

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: June 1, 2020

AT (OFFICE): NHPUC

FROM: Elizabeth R. Nixon, Utility Analyst

SUBJECT: Net Metering Avoided Cost Calculation Pursuant to Puc 903.02
Request for Rules Waivers to Extend Deadlines

TO: Dianne Martin, Chairwoman
Kathryn M. Bailey, Commissioner
Michael S. Giaimo, Commissioner
Debra A. Howland, Executive Director

CC: Thomas C. Frantz, Director, Electric Division
Richard Chagnon, Assistant Director, Electric Division
David K. Wiesner, Director, Legal Division
Electric Distribution Utilities

Summary

Pursuant to Puc 903.02(i)(1), the New Hampshire Public Utilities Commission (Commission) is required to publish on or before April 15 the calculation of net metering avoided cost rates for energy and capacity for the previous year ending on March 31. The electric distribution utilities use those rates to calculate the compensation for eligible customer-generators opting to receive payment for banked kilowatt-hours (kWh). Under Puc 903.02(h), each distribution utility, on or before June 1, must provide customer-generators taking default service with their accumulated kWh, estimated or actual capacity in kilowatt (kW) associated with the surplus generation, average energy and capacity rates, total value of surplus generation, and a statement that the customer will continue to accumulate the net surplus unless the customer chooses to receive a bill credit or payment by check.

Staff requests that the Commission waive the dates related to the calculation and notification described above, including the April 5 deadline for receipt of actual generation data from New Hampshire systems, the April 15 avoided cost calculation deadline, and the June 1 utility customer notification deadline. Staff requests those waivers as a result of delays experienced in receiving accurate information necessary to complete the avoided cost calculation and the discovery of errors in the calculation after it was initially performed. Staff requests waivers such that the new deadlines would be June 12, June 22, and July 6, respectively.

Background

In accordance with Puc 903.02(i)(7)(a), Staff strives to obtain verifiable hourly generation data from solar photovoltaic (PV) systems operating in New Hampshire with a total combined capacity of at least 25 kW. In reviewing the actual system data, Staff develops the net metering energy and capacity avoided cost rates taking the following into consideration in accordance with the settlement agreement approved in Docket No. DE 16-674 and as requested by customer-generator Clifton Below in Docket No. IR 18-028:

- Obtain and use production data from systems with a capacity weighted average azimuth close to 180°;
- Ensure daylight savings time is accounted for accurately; and
- Align the hourly production data with the appropriate hourly wholesale cost data.

The calculation involves hundreds of thousands of data points. Although Staff is diligent about checking the calculation, with over 8,760 hours in a year (or 8,784 in a leap year), and the associated data with each hour, unfortunately, the opportunity for error exists.

Staff requests production data from local developers, members of Clean Energy New Hampshire, and customer-generators that have been active in the above-referenced dockets. Each year, the data is obtained from different systems, but Staff strives to use data from systems with a capacity-weighted average azimuth close to 180°. By getting data from these random systems, Staff has been able to obtain data from systems with a capacity-weighted average azimuth close to 180°. This year, however, the data from one of the systems demonstrated apparent inconsistencies. With that system included, the capacity-weighted average azimuth is 182°. If the data from that system were eliminated, the capacity-weighted average azimuth would be 204°. Staff therefore would prefer to use the data from that system. Staff is still awaiting verification regarding the data from that system and expects to receive verification within the next few days.

Because the data is downloaded from various monitoring systems, each platform presents the data differently. Some take daylight saving time into consideration, while others do not do so or fail to mark it consistently. In addition, most monitoring systems present the data for each hour using the notation “hour beginning,” whereas the hourly wholesale data from ISO New England is presented for each using the notation “hour ending.” Since all of the various sources are slightly different in their presentation of the relevant data, the details of each line of data must be reviewed carefully.

Puc 903.02(i)(7)(b) does allow for the option of using hourly generation data based on a U.S. Department of Energy software model, “PVWatts,” which uses average weather data for a specified location and specifications for a generic PV system, to present hourly generation data. Staff used the PVWatts option until 2017. It is available as an alternative option; however, Staff generated the data from PVWatts and found that, during the system peak hour of July 30, 2019 at hour ending 1800, PVwatts showed no generation. In contrast, the data from the actual systems showed generation for that

system peak hour. That discrepancy would significantly affect the capacity rate in the avoided cost calculation. Staff therefore recommends the use of actual hourly generation from New Hampshire PV systems for this year and whenever possible.

Rules Waiver Request

Pursuant to Puc 201.05(a), the Commission may waive a rule if it finds that:

- (1) The waiver serves the public interest; and*
- (2) The waiver will not disrupt the orderly and efficient resolution of matters before the commission.*

In determining the public interest, under Puc 201.05(b), the Commission shall waive the rule provision if:

- (1) Compliance with the rule would be onerous or inapplicable given the circumstances of the affected person; or*
- (2) The purpose of the rule would be satisfied by an alternative method proposed.*

Staff believes that the public interest would be served by an alternative method of compliance with the rules by extending the applicable deadlines to permit additional time to verify actual PV system data, complete the necessary calculations, and provide the correct avoided cost calculations to the utilities for notification to their customer-generators entitled to receive that notice. Note that the net metering rates may change (probably increase) as a result of these deadline extensions, but otherwise the customer will still receive the notification of the rates and still be able to opt to carry the kWh balance or receive compensation for the surplus kWh. The dates set forth in the rules are April 5 for receipt of actual generation data from New Hampshire systems, April 15 for completion of the avoided cost calculations, and June 1 for utility customer notification.

Staff recommends that the deadline for receipt of actual system generation data be extended to June 12, with the calculations completed by June 22, and the utility customer notifications issued on or before July 6.