STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

DE 15-147

UNITIL ENERGY SYSTEMS INC.

Petition for Recovery of Distribution Revenue Displaced Due to Customer Net-Metered Generation

Order Approving Settlement Agreement

O R D E R N O. 25,991

February 21, 2017

APPEARANCES: Gary M. Epler, Esq., on behalf of Unitil Energy Systems, Inc.; the Office of Consumer Advocate by D. Maurice Kreis, Esq., on behalf of residential ratepayers; and Suzanne Amidon, Esq., on behalf of Commission Staff.

In this Order, the Commission approves a methodology under which Unitil can recover revenue displaced due to customer net-metered generation. This Order does not approve a specific rate for such recovery. Pursuant to a Settlement Agreement, Unitil will begin recovering displaced revenue through its external delivery charge rate beginning with rates effective August 1, 2017.

I. PROCEDURAL BACKGROUND

On May 14, 2015, Unitil filed a proposal to recover distribution revenue lost during calendar years 2013 and 2014 due to net-metered generation. Unitil proposed using its External Delivery Charge (EDC) rate to recover the lost revenue. The request was made pursuant to N.H. Code Admin. Rules Puc 903.02(o), which sets forth the process whereby an electric distribution utility may petition the Commission for reconciliation of the effects of net metering on its default service and distribution revenues and expenses. The EDC rate is a reconciling rate factor consisting of several components. Unitil annually files a proposal to adjust its EDC rate in

June, for rates effective on a service rendered basis on and after August 1 of that same year. Unitil's 2015 proposal added a new component to the EDC to recover revenue displaced due to net metering, subject to the approval of the Commission. At the time of the filing, Unitil requested a total recovery of $41,628, of which $15,261 related to 2013, and $26,367 related to 2014.

On May 18, 2015, the Office of Consumer Advocate (OCA) filed a letter of participation pursuant to RSA 363:28. The Commission issued an Order of Notice on June 4, 2015, scheduling a prehearing conference on June 23, 2015. No other party petitioned for intervention in the docket. During the remainder of 2015, the parties engaged in written discovery and held several technical sessions.

On January 25, 2016, Staff filed a letter reporting that, based on Staff's review, the methodology used by Unitil to calculate the amount of revenue displaced by net metering is appropriate, and the next step would be the development of a settlement agreement on the issues.

On April 11, 2016, Unitil filed a joint Settlement Agreement among itself, the OCA and Staff (Settlement Agreement). The Commission held a hearing on the Settlement Agreement on September 6, 2016. The petition and subsequent docket filings, other than any information for which confidential treatment is requested of or granted by the Commission, are posted to the Commission's website at http://www.puc.nh.gov/Regulatory/Docketbk/2015/15-147.html.

II. SETTLEMENT AGREEMENT

In the Settlement Agreement, the parties agreed that the methodology proposed by the Company to estimate the displaced revenue associated with net metering is reasonable and satisfies the requirements of RSA 362-A:9, VII and Puc 903.02(o). Under the Settlement Agreement, Unitil will use the nominal system size, measured in direct current kilowatts (kW_{DC}), of each net metering generator installed on its system to estimate an annual amount of energy, measured in kilowatt-hours (kWh), displaced by the net metering generation system. The calculation of the kWh displaced is based on industry standard models for solar installations applied to the Unitil net metering capacity. Additional detail on the calculation is contained in the Settlement Agreement http://www.puc.nh.gov/Regulatory/Docketbk/2015/15-147/LETTERS-MEMOS-TARIFFS/15-147_2016-04-11_JT_SETTLEMENT_AGREEMENT.PDF

The Settling Parties agreed that in Unitil's next EDC filing due in June 2017, Unitil should be allowed to request displaced revenue associated with net metering for 2013, 2014, 2015, and 2016 with rates for effect August 1, 2017. The Settling Parties also agreed that Unitil's EDC tariff should be amended to include a provision allowing displaced revenue associated with net metering to be recovered through the EDC.

III. POSITIONS OF THE PARTIES

A. UNITIL

Unitil explained that the Settlement Agreement establishes the methodology for how the Company will estimate the displaced distribution revenue that is caused by customers who install on-site generation, primarily solar generation. While many of the customers have metering systems that measure the amount of generation from their systems, Unitil does not have access to that metering data because the customers' meters measuring production are not linked to or read by Unitil's meters measuring consumption of energy delivered to those customers by Unitil. As a result, Unitil developed its proposal as presented in the Settlement Agreement to estimate the on-site generation, using an industry model known as the PVWatts model. The model is developed by the National Renewable Energy Laboratory, and is recognized nationally as an appropriate methodology for estimating generation from customer-owned solar systems. The model is publicly available at http://pvwatts.nrel.gov/.

For modeling Unitil's net-metered customers, Unitil proposes to use weather data for the Concord Airport location, which is the closest site to its service territory. Unitil explained that the PVWatts model operates with many generic assumptions, and Unitil has not changed those assumptions with the exception of the DC to AC ratio, which uses a default value of 1.1. Unitil's model assumes a 1.25 DC to AC ratio (i.e., a photovoltaic (PV) system with 12.5 kW_{DC} would be estimated to generate 10 kW_{AC}). Unitil said its Massachusetts affiliate, Fitchburg Gas & Electric Light Company, complies with net metering regulation that includes a net metering cap. In Massachusetts, the net metering cap is developed using 80 percent of the net metered system capacity. The 80 percent value used by the Company's Massachusetts affiliate is equivalent to the 1.25 DC:AC ratio proposed here. Unitil decided this was an appropriate ratio for use in modeling the energy generation of New Hampshire net metered systems.

Unitil uses the PVWatts model to estimate the annual kilowatt-hour output for every kilowatt (kW) of installed generation. The calculation is conducted for every customer that has installed on-site generation, using the amount of installed kW as a basis for the calculation. Unitil explained that the PVWatts model includes a range of conditions in its alogorithm such as weather, sunlight, cloud cover, and other factors that affect the output of the systems. As a result, Unitil believes that the calculation is a conservative estimate of the annual output. In addition, Unitil develops its estimate for any system using the month the system became operational as the beginning point for its calculation.

Using the PVWatts model, Unitil calculated the displaced revenue for 2013 and 2014. If the Commission approves the Settlement Agreement, Unitil plans to request recovery of the displaced revenue in its 2017 EDC filing. By the time of that filing, Unitil will have calculated the displaced revenue associated with calendar years 2015 and 2016. Assuming that the recovery is approved, Unitil will begin recovery of the displaced revenue for years 2013-2016 commencing with rates effective on and after August 1, 2017.

Unitil said that, in the event that a more accurate methodology to calculate displaced revenue becomes available, the Company will consider adopting the more accurate methodology.

B. OCA

The OCA said that Unitil is entitled to recover the lost revenue that it seeks to recover through the methodology proposed in the Settlement Agreement, and that the proposed methodology is a reasonable way to estimate the lost revenue. The OCA also expressed appreciation that Unitil is willing to consider adopting a different method to calculate displaced revenue if such a method becomes available. In conclusion, the OCA said it remained a signatory to the Settlement Agreement and supported its approval by the Commission.

C. STAFF

Staff's witnesses concurred with Unitil's characterization of the PVWatts model, and noted that the model was widely used by developers of solar power projects. Staff noted that because the displaced revenue would be recovered through Unitil's annual EDC filing, Staff and the OCA could review the calculation of the revenue Unitil sought to recover when the EDC filing is made. Staff also noted that the adoption of the PVWatts methodology by Unitil would not constitute a precedent for other electric distribution companies. Staff recommended that the Commission approve the Settlement Agreement.

IV. COMMISSION ANALYSIS

Pursuant to RSA 362-A:9, VII and New Hampshire Code Admin. Rules Puc 903.02(o), an electric distribution company may determine the net effect of net metering on its distribution revenues and expenses and recover or credit such reconciliation after approval by the Commission. We have reviewed the testimony and the Settlement Agreement, and find that the terms of the Settlement Agreement are reasonable and in the public interest as required by Puc 203.20.

The Settlement Agreement only addresses the calculation of displaced revenue, but does not address any savings of expenses from net metering. If sufficient data or a new methodology becomes available to calculate benefits from net metering, the net effect shall be calculated in the future. The Settlement Agreement recommends using 2009 as the baseline, the test year used in the Company's most recent rate case, for calculating the lost revenue for 2013 and 2014 so that only the output of systems installed during or after the test year is included.

We are satisfied at this time that the methodology proposed in the Settlement Agreement to calculate only the displaced distribution revenue uses a PV energy generation model that is recognized by the PV industry and is a reasonable method to model electric production from PV facilities. In addition, Unitil demonstrated that its proposed method does not double count production, but provides the best estimate of displaced distribution revenue at this time. Finally, any party to Unitil's annual EDC docket can review Unitil's calculation of displaced revenue, any savings of expenses from net metering (if such benefits are quantifiable), and the proposed rate for recovery of the lost revenue (or credit of savings) in that filing. Based on the foregoing, we approve the Settlement Agreement. We note that in Unitil's current distribution rate case

(DE 16-384), the company used a test year of 2015. For the calculation of displaced revenue for years subsequent to 2015, Unitil shall use the 2015 test year as the basis for the calculation.

Based upon the foregoing, it is hereby

ORDERED, that the Settlement Agreement among Unitil, the OCA and Staff for the calculation of distribution revenue displaced due to net metering is hereby APPROVED; and it is

FURTHER ORDERED, that Unitil is authorized to file for recovery of the displaced distribution revenue through its External Delivery Charge effective with rates on and after August 1, 2017, taking into account the new test year of 2015 for the displaced revenue calculation for 2016.

By order of the Public Utilities Commission of New Hampshire this twenty-first day of February, 2017.

Martin P. Honigberg Chairman	Robert R. Scott Commissioner	Kathryn M. Bailey Commissioner

Attested by:

Debra A. Howland
Executive Director