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, Inc.

Vermont Electric Cooperative, Inc. (VEC) submits the following comments in response to the Order Opening Rulemaking issued by the Public Utility Commission (PUC or Commission) on April 16, 2019.

A. General Comments

A year ago, the Commission undertook a comprehensive examination of the pace of deployment of net-metering in Vermont in the context of the Comprehensive Energy Plan (CEP) and the Renewable Energy Standard (RES). The Commission acknowledged that it "has been tasked with finding the balance between moving toward a carbon-free energy future, as outlined in the CEP and the RES, and doing so at a reasonable cost to ratepayers."[1] The Commission expressed its concern that net-metering is not the least-cost option for achieving Tier II goals under the RES, and it addressed that concern by reducing the siting adjuster for Category III net-metering systems by $0.01 and the REC adjuster by $0.02 over a two-year period (although these reductions were somewhat offset by an increase in the statewide blended rate). The Commission declined at that time to change the eligibility criteria, in particular the inclusion in the program of large projects.

While the changes to the adders provided welcome relief, the continued inclusion of large projects, which are more like merchant-generators than true net-metering projects, threatens the balance between pursuing carbon reduction goals and remaining true to least-cost principles. VEC believes that the Commission should use this rulemaking to eliminate Category III net-metering systems because they are no longer needed and are not cost effective and thus fail to meet key criteria of 30 V.S.A. §248.

Moreover, having heard evidence of the negative impacts of net-metering projects that are located within transmission-constrained areas such as the Sheffield-Highgate Export Interface (SHEI), the Commission should revise the rule to remove "preferred site" status from such projects.

These issues and other comments are addressed more fully below.

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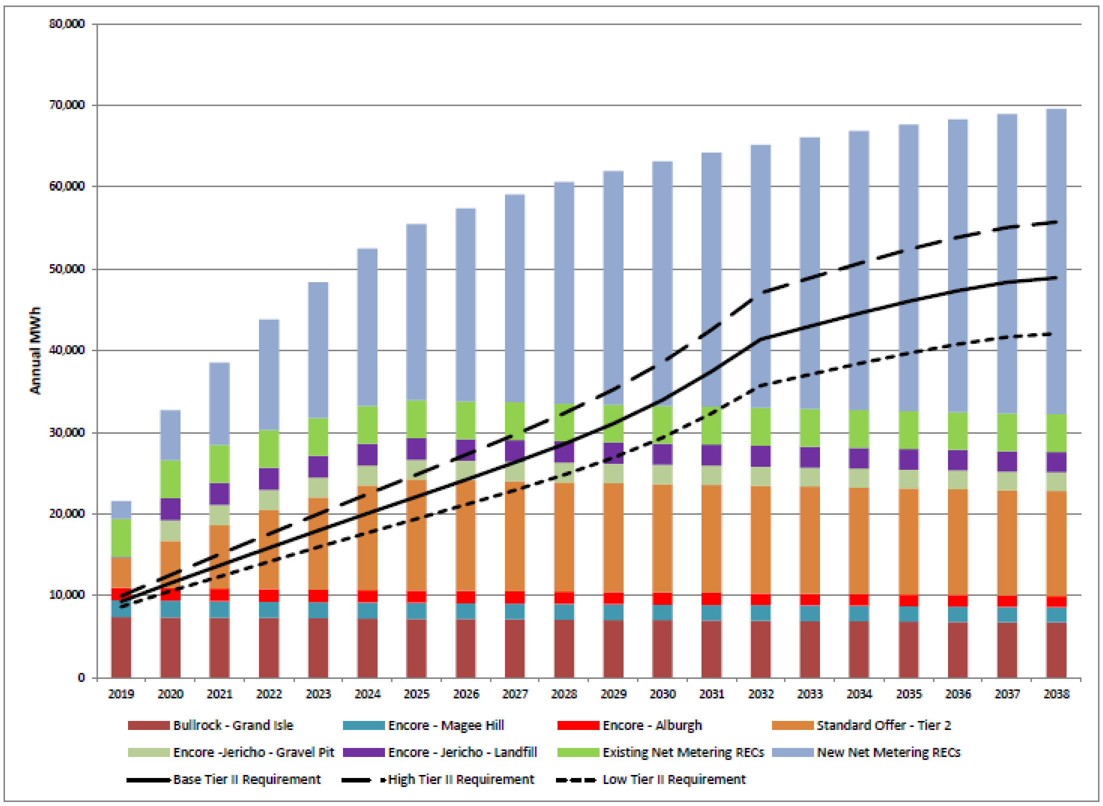
[1] Case No. 18-0086-INV, *In re: biennial update of the net-metering program,* Order entered 5/01/18, at page 31 (referred to herein as the "Biennial Update Order").

B. <u>The PUC Should Remove Category III from the Net-Metering Rule.</u>

1. <u>Large Solar Net-Metering Projects Are No Longer Needed to Meet State Goals.</u>

As shown in the chart below, VEC already has a commitment to take Tier II resources in excess of its Tier II requirements in every year for the next 20 years. VEC has no need for additional Tier II resources, especially large net-metering projects that continue to receive a subsidized rate despite last year's adjustment to the REC adder.



Moreover, even if VEC were to need additional Tier II resources, there are lower cost options, as the Commission has recognized in its Biennial Update Order when it stated that:

> [T]here are more cost-effective ways for Vermont to develop solar resources than continuing the current net-metering incentives. As stated in the CEP, '[p]ower supply questions now revolve around the most cost-effective way to meet the RES requirements, not around how much renewable energy to acquire." (footnote omitted).

Despite the changes made to the REC adjuster in 2018, the total credit that these projects receive is still significantly higher than projects developed under Power Purchase Agreements (PPAs) and through recent auctions in the Standard Offer Program, as shown in the following table:

Comparative Cost for a 500 kW Project Developed Under Net Metering Vs. Other Programs

		NM 1.0 (no RECs)	NM 2.0 (w/RECs)	PPA	Standard Offer
First 10 yrs	Price/kWh	0.1940*	0.17464**	$0.1164***	$0.10126****
	Annual Cost	$135,800	$122,125	$81,480	$70,882
	Annual Subsidy	$54,320	$40,645		
	10-year subsidy	$543,200	$406,448		
Last 15 yrs	Price/kWh	0.1960**	0.1760**	$0.1164***	$0.10126****
	Annual Cost	$137,200	$123,200	$81,480	$70,882
	Annual subsidy	$55,720	$41,720		
	15-year subsidy	$835,800	$625,800		
	Lifetime Subsidy	$1,379,000	$1,032,248		

**Includes an annual escalator of one percent, VEC's conservative assumption for VEC's annual rate increase.*
***Includes an escalator of four percent every two years, VEC's conservative assumption for the rate of increase for the statewide blended rate.*
****Based on five solar PPA projects.*
*****Based on the 2018 Standard Offer award group for solar.*

2. <u>Continued Subsidies for Large Net-Metering Projects Divert Resources from Other Strategic Initiatives.</u>

Vermont has established ambitious energy goals through the CEP. In order to reach 90 percent renewable power by 2050 in not only electricity but also heating and transportation, electric utilities and their ratepayers will likely need to make significant investments to allow for increased electric usage and integrate more renewable power onto the grid. In addition, reaching state goals will require investment in battery storage, infrastructure upgrades, load management strategies, and fuel-switching projects. As a state, we need to ensure that these investments are made in accordance with the least-cost principles that have always guided utility decision-making. When utilities are required to pay a subsidized rate for large net metering projects, this subsidy creates an unnecessary cost pressure that could drain resources from other investments and increase rates at a time when affordability of electricity is becoming ever more important.

VEC believes that it is time to return net-metering to its roots as a load reducing mechanism available for individual and small businesses to locate at or near their property. A large net-metering project located far away from the groups who "consume" its output is no different from a merchant renewable project – except that it costs ratepayers more. The time has come to remove Category III projects from the program altogether.

C. Net-Metering Projects Located in the SHEI Should Not Receive "Preferred Sites" Designation.

As part of the Commission's biennial review proceeding, VEC recommended that the Commission add a restriction to the "preferred site" definition in Rule 5.100 to address the transmission constraints in the SHEI. As the Commission knows, in this area there are times where generation exceeds load and the excess is not able to be exported from the area, resulting in curtailments of existing renewable resources to the detriment of Vermont ratepayers.

In that proceeding, the Commission declined to change the eligibility criteria based on transmission constraints, observing that:

> There is insufficient information in this proceeding for the Commission to develop a general rule about the SHEI. Instead, the Commission determines it is more appropriate to consider such issues in the context of a contested case, where current information can be used to evaluate the effect of a proposed generator on the operation of the system.[2]

The Commission has now had the benefit of a contested case on this issue. In the Derby Solar matter, the Commission, having heard the evidence, found that a 500 kW net-metering project located in the SHEI does not comply with two key criteria of section 248.[3] The Commission acknowledged that "the dynamic nature of the transmission system does not allow precise analysis regarding which energy resource has caused the curtailment of another generation resource at any particular moment in time." Nonetheless, it concluded that "in the aggregate, the SHEI is often export constrained, and the addition of new energy sources in the SHEI, including the [Derby] Project, will increase the curtailments of existing generation."[4]

The Commission continued:

> We do recognize that the Commission's Section 248 and 8010 review process currently focuses on ground-mounted projects greater than 50 kW in size,

[2] Case No. 18-0086-INV, *In re biennial update of net-metering program*, Order entered 5/1/18
[3] Case No. 17-1247-NMP, *Application of Derby Solar LLC*, Order entered 1/24/19
[4] Id. at 25.

> allowing certain net-metered projects that may increase curtailments to be added to the SHEI without significant review. We will consider outside this proceeding whether this policy remains appropriate given the existing constraints in the SHEI.[5]

This rule-making offers an opportunity not only to address the process issue that the Commission had deferred in the Derby Solar matter, but also to address the SHEI issue generally, by eliminating preferred site status for projects located in the SHEI.

The Commission's logic in Derby Solar – that the addition of new energy sources in the SHEI will increase the curtailments of existing generation and cause economic harm to Vermont ratepayers – justifies removing preferred site eligibility for projects located in that area. This would affect Category II and Category III net-metering systems (i.e. systems above 15 kW). These net-metering projects already are paid a subsidy supported by VEC ratepayers. Located in the SHEI, those projects cost ratepayers even more.

VEC recognizes that there are serious and on-going discussions among the Vermont utilities, the Department of Public Service and others both to address current levels of grid congestion and to allow for the integration of additional renewable resources in the future. Until those solutions are developed, a limit on preferred site status will avoid exacerbating the existing problem. VEC urges the Commission to eliminate preferred site eligibility for projects within transmission-constrained areas as part of this rule revision.

D. The PUC Should Require All Projects Over 150 kW to Follow the Rule 5.500 Interconnection Process.

Although the draft rule provides clarity as to which types of net-metering systems need to file a Rule 5.500 application, the proposed distinctions do not meet the needs of the interconnecting utility. Under the proposed rule, a Rule 5.500 application would need to be submitted only for net-metering systems greater than 50 kW that are not roof-mounted or hydroelectric facilities. For all other systems, the registration (under section 5.105) or the application (under section 5.106) itself would constitute the interconnection application. While it may make sense from a processing perspective to adopt different PUC processes for different types of net-metering systems, the distinction proposed does not make sense for interconnection issues, which are driven completely by the size of the project.

The requirement to file a Rule 5.500 interconnection application currently proposed in section 5.107 (C)(10) should apply to all projects greater than 150 kW (Category III systems), including roof-mounted solar systems and hydro-electric systems. Utilities should be given

[5] Id. (footnotes omitted)

discretion as to whether they will require an interconnection study for projects sized between 50 kW and 150 kW.

The true driver of interconnection issues is project size, and any project larger than 150 kW needs to be reviewed under Rule 5.500 to ensure that appropriate analysis is done to identify necessary system upgrades. The 30-day process under section 5.105 (which includes projects up to 500 kW) is not sufficient to review the interconnection of larger projects.

VEC does not object to the streamlined procedure whereby the Commission is involved only where interconnection concerns cannot be resolved. However, to make sure that proper analysis is done, larger projects should be required to follow the Rule 5.500 process. As to the Commission's request for comments on adopting a simpler CPG process for so solar canopies over existing parking lots, VEC has no objection so long as such projects above 150 kW follow the Rule 5.500 process.

E. Other Comments.

1. Changes to Net-metering Rate Structure

Although the draft rule did not include any proposed changes to the current net-metering rates, the Commission invited comments on whether changes to the rate structure would be beneficial. As noted above and in numerous other comments, VEC continues to believe that the subsidized rates for projects above 150 kW are not sustainable or justified based on current market rates for non-net-metering solar. Removing such large projects from the net-metering program altogether would ensure that they are developed only when they are competitive. Alternatively the Commission should revise the rates paid for larger projects to be based on the true value that such output provides to the utility, which, as the Commission noted in it Biennial Update Order, has declined since the program was implemented, as peak times shift later in the evening and regional LMPs are depressed when the sun is shining.

VEC does not support linking net-metering rates with requirements for beneficial electrification. Net-metering and Tier III are separate programs, and customers should have a choice as to whether they can participate in one without being compelled to participate in the other. Moreover, VEC's most popular Tier III incentive has been for cold-climate heat pumps, which contribute the highest usage in the winter when there is little to no solar generation.

2. Changes to Streamline and Clarify the Registration of Net-Metering Systems

VEC has no objection to streamlining and clarifying the process for amending pending or approved net-metering systems. VEC agrees that the rate applicable to an amended net-metering application or registration should be the rate in place when the initial complete application or registration was filed and not on the date of the amendment. It would be administratively unworkable if the same net metering system were compensated based on two different rates. By the same logic, the ten-year period during which the system receives a preferential rate should begin when the original project was commissioned and should not be reset by amending the system's CPG.

3. Suggested Change Removing Multiple Systems Within One Group

VEC recommends removing Section 5.129(E) from the rule. This section allows a single group to include more than one net-metering system. This type of arrangement is administratively difficult to bill, as we need to aggregate the output and then distribute the credit among group members. For VEC, this is a manual process that cannot be automated. Billing for group projects is already administratively complex, and this provision exacerbates that.

If this provision remains, VEC believes that it should still be subject to Commission approval, which would allow utilities to comment in cases where this could be particularly burdensome to administer.

F. Conclusion

VEC appreciates the difficulty of balancing the many competing interests that the Commission must consider in crafting a sustainable net-metering program. Thank you for your diligence and your consideration of our comments.

Dated at Johnson, Vermont, this 17th day of May, 2019.

Respectfully submitted,

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