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STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 19-0855-RULE	
Proposed revisions to Vermont Public Utility Commission Rule 5.100	

VERMONT DEPARTMENT OF PUBLIC SERVICE COMMENTS ON REVISING RULE 5.100 TO ADDRESS COMPENSATION

On September 16, 2021, the Vermont Public Utility Commission ("Commission") held a workshop to discuss potential changes to Commission Rule 5.100, the Net-Metering Rule, regarding the compensation structure of the program. The Vermont Department of Public Service ("Department") submits the following comments as a follow-up to the workshop.

This proceeding is not about whether the Commission should implement policy in a manner that addresses the climate crisis; everyone involved agrees that this is a priority. The Vermont Global Warming Solutions Act ("GWSA")[1] mandates carbon reductions and requires that the resulting Climate Action Plan "prioritize the most cost-effective, technologically feasible, and equitable greenhouse gas emissions reduction pathways. . . ."[2] The discussion in this proceeding involves the business practice associated with but one specific way of developing new renewable generation in Vermont.

The GWSA makes clear that we need to prioritize greenhouse gas ("GHG") reductions. The primary strategies for achieving this will be electrification of the transportation and thermal sectors, which far exceed the electric sector in terms of

[1] Public Act No. 153 (H.688) (2020 Vt.); 10 V.S.A. Ch. 24.
[2] 10 V.S.A. § 592(d)(1).

Vermont's GHG emissions. New renewable generation will also need to be developed to meet this increased load from electrification. Given that electricity will be the necessary fuel for Vermonters, ensuring the cost-effective development of new renewable generation is crucial. Reforms to Vermont's net-metering compensation are necessary if the requirements of the GWSA's GHG reduction levels are to be achieved in a sustainable and equitable manner.

Deployment of Solar in Vermont

By any reasonable metric, Vermont has a greater proportion of distributed renewable solar generation than almost any other state in the country. At the end of 2020, Vermont had just over 400 MW of distributed solar installed, with 267 MW of this from net-metering. This compares to a peak statewide load of just under 1,000 MW. The amount of energy produced from distributed solar is approximately 10% of the MWh used by Vermonters, with net-metering accounting for approximately 6%. In addition, approximately 25% of the energy produced by net-metering facilities is exported directly to the grid.

Solar facilities commissioned before July 1, 2015, are not eligible for Renewable Energy Standard ("RES") Tier 2 compliance.[3] Further, prior to the July 1, 2017, change in Commission Rule 5.100, there was no incentive for net-metered customers to transfer renewable energy credits to the host utility and therefore only

[3] *See*, 30 V.S.A. §§ 8002(17) and 8005(a)(2)(B).

approximately 140 MW of net-metering can be used for RES Tier 2 compliance.

To have an honest conversation about resource deployment in Vermont, it is imperative for stakeholders to keep in mind that proportionality is important when comparing Vermont to other states. For example, New York has recently proposed a target of 10,000 MW of distributed solar by 2030.[4] In absolute numbers this dwarfs the amount installed in Vermont; however, New York's 2020 peak load was 31,723 MW,[5] meaning that approximately 31% of its peak load would be met from solar by 2030 (assuming no other changes to peak load). By comparison, the amount of installed solar in Vermont already equaled 40% of peak load in 2020. To be clear, this is not meant to devalue New York's efforts – Vermont has shown that increasing penetrations of distributed solar can be interconnected to the grid – however, it is important to remember that Vermont's build out of solar facilities occurred faster than most other states.

The Department continues to be concerned with the current net-metering compensation structure as it overvalues the generation that is exported to the grid and does not reflect the costs of serving that customer. Consequently, the costs avoided by a net-metered customer must be borne by all other Vermonters. These

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[4] *Governor Hochul Announces Expanded NY-Sun Program to Achieve at Least 10 Gigawatts of Solar Energy by 2030*, NYSERDA (Sept. 20, 2021), https://www.nyserda.ny.gov/About/Newsroom/2021-Announcements/2021-09-20-Governor-Hochul-Announces-Expanded-NY-Sun-Program-to-Achieve-at-Least-10-Gigawatts-of-Solar-Energy-by-2030.

[5] The New York Independent System Operator, Inc., *2021 Load and Capacity Data* (Apr. 2021), https://www.nyiso.com/documents/20142/2226333/2021-Gold-Book-Final-Public.pdf/b08606d7-db88-c04b-b260-ab35c300ed64?t=1619631804748.

concerns are heightened with increased electrification. A net-metered customer has a greater incentive to use electric vehicles and heat pumps because, under the current net-metering compensation structure, that net-metered customer's electric, transportation, and heating bills are being subsidized by their neighbors. While that may result in more electrification in the near term, it will further exacerbate the cost shift between those customers who net-meter and those who do not. Furthermore, these elevated electricity costs for non-net-metered customers strongly risk deterring them from participating in electrification efforts, because their electricity costs more, if not too much more, than their net-metering neighbor's electricity. In short, this is an inequitable state of affairs, and it erodes broad-based support for the renewable energy transition underway in Vermont.

These arguments are not new, nor are they unique to Vermont. In an ongoing California rulemaking proceeding, similar to the instant case, examining that State's net energy metering ("NEM") program, the Natural Resources Defense Council ("NRDC") submitted the following comments on California's net-metering program to the California Public Utilities Commission ("CAPUC"):

> The record in this case confirms that, although the current NEM tariff has helped to incentivize the installation of more rooftop solar in California than in any other State, the current NEM tariff needs substantial reform. Three factors drive this need for reform. First, the existing tariff imposes an unacceptably high and fundamentally unfair economic burden, in the form of undue electric rate increase, on customers who do not have rooftop solar on their homes. Second, the benefits of NEM are disproportionately skewed toward wealthier households and communities, at the expense of lower-income families and disadvantaged communities. Third, the undue increase

> in electric rates attributable to current NEM tariffs is hampering California's ability to achieve its clean energy goals in a cost-effective manner by making electrification of transportation and buildings less economic for non-NEM customers.[6]

These concerns, raised in California, are reasonably similar to those experienced in Vermont. While California may be further along than Vermont regarding the impacts of net-metering, there is no good reason why Vermont should defer changes to net-metering until the impacts on Vermonters and climate policy have reached the same level of intensity as is felt in California.

For these reasons, it is worthwhile for Vermont to examine the following specific features that the NRDC has proposed for the future of net-metering in California:

- A net billing structure that "should have separate values for compensation for electricity exported to the grid, separate charges for electric consumption, grid benefit charges that help recoup costs to serve NEM customers, and non-bypassable charges."[7]

- "Export Compensation … should be based on avoided costs."[8] The methodology used to calculate avoided costs in California is generally different than that used to determine the avoided cost of Vermont utilities. However, this general principle is aligned with the Department's November 1, 2019, comments regarding compensation that were filed in this rulemaking. In addition, the NRDC stated that it "prefers hourly export values and instantaneous or hourly netting . . . to encourage customer behavior in line with electric grid needs."[9] The Department has similar

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[6] Post Hearing Brief of the Natural Resources Defense Council at 2-3. Submitted to the California Public Utilities Commission in Rulemaking 20-08-020, *Order Instituting Rulemaking to Revisit Net Energy Metering Tariffs Pursuant to Decision 16-01-044, and to Address Other Issues Related to Net Energy Metering*. (Filed August 31, 2021), *available at* https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M406/K567/406567711.PDF.
[7] NRDC Brief to CAPUC Rulemaking 20-08-020, at 26.
[8] NRDC Brief to CAPUC Rulemaking 20-08-020, at 27.
[9] NRDC Brief to CAPUC Rulemaking 20-08-020, at 28.

preferences for Vermont.

- "A grid benefit charge is necessary to ensure that NEM customers pay their fair share of transmission and distribution costs necessary to maintain and operate the electric grid . . . . Meanwhile, non-bypassable charges recover costs borne by the electric sector for purposes other than transmission and distribution. These charges fund important public policy initiatives and are appropriately shared by all utility customers in proportion to their electricity consumption."[10]

- An Equity Fee, "a dedicated mechanism designed to ensure rooftop solar installations [for lower-income customers], should be a feature of any Successor NEM Tariff."[11]

- "[A]ny incentives should be transparent and provided as an upfront market transition credit, rather than be provided through invisible rate subsidies."[12]

- "The Commission should adopt electrification-friendly TOU rates that provide customers with an accurate signal of the time-varying value of electricity."[13]

Generally, the Department supports the concepts outlined in the NRDC proposal. The Department quotes extensively from the NRDC proposal to demonstrate the breadth of issues being considered in California and to show that the dialogue regarding net-metering is not as clear cut as some stakeholders would have the Commission believe. The issues the NRDC raised in California should also be considered here because they are likewise important issues in Vermont, given the relative similarity between the two states in terms of distributed solar saturation.

[10] NRDC Brief to CAPUC Rulemaking 20-08-020, at 29.
[11] NRDC Brief to CAPUC Rulemaking 20-08-020, at 32.
[12] NRDC Brief to CAPUC Rulemaking 20-08-020, at 34.
[13] NRDC Brief to CAPUC Rulemaking 20-08-020, at 36.

The CAPUC is expected to make a determination on its "NEM 3.0" program in December of 2021. As California effectively serves as the "canary in the coal mine" for net-metering nationally, the Department recommends that the Commission utilize the forthcoming CAPUC Order as a basis for a structured conversation on Vermont's net-metering future. To be clear, the Department does not recommend that Vermont wholly adopt California's determination – even in the extremely unlikely event that all parties agreed to exactly what California produced, it would still need to be modified to reflect Vermont's conditions. However, the Californian proceeding has involved considerable efforts by numerous parties and the proceeding has engendered a robust national debate on the topic of net-metering. Therefore, Vermont has the opportunity to capitalize on that debate to inform its own net-metering program.

As such, the Department recommends that the Commission stay its consideration of how net-metering should be compensated in Vermont until the CAPUC issues its NEM order. Due to the comparative similarity between Vermont and California, this approach would greatly benefit and inform the Commission's consideration of Vermont's net-metering compensation and the salient issues the NRDC has raised before the CAPUC and how they might be best addressed as applied in our State.

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