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Judith Whitney, Clerk
Vermont Public Service Board
112 State Street
Montpelier, VT 05620-2701

Re: Act 99 Net Metering Workshop
Comments of Vermont Electric Cooperative, Inc.

Dear Mrs. Hudson:

Please accept this letter as the comments of Vermont Electric Cooperative, Inc. (VEC) on the draft Rule 5.100.

A. The proposed rule includes some changes that improve on the current net metering program.

1. VEC supports the provision of the draft rule that allows utilities to recover fixed costs associated with providing net metering customers access to the electric grid. This provision corrects a fundamental flaw of the existing net metering program, which shifts the costs of maintaining the electric grid to those customers who do not participate in net metering. Net metering customers use the electric grid virtually every hour of the year, as do non-net metering customers, to inject output at times when their system is generating more than the on-site load and to withdraw energy when the system is not generating as much as the on-site load. For a net metering program to be sustainable over the long term, all customers must share in the cost of maintaining and upgrading the grid. The proposed rule allows for that.
2. Similarly, VEC supports the ability for a utility to recover reasonable costs of administration associated with net metering systems. Group net metering systems in particular carry administrative challenges.

The rule is not clear about how fixed cost and administrative charges would be set, and VEC supports a tariff process that would be similar to how other miscellaneous service charges are set, based on the utility's costs.

3. VEC also supports the requirement that members of group systems must be located within ten miles of the net metering generation. This provision supports the general goal of locating distributed generation near load. Under Vermont's current group net metering rules, generation can be located far from the group members that it has been built to serve, risking straining the transmission system in remote areas where generation could exceed load.
4. Finally, VEC believes that the draft rule has done a good job of clarifying the net metering application process.

B. The rate provisions of the draft rule do not support a fair and sustainable net-metering program.

1. A fundamental problem with the rates proposed in the rule is that they lack a factual basis. The rule includes no justification for starting at the retail rate, nor for the 3¢ and 2¢ adders to be paid for excess generation. The rationale underlying Act 99 when it was enacted in 2014 was that the Public Service Board was better situated to develop the new net metering rates because of its expertise in the ratemaking process. However, to date the Board has not engaged in a process that includes findings of fact to support its conclusions. VEC suggests that, before adopting final rates to be paid for net metering generation, the Board conduct an evidentiary proceeding where it can test the level of rates that are necessary to achieve statewide goals -- including the goals expressed in Act 56.

VEC is concerned that, compared to other solar opportunities available in the market place, the retail rate is higher than utilities should pay for net metering. The solar industry has experienced economies of scale and increased competition, both of which have helped drive down prices. In the Standard Offer program, for example, two 2.1 MW projects were accepted at 10.96¢/kWh and \$10.97¢/kWh, and a 500 kW solar project was accepted at a cost of 15.5¢/kWh. The cost for the 2.1 MW projects is similar to prices VEC is negotiating for other utility scale (greater than 500 kW and smaller than 5 MW) projects that qualify for Tier 2 under Vermont's Renewable Energy Standard. Moreover, all of the Standard Offer and PPA prices include the RECs associated with the generation. The proposed net metering price for excess generation -- retail rate plus 3¢ for the RECs and 2¢ as a siting incentive -- means that VEC will pay 22.62¢ for excess generation, dramatically more than it will pay for alternative renewable sources.

Larger projects, admittedly, enjoy economies of scale; however, the Board should consider whether smaller projects have also benefited from lower solar equipment costs, rendering the proposed incentive structure unnecessary. One of the articulated goals of Act 99 is to develop a net metering program that “accounts for changes over time in the cost of technology.” Except for a presentation by VPPSA, no stakeholder has addressed this criterion to date in the rulemaking process.

It may be true that higher incentives are needed to continue deployment of small rooftop solar, and retail rates may be justified for those projects. However, a factual record has not been developed to reach that conclusion. Certainly, larger projects should be compensated at less than retail, given falling solar costs and economies of scale. It is only through a fact-based inquiry, similar to that used when the Board sets any other utility rate, that the Board can assure that utility customers are not paying more than needed to secure net metering resources.

VEC’s analysis of its net metering program shows that under current rates, the costs associated with net metering exceed the benefits by a 2.3 to 1 ratio. The analysis shows that for each kilowatt of net metering capacity, VEC pays about \$150 more annually than the benefits it receives. For its active systems, that cost amounts to over \$900,000 more than the benefits annually; with pending projects the annual cost will increase by about \$500,000. (Attachment 1 summarizes this analysis.)

This excess cost is shifted to members who do not participate in net metering, and it is beginning to place upward pressure on VEC’s rates. Moreover, VEC has control of almost none of the RECs for installed and pending net metering systems, meaning that VEC pays this subsidy for power that it cannot count as renewable, that does not contribute to statutory renewable goals as required by Act 56, and that is not in fact renewable if the RECs are sold.

VEC is happy to engage in a discussion and testing of its analysis and assumptions as part of a fact-based process to develop net metering rates that are sufficient to drive a pace of deployment consistent with public policy goals, while assuring that ratepayers are not paying more than is necessary to achieve those goals. This does not have to be a full-blown proceeding as to all elements of the rule. It could be narrowly focused on the appropriate rate(s) and leave all other net metering implementation issues to be developed as part of the rule-making process.

2. The rule must include a significant disincentive for customers who elect not to transfer renewable energy credits (RECs) to the utility, since energy from these net metering systems cannot be considered renewable under Act 56.

While this rule was being developed, Act 56 was enacted, which created new obligations for utilities to acquire renewable resources. For net metering to be considered a renewable resource under Act 56, RECs associated with net metering generation must be assigned to the utilities and retired. To achieve that end, the Board should start with a base rate that assumes the utility receives the RECs and then deduct a REC value for customers who elect not to transfer the RECs to the utility. VEC would suggest mirroring the Alternative Compliance Payment (ACP) in Tier 2 of Act 56, which is 6¢ per kWh.

VEC believes this is the best course of action of a variety of reasons.

First, the purpose of both Act 56 and net metering is to support the development of renewable resources in Vermont. Utilities should not be required to pay a premium for net metered energy that does not include RECs since it cannot be considered renewable, does not apply toward the Tier 2 requirements of Act 56, and does not help move the state closer to its goals.

Second, without the RECs, net metering generation must be considered a non-renewable resource in a utility's power supply portfolio. Over time, utilities are allowed to have less and less non-renewable energy in their portfolios, so net metering without RECs actually makes it harder for utilities to meet their Tier 1 Act 56 requirements, a perverse outcome. Moreover, comparable non-renewable resources are available at a lower cost.

Third, the net metering statute requires utilities to retire net metering RECs and does not require the same of the customer who elects to retain the RECs. Therefore, transferring the RECs to the utility is the only way for the Board to ensure that projects developed through net metering are supplying renewable energy in Vermont.

In conclusion, VEC firmly believes that Vermont ratepayers should not be required to pay a premium for non-renewable power under the auspices of net metering and that systems that choose not to transfer the RECs should receive a reduced rate rather than

requiring utilities to pay an additional amount for the RECs. VEC believes this is in line with the definition of “net metering system” in the statute, which includes a requirement that it “employs a renewable energy source.” Only with the RECs can a net metering system be considered a renewable energy resource under Act 56.

3. The proposed crediting, which requires a different rate for “excess generation,” is not administratively feasible for groups.

For groups, VEC currently monetizes the total kWh production from the generation account at the appropriate rate and credits dollar amounts to group members, whether percentage or priority based. Working in dollar amounts rather than kWh is simpler for a variety of reasons. Although VEC must still administer credits for its more than 100 groups manually, this process is straightforward and easily understood both by those administering it and the group members receiving credits.

Under the proposed rule, VEC would have to look at each generation account individually, determine the kWh produced in the billing cycle, total the kWh consumed by each group member, compare the two, then determine whether there was any excess generation that month to receive applicable adders. This process would require a large degree of manual intervention that would be time-consuming, difficult to explain to generators and group members, and expose the billing process to a high potential for error. VEC already spends a significant amount of time administering groups and explaining group set up, changes, and credits to members and has strong concerns about increasing the administrative burden of group net metering.

VEC would also like the Board to know that it has almost completed an extensive custom programming process with our billing vendor to automate the distribution of group credits, and the change proposed in the rule would cause us to abandon any hope of achieving automation. It would also create a new vintage of group systems, which VEC would have to track along with all the other vintages that have been created by different crediting schemes and rate increases over the years.

VEC also wonders what “retail rate” means for group generators that are located separately from the load they virtually serve. Currently, VEC treats these accounts as small commercial since they do not have a residence associated with them. VEC

questions what the appropriate "retail rate" would be under the proposed rule for group generators without associated load or residence (i.e., generation only accounts).

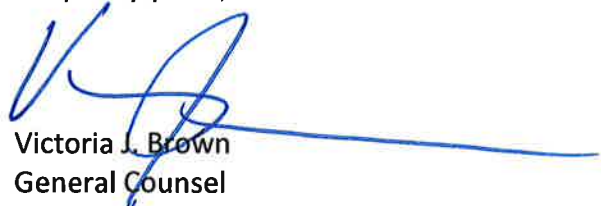
VEC asks the Board to adopt language in the rule that clarifies at what rate group net metering generators should be credited so that kWh can be monetized at the generation account level and distributed to group members as a bill credit not as kWh.

4. As to a cap, if the net metering program pricing is fair and sustainable, VEC would support elimination of a cap at least on smaller (15 kW and smaller) projects.

VEC works to keep rates as low as possible to the benefit of all our members, especially lower income members. We cannot support the elimination of the cap until we have a net metering program that compensates participants fairly and does not create additional cost-shifting.

Thank you for your consideration.

Very truly yours,



Victoria J. Brown
General Counsel

Attachment

cc: Parties (via email)

Vermont Electric Cooperative
2015 Net Metering Systems - Active and Pending
Cost Benefit Analysis Summary

VEC Net Metering - 2015 (includes applications received through 10/14/15)

Status	Technology	Individual System	Group System	Capacity kW	Annual kWh	Annual Cost
Active	Farm Meth	-	1	62	81,140	\$ 14,297
	Hydro	1	1	229	869,152	\$ 153,145
	Solar	474	71	5,363	6,925,055	\$ 1,354,032
	Wind	18	6	195	306,339	\$ 53,977
	Wind & Solar	8	4	138	196,707	\$ 34,660
	Active	501	83	5,987	8,378,393	\$ 1,610,110
On Hold	Solar	26	10	1,789	2,309,612	\$ 440,422
	On Hold	26	10	1,789	2,309,612	\$ 440,422
Pending	Solar	8	6	1,639	2,116,309	\$ 402,012
	Wind & Solar	2	-	12	17,098	\$ 3,013
	Pending	10	6	1,651	2,133,407	\$ 405,025
	Total	537	99	9,426	12,821,412	\$ 2,455,557

\$ Benefits Received

Technology Type	Energy	Regulation	Forward Reserve	Capacity	Transmission	Total
Active						
Farm Meth	\$ 3,880	\$ 9	\$ 90	\$ 474	\$ 1,179	\$ 5,632
Hydro	\$ 39,713	\$ 85	\$ 877	\$ 5,284	\$ 12,970	\$ 58,929
Solar	\$ 352,220	\$ 580	\$ 8,088	\$ 87,027	\$ 123,993	\$ 571,909
Wind	\$ 14,779	\$ 35	\$ 320	\$ 3,691	\$ 7,221	\$ 26,046
Wind & Solar	\$ 9,747	\$ 19	\$ 217	\$ 2,421	\$ 4,079	\$ 16,485
Active	\$ 420,339	\$ 729	\$ 9,593	\$ 98,897	\$ 149,442	\$ 679,000
On Hold						
Solar	\$ 117,471	\$ 194	\$ 2,698	\$ 29,025	\$ 41,354	\$ 190,740
On Hold	\$ 117,471	\$ 194	\$ 2,698	\$ 29,025	\$ 41,354	\$ 190,740
Pending						
Solar	\$ 107,639	\$ 177	\$ 2,472	\$ 26,596	\$ 37,893	\$ 174,776
Wind & Solar	\$ 847	\$ 2	\$ 19	\$ 210	\$ 355	\$ 1,433
Pending	\$ 108,486	\$ 179	\$ 2,491	\$ 26,806	\$ 38,247	\$ 176,209
Total	\$ 646,296	\$ 1,101	\$ 14,781	\$ 154,729	\$ 229,043	\$ 1,045,950

Cost Benefit Summary

Status	Technology	Capacity kW	Annual kWh	Cost of Net Metering Systems	Avoided Cost Benefit to VEC	Net Benefit (Cost) to VEC
Active	Farm Meth	62	81,140	\$ (14,297)	\$ 5,632	\$ (8,665)
	Hydro	229	869,152	\$ (153,145)	\$ 58,929	\$ (94,215)
	Solar	5,363	6,925,055	\$ (1,354,032)	\$ 571,909	\$ (782,123)
	Wind	195	306,339	\$ (53,977)	\$ 26,046	\$ (27,931)
	Wind & Solar	138	196,707	\$ (34,660)	\$ 16,485	\$ (18,175)
	Active	5,987	8,378,393	\$ (1,610,110)	\$ 679,000	\$ (931,110)
On Hold	Solar	1,789	2,309,612	\$ (440,422)	\$ 190,740	\$ (249,681)
	On Hold	1,789	2,309,612	\$ (440,422)	\$ 190,740	\$ (249,681)
Pending	Solar	1,639	2,116,309	\$ (402,012)	\$ 174,776	\$ (227,236)
	Wind & Solar	12	17,098	\$ (3,013)	\$ 1,433	\$ (1,580)
	Pending	1,651	2,133,407	\$ (405,025)	\$ 176,209	\$ (228,816)
Total		9,426	12,821,412	\$ (2,455,557)	\$ 1,045,950	\$ (1,409,607)