This document is being filed electronically using ePUC.

STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 19-0855-RULE
Proposed Revisions to Vermont Public Utility Commission Rule 5.100

Comments of Vermont Electric Cooperative

Vermont Electric Cooperative (VEC) submits the following comments in response to the information submitted by stakeholders on November 1, 2019.

VEC is dedicated to meeting the requirements of Vermont's Renewable Energy Standard (RES), which is a critical vehicle for achieving the state's greenhouse gas emission goals. As a not-for-profit, member-owned utility, we must work to do so in the most cost-effective manner available and with as little cost-shift as possible.

In the first two years of the RES, VEC has met or exceeded its compliance requirements, and we are well-positioned to continue meeting them in all three tiers. As our original comments submitted on November 1, 2019 stated, even with no new net metering projects, we currently have sufficient Tier II resources to meet our requirements until at least 2028, even after accounting for load growth from Tier III projects to transition from fossil fuels to electric and other renewable energy sources.

Response to Overall Comments Submitted by the Department of Public Service

VEC agrees in large part with the comments of the Department of Public Service (Department). As we stated in our November 1, 2019 comments, our data show that net metering is creating a significant cost-shift. Another way to state this is that we are overpaying relative to the value of the resource and relative to comparable renewable resources, and non-participants are covering the cost of that overpayment.

VEC agrees with the Department's statement that, "The cost pressure of net-metering has undesirable implications for meeting Vermont's total climate goals."[1] As the Vermont Greenhouse Gas Inventory 1990-2015 shows, electric generation was responsible for 10 percent of Vermont's greenhouse gas emissions in 2015, whereas transportation contributed 43 percent, and residential/commercial fuel use contributed 24 percent (Note that these figures do not capture the years since the RES has been in place). Net metering, among other factors, is causing electric rates to rise at a time when we are asking consumers to use more electricity as they transition away from fossil fuels with the purchase of electric vehicles, heat pumps, and other Tier III technologies. While customers have many motivations for making these changes, they are sensitive to fuel costs and may choose not to invest in these technologies if they will not realize savings as a result of those investments.

Moreover, net metering has significant opportunity costs as it absorbs both utility and customer resources that could be directed towards programs and technologies that are more

[1] Page 7

effective at reducing carbon emissions. Staff time spent on billing, engineering, and in-depth customer support for net metering participants is time not spent on building and maintaining a reliable system as well as programs for load management and energy transformation, which are areas that we must invest in if we are to achieve 90 percent renewability in total fuel consumption by 2050. Distorted price signals may also cause a customer to invest in a net metering system rather than direct carbon-reducing technologies such as heat pumps and electric vehicles.

Response to the Department's Straw Proposal

VEC generally agrees with the Department's straw proposal, which would compensate excess generation at the value of solar and generation that offsets load at the customer's retail rate. This proposal would better align the costs and benefits of net metering and reduce cost-shifting as directed in 30 V.S.A. § 8010(c)(1)(C).

However, we would amend the Department's proposal in three ways.

First, we believe that the value of solar should not be fixed for individual participants. When the value of solar changes, it should change for all customers that applied when those rules were in place. That is the same as the current rate structure for the statewide blended rate. As we stated in our November 1, 2019 comments, this recommendation is driven by billing simplicity (i.e., one new rate rather than one each time the value of solar changes) and the fact that the value of the generation is the same at any given time regardless of when the system came online. Since the majority of the credit will be received as a usage offset (i.e., rolling the billing meter backwards), small changes in the value of solar should not have a great impact on the amount of credit that a customer receives. VEC's model projects that this value will move in both directions, and the participant could benefit from having a floating rather than fixed value.

Second, VEC recommends that, because utilities can claim RECs for the full production of the system, the REC value be given for the full production rather than only for excess generation. Under this scenario, the value of solar without RECs would then be given on the excess generation. For example, an array generates 500 kWh for the month and 200 kWh of that is excess generation. If the REC value is $0.025/kWh, then the account would receive $12.50 (500 x 0.025) for the value of the RECs. If the value of solar without RECs is $0.07/kWh, then the account would also receive $14 for the excess generation (200 x 0.07) for a total credit of $26.50.

Third, VEC does not support removing the 500-kW limit on project size proposed by the Department. As stated in Rule 5.100, net metering "is intended primarily to offset the customer's own electricity requirements."[2] Virtual net metering has already caused the program to stray far from this principle by allowing solar arrays directly connected to the grid to provide credits to off-takers a hundred miles away. Removing the 500-kW limit on the project size would further erode this principle and eliminate any discernable difference between net metering and other Tier II resources. It would also exacerbate utility interconnection concerns because utilities have no control over where these projects are sited Lastly, VEC has most of its power supply locked up in

[2] Page 8

long-term contracts in order to protect members from price volatility. Without a cap on the total amount of net metering or the project size, it is easy to see how a utility would be at risk of having to take generation significantly in excess of its power supply requirements.

The Department proposed a workshop to determine the value of solar. VEC supports this concept, which would create an open and transparent process.

Response to Comments Submitted by Other Stakeholders

Instead of addressing each participant's comments individually, we address general themes that we did not discuss in our November 1, 2019 comments.

Some commenters discussed grid resilience as a benefit of net metering. However, without significant utility investments to create a micro-grid or a battery co-located with the generator, net metering systems provide no power in the event of an outage. IEEE-certified inverters must shut down during an outage to ensure that the system is not feeding power onto the grid and creating a hazard for line workers. Almost all net metering systems rely completely on the availability of grid access.

The intermittent nature of solar power limits its usefulness in creating distribution or transmission system resiliency. At every level, the grid is designed to serve peak power demand. Because net metering resources come and go with the sun (and wind, but mostly sun), they do not lead to less robust or expensive grid investments. In fact, net metering often leads to more expensive, complex and duplicative investments because the grid must be ready to replace the loss of these generators when clouds pass over or a storm rolls in. Batteries could mitigate these effects on a minute-by-minute or hour-by-hour basis, but not on a seasonal basis. Even with significantly more solar than Vermont currently has, the grid will have to be robust enough to meet winter demand when sunlight is in short supply.

VEC appreciates the Commission's inquiry into this important topic. All stakeholders share the goal of creating a regulatory framework through which we can transform how we create and consume energy and, by doing so, reduce carbon emissions. We must do so in a clear-eyed, fact-based manner than correctly assigns values to each piece of a complex and challenging puzzle. Thank you for the opportunity to comment. We look forward to continued engagement on this topic.

Sincerely,

Lisa Morris
Energy Services Planner
Vermont Electric Cooperative