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January 21, 2022

Holly Anderson, Clerk
Vermont Public Utility Commission
Peoples United Bank Building, 4th Floor
112 State Street
Montpelier, VT 05620-2701

Re: Case No. 21-5254-TF – Extension of Bring Your Own Device Program and Energy Storage System Service Tariffs

Dear Ms. Anderson:

We provide these comments with additional detail in response to the comments filed by Renewable Energy Vermont ("REV") regarding the BYOD tariff renewal in the above-referenced BYOD and ESS tariff extension request proceeding.

Our proposed BYOD tariff update to require grid charging will apply to new enrolling BYOD customers after October 1, 2022. This proposed update will ensure participating customers have backup power when they need it while also delivering program benefits as designed to all customers. The update brings the BYOD program closer to alignment with the ESS tariff, where all systems are capable of grid recharging, and is designed to ensure BYOD enrolled systems meet the peak reduction commitments upon which the upfront BYOD incentive is based.

Good communication is key for customer programs. BYOD was designed to provide customers an option to work directly with energy service companies to purchase storage systems and receive an incentive for allowing GMP to call on these systems for peak events, saving money for all customers. Currently, when customers enroll in BYOD, they decide with the company that sells and installs their storage system how much energy they want to share with GMP and how they want to recharge their system. The upfront incentive they receive is based upon how much energy they choose to share.

As part of the original BYOD Pilot, REV provided feedback that an upfront incentive was important because monthly payments for actual performance of systems during GMP peaks would not be effective to encourage customers to adopt storage. We agreed to provide an upfront incentive to help the program's success. But with an upfront incentive, if the enrolled amount of energy is not available when needed, the participating customers get the benefit without fulfilling their BYOD commitment, directly impacting all other customers. In other words, the battery storage programs work in large part because energy stored in the system can be deployed by GMP to offset expensive peak moments—if it's not available at that time, other customers are paying the incentive but not realizing the full cost savings.

The current tariff is silent on how a customer and the installer set up recharging, whether through the grid or through solar-only recharging. However, at this time, to claim the Solar Investment Tax Credit for a solar-paired storage system, the storage system can only be recharged directly from the solar. The terms and conditions agreed to by BYOD customers says:

> *You acknowledge and understand that if your Equipment requires that it be recharged only by solar power for any reason, whether for operational, financial, or other benefits or reasons, this may impact or delay the Equipment's return to a fully charged status and availability for the BYOD program commitments or back up power.*
>
> *System outages, Equipment failure, or other circumstances outside GMP's control may impact or delay the charging status and availability of your Equipment. GMP cannot guarantee that your Equipment will be charged, fully charged, or available to you during all system outages; however, the BYOD program is designed so that GMP will minimize use of your Equipment during or prior to a weather event that is expected to cause system outages.*

Bring Your Own Device Customer Lease Agreement at 3–4. Available along with additional program information at https://greenmountainpower.com/rebates-programs/home-energy-storage/bring-your-own-device/battery-systems/.

As part of the tariff, GMP can charge BYOD customers for failed performance; however, that is a solution we don't want to exercise routinely since it was meant to be used for storage systems that were not functioning and, despite notice, customers did not repair or bring back online. It has become clear to us that the implications of choosing to recharge only with solar, in order to take both the Solar ITC and the BYOD incentive, are not well understood by BYOD customers. That's why we are proposing to modify the tariff when it renews to address this and help all customers. With this change, the customer will be able to choose between the Solar ITC and the BYOD incentive depending on what is most beneficial to them; if they choose the BYOD, they will need to ensure their system is set up to deliver the benefits the upfront incentive represents. Meanwhile, if a storage-only ITC is put in place in the future, which would not require recharging from solar only, customers would be able to benefit from both the ITC and the BYOD incentive.

GMP has received many phone calls and emails from BYOD participants with questions and concerns about a lack of energy in their energy storage system after a peak event and then subsequent lack of solar production to recharge their batteries. We have been working with these customers to explain the situation and have urged them to speak to their storage system providers to modify their recharging. Communications have included emails, phone calls, and discussions with installer sales teams. One customer's recent comment provides a good example of how customers are unware of this issue:

> *You see, when we signed up for this program two years ago—it was late spring/early summer. No one said anything about what happens when snow covers your solar panels, and you can't get your storage charged fast enough for GMP to draw down.*

Another BYOD customer wrote to us after receiving a peak event notification at the beginning of this year:

> *The solar array that charges our Tesla power wall batteries has been unable to charge our batteries due to ice and snow that has covered the panels until yesterday, January 2nd. Therefore, there is little charge present in the batteries. The charge in the batteries has been literally zero over the week or so since the last GMP "event" until yesterday when the charge came up to 17% by the end of the day. Due to the extended period of uncooperative weather, we have no power for GMP to tap.*

Not only did this BYOD customer have no storage available in the event of an outage for more than a week, but all GMP customers also missed out on the peak-reducing benefit on January 3, 2022, when the system was called upon and was only able to deliver only 50% of its committed amount.

It is not good for either the participating BYOD customer or the rest of our customers that these systems are not performing as committed. The BYOD customer is in a difficult position when there is not enough solar energy to recharge the storage system; this in turn means the battery system is not available for any potential outage. All customers are worse off when the system is not available as expected for a peak event. While this happens most often in the winter, it also happens in the summer, and if there is a peak event on back-to-back days—such as during a heat wave—these BYOD systems may not be able to perform as expected at a critical time for customer savings. Oftentimes the peak event is occurring late in the day after solar production has dropped. This means that even during good solar conditions, the battery will remain fully or partially empty until the sun comes up the next day, leaving the battery unavailable for the customer through the night should an outage arise. One customer's comment captures this concern aptly:

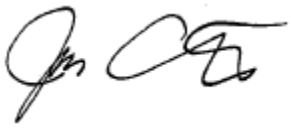
> *Last month you discharged two days in a row. It is impossible for my system to recharge in one day at this time of year. So, as long as you understand the weather will not be clear for several days so you will not be able to discharge again until after this weekend.*

This tariff change is intended to fix this issue for new enrolling customers and help ensure a successful BYOD program going forward for participating and non-participating customers. While we considered other alternatives—such as revaluing the BYOD upfront incentive to account for the poor performance of systems that are solar-recharged—we recognize that solution would still not leave BYOD customers with systems that perform to their expectations. Therefore, we ask that the Commission approve the tariff as submitted.

Finally, REV's comment raises a separate concern about batteries participating in net-metering. This concern is misplaced, as discussed further during the energy storage rulemaking in Case No. 21-3883-RULE. The metering that is in place today already allows for separating energy from solar PV production and storage charging and discharging, to assure that grid power stored in the battery cannot receive solar credits.

GMP appreciates the opportunity to respond to REV's comments in this proceeding, and will continue communication with REV on this issue and others, including a meeting next week with REV and BYOD program storage installers. If the Commission has any further questions, please don't hesitate to reach out.

Sincerely,



Josh Castonguay
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cc: Department of Public Service (via email and ePUC)
Renewable Energy Vermont (via email)