



March 3, 2016

Vermont Public Service Board
112 State Street, 4th Floor
Montpelier, VT 05620

Re: Draft Net Metering Rule 5.100

Dear Public Service Board Members,

Renewable Energy Vermont (REV) appreciates the Board's commitment to drafting a net-metering rule (5.100) that will set the stage for Vermont's future net-metering program and transformation of our energy infrastructure toward a more stable and efficient distributed generation future.

Renewable Energy Vermont shares the Board's and our State's vision for a sustainable, clean energy future in Vermont. We share these urgent comments to highlight critical issues for the Board's consideration as it deliberates additional changes to draft net metering rule 5.100. **REV's members are deeply concerned that elements of the latest proposed draft rule would result in unintended detrimental consequences for Vermont homeowners, farmers, businesses, and institutions, as well as the more than 16,231 employees comprising our State's clean energy economy.**

Vermont is a national leader in efforts to reduce pollution and combat climate change. In 2006, Vermont set statutory goals for the State to reduce harmful greenhouse gas emissions to 50% of 1990 levels by 2028 and 75% by 2050.¹ In 2008, the Vermont General Assembly issued legislative findings that:

- (1) Global climate change, which is threatening our environment and perhaps ultimately our existence, has been caused in part by an energy policy that is largely dependent upon the burning of fossil fuels;
- (2) In order to reduce greenhouse gas emissions and environmental degradation, it is essential that we reduce or eliminate our dependence on fossil fuels by significantly improving energy efficiency and shifting to benign forms of energy such as wind, sun and water power.²

In addition, with the recent passage of Act 56 and the Vermont Renewable Energy Standard (RES), utilities must meet more than 55% of their power supply needs from renewable resources by 2017, and 75% by 2032.³ The 2016 Comprehensive Energy Plan (CEP) set two new goals intended to achieve greater pollution reductions sooner: 40% reduction below 1990 levels by 2030, and 80% to 95% reduction below 1990 levels by 2050. The Vermont Department of Public Service informed the Vermont Solar Siting Task Force recently that the 90% renewable goal set forth in the CEP

¹ 10 V.S.A. § 578(a).

² 2008, No. 92 (Adj. Sess.), § 2.

³ 2015, No. 56 (Adj. Sess.).



reflects Vermont’s “strong desire to become energy secure, ensure stable prices and as much as possible to rely on resources indigenous to Vermont.”⁴

Yet, according to the New England Independent System Operator (ISO-NE), the majority of electric generation resources on the New England power system today “are traditional, grid-connected generators fueled by imported fossil fuels.”⁵ Green Mountain Power Corporation (GMP), the state’s largest electric utility, submitted testimony in multiple dockets recently that it faces a large gap in energy, capacity, and renewable energy generation.⁶

Net metering plays a critical role in furthering clean and renewable distributed generation. **Without appropriately modifying the proposed changes to Rule 5.100 to address grandfathering, rates and rate structure, and fees, the Board will virtually eliminate net-metering in Vermont.** Other unintended consequences of the proposed draft rule include significant job losses within the clean energy sector, financial hardship for thousands of Vermont’s electric customers, chilling financial investment in Vermont, and ultimately foreclosure of our State’s ability to achieve the critical climate change goals.

Grandfathering

Projects developed under the existing net-metering statute and rule have a vested right to the rates and contracts term in effect at the time of their application. As explained by the Vermont Supreme Court, the vested rights rule vests “a right in the developer to develop under the [regulation] in effect at the time of application”.⁷ The draft rule is ambiguous to current and future net-metering customers what basic rate they can reasonably expect for their long-term net-metering investments.

Current law establishes a net-metering program that credits net-metering customers for the production of their net-metering systems at the residential rate or the highest inclining block rate, if applicable, for a period of ten years from commissioning, and at the blended retail rate thereafter. **It also prohibits electric companies from charging interconnection or grid service fees and otherwise discriminating against net-metering customers in rates.**⁸ Solar net-metering

⁴ Hopkins, Asa. Vermont Public Service Department, Planning & Energy Resources Division. 2015. “Vermont Comprehensive Energy Plan: Public Forum.”

⁵ See *id.* at 13.

⁶ See prefiled testimony and exhibits of Douglas Smith submitted in *Petition of GMPSolar – Williston, LLC*, Docket No. 8562, submitted 7/15/15; *Petition of GMPSolar – Richmond, LLC*, Docket No. 8564, submitted 7/20/15; *Petition of GMPSolar – Hartford, LLC*, Docket No. 8580, submitted 8/17/15; and *Petition of GMPSolar – Panton, LLC*, Docket No. 8637, submitted 11/3/15.

⁷ *In re Handy v. Town of Shelburne, Vt.*, 171 Vt. 336, 764 A.2d 1226 (2000).

⁸ 30 V.S.A §219a(e) provides that:

(3) If electricity generated by the customer exceeds the electricity supplied by the electric company, each of the following shall apply:

(A) The electric company shall calculate a monetary credit to the customer by multiplying the excess kWh generated during the billing period by the kWh rate paid by the customer for electricity supplied by the company and shall apply the credit to any remaining charges on the customer's bill for that period. If the applicable rate schedule includes inclining block rates: . . .



customers have also been guaranteed by law an additional benefit in the form of an “add-on” to the residential rate for a period of ten years. The adder each solar customer gets is fixed at the time the system is commissioned and cannot change with the utility’s tariff during that ten-year period.⁹

Vermont’s current net-metering program, which began in 1999, has attracted hundreds of millions of dollars in financing to build small solar projects throughout our state. Investment institutions, including the Vermont Economic Development Authority (VEDA), rely on the net-metering law’s rate stability to issue financing to customers using 10-year, 20-year, and 25-year revenue/debt modeling. These long-term financing structures were predicated on a reasonable reliance that Vermont would honor the long-term rate commitments it made under the present law.

The unintended consequences of a sudden change in rate structure and stability, reflected in the draft rule, are market upheaval and a loss of confidence by the customers and investment institutions, which have underwritten the success of Vermont’s net-metering program for almost two decades.¹⁰ More than 6,000 solar net-metering systems alone have been installed in Vermont to date, and all of those systems will face an absolute reduction in their predicted rates and an unpredictable future under the current draft rule language. **Existing renewable net-metered systems have a vested right in the rates established at the time of their applications. Consistent with this legal imperative, the net-metering program must provide grandfathering that honors, for twenty (20) years, the language and intent of Vermont’s existing statutory net-metering program.**

Predictability and stability is also needed when the current net-metering law expires at the end of this year. It is essential that in 2017, all electric customers understand, and are able to make reasonable assumptions about a net-metering project’s projected bill credits (i.e., revenue and, thus, ability to make debt service) at the time of commissioning **irrespective of the project’s size**. While some level of uncertainty is expected regarding residential rates, it is untenable to expect electric customers

(ii) for a solar net metering system, the rate used for this calculation:

(I) during the ten years immediately following the system's installation shall be the highest of those block rates and, **after this ten-year period, shall be the blended rate** in accordance with subdivision (i) of this subdivision (A); or

(II) if the electric company's highest block rate exceeds the adder sum described in subdivision (h)(1)(K) of this section, then . . . **after the first ten years following the system's installation, the rate used to calculate the credit shall be the blended rate** in accordance with subdivision (i) of this subdivision (A).

30 V.S.A §219a(h)(1)(D) provides that:

Except as otherwise provided in this section, shall charge the customer a minimum monthly fee that is the same as for other customers of the electric distribution company in the same rate class, but **shall not charge the customer any additional standby, capacity, interconnection, or other fee or charge.**

⁹ 30 V.S.A §219a(h)(1)(K).

¹⁰ See, e.g., *In re Tariff Filing of Green Mountain Power Corp.*, Docket No. 6107, Order of January 23, 2001 at 9 (allowing Green Mountain Power to recover costs of a long-term contract with Hydro-Quebec because disallowing them would not allow the utility to continue attracting capital and therefore would not be in its customer’s interests).



to finance long-term projects using their own capital, without any surety that the State will honor its end of the bargain or provide a reasonable future pricing and fee structure. Utilities, like their customers, do not make substantial capital investments based on unpredictable assumptions.

The grandfathering provision REV proposes would honor Vermont's commitments, legal obligations, and customers' reasonable expectations to attract investment for new net-metering systems in 2017 and thereafter.¹¹ **We must provide financial institutions and customers a reasonable level of certainty that rates, credits, adjusters and associated fees will be secured for at least a 10-year period and, thereafter, guarantee that customers will be credited at the residential rate and will not be exposed to new fees that could undermine capital investments.**¹²

Fees

The Board should not allow monopoly utility driven grid service fees or other fees that target net-metering customers. Fees create barriers to customer participation,¹³ disproportionately impact residential customers, and fail to acknowledge the well documented benefits of renewable distributed generation for ratepayers and all Vermonters. Customers have little ability to challenge a utility's fee charges. **The net metering rule 5.100 should include a clear prohibition against new fees.**

During the Act 99 workshop process, Green Mountain Power Corporation (GMP), Vermont's largest utility, advocated against such fees and, this past April, GMP showed a direct benefit to the utility from solar net metering with an applicable rate of \$0.182 to \$0.212/kWh including a net benefit of approximately \$0.03/kWh for avoided transmission delivery service.¹⁴

Net-metering customers use their own capital to help create Vermont's "distributed grid", which benefits electric utilities and all of their customers and implements Vermont's policies establishing energy independence and transformation to a modern energy grid. Renewable energy projects, not the utilities or other ratepayers, already pay for distribution grid upgrades when upgrades are needed for interconnecting projects. Since net-metering customers finance distribution line upgrades, they should not also be saddled with paying higher charges than other customers. A customer at the end

¹¹ In its current form, the Draft Rule offers no protection for net-metered projects commissioned after the Rule's adoption against future changes in the Rule and virtually no protection against future changes in a utility's net-metering tariff (fees and terms and conditions of service) following commissioning.

¹² In its current form, the Draft Rule does not provide protection for projects that change ownership in the first ten years of commissioning or beyond. This failure would put many residential and non-residential systems in unfair financial peril and would put financing future systems in absolute jeopardy.

¹³ The adverse consequences of imposing grid fees only on net-metering customers are clear in the Washington Electric Cooperative territory, which imposed such fees and has experienced a precipitous drop off in its net-metering program, which results in long term net financial losses and or financial uncertainty for participating customers when financing and development costs are considered.

¹⁴ See http://psb.vermont.gov/sites/psb/files/GMP_NM_2.0_PPT_043015.pdf at Slide 7 (also showing a \$0.182-\$0.212 kWh direct solar benefit). See also <http://psb.vermont.gov/sites/psb/files/11052014%20Net%20Metering%20Workshop%20Final.pdf> at Slide 9 (showing an example of a 4 kW solar net-metered systems benefit calculation with a \$0.237 kWh benefit with avoided transmission and distribution grid benefits increasing over time.



of a line, far from a substation need greater transmission investments than a renewable net-metering customer sending excess electrons to adjacent homes or businesses. We don't and shouldn't discriminate against that end-of-line customer, and nor should net-metered customers be treated differently.

The rule should disallow additional administrative fees on Category I and II projects, where the margins and economies of scale are much narrower. The current proposal encourages utilities to be inefficient by allowing them to charge an allowable percentage of fees based on kWh. The Department of Public Service is charged with representing Vermont electric ratepayers and may find it an insurmountable challenge to represent Vermont net-metering electric customers as a separate class in such tariff proceedings.

Rates and Rate Structure

The rates and rate structure under the proposed amendments will not allow net metering to continue in Vermont. As proposed, the current draft rule's proposed rate structure and rates are devastating for larger solar projects (which offer lower energy costs), those providing a significant portion of new distributed generation capacity in the state. **The proposed rates threaten elimination of more affordable and efficient renewable energy projects.** Residential net-metering systems will also be extremely difficult to finance under the present rate structure and unpredictability in the rule.

Customers should not be forced to give their Renewable Energy Credits (RECs) to utilities for no compensation. **Government or corporate taking of a citizen's private capital investment is untenable. Regardless of system size, a renewable net-metered customer has a right to the value of the renewable energy credits (RECs) that their capital investment produces.**

A drop in compensation of between 10% for residential net metering, and 50% for commercial net metering, as proposed [See Exhibit A], represents a far too drastic and unjustified reduction in the fair compensation net-metering customers need when making the significant investment to convert to renewable energy. **Simplicity and fairness require a rate structure that is based on the retail plus model that compensates customers for their REC value and provides a stable rate structure that can be modeled by investors and institutions who finance our renewable energy economy.**

The retail plus model is also one that customers, financiers, installers, and regulators all understand. Retail rates¹⁵ are a logical, appropriate foundation for a net-metering rate structure because they are highly regulated and provide a simple, stable framework for customers and regulators alike. While retail rates are insulated from volatile energy markets and we are currently seeing with an unprecedented and unsustainable crash in energy prices, they are set in a manner that allows the utility to recoup its costs to provide service, plus earn a reasonable rate of return.

¹⁵ REV supports an alternative to a purely utility-based retail rate plus model for smaller municipal-owned and cooperative-owned utilities by using the weighted statewide average for the base residential retail rate for such utilities, perhaps looking at Act 56 categories for guidance. Although using the weighted statewide average would reduce the total rate for net-metering customers in certain territories, it seems reasonable given the rate differentials in such territories.



An appropriate rate structure could still accommodate categories that seek to encourage certain types of net-metered projects using siting adjusters and should still include a REC adjuster, but structured differently. The attached markup of the draft rule offers a modified retail plus rate design that provides:

- ✓ fair compensation for all RECs produced by a project, if transferred to the utility;
- ✓ negative adjusters, for all RECs produced by a project, if retained by the customer;
- ✓ siting adjusters for all kWh production based on the Board-articulated “preferred” sites¹⁶; and
- ✓ fair rates based on retail rates.

The detailed alternative rate structure would significantly impact the deployment pace and brings RECs "home" toward local goals. Smaller projects and those receiving the siting adder under the proposed rule would receive the additional credit in recognition of both their additional grid benefits and development hurdles.

The draft rule’s proposed drastic and unjustified cut in net metering rates mean that individual Vermonters, farms, businesses, towns, and institutions will not be able to choose renewable, net-metered power to increase their own self-reliance, reduce dependence on fossil fuels and do their part to combat climate change.

A Path Forward

The accompanying markup of the Board’s Draft Rule 5.100 details the textual changes recommended to improve the next final draft proposal. The suggested changes align the new rule more closely with the State’s interest in continuing a robust, customer-focused renewable net-metering program that can continue to benefit the wider Vermont economy, as it has for the last 16 years, while working to maintain the draft structure developed by the Board. The markup includes comments regarding concerns not discussed herein, including the overly complicated filing and review process included in the current draft and the omission of a provision that secures a longer rollover period for unused credits. **Without appropriately modifying the latest proposed final draft rule to address grandfathering, fees, and rates and rate structure, the draft rule will devastate Vermont’s renewable net-metering customers, result in significant job losses, cause undue financial hardship, and chill financial investment in Vermont.**

As you know, Vermont proudly fostered a strong, growing, and sustainable clean energy jobs sector. Net metering provides the backbone of the job-creating opportunities here in the state, not larger, utility-driven projects. For this reason, among others addressed, **we need to ensure a rate structure and net metering policy that continues the tradition of stable, predictable and fair net metering policy for customers around Vermont.**

Two recent independent polls by Vermont Public Radio and Renewable Energy Vermont Education Fund found that **more than 70% of Vermonters support more renewable energy generation in**

¹⁶ REV must note though, that rates should be set based on the holistic benefits, value, and costs of electricity generation and transmission, not unrelated land use decisions.



their communities, including large solar arrays. Vermonters need and want more clean, local, reliable and sustainable energy.

We appreciate the Board's efforts to accommodate the many voices heard throughout the rule making process and hope that the Board will work to address the crucial concerns outlined above. Please do not hesitate to contact us if you have any questions or need additional information. REV and our members are eager to help avoid the tremendously negative implications of the current draft and to forge a path towards a successful and sustainable renewable net-metering program in our great Green Mountain State.

Respectfully submitted,

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Executive Director
Renewable Energy Vermont

Renewable Energy Vermont represents nearly 300 businesses, individuals, and utilities committed to reducing our reliance on dirty fossil fuels by increasing clean renewable energy and energy efficiency in Vermont. Vermont's clean energy industry supports at least 16,231 sustainable jobs at 2,519 businesses, representing approximately 5% of Vermont's economy.

Enclosures:

- Exhibit A
- Mark-up of PSB Draft Final Net Metering Rule 5.100

Cc: Department of Public Service



Exhibit A:

PSB DRAFT RULE							
Category	Residential retail proxy	Siting incentive for 10 years	REC for 10 years, (-6, +0 structure)	Proposed Solar Value, including REC value going to utility	2016 value (assumes 5 cent REC value for all except residential)	% Reduction from 2016	Fees
I	\$ 0.150	\$ 0.030	\$ -	\$ 0.180	\$ 0.200	10%	Utility discretion
II	\$ 0.150	\$ 0.010	\$ -	\$ 0.160	\$ 0.240	33%	Utility discretion
III	\$ 0.150	\$ -	\$ -	\$ 0.150	\$ 0.240	38%	Utility discretion
IV	\$ 0.150	\$ (0.020)	\$ -	\$ 0.130	\$ 0.240	46%	Utility discretion
V	\$ 0.150	\$ (0.030)	\$ -	\$ 0.120	\$ 0.240	50%	Utility discretion

REV PROPOSAL							
Category	Residential retail proxy	Siting incentive for 10 years	REC for 10 years, (-3, +3 structure)	Proposed Solar Value, including REC value going to utility	2016 value (assumes 5 cent REC value for all except residential)	% Reduction from 2016	Fees
I	\$ 0.150	\$ 0.010	\$ 0.030	\$ 0.190	\$ 0.200	5%	No fees
II	\$ 0.150	\$ 0.010	\$ 0.030	\$ 0.190	\$ 0.240	21%	No fees
III	\$ 0.150	\$ 0.005	\$ 0.030	\$ 0.185	\$ 0.240	23%	No fees
IV	\$ 0.150	\$ -	\$ 0.030	\$ 0.180	\$ 0.240	25%	No fees
V	\$ 0.150	\$ (0.010)	\$ 0.030	\$ 0.170	\$ 0.240	29%	No fees