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Via ePUC

Holly Anderson, Clerk
Vermont Public Utility Commission
112 State Street
Montpelier, VT 05620-2701

Re: Case No. 24-3351-INV – Investigation into the potential need for transmission system improvements identified in the 2024 Vermont Long-Range Transmission Plan

Dear Ms. Anderson,

Green Mountain Power (GMP) appreciates the opportunity to submit these comments in the above-referenced proceeding regarding VELCO's 2024 Vermont Long-Range Transmission Plan (Plan). These comments are offered in response to the Hearing Officer's request to comment on the recommendations in the Plan, in the *Order Addressing Schedule and Process* issued December 27, 2024.

The Plan's conclusion regarding statewide coordination for distributed generation growth management

Regarding the 2024 Plan's conclusion that "more statewide coordination and planning are needed to address how distributed generation growth can be optimally managed and coordinated," GMP agrees that coordination across multiple Vermont stakeholders will be needed to optimally develop new distributed generation to meet the updated goals in Vermont's Renewable Energy Standard (RES).

As discussed in VELCO's 2024 Plan and GMP's 2021 and 2024 Integrated Resource Plans, there is enough transmission capacity in the state to meet Vermont's 20% Tier II goals without major transmission upgrades if solar development could be guided to optimal locations on the transmission system or flexible resources such as controlled load and storage are utilized in combination with the generation deployment. Through our most recent 2024 IRP, GMP has identified what an optimized deployment would look like and how much generation capacity headroom exists across our entire system and now must work with Vermont stakeholders to help drive the optimal deployment.

GMP will be utilizing additional tools to limit the scope of grid upgrades needed to integrate new distributed renewables. These tools include limited curtailment of distributed renewable generation, use of distributed storage and flexible load resources, and solar plant design choices that can enhance plant capacity factors (i.e., the volume of renewable energy generation compared to required grid capacity). It is also possible that in some instances grid upgrades will be the most cost-effective way to integrate additional distributed generation, particularly if such upgrades can be implemented at a relatively low cost per kW and/or will provide other grid benefits.

Non-Transmission Alternative Analysis per Docket No. 7081

The 2024 Vermont Long-Range Transmission Plan identifies the potential overloads during peak demand hours caused by the most severe N-1-1 contingencies—which is loss of one transmission element, followed by the loss of another element. The initial analysis performed for the 2024 Plan considered the increased demand due to electrification of transportation and heating at amounts needed to meet the goals set in Vermont's Climate Action Plan. GMP is working with VELCO to first identify what the actual needs are, such as the overload in MWs and the durations of those overloads. From there, we will be able to determine if some of the tools already in use, such as EV charging control and deployed battery storage can meet the need prior to requiring additional NTA analysis. Once we have identified what the existing programs can cover, if a gap remains, the further NTA analysis process would begin. VELCO has already begun the work of performing the necessary time series analysis to identify the specific gaps.

GMP is looking forward to furthering our work with VELCO, the VSPC, the Commission, and other Vermont stakeholders in the LRTP planning horizon. Following additional analysis currently being performed by VELCO, GMP will continue to work with VELCO and the VSPC under Docket No. 7081 and reassess any reliability concerns after load control via GMP's existing, or other similar, programs are taken into consideration.

Thank you for the opportunity to submit these comments. Please reach out with any questions.

Sincerely,

Kamran Hassan
Leader of Engineering

cc: Service List *(via ePUC)*