GREEN MOUNTAIN POWER
Generating Possibilities Together

VIA ePUC
August 27, 2021

Ms. Holly R. Anderson, Clerk
VERMONT PUBLIC UTILITY COMMISSION
People's United Bank Building, 4th Floor
112 State Street
Montpelier, VT 05620-2701

Re: Case No. 19-0855-RULE - Proposed revisions to Vermont Public Utility Commission Rule 5.100

Dear Ms. Anderson:

Green Mountain Power ("GMP") provides the following comments following the Vermont Public Utility Commission's (the "Commission") July 27, 2021 workshop regarding the Department of Public Service's ("Department") proposed Sheffield-Highgate Export Interface ("SHEI") Constraint Mitigation Grid Adjustor. The workshop addressed potential changes to the net-metering rule that would be necessary to implement the Department's proposal as well as potential broader changes to the rule to address the deployment of distributed generation in export-constrained areas. GMP appreciates the Commission's attention to this matter and the opportunity to comment. As discussed below, GMP supports the Commission's implementation of a SHEI adjustor and believes this rulemaking is also an appropriate venue to consider how locational guidance from the Commission in the net-metering program could help Vermont achieve its renewable energy goals affordably.

Vermont's net-metering program has promoted the development of significant distributed renewable generation ("DG") resources. In GMP's service territory alone, there are approaching 400 MW of installed DG,[1] the majority of which (335 MW) is solar photovoltaic ("PV"). About 230 MW, or more than half of the installed DG capacity, is solar net-metered projects, which for context represents almost half of GMP's average load of less than 500 MW. In the last five years (2016-2020), more than half of installed net metering projects have been large (up to 500 kW) solar PV projects, and that is true of the project pipeline too. Development of instate DG renewable capacity on this scale is a significant accomplishment over a relatively short period of time, and with the right planning and policy support, including a focus on location, we see opportunity for a continued strong pace of instate development.

GMP believes this rulemaking will help evaluate one avenue to continue to promote the benefits of DG while also securing substantial cost savings for all customers. Increasingly, promoting "a distributed energy future in which a significant portion of Vermont's energy is

1 This also includes some battery storage capacity.

produced near where it is consumed, and which is shaped by many coordinated actions by distributed energy users, rather than through singular central control"[2] means considering how location and siting of DG resources can be optimized to bring the most value to all customers.

More specifically, GMP thinks the Commission should consider whether the net-metering program—currently representing the single largest source of DG in Vermont—can be improved by, among other ways, better promoting locational value. GMP recommends considering amendments to the Rule that would enable the Commission to review potential locational impacts during its biennial update proceedings under Rule 5.128. This would give the Commission the tools and flexibility needed to keep track of the locational impact and value of net metering and account for the reality that the location of net-metering resources will become increasingly relevant to the value such resources provide for Vermont customers.[3]

The biennial proceeding under Rule 5.128 is one of the most effective opportunities for the Commission to help guide the size, type, site characteristics, and location of net-metering projects to benefit all customers. Under the Commission's existing authority, it already establishes "siting adjustors" that are intended to "provide incentives for the appropriate and beneficial siting of net-metering systems." A similar principle could be applied to capture significant differences in the relative value and cost of new generation in some locations in Vermont if they arise in the future. To be clear, we are not proposing adjustors in addition to the Department's proposed SHEI adjustor at this time, but we do think it will be important for the Commission going forward to have the means to establish geographic price signals in the net-metering program that encourage development where it makes the most sense.

To implement a price signal similar to existing siting adjustors based on the geographic location of a project, the (1) location, (2) magnitude, and (3) an opportunity to update locational adjustors will all be important.

- **Location:** Relevant geographic areas need to be defined. For example, to implement the Department's proposed adjustor, the SHEI area will need to be defined so that the applicability of the adjustor is known to applicants and interconnecting utilities. Likewise, to implement an adjustor in other locations, geographic areas will need to be defined. Accordingly, amendments to the rule should give the Commission the flexibility to distinguish among various locations in Vermont to the extent that significant differences in grid related costs or value arise.
- **Magnitude:** The magnitude of the adjustor could vary based on a variety of considerations. For example, it could involve considerations about the existing adverse economic impacts on Vermont customers as in the case of the Department's SHEI Straw Proposal. But the appropriate magnitude of an adjustor could also be based on the pace of

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2 2016 Comprehensive Energy Plan at 4.

3 See, for example, VELCO 2021 Long Range Transmission Plan at 7, available at https://www.velco.com/assets/documents/2021%20VLRTP%20to%20PUC_FINAL.pdf (noting that continued solar PV growth could cause additional curtailment of generation plants or require locally-funding transmission upgrades if that growth is pursued in certain geographical areas of Vermont).

development and the extent to which the Commission wishes to encourage development in certain areas over others; the available hosting capacity of a given location; the potential cost of significant grid upgrades; or other impacts on customers.
- **Updating:** The adjustors should be updated over time to the extent warranted by the pace of DG development, changes in grid conditions, the availability of alternative solutions, and other relevant factors. This is one reason GMP thinks implementing a locational adjustor under a framework that enables the Commission to review locational impacts on a two-year cycle represents a good way to track potential changes in the locational impacts of DG and make appropriate adjustments on a regular schedule.

In GMP's view, the Commission could pursue a relatively simple approach to address locational issues during a biennial review proceeding where all stakeholders have an opportunity to participate and present information and recommendations for the Commission's consideration. Under this approach, the Commission would have the opportunity to:

- Identify geographic areas where the development of additional DG may impact the need for significant distribution or transmission upgrades, including areas where additional distributed generation: (1) is expected to have the potential to contribute to the need for significant distribution or transmission upgrades, (2) may impact existing transmission or distribution constraints, including curtailment requirements on already-connected DG, or (3) could have a significant positive impact – such as helping to defer a grid upgrade that would otherwise be needed;
- Categorize different areas based on a determination that additional DG is: (1) not expected to contribute to the need for substantial distribution or transmission upgrades in the near- or long-term, (2) is expected to contribute to the need for substantial distribution or transmission upgrades in the near- or long-term, (3) will actually improve or defer the overall need for grid upgrades, or (4) has the potential to aggravate existing transmission and distribution constraints and result in adverse economic impacts on customers; and
- Establish the appropriate amount of the adjustor based on relevant policy considerations, the grid, and other factors discussed above.

GMP respectfully submits that further discussion on these topics in the context of net-metering will advance Vermont's effort to build thoughtfully placed DG that accounts for locational differences among proposed projects and recommends that the Commission consider issuing or calling for proposed draft Rule amendments after it has received sufficient input.

If you have any questions, please do not hesitate to contact me.

Sincerely,
/s/ Doug C. Smith
Douglas C. Smith
Chief Power Supply Executive

Cc: Service List via ePUC