

STATE OF NEW HAMPSHIRE
Inter-Department Communication



DATE: July 17, 2018
AT (OFFICE): NHPUC

TCF

FROM: Rich Chagnon
Utility Analyst – Electric Division

SUBJECT: DE 18-019, Keene Housing
Petition to Waive Puc 303.02; Master Metering

TO: Commissioners
Debra Howland, Executive Director

CC: Tom Frantz, Director, Electric Division
Amanda Noonan, Director, Consumer Services and External Affairs
Les Stachow, Assistant Director, Electric Division
Lynn Fabrizio, Staff Attorney

Summary

On February 7, 2018, Keene Housing (KH) filed a request for waiver of N.H. Code Admin. Rules Puc 303.02 (master metering rule) with respect to KH's existing four properties, which consist of 20 buildings, housing a total of 189 apartments (248 electric utility accounts in total). KH is a subsidized public housing agency in Keene, New Hampshire.

Based on a review of the history of the master metering rule requirements and the Commission's previous approvals of similar waiver requests, Staff finds that past approvals have been based on documentation focused on new construction or substantial renovations to existing facilities. Staff believes that a waiver of the master metering rule has never been intended or contemplated to allow the consolidation of multiple existing residential meters in a facility to be master metered for the stated purpose of saving on meter charges. Given the above, Staff is not persuaded by KH's arguments that a waiver is warranted.

Based on Staff's analysis regarding the historical language of the rule, and the historical policies and practices of New Hampshire's electric utilities, including Public Service Company of New Hampshire d/b/a Eversource Energy (Eversource, the Company or PSNH), Staff recommends that KH's request for a waiver of Puc 303.02 be denied.

Staff also recommends that if KH undertakes substantial renovations to one or more of its facilities (in which the cost of renovation exceeds 50 percent of the value of the building)

in the future, and KH files a request for a waiver of the master metering rule for the renovated location(s), then the Commission should consider such request at that time on an individual basis.

Background

KH is a Section 8 and public housing agency in Keene, New Hampshire. KH provides and advocates for affordable housing and supportive services that strengthen and empower low and moderate-income households in the Monadnock region. KH has a commitment to reducing its carbon footprint as well as its utility operating expenses. KH states that in addition to the environmental benefits, reducing its energy and water consumption will free up much needed funds for programming, as well as for developing new affordable housing units and maintaining its existing portfolio.

In 2014, KH engaged an energy consulting firm to help KH move forward with this goal. The consulting firm determined that the KH properties that rely on electricity for heating were some of its least efficient and most expensive. Annually, KH spends over one million dollars on energy and water utility costs.

According to KH, there is a direct relationship between its operating expenses and its ability to maintain and expand its stock of affordable housing in the Monadnock region. KH states that the less it spends on electric bills, the more funding it will have available to repair roofs, repave parking lots, and develop new, desperately needed affordable housing.

Upon completion of its energy review, KH and its energy consulting firm began looking at a variety of strategies, including energy efficiency, generation, and conservation (resident behavior). KH joined on as a U.S. Department of Energy Better Buildings Challenge (BBC) Partner in 2015 and committed to a 20 percent reduction in energy and water use by 2025. Additionally, KH made an internal commitment to meet all of its energy needs with renewables by 2035.

In its waiver request, KH lists its existing four properties which consist of 20 buildings, housing a total of 189 apartments (248 electric utility accounts in total). These properties are known as Bennett Block, Forest View, North and Gilsum, and Central Square Terrace. Each residence at these locations is individually metered for its electrical service. Each meter/service account is billed directly to KH. As a result, the tenants never see the bill or their electricity consumption. However, KH closely monitors consumption at the building level.

As stated above, the apartments in these four properties managed by KH are currently individually metered for electricity. KH would like to install master meters for these apartments within each building. As a result of consolidating meters at the building level for the apartments at each property, KH reports that it would see a potential annual savings of \$30,345 in the associated service charges by billing at a commercial rate as a

result of master metering each building, rather than at residential rates for individual meters.

KH added that, in addition to the higher costs associated with individual service charges, sub-metering is impinging upon its energy conservation initiatives in other ways:

Solar - We are researching the installation of a community-supported solar array at our Forest View property. To effectively install a solar array that serves the whole property, we would need a single commercial meter at the property.

Incentives - We are in the process of planning a major rehab of our Central Square Terrace property and a moderate rehab of our Bennett Block property. While common area lighting retrofits have been completed, we would like to install LED lighting throughout the residential units. We can access incentives that make this improvement cost effective through programs overseen by Eversource and NH Saves, but the units need to be on a commercial meter.

Bi-annually, our energy consultant pulls utility data and reports at the building level to both Keene Housing and to the Better Buildings Challenge. Currently this entails pulling close to 350 accounts at an hourly cost to Keene Housing. Regularly analyzing our utility consumption data would be facilitated by having fewer meters to monitor.

Positions of Parties

Eversource

On March 29, 2018, the Commission issued a letter to Eversource requesting that Eversource file a statement of its position on the request by April 4, 2018. Eversource responded on April 4 stating that the Company's tariff language relative to metering has been revised and modified over time to ensure that Eversource remains in compliance with the Commission's rules, and past policy and practice. The relevant section of Eversource's tariff¹ reads as follows:

The Company will provide each Customer with proper metering equipment subject to the ability of the Company to obtain the same.

The Company shall own and maintain the metering equipment necessary to measure Delivery Service under this Tariff. Each meter location shall be designated by the Company and the Company shall have priority over any other entity with respect to placement of Company owned metering equipment.

¹ Eversource Tariff, NHPUC No. 9, Original Page 15, Section 14 (Meters).
https://www.eversource.com/content/docs/default-source/rates-tariffs/electric-delivery-service-tariff-nh.pdf?sfvrsn=7fb7f062_30

Any Customer requesting non-standard metering equipment, the cost of which exceeds the cost of the metering equipment necessary for the rendering of Delivery Service under the applicable Rate Schedule, shall be responsible for the additional cost of the requested metering equipment including any incremental labor costs associated with installation of the requested metering equipment. Any such metering equipment must be approved by the Company.

Each unit of a new or renovated domestic structure with more than one dwelling unit will be metered separately and each meter will be billed as an individual customer. Where an individual household or business enterprise, occupation or institution occupies more than one unit of space, each unit will be metered separately and considered a distinct Customer, unless the Customer furnishes, owns and maintains the necessary distribution circuits by which to connect the different units to permit delivery and metering at one location of all the energy used.

Eversource stated that it does not support the request for a waiver by KH and lists the following reasons:

In this case, the request by KH is unusual in that the relevant properties currently have individual meters in place that are billed monthly by Eversource. The position of KH is that because it currently receives and pays the electric bills for 189 housing units, a waiver of the master meter rule is appropriate.

Permitting a waiver in such a circumstance would open the possibility that any existing customer with multiple tenants and individual meters could make the same request.

Regarding the rate analysis, it does not appear from the cost savings estimates provided by KH that it understood that, if master metering was used, Eversource's Rates G or GV would apply to these locations, not residential service Rate R as was used in the cost savings estimates.

In addition to the additional demand charges, a number of the accounts are currently HeatSmart accounts, which are at a discounted rate, and which would be eliminated by the switch to master metering.

An additional significant issue is the amount of engineering and electrical work needing to be performed to convert these facilities to a master or primary meter set up.

Each location would require a study to truly understand what is currently connected and how the systems at each location tie back to the Eversource system.

For the reasons above, specifically the change in precedent that approval of the KH request would create, as well as the billing, metering, and engineering issues that would accrue if this request was granted.

Eversource added the following:

Eversource acknowledges and supports KH's commitment to energy conservation and its efforts to reduce operating costs.

The Company has previously worked with KH on common area lighting projects, a pilot heat pump project, and weatherization projects in the residential units.

Eversource's energy efficiency staff will commit to further discussions with KH to better understand its inventory of existing lighting, what the replacement plans are, and whether there are any additional opportunities that will pass the NHSaves efficiency program cost-benefit tests and qualify for rebates.

Eversource has worked over the past year to develop a system for automatic uploads of billing data into ENERGY STAR Portfolio Manager. This new process should help to alleviate the time challenges related to pulling and analyzing usage data and may further assist KH in achieving the goals described in its waiver request.

Office of the Consumer Advocate (OCA)

On April 9, 2018, the OCA filed a response letter opposing Eversource's position and recommended that the Commission grant the waiver request.

"It is on all fours with the waiver granted on March 29 to Twin Pines Housing in Docket No. DE 18-020. The chief distinction between the two situations is that Twin Pines is in the service territory of Liberty Utilities, which took no position on the waiver request, whereas Keene Housing is served by PSNH."

Keene Housing (KH)

On April 11, 2018, KH filed its response to Eversource's April 4 statement of position filing. KH states the following:

That the N.H. Code Admin. Rules Puc 201.05 is unambiguous with respect to when a waiver shall be granted.

The rule states that the waiver shall be granted when so doing serves the public interest.

Further, the rule states that the public interest is served when “compliance with the rule would be onerous or inapplicable given the circumstances of the affected person.”

KH believes that in this case, application of the rule is both onerous and inapplicable.

KH points out that the applicable (master metering) rule requires KH to have a single meter for each dwelling unit it owns, even when the low-income elderly, disabled and family households living in the properties for which KH has requested waivers do not pay for their own electricity. These residents will never see an electricity bill. KH hopes that the PUC will agree that application of the rule is onerous, in that it requires KH to use sparse funding for meter reads that would otherwise be used to benefit low income members of the public, and that, further, the rule is inapplicable because KH residents living in the properties for which KH has requested waivers do not pay for their electricity consumption.

KH states that the PUC approved a similar waiver request made by Twin Pines Housing² on March 29, 2018. KH feels strongly that, as in the waiver granted to Twin Pines Housing, there can be little doubt that KH's circumstances meet the high bar set by the applicable PUC rules.

KH believes that Eversource's single argument opposing the waiver request is its concern that the waiver would set a precedent for other customers in the same situation. However, KH believes the only Eversource customers who might submit a similar request, based on the same criteria, are other affordable housing owners and non-profit organizations.

Regarding the rate analysis that Eversource pointed out, KH conducted an in-depth analysis for Central Square Terrace, one of the properties for which KH is requesting a waiver, to be sure that KH will still realize significant savings through meter consolidation, even after going on the G or GV rate. An energy model using Trane Trace® software was completed, and annual demand was projected for all Central Square Terrace accounts. The result was an estimated annual bill savings of \$3,618. KH believes that this analysis makes the concern Eversource articulates on this point moot.

KH states that in addition to reduced costs, consolidating meters will make it easier for KH to move ahead with its plans to expand its energy generation strategy through the construction of photovoltaic arrays across its portfolio, with a goal of relying on 100% renewables by 2035.

KH conducted a pilot conversion to heat pumps at its smaller West Street property (4 units). The purpose of the pilot conversion was to track the effect such a conversion, including coming off the HeatSmart program, would have on annual electricity costs.

² Docket No. DE 18-020.

KH concluded that the results of this pilot delivered almost 30 percent energy savings while keeping residents satisfied and achieving fewer maintenance calls. When the heat pumps are installed at two properties, Forest View Apartments and North and Gilsum Apartments, those properties will no longer be on the HeatSmart program. If the waiver is approved, KH will pursue consolidation of the meters as part of the work completed during the retrofit when the HeatSmart meters are removed. KH believes that while this is a legitimate question asked by Eversource, it is not a sound argument against the waiver request.

Regarding Eversource's concern about the costs associated with the engineering and electrical work needed to convert the facilities to a master or a primary meter set up, KH stated that it will begin the planning process in earnest once the waiver is granted³, not before. KH's resources are limited, and it would be irresponsible to expend them unnecessarily on engineering and electrical work without first knowing whether or not the waiver will be granted. The waiver is the first step, with associated studies and analyses to follow. Similar to other arguments made by Eversource, this is a decision for KH to consider and not a valid argument against approval of the waiver.

KH stated that it remains anxious for Eversource to complete its installation of a system for automatically uploading billing data into ENERGY STAR Portfolio Manager, as it will save KH considerable costs associated with uploading its consumption data. In any case, according to KH, the availability of a method to automatically upload data into ENERGY STAR Portfolio Manager has no bearing on whether or not the waiver should or should not be granted.

Staff Analysis

Staff would first like to address the difference between the Twin Pines Housing (Twin Pines) request for a waiver and KH's request for a waiver. Both the OCA and KH have stated that these two requests are comparable situations.

Twin Pines, a nonprofit housing organization, was undertaking the renovation of 10 Parkhurst Street in Lebanon to create 18 units of housing for the chronically homeless. Prior to purchasing the property which was built in 1890, the Twin Pines facility was an existing apartment complex consisting of large studio apartments that were already internally wired and metered through an *existing* master meter. Twin Pines' request was to keep the existing master meter set up, to avoid additional costs for individually wiring each residential unit. Since the only change at that facility was a change of customer (i.e., the owner of the facility), the Commission found that given the circumstances described by Twin Pines, the requested waiver would serve the public interest and would not disrupt the orderly and efficient resolution of matters before the Commission.

³ Staff believes that KW is requesting a "blanket waiver" to cover all of its 20 buildings prior to committing internal resources to determine actual costs and benefits of master metering any of its buildings.

Although KH is a Section 8 and public housing agency, KH's request is uniquely different than Twin Pines in the fact that its request includes the consolidation of existing individual residential meters to be combined throughout its 20 facilities through multiple master meters.

The Rule, Puc 303.02, Master Metering, effective May 21, 2014 (current) provides as follows:

- (a) No utility shall install master metering in a building with multiple dwelling units. The energy in each dwelling unit in such a building shall be separately metered;
- (b) A utility shall only install master metering in commercial buildings and as consistent with the International Energy Conservation Code 2009 (Code) as adopted pursuant to RSA 155-A:1,IV; and
- (c) Hotels, motels, dormitories, boarding houses and time-sharing interests in condominiums as defined in RSA 356-B:3 shall not be considered a dwelling unit within the meaning of Puc 303.02(a) above.

Puc 201.05, Waiver of Rules, provides as follows:

- (a) The commission shall waive the provisions of any of its rules, except where precluded by statute, upon request by an interested party, or on its own motion, if the commission 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.
- (b) In determining the public interest, the commission shall waive a rule 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.
- (c) Any interested party seeking a waiver shall make a request in writing, except as provided in (d) below.
- (d) The commission shall accept for consideration any waiver request made orally during a hearing or pre-hearing conference.
- (e) A request for a waiver shall specify the basis for the waiver and proposed alternative, if any.

Staff reviewed PUC dockets involving waivers of the master metering rule for the past 10 years and found that none of the past requests and approvals for waivers of the master metering rule involved the consolidation of two or more existing residential meters within a facility to master meters absent concurrent substantial renovations to the building in question. KH's request is unique since its request is to have the ability to consolidate multiple existing residential meters to master metering in multiple facilities at some future date.

In its historical review of the master metering rule, Staff utilized the Commission Staff memorandum (memo) in DE 10-329⁴ as a reference; the memo lists the version of Puc 303.02 in effect prior to 2005:

The master metering rule, Puc 303.02, effective October 21, 1997, provided as follows:

- (a) “Control” means direct manipulation such as by a thermostat or by direct use, but does not include indirect manipulation such as activating water flow as in the case of hot water usage.
- (b) “Dwelling unit” means a space occupied for a residence consisting of contiguous living, sleeping, kitchen and bathroom facilities.
- (c) “New construction” means all multi-tenant buildings excluding motels, hotels, dormitories, and time sharing interests in condominiums as defined in RSA 356-B:3, as follows:
 - (1) For which construction commenced after November 18, 1980;
 - (2) Which are undergoing renovations after November 18, 1980, in which the cost of the renovations exceed 50 percent of the value of the building; or
 - (3) Which are converted to electric service and/or electric water heating after November 18, 1980.
- (d) No utility shall install or permit master metering of electric service in new construction pursuant to RSA 155-D [Energy Conservation in New Buildings, part of the state building code] and the New Hampshire Commercial and Industrial Energy Code, § 5.4.1.2.
- (e) Electric service shall be considered master metered if:
 - (1) More than one dwelling unit in a building receives electric service through the master meter; and
 - (2) The occupant(s) of each unit receiving electric service through the master meter have control over any portion of the electric service for their unit.”

Similar versions of the rule date back to at least 1984.

Reviewing Puc 303.02(c)(1) and (c)(2) from the October 21, 1997 version of the rule above, it appears to Staff that master metering would be considered only for new construction and for renovations that exceed 50 percent of the value of the building.

The prior master metering rule, Puc 303.02, effective October 18, 2005, provided as follows:

- (a) A utility shall install master metering of electric service consistent with its tariffs if the installation is consistent with the International Energy Conservation Code 2000 as adopted in RSA 155-A:1,IV, except as set forth in (b) below.

⁴ <http://www.puc.nh.gov/Regulatory/CASEFILE/2010/10-329/LETTERS-MEMOS-TARIFFS/10-329%202011-03-11%20STAFF%20MEMO%20RECOMMENDATION.PDF>

- (b) No utility shall install master metering at a multi-tenant building containing any residences if the occupants of any unit receiving electric service through the master meter have temperature control over any portion of the electric space heating, electric air conditioning or electric water heating service for the unit.
- (c) Section (b) above shall not apply to hotels, motels, dormitories and timesharing interests in condominiums as defined in RSA 356-B:3.

Under Puc 302.12, master metering is defined as the use of a single meter to supply electric service at a building that contains two or more residential premises.

Reviewing Puc 303.02(a) from the October 18, 2005 version of the rule above, it appears to Staff that a utility shall install master metering of electric service consistent with its tariffs if the installation is consistent with the International Energy Conservation Code 2000, which was in effect at the time.

On May 10, 2011 in Docket No. DE 10-329, Commission Order No. 25,222⁵ approved PSNH's proposed tariff language⁶ on the understanding that PSNH will apply its proposed tariff to new or newly renovated multi-family apartment buildings consistent with its historical policies and practices.

The approved updated tariff included the additional language as follows:

Each unit of a new or renovated domestic structure with more than one dwelling unit will be metered separately and each meter will be billed as an individual customer.

This is the current language of the tariff as presented on page 3 of this memo. This language is consistent with the Company's historical policies and practices.

Staff Recommendation

Staff is unaware of any approvals of waiver requests to consolidate multiple existing residential meters through master metering where no substantial renovation or new construction was involved. Staff also believes that its analysis of dockets within the last 10 years shows that no waiver of the master metering rule involving the consolidation of multiple existing residential meters in multiple facilities without substantial renovations or new construction has ever been requested or approved by the Commission.

⁵ Order No. 25,222 <http://www.puc.nh.gov/Regulatory/CASEFILE/2010/10-329/ORDERS/10-329%202011-05-10%20ORDER%20NO%2025-222%20APPROVING%20WAIVER%20AND%20PROPOSED%20TARIFF%20LANGUAGE%20CHANGE.PDF>

⁶ <http://www.puc.nh.gov/Regulatory/CASEFILE/2010/10-329/LETTERS-MEMOS-TARIFFS/10-329%202011-05-24%20PSNH%20TARIFF%201ST%20REV%20PG%2015.PDF>

Staff concludes that historical versions of Puc 303.02 Master Metering rule and Eversource's historical policies and practices all refer to new or (substantially) renovated domestic structures/facilities. Staff also concludes that master metering was never intended for the consolidation of multiple existing residential meters as a way to reduce costs through changing the rate in which these accounts are metered and billed. This conclusion is based on the fact that Staff was unable to find any historical reference to existing residential meters other than renovations. Staff believes that the historical language consisting of reference to new construction, or renovations that exceed 50 percent of the value of the building, also served to "grandfather" electrical services which may have been master metered prior to the update of the Puc 303.02 rule in 1997.

Based on the analysis previously noted above regarding the historical language of the rule, as well as the historical policies, practices and tariffs of New Hampshire electric utilities, including Eversource, Staff recommends that KH's request for a waiver of Puc 303.02 be denied.

Staff also recommends that if KH does substantially renovate (in which the cost of the renovations exceed 50 percent of the value of the building) one or more of its facilities in the future, and KH files a request for a waiver of the master metering rule for the renovated location(s), then the Commission should consider such request at that time on an individual basis.

SERVICE LIST - EMAIL ADDRESSES- DOCKET RELATED

Pursuant to N.H. Admin Rule Puc 203.11 (a) (1): Serve an electronic copy on each person identified on the service list.

Executive.Director@puc.nh.gov
amanda.noonan@puc.nh.gov
donald.kreis@oca.nh.gov
jmeehan@keenehousing.org
leszek.stachow@puc.nh.gov
lynn.fabrizio@puc.nh.gov
matthew.fossum@eversource.com
ocalitigation@oca.nh.gov
richard.chagnon@puc.nh.gov
tom.frantz@puc.nh.gov

Docket #: 18-019-1 Printed: July 18, 2018

FILING INSTRUCTIONS:

- a) Pursuant to N.H. Admin Rule Puc 203.02 (a), with the exception of Discovery, file 7 copies, as well as an electronic copy, of all documents including cover letter with: DEBRA A HOWLAND
EXEC DIRECTOR
NHPUC
21 S. FRUIT ST, SUITE 10
CONCORD NH 03301-2429
- b) Serve an electronic copy with each person identified on the Commission's service list and with the Office of Consumer Advocate.
- c) Serve a written copy on each person on the service list not able to receive electronic mail.