using the upfront incentive structure proposed in the ESS and BYOD Tariffs to drive customer participation as opposed to the pay-for-performance structure proposed by the Department. Next, while GMP did not seriously investigate a lease fee higher than \$55 per month, GMP lowered the risk to non-participating customers by making the lease fee higher than the \$30-per-month fee used in the battery storage pilots, while keeping the fee as low as possible for participating customers and still projecting a net positive benefit.<sup>20</sup> Additionally, regarding a below-the-line offering, GMP stated that it was not interested in starting a battery storage business, and therefore did not consider offering the batteries below-the-line.<sup>21</sup> Finally, as to providing batteries through on-bill financing, GMP stated that it did not consider such an option because, unlike with cold-climate heat pumps, the battery storage market is not yet mature enough to support an on-bill financing program.<sup>22</sup>

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<sup>16</sup> Tr. 2/14/20 at 70 (Ryan).

<sup>17</sup> GMP Responses to PUC Information Requests at 10.

<sup>18</sup> *Id.* at 10-11.

<sup>19</sup> *Id.*

<sup>20</sup> Tr. 2/13/20 at 30 (Castonguay). GMP acknowledged that at \$55 per month, the uptake of participation in the ESS Tariff might not be as fast as with the battery storage pilots, but that the fee could be adjusted, if needed, when the ESS Tariff is reassessed in just over two years. *Id.*

<sup>21</sup> Tr. 2/13/20 at 26 (Castonguay).

<sup>22</sup> Tr. 2/13/20 at 17 (Castonguay).

While GMP did not provide in-depth analyses of all potential alternative pricing mechanisms, GMP provided reasonable support for the pricing mechanisms it has proposed as well as reasonable explanations for not choosing potential alternatives.

## 2. The Department's tariff proposal

The Department proposes an alternative to the ESS and BYOD Tariffs filed by GMP. The Department proposes that GMP refile a new, single pay-for-performance tariff, as opposed to an upfront incentive tariff, covering both GMP- and privately-owned small-scale battery systems and that GMP use “below-the-line” accounting for all utility-owned batteries. However, the Department’s proposal is only conceptual, and without a detailed proposal there is an inadequate basis for the Commission to determine that a pay-for-performance tariff would result in more just and reasonable rates than GMP’s proposals. For example, there is not enough information in the record for the Commission to be confident that the Department’s proposal would be viable. The Department has not shown that a pay-for-performance model would result in the same or greater benefits as GMP’s tariffs.<sup>23</sup> There are no pilots testing the Department’s proposal, and the Department didn’t provide any evidence to indicate customers would be interested in such a tariff.<sup>24</sup> The Commission declines to find that the ESS and BYOD Tariffs are unjust and unreasonable based on the Department’s unsupported assertion that an alternative tariff option would be better.

The Commission also finds that adopting the Department’s proposal at this time would result in undesirable outcomes. First, there is no guarantee that GMP would file a new tariff consistent with the Department’s proposal.<sup>25</sup> This would be an unfortunate outcome, considering that all the parties support deployment of small-scale batteries and agree they have the potential to provide financial and resiliency benefits.<sup>26</sup> Further, even if GMP filed a new tariff, that tariff would need to go through the Commission’s review process, and it would likely be another six months to a year before the tariff were in place, resulting in delays in battery deployment and the growth of the small-scale battery storage market.

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<sup>23</sup> *Id.* at 6. (McNamara).

<sup>24</sup> *Id.*

<sup>25</sup> In fact, GMP indicated it had no interest in offering batteries below-the-line, as proposed by the Department. Tr. 2/13/20 at 20 (Castonguay).

<sup>26</sup> *Id.* at 10 (McNamara)

### **E. Responses to REV's arguments**

REV urges the Commission to deny the ESS Tariff on the basis that it is unduly preferential, unjust, and unreasonable. REV argues that: the ESS Tariff gives a single product advantages that allow GMP and that product to dominate the marketplace; GMP is not sufficiently prepared to implement the ESS Tariff; participants in the ESS Tariff will lack certain protections under the Vermont Consumer Fraud Act; the customer agreement must be a part of the tariff; and changes to the ESS Tariff and supporting documentation made after the evidentiary hearing cannot be relied upon to approve the tariff. REV's arguments are addressed in turn below.

#### **1. GMP's role in the battery storage market**

REV argues that the ESS Tariff should be denied because it affords GMP and the Tesla Powerwall advantages that allow the GMP-owned Powerwalls to dominate the battery storage marketplace. REV contends that the Powerwall's dominance is due to GMP receiving preferential pricing for Powerwalls under its agreement with Tesla, Tesla being able to market to GMP's customers in a way that other energy service providers cannot, and GMP's unique branding power and captive customer base. REV's arguments do not render the ESS Tariff unjust or unreasonable.

First, there is no evidence in the record that GMP receives preferential pricing for Powerwalls. The information that the Commission has is that GMP's cost for a fully-installed two-battery Powerwall system is \$16,300 (\$14,100 for equipment costs plus \$2,200 for installation) and the cost for an un-installed two-battery Powerwall system directly from Tesla is less than \$16,300.<sup>27</sup> The record did not contain information about the exact cost of an un-installed two-battery Powerwall system to other energy services providers. Additionally, the Commission heard testimony that the ESS Tariff's \$55-per-month lease payment is not radically different from what might be available in the market.<sup>28</sup>

Next, regarding marketing, GMP is not just marketing the Tesla Powerwall to its customers but will also be promoting the BYOD Tariff, under which customers may use a

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<sup>27</sup> Castonguay pf. at 4; exh. PUC-Info Request-2.c at 4; exh. PUC-Info Request-2.a at 2; Tr. 2/13/20 at 226 (Moore).

<sup>28</sup> Tr. 2/13/20 at 234, 238 (Moore).



variety of different battery storage systems. As with the BYOD Pilot, GMP will continue to co-market the BYOD Tariff with the ESS Tariff and, in collaboration with REV, will use its website, social media, press releases, and other means to promote the BYOD Tariff.<sup>29</sup>

Finally, the Commission acknowledges that GMP has unique branding power and a captive customer base that its competitors in the battery storage market may not have. However, these factors must be viewed in the greater context and do not alone make the ESS Tariff unjust or unreasonable. While GMP and the Powerwall may initially have an advantage, GMP is playing a critical role in growing the fledgling battery storage market in Vermont, GMP is offering both the ESS Tariff and the BYOD Tariff simultaneously, and the ESS Tariff is limited in scope and duration. The Commission anticipates there will likely be a point in the future when the battery storage market is mature and it is no longer appropriate for GMP to provide small-scale batteries as an above-the-line offering, but there is nothing in the record to indicate that the battery storage market has reached that point. In fact, the testimony indicates quite the opposite. GMP has reached less than 1% of its customers thus far through its various energy storage pilots.<sup>30</sup>

## **2. GMP's preparedness to implement the ESS Tariff**

REV contends that GMP has not taken various steps in preparation for implementing the ESS Tariff and therefore the Commission should deny the ESS Tariff. REV argues that GMP failed to develop plans for communicating with customers about various aspects of the ESS Tariff, to develop plans to train its customer service representatives to not favor the ESS Tariff over the BYOD Tariff, to do market research to determine the price point for the ESS Tariff, and to determine how it will use any Powerwalls removed from customer premises due to non-payment or early termination. As detailed below, REV's arguments are not supported by the record and do not make the ESS Tariff unjust or unreasonable.

To begin, GMP has gained experience implementing programs like the ESS Tariff through its implementation of various pilot programs, including its Powerwall Pilot and Bring Your Own Device Pilot. Therefore, while GMP may not have specific written plans in place related to every aspect of implementing the ESS Tariff, GMP has relevant previous experience

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<sup>29</sup> Castonguay pf. reb. at 41.

<sup>30</sup> Castonguay pf. at 18.

communicating with customers about battery lease agreements and their terms as well as experience simultaneously marketing utility-owned and customer-owned battery programs.<sup>31</sup>

Next, while GMP may not have conducted market studies specifically regarding the ESS Tariff's \$55-per-month lease payment, GMP's pricing for the ESS Tariff was based on several factors. The Powerwall Pilot lease was \$30 per month. While the cost of the ESS Tariff lease is higher, it is informed by the Powerwall Pilot, which quickly filled to capacity, as well as by the program costs for the ESS Tariff and the goal of setting the price for the tariff at a level that would encourage participation while also producing benefits for non-participating customers.<sup>32</sup> Further, REV's witness testified that GMP's pricing is not substantially below the cost he would expect in the market.<sup>33</sup>

Finally, while GMP has not proposed a tariff for dealing with the redeployment of systems that are removed from customer premises before the end of a customer's lease term, GMP is planning to continue to receive benefits from those systems and stated that the systems would likely be redeployed through GMP facilities to ensure the batteries still produce benefits for all customers.<sup>34</sup>

### **3. The Vermont Consumer Fraud Act**

REV argues that the Commission should deny the ESS Tariff because participating customers will not have certain protections otherwise afforded to "home solicitation sales" under the Vermont Consumer Fraud Act ("VCFA").<sup>35</sup> "Home solicitation sales" by a public utility regulated by the Commission are exempted from provisions of the VCFA regarding termination of agreements.<sup>36</sup> Sellers that are subject to the VCFA's termination-of-agreement provisions for "home solicitation sales" may be sued for treble damages and attorney's fees for failure to comply with those requirements. REV maintains that because customers participating

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<sup>31</sup> Castonguay pf. at 10, Castonguay reb. at 41, and exh. GMP-JC-5.

<sup>32</sup> Tr. 2/13/20 at 32, 104 (Castonguay).

<sup>33</sup> Tr. 2/13/20 at 234, 238 (Moore).

<sup>34</sup> Tr. 2/13/20 at 64 (Castonguay).

<sup>35</sup> "'Home solicitation sale' means the sale or lease, or the offer for sale or lease, of goods or services with a purchase price of \$5.00 or more, whether under single or multiple contracts, where the sale, lease, or offer thereof is either personally solicited or consummated by a seller at the residence or place of business or employment of the consumer, or at a seller's transient quarters, or solicited or consummated by a seller wholly or in part by telephone with a consumer at the residence or place of business or employment of the consumer. Transient quarters includes hotel or motel rooms, or any other place utilized as a temporary business location." 9 V.S.A. § 2451a(d).

<sup>36</sup> 9 V.S.A. § 2451a(d)(8).

in the ESS Tariff will not have those remedies available to them, the Commission should deny the tariff.

REV's arguments are inapposite. The VCFA gives a consumer the right to cancel a "home solicitation sale" until midnight of the third business day after the day on which the consumer agreed to buy goods or services from the seller.<sup>37</sup> The ESS Tariff provides participating customers with greater protections than the VCFA. Customers that have signed an agreement to participate in the ESS Tariff do not have to pay anything until after installation, may terminate at any point up to the date of installation at no cost or obligation to them, and after installation may terminate service at any time, subject only to a termination fee.<sup>38</sup> Customers selecting the monthly payment option have no further obligations after the equipment has been removed, and if the customer selected the upfront payment option, the customer will be refunded on a prorated basis for the remainder of the agreement term.<sup>39</sup> Additionally, the Commission retains jurisdiction to oversee and enforce the terms of GMP's tariffed offering, and to the extent contractual or property damage claims arise, jurisdiction over those matters will remain with state courts as stated in the choice of law provisions in the customer agreements.<sup>40</sup> Therefore, in the event any issues arise for a customer participating in the ESS Tariff, they will have means to have their grievances addressed. Based on the foregoing, the fact that the VCFA will not apply to ESS Tariff transactions is not a reason to deny the tariff.

#### **4. The tariffs and customer agreements**

REV contends that state law and Commission precedent require all terms and conditions in a customer agreement to be part of a tariff. This issue initially arose because the Department expressed concern in its testimony about the tariff participation agreements being included in the tariffs, especially the lease agreement for the ESS Tariff. According to the Department, the customer agreement terms raise "issues related to licensed-lender laws, data breaches, and deceptive advertisements" that have traditionally been reviewed by other State agencies, such as

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<sup>37</sup> 9 V.S.A. § 2454(a)(1).

<sup>38</sup> Exh. PUC-Info Request-2.c at ¶¶ 6, 7.

<sup>39</sup> Exh. PUC-Info Request-2.c at ¶ 7.

<sup>40</sup> Exh. PUC-Info Request-2.c at ¶ 23. See *Petition of Caruso Wood Products v. Town of Readsboro Electric Dept.*, Docket No. 6807, Order of 6/9/2004 at 10 (stating that the Commission has the authority to regulate and enforce tariffs but does not have the authority to rule on claims for damages alleged to have been caused by negligence or breach of contractual obligations (such claims must be addressed in a separate forum)).

the Department of Financial Regulation, the Attorney General's Office, and the judiciary.<sup>41</sup> The Department stated that the terms and conditions of the customer agreements would be subject to Commission enforcement if adopted, thereby expanding the Commission's supervisory jurisdiction over GMP to include consumer complaints and disputes that the Commission traditionally has recognized as being beyond its general statutory jurisdiction. In response to the Department's testimony, GMP offered to remove the customer agreements from the tariffs while retaining some material terms of the agreements in the tariffs.<sup>42</sup> GMP also submitted a revised customer lease agreement for the ESS Tariff that makes clear that customers may bring claims before the Commission or state and federal courts.<sup>43</sup>

Section 225(a) states that GMP must keep rate schedules (i.e., tariffs) on file with the Commission "and as a part thereof shall file the rules and regulations that in any manner affect the tolls or rates charged or to be charged for any such service or product." The purpose of this statutory requirement is to "record in a single readily accessible and readily updated place all of the obligations between the Company and its customers."<sup>44</sup> Therefore, while GMP does not have to include the form of a customer agreement as an attachment to a tariff, a tariff must include all terms of a customer agreement that "in any manner affect the tolls or rates charged or to be charged for any such service or product."<sup>45</sup> GMP has included many key terms from the customer agreements in the modified tariffs that were filed after the hearing.<sup>46</sup> However, there are rules and regulations affecting the tolls or rates charged, such as the equipment charge for the ESS Tariff and the termination charge for the BYOD Tariff, that are not stated in the revised tariffs and are only stated in the customer agreements. In fact, the revised ESS Tariff specifically directs customers to "see lease for details" of these charges.<sup>47</sup> This violates Section 225(a). GMP will need to file revised tariffs that include all the terms of the revised customer agreements that affect the tolls or rates of the tariffs.

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<sup>41</sup> Flint pf. at 8.

<sup>42</sup> Tr. 2/14/20 at 76 (Hand).

<sup>43</sup> Exh. PUC-Info Request-2.

<sup>44</sup> *In re Mountain Cable Co. et al*, Dockets 6101 and 6223, Order of April 28, 2000, at 44.

<sup>45</sup> 30 V.S.A. § 225(a).

<sup>46</sup> Exh. PUC-Info Request-2 at Sheet 290 ("Equipment Charge for failure to surrender unit upon Customer Early Termination or GMP Termination also may apply, based upon age of lease at termination; *see lease for details.*") (emphasis added).

<sup>47</sup> *Id.* at

The Commission acknowledges the Department's concern about customers bringing novel legal claims to the Commission because the customer agreement terms are in the tariffs. The Commission has jurisdiction to hear complaints from customers "receiving service or entitled to receive service from a utility regulated by the Commission seeking a refund of charges and/or an order requiring a utility to comply in a reasonable manner with any applicable tariff, statute, rule or order of the Commission."<sup>48</sup> But the Commission is a body of limited jurisdiction and cannot award damages or enforce statutes that are entrusted to other agencies or the courts.<sup>49</sup> There may be instances where the Commission will have to direct customers to another forum for claims that are outside its jurisdiction.

However, the Commission concludes that the tariffs, including the terms of the revised customer agreements, will provide appropriate consumer protections. The Department has testified that it believes that GMP intends to comply with any law or regulation protecting consumer rights, and no party has suggested that any term of the customer agreements is unlawful. The revised ESS Tariff customer lease agreement also makes clear that customers can elect to bring complaints to the Commission or in the courts.<sup>50</sup> The BYOD Tariff customer agreement should include a similar provision stating that the parties agree that any dispute arising out of the agreement may be brought either before the Vermont Public Utility Commission or before a state or federal court in the State of Vermont. Under these circumstances, the Commission is comfortable approving the tariffs with the revised customer agreement terms.

**5. Changes to the tariffs and information submitted by GMP after the evidentiary hearing**

REV contends that GMP has relied on "updated proof the Company submitted after the evidentiary hearing to support its evolving Energy Storage Service Tariff."<sup>51</sup> REV argues that GMP has not shown that these updates are necessary to provide adequate and efficient service. REV describes three categories of allegedly improper updates. First, REV objects to proposed

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<sup>48</sup> Commission Rule 2.301.

<sup>49</sup> *Trybulski v. Bellows Falls Hydro-Corp.*, 112 Vt. 1, 7 (1941).

<sup>50</sup> Exh. PUC-Info Request-2.c at ¶ 23 (noting that agreement is governed by State of Vermont, and that "[t]he parties agree that any dispute arising out of this Agreement shall be brought either before the Vermont Public Utility Commission or before a State or Federal court in the State of Vermont.")

<sup>51</sup> REV Reply Brief at 1.

changes to the ESS and BYOD Tariffs that GMP offered after the evidentiary hearing, including (1) altering the timeframe for the ESS and BYOD tariffs to align with the term of GMP's currently in-effect Multi-Year Regulation Plan, (2) removing the customer agreement from the ESS Tariff and incorporating terms from the lease into the body of the tariff where necessary, and (3) revising the BYOD Tariff in response to REV's request to make sure that newly available technology could be added quickly to the BYOD Tariff without the need for a tariff change in the future.

Section 225(a) of Title 30 of the Vermont Statutes Annotated prohibits what is known as "updating" during a rate case. Specifically, a company may not:

amend, supplement, or alter an existing filing or substantially revise the proof in support of such filing in order to increase, decrease, or substantiate a pending rate request, unless, upon opportunity for hearing, the company demonstrates that such a change in filing or proof is necessary for the purpose of providing adequate and efficient service.<sup>52</sup>

The Commission has explained that Section 225(a) "expresses a clear public policy, based on a recognition that the utility controls the information and (usually) the timing relevant to a rate case. It also recognizes the public risk posed by forcing the Public Advocate to litigate against a moving target."<sup>53</sup> In summary, Section 225(a) and Commission Rule 2.204(G) require a utility to present all information justifying a rate request with the company's initial filing. Prohibited updating occurs in a traditional cost-of-service rate case when a utility company tries to introduce new information supporting a rate increase after its initial justification is challenged.

However, the changes to the tariffs in this case were not offered to "increase, decrease, or substantiate a pending rate request" and, therefore, are not prohibited. Section 225(a) does not prohibit a company from conceding that portions of its proposed tariff should be changed to be found just and reasonable. Similarly, the Commission has authority to order changes to a proposed tariff to ensure that it is just and reasonable.<sup>54</sup>

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<sup>52</sup> 30 V.S.A. § 225(a).

<sup>53</sup> *Investigation into the existing rates of Cent. Vt. Pub. Serv. Corp., and Tariff filing of Cent. Vt. Pub. Serv. Corp., requesting an 8.9% rate increase*, Docket 5701/5724, Order of 10/31/94, at 22.

<sup>54</sup> 30 V.S.A. § 218(a) ("[the Commission] may order and substitute . . . such rates, tolls, charges, or schedules, and make such changes in any regulations, measurements, practices, or acts of such company relating to its service,

The second category of filings that REV objects to is the information provided by GMP in response to questions posed by the Commission at the evidentiary hearing. The Commission requested these filings to clarify information that was already in the record. Therefore, these filings do not constitute a substantial revision of proof that would be prohibited under Section 225(a).<sup>55</sup>

Lastly, REV objects to footnote 130 of GMP's initial brief where GMP asserts that its proposed ten-year lease period is consistent with recently adopted Financial Accounting Standard Board ("FASB") guidance because this would constitute updating under Section 225(a). GMP persuasively responded that there is no dispute about whether GMP is following Generally Accepted Accounting Procedures and that "the underlying FASB guidance is not critical to the Commission's determination in this case."<sup>56</sup> GMP's assertion that its customer lease terms are consistent with FASB guidance is analogous to a legal citation and is not the sort of substantial revision to the Company's proof that is prohibited by Section 225(a).<sup>57</sup> For these reasons, REV's objections raised under Section 225(a) are rejected.

## VII. CONCLUSION

Based on the evidence of record, the Commission concludes that GMP's proposed ESS and BYOD Tariffs are just and reasonable. GMP is required to file compliance tariffs within ten days of the issuance of this Order that incorporate the changes described above, including that all the terms of the customer agreements that affect the tolls or rates of the tariffs be added to the terms and conditions of the tariffs. GMP shall comply with the reporting requirements described above and in the ordering paragraphs below.

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and may make such order as will compel the furnishing of such adequate service as shall at such hearing be found by it to be just and reasonable." The Commission also notes that the Commission has not accepted GMP's offer to remove all the terms of the revised lease agreement from the body of the tariff.

<sup>55</sup> 30 V.S.A. § 225(a) (stating that a utility may not "*substantially* revise the proof in support of" a proposed tariff) (emphasis added).

<sup>56</sup> GMP Surreply Brief at 5.

<sup>57</sup> GMP urged the Commission to take judicial notice of the FASB guidance, but the Administrative Procedure Act states that in order to take notice of material, "[p]arties shall be notified either before or during the hearing, or by reference in preliminary reports or otherwise, of the material noticed . . . and they shall be afforded an opportunity to contest the material so noticed." 3 V.S.A § 810(4). It is not necessary to take notice of the FASB guidance because GMP's proffer that its lease terms are consistent with the FASB guidance is not material to the Commission's decision to approve the ESS Tariff.

### **VIII. ORDER**

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

1. Green Mountain Power Corporation (“GMP”) shall be permitted to implement the Energy Storage System tariff (the “ESS Tariff”) and the Bring Your Own Device tariff (the “BYOD Tariff”) pending the Commission’s approval of compliance tariffs consistent with this Order.

2. Within ten days of the issuance of this Order, GMP shall file compliance tariffs, subject to Commission approval. The compliance tariffs shall incorporate all changes described in today’s Order, including that the terms of the customer agreements be incorporated into the tariffs.

3. GMP shall report the following data on an annual basis concurrent with reporting under its Multi-Year Regulation Plan. GMP shall report on the following metrics: (1) the number of systems and total kW installed under each tariff; (2) the number of installers participating in each tariff; (3) the names of the installers; (4) the battery type/size installed by manufacturer; (5) the number of monthly peaks during which discharge successfully occurred during the RNS peak and the total capacity available during discharge; (6) whether the batteries were successfully discharged during the ISO New England annual forward capacity peak and the total capacity available during that discharge; (7) the financial savings from peak shaving actually achieved; (8) the total lease revenue; (9) any payments requested and/or received from Tesla under the performance guarantee; (10) the annual program costs by program (including cost to service debt and equity associated with the investments for the ESS Tariff); (11) the number and capacity of systems defaulting on lease payments; and (12) the number and capacity of systems that fail to respond to more than three discharge signals. GMP shall file these reports in a separate report case.

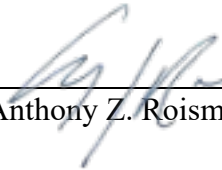
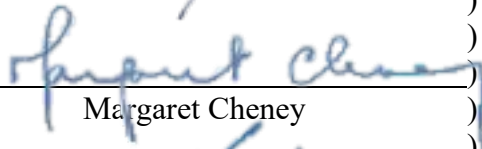

4. When the Multi-Year Regulation Plan concludes, GMP shall continue to report on these 12 metrics until the lease terms and five-year extensions of those terms expire and until systems in the BYOD program reach the end of their ten-year enrollment term. Also, when the ESS Tariff enters its eleventh year, and each year thereafter, GMP shall report on the number and



capacity of systems re-enrolled in the tariff. GMP shall file these reports in a separate report case.

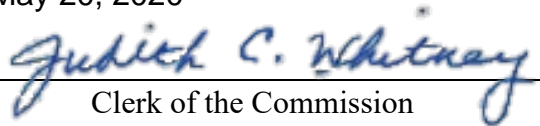
5. Within six months of this Order, GMP shall file with the Commission and the Vermont Department of Public Service either (i) a plan for the creation, size, funding, and terms of use for a loan loss reserve fund, including the disposition of funds remaining in the account after the conclusion of the ESS Tariff; or (ii) justification with supporting documentation to explain why creation of a loan loss reserve fund is not feasible or is unnecessary. GMP shall file the requested information as a compliance filing in this case.

Dated at Montpelier, Vermont, this 20th day of May, 2020.

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

OFFICE OF THE CLERK

Filed: May 20, 2020

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](mailto: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 Nos. 19-3167-TF & 19-3537-TF – JOINT SERVICE LIST

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