

THE STATE OF NEW HAMPSHIRE

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November 27, 2018

**CONFIDENTIAL
MATERIAL
IN COMM FILE**

Debra A. Howland, Executive Director
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, New Hampshire 03301-2429

Re: DW 18-090 – Pennichuck East Utility, Inc. (“PEU” or “Company”)
Staff Recommendation for Approval of Proposed Tariff Changes relative to Small
Diameter Private Fire Protection Non-Metered Service and Other Proposed
Remedies: **PUBLIC VERSION**

Dear Ms. Howland:

The purpose of this letter is to recommend that the Commission approve certain tariff changes proposed by PEU, including rate changes and installation specificity, relative to its provision of private fire protection service to customers using small diameter connections. Staff further recommends that the Commission approve proposed credits to customers who have been previously receiving this service, to address certain billing inequities. Staff also recommends that the Commission approve proposed outreach efforts to be undertaken by PEU to actively educate municipal officials of the new tariff requirements. Finally, Staff recommends that the Commission approve PEU’s Motion for Confidential Treatment of certain customer-specific information provided in this proceeding.

Procedural Background

In March of this year, the Staff of the Commission’s Consumer Services and External Affairs Division became aware of billing inconsistencies relative to private fire protection service charges by PEU to customers residing in the Peterson Village subdivision in the Town of Pelham, and the Stone Sled subdivision in the Town of Bow. Subsequent discussions ensued between the Company, the Commission Staff (“Staff”), and the Office of the Consumer Advocate (“OCA”). As a result of those discussions, it was agreed that the Company would submit a filing to the Commission to correct specific deficiencies and inequities contained within its tariff relative to the provision of private fire protection service.

On May 29, 2018, PEU petitioned to change its tariff regarding non-metered private fire protection service to customers currently using smaller diameter connections, and to provide pricing and installation specificity relative to these type of connections. In support of its petition, PEU filed copies of its proposed amended tariff pages, and the testimony of Donald L. Ware, the Company's Chief Operating Officer.

On May 30, 2018, the OCA filed a letter of participation, pursuant to RSA 363:28. There are no other intervenors in this proceeding.

On June 27, 2018, the Commission issued Order No. 26,152 suspending the proposed tariff pages, pursuant to RSA 378:6, I(b), through September 27, 2018, pending an investigation and further order by the Commission.

On July 12, 2018, Staff propounded discovery to the Company, to which PEU provided final responses on August 6. A redacted copy of PEU's discovery responses is attached to this PUBLIC VERSION correspondence. (A copy of this letter, with the UNREDACTED CONFIDENTIAL material attached, will also be filed and provided to PEU and the OCA, separately.)

On September 5, 2018, the parties in this proceeding met in a technical session. There, Staff and the OCA agreed to support the tariff changes proposed by the Company in its filing, and PEU agreed to undertake certain other actions as a further remedy towards resolving the deficiencies and inequities highlighted in this proceeding. PEU memorialized this agreement in a letter dated September 14, 2018, which is attached to this correspondence.

On September 21, 2018, PEU informed Staff that it would be submitting a supplemental response to Staff Data Request 1-1. The supplemental response indicated an under-collection of revenues in a third subdivision, Ministerial Heights in the Town of Londonderry, where private fire protection was installed. In turn, Staff filed a request to extend PEU's tariff suspension until November 27, 2018 on that same day. PEU assented to Staff's request and the Commission approved the extension via a Secretarial Letter issued on September 26, 2018.

On September 25, 2018, PEU filed its supplemental response regarding the Ministerial Heights subdivision and a request for an additional tariff change. On October 1, 2018, PEU filed a Motion for Protective Order and Confidential Treatment of Customer-Specific Account Information and Street Addresses (Motion for Confidential Treatment) with regard to information included in its response to Staff Data Request 1-1.

On October 5, 2018, Staff requested additional information from the Company related to its supplemental response, which PEU responded to on October 10, 2018. This additional information is identified as Staff Data Request 1-16 and is included in the attached discovery responses to this correspondence.

Background of Proposed Tariff Changes

According to Mr. Ware in his testimony, PEU is receiving applications from building developers installing “life safety” sprinkler systems in newly constructed homes, as recommended by the International Code Council’s International Residential Code, Section P2904. These systems require non-metered private fire protection service connections.

Mr. Ware further states that PEU’s current tariff is ambiguous regarding the installation specifications for these systems, thus PEU has noted two types of installations. Under what PEU refers to as “Option 1”, some developers are installing a single, larger service line (1½” or larger) to provide both domestic and fire suppression flows. In order to allow passage of these combined flows, however, a 1” meter needs to be installed instead of the typical 5/8” meter. Conversely, under what PEU refers to as “Option 2”, two separate service lines are installed; a 1” service line with a 5/8” meter to provide domestic flows, as well as a 1½” or larger non-metered service line to provide fire protection flows.

Mr. Ware further explains that, of the two installation scenarios, Option 1 is least preferred for the following reasons:

1. Customers forced to install a 1” meter in their homes in order to receive fire protection service, instead of the typical 5/8” meter, are paying a monthly minimum charge of \$51.76 for the 1” meter, as opposed to \$17.19 for a 5/8” meter; a difference of \$34.57.¹
2. Installation of a 1” meter, instead of a 5/8” meter, results in higher than normal unaccounted-for or lost water, because a 1” meter only registers low flows down to ¾ gallons per minute (gpm), compared to a 5/8” meter that registers flows as low as ¼ gpm.
3. 1” meters require a greater frequency of testing than 5/8” meters; that is, every 4 years versus every 10 years. This results in meter testing costs that are 2.5 times greater than what would normally be required relative to typical single-family residences.
4. Under circumstances where either a problem arises relative to a customer’s private fire protection service or a customer ceases payment for that service, the Company does not have the ability to shut off the fire protection flow while leaving the domestic flow on.

¹ On October 4, 2018, the Commission issued Order No. 26,179 approving a Settlement Agreement in DW 17-128 which, among other items, included a general rate increase for PEU. As a result, PEU’s monthly minimum charge for a 5/8” meter increased from \$17.19 to \$20.70 and its monthly minimum charge for a 1” meter increased from \$51.76 to \$62.32, effective for bills rendered after November 16, 2018. Therefore, the current difference between PEU’s 5/8” meter charge and its 1” meter charge is \$41.62.

Mr. Ware's testimony further explains that there are three subdivisions in PEU's current franchise where private fire service installations exist:

- **Peterson Village – Pelham:**

Description: Construction began on this subdivision in 2016. As of the date of PEU's filing, 21 out of a total of 40 homes were completed. In order to meet the Town of Pelham's requirement regarding the installation of a fire suppression system for the subdivision, all of the homes were equipped with a sprinkler system. However, each home receives both private fire protection flows and domestic flows through a single service and an oversized ¾" or 1" meter (Option 1).

Current Billing Practice: PEU charges the homes in this subdivision the appropriate monthly meter charges per its tariff of \$51.76 for a 1" meter and \$36.57 for a ¾" meter,² in addition to consumption charges. However, these customers do not pay a monthly non-metered fire protection service charge.

Revenue Impact: As a result of the "grandfathered" rate proposed by PEU in its filing and further explained below, the Company is proposing that the customers in this subdivision receive billing credits. Through October 2018 these credits totaled \$9,566.05.³

- **Stone Sled Farms – Bow:**

Description: Construction of this subdivision began in 2006. As of the date of PEU's filing, 39 out of a total of 42 homes were completed. All of the homes were equipped to receive both private fire protection and domestic use water delivered through a single service line (Option 1). However, prior to 2018, only 12 of the 39 homes were actually receiving private fire protection through a 1½" service line paired with a 1" meter. The remaining homes received water through a 5/8" meter, and thus had no private fire protection service. During 2018, however, an additional five customers upsized from 5/8" meters to 1" meters in order to receive private fire protection service.

Current Billing Practice: The 17 homes currently receiving private fire protection service are billed a monthly 5/8" meter charge of \$17.19 plus a

² Per Order No. 26,179, PEU's monthly minimum charge for a 1" meter increased from \$51.76 to \$62.32, and its monthly minimum charge for a ¾" meter increased from \$36.57 to \$44.03, effective for bills rendered after November 16, 2018.

³ PEU's calculation of proposed Peterson Village billing credits, contained in Redacted Attachment 1-1-b-f and included in its response to Staff Data Request 1-1, accounts for the resulting rate increases per Order No. 26,179.

1½” non-metered private fire service charge \$8.06, for a total of \$25.25 per month.⁴ This is instead of billing these customers the 1” meter charge of \$51.76 per month⁵ as per PEU’s tariff. The remaining homes are billed the monthly minimum 5/8” meter charge of \$17.19,⁶ but are not billed for non-metered fire protection service. These charges are in addition to the monthly consumption charges.

Revenue Impact: In its response to Staff Data Request 1-1, PEU indicated that from 2007 through 2018, it had undercharged the appropriate tariffed rate to the 17 customers receiving private fire protection service by a total of \$43,070.34.⁷

- **Ministerial Heights – Londonderry:**

Description: This subdivision was constructed in 1997 and was previously served by Consumers New Hampshire Water Company before it was acquired by PEU in 1998. It consists of 64 homes, all of which were required to have private fire protection as part of the subdivision’s approval. Mr. Ware’s original testimony states that all of the homes were installed with two services (Option 2). In its supplemental response to Staff Data Request 1-1, PEU further explained that all of the homes receive water via a single 2” service that splits outside the home into two services: a 1½” non-metered fire service and a 1” domestic service that provides water through a 5/8” meter.

Current Billing Practice: In its supplemental response to Staff Data Request 1-1, PEU indicated that prior to June 2003, the customers in this subdivision had previously paid a 2” non-metered fire protection charge. However, in June 2003, PEU ceased billing this charge, and did not resume billing its customers an appropriate alternative fire protection rate until 2018. The present management of PEU is not certain as to the precise reason behind the decision to cease charging the 2” non-metered fire protection rate in 2003 and only became aware of its impact through a manual cross-referencing of its paper billing and installation records this past September.

⁴ Per Order No. 26,179, PEU’s monthly minimum charge for a 5/8” meter increased, from \$17.19 to \$20.70 and its monthly 1½” non-metered private fire service rate increased from \$8.06 to \$9.71, effective for bills rendered after November 16, 2018. The combination of these two charges increased from \$25.25 per month to \$30.41 per month.

⁵ Per Order No. 26,179, PEU’s monthly minimum charge for a 1” meter increased from \$51.76 to \$62.32, effective for bills rendered after November 16, 2018.

⁶ Per Order No. 26,179, PEU’s monthly minimum charge for a 5/8” meter increased from \$17.19 to \$20.70, effective for bills rendered after November 16, 2018.

⁷ PEU’s calculation of Stone Sled Farms’ under-billings contained in Redacted Attachment 1-1-e, and included in its response to Staff Data Request 1-1, accounts for the rate increases resulting from Order No. 26,179.

Revenue Impact: In its supplemental response to Staff Data Request 1-1, PEU indicated that between 2003 and 2018, it had undercharged the appropriate tariffed rate to the customers in this subdivision by a total of \$92,997.75.⁸

Proposed Tariff Changes

Given the likelihood that the demand for private fire protection in residential dwellings will only increase, Mr. Ware states that it is important to take steps now in order to prevent future installations of combined domestic and fire-protection services under Option 1. To do so, the Company proposes introducing more specific system configuration requirements to its current tariff.

On Page 28-A of PEU's tariff, the Company is proposing revisions which mandate that future domestic and private fire protection services no longer be combined as a single service connection. Rather, the additional proposed language requires that a residential home installed with a life safety sprinkler system must have two services, with separate outside shutoffs.

Additionally, in order to resolve the rate inequity issue for homes previously installed with one service coupled with an over-sized meter under Option 1, PEU proposes the establishment of a "grandfathered" rate for these customers. Specifically, this rate would apply only to those customers with this type of service and meter set-up installed and placed in service prior to December 31, 2018. PEU proposes that these customers be charged a combined fixed rate of \$25.25 per month consisting of the \$17.19 5/8" meter charge plus the \$8.06 non-metered charge for a 1½" private fire protection service.⁹ PEU proposes that this "grandfathered" rate of \$25.25 be added to Page 38 of its tariff and charged on a going-forward basis to Option 1 customers who have this type of installation on or before December 31, 2018. PEU has identified up to 82 homes which may qualify for the "grandfathered" rate. These consist of 40 potential customers (21 at the time of filing) within the Peterson Village subdivision and 42 potential customers (39 at the time of filing) within the Stone Sled Farms subdivision.

In addition to the tariff changes discussed above, in its supplemental response to Staff Data Request 1-1, PEU also proposes an additional change in the language appearing on tariff Page 38 to indicate that a customer's non-metered fire protection charge will be based on the size of the fire service tap (as opposed to the size of "the pipe

⁸ PEU's calculation of Ministerial Height's under-billings contained in Attachment 1-1-e Supplement, and included in its supplemental response to Staff Data Request 1-1, accounts for the rate increases resulting from Order No. 26,179.

⁹ Per Order No. 26,179, PEU's monthly minimum charge for a 5/8" meter increased from \$17.19 to \$20.70, and its monthly 1½" non-metered private fire service rate increased from \$8.06 to \$9.71. The resulting "grandfathered" rate is \$30.41.

entering the property”), which can either be off of the water main in the street or off of the service.

Staff believes that the tariff changes proposed by PEU will result in just and reasonable rates to all effected customers on a prospective basis. As a result, Staff recommends that the Commission approve the respective tariff changes proposed by the Company.

Proposed Customer Credits at Peterson Village

In its response to Staff Data Request 1-1, PEU proposes to provide credits to its existing Option 1 customers residing in the Peterson Village subdivision. Through October 2018, the proposed credits amounted to \$9,566.05. PEU’s Redacted Attachment Staff 1-1-b-f shows the individual credits calculated for each of the respective Peterson Village customers. The purpose of these credits is to further resolve the previous billing inequities experienced by these customers relative to PEU’s current tariff. The proposed credits are based on the difference between the previously billed charges paid by those customers, based on either a 1” or ¾” meter, and the fixed monthly charges these customers would have paid had the proposed “grandfathered” rate been in effect during that same time period.

Staff has reviewed the basis for the Company’s proposed credits and the underlying calculations contained in Redacted Attachment Staff 1-1-b-f. Staff believes that PEU’s proposed customer credits provide an equitable solution to resolve a previous regulatory oversight relative to an emerging issue. As such, Staff believes that the proposed customer credits are just and reasonable and recommends that the Commission approve them.

Staff recommends that within 30 days of a Commission Order approving the proposed credits, the Company submit a revised Redacted Attachment 1-1-b-f containing an updated calculation of the proposed credits to the Peterson Village customers through the date of the Commission’s order. Staff further recommends that PEU be prohibited from any future recovery of these customer credits via a future general rate increase.

Previous Customer Undercharges at Stone Sled Farms and Ministerial Heights

Stone Sled Farms

As stated above, from 2007 through 2018, 17 Option 1 private fire protection service customers at the Stone Sled Farms subdivision were undercharged PEU’s tariffed rate. Through October 2018, these customers were undercharged by a total of \$43,070.34. This is calculated on PEU’s Redacted Attachment 1-1-e included in its response to Staff Data Request 1-1. The undercharges occurred because, rather than PEU charging these customers the monthly 1” meter minimum charge per its tariff, the Company,

instead, charged them the monthly 5/8" meter minimum charge plus the monthly 1½" non-metered private fire service charge. At the time of PEU's filing, the difference between the two billing approaches resulted in customers paying \$26.51 less per month than the appropriate tariffed rate. [$\$51.76 - (\$17.19 + \$8.06) = \26.51].¹⁰

Staff has reviewed the basis and circumstances regarding PEU's previous undercharges of Stone Sled Farms' Option 1 customers. While Staff believes it was inappropriate for PEU to charge these customers a rate which was not previously included in its approved tariff, Staff also believes that the Company's intention in doing so was to remedy the previously described Option 1 customer billing inequity. The ultimate result of PEU undercharging the Stone Sled Farms customers is akin to the customer credits proposed by the Company for the Peterson Village customers, as discussed previously.

Staff roughly calculates that, over the twelve-year period of customer undercharges, the resulting subsidization by PEU's other customers on an annual basis amounted to approximately \$3,600 ($\$43,070 \div 12$). During 2017, this computes to approximately \$0.46 per customer ($\$3,600 \div 7,900$ customers). Based on these calculations, Staff believes that PEU's other customers did not significantly subsidize the 17 undercharged Stone Sled Farms Option 1 customers.

Staff recommends that within 30 days of a Commission Order approving the proposed tariff changes, the Company submit an updated Redacted Attachment 1-1-e containing updated calculations of the total under-billings in Stone Sled Farms through the date of the Commission's order.

Ministerial Heights

As stated above, from 2003 through 2018, the 64 Option 2 customers in the Ministerial Heights subdivision were not charged a non-metered fire protection service rate. That resulted in a total under-collection of revenues of \$92,997.75. This is calculated on PEU's Attachment 1-1-e Supplement included in its supplemental response to Staff Data Request 1-1.

PEU indicates that, while its present management is not certain as to the precise reason behind the decision to cease charging a non-metered fire protection rate to these customers in 2003, it surmised that there was an original intent to change the basis for the non-metered fire protection rate for these customers from a 2" service to 1½" service. However, the Company did not follow-up in filing a corrective tariff. The Company believes that the time drain associated with the eminent domain proceeding (Docket No. DW 04-048) occurring during that same time period contributed to this oversight. The Company further states that this billing situation would not have been discovered via its

¹⁰ Per Order No. 26,179, the difference per customer between the two billing approaches is now $\$31.91 [\$62.32 - (\$20.70 + \$9.71) = \$31.91]$.

normal electronic billing integrity reports, but rather it came to light as a result of the Company manually cross-referencing its paper billing and installation records which was conducted this past September.

Staff has reviewed the circumstances regarding PEU's undercharging the Ministerial Heights customers. Staff believes that it was PEU's intention to correct an identified tariff inequity for these customers, and thus ceased billing the previous fire protection charges. Unfortunately, PEU did not follow through with the appropriate tariff changes, which would have resulted in the reinstatement of more appropriate fire protection charges for these customers. Staff believes that this was an unintentional regulatory oversight on the part of the Company, and it should receive some credit for initiating the appropriate steps during the instant tariff investigation which ultimately led to the identification of this error.

Staff roughly calculates that, over the fifteen-year period that these customers were undercharged, the resulting subsidization by PEU's other customers on an annual basis amounted to approximately \$6,200 ($\$92,998 \div 15$). During 2017, this computes to approximately \$0.78 per customer ($\$6,200 \div 7,900$ customers). Based on these calculations, Staff believes that PEU's other customers did not significantly subsidize the 64 undercharged Ministerial Heights customers.

Staff recommends that within 30 days of a Commission Order approving the proposed tariff changes, the Company submit an updated Attachment 1-1-e Supplement containing updated calculations of the total under-billings in Ministerial Heights through the date of the Commission's order.

Education of Municipal Officials of Tariff Changes

During the September 5, 2018, technical session, PEU agreed that within 30 days of a Commission order approving the proposed tariff changes, it would mail a letter to each municipality within its franchise, and to the building inspector and/or fire inspector of those municipalities. That letter will explain the approved tariff changes, including the installation of metered and private fire protection services technical specifications and design standards. In that letter, PEU will also offer to meet with officials of the respective municipalities to further discuss the proposed changes. PEU also agreed to file a report with the Commission no later than December 31, 2018, describing which municipal officials the Company sent letters to and which officials agreed to meet with PEU. PEU's outreach commitments are contained in its September 14, 2018 letter attached to this correspondence.

Staff believes that such efforts undertaken by the Company will prove beneficial to all parties concerned including the individual municipalities, PEU's customers, and PEU. Staff, therefore, recommends Commission approval. Given the date of this recommendation letter, Staff also recommends that the Commission approve an

alternative date to December 31, 2018 on which PEU will be required to file its report with the Commission.

Motion for Confidential Treatment

On October 1, 2018, PEU filed a Motion for Protective Order and Confidential Treatment, pursuant to N.H. Admin. Rule Puc 203.08 and RSA Chapter 91-A, seeking protective treatment of certain confidential customer-specific data contained in the Company's discovery response to Staff 1-1. Specifically, PEU's response includes schedules identified as Confidential Attachment Staff 1-1-b-f and Confidential Attachment Staff 1-1-e which contain the street addresses, account numbers and billing histories of various customers.

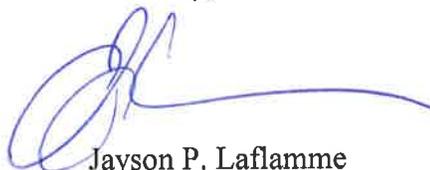
The Company states that RSA 91-A:5, IV expressly exempts from public disclosure "files whose disclosure would constitute an invasion of privacy." PEU argues that the New Hampshire Supreme Court has held there is a recognized privacy interest in individually identifiable customer information, particularly where that information is tied to financial information. PEU states that its discovery response includes street addresses which can be used to identify a specific residential customer. PEU further contends that the customer-specific street addresses and account numbers are not necessary to inform the public of the conduct and activities of the Commission because PEU has provided information as to the streets in general, which should be sufficient to inform the public that Commission approval of credits to certain of the customer groups is just and reasonable.

Staff agrees with the Company's concern that public disclosure of customer-specific street addresses and account numbers contained in its response to Staff 1-1, and specifically Confidential Attachment Staff 1-1-b - f and Confidential Attachment 1-1-e, may constitute an invasion of privacy. Staff supports and recommends that the Commission grant PEU's Motion for Confidential Treatment of this information.

Prior to filing this recommendation, Staff provided a copy to both PEU and the OCA for review. In response, PEU indicated that it concurred with Staff's recommendation. As of the date of this correspondence, Staff has not received a response from the OCA.

Thank you for your attention and assistance with this matter. If you have any further questions, please do not hesitate to contact me.

Sincerely,



Jayson P. Laflamme
Assistant Director, Gas-Water Division

Attachments: PEU Data Responses – Redacted
9/14/18 Correspondence from PWW/PEU

cc: Service List

Confidential
Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Data Request Received: 7/12/18
Data Request Received: 8/2/18

Date of Response: 7/26/18
Supplemental Response: 8/3/2018
Supplemental Response: 9/25/2018
Witness: Donald L. Ware

Request No. Staff 1-1

REQUEST: Re Ware testimony, page 4, lines 13 to 22. For each of the customers referred to please provide:

- a) a complete copy of the associated application for service connection (to the company's distribution system);
- b) the dates of service;
- c) the size of the meter;
- d) the billing history;
- e) the amount of any revenue not recovered, as required by the tariff (e.g., for a customer with a 1" meter, who was charged for a 5/8" meter; or a customer with a 1" meter, who was not charged separately for private fire protection services); and
- f) the amount of any credit the company proposes as a refund or an account credit if the petition is approved.

SUPPLEMENTAL REQUEST:

With regard to Attachment 1-1-b-f and Attachment Staff 1-1-e, could the Company please provide the original Excel spreadsheets with embedded formulas relative to these two attachments?

SUPPLEMENTAL CONFIDENTIAL RESPONSE:

PEU has a good faith basis for seeking confidential treatment of the attached documents pursuant to Puc 203.08 and RSA 91-A:5 because the attached documents contain customer-specific billing information, that if made public, could constitute an invasion of privacy. PEU intends to submit a motion for confidential treatment regarding the confidential portions of the attached documents at or before the commencement of the hearing in this proceeding.

- a) Attached please find ~~a complete~~ copies of the service applications for ~~the~~ customers in the Stone Sled and Peterson Village Subdivisions. Where applications refer to lot numbers, it is

because street addresses had not yet been established. (Attachment Staff 1-1-a). **The blue highlighted rows are the services where PEU is still locating the original service applications. The service applications for all the non-highlighted rows are attached as Attachment Staff 1-1-a. The yellow highlighted rows never had service applications because the services were already installed when PEU acquired the water system.**

b) The dates of service (Date of meter set) are noted on the attached spreadsheet titled Confidential Attachment Staff 1-1-b-f. **See attached Excel spreadsheet.**

c) The size meter is noted on each service application.

d) The billing history for each service account in these two subdivisions is attached inclusive of what these customers paid for in terms of: (1) fixed customer charges, (2) the date the charges started and (3) the dates that changes in tariffed rates for those charges occurred. Please note that no volumetric usage is attached, as the proposed tariff change has no bearing on the volumetric rate.

e) The Company recovered its revenue, as required by tariff from the Peterson Village Subdivision. The Company did not recover its tariffed revenues from some of the Stone Sled Subdivision customers. The attached spreadsheet titled Attachment Staff 1-1-e details the amount of revenues that wasn't recovered from its Stone Sled customers. Customers who had a 5/8" meter installed paid the correct tariffed fee. Customers who had a 1" meter installed and paid the tariffed rate for a 5/8" meter and a 1-1/2" fire service paid less than the tariffed rate they would have paid for a 1" meter. The difference between the two rates (5/8" meter plus 1-1/2" fire service vs. a 1" meter) vary dependent upon the "Meter Install Date" as detailed on Attachment Staff 1-1-e. The Company estimates that had it collected revenues at the tariffed rates in effect at the time, it would have collected an additional \$43,070.24 from the Stone Sled customers as detailed on Confidential Attachment Staff 1-1-e. **See attached Excel spreadsheet and pdf.**

f) The Company proposes the issuance of an account credit to its customers in the Peterson Village Subdivision in Pelham, in accordance with the attached spreadsheet titled Confidential Attachment Staff 1-1-b-f.

9/25/18 Supplemental Response:

The Company performed an internal review of its billing and installation records. After verifying its electronic records, the Company's Manager of Revenue and Customer Operations cross-referenced paper records, including those records from systems acquired by the Company. In that search, the Manager learned that the Company eliminated a 2" non-metered fire protection charge to 64 single-family customers in the Ministerial Heights subdivision in June 2003. The homes in this subdivision were serviced with a single 2" service that split outside the home into two services, a 1-1/2" non-metered fire service and a 1" metered domestic service with a 5/8" meter. This Subdivision existed in 1998 when PEU acquired Southern New Hampshire Water Company, Inc. None of the present PEU

employees know why this decision was made by management at the time. It is important to note that this change would not have been picked up by billing integrity reports because the fire services were inactivated which resulted in a "no-charge"-which matches the service status.

Based on the size of the service at the tap in the Street (2") and based on the actual size of the fire service (1-1/2") the Company may have eliminated the tariffed 2" non-metered fire charge because it believed that the correct charge was for a 1-1/2" non-metered fire charge and that it intended to clarify the tariff language to reflect that the correct non-metered fire service charge should be based on the size of the fire service, not the size of the tap on the water main where the tap is based on the ability to deliver both domestic and fire service. As previously discussed with Staff in this docket, we now know that the Company did not follow-up on filing a corrective tariff. As with Stone Sled, the Company believes that the time drain resulting from Company being significantly involved with defending the eminent domain proceeding (Docket No. DW 04-048) contributed to this oversight.

I have updated Attachment Staff 1-1-e to reflect the revenues that were not collected from the Ministerial Heights customers (based on both a 2" and a 1-1/2" non-metered fire service) from June of 2003 to the present. Those revenues total \$92,997.78 based on a 1-1/2" non-metered fire protection service charge.

The Company proposes to reinstate the non-metered fire protection charge for the Ministerial Heights, based on the charge for a 1-1/2" non-metered fire protection service and to change its' tariff language to reflect that the non-metered fire protection charge is based on the size of the fire service tap, which can be either on the water main in the Street or off of the service. A copy of the proposed change to the Company's tariff change is attached as Attachment Supp Staff 1-1-tariff. The Company proposes this tariff language change for both Pennichuck East Utility and Pennichuck Water Works.

Pennichuck East Utility, Inc.
 DW18-090
 Staff Date Request 1-1 Supplement
 Attachment 1-1-e Supplement
 Revised 9-25-2018

Number of Accounts	Billing Period		Number of Months @ rate	Meter Size	Fire Service Size	Fire Service Tap	Under Recovered revenue for Period ³	Under Recovered revenue for Period ⁴
64	Jun-03	May-07	48	5/8"	1-1/2"	2"	\$ 36,679.68	\$ 22,456.32
64	Jun-07	Sep-08	16	5/8"	1-1/2"	2"	\$ 14,458.88	\$ 8,130.56
64	Oct-08	Nov-13	61	5/8"	1-1/2"	2"	\$ 55,124.48	\$ 30,997.76
64	Dec-13	Dec-17	49	5/8"	1-1/2"	2"	\$ 44,938.88	\$ 25,276.16
64	Jan-18	Oct-18	10	5/8"	1-1/2"	2"	\$ 10,910.98	\$ 6,136.95
Total Undercollected Revenues between 2003 and 2018-							\$ 162,112.90	\$ 92,997.75

Rates in effect during the duration of service					
	Customer Charge Billed based on 5/8" meter	Customer Charge for a 2" Fire Service	Customer Charge for a 1-1/2" Fire Service	Under recovered revenue per month ³ based on current tariff	Under recovered revenue per month ⁴ based on proposed tariff
Rate from June 2003 through May 2007	\$ 15.58	\$ 11.94	\$ 7.31	\$ 11.94	\$ 7.31
Rates from June 2007 to September 2008	\$ 16.20	\$ 14.12	\$ 7.94	\$ 14.12	\$ 7.94
Rates from October 2008 through November 2013	\$ 16.49	\$ 14.12	\$ 7.94	\$ 14.12	\$ 7.94
Rates from December 2013 to December 2017	\$ 17.19	\$ 14.33	\$ 8.06	\$ 14.33	\$ 8.06
Rates from January 2018 to October 2018 ⁵	\$ 20.45	\$ 17.05	\$ 9.59	\$ 17.05	\$ 9.59

Notes:

1. These Homes all have two services, one that is metered with a 5/8" meter and one with a 2" non metered fire service.
2. The Company suspended the payment for the 2" nonmetered fire service in June of 2003.
3. The under recovered revenue per month based on the monthly rate in effect at the time is calculated by subtracting the rate for a 5/8" meter from the sum of the customer charge for a 5/8" meter and a 2" fire service
4. The under recovered revenue per month based on the monthly rate in effect at the time is calculated by subtracting the rate for a 5/8" meter from the sum of the customer charge for a 5/8" meter and a 1-1/2" fire service
5. Rates from Jan\uary 2018 to October 2018 are inclusive of pending permanent rate increase of 18.97%

RATE SCHEDULE
PRIVATE FIRE PROTECTION SERVICE
TEMPORARY INCREASE

Application:

This schedule is applicable to all private fire protection service within a structure or on private property, to include sprinkler systems and privately owned non-municipal hydrants, rendered by the Company in any service area not served under any other private fire protection rate schedule of the Company.

Character of Service:

The Company will make every effort to maintain normal pressures at all times on the distribution system, but shall not be held liable for the failure of either the supply or distribution division of its system to adequately furnish its normal quantity of water when such failure is due to the elements, natural causes, breaks, leaks, unusual or concurrent droughts, or waste or unlawful use of water.

Rate:

The charge shall be determined by the size of the fire service tap to the pipe entering the property as follows:

<u>Connection or Service</u>	<u>Current Rate</u>	<u>Temporary Rate</u>
1-1/2"	\$ 8.06	\$ 9.05
2"	14.33	16.08
3"	32.24	36.18
4"	57.32	64.33
6"	129.00	144.78
8"	229.30	257.35
10"	378.09	424.35
12"	608.94	683.44

For each private hydrant, whether connected directly to the Company's mains, or to the customer's private fire protection distribution system:

\$ 100.80	113.13
----------------------	--------

Terms of Payment:

Bills under this rate are net; will be rendered monthly, and are due and payable at the office of the Company on the due date as stated on water bill.

Issued: June 14, 2018

Issued by Donald L. Ware

Effective: January 8, 2018

Title: Chief Operating Officer

Authorized by NHPUC Order No. ~~26,436~~ in Docket No. DW 18-09047-128, dated ~~May 31, 2018~~.



Marcia A. Brown
Attorney at Law

Environmental Law ■ Utility Law

July 26, 2018

VIA ELECTRONIC DELIVERY

Alexander F. Speidel, Esq.
N.H. Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, NH 03301

Re: Docket No. DW 18-090
PEU-Small Diameter Private Fire Protection
Responses to Staff Data Requests – Set 1

Dear Alex,

Attached please find Pennichuck East Utility, Inc.'s ("PEU") responses to Staff's first set of discovery.

If you have any questions, please feel free to reach me at (603) 219-4911.

Very Truly Yours,

A handwritten signature in cursive script that reads "Marcia A. Brown".

Marcia A. Brown

Enclosures

cc: DW 18-090 Discovery Service List

Confidential
Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 8/2/18
Request No. Staff 1-1

Date of Supplemental Response: 8/3/18
Witness: Donald L. Ware

REQUEST: Re Ware testimony, page 4, lines 13 to 22. For each of the customers referred to please provide:

- a) a complete copy of the associated application for service connection (to the company's distribution system);
- b) the dates of service;
- c) the size of the meter;
- d) the billing history;
- e) the amount of any revenue not recovered, as required by the tariff (e.g., for a customer with a 1" meter, who was charged for a 5/8" meter; or a customer with a 1" meter, who was not charged separately for private fire protection services); and
- f) the amount of any credit the company proposes as a refund or an account credit if the petition is approved.

SUPPLEMENTAL REQUEST:

With regard to Attachment 1-1-b-f and Attachment Staff 1-1-e, could the Company please provide the original Excel spreadsheets with embedded formulas relative to these two attachments?

SUPPLEMENTAL CONFIDENTIAL RESPONSE:

PEU has a good faith basis for seeking confidential treatment of the attached documents pursuant to Puc 203.08 and RSA 91-A:5 because the attached documents contain customer-specific billing information, that if made public, could constitute an invasion of privacy. PEU intends to submit a motion for confidential treatment regarding the confidential portions of the attached documents at or before the commencement of the hearing in this proceeding.

- a) Attached please find ~~a complete~~ copies of the service applications for ~~the~~ customers in the Stone Sled and Peterson Village Subdivisions. Where applications refer to lot numbers, it is because street addresses had not yet been established. (Attachment Staff 1-1-a). **The blue highlighted rows are the services where PEU is still locating the original service applications. The service applications for all the non-highlighted rows are attached as**

Attachment Staff 1-1-a. The yellow highlighted rows never had service applications because the services were already installed when PEU acquired the water system.

b) The dates of service (Date of meter set) are noted on the attached spreadsheet titled Confidential Attachment Staff 1-1-b-f. **See attached Excel spreadsheet.**

c) The size meter is noted on each service application.

d) The billing history for each service account in these two subdivisions is attached inclusive of what these customers paid for in terms of: (1) fixed customer charges, (2) the date the charges started and (3) the dates that changes in tariffed rates for those charges occurred. Please note that no volumetric usage is attached, as the proposed tariff change has no bearing on the volumetric rate.

e) The Company recovered its revenue, as required by tariff from the Peterson Village Subdivision. The Company did not recover its tariffed revenues from some of the Stone Sled Subdivision customers. The attached spreadsheet titled Attachment Staff 1-1-e details the amount of revenues that wasn't recovered from its Stone Sled customers. Customers who had a 5/8" meter installed paid the correct tariffed fee. Customers who had a 1" meter installed and paid the tariffed rate for a 5/8" meter and a 1-1/2" fire service paid less than the tariffed rate they would have paid for a 1" meter. The difference between the two rates (5/8" meter plus 1-1/2" fire service vs. a 1" meter) vary dependent upon the "Meter Install Date" as detailed on Attachment Staff 1-1-e. The Company estimates that had it collected revenues at the tariffed rates in effect at the time, it would have collected an additional \$43,070.24 from the Stone Sled customers as detailed on Confidential Attachment Staff 1-1-e. **See attached Excel spreadsheet and pdf.**

f) The Company proposes the issuance of an account credit to its customers in the Peterson Village Subdivision in Pelham, in accordance with the attached spreadsheet titled Confidential Attachment Staff 1-1-b-f.



APPLICATION FOR SERVICE INSTALLATION

The undersigned hereby makes application to Pennichuck Water Works, hereinafter called the "Company" for a service installation to provide water service at 12 STONE SLED LN. BOW the undersigned agrees that the Company may enter upon the property of the undersigned to install/inspect the service pipe. The undersigned and the Company agree to install the service pipe according to its standards.

The Company reserves the right to require a deposit to be made prior to the start of the work. Where the amount of the deposit exceeds the cost of the work, the Company will refund the difference to the undersigned. If the cost of the work exceeds the amount of the deposit, the undersigned agrees to pay the difference. **Any work order not completed within two years will be closed and all deposits will be refunded to the customer along with a letter instructing them to re-apply for service when the job is closer to completion.**

The undersigned agrees that barring acts of negligence, the undersigned will not make any claim or bring any action to enforce such a claim against the Company by reason of any loss, damage, costs or expenses which the undersigned may suffer, incur or pay by reason of the installation requested by this application and the operation thereof.

In case where multiple services are being provided to buildings on a single, private lot from a water main installed on the same private property, the provision of water service is contingent upon the owner granting to Pennichuck Water Works formal rights of access to maintain water company piping on the subject lot, to enter all buildings for the purpose of reading and maintaining water meters and to discontinue service to any individual building within the subject lot for non payment of water bills or for other reasons as defined in Pennichuck Water Work's NH Public Utilities Commission Tariff.

Note: On all new residential domestic services and residential service renewals, the Company will install a backflow prevention device at the service entrance. It is the responsibility of the property owner to install a suitable expansion tank and a pressure release valve on water heaters on the premises to prevent damage resulting from lack of pressure relief through the water line. The company may require the property owner to install increased levels of backflow prevention protection.

OWNER: COBB HILL CONSTRUCTION

SIGNATURE: _____

STREET 206 N. STATE ST

BY: Kerry Under

CITY CONCORD, NH

DATE: 7/11/10

ZIP 03301

PHONE NO. (H) 603-224-8378

(W) _____

Fee Schedule - to be paid upon filing of application..

Meter Set-Up Fee	\$140.00
Inspection Fee	\$160.00
Pressure Release Filing	_____
Jobbing Fee	_____
Tapping Fee	_____
Total Required:	\$300.00

32 7448
7/14/10
230

APPLICATION FOR SERVICE INSTALLATION

4 TYPE: (PLEASE CHECK ONE BOX) SERVICE NUMBER _____

NEW SERVICE RENEWED (M-S S-E) TEMPORARY

4 DWELLING: (PLEASE CHECK ONE BOX)

RESIDENTIAL

- Single Family Metered
- Multi Family Metered
- Unmetered Service
- Multi Family Compound
- Multi Family FS Only
- Hydrant Only
- Irrigation
- Single Family FS

COMMERCIAL

- Metered
- Fire Service Only
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

INDUSTRIAL

- Metered
- Fire Service Only
- Contract
- Compound
- Anheuser Busch
- Hydrant Only
- Irrigation
- FS & ___ Hydts

MUNICIPAL

- Metered
- Fire Service Only
- Contract
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

METER SIZE 5/8
 SERVICE SIZE* 1.5" PE
 EST. PRESSURE 75.5

METER TYPE (DISK TURBINE)
 MATERIAL TYPE C.T.
 * Service must be 1" inside unless otherwise stated

PRESSURE RELEASE FORM REQ'D YES NO

BOOSTER PUMP REQUIRED YES NO

PRESSURE REDUCING VALVE REQ'D YES NO

TYPE OF BACKFLOW PREVENTER REQ'D* HIGH HAZARD

NOTES: SERVICE MUST BE REDUCED & BRACED PER SPEC A-25E OR A-25F LOW HAZARD

RESIDENTIAL DUAL CHECK
 (as provided)
 OTHER DEVICE (DESCRIPTION)

Service#	House#	Lot#	Location
281047	12		STONE SLED LN, BOW
100.3230		100.3231	



PENNICHUCK
PENNICHUCK EAST UTILITY, INC.

25 Manchester Street
PO Box 1947
Merrimack, NH 03054
(603) 882-5191
Fax (603) 913-2362

APPLICATION FOR SERVICE INSTALLATION

72
The undersigned hereby makes application to Pennichuck East Utility, hereinafter called the "Company" for a service installation to provide water service at 40 Stone Sled Lane Bow NH the undersigned agrees that the Company may enter upon the property of the undersigned to install/inspect the service pipe. The undersigned and the Company agree to install the service pipe according to its standards.

The Company reserves the right to require a deposit to be made prior to the start of the work. Where the amount of the deposit exceeds the cost of the work, the Company will refund the difference to the undersigned. If the cost of the work exceeds the amount of the deposit, the undersigned agrees to pay the difference. **Any work order not completed within two years will be closed and all deposits will be refunded to the customer along with a letter instructing them to re-apply for service when the job is closer to completion.**

The undersigned agrees that barring acts of negligence, the undersigned will not make any claim or bring any action to enforce such a claim against the Company by reason of any loss, damage, costs or expenses which the undersigned may suffer, incur or pay by reason of the installation requested by this application and the operation thereof.

In case where multiple services are being provided to buildings on a single, private lot from a water main installed on the same private property, the provision of water service is contingent upon the owner granting to Pennichuck East Utility formal rights of access to maintain water company piping on the subject lot, to enter all buildings for the purpose of reading and maintaining water meters and to discontinue service to any individual building within the subject lot for non payment of water bills or for other reasons as defined in Pennichuck East Utility's NH Public Utilities Commission Tariff.

Note: On all new residential domestic services and residential service renewals, the Company will install a backflow prevention device at the service entrance. It is the responsibility of the property owner to install a suitable expansion tank and a pressure release valve on water heaters on the premises to prevent damage resulting from lack of pressure relief through the water line. The company may require the property owner to install increased levels of backflow prevention protection.

OWNER: Preferred First Realty Homes LLC

SIGNATURE: *[Signature]*

STREET 298A North State St

BY: _____

CITY Concord, NH

DATE: 3-13-14

ZIP 03301

PHONE NO. (H) Fax 603 224-4500

(W) 603 496-3410

Fee Schedule - to be paid upon filing of application.

Meter Set-Up Fee	<u>\$400.00</u>
Inspection Fee	<u>\$160.00</u>
Pressure Release Filing	_____
Jobbing Fee	_____
Tapping Fee	_____
Total Required:	<u>\$560.00</u>

03/13/2014 THU 9:57 FAX

APPLICATION FOR SERVICE INSTALLATION

4 TYPE: (PLEASE CHECK ONE BOX) SERVICE NUMBER _____

- NEW SERVICE
 RENEWED (M-S S-E)
 TEMPORARY

4 DWELLING: (PLEASE CHECK ONE BOX)

RESIDENTIAL

- Single Family Metered
- Multi Family Metered
- Unmetered Service
- Multi Family Compound
- Multi Family FS Only
- Hydrant Only
- Irrigation
- Single Family FS

COMMERCIAL

- Metered
- Fire Service Only
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

INDUSTRIAL

- Metered
- Fire Service Only
- Contract
- Compound
- Anheuser Busch
- Hydrant Only
- Irrigation
- FS & ___ Hydts

MUNICIPAL

- Metered
- Fire Service Only
- Contract
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

METER SIZE 1"
 SERVICE SIZE* 2"
 EST. PRESSURE 75 psi

METER TYPE (DISK TURBINE)
 MATERIAL TYPE C.T.
 * Service must be 1" inside unless otherwise stated

- PRESSURE RELEASE FORM REQ'D YES NO
 BOOSTER PUMP REQUIRED YES NO
 PRESSURE REDUCING VALVE REQ'D YES NO

TYPE OF BACKFLOW PREVENTER REQ'D* HIGH HAZARD

NOTES: _____ LOW HAZARD

_____ RESIDENTIAL DUAL CHECK

_____ (as provided)

_____ OTHER DEVICE (DESCRIPTION)

Service#	House#	Lot#	Location
181337	77-40	092	Stone Sled Bow NH
1401733	72	1401734	



PENNICHUCK

KELLY

25 Manchester Street
PO Box 1947
Merrimack, NH 03054
(603) 882-5191
Fax (603) 913-2362

APPLICATION FOR SERVICE INSTALLATION

The undersigned hereby makes application to Pennichuck East Utility, hereinafter called the "Company" for a service installation to provide water service to STONE SLED, BOW the undersigned agrees that the Company may enter upon the property of the undersigned to install and connect the service pipe. The undersigned and the Company agree to install the service pipe according to its standards.

The Company reserves the right to require a deposit to be made prior to the start of the work. Where the amount of the deposit exceeds the cost of the work, the Company will refund the difference to the undersigned. If the cost of the work exceeds the amount of the deposit, the undersigned agrees to pay the difference. **Any work order not completed within two years will be closed and all deposits will be refunded to the customer along with a letter instructing them to re-apply for service when the job is closer to completion.**

The undersigned agrees that barring acts of negligence, the undersigned will not make any claim or bring any action to enforce such a claim against the Company by reason of any loss, damage, costs or expenses which the undersigned may suffer, incur or pay by reason of the installation requested by this application and the operation thereof.

In case where multiple services are being provided to buildings on a single, private lot from a water main installed on the same private property, the provision of water service is contingent upon the owner granting to Pennichuck East Utility formal rights of access to maintain water company piping on the subject lot, to enter all buildings for the purpose of reading and maintaining water meters and to discontinue service to any individual building within the subject lot for non payment of water bills or for other reasons as defined in Pennichuck East Utility's NH Public Utilities Commission Tariff.

Note: On all new residential domestic services and residential service renewals, the Company will install a backflow prevention device at the service entrance. It is the responsibility of the property owner to install a suitable expansion tank and a pressure release valve on water heaters on the premises to prevent damage resulting from lack of pressure relief through the water line. The company may require the property owner to install increased level of backflow prevention protection.

OWNER: PREFERRED FIRST REAL ESTATE HOUSING, LLC SIGNATURE: *[Signature]*
STREET: 298 A NORTH STATE ST BY: _____
CITY: CONCORD, NH DATE: 12-3-13
ZIP: 03301 PHONE NO: (H) 603-496-3410 (W) _____

Fee Schedule - to be paid upon filing of application.

Meter Set-Up Fee	<u>\$240.00</u>
Inspection Fee	<u>\$160.00</u>
Pressure Release Filing	_____
Jobbing Fee	_____
Tapping Fee	_____
Total Required:	<u>\$400.00</u>

✓ noted 12-3-13

APPLICATION FOR SERVICE INSTALLATION

4 TYPE: (PLEASE CHECK ONE BOX) SERVICE NUMBER _____

- NEW SERVICE
 RENEWED (M-S S-E)
 TEMPORARY

4 DWELLING: (PLEASE CHECK ONE BOX)

RESIDENTIAL

- Single Family Metered
- Multi Family Metered
- Unmetered Service
- Multi Family Compound
- Multi Family FS Only
- Hydrant Only
- Irrigation
- Single Family FS

COMMERCIAL

- Metered
- Fire Service Only
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

INDUSTRIAL

- Metered
- Fire Service Only
- Contract
- Compound
- Anheuser Busch
- Hydrant Only
- Irrigation
- FS & ___ Hydts

MUNICIPAL

- Metered
- Fire Service Only
- Contract
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

METER SIZE 5/8
 SERVICE SIZE* 1
 EST. PRESSURE 73-75

METER TYPE (DISK TURBINE)
 MATERIAL TYPE C.T.
 * Service must be 1" inside unless otherwise stated

- PRESSURE RELEASE FORM REQ'D YES NO
 BOOSTER PUMP REQUIRED YES NO
 PRESSURE REDUCING VALVE REQ'D YES NO

TYPE OF BACKFLOW PREVENTER REQ'D* HIGH HAZARD

NOTES: _____ LOW HAZARD

- _____ RESIDENTIAL DUAL CHECK
 _____ (as provided)
 _____ OTHER DEVICE (DESCRIPTION)

Service#	House#	Lot#	Location
26130	7897-34 Cole	092-	STONE SLED LN, BOW
	1307576	1307577	



APPLICATION FOR SERVICE INSTALLATION

The undersigned hereby makes application to Pennichuck East Utility, hereinafter called the "Company" for a service installation to provide water service at 38 LEWIS LN BOW the undersigned agrees that the Company may enter upon the property of the undersigned to install/inspect the service pipe. The undersigned and the Company agree to install the service pipe according to its standards.

The Company reserves the right to require a deposit to be made prior to the start of the work. Where the amount of the deposit exceeds the cost of the work, the Company will refund the difference to the undersigned. If the cost of the work exceeds the amount of the deposit, the undersigned agrees to pay the difference. **Any work order not completed within two years will be closed and all deposits will be refunded to the customer along with a letter instructing them to re-apply for service when the job is closer to completion.**

The undersigned agrees that barring acts of negligence, the undersigned will not make any claim or bring any action to enforce such a claim against the Company by reason of any loss, damage, costs or expenses which the undersigned may suffer, incur or pay by reason of the installation requested by this application and the operation thereof.

In case where multiple services are being provided to buildings on a single, private lot from a water main installed on the same private property, the provision of water service is contingent upon the owner granting to Pennichuck East Utility formal rights of access to maintain water company piping on the subject lot, to enter all buildings for the purpose of reading and maintaining water meters and to discontinue service to any individual building within the subject lot for non payment of water bills or for other reasons as defined in Pennichuck East Utility's NH Public Utilities Commission Tariff.

Note: On all new residential domestic services and residential service renewals, the Company will install a backflow prevention device at the service entrance. It is the responsibility of the property owner to install a suitable expansion tank and a pressure release valve on water heaters on the premises to prevent damage resulting from lack of pressure relief through the water line. The company may require the property owner to install increased levels of backflow prevention protection.

OWNER: PREFERRED FIRST REALTY HOLDINGS LLC SIGNATURE: [Signature]
 STREET 298A NORTH STATE ST BY: ALAN S. JONES
 CITY CONCORD DATE: 6-22-16
 ZIP 03301 PHONE NO. (H) 603-496-3410 (W) _____

Fee Schedule - to be paid upon filing of application..

Meter Set-Up Fee	\$247.00
Inspection Fee	\$160.00
Pressure Release Filing	\$0.00
Jobbing Fee	_____
Tapping Fee	_____
Total Required:	\$407.00

*received 6/24/2016
 AMT \$407.00
 CH# 15007 DM*

APPLICATION FOR SERVICE INSTALLATION

4 TYPE: (PLEASE CHECK ONE BOX) SERVICE NUMBER _____

- NEW SERVICE
 RENEWED (M-S S-E)
 TEMPORARY

4 DWELLING: (PLEASE CHECK ONE BOX)

RESIDENTIAL

- Single Family Metered
- Multi Family Metered
- Unmetered Service
- Multi Family Compound
- Multi Family FS Only
- Hydrant Only
- Irrigation
- Single Family FS

COMMERCIAL

- Metered
- Fire Service Only
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

INDUSTRIAL

- Metered
- Fire Service Only
- Contract
- Compound
- Anheuser Busch
- Hydrant Only
- Irrigation
- FS & ___ Hydts

MUNICIPAL

- Metered
- Fire Service Only
- Contract
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

METER SIZE 5/8"
 SERVICE SIZE* 1"
 EST. PRESSURE 75-80

METER TYPE (DISK TURBINE)
 MATERIAL TYPE C.T.
 * Service must be 1" inside unless otherwise stated

- PRESSURE RELEASE FORM REQ'D YES NO
 BOOSTER PUMP REQUIRED YES NO
 PRESSURE REDUCING VALVE REQ'D YES NO

TYPE OF BACKFLOW PREVENTER REQ'D* HIGH HAZARD

NOTES: A 1" C.T. OR 1.5" P.E. LOW HAZARD

BRACED SERVICE LINE
REQUIRED

RESIDENTIAL DUAL CHECK

(as provided)

OTHER DEVICE (DESCRIPTION)

Service#	House#	Lot#	Location
<u>100281646</u>	<u>38</u>	<u>797-1607665</u> <u>092-1607666</u>	<u>LEWIS LN</u>
		<u>750-1607667</u>	
		<u>754-1607668</u>	



25 Manchester Street
PO Box 1947
Merrimack, NH 03054
(603) 882-5191
Fax (603) 913-2362

APPLICATION FOR SERVICE INSTALLATION

The undersigned hereby makes application to Pennichuck East Utility, hereinafter called the "Company" for a service installation to provide water service at 40 LEWIS LN BOW the undersigned agrees that the Company may enter upon the property of the undersigned to install/inspect the service pipe. The undersigned and the Company agree to install the service pipe according to its standards.

The Company reserves the right to require a deposit to be made prior to the start of the work. Where the amount of the deposit exceeds the cost of the work, the Company will refund the difference to the undersigned. If the cost of the work exceeds the amount of the deposit, the undersigned agrees to pay the difference. **Any work order not completed within two years will be closed and all deposits will be refunded to the customer along with a letter instructing them to re-apply for service when the job is closer to completion.**

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In case where multiple services are being provided to buildings on a single, private lot from a water main installed on the same private property, the provision of water service is contingent upon the owner granting to Pennichuck East Utility formal rights of access to maintain water company piping on the subject lot, to enter all buildings for the purpose of reading and maintaining water meters and to discontinue service to any individual building within the subject lot for non payment of water bills or for other reasons as defined in Pennichuck East Utility's NH Public Utilities Commission Tariff.

Note: On all new residential domestic services and residential service renewals, the Company will install a backflow prevention device at the service entrance. It is the responsibility of the property owner to install a suitable expansion tank and a pressure release valve on water heaters on the premises to prevent damage resulting from lack of pressure relief through the water line. The company may require the property owner to install increased levels of backflow prevention protection.

OWNER: PREFERRED FIRST REALTY HOLDINGS LLC SIGNATURE: [Signature]
 STREET 298A NORTH STATE ST BY: [Signature]
 CITY CONCORD DATE: 8-1-16
 ZIP 03301 PHONE NO. (H) 603-496-3410 (W) _____

Fee Schedule - to be paid upon filing of application..

Meter Set-Up Fee	<u>\$247.00</u>
Inspection Fee	<u>\$160.00</u>
Pressure Release Filing	<u>\$0.00</u>
Jobbing Fee	_____
Tapping Fee	_____
Total Required:	<u>\$407.00</u>

Received 8/1/2016
AMT \$407.00
CHU # 15057 DM.

APPLICATION FOR SERVICE INSTALLATION

4 TYPE: (PLEASE CHECK ONE BOX) SERVICE NUMBER _____

- NEW SERVICE
 RENEWED (M-S S-E)
 TEMPORARY

4 DWELLING: (PLEASE CHECK ONE BOX)

RESIDENTIAL

- Single Family Metered
- Multi Family Metered
- Unmetered Service
- Multi Family Compound
- Multi Family FS Only
- Hydrant Only
- Irrigation
- Single Family FS

COMMERCIAL

- Metered
- Fire Service Only
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

INDUSTRIAL

- Metered
- Fire Service Only
- Contract
- Compound
- Anheuser Busch
- Hydrant Only
- Irrigation
- FS & ___ Hydts

MUNICIPAL

- Metered
- Fire Service Only
- Contract
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

METER SIZE 5/8"
 SERVICE SIZE* 1"
 EST. PRESSURE 75-80

METER TYPE (DISK TURBINE)
 MATERIAL TYPE C.T.
 * Service must be 1" inside unless otherwise stated

PRESSURE RELEASE FORM REQ'D YES NO

BOOSTER PUMP REQUIRED YES NO

PRESSURE REDUCING VALVE REQ'D YES NO

TYPE OF BACKFLOW PREVENTER REQ'D* HIGH HAZARD

NOTES: A 1" C.T. OR 1.5" P.E. LOW HAZARD

BRACED SERVICE LINE RESIDENTIAL DUAL CHECK

REQUIRED (as provided)
 _____ OTHER DEVICE (DESCRIPTION)

Service#	House#	Lot#	Location
<u>100281652</u>	<u>40</u>	<u>797-1611390</u> <u>092-1611391</u>	<u>LEWIS LN</u>
		<u>750-1611392</u> <u>754-1611393</u>	



APPLICATION FOR SERVICE INSTALLATION

The undersigned hereby makes application to Pennichuck East Utility, hereinafter called the "Company" for a service installation to provide water service at 70 STONE SLED LN BOW the undersigned agrees that the Company may enter upon the property of the undersigned to install/inspect the service pipe. The undersigned and the Company agree to install the service pipe according to its standards.

The Company reserves the right to require a deposit to be made prior to the start of the work. Where the amount of the deposit exceeds the cost of the work, the Company will refund the difference to the undersigned. If the cost of the work exceeds the amount of the deposit, the undersigned agrees to pay the difference. **Any work order not completed within two years will be closed and all deposits will be refunded to the customer along with a letter instructing them to re-apply for service when the job is closer to completion.**

The undersigned agrees that barring acts of negligence, the undersigned will not make any claim or bring any action to enforce such a claim against the Company by reason of any loss, damage, costs or expenses which the undersigned may suffer, incur or pay by reason of the installation requested by this application and the operation thereof.

In case where multiple services are being provided to buildings on a single, private lot from a water main installed on the same private property, the provision of water service is contingent upon the owner granting to Pennichuck East Utility formal rights of access to maintain water company piping on the subject lot, to enter all buildings for the purpose of reading and maintaining water meters and to discontinue service to any individual building within the subject lot for non payment of water bills or for other reasons as defined in Pennichuck East Utility's NH Public Utilities Commission Tariff.

Note: On all new residential domestic services and residential service renewals, the Company will install a backflow prevention device at the service entrance. It is the responsibility of the property owner to install a suitable expansion tank and a pressure release valve on water heaters on the premises to prevent damage resulting from lack of pressure relief through the water line. The company may require the property owner to install increased levels of backflow prevention protection.

OWNER: PREFERRED FIRST REALTY HOLDINGS LLC SIGNATURE: _____

STREET 298A NORTH STATE ST

BY: _____

CITY CONCORD

DATE: _____

ZIP 03301

PHONE NO. (H) 603-496-3410

(W) _____

Fee Schedule - to be paid upon filing of application..

Meter Set-Up Fee	\$369.00
Inspection Fee	\$160.00
Pressure Release Filing	\$0.00
Jobbing Fee	_____
Tapping Fee	_____
Total Required:	\$529.00

Received 9/16/16
 AMT: \$529.00
 CHK # 15112 DM.

APPLICATION FOR SERVICE INSTALLATION

4 TYPE: (PLEASE CHECK ONE BOX) SERVICE NUMBER _____

NEW SERVICE RENEWED (M-S S-E) TEMPORARY

4 DWELLING: (PLEASE CHECK ONE BOX)

RESIDENTIAL

- Single Family Metered
- Multi Family Metered
- Unmetered Service
- Multi Family Compound
- Multi Family FS Only
- Hydrant Only
- Irrigation
- Single Family FS

COMMERCIAL

- Metered
- Fire Service Only
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

INDUSTRIAL

- Metered
- Fire Service Only
- Contract
- Compound
- Anheuser Busch
- Hydrant Only
- Irrigation
- FS & ___ Hydts

MUNICIPAL

- Metered
- Fire Service Only
- Contract
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

METER SIZE 3/4"
 SERVICE SIZE* 1"
 EST. PRESSURE 55-60

METER TYPE (DISK TURBINE)
 MATERIAL TYPE C.T.
 * Service must be 1" inside unless otherwise stated

PRESSURE RELEASE FORM REQ'D YES NO

BOOSTER PUMP REQUIRED YES NO

PRESSURE REDUCING VALVE REQ'D YES NO

TYPE OF BACKFLOW PREVENTER REQ'D* HIGH HAZARD

NOTES: A 1" C.T. OR 1.5" P.E. LOW HAZARD

BRACED SERVICE LINE
REQUIRED

RESIDENTIAL DUAL CHECK
 (as provided)
 OTHER DEVICE (DESCRIPTION)

Service#	House#	Lot#	Location
100282162	70	797-1615499	STONE SLED LN
		092-1615500	
		750-1615501	
		754-1615502	



PENNICHUCK

PENNICHUCK EAST UTILITY, INC.

DW 18-090
Attachment Staff 1-1-a
Page 10 of 10
25 Merrimack Street
PO Box 1947
Merrimack, NH 03054
(603) 882-5191
Fax (603) 913-2362

APPLICATION FOR SERVICE INSTALLATION

The undersigned hereby makes application to Pennichuck East Utility, hereinafter called the "Company" for a service installation to provide water service at 68 STONE SLED LN BOW the undersigned agrees that the Company may enter upon the property of the undersigned to install/inspect the service pipe. The undersigned and the Company agree to install the service pipe according to its standards.

The Company reserves the right to require a deposit to be made prior to the start of the work. Where the amount of the deposit exceeds the cost of the work, the Company will refund the difference to the undersigned. If the cost of the work exceeds the amount of the deposit, the undersigned agrees to pay the difference. **Any work order not completed within two years will be closed and all deposits will be refunded to the customer along with a letter instructing them to re-apply for service when the job is closer to completion.**

The undersigned agrees that barring acts of negligence, the undersigned will not make any claim or bring any action to enforce such a claim against the Company by reason of any loss, damage, costs or expenses which the undersigned may suffer, incur or pay by reason of the installation requested by this application and the operation thereof.

In case where multiple services are being provided to buildings on a single, private lot from a water main installed on the same private property, the provision of water service is contingent upon the owner granting to Pennichuck East Utility formal rights of access to maintain water company piping on the subject lot, to enter all buildings for the purpose of reading and maintaining water meters and to discontinue service to any individual building within the subject lot for non payment of water bills or for other reasons as defined in Pennichuck East Utility's NH Public Utilities Commission Tariff.

Note: On all new residential domestic services and residential service renewals, the Company will install a backflow prevention device at the service entrance. It is the responsibility of the property owner to install a suitable expansion tank and a pressure release valve on water heaters on the premises to prevent damage resulting from lack of pressure relief through the water line. The company may require the property owner to install increased levels of backflow prevention protection.

OWNER: PREFERRED FIRST REALTY HOLDINGS LLC SIGNATURE: [Signature]

STREET 298A NORTH STATE ST

BY: _____

CITY CONCORD

DATE: 12-8-16

ZIP 03301

PHONE NO. (H) 603-496-3410

(W) _____

Fee Schedule - to be paid upon filing of application..

Meter Set-Up Fee	<u>\$369.00</u>
Inspection Fee	<u>\$160.00</u>
Pressure Release Filing	<u>\$0.00</u>
Jobbing Fee	_____
Tapping Fee	_____
Total Required:	<u>\$529.00</u>

Received 12/12/16
AMT \$529.00
CHK# 15219 DM.

APPLICATION FOR SERVICE INSTALLATION

4 TYPE: (PLEASE CHECK ONE BOX) SERVICE NUMBER _____

NEW SERVICE RENEWED (M-S S-E) TEMPORARY

4 DWELLING: (PLEASE CHECK ONE BOX)

RESIDENTIAL

- Single Family Metered
- Multi Family Metered
- Unmetered Service
- Multi Family Compound
- Multi Family FS Only
- Hydrant Only
- Irrigation
- Single Family FS

COMMERCIAL

- Metered
- Fire Service Only
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

INDUSTRIAL

- Metered
- Fire Service Only
- Contract
- Compound
- Anheuser Busch
- Hydrant Only
- Irrigation
- FS & ___ Hydts

MUNICIPAL

- Metered
- Fire Service Only
- Contract
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

METER SIZE 3/4"
SERVICE SIZE* 1"
EST. PRESSURE 55-60

METER TYPE (DISK TURBINE)
MATERIAL TYPE C.T.
* Service must be 1" inside unless otherwise stated

PRESSURE RELEASE FORM REQ'D YES NO

BOOSTER PUMP REQUIRED YES NO

PRESSURE REDUCING VALVE REQ'D YES NO

TYPE OF BACKFLOW PREVENTER REQ'D* HIGH HAZARD

NOTES: A 1" C.T. OR 1.5" P.E. LOW HAZARD

BRACED SERVICE LINE
REQUIRED

RESIDENTIAL DUAL CHECK
(as provided)
OTHER DEVICE (DESCRIPTION)

Service#	House#	Lot#	Location
100282201	68 797-	1622008	STONE SLED LN
		092-1622009	
		750-1622010	
		754-1622011	



PENNICHUCK
PENNICHUCK EAST UTILITY, INC.

25 Manchester Street
PO Box 1947
Merrimack, NH 03054
(603) 882-5191
Fax (603) 913-2362

APPLICATION FOR SERVICE INSTALLATION

The undersigned hereby makes application to Pennichuck East Utility, hereinafter called the "Company" for a service installation to provide water service at 17 STONE SLED LANE BOW the undersigned agrees that the Company may enter upon the property of the undersigned to install/inspect the service pipe. The undersigned and the Company agree to install the service pipe according to its standards.

The Company reserves the right to require a deposit to be made prior to the start of the work. Where the amount of the deposit exceeds the cost of the work, the Company will refund the difference to the undersigned. If the cost of the work exceeds the amount of the deposit, the undersigned agrees to pay the difference. Any work order not completed within two years will be closed and all deposits will be refunded to the customer along with a letter instructing them to re-apply for service when the job is closer to

The undersigned agrees that barring acts of negligence, the undersigned will not make any claim or bring any action to enforce such a claim against the Company by reason of any loss, damage, costs or expenses which the undersigned may suffer, incur or pay by reason of the installation requested by this application and the operation thereof.

In case where multiple services are being provided to buildings on a single, private lot from a water main installed on the same private property, the provision of water service is contingent upon the owner granting to Pennichuck East Utility formal rights of access to maintain water company piping on the subject lot, to enter all buildings for the purpose of reading and maintaining water meters and to discontinue service to any individual building within the subject lot for non payment of water bills or for other reasons as defined in Pennichuck East Utility's NH Public Utilities Commission Tariff.

etc: On all new residential domestic services and residential service renewals, the Company will install a backflow prevention device at the service entrance. It is the responsibility of the property owner to install a suitable expansion tank and a pressure release valve on water heaters on the premises to prevent damage resulting from lack of pressure relief through the water line. The company may require the property owner to install increased levels of backflow prevention protection.

OWNER: PREFERRED FIRST REALTY HOUSING SIGNATURE: [Signature]
STREET 298 A NORTH STATE STREET BY: ALAN S. SCHW
CITY CONCORD DATE: 9-8-14
ZIP 03301 PHONE NO. (H) 603-496-3410 (W) _____

Fee Schedule - to be paid upon filing of application..

Meter Set-Up Fee	\$240.00
Inspection Fee	\$160.00
Pressure Release Filling	_____
Jobbing Fee	_____
Tapping Fee	_____
Total Required:	\$400.00 ✓

CK # 14185 \$400
9/12/14 DW

Cust # 62035

Mailed 9-8-14

APPLICATION FOR SERVICE INSTALLATION

4 TYPE: (PLEASE CHECK ONE BOX) SERVICE NUMBER _____

NEW SERVICE RENEWED (M-S S-E) TEMPORARY

4 DWELLING: (PLEASE CHECK ONE BOX)

RESIDENTIAL

- Single Family Metered
- Multi Family Metered
- Multi Family Compound
- Multi Family FS Only
- Hydrant Only
- Irrigation
- Single Family FS

COMMERCIAL

- Metered
- Fire Service Only
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

INDUSTRIAL

- Metered
- Fire Service Only
- Contract
- Compound
- Anheuser Busch
- Hydrant Only
- Irrigation
- FS & ___ Hydts

MUNICIPAL

- Metered
- Fire Service Only
- Contract
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

METER SIZE 5/8"
 SERVICE SIZE* 1"
 EST. PRESSURE 60

METER TYPE (DISK TURBINE)
 MATERIAL TYPE C.T.
 * Service must be 1" inside unless otherwise stated

PRESSURE RELEASE FORM REQ'D YES NO
 BOOSTER PUMP REQUIRED YES NO
 PRESSURE REDUCING VALVE REQ'D YES NO

TYPE OF BACKFLOW PREVENTER REQ'D* HIGH HAZARD

NOTES: CAN RUN 1.25" OR 1.5" P.E LOW HAZARD
(STOP TO END). BUT MUST REDUCE
INSIDE BUILDING TO 1" CT.

RESIDENTIAL DUAL CHECK
 (as provided)
 OTHER DEVICE (DESCRIPTION)

Service#	House#	Lot#	Location
100-25-1390	75 17	797-1405582 797-1405583	STONE SLED LANE

Handwritten signature and date
 035 9-8-14



PENNICHUCK
PENNICHUCK EAST UTILITY, INC.

25 Manchester Street
PO Box 1947
Merrimack, NH 03054
(603) 882-5191
Fax (603) 913-2362

APPLICATION FOR SERVICE INSTALLATION

34 Lewis LN (changed) 9/13/16 Alan Jones (owner)

The undersigned hereby makes application to Pennichuck East Utility, hereinafter called the "Company" for a service installation to provide water service at 34 STONE SLED LN BOW the undersigned agrees that the Company may enter upon the property of the undersigned to install/inspect the service pipe. The undersigned and the Company agree to install the service pipe according to its standards.

The Company reserves the right to require a deposit to be made prior to the start of the work. Where the amount of the deposit exceeds the cost of the work, the Company will refund the difference to the undersigned. If the cost of the work exceeds the amount of the deposit, the undersigned agrees to pay the difference. **Any work order not completed within two years will be closed and all deposits will be refunded to the customer along with a letter instructing them to re-apply for service when the job is closer to completion.**

The undersigned agrees that barring acts of negligence, the undersigned will not make any claim or bring any action to enforce such a claim against the Company by reason of any loss, damage, costs or expenses which the undersigned may suffer, incur or pay by reason of the installation requested by this application and the operation thereof.

In case where multiple services are being provided to buildings on a single, private lot from a water main installed on the same private property, the provision of water service is contingent upon the owner granting to Pennichuck East Utility formal rights of access to maintain water company piping on the subject lot, to enter all buildings for the purpose of reading and maintaining water meters and to discontinue service to any individual building within the subject lot for non payment of water bills or for other reasons as defined in Pennichuck East Utility's NH Public Utilities Commission Tariff.

Note: On all new residential domestic services and residential service renewals, the Company will install a backflow prevention device at the service entrance. It is the responsibility of the property owner to install a suitable expansion tank and a pressure release valve on water heaters on the premises to prevent damage resulting from lack of pressure relief through the water line. The company may require the property owner to install increased levels of backflow prevention protection.

OWNER: PREFERRED FIRST REALTY HOLDINGS LLC SIGNATURE: _____
 STREET 298A NORTH STATE ST BY: *[Signature]*
 CITY CONCORD DATE: Sept 7, 2016
 ZIP 03301 PHONE NO. (H) 603-496-3410 (W) _____

Fee Schedule - to be paid upon filing of application..

Meter Set-Up Fee	<u>\$369.00</u>
Inspection Fee	<u>\$160.00</u>
Pressure Release Filing	<u>\$0.00</u>
Jobbing Fee	_____
Tapping Fee	_____
Total Required:	<u>\$529.00</u>

*Received 9/7/16
AMT \$529.00
CHU # 14648 DM*

311

APPLICATION FOR SERVICE INSTALLATION

4 TYPE: (PLEASE CHECK ONE BOX) SERVICE NUMBER _____

NEW SERVICE RENEWED (M-S S-E) TEMPORARY

4 DWELLING: (PLEASE CHECK ONE BOX)

RESIDENTIAL

- Single Family Metered
- Multi Family Metered
- Unmetered Service
- Multi Family Compound
- Multi Family FS Only
- Hydrant Only
- Irrigation
- Single Family FS

COMMERCIAL

- Metered
- Fire Service Only
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

INDUSTRIAL

- Metered
- Fire Service Only
- Contract
- Compound
- Anheuser Busch
- Hydrant Only
- Irrigation
- FS & ___ Hydts

MUNICIPAL

- Metered
- Fire Service Only
- Contract
- Compound
- Hydrant Only
- Irrigation
- FS & ___ Hydts

METER SIZE 3/4"
SERVICE SIZE* 1"
EST. PRESSURE 55-60

METER TYPE (DISK TURBINE)
MATERIAL TYPE C.T.
* Service must be 1" inside unless otherwise stated

PRESSURE RELEASE FORM REQ'D YES NO

BOOSTER PUMP REQUIRED YES NO

PRESSURE REDUCING VALVE REQ'D YES NO

TYPE OF BACKFLOW PREVENTER REQ'D* HIGH HAZARD

NOTES: A 1" C.T. OR 1.5" P.E. LOW HAZARD

BRACED SERVICE LINE RESIDENTIAL DUAL CHECK

REQUIRED (as provided)

OTHER DEVICE (DESCRIPTION)

Service#	House#	Lot#	Location
100281655	34	797-1614517	STONE SLED LN
		092-1614518	
		750-1614519	
		754-1614520	

Pennichuck East Utility, Inc.
DW 18-090
Staff Date Request 1-1
Attachment 1-1-e

Redacted

Account #	Street #	Street Name	City	Meter Install Date	Original Meter Size Installed ¹	Monthly Customer Charge Based on Meter Size	Fire Service Size Billed	Projected revenues not collected	Change in meter size during 2018
		Stone Sled	Bow	1/18/07	1"	5/8"	1 1/2"	\$ 3,609.85	The yellow highlighted accounts were existing homes with active water services when the Stone Sled Community Water System was acquired from the Developer. These services were not metered at the time of the acquisition. The meter install dates reflect the date the Company was able to get into the residence and set the meter. There were no service applications completed for these accounts.
		Stone Sled	Bow	1/18/07	1"	5/8"	1 1/2"	\$ 3,609.85	
		Stone Sled	Bow	1/18/07	1"	5/8"	1 1/2"	\$ 3,609.85	
		Stone Sled	Bow	1/18/07	1"	5/8"	1 1/2"	\$ 3,609.85	
		Stone Sled	Bow	1/18/07	1"	5/8"	1 1/2"	\$ 3,609.85	
		Stone Sled	Bow	1/23/07	1"	5/8"	1 1/2"	\$ 3,586.17	
		Stone Sled	Bow	1/31/07	1"	5/8"	1 1/2"	\$ 3,562.50	
		Stone Sled	Bow	5/9/07	1"	5/8"	1 1/2"	\$ 3,515.15	
		Stone Sled	Bow	5/25/07	1"	5/8"	2 1/2"	\$ 3,491.47	
		Stone Sled	Bow	9/19/07	1"	5/8"	2 1/2"	\$ 3,417.61	
		Stone Sled	Bow	10/25/07	1"	5/8"	1 1/2"	\$ 3,368.37	
		Stone Sled	Bow	8/7/08	1"	5/8"	1 1/2"	\$ 3,122.17	
		Stone Sled	Bow	10/8/10	5/8"	5/8"	n/a		
		Stone Sled	Bow	2/10/11	5/8"	5/8"	n/a		
		Stone Sled	Bow	2/16/12	5/8"	5/8"	n/a		
		Stone Sled	Bow	7/9/12	5/8"	5/8"	n/a		
		Stone Sled	Bow	10/25/12	5/8"	5/8"	n/a		
		Stone Sled	Bow	1/10/13	5/8"	5/8"	n/a		
		Stone Sled	Bow	2/20/13	5/8"	5/8"	n/a		
		Stone Sled	Bow	3/6/13	5/8"	5/8"	n/a	\$ 191.51 upsized to 1" meter on 3/12/18 - 1 1/2" fire added as of this date	
		Stone Sled	Bow	5/7/13	5/8"	5/8"	n/a		
		Stone Sled	Bow	7/5/13	5/8"	5/8"	n/a		
		Stone Sled	Bow	9/3/13	5/8"	5/8"	n/a		
		Stone Sled	Bow	10/23/13	5/8"	5/8"	n/a		
		Stone Sled	Bow	2/3/14	5/8"	5/8"	n/a		
		Stone Sled	Bow	5/30/14	5/8"	5/8"	n/a		
		Stone Sled	Bow	6/18/14	5/8"	5/8"	n/a		
		Lewis	Bow	3/16/15	5/8"	5/8"	n/a		
		Lewis	Bow	7/27/17	5/8"	5/8"	n/a		
		Lewis	Bow	6/23/16	5/8"	5/8"	n/a	\$ 191.51 upsized to 1" meter on 3/2/18 - 1 1/2" fire added as of this date	
		Lewis	Bow	8/8/16	5/8"	5/8"	n/a	\$ 191.51 upsized to 1" meter on 2/23/18 - 1 1/2" fire added as of this date	
		Lewis	Bow	8/8/16	5/8"	5/8"	n/a	\$ 191.51 upsized to 1" meter on 2/28/18 - 1 1/2" fire added as of this date	
		Stone Sled	Bow	9/21/16	3/4"	3/4"	n/a	\$ 191.51 upsized to 1" meter on 2/16/18 - 1 1/2" fire added as of this date	
		Stone Sled	Bow	1/27/17	5/8"	5/8"	n/a		
		Stone Sled	Bow	3/1/17	5/8"	5/8"	n/a		
		Lewis	Bow	9/21/17	3/4"	3/4"	n/a	downsized to 5/8" on 2/22/18	
		Lewis	Bow	6/9/17	5/8"	5/8"	n/a		
Projected Revenues not collected between January 2006 and October 2018 -								\$ 43,070.24	

Rates in effect during the duration of service					
	Customer Charge Billed based on 5/8" meter	Fire Service Billed	Customer Charge for 1" Meter	Under recovered revenue per month ³	
Rates from January 2007 through May 2007	\$ 15.58	\$ 7.63	\$ 46.89	\$ 23.68	
Rates from June 2007 to September 2008	\$ 16.20	\$ 7.94	\$ 48.76	\$ 24.62	
Rates from October 2008 through November 2013	\$ 16.49	\$ 7.94	\$ 49.64	\$ 25.21	
Rates from December 2013 to December 2017	\$ 17.19	\$ 8.06	\$ 51.76	\$ 26.51	
Rates from January 2018 to October 2018	\$ 20.70	\$ 9.70	\$ 62.32	\$ 31.92	

- Notes:
- These are all single services into homes through an upsized 1" meter or a 5/8" meter. The meter size was selected by the customer. If the customer did not want fire protection they had a 5/8" meter installed and they paid the tariffed customer charge for a 5/8" meter. If the customer wanted fire protection they had a 1" meter installed and paid the tariffed customer charge for a 5/8" meter plus the tariffed charge for a 1-1/2" non-metered private fire service.
 - Monthly customer charges as of January 2018 based on a projected rate increase of 20.4%
 - Under recovered revenue per month based on rates in effect at the time is calculated by subtracting the sum of the customer charge for a 5/8" meter and a 1-1/2" fire service from the customer service charge for a 1" meter.

Confidential
Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 7/12/18
Request No. Staff 1-1

Date of Response: 7/26/18
Witness: Donald L. Ware

REQUEST: Re Ware testimony, page 4, lines 13 to 22. For each of the customers referred to please provide:

- a) a complete copy of the associated application for service connection (to the company's distribution system);
- b) the dates of service;
- c) the size of the meter;
- d) the billing history;
- e) the amount of any revenue not recovered, as required by the tariff (e.g., for a customer with a 1" meter, who was charged for a 5/8" meter; or a customer with a 1" meter, who was not charged separately for private fire protection services); and
- f) the amount of any credit the company proposes as a refund or an account credit if the petition is approved.

CONFIDENTIAL RESPONSE:

PEU has a good faith basis for seeking confidential treatment of the attached documents pursuant to Puc 203.08 and RSA 91-A:5 because the attached documents contain customer-specific billing information, that if made public, could constitute an invasion of privacy. PEU intends to submit a motion for confidential treatment regarding the confidential portions of the attached documents at or before the commencement of the hearing in this proceeding.

- a) Attached please find a complete copy of the service applications for the customers in the Stone Sled and Peterson Village Subdivisions. Where applications refer to lot numbers, it is because street addresses had not yet been established. (Attachment Staff 1-1-a).
- b) The dates of service (Date of meter set) are noted on the attached spreadsheet titled Confidential Attachment Staff 1-1-b-f.
- c) The size meter is noted on each service application.

d) The billing history for each service account in these two subdivisions is attached inclusive of what these customers paid for in terms of: (1) fixed customer charges, (2) the date the charges started and (3) the dates that changes in tariffed rates for those charges occurred. Please note that no volumetric usage is attached, as the proposed tariff change has no bearing on the volumetric rate.

e) The Company recovered its revenue, as required by tariff from the Peterson Village Subdivision. The Company did not recover its tariffed revenues from some of the Stone Sled Subdivision customers. The attached spreadsheet titled Attachment Staff 1-1-e details the amount of revenues that wasn't recovered from its Stone Sled customers. Customers who had a 5/8" meter installed paid the correct tariffed fee. Customers who had a 1" meter installed and paid the tariffed rate for a 5/8" meter and a 1-1/2" fire service paid less than the tariffed rate they would have paid for a 1" meter. The difference between the two rates (5/8" meter plus 1-1/2" fire service vs. a 1" meter) vary dependent upon the "Meter Install Date" as detailed on Attachment Staff 1-1-e. The Company estimates that had it collected revenues at the tariffed rates in effect at the time, it would have collected an additional \$43,070.24 from the Stone Sled customers as detailed on Confidential Attachment Staff 1-1-e.

f) The Company proposes the issuance of an account credit to its customers in the Peterson Village Subdivision in Pelham, in accordance with the attached spreadsheet titled Confidential Attachment Staff 1-1-b-f

Account #	Street #	Street Name	City	Meter Install Date	Original Meter Size Installed ¹	Monthly Customer Charge Based on Meter Size	Fire Service Size Billed	Projected revenues not collected	Change in meter size during 2018
		Stone Sled	Bow	1/18/07	1"	5/8"	1 1/2"	\$ 3,609.85	
		Stone Sled	Bow	1/18/07	1"	5/8"	1 1/2"	\$ 3,609.85	
		Stone Sled	Bow	1/18/07	1"	5/8"	1 1/2"	\$ 3,609.85	
		Stone Sled	Bow	1/18/07	1"	5/8"	1 1/2"	\$ 3,609.85	
		Stone Sled	Bow	1/18/07	1"	5/8"	1 1/2"	\$ 3,609.85	
		Stone Sled	Bow	1/23/07	1"	5/8"	1 1/2"	\$ 3,586.17	
		Stone Sled	Bow	1/31/07	1"	5/8"	1 1/2"	\$ 3,562.50	
		Stone Sled	Bow	5/9/07	1"	5/8"	1 1/2"	\$ 3,515.15	
		Stone Sled	Bow	5/25/07	1"	5/8"	2 1/2"	\$ 3,491.47	
		Stone Sled	Bow	9/19/07	1"	5/8"	2 1/2"	\$ 3,417.61	
		Stone Sled	Bow	10/25/07	1"	5/8"	1 1/2"	\$ 3,368.37	
		Stone Sled	Bow	8/7/08	1"	5/8"	1 1/2"	\$ 3,122.17	
		Stone Sled	Bow	10/8/10	5/8"	5/8"	n/a		
		Stone Sled	Bow	2/10/11	5/8"	5/8"	n/a		
		Stone Sled	Bow	2/16/12	5/8"	5/8"	n/a		
		Stone Sled	Bow	7/9/12	5/8"	5/8"	n/a		
		Stone Sled	Bow	10/25/12	5/8"	5/8"	n/a		
		Stone Sled	Bow	1/10/13	5/8"	5/8"	n/a		
		Stone Sled	Bow	2/20/13	5/8"	5/8"	n/a		
		Stone Sled	Bow	3/6/13	5/8"	5/8"	n/a	\$ 191.51	upsized to 1" meter on 3/12/18 - 1 1/2" fire added as of this date
		Stone Sled	Bow	5/7/13	5/8"	5/8"	n/a		
		Stone Sled	Bow	7/5/13	5/8"	5/8"	n/a		
		Stone Sled	Bow	9/3/13	5/8"	5/8"	n/a		
		Stone Sled	Bow	10/23/13	5/8"	5/8"	n/a		
		Stone Sled	Bow	2/3/14	5/8"	5/8"	n/a		
		Stone Sled	Bow	5/30/14	5/8"	5/8"	n/a		
		Stone Sled	Bow	6/18/14	5/8"	5/8"	n/a		
		Lewis	Bow	3/16/15	5/8"	5/8"	n/a		
		Lewis	Bow	7/27/17	5/8"	5/8"	n/a		
		Lewis	Bow	6/23/16	5/8"	5/8"	n/a	\$ 191.51	upsized to 1" meter on 3/2/18 - 1 1/2" fire added as of this date
		Lewis	Bow	8/8/16	5/8"	5/8"	n/a	\$ 191.51	upsized to 1" meter on 2/23/18 - 1 1/2" fire added as of this date
		Lewis	Bow	8/8/16	5/8"	5/8"	n/a	\$ 191.51	upsized to 1" meter on 2/28/18 - 1 1/2" fire added as of this date
		Stone Sled	Bow	9/21/16	3/4"	3/4"	n/a	\$ 191.51	upsized to 1" meter on 2/16/18 - 1 1/2" fire added as of this date
		Stone Sled	Bow	1/27/17	5/8"	5/8"	n/a		
		Stone Sled	Bow	3/1/17	5/8"	5/8"	n/a		
		Lewis	Bow	9/21/17	3/4"	3/4"	n/a		downsized to 5/8" on 2/22/18
		Lewis	Bow	6/9/17	5/8"	5/8"	n/a		
Projected Revenues not collected between January 2006 and October 2018 -								\$ 43,070.24	
Rates in effect during the duration of service									
					Customer Charge Billed based on 5/8" meter	Fire Service Billed	Customer Charge for 1" Meter	Under recovered revenue per month ³	
					\$ 15.58	\$ 7.63	\$ 46.89	\$ 23.68	
					\$ 16.20	\$ 7.94	\$ 48.76	\$ 24.62	
					\$ 16.49	\$ 7.94	\$ 49.64	\$ 25.21	
					\$ 17.19	\$ 8.06	\$ 51.76	\$ 26.51	
					\$ 20.70	\$ 9.70	\$ 62.32	\$ 31.92	
Notes:									
1. These are all single services into homes through an upsized 1" meter or a 5/8" meter. The meter size was selected by the customer. If the customer did not want fire protection they had a 5/8" meter installed and they paid the tariffed customer charge for a 5/8" meter. If the customer wanted fire protection they had a 1" meter installed and paid the tariffed customer charge for a 5/8" meter plus the tariffed charge for a 1-1/2" non-metered private fire service									
2. Monthly customer charges as of January 2018 based on a projected rate increase of 20.4%									
3. Under recovered revenue per month based on rates in effect at the time is calculated by subtracting the sum of the customer charge for a 5/8" meter and a 1-1/2" fire service from the customer service charge for a 1" meter									

Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 7/12/18
Request No. Staff 1-2

Date of Response: 7/26/18
Witness: Donald L. Ware

REQUEST: Re Ware testimony, page 4, line 4, and page 8, lines 19-21. To what part of the current tariff does PEU refer as “ambiguous”?

RESPONSE:

The current tariff language as found on Pennichuck East Utility, Inc. NHPUC NO. 1 Water, Original Page 28-A in paragraph 2.b. stipulates that “this portion of the service pipe may be installed by the Customer subject to the Company’s Technical Specifications for Main, Hydrant, and Service Installations”. The referenced Technical Details show a range of service installations, including a single installation and an installation where the service splits into a metered domestic and non-metered private fire service. The current Specifications do not clearly stipulate that a service where there will be both domestic and private fire protection services can only be provided via the two service option. As discussed in my testimony, a single service with an oversized meter can provide for both domestic and fire protection service. PEU wants the language in both its tariff and in its Standard Details to eliminate any possibility that a developer could request service into a building for both domestic and private fire protection services via a single service and an oversized meter.

Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 8/2/18
Request No. Staff 1-3

Date of Supplemental Response: 8/6/18
Witness: Donald L. Ware

REQUEST: Re Ware testimony, page 8, lines 3-5.

- a) Please quantify the revenue impact of the additional meter testing required for the “grandfathered” customers.
- b) How will the company recover the additional cost of performing periodic meter testing of the 1” meters used by the “grandfathered” customers if those customers are charged a rate that does not include recovery for those costs?

SUPPLEMENTAL REQUEST:

Within the Company's response to Staff 1-3(a), Paragraph 2, Line 4; should the pertinent sentence read, "If PEU's tariff change is accepted there are seventeen (17) services in the Stone Sled subdivision . . .", i.e., replace "twelve" with "seventeen"?

SUPPLEMENTAL RESPONSE:

a) The cost to test a 5/8” meter and a 1” meter is the same. Based upon current labor and benefit expenses, the cost to test either a 5/8” or 1” meter is about \$14 per meter. There is about one hour of labor and truck associated with each periodic meter test. One hour of labor, benefits and truck time equates to a cost of about \$58 per hour. Consequently the overall current cost of a meter test is about \$72 per test.

Based upon the fact that a 5/8” meter is tested once every 10 years, versus a 1” meter being tested every 4 years, the increase in testing costs over a 10 year period for a 1” meter versus a 5/8” meter is about \$108 over 10 years or about \$10.80 per year per meter. If PEU’s tariff change is accepted there are ~~twelve~~ **seventeen** (17) services in the Stone Sled subdivision and forty (40) services in the Peterson Village Subdivision that would be grandfathered as Option 1 services, resulting in a revenue shortfall from these fifty-seven (57) customers of about \$616 per year.

b) The extra cost of completing the additional meter testing on 1” meters would be picked up in the customer charges to all customers at the next rate case and would result in a small subsidy from the balance of the Company’s customers, due to the small number of customers that the Company seeks to grandfather.

Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 7/12/18
Request No. Staff 1-3

Date of Response: 7/26/18
Witness: Donald L. Ware

REQUEST: Re Ware testimony, page 8, lines 3-5.

- a) Please quantify the revenue impact of the additional meter testing required for the “grandfathered” customers.
- b) How will the company recover the additional cost of performing periodic meter testing of the 1” meters used by the “grandfathered” customers if those customers are charged a rate that does not include recovery for those costs?

RESPONSE:

a) The cost to test a 5/8” meter and a 1” meter is the same. Based upon current labor and benefit expenses, the cost to test either a 5/8” or 1” meter is about \$14 per meter. There is about one hour of labor and truck associated with each periodic meter test. One hour of labor, benefits and truck time equates to a cost of about \$58 per hour. Consequently the overall current cost of a meter test is about \$72 per test.

Based upon the fact that a 5/8” meter is tested once every 10 years, versus a 1” meter being tested every 4 years, the increase in testing costs over a 10 year period for a 1” meter versus a 5/8” meter is about \$108 over 10 years or about \$10.80 per year per meter. If PEU’s tariff change is accepted there are twelve (17) services in the Stone Sled subdivision and forty (40) services in the Peterson Village Subdivision that would be grandfathered as Option 1 services, resulting in a revenue shortfall from these fifty-seven (57) customers of about \$616 per year.

b) The extra cost of completing the additional meter testing on 1” meters would be picked up in the customer charges to all customers at the next rate case and would result in a small subsidy from the balance of the Company’s customers, due to the small number of customers that the Company seeks to grandfather.

Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 7/12/18
Request No. Staff 1-4

Date of Response: 7/26/18
Witness: Donald L. Ware

REQUEST: Re Ware testimony, page 8, lines 19 through 21.

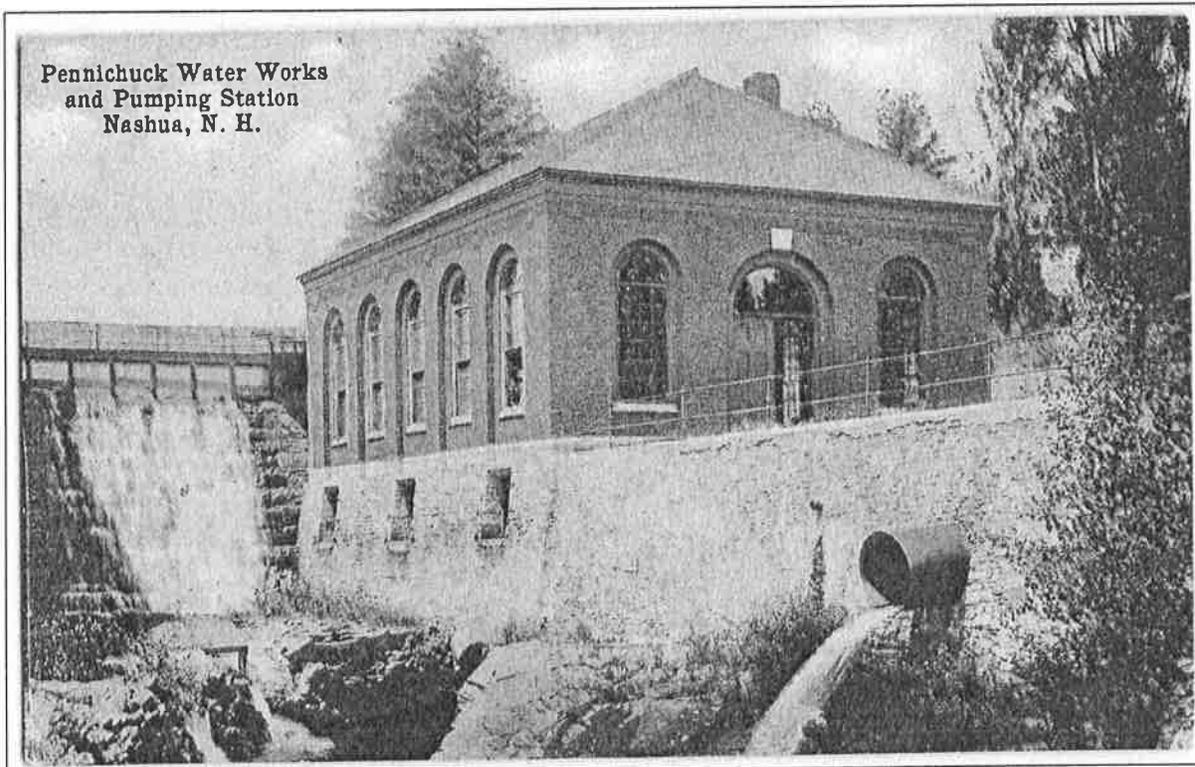
- a) Please provide a copy of the technical specification to which PEU refers.
- b) To what part of the technical specifications does PEU refer as “ambiguous”?

RESPONSE:

- a) A complete copy of PEU’s current technical specifications and associated standard details is attached to these responses. See Attachment Staff 1-4.
- b) Please see the response to Staff DR1-2.

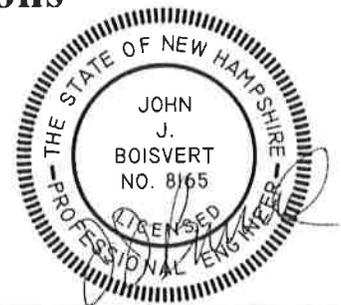
PENNICHUCK WATER WORKS

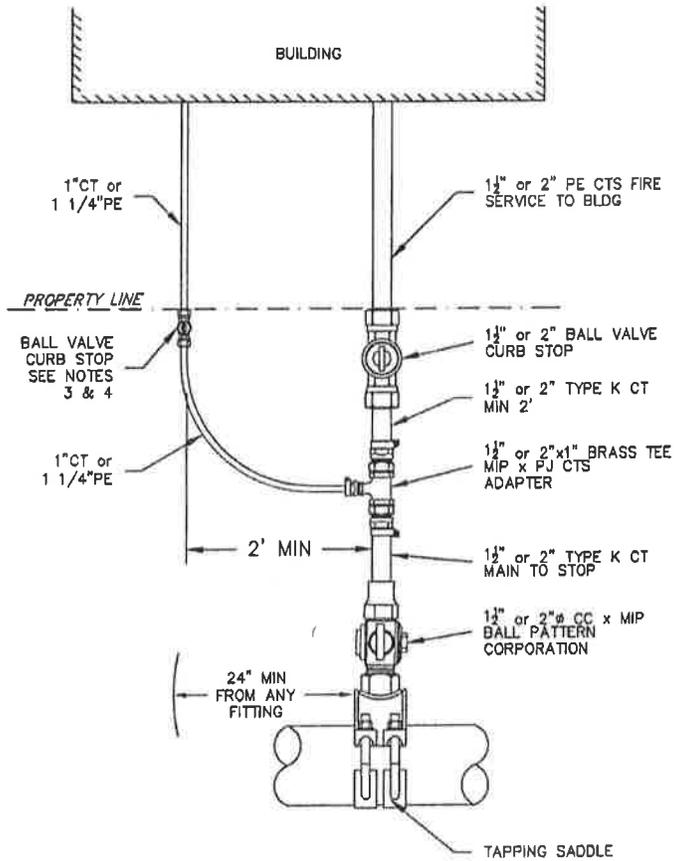
Merrimack, New Hampshire



Technical Specifications for Water Main, Hydrant, and Service Installations

Revision – 2018





NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. INSTALLATION DETAIL. SEE DETAIL D02 FOR 1 1/2" TO 2"
4. SEE DETAIL M01 FOR TYPICAL SERVICE UTILITY SEPARATION ENTRANCE.



DETAIL D16
 RESIDENTIAL DOMESTIC SERVICE
 TAPPED OFF FIRE SERVICE
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS

Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 7/12/18
Request No. Staff 1-5

Date of Response: 7/26/18
Witness: Donald L. Ware

REQUEST: Re Ware testimony, page 6, at lines 7 to 10, and page 6, lines 17 to 18. Please reconcile the statement, “All homes (39 of 42 to date) were installed with ...[an] oversized 1” meter...”, with, the statement, “The remaining 27 homes have 5/8” meters in lieu of the 1” meter required to pass fire flows.”

RESPONSE:

The testimony should have read that 37 of 42 homes have a single service installed. Of the 37 homes with single services installed 12 homes had a 1” meter, 2 homes have a ¾” meter and 23 homes have a 5/8” meter installed. Since my initial testimony was completed, a number of customers have changed their meter size. Per Attachment Staff 1-1-e there are currently 37 active services of which 17 are 1” meters and 20 are 5/8” meters.

Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 7/12/18
Request No. Staff 1-6

Date of Response: 7/26/18
Witness: Donald L. Ware

REQUEST: Re Ware testimony, page 6, line 23, to page 7, line 7.

- a) Please explain why the company has not charged customers with a ¾” meter or a 1” meter for private non-metered fire protection service, as required by the current tariff.
- b) Please reconcile that company practice with the Commission’s Order No. 24,840 (2008), in DW 07-032, authorizing the company to impose fire protection charges on customers in Bow, as well as the company’s proposal in the docket, see Ware testimony, page 10, line 25, to page 11, line 5, to charge those customers for private non-metered fire protection service.

RESPONSE:

- a) The customers with a ¾” meter or 1” meter have a single service. All water into the residence passes through the meter. There is no private non-metered fire protection service being provided. The tariff does not require that a metered service with fire protection after the meter be billed for a private non-metered fire protection service because that type of service does not exist in this case.
- b) DW 07-032 imposed fire protection on customers for “municipal” fire protection, i.e., fire protection provided to a community via hydrants. This type of fire protection is entirely different than “private” fire protection.

If a home in Bow is in a community where there is a hydrant within 1000’ feet of the home and the home also has life safety sprinkler system that home would be charged the “municipal” fire protection approved in DW 07-032 plus the “private” fire protection charge that in PEU’s tariff.

If a home in Bow is in a community that does not have a hydrant within 1000’ feet of the home but the home has a life safety sprinkler system, that home would not be charged the “municipal” fire protection approved in DW07-032 but would be charged for a “private non-metered” fire protection charge in accordance with PEU’s tariff.

Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 7/12/18
Request No. Staff 1-7

Date of Response: 7/26/18
Witness: Donald L. Ware

REQUEST: Re Ware testimony, page 7, lines 22, to page 8, line 2.

- a) Please quantify the impact on unaccounted-for or lost water of the “unregistered or under registered” usage of the “grandfathered” customers.
- b) Please quantify the revenue impact.

RESPONSE:

a) As described in testimony, a 1” meter will accurately measure water flows down to ¼ Gallons Per Minute (“GPM”) where a 5/8 meter accurately measures water flow down to ¼ GPM. There is no accurate way to quantify how much water is being used in a household at a rate of less than ¼ GPM. Based on water fixture specifications the range of commercially available low flow fixtures for a kitchen faucet and showerhead is between 1.5 and 2.2 GPM. Commercially available bathroom sink faucets range in flow from 0.5 to 1.5 GPM. Flows can also be restricted to less than ¼ GPM by not fully opening a faucet. According to EPA WaterSense 19% of household water usage is used through household faucets. If 50% of the household faucet usage is used through bathroom faucets and 20% of the usage was at less than ¼ GPM with 90% of that low flow being registered (A Neptune T-10 meter registers 90% of flows at ¼ GPM while a 5/8” meter registers 99% of that flow) and an average household uses 120 gallons per day the potential under registration would be:

$120 \text{ gallons/day} \times 0.20 \times 0.19 \times 0.50 \times 0.10 = 0.23 \text{ gallons per day of unaccounted for water}$
or 83 gallons per year of unmetered water. During the winter months this translates to about 0.2% unaccounted for water.

For a single family house this would translate to about \$0.83 per year in lost revenues based upon a projected volumetric rate of \$7.51 per CCF.

As stated above, this calculation makes a number of assumptions that would vary from household to household. Whereas PEU is asking to grandfather 57 services, and based upon the stated assumptions, leaving the 1” meters in place would result in about \$47 per year of lost revenue.

Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 7/12/18
Request No. Staff 1-8

Date of Response: 7/26/18
Witness: Donald L. Ware

REQUEST: Re Ware testimony, page 8, lines 3 to 6. Please quantify the revenue impact of the additional meter testing required for the “grandfathered” customers.

RESPONSE:

Please see the Company’s response to Staff 1-3 a)

Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 7/12/18
Request No. Staff 1-9

Date of Response: 7/26/18
Witness: Donald L. Ware

REQUEST: Re Ware testimony, page 9, lines 11 to 13. When does PEU expect its next rate filing?

RESPONSE:

PEU expects its next rate case to have a 2019 test year with a filing being made by mid-2020.

Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 8/2/18
Request No. Staff 1-10

Date of Supplemental Response: 8/6/18
Witness: Donald L. Ware

REQUEST: Re Ware testimony, page 10, line 17, to page 11, line 9. Please quantify the revenue impact of the creating the proposed “grandfathered” rate class.

SUPPLEMENTAL REQUEST: In the Company's response to Staff 1-10, it appears that the calculated monthly impact of \$2,138.64 and the calculated annual impact of \$25,663.68 are based on 67 customers, rather than the indicated 57 customers (17 in Stone Sled and 40 in Peterson Village). Please confirm that these amounts are in error and should be, rather, \$1,819.44 monthly and \$21,833.28 annual; or, if not, please explain the use of 67 customers in the underlying calculations of these amounts, rather than 57.

SUPPLEMENTAL RESPONSE:

a) Based upon the current and projected number of customers in PEU that have a single service and oversized water meter, the Company projects the following revenue impact of grandfathering this type of customer (based upon rates that the Company is seeking in DW17-128):

Current Non-Grandfathered monthly charge:

Monthly Customer Charge for a service with a 1” meter - \$62.32

Proposed Grandfathered monthly charge:

Monthly Customer Charge for a service with a 5/8” meter - \$20.70

Monthly Charge for a 2” non-metered Private Fire Service - \$ 9.70

Total - \$30.40

Based upon the current number of active accounts that would/could be grandfathered (17 in Stone Sled and 40 in Peterson Village) the revenue impact would be ~~\$2,138.64~~ **\$1,819.44** per month or ~~\$25,663.68~~ **\$21,833.28** per year. **This calculation is based on 57 customers.**

Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 7/12/18
Request No. Staff 1-10

Date of Response: 7/26/18
Witness: Donald L. Ware

REQUEST: Re Ware testimony, page 10, line 17, to page 11, line 9. Please quantify the revenue impact of the creating the proposed “grandfathered” rate class.

RESPONSE:

a) Based upon the current and projected number of customers in PEU that have a single service and oversized water meter, the Company projects the following revenue impact of grandfathering this type of customer (based upon rates that the Company is seeking in DW17-128):

Current Non-Grandfathered monthly charge:

Monthly Customer Charge for a service with a 1” meter - \$62.32

Proposed Grandfathered monthly charge:

Monthly Customer Charge for a service with a 5/8” meter - \$20.70

Monthly Charge for a 2” non-metered Private Fire Service - \$ 9.70

Total - \$30.40

Based upon the current number of active accounts that would/could be grandfathered (17 in Stone Sled and 40 in Peterson Village) the revenue impact would be \$2,138.64 per month or \$25,663.68 per year.

Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 7/12/18
Request No. Staff 1-11

Date of Response: 7/26/18
Witness: Donald L. Ware

REQUEST: Re Ware testimony, page 12, lines 3 to 7. Is the company aware of any circumstances associated with the “grandfathered” customers’ homes, aside from private fire protection, that would necessitate a $\frac{3}{4}$ ” or 1” meter?

RESPONSE:

No.

Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 7/12/18
Request No. Staff 1-12

Date of Response: 7/26/18
Witness: Donald L. Ware

REQUEST: Have any of the “grandfathered” customers used water for fire protection that the company is aware of? If so, how was the usage billed?

RESPONSE:

There is no way to know if a customer with a 1” meter has had an event where a sprinkler head has released and water was used for fire protection. Whereas all the water that went into and out of the sprinkler system went through the meter for such an event it would be billed at the tariffed volumetric rate.

Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 7/12/18
Request No. Staff 1-13

Date of Response: 7/26/18
Witness: Donald L. Ware

REQUEST: In the information provided to Commission Staff in DW 17-128, labeled tech session data request 1 and dated April 27, 2018, in reference to the Stone Sled development, Mr. Ware states “Based on our review of these files, we believe as a preliminary matter that at the time of the acquisition of this subdivision, it was stipulated that these homes should be charged for a 5/8” meter and a 1 ½” fire service.”

- a) By whom was it stipulated that meter size, for billing purposes, would be different than that of the actual meter?
- b) For how long were the Stone Sled customers billed in accordance with this stipulation?
- c) Why did PEU fail to file a tariff revision shortly after the acquisition of Stone Sled late in 2007 to grandfather these services at this time and to clarify in the tariff and its technical specifications that private fire protection required two separate service lines rather than one larger service line and larger meter?

RESPONSE:

- a) The decision to bill the customer service charge for a 1” meter at the rate for a 5/8” meter was made by the Company Executive Vice President at the time, Mr. Stephen Densberger.
- b) The Stone Sled customers with a 1” meter have always been billed in accordance with this decision. As stated on page 6 of my testimony, construction in Stone Sled began in 2006.
- c) I do not have any knowledge as to why the Company did not file for a tariff revision shortly after the acquisition of Stone Sled to reflect the billing practice that was stipulated by Mr. Densberger to Pennichuck’s Customer Service Department.

Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 7/12/18
Request No. Staff 1-14

Date of Response: 7/26/18
Witness: Donald L. Ware

REQUEST: In the information provided to Commission Staff in DW 17-128, labeled tech session data request 1 and dated April 27, 2018, and in the testimony of Donald L. Ware in DW 18-090, reference is made to customers in the Stone Sled development with ¾” meters. However, neither the petition nor Mr. Ware’s testimony in DW 18-090 discuss why ¾” meters were installed, the need or purpose for the ¾” meter or how the proposed tariff change would affect customers with ¾” meters.

- a) Please identify the number of customers in the Stone Sled and Peterson Village developments served through a ¾” meter. Do those customers have life safety sprinkler systems?
- b) Do the same concerns about lost water and more frequent testing requirements apply to the ¾” meters that are in service at these residential properties?
- c) How would the proposed tariff address in the rate inequity between a customer with a ¾” meter, a 1” meter and a 5/8” meter?

RESPONSE:

a) Per the records provided in response to Staff 1-1 there were two ¾” meters installed in the Stone Sled subdivision and two ¾” meters installed in the Peterson Village Subdivision. These meters have been replaced with a 1” meter in Peterson Village and with a 1” meter and a 5/8” meter in Stone Sled (based upon each customer’s request).

b) No. A ¾” meter needs to be tested every 10 years which is the same testing schedule as a 5/8” meter. A ¾” meter accurately measured low flows down to about 0.3 GPM, just slightly greater than the low flow testing capability of a 5/8” meter which is ¼ GPM. The concern with a ¾” meter is that it can only pass 30 GPM which is insufficient flow to properly operate a residential fire sprinkler system, which is why these meters have been removed and replaced as detailed in response a) above.

Any Option 1 home in Stone Sled, where the fire sprinkler systems are not required by building code, with a ¾” meter will be given the option of upsizing their ¾” meter to a 1” meter and paying the grandfathered rate (if approved) of \$30.40 per month (based upon the projected

tariffed rate for a 5/8" meter and a 1-1/2" fire service) or downsizing their meter to a 5/8" meter and paying \$20.70 per month.

Any Option 1 home in Peterson Village, where the fire sprinkler system is required by local building code, will have the 3/4" meter replaced with a 1" meter and will pay the grandfathered rate (if approved) of \$30.40 per month.

c) The addition of the tariff charge for a non-metered private fire protection service in the amount of \$9.70 to the customer service charge of for a 5/8" meter of \$20.70 per month would provide equity between the 5/8" meter customer without fire protection and the customer with a 1" meter and private fire protection. If total equity was being sought, a grandfathered customer could also be charged an additional \$0.90 per month to pick up the extra cost of testing the 1" meter more frequently.

There will be no inequity with 3/4" meters, as those meters have been removed and replaced as detailed within this data response.

Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 7/12/18
Request No. Staff 1-15

Date of Response: 7/26/18
Witness: Donald L. Ware

REQUEST: On page 6 of Mr. Ware's testimony, he identifies three existing subdivisions with private fire service: Ministerial Heights in Londonderry, Stone Sled Farms in Bow, and Peterson Village.

- a) Are there other subdivisions within the service areas of Pennichuck Water Works and Pittsfield Aqueduct Company with private fire service?
- b) If so, is the service being provided, as described in Mr. Ware's testimony, via Option 1, Option 2 or some combination of the two?

RESPONSE:

- a) There are no subdivisions or homes in Pittsfield with private fire services. There are currently 21 homes with private fire protection service in Pennichuck Water Works.
- b) Service to the 21 homes in Pennichuck Water Works is being provided via both Option 1 and Option 2 with 15 of the homes having Option 1 service and the remaining 6 homes having Option 2 service.

Pennichuck East Utilities, Inc.
DW 18-090

PEU-Small Diameter Private Fire Protection Non-Metered Tariff
Responses to Staff Data Requests – Set 1

Date Request Received: 10/4/18
Request No. Staff 1-16

Date of Response: 10/10/18
Witness: Donald L. Ware

REQUEST:

Please provide the calculation of straight reparations over the past two years for customers of PEU for all fire protection and non-fire protection customers under RSA 365:29. Divide this total by the total number of customers in PEU's rate groups.

RESPONSE:

There were no overcollections under RSA 365:29 for non-fire protection and fire-protection customers.

Over the past two years, November 2016 through October 2018, a total of \$9,495.67 was under-collected from Stone Sled customers (based on PEU's tariff rates in effect during that time). A total of \$13,874.55 was under-collected from Ministerial Heights customers for a total under-collection of \$23,370.22.

Had the \$23,370.22 been collected and booked, the revenue increase to PEU would have been about \$11,685 per year less. This reduction in revenue requirement would have translated uniformly across all customer classes, of which there are presently 8,357 accounts, to about \$1.40 per year per account. Please see revised Confidential and Redacted Attachment Staff 1-1-e which supports these calculations. This calculation is provided for information purposes only with no implied concurrence from the Company that RSA 365:29 is applicable or that the calculation represents a subsidy.

These under-collections will be remedied by the changes proposed in Revised Pages 28A, 38, and 45.

PEU has a good faith basis for seeking confidential treatment of the attached documents pursuant to Puc 203.08 and RSA 91-A:5 because the attached documents contain customer-specific account and billing information, that if made public, would constitute an invasion of privacy.

Redacted

Account #	Street #	Street Name	City	Meter Install Date	Original Meter Size Installed ¹	Monthly Customer Charge Based on Meter Size	Fire Service Size Billed	Projected revenues not collected	Change in meter size during 2018	Under Recovered revenue for past two years ⁴
		Stone Sled	Bow	1/18/07	1"	5/8"	1 1/2"	\$ 3,609.85	The yellow highlighted accounts were existing homes with active water services when the Stone Sled Community Water System was acquired from the Developer. These services were not metered at the time of the acquisition. The meter install dates reflect the date the Company was able to get into the residence and set the meter. There were no service applications completed for these accounts.	\$ 684.91
		Stone Sled	Bow	1/18/07	1"	5/8"	1 1/2"	\$ 3,609.85		\$ 684.91
		Stone Sled	Bow	1/18/07	1"	5/8"	1 1/2"	\$ 3,609.85		\$ 684.91
		Stone Sled	Bow	1/18/07	1"	5/8"	1 1/2"	\$ 3,609.85		\$ 684.91
		Stone Sled	Bow	1/18/07	1"	5/8"	1 1/2"	\$ 3,609.85		\$ 684.91
		Stone Sled	Bow	1/23/07	1"	5/8"	1 1/2"	\$ 3,586.17		\$ 684.91
		Stone Sled	Bow	1/31/07	1"	5/8"	1 1/2"	\$ 3,562.50		\$ 684.91
		Stone Sled	Bow	5/9/07	1"	5/8"	1 1/2"	\$ 3,515.15		\$ 684.91
		Stone Sled	Bow	5/25/07	1"	5/8"	1 1/2"	\$ 3,491.47		\$ 684.91
		Stone Sled	Bow	9/19/07	1"	5/8"	1 1/2"	\$ 3,417.61		\$ 684.91
		Stone Sled	Bow	10/25/07	1"	5/8"	1 1/2"	\$ 3,368.37		\$ 684.91
		Stone Sled	Bow	8/7/08	1"	5/8"	1 1/2"	\$ 3,122.17		\$ 684.91
		Stone Sled	Bow	10/8/10	5/8"	5/8"	n/a			
		Stone Sled	Bow	2/10/11	5/8"	5/8"	n/a			
		Stone Sled	Bow	2/16/12	5/8"	5/8"	n/a			
		Stone Sled	Bow	7/9/12	5/8"	5/8"	n/a			
		Stone Sled	Bow	10/25/12	5/8"	5/8"	n/a			
		Stone Sled	Bow	1/10/13	5/8"	5/8"	n/a			
		Stone Sled	Bow	2/20/13	5/8"	5/8"	n/a			
		Stone Sled	Bow	3/6/13	5/8"	5/8"	n/a	\$ 191.51		upsized to 1" meter on 3/2/18 - 1 1/2" fire added as of this date
		Stone Sled	Bow	5/7/13	5/8"	5/8"	n/a			
		Stone Sled	Bow	7/5/13	5/8"	5/8"	n/a			
		Stone Sled	Bow	9/3/13	5/8"	5/8"	n/a			
		Stone Sled	Bow	10/23/13	5/8"	5/8"	n/a			
		Stone Sled	Bow	2/9/14	5/8"	5/8"	n/a			
		Stone Sled	Bow	5/30/14	5/8"	5/8"	n/a			
		Stone Sled	Bow	6/18/14	5/8"	5/8"	n/a			
		Lewis	Bow	3/16/15	5/8"	5/8"	n/a			
		Lewis	Bow	7/27/17	5/8"	5/8"	n/a			
		Lewis	Bow	6/23/16	5/8"	5/8"	n/a	\$ 191.51	upsized to 1" meter on 3/2/18 - 1 1/2" fire added as of this date	\$ 255.34
		Lewis	Bow	8/8/16	5/8"	5/8"	n/a	\$ 191.51	upsized to 1" meter on 2/23/18 - 1 1/2" fire added as of this date	\$ 255.34
		Lewis	Bow	8/8/16	5/8"	5/8"	n/a	\$ 191.51	upsized to 1" meter on 2/28/18 - 1 1/2" fire added as of this date	\$ 255.34
		Stone Sled	Bow	9/21/16	3/4"	3/4"	n/a	\$ 191.51	upsized to 1" meter on 2/16/18 - 1 1/2" fire added as of this date	\$ 255.34
		Stone Sled	Bow	1/27/17	5/8"	5/8"	n/a			
		Stone Sled	Bow	3/1/17	5/8"	5/8"	n/a			
		Lewis	Bow	9/21/17	3/4"	3/4"	n/a		downsized to 5/8" on 2/22/18	
		Lewis	Bow	6/9/17	5/8"	5/8"	n/a			
								Projected Revenues not collected between January 2006 and October 2018 -		\$ 43,070.24

Rates in effect during the duration of service					
	Customer Charge Billed based on 5/8" meter		Customer Charge for 1" Meter		Under recovered revenue per month ⁴
		Fire Service Billed			
Rate from January 2007 through May 2007	\$ 15.58	\$ 7.63	\$ 46.89	\$ 23.68	
Rates from June 2007 to September 2008	\$ 16.20	\$ 7.94	\$ 48.76	\$ 24.62	
Rates from October 2008 through November 2013	\$ 16.49	\$ 7.94	\$ 49.64	\$ 25.21	
Rates from December 2013 to December 2017	\$ 17.19	\$ 8.06	\$ 51.76	\$ 26.51	
Rates from January 2018 to October 2018	\$ 20.70	\$ 9.70	\$ 62.32	\$ 31.92	

Notes:

- These are all single services into homes through an upsized 1" meter or a 5/8" meter. The meter size was selected by the customer. If the customer did not want fire protection they had a 5/8" meter installed and they paid the tariffed customer charge for a 5/8" meter. If the customer wanted fire protection they had a 1" meter installed and paid the tariffed customer charge for a 5/8" meter plus the tariffed charge for a 1-1/2" non-metered private fire service
- Monthly customer charges as of January 2018 based on a projected rate increase of 20.4%
- Under recovered revenue per month based on rates in effect at the time is calculated by subtracting the sum of the customer charge for a 5/8" meter and a 1-1/2" fire service from the customer service charge for a 1" meter
- Past two years incorporates revenues between November 2016 through October 2018.

Number of Accounts	Billing Period		Number of Months@ rate	Meter Size	Actual Fire Service		Under Recovered revenue for Period ³	Under Recovered revenue for Period ⁴	Under Recovered revenue for past two years ⁶
					Size	Tap From Street			
64	Jun-03	May-07	48	5/8"	1-1/2"	2"	\$ 36,679.68	\$ 22,456.32	
64	Jun-07	Sep-08	16	5/8"	1-1/2"	2"	\$ 14,458.88	\$ 8,130.56	
64	Oct-08	Nov-13	61	5/8"	1-1/2"	2"	\$ 55,124.48	\$ 30,997.76	
64	Dec-13	Dec-17	49	5/8"	1-1/2"	2"	\$ 44,938.88	\$ 25,276.16	\$ 7,737.60
64	Jan-18	Oct-18	10	5/8"	1-1/2"	2"	\$ 10,910.98	\$ 6,136.95	\$ 6,136.95
Total Undercollected Revenues between 2003 and 2018-							\$ 162,112.90	\$ 92,997.75	\$ 13,874.55

Rates in effect during the duration of service						
	Customer Charge Billed based on 5/8" meter	Customer Charge for a 2" Fire Service	Customer Charge for a 1-1/2" Fire Service	Under recovered revenue per month ³ based on current tariff	Under recovered revenue per month ⁴	
Rate from June 2003 through May 2007	\$ 15.58	\$ 11.94	\$ 7.31	\$ 11.94	\$ 7.31	
Rates from June 2007 to September 2008	\$ 16.20	\$ 14.12	\$ 7.94	\$ 14.12	\$ 7.94	
Rates from October 2008 through November 2013	\$ 16.49	\$ 14.12	\$ 7.94	\$ 14.12	\$ 7.94	
Rates from December 2013 to December 2017	\$ 17.19	\$ 14.33	\$ 8.06	\$ 14.33	\$ 8.06	
Rates from January 2018 to October 2018 ⁵	\$ 20.45	\$ 17.05	\$ 9.59	\$ 17.05	\$ 9.59	

- Notes:**
1. These Homes all have two services, one that is metered with a 5/8" meter and one with a 2" non-metered fire service.
 2. The Company suspended the payment for the 2" non-metered fire service in June of 2003.
 3. The under-recovered revenue per month based on the monthly rate in effect at the time is calculated by subtracting the rate for a 5/8" meter from the sum of the customer charge for a 5/8" meter and a 2" fire service (2" tap from street before split)
 4. The under-recovered revenue per month based on the monthly rate in effect at the time is calculated by subtracting the rate for a 5/8" meter from the sum of the customer charge for a 5/8" meter and a 1-1/2" fire service (actual size of fire service line after split)
 5. Rates from January 2018 to October 2018 are inclusive of pending permanent rate increase of 18.97%
 6. Past two years incorporates revenues between November 2016 through October 2018.



Environmental Law ▪ Utility Law

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September 14, 2018

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Office of the Consumer Advocate
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Re: Docket No. DW 18-076 Pennichuck Water Works, Inc.
Docket No. DW 18-090 Pennichuck East Utility, Inc.
Petitions for Approval of Small Diameter Private Fire
Protection Non-Metered Service

Dear Attorneys Ross and Kreis:

This letter is to summarize additional actions Pennichuck Water Works, Inc.’s (“PWW”) and Pennichuck East Utility, Inc.’s (“PEU”) (together “Companies”) agree to take with respect to the proposed tariff revisions. These actions are preconditioned on the Commission approving PWW and PEU’s petitions. Therefore, in addition to the proposed tariff revisions, the Companies agree as follows:

- 1) Within thirty (30) days of a Commission decision approving the relief requested in the above-referenced petitions, the Companies agree to mail a letter to each municipality within their respective franchises, as well as to the building inspector and/or fire inspector of those municipalities. This letter will explain the tariff changes, Technical Specifications, and Design Standards relative to how metered and private fire protection services are to be installed. In the letter, the Companies will offer to meet with municipal officials. Prior to distributing this letter, the Companies agree to submit the draft letter to the Commission’s Consumer Services Division for review.
- 2) The Companies agree to file a report with the Commission no later than December 31, 2018 describing which municipal officials the Companies sent letters to and which officials elected to meet with the Companies.
- 3) To allow the Commission additional time to review PWW and PEU’s tariff proposals, PEU agrees to not implement the proposed tariff changes after the September 27, 2018 expiration date of the Commission’s suspension order (Order No. 26,152); and PWW agrees to not implement the proposed tariff changes after the August 30, 2018 expiration date of the Commission’s suspension order (Order No. 26,137).
- 4) The Companies agree to provide credit to certain customers to put those customers in the financial position they would have been in had the applicable proposed tariff rates been

available at the time the customer first took service. These credits are more specifically described in PWW's response to Staff 1-4 b-c-d and PEU's response to Staff 1-1 b-f. The relevant spreadsheets for those responses are attached hereto. The credits are calculated assuming the Companies are able to implement the proposed tariff changes in October, 2018.

The Companies are glad for the opportunity to discuss the proposed tariff changes with Staff and the Office of the Consumer Advocate ("OCA") and to have Staff and OCA's support for these changes. PWW and PEU believe the proposed changes will allow the Companies to offer more equitable fire protection rates in this burgeoning service category. We look forward to the Commission's approval.

If you have any questions, please do not hesitate to contact me at (603) 219-4911 or at mab@nhbrownlaw.com.

Very Truly Yours,



Marcia A. Brown

cc: Docket-Related Service Lists