STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 19-0855-RULE

Proposed revisions to Vermont Public Utility Commission Rule 5.100	

DEPARTMENT OF PUBLIC SERVICE COMMENTS TO THE VERMONT PUBLIC UTILITY COMMISSION'S REQUEST FOR COMMENTS ON DRAFT RULE

On April 16, 2019, the Vermont Public Utility Commission ("Commission") opened this rulemaking proceeding to review Commission Rule 5.100, which governs the construction and operation of net-metering systems under 30 V.S.A. §§ 8010 & 248, and some other small renewable energy plants pursuant to 30 V.S.A. § 8007. After a few rounds of comments and workshops, on April 29, 2022, the Commission issued a proposed draft red-line of a revised Rule 5.100 along with an order summarizing the changes and requesting comments on the draft rule. The Vermont Department of Public Service ("Department") has reviewed the draft rule and offers the following comments.

The Department reaffirms its previous recommendations. In particular, the Department renews its recommendation that the Commission revise the net-metering compensation structure to minimize cost-shifts from participants to non-participants (*see* the Department's comments in this proceeding of May 17, 2019, November 19, 2019, December 6, 2019, and October 15, 2021). In this regard, the Department's October 15, 2021, comments, recommended that the Commission stay its consideration of the Rule 5.100 net-metering compensation framework until the California Public Utilities Commission ("CPUC") issues an order regarding that state's net-metering compensation framework (CPUC Rulemaking 20-08-020),[1] given similarities in the issues under discussion in both states. The Department understands a final order has not yet been issued by the CPUC and may not be issued in a manner sufficiently timely to be of use to this proceeding. The Department recommends that when a final order is issued in the Californian proceeding, that the Commission open a proceeding to address the compensation framework in Rule 5.100, or if such an order is not made on a timely basis, a separate proceeding be opened independent of the CPUC.

Department recommendations regarding the Commission's draft Rule:

The Department respectfully submits the following initial observations and suggestions pertaining to the proposed rule changes (aside from and in addition to its recommendations regarding the net-metering compensation framework):

Section 5.103

Amendments: In general, the Department supports the Commission's proposal to better align amendments in net-metering cases with the "substantial change" standards in Commission Rule 5.400, which governs Section 248 cases generally (*See* Rule 5.408). The Department will provide substantive comments regarding the net-metering amendment process in its discussion of the revised Rules 5.108 and 5.109, below.

[1] *See generally*, CALIFORNIA PUBLIC UTILITIES COMMISSION, *Net Energy Metering Revisit – Rulemaking (R.) 20-08-020*, https://www.cpuc.ca.gov/nemrevisit (last visited May 20, 2022) (general website for California net-metering rulemaking).

However, the opportunity to make amendments to net-metering systems functionally remains in the proposed Rule 5.100, just with revised standards. The term "Amendment" is also still used in the revised Rule 5.100 and hasn't been entirely supplanted by the concept of a "substantial change." As such, the Department recommends that a brief definition of "Amendment" should be provided and rewritten as needed per the revised processes, but that the definition not be deleted altogether. It is also possible to expound upon the "Substantial Change" definition to address this.

Preferred Site: The definition has been amended generally to reflect input gathered in this proceeding. In subsection (3) of the "Preferred Site" definition, which concerns previously developed tracts, the Department notes that the entire energy generation component of the plant must be within the qualifying site footprint and that "the energy generation component of the plant does not include interconnection equipment." The Department is concerned that "interconnection equipment" is not defined in this Rule, and its relation, if any, to the term "Interconnection Facilities" as defined in the existing and proposed Rule 5.500 is not clear. Given the potential for dispute regarding this phrase (such as whether a given project does or does not qualify as a preferred site under this sub-definition because what is and is not "interconnection equipment" is unclear), including its potential implications under the 30 V.S.A. § 8002(18) definition of "Plant," the Department recommends that either this term be defined or that the definition of

"Preferred Site" (3), regarding previously developed tracts, be further revised to address this potential for controversy.

Under the "letter(s)" option of Preferred Site definition (7), the Commission has proposed adding the following: "[t]he letters must include a written determination that the plant is consistent with the applicable town or regional plan."

In its comments of May 17, 2019, the Department suggested, "requiring that locations identified in the joint letters need to be in areas identified as suitable in the regional plans, to address concerns that this particular category of preferred site might not reflect environmental concerns. It may also be beneficial to clarify that the letter is in support of the site, not necessarily the project, and that the town and regional planning commission will preserve the right to comment on the specifics of the project later in the process." The Department suggests the Commission modify its proposed language to require the written determination to address both the town *and* the regional plan, to correspond to the respective letters of support from both the municipality *and* the region.

The Department may make further recommendations regarding the "Preferred Site" definition revisions it its reply comments, after it has had the opportunity to review the initial comments of other stakeholders.

Section 5.105

The Department supports processing project interconnection before the petition for a Certificate of Public Good ("CPG") under 30 V.S.A. §§ 248 and 8010. However, this cumulative timeline could be unduly burdensome for systems ≤ 15 kW in capacity. Therefore, the Department suggests that the Commission maintain a simple, and relatively expedited one-stop-shop process for net-metering systems up to 15 kW *only* (i.e. not, say, a co-located 485 kW roof mounted installation). One potential way to achieve this could be to include language in Rule 5.500, and perhaps Rule 5.131, directing applicants for systems 0-15 kW in size to use the 5.100 registration form as the interconnection application (this may require revising the registration form to include more interconnection information). This would to a large degree mimic the current practice but would exclude registrations for systems > 15 kW. The proposed change to require approval to interconnect prior to filing a registration will eliminate the existing issue for larger rooftop registration projects, for which the 5.100 registration timelines had proven problematic during simultaneous review by the distribution utilities under Rule 5.500. To the limited extent where ≤ 15 kW pose interconnection concerns that are difficult to identify in a timely manner, a technically detailed net-metering registration form could help avoid such issues.

The Department also suggests adding a definition of "approval to interconnect" to this rule to avoid any confusion in this area, as this term appears in sections 5.105, 5.106, and 5.107. The definition may be different for different size projects. The Department suggests that the utilities and developers work together to attempt to propose a definition that is clear and acceptable to all stakeholders.

Section 5.106

The Department notes that the word "registration" is used in this section (at least in Rule 5.106(E)(9)) and this should be changed to "application." As above (and below), the Department also suggests adding a definition of "approval to interconnect" to this rule to avoid any confusion in this area, as this term appears in sections 5.105, 5.106, and 5.107. The definition may be different for different size projects. The Department suggests that the utilities and developers work together to attempt to propose a definition that is clear and acceptable to all stakeholders.

Section 5.107

Section 5.107(C) has been amended to simplify the application process for large net-metering systems. While the Department recognizes that removing the requirement for testimony alongside a Rule 5.107 application could result in increased efficiency for all, and therefore supports this change, the Department also requests that some form of written project narrative still be provided and required (with the option to provide testimony at the Petitioner's election clearly provided for) because this is useful for project review. To streamline the process, the Department recommends that the content, form, and type of "evidence" required either be included in Rule 5.107 itself, or in the application form proposed in the revised Rule 5.107(C), because certain types of information are useful to stakeholders in review of the project and it would aid applicants to know what sorts of evidence would be sought, in advance, because this would avoid disputes and minimize the need for supplemental filings.

As above, the Department also suggests adding a definition of "approval to interconnect" to this rule to avoid any confusion in this area, as this term appears in sections 5.105, 5.106, and 5.107. The definition may be different for different size projects. The Department suggests that the utilities and developers work together to attempt to propose a definition that is clear and acceptable to all stakeholders.

Finally, 5.107(C)(15) has been added to require information about adjacent facilities to ensure that single-plant issues are identified in an application. Potential single plants, under 30 V.S.A. § 8002(18), of the capacity implicated by Rule 5.107 can be complex. As such, the Department recommends that the proposed Rule 5.107(C)(15) requirements also require diagrams or comparative site plans in addition to the written descriptions.

Section 5.108

The Department generally supports the Commission's revisions and agrees that the major and minor amendment distinction (and the associated withdrawal and refile requirements) often discouraged beneficial changes and led to disputes. While the Department supports the removal of withdrawal and refiling requirements, the Department notes that this provision was originally included to encourage the submission of thoroughly developed applications (and to discourage, for example, a provisional application made before an adjustor change which would then undergo substantial amendments and finalizing during the CPG review process). Should the amendment fee not serve as adequate inducement to file fully considered applications, the Department recommends that some other incentive or disincentive be considered, aside from a withdrawal and refiling requirement.

Finally, the Department recommends that a process like the provisions which specify that rate adjustors will change when amendments place a pending application under another net-metering category also be adopted in Rule 5.109 because it would ensure appropriate compensation, and reduce cost shifting to non-participating ratepayers, for substantial capacity increase amendments to pre-existing systems.

Section 5.109

Rates for Amended Systems: In its May 17, 2019, comments in this proceeding, the Department requested that the Commission consider imposing a "limit on the size of project or scale of expansion entitled to 'original' rate treatment. For instance, while a residential, 5 kW system doubling in size and receiving an extra cent or two for excess production may not be a substantial impact in overall compensation, the same cannot reasonably be said for a 150 kW directly interconnected system tripling in size to 450 kW." The Department again urges the Commission to add a provision imposing some limit on the extent to which existing systems – in particular pre-existing ("NM 1.0") systems – can expand and still be entitled to the underlying system's original rates, which in many cases are well above the rates that would be offered to a similar system under the current compensation framework.

Currently, the usual approach toward compensating new capacity added to pre-existing systems would be to provide the amended, larger capacity system the pre-existing system rate.[2] The rationale behind this was to avoid discouraging modest system capacity increases made to facilitate the beneficial electrification of traditionally fossil-fueled technologies (e.g., the adoption of electric vehicles or cold climate heat pumps by homeowners).[3] Such amendments would be of modest scale, but this pre-existing system rate treatment is applied to large increases in capacity as well.

As will be discussed below, a recently filed case exemplifies the ratepayer impacts that can be presented by permitting amended systems to receive the pre-existing system's rates regardless of the size of the amendment.

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[2] *E.g.*, VERMONT PUBLIC SERVICE BOARD, *Report to the Vermont General Assembly on the Net-Metering Program Pursuant to Act 99 of 2014*, at 31-32 (Jan. 20, 2017), *available at* https://puc.vermont.gov/sites/psbnew/files/doc_library/FINAL%20Report%20to%20Legislature%20Pursuant%20to%20Act%2099%201-20-17.pdf; *Application of Emmett Dunbar & Mrinalini Mazumdar for A Certificate of Pub. Good for A 26.4 Kw Solar Net-Metered Elec. Power Sys. in Londonderry, Vermont.*, Case No. 21-4867-NM, Order of 02/25/22 at 3.

[3] *See*, VERMONT PUBLIC SERVICE BOARD, *Report to the Vermont General Assembly on the Net-Metering Program Pursuant to Act 99 of 2014*, at 31-32 (Jan. 20, 2017), *available at* https://puc.vermont.gov/sites/psbnew/files/doc_library/FINAL%20Report%20to%20Legislature%20Pursuant%20to%20Act%2099%201-20-17.pdf.

Today, the incremental capacity added to an existing system – like capacity installed as a new system – would be installed under significantly different market conditions than those that warranted the rates offered under NM 1.0. Therefore, allowing pre-existing rate treatment for significant increases in capacity to pre-existing systems should be reconsidered to ensure that significant newly added capacity is receiving similar compensation, whether it is added to a pre-existing system or installed as a new system, as its value to non-participants (and hence the degree of any cross-subsidy and cost shifting) depends on when it is installed.

To illustrate the potential impact, consider the following example: under the current rules, a 120 kW system installed in 2014 has recently proposed adding 375 kW of new incremental capacity.[4] If approved in 2022 and installed in 2023, this incremental capacity would receive roughly two years of compensation well above $0.20/kWh (including the solar credit that existed under NM 1.0) until the 10 year mark is hit, and then receive the blended retail rate with no applicable siting or Renewable Energy Credit ("REC") adjustors for the remaining life of the system. If this same 375 kW were installed today under the current NM 2.4 rules, by the Department's preliminary calculations, it would receive roughly $802,406 less ratepayer-funded incentive over a 20-year period.[5] Systems installed under NM 1.0

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[4] *See*, *Petition of TES Solar, LLC for authorization to amend the Thetford School District's existing 120 kW ground-mounted solar group net-metering system approved in Case NM-5037 by increasing the plant's total capacity to 495 kW*, Case No. 22-1136-NMP filed 04/05/22.
[5] Today, a Category III system that retains RECs would be subject to a -$0.04/kWh siting adjustor and a -$0.04/kWh REC adjustor.

were not required to transfer their RECs to their utility, and therefore, this system would receive significantly higher compensation than other similar systems installed today while not necessarily contributing to meeting Vermont's Renewable Energy Standard,[6] for which utilities must demonstrate compliance with verified retired RECs. Moreover, those retained RECs could be sold in the regional market, perhaps further increasing the financial incentive to make such large capacity amendments to pre-existing systems.

Procedural concerns: The Department notes that Rule 5.109(B)(1) requires the submission of testimony for substantial changes. Because the Commission proposes to eliminate the testimony requirement under Rule 5.107 (and testimony is not required under Rule 5.106), and initial applications can also present the potential for significant impacts under 30 V.S.A. § 248, the Department recommends that Rules 5.106, 5.107, and 5.109 have consistent evidentiary requirements regarding the need for testimony.

While the Department recognizes the difficulties in processing amendments to existing systems under the original CPG case number, the Department requests that any amendments also cross reference the original CPG case number as well as those for any prior amendments or changes.

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[6] 30 V.S.A. §§ 8004 & 8005; Commission Rule 4.400 *available at* https://puc.vermont.gov/sites/psbnew/files/doc_library/4400-renewable-energy-standard.pdf.

Moreover, the Department and other stakeholders make use of ePUC to monitor individual projects/cases and to look at aggregate CPG application trends (separately from interconnection trends, which can be gleaned from utility-filed data), so the Commission's efforts to streamline the amendment process are appreciated. Currently, either due to the applicant withdrawing and resubmitting, or some other reason, some proposed systems that receive an initial CPG case number are then assigned a new CPG case number. This can create double-counting of applications – a metric that is valuable for the purpose of evaluating net-metering applications and pacing in biennial investigations. The Commission's proposal should reduce this problem. At the same time, under the proposed update, an amendment to a system that has already been commissioned would appear as two separate systems, which could create similar double counting issues with regard to the number of applications, although the capacity would likely be tracked correctly. While it is difficult to predict exactly how the proposed changes to tracking of CPG amendments will come to fruition, on balance the Department is supportive of these updates.

Section 5.110

Section 5.110(A) has been revised to eliminate the need for residential customers to file CPG transfer forms with the Commission when a net-metering system is transferred as part of the sale of a home or property. Instead, the customer purchasing a property with a net-metering system must inform the utility of the change in ownership. The Commission will continue to transfer CPGs that are not associated with the sale of a property. While the Department supports streamlining the process and reducing administrative burdens, the Department is concerned that confusion could arise regarding who is ultimately responsible for a system in the event of an issue, and that failure to officially transfer the system could have other legal implications and liabilities for property owners. As such, the Department recommends that this change be reconsidered or revised.

Similarly, while the Department supports streamlining and reducing administrative burdens related to meritorious CPG extension requests, the Department maintains that a two-year CPG expiration poses potential issues. For example, the Department notes that projects sitting in the interconnection queue for up to two years, and that may never get built, might complicate system studies for later projects that are assuming upgrades are in place from previous projects. The Department recommends that the time be left at one year, but with the opportunity for an automatic extension of one year if the interconnection requestor notifies the interconnecting utility of continuing intent to construct the project before the first year expires (akin to the "deemed approved" concept currently in place for net-metering registrations). Moreover, given changes that can occur with time, such as fluctuations to the net-metering rate adjustor (and the corresponding ratepayer impacts), shifts in noticed parties such as adjoining landowners, or varying environmental impacts, the Department encourages affirmative and expedient steps toward project commissioning.

Finally, the Department recommends that the term "abandonment" in the Rule's title be changed to "expiration"[7] because this would improve the readability and comprehension of the Rule as many CPGs are not actively abandoned so much as they expire before commissioning.

Sections 5.116 and 5.118

The Department does not support reducing the comment and request for hearing period from 30 to 28 days. The Department recommends retention of the current timelines though it is open to reconsidering this position should the reason for this proposed change be explained and it is agreeable to the Department.

Section 5.124

There should be a space between the words "will" and "be" is this section.

Section 5.125

Consistent with its comments regarding Rule 5.109, above, the Department recommends that Rule 5.125 be amended to preclude the use of the pre-existing system's rate structure when capacity increases exceed an established threshold. The Department also recommends that capacity increase amendments to pre-existing net-metering systems over this same threshold remove the ability to bypass certain charges under Rule 5.125(D).

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[7] Or, "Expiration and Abandonment."

Section 5.128

This section has been revised to change the timing of biennial update proceedings. Currently, the biennial update proceeding schedule culminates in changes to adjustor values taking effect on July 1. Changes in adjustor values can cause temporary increases in application volume leading up to July 1, which coincides with the end of the State's fiscal year. Under the revised rule, any future changes to adjustor values would take effect on August 1.

While the Department supports changing the date when adjustor values take effect, the Department is uncertain whether August 1 is the optimal alternative. Thus, the Department respectfully requests the opportunity to propose alternative dates in its reply comments (with potential, corresponding changes to dates of the biennial update process).

The Department recommends that Rule 5.128 (D) direct the electric companies to use a standardized template to report information regarding their net-metering programs. The Department has developed such a template in the past, pursuant to a Commission request in Case No. 20-0097-INV. The Department believes the standardized reporting supported by the template has begun to deliver benefits such as more efficient data management and analysis, and greater clarity regarding the data fields requested. A template should continue to be used in each biennial, although further improvements should be made in the future, particularly around standardized formatting of specific data fields, to continue to reduce burdens around data cleaning and formatting.

The Department requests that in, or prior to, its order opening the biennial proceeding, that the Commission issue the standard template or, in the alternative, request that the Department file the template with the Commission and direct utilities to use that template. The Department recognizes that various utilities may have differing internal data tracking systems that influence their ability to report in a consistent statewide template and proposes to work collaboratively with all utilities in advance of filing the template to ensure the template fits the needs for all necessary reporting without being overly burdensome. In addition to the information currently listed in Section 5.128, the Department recommends the Commission add the following requested items:[8]

- Interconnection application filing date of each system;
- The date of interconnection of each system;
- The Certificate of Public Good registration, application, or petition case number of each system;
- The date each system's Certificate Public Good was issued or deemed issued;
- Whether each system is receiving credits under NM-1.0, NM-2.0, NM-2.1, NM-2.2, NM 2.3, NM 2.4, or subsequent vintages;
- The category of each system (i.e., category I, II, III, IV, or Hydro);
- For systems on preferred sites, the type of preferred site; and
- The location (municipality and zip code) of each system.

Section 5.129

The Department respectfully reminds the Commission that Vermont Act No. 81 (S.95), *An act relating to municipal utility capital investment* (2019)[9] directs the

[8] This information was requested in Case Nos. 20-0097-INV and 22-0334-INV but is not currently embedded in Rule 5.100.
[9] VT Act No. 81 (S.95), *An act relating to municipal utility capital investment* (2019), *available at* https://legislature.vermont.gov/Documents/2020/Docs/ACTS/ACT081/ACT081%20As%20Enacted.pdf.

Commission to amend Rule 5.129(D) to clarify that the 500 kW net-metering capacity limit per customer does not apply to schools and school districts, which have a 1 MW limit (with exceptions for consolidated school districts).

Section 5.135

This section has been added to prevent net-metering systems from receiving both retail and wholesale compensation unless authorized by the Commission. The Department supports this addition and recommends that the language be expanded to disallow inclusion of net-metering systems in aggregations compliant with FERC Order 2222 that participate in wholesale markets without authorization by the Commission.

Section 5.136

The Department agrees with the use of utility-specific, tariff-based grid mitigation fees in constrained areas of the grid (though uniform approaches may be warranted in some instances). In declaring a section of the grid constrained, utilities should clearly indicate the equipment type and engineering quality limiting further connection of resources (e.g. substation transformer thermal capacity, distribution feeder voltage sag, etc.), as well as the times of day and year in which this constraint is binding. Additionally, the description of the physical boundaries should include geographical and electrical boundaries.

In developing a tariff for levying fees on new net-metering systems connecting in these areas, the utilities should be allowed to use discretion in exempting certain net-metering systems from the grid mitigation fee based on the systems' operating profile, etc.

Section 5.137

The Department recommends that the term, "net-metering credits" in subparts (A) and (C) of Section 5.137 be changed to "net-metering compensation," to ensure no aspect of net-metering compensation (credits, adjustors, blended residential rates, etc.) is applied to exports from a storage facility. To further clarify this detail, the term "net-metering compensation" should be so defined in Rule 5.103.

Thank you for the opportunity to comment on this matter, please do not hesitate to contact me with any questions.

Dated at Montpelier, Vermont, this 27th day of May 2022.

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