



September 24th, 2021

Ms. Holly Anderson, Clerk
Vermont Public Utility Commission
112 State Street, 4th Floor
Montpelier, VT 05602

Re: 19-0855 -Rule Renewable Energy Vermont Comments

Dear Clerk Anderson,

Please accept this filing as Renewable Energy Vermont's ("REV") comments on the second workshop for Case 19-0855-Rule held on August 24th. The workshop covered administrative changes to Rule 5.100 and a discussion concerning tree cutting at solar projects.

OVERVIEW:

Before diving into the pros and cons of administrative revisions to Rule 5.100 and the merits of tree cutting in the context of net metering, REV believes it is important to take a step back and appreciate the larger picture in which these proceedings are taking place. The world faces a code red climate crisis. The crisis as well as Vermont statutes require significant and quick forward-thinking action. Anything less and we will fail to prevent the worst impacts from climate change. Potential changes to Rule 5.100 should pass the threshold question of whether they will increase the rate of deployment of non-carbon-emitting energy facilities of all types. The quickest way to decrease our reliance on technologies that emit harmful, climate changing greenhouse gases is to deploy as many projects as we can, as expeditiously as we can. The escalation of extreme weather and the negative impacts on Vermont's environment are expected to increase every year. In a state like Vermont, rich in natural resources, those climate-induced changes will challenge our long-standing beliefs and approaches and negatively impact our natural resource and recreational economies in particular.

REV comments in this proceeding are mindful of the Vermont Legislature's adoption, by a convincing veto override, of the 2020 Global Warming Solutions Act. For the last few years, changes to the net metering program have focused on rate reductions and stricter siting. Project revenue (market signal) has dropped significantly while siting and permitting have become more costly and more difficult. REV encourages the Commission to shift its focus, in this workshop and beyond, to figuring out how it can encourage the private sector to expeditiously deploy all the resources necessary to mitigate the devastating practical impacts and financial costs climate change will otherwise have on Vermonters and humanity.



SUGGESTED ADMINISTRATIVE CHANGES TO Rule 5.100:

5.106 - 15 to 50kW systems

With electrification, a key component of the state's strategy to decarbonize Vermont, it is critical that increasing residential loads be offset with clean, local, energy. In-state Distributed Energy Resources (DER) increase the reliability and stability of Vermont's grid. REV recommends that the registration process currently applicable to systems 15 kW AC be expanded to include systems sized up to 50 kW AC (roof or ground mounted) as long as 50% of the load is on-site or the installed array footprint is less than one acre. This change will help increase adoption of decarbonizing technologies and ensure that Vermonters have the basic right to generate their own energy.

Amending the applicable system size for registrations will have the added benefit of rebalancing the elevated cost-per-watt of permitting these small systems with the newly reduced compensation rates.

5.107 - Applications for Net-Metering Systems Greater Than 50 kW That Are Not Roof Mounted Photovoltaic Systems or Hydroelectric Facilities

REV applauds all efforts to make the Section 5.107 application and review easier for all parties. From the applicant's perspective some suggested changes include:

- Lessen requirements for smaller systems by eliminating some steps or requirements in the application. For example, all communications and filings should be done through ePUC and one-page informational notification of the application filing should be available on the ePUC site for all parties. No hardcopy mailings should be required, unless a party specifically requests it.
- Conduct a "lean process mapping" to ensure the entire process is efficient and delivers value to all stakeholders.
- Adopt more "deemed complete" with specific, time-period procedures in cases where no comments have been received after the allotted time.
- Adhere to internal deadlines and stakeholder deadlines to maintain an efficient and timely process. This will inform and set expectations particularly for the public in terms of customers waiting to receive net metering credits and landowners wishing to host an array.
- Review applications only against regulatory rules adopted by the Legislature.

5.108 -Amendments to Pending Registrations and Applications

REV believes the requirements of this Section of the Rule are sufficient, but respectfully requests that "Any comments or objections to a proposed minor amendment must be filed within 10 business days of the date the minor amendment was filed with the Commission" be adhered to by all parties.

5.109 - Amendments to Approved NM systems

In the vein of efficiency and certainty, REV would like to see a process that automatically deems the minor amendment complete should no party file an objection. Further, for minor amendments where an objection is filed, an enhanced emphasis on facilitating a timely resolution would be more reflective of a minor amendment.



In light of the realities of constructing electric generation facilities in Vermont, supply chain disruptions, and frequent natural resource CPG conditions limiting the timeframe of construction, REV supports making CPGs valid for two years from issuance.

REV supports clarifying the conditions under which a major or minor amendment is required.

Additionally, REV supports the applicable net-metering rate remaining the same for an amendment to an existing system or pending permit application or registration.

5.110 - Transfer and Abandonment of CPGs

REV encourages the Commission to establish agreed upon data tracking metrics (utility interconnections and permitted projects) which will more accurately reflect the effect of compensation changes on the pace of net metering deployment. Interconnection trends for projects permitted under previous net metering compensation regimes do not accurately reflect the pace of net metering under current compensation rates. ePUC application data can overstate the number of installations actually interconnected when projects are abandoned and not removed from the system.

REV supports efforts to more accurately track installations by net metering compensation levels. The ePUC system could send an automated message to the CPG holder requesting confirmation that the project was commissioned.

With respect to collecting information about transfers of net-metering systems, REV supports the collection of transfer information if it serves the public good. At this time the value of collecting such data is not clear.

REV believes the public is best served by a Notice only filing for CPG transfers.

5.117 - Party Status in Net-Metering CPG Proceedings

REV encourages the Commission to keep the process efficient and reflective of the climate crisis we face by not expanding the list of participants. Further, REV restates its recommendation that all participants whether granted party status or not, comply with equal rigor to application deadlines and requirements.

5.131 - Interconnection Requirements

For efficiency in the process, REV recommends that the Fast Track provision be at the discretion of the applicant who may decide to go direct to study.

An additional efficiency enhancement for all parties would be to treat ground mount applications like registrations for interconnection issues. This process already works well for registrations and can streamline the application process, while avoiding adverse utility demand around application deadlines driven by decreasing net metering compensation changes.

REV appreciates and supports Mr. Marren's idea at the workshop that the interconnection can be handled directly with the utility and that all applications would include a statement that the applicant will satisfy the requirements of Rule 5.500 as a condition of their CPG.

REV supports keeping the Rule 5.100 review process separate from Rule 5.500 as they serve related but distinct purposes best managed in their own specific Rules.



NET METERING IN THE CONTEXT OF “FOREST” CUTTING

REV appreciates the opportunity to more directly discuss and comment on the cutting of trees. While some trees are cleared each year at solar installations, the scale of the cutting is, by all standards, insignificant compared to the annual conversion for development. Further, unlike other development, solar arrays which impact 50+ acres per year¹ actually help protect the more than 4 million acres of Vermont forest from the growing impacts of climate change. Our top priority should be mitigating the warming temperatures, drought, extreme weather events, invasive species, and even human migration that will have an irreversible impact on Vermont forests.

In that context, REV offers the following comments regarding the incorporation of specific forest rules into the siting of solar.

- **A Blanket Ban on Solar that Requires Tree Cutting is Wrong**

The options put forth by the Agency of Natural Resources (ANR) as part of this proceeding act to effectively ban solar installations requiring any tree cutting. Such a blanket ban as proposed disregards the range of site conditions that exist across our State between true undeveloped forests and sites in a developed area. The public's interest would best be served by ANR using its automatic party status to comment where it feels this prohibition has true merit.

- **Policy Changes of this Magnitude Merit a Separate and Public Review Process**

REV believes the public is best served with a standalone, public process to review the full merits of proposed restrictions on solar with respect to forested land. While changes to Rule 5.100 are following the rulemaking process, the scope of changes requested by ANR do not include input from all affected stakeholders who would be impacted by such a change. They should, therefore, first stand on their own before being incorporated into Rule 5.100. For example, see the attached Vermont Land Trust Year in Review documenting their efforts in Vermont land conservation.

- **Forest Cutting Changes Based on Guidance Should be Peer Reviewed**

REV believes the public's interest is best served by ensuring that all guidance is based upon specific scientific data and that such assessment be peer reviewed and adopted through a public process. It is unclear what public debate and scrutiny has occurred on the recommendation suggesting that solar be prohibited on sites that require tree cutting.

- **Comprehensive Forest Impact Perspective**

REV believes the public's interest is best served by a more comprehensive review of the net adverse benefits of a solar array on a site which requires cutting trees.

- **Tree Cutting for Solar in the Context of Activities in Vermont's Forest**

To the extent that forest fragmentation and clearing is a relevant discussion for Vermonters, REV believes that the effort should first be directed at the major drivers of those impacts. While the acreage has not been verified, even 204 acres of forest impact from solar deployment over 4 years has a *de*

¹ Based upon ANR's presentation



minimis impact on Vermont's 4.5 million acres of forest and should be considered in light of the GHG reduction value achieved by the tree cutting.

- Solar represents an insignificant component (and is a temporary impact) of the 1,500 acres/year lost in Vermont to residential and commercial development, as cited in the 2017 Harvard study Wildlands and Woodlands.
- All stakeholders would be better served by an accurate accounting of tree clearing that has actually occurred. Any reliance on initial application data does not substantiate actual tree cutting and is an inaccurate data set on which to make policy changes.
- "Forests" is a general term and, to date, no scientific, qualitative assessment of forest type, age, condition, etc., has been conducted. Here, we refer back to the recommendation provided by REV member VHB in the workshop. VHB indicated that any discussion about potentially limiting cutting would be well served by identifying the quality, or lack thereof, of the specific "forest" in question and by considering the particular use (solar) in relation to other permitted activities and uses that impact our "forests".
- Since most of Vermont's current forest was previously cleared land, viewing solar arrays as "conversion" is inappropriate and ignores the requirements of end-of-life removal imposed on all systems > 150 kW AC. Tree cutting for solar should be classified closer to clearing, and not classified as conversion like permanent development creates.
- By necessity, solar arrays are co-located with development requiring utility and public infrastructure and not located in the center of forests, as construction away from utility lines and roads is cost prohibitive.

Singling Out a Specific Technology (Solar) to a Different Standard Violates the Common Benefits Clause of the Vermont Constitution

Vermont laws support utilizing Vermont's forests for a vibrant clean energy heating economy, including clear cuts over 40 acres with only an "intent to cut notification" to ANR. Similar to allowed clear-cutting practices (allowed on a much larger scale), solar is a temporary clearing of trees with no irreversible long-lasting impacts at the site.

Solar Generation Avoids the Production of More Carbon than an Equivalent Area of Forest Sequesters

- **A 500 kW AC array offsets up to 30.5 times the carbon of an equivalent forested area.** (Based on 7.2 -12 tons/equivalent forested area per year <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>). Calculators using Vermont-specific forest values tilt even more favorably towards solar over avoiding solar to preserve trees.
- The importance of greenhouse gas emissions must be a significant factor in evaluating land use.

The ANR Air Quality and Climate Division, among other critical tasks provides technical and engineering assistance on a broad range of air pollution issues, including estimating and evaluating greenhouse gas emissions, public outreach, and regulation development. The Air Quality and Climate Division should be contributing to the Rule 5.100 workshop and providing a science-based review and evaluation of the



benefits of expanding solar deployment across our Vermont working landscape to ensure Vermont's compliance with state and federal greenhouse gas regulations.

The Enforceable Standards that Limit Forest Clearing as the Language in 248(b)(5) are Unclear.

The language regarding 'natural environment' is too vague to be used to enforce a restrictive rule. Doing so would conflict with the intent of the Global Warming Solutions Act, which is to reduce Vermont's GHG emissions. Formulaically limiting tree cutting, such as using a minimum ratio of KW capacity per acre would clearly discourage the deployment of technology (solar PV) that mitigates many multiples more carbon per acre than would be sequestered if the trees were left standing. As a state we need to make choices that result in less GHG emissions, not more. The present, case by case method, works.

REV appreciates the opportunity to file comments on these issues.

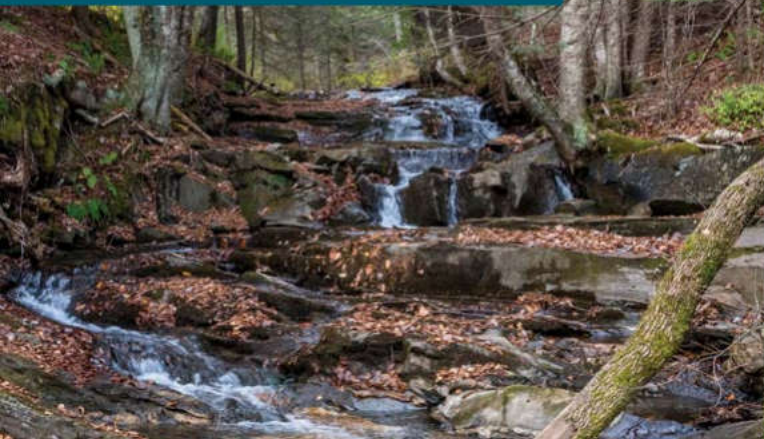
Sincerely,

A handwritten signature in black ink that reads "Peter Sterling". The signature is fluid and cursive, with the first name and last name clearly distinguishable.

Peter Sterling
Executive Director
director@revermont.org

OUR WORK THIS YEAR

7,300+ ACRES CONSERVED



CLIMATE & ECOLOGY

8,600+

ACRES ENROLLED
in new forest carbon program

CLEAN-WATER PROTECTION ALONG

41 miles

OF STREAMS AND RIVERS



2,800+

TREES PLANTED
along wetlands, rivers,
and streams

238

ACRES OF WETLANDS
CONSERVED

FARMS & FORESTS



2,500+

FARMLAND ACRES
PROTECTED

4,600+

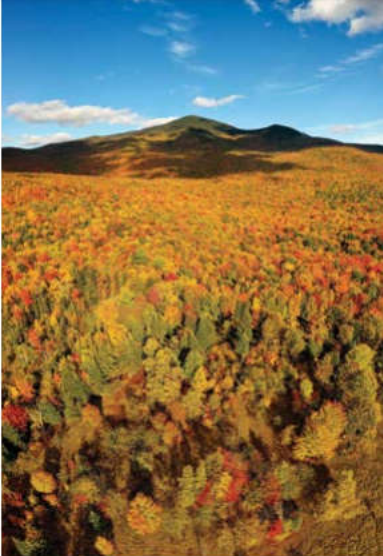
ACRES OF
FORESTLAND
CONSERVED

20

FARM PARCELS
CONSERVED

2,268

FARM & FOREST
PARCELS
MONITORED
by stewardship
staff



COMMUNITY

\$138,000

WORTH OF COVID-19 GRANTS TO FARMS

160+

HOURS
VOLUNTEERED
at Pine Island
Community
Farm



55,000+
POUNDS OF FOOD
PACKED
for those in need

180+

FAMILIES BENEFITED
from community gardens