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February 19, 2019

Judith Whitney, Clerk
Vermont Public Utility Commission
112 State Street filed via ePUC
Montpelier, Vermont 05620-2701

Re: 18-3810-INV, Investigation into Renewable Energy Standard Rulemaking

Dear Ms. Whitney:

This letter responds to Public Utility Commission ("Commission") Staff Attorney Elizabeth Schilling's Memo dated January 30, 2019 inviting participants to respond to the comments made and issues raised at the workshop as well as the written comments filed prior to the workshop. Green Mountain Power ("GMP") is pleased to provide its comments.

One issue that was raised during the workshop was the difference between renewable energy goals and carbon or greenhouse gas reduction goals in the Renewable Energy Standard ("RES"). Vermont's RES is one of the most aggressive renewable policies in the country and requires Vermont's utilities to focus not only on increasing renewables within their electric portfolios, but also reducing carbon emission in the non-electric sector.

There are two key components in Vermont's RES. The first is setting specific requirements for how much renewable energy Vermont utilities have to have in their energy supply provided to customers. This includes specific amounts of renewable energy produced from projects that are developed in Vermont.[1] The second sets specific requirements for carbon reduction that Vermont utilities have to achieve in the non-electric sector – like transportation, home heating and business processing.[2]

While there was a suggestion at the workshop that Vermont's utilities are using nuclear power to satisfy the renewable energy components of the RES, this suggestion is misplaced. Vermont

[1] The renewable energy requirements are set in Tiers I and II of the RES. Tier I sets minimum total amounts of renewable energy within the supply portfolio of each retail electricity provider. 30 V.S.A. § 8005(a)(1)(A) Tier II establishes a distributed renewable generation category for the RES. 30 V.S.A. § 8005(a)(2)(A).

[2] Tier III of the RES encourages Vermont retail electricity providers to support additional distributed renewable generation *or to support other projects to reduce fossil fuel consumed by their customers and the emission of greenhouse gases attributable to that consumption*. 30 V.S.A. 8005(a)(3)(A) (emphasis supplied). It is the latter component of Tier III which focuses on carbon reduction.

utilities do not use nuclear power to meet their renewable energy requirements, and the RES in no way allows nuclear power to be used to meet Vermont's renewability requirements. GMP is clear, and always has been clear to our customers, about our power supply. We make the distinction between carbon-free and renewable, as does the RES. Contracted nuclear power is not renewable, but it is considered carbon-free.[3] As required by the RES, this information is posted on our website and updated annually. https://greenmountainpower.com/2018/12/13/fuel-mix/

Under the RES, starting in 2017, Vermont utilities had to be 55% renewable increasing over time to 75%.[4] GMP is presently at 60% renewable and 90% carbon free. The 60% that GMP claims as renewable is all renewable energy. The part of GMP's portfolio that is carbon free is the sum of both the renewable energy and nuclear components. It is the carbon content of the electric mix that is used to determine how much carbon reduction under Tier III GMP must attain by helping its customers reduce their fossil fuel use. When a customer, for example, replaces a gas-fueled car with an electric vehicle, the amount of carbon credit GMP can claim is based on the carbon content of the electricity provided.

In no way is the nuclear component of this carbon-free mix being used to meet Vermont's renewable energy requirement. Instead, it is being used to calculate the amount of carbon reduction that has occurred as a result of specific actions, encouraged by utilities and taken by customers, like purchasing a heat pump or an electric vehicle.[5]

It is critical that we take steps to fight climate change. For carbon reduction, this means looking at transportation and how Vermonters heat our homes and businesses, and Tier III in RES encourages this view. Cutting and reducing carbon, in partnership with our customers, is the focus of everything GMP does. This is also part of our ongoing plan started years ago to continue to ramp up in-state renewable energy in a cost effective way while ramping down nuclear power.

GMP looks forward to working with the Department and other interested parties in this matter to address all of the topics that have arisen, and appreciates the opportunity to offer these further comments.

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[3] 30 V.S.A. § 8002(21)(B)

[4] 30 V.S.A. § 8005(a)(1)(B)

[5] The RES clearly explains how to calculate savings from a Tier III project. The utility must convert the net reduction in fossil fuel consumption resulting from the energy transformation project to a MWh equivalent of electric energy. 30 V.S.A. § 8005(D) To the extent the project increases electric use, the fossil fuel displaced must be reduced by the increased electric consumption that is fossil-fuel driven to obtain the net lifetime Tier III savings as compared to the non-fossil fuel portion of the utility's power supply. Nuclear energy provides electricity supply that is non-fossil fuel and does not have any direct GHG emissions. It is therefore appropriate, in the determination of MWh equivalents for energy transformation projects, to count nuclear energy as non-fossil fuel supply. Notably, neither the definition of Tier III nor the conversion calculation incorporate anything about renewable electricity supply; this is dealt with in parallel through Tier I (total renewable) and Tier II (distributed renewable). The clear statutory language requiring that energy transformation projects reduce fossil fuel consumption and that the savings be calculated based on net reduction in fossil fuel converted to a MWh equivalent of electric energy, shows that a utility's savings from a Tier III project that increases electricity must be quantified based on the non-fossil fuel portion of its power supply, including nuclear, and not to the renewable portion of a utility's power supply.

Thank you, and if you have any questions, please feel free to reach out.

Sincerely,

Carolyn Browne Anderson
CBA
cc: ePUC Service List (electronic only)