

**STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION**

**Pennichuck East Utility, Inc.
Petition for Approval of
Small-Diameter Private Fire Protection – Non-Metered Service**

DW 18-_____

Direct Testimony of Donald L. Ware

May 25, 2018

Professional and Educational Background

2 **Q. What is your name and what is your position with Pennichuck East**
3 **Utility, Inc.?**

4 A. My name is Donald L. Ware. I am the Chief Operating Officer of
5 Pennichuck East Utility, Inc. (“PEU” or “Company”). I have worked for the
6 Company since 1998 when Pennichuck Corporation acquired the
7 Company from Consumers New Hampshire Water Company.

8 **Q. Please describe your educational background.**

9 A. I have a Bachelor of Science degree in Civil Engineering from Bucknell
10 University in Lewisburg, Pennsylvania. I have a Master’s in Business
11 Administration from the Whittemore Business School at the University of
12 New Hampshire.

13 **Q. Please describe your professional background.**

14 A. Prior to joining PEU, I served as the General Manager of the Augusta
15 Water District in Augusta, Maine from 1986 to 1995. I served as the
16 District’s engineer between 1982 and 1986.

17 **Q. What are your responsibilities as Chief Operating Officer of the**
18 **Company?**

19 A. As the Chief Operating Officer I am responsible for the overall operations
20 of the Company, including water quality and supply, distribution,
21 engineering, customer service, and water system capital improvements.

22 **Q. What is the purpose of your testimony?**

23 A. The purpose of my testimony is to describe why PEU is seeking approval
24 from the New Hampshire Public Utilities Commission (“NHPUC”) to:

- 2 1. Create and establish an additional rate group within PEU's General
3 Metered customer class. This class would be for residential homes taking
4 service on or before December 31, 2018 that have life safety fire safety
5 sprinkler systems where the domestic and fire protection services are
6 delivered through a single meter; and
- 7 2. Establish specifications for installations providing customers with
8 domestic and fire protection services, namely, that there should be two
9 services into the home, one metered domestic service and one non-
10 metered service for fire protection.

11 **Proposal for Grandfathered Rate Group and Specifications for Private Fire**
12 **Protection-Non-Metered**

13 **Q. What are life safety sprinkler systems?**

14 **A.** The life safety sprinkler systems are recommended for one- and two-
15 family dwellings by the International Residential Code ("Code"). See,
16 Section P2094, *Dwelling Unit Fire Sprinkler Systems*, of the International
17 Code Council's International Residential Code. Municipalities within
18 PEU's service territory are starting to adopt this Code. These sprinkler
19 systems typically require flow rates of 34 gallons per minute ("gpm") in
20 addition to normal domestic flows.

21 **Q. Why is PEU seeking to establish a grandfathered rate group and a**
22 **service installation configuration for small diameter "private fire**
23 **protection- non-metered service" for single-family residential homes**
24 **in its tariff?**

25 **A.** PEU has had applications for private fire protection service where home

2 builders are either voluntarily, or are required by local, municipal building
3 codes, to install life safety fire safety sprinkler systems. PEU's current
4 tariff is ambiguous enough that developers have interpreted the tariff to
5 allow for residential fire protection service to be installed via a single
6 service through an upsized meter (1" meter versus a typical domestic 5/8"
7 meter) or through two services to the premise, one metered domestic
8 service and one non-metered, small-diameter fire service. It is PEU's view
9 that the interpretation allowing for a single combined fire and domestic
10 service configuration results in inefficient service to these premises. PEU
11 expects the requests for this service to increase in the future and thus it is
12 important to prevent future combined services.

13 **Q. How many existing customers does PEU provide domestic and**
14 **private fire protection service to through a single service and**
15 **oversized meter?**

16 **A.** PEU currently provides service to two subdivisions that provide for both
17 the domestic and private fire service via a single service and an oversized
18 meter: 1) the Stone Sled subdivision in Bow currently has 39 homes with
19 this type of service (with an expected full buildout of 42 homes); and 2) the
20 Peterson Village Subdivision (consisting of Tanager and Oriole Way) in
21 Pelham currently has 21 homes with this type of service (with an expected
22 full buildout of 40 homes)

23 **Q. How is PEU currently serving and charging the customers in these**
24 **subdivisions?**

25 **A.** PEU has seen two types of installations in these subdivisions and has

2 charged these customers the most applicable rates as follows:

3 **Option 1.** - The customer installs a single, larger service line (1-1/2" or 2"
4 vs. a 1" service) from PEU's curbstop to the house. The customer installs
5 a 1" meter in the house instead of the typical 5/8" meter. This allows
6 passage of the combined peak domestic and residential flows, which are
7 about 40 to 50 gpm depending on the type of domestic water fixtures
8 used. As a result, the customer pays a monthly minimum charge of
9 \$51.76 for a 1" meter (as noted on page 38 of PEU's tariff) instead of the
10 monthly minimum charge of \$17.19 for a 5/8" meter. See Attachment
11 DLW-A, tariff page 38.

12 **Option 2.** - The customer installs two services into the home:

13 a. A 1" service line from the curbstop with a 5/8" meter to provide
14 for domestic flows and currently has a monthly minimum charge of \$17.19
15 pursuant to page 38 of PEU's tariff for "General Service-Metered" service;
16 and

17 b. A 1-1/2" non-metered service line from the curbstop to provide
18 for the fire protection flows. This service is not metered and falls under
19 PEU's current tariffed rate for a 1-1/2" private fire protection-non-metered
20 service of \$8.06 per month (as noted on page 45 of PEU's tariff).

21 **Q. Please describe the number of customer requests for the two**
22 **different private service options described above.**

23 **A.** Customers in three existing subdivisions have installed private fire service.
24 As noted above, two subdivisions have customers taking domestic and fire
25 protection service through one, oversized meter. The types of fire

2 services are as follows:

3 **1.** Ministerial Heights in Londonderry, NH – Constructed in 1997 under
4 Consumers New Hampshire Water Company. All 65 homes were
5 installed with two services (Option 2 above). The homes were required
6 to have private fire protection as part of the subdivision approval.

7 **2.** Stone Sled Farms in Bow, NH – Construction began in 2006. All
8 homes (39 of 42 to date) were installed with both private fire protection
9 and domestic service delivered through a single service and oversized
10 1” meter (Option 1 above). Although private fire protection is not
11 required by the Town of Bow for this subdivision, the developer also
12 installed private fire protection facilities in each home. Of the 39
13 homes currently receiving service in this subdivision, 12 have private
14 fire protection through a 1-1/2” service line paired with a 1” meter.
15 facilities. These homes have been charged the monthly minimum
16 meter charge of \$17.19 per month for 5/8” meter and \$8.06 for an 1-
17 1/2” non-metered fire service. The remaining 27 homes have 5/8”
18 meters in lieu of the 1” meter required to pass fire flows. These 27
19 homes are charged the monthly minimum meter charge of \$17.19 per
20 month for 5/8” metered service but no private non-metered fire
21 protection charge because the 5/8” meter cannot pass the flows
22 necessary to support a fire sprinkler system.

23 **3.** Peterson Village - Construction began in 2016. All homes (21 of 40
24 to date) were installed with both private fire protection and domestic
25 service delivered through a single service and an oversized 3/4” or 1”

2 meter (Option 1 above). Private fire protection facilities were installed
3 in each home constructed by the developer and were required by the
4 Town for this subdivision. These homes have been charged the
5 monthly minimum meter charge for a 1" or ¾" meter based on the size
6 of the meter. These homes do not pay for private non-metered fire
7 service.

8 **Q. Does PEU expect requests for private fire protection to increase?**

9 **A.** PEU expects demand within this customer class to increase, especially in
10 the smaller diameter rate groups.

11 **Q. Why does the Company seek to modify its tariff to grandfather
12 certain private fire protection service?**

13 **A.** In the past, developers oftentimes installed Option 1 instead of Option 2.
14 This is because it is less expensive for them to install one service line but
15 it results in higher monthly fees for the customer. PEU seeks to revise its
16 tariff to prevent inconsistencies in the future and provide this type of fire
17 protection service more efficiently and fairly.

18 **Q. Please describe some of the policy reasons driving PEU's request.**

19 **A.** The current tariff, in Option 1 above (single service, single shut off, and
20 oversized meter) is not fair to the customer or PEU for the following
21 reasons:

22 1. A 1" meter only registers low flows down to ¾ gpm as opposed to a
23 5/8" meter that registers flows as low as ¼ gpm. Upsizing the meter from
24 a 5/8" to a 1" meter to pass the required fire protection flow results in
25 usage between ¼ and ¾ gpm being unregistered or under registered,

2 which adversely affects PEU's unaccounted-for or lost water.

3 2. A 1" meter requires periodic testing every 4 years as opposed to a
4 5/8" meter which only requires periodic testing every 10 years, resulting in
5 meter testing costs to PEU that are 2.5 times those normally required for a
6 single-family home.

7 3. PEU's tariffed rate for a 1" meter is \$51.76 per month, which is
8 substantially greater than that of a 5/8" meter with a monthly meter charge
9 of \$17.19 per month and a separate 1-1/2" non-metered fire service with a
10 monthly charge of \$8.06 per month. Therefore, while the contractor saves
11 costs by installing a single combined serviced versus separate domestic
12 and fire protection services, the customer pays more for the service.

13 For these reasons, PEU believes the current 1" meter charge for homes
14 with single-family residential fire protection results in those customers
15 being overcharged for their service and PEU under-collecting for the
16 actual water used.

17 **Q. Why doesn't PEU require the Option 2 installation if it believes it is**
18 **better for the customer?**

19 **A.** While PEU believes its current tariff language and corresponding technical
20 specifications support it requiring the developer to install two separate
21 services (Option 2), the current language could be considered ambiguous.
22 Therefore, PEU seeks to clarify its tariff language to expressly eliminate
23 developers choosing Option 1 as an acceptable form of delivering private
24 fire protection to residential properties. That way, going forward, PEU can
25 limit the installations to Option 2.

2 **Proposed Fire Protection Rates**

3 **Q. If the NHPUC accepts PEU’s proposed grandfathered “private fire**
4 **protection – non-metered” rate group, is PEU willing to complete a**
5 **COSS as part of PEU’s next rate filing?**

6 **A.** Yes. PEU presently has a general rate case pending before the
7 Commission in Docket No. DW 17-128 wherein it requested a waiver from
8 providing a new COSS. The Company argued that since its last COSS in
9 Docket No. DW 07-032, the relative proportion of PEU’s customer groups
10 has remained fairly constant. For that reason, PEU did not believe a new
11 COSS was warranted. Notwithstanding that position, PEU would be
12 willing to complete a COSS as part of its next rate filing if the Commission
13 requests one to be completed.

14 **Specific Tariff Revisions**

15 **Q. What changes need to be made to PEU’s tariff to limit installations to**
16 **Option 2?**

17 **A.** PEU seeks to change its technical specifications and its tariff. PEU
18 believes that it is essential that when a residential customer is provided
19 with private fire protection service that the home have two services, both
20 with outside shutoffs, as illustrated on Attachment DLW-B. It is important
21 that a contractor or developer not be allowed to install a single, combined
22 domestic and fire protection service.

23 **Q. Please explain.**

24 **A.** As noted above, it is less expensive for a developer to install one service
25 as oppose to two services. If a contractor/developer has the option of not

2 paying the higher monthly charge for a 1” meter (\$51.76 per month), as
3 opposed to the existing tariffed monthly charges totaling \$25.25 (\$17.19
4 per month for the 5/8” meter and \$8.06 per month for the 1-1/2” “private
5 fire protection – non-metered” service) they may elect to avoid the higher
6 up-front cost of completing the dual service installation. The result is the
7 customer ends up paying a higher monthly service rate. PEU also
8 opposes the single service, upsized meter option because of the higher
9 cost to PEU of purchasing and maintaining the 1” meter, as well as the
10 potential for under-registration of water. In addition, if there is a problem
11 with or non-payment of fire protection service, PEU would be left with only
12 one shut-off valve. In the single service option it is not possible to shut
13 one service off and leave the other service on. To address these
14 problems, PWW proposes to add paragraph “c” to tariff page 28-A found
15 in Attachment DLW- C. The Company also proposes other minor
16 revisions to tariff page 28-A to make the content clearer to customers.

17 **Q. Is PEU seeking any other changes to its tariff in relation to the**
18 **provision of small diameter “private fire protection – non-metered”**
19 **service to its customers?**

20 A. Yes. PEU seeks to establish a grandfathered rate for services that were
21 established under Option 1, where a home has a single service and a 1”
22 meter that has been installed to pass the higher flows required by a
23 residential life safety sprinkler system. PEU does not believe a customer
24 should be penalized on account of the contractor or developer saving
25 costs up-front by installing one service line for both types of service. PEU

2 proposes to charge those customers the approved monthly charge for a
3 5/8” meter plus the charge for a 1-1/2” “private fire service – non-metered”
4 service. PEU proposes a rate of \$25.25 per month (\$17.19 per month for
5 the 5/8” meter and \$8.06 per month for the 1-1/2” “private fire protection –
6 non-metered” service). This rate would only apply to those customers with
7 this type of service and meter set-up installed and placed in service on or
8 before December 31, 2018. Please see Attachment DLW-A for the
9 revision to Page 38 of PWW’s existing tariff.

10 **Q. About how many services will fall into the grandfathered rate group?**

11 **A.** PEU has identified up to 82 services that currently exist (42 in Stone Sled
12 and 40 in Peterson Village of which 39 are currently active in Stone Sled
13 and 21 are active in Peterson Village. PEU estimates that the remaining 3
14 homes in Stone Sled and 19 homes in Peterson Village will be placed into
15 service before the end of 2018 and would be eligible for grandfathering.

16 **Q Why should the Commission approve grandfathering these**
17 **services? Didn’t the customers take service knowing the cost of that**
18 **service?**

19 **A.** In most, if not all of the cases, the service was applied for by the
20 developer who chose to install a single service through an upsized meter
21 as that was the least expensive tariffed option available. Had PEU’s tariff
22 expressly prohibited single, dual service lines and expressly required the
23 installation of two services, one domestic and one fire protection, the
24 customer would not be stuck paying the higher monthly fee for a 1” meter.
25 The higher monthly fee for a 1” meter is applicable when the meter is

2 sized to provide a higher consistent demand for water, as opposed to a
3 rare, high demand resulting from a fire event. PEU believes it is fair and
4 appropriate to grandfather these existing customers, and to provide them
5 a rate that is more commensurate with the demand on PEU's system as
6 opposed to those customers who require a 1" meter for domestic or
7 commercial purposes only.

8 **Q. Do you have an opinion as to whether the proposed PEU Tariff**
9 **changes are in the public interest?**

10 **A.** Yes. I believe that the proposed PEU tariff changes provide a reasonable
11 approach to providing fire protection service to residential life safety
12 sprinkler systems and that the rates being proposed for grandfathered
13 customers are just and reasonable.

14 **Q. Does that complete your testimony?**

15 **A.** Yes.