

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

Pennichuck Water Works, Inc.

Petition for Wholesale Water Agreement

with the Merrimack Village District

DW 22- _____

Direct Testimony of Donald L. Ware

December 16, 2022

TABLE OF CONTENTS

1. Professional and Educational Background 3

2. Description of MVD’s Current Purchase of Water from PWV 4

3. Description of Emergency Usage by MVD 4

4. Description of Terms and Rates of Proposed Wholesale Contract..... 6

5. Policy Reasons Supporting a Special Contract..... 12

1 **1. Professional and Educational Background**

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

4 **A.** My name is Donald L. Ware. I am the Chief Operating Officer of the Pennichuck
5 Water Works, Inc. (“PWW” or “Company”). I have worked for PWW since
6 1995. I am a licensed professional engineer in New Hampshire, Massachusetts,
7 and Maine.

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

9 **A.** I have a bachelor’s in science degree in Civil Engineering from Bucknell
10 University in Lewisburg, Pennsylvania and I completed all the required courses,
11 with the exception of my thesis, for a master’s degree in civil engineering from
12 the same institution. I have a master’s in business administration from the
13 Whittemore Business School at the University of New Hampshire.

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

15 **A.** Prior to joining the Company, I served as the General Manager of the Augusta
16 Water District in Augusta, Maine from 1986 to 1995. I served as the District’s
17 engineer between 1982 and 1986. Prior to my engagement with the District, I
18 served as a design engineer for the State of Maine Department of Transportation
19 for six months and before that as a design engineer for Buchart-Horn Consulting
20 Engineers from 1979 to 1982.

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

22 **A.** As Chief Operating Officer, I am responsible for PWW’s overall operations,
23 including customer service, water supply, water supply and water sales contracts,
24 distribution and engineering. I work closely with PWW’s Chief Engineer and

1 other senior managers to help develop PWW’s Annual and Three-Year Capital
2 Improvement Plans.

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

4 A. The purpose of my testimony is to describe the Company’s willingness to:

5 (1) enter into a wholesale water contract (“Wholesale Contract”) with the
6 Merrimack Village District (“MVD”);

7 (2) summarize the terms and conditions of the proposed contract; and

8 (3) explain why the proposed contract is in the public interest and should
9 be approved.

10 **2. Description of MVD’s Current Purchase of Water from PWW**

11 **Q. Does MVD currently purchase water from PWW?**

12 A. Yes. MVD currently has a water main connection with PWW along Route 101A
13 in Merrimack, just south of the Merrimack Home Depot. For several years, MVD
14 has used water at this interconnection point on an “as needed” basis to supplement
15 their water supply when one or more of their wells are out of service or during
16 heavy periods of summer usage by MVD’s customers. At present MVD draws
17 between 0-.01 million gallons of water per day as needed, almost exclusively
18 during the summer months, and not for any extended period of time. As such,
19 under their current usage conditions, MVD has existed as a General Metered
20 customer of PWW.

21 **3. Description of Emergency Usage by MVD**

22 **Q. Didn’t the NHPUC approve an Emergency Special Contract between MVD
23 and PWW earlier in 2022, at rates other than those of a PWW G-M
24 customer?**

1 A. Yes. By Order No. 26,597 (March 25, 2022), the Commission approved the
2 Emergency Special Contract and rates through December 31, 2022.

3 **Q. Why doesn't PWW and MVD propose to extend the terms of the Emergency
4 Special Contract, rather than entering into a new Wholesale Contract?**

5 A. The Emergency Special Contract ("Emergency Contract") was unique and based
6 on short-term environmental conditions outside of the control of MVD. At the
7 time of the approval of the emergency contract, MVD did not envision purchasing
8 water from PWW, other than their sporadic historic patterns of usage, as noted on
9 page 4 of my testimony. And based upon this, going forward MVD felt it had
10 sufficient supply coming on line with their existing wells, once treatment that was
11 being developed and installed was completed, that it did not need water from
12 PWW other than for emergency purposes.

13 **Q. Do the rates under the Emergency Contract cover all of PWW's costs to
14 provide water under the new proposed usage?**

15 A. No. The rate that was offered in the Emergency Contract recovered PWW's
16 variable cost of water production only and did not include any contribution by
17 MVD toward PWW's general and administrative costs or towards the capital
18 invested by PWW to provide water to MVD on a long-term and significant and
19 constant basis. Continuing to charge MVD rates based on PWW's variable cost of
20 producing the water for MVD, as allowed for under the emergency contract,
21 would not be just and reasonable, as MVD would be getting water at rates, on an
22 on-going and long-term basis, that would be subsidized by PWW's General
23 Metered ("GM") customers.

24 **Q. Please explain why MVD's planned use of PWW's water for the next 3 to 6**

1 **years is different than its usage in the past?**

2 **A.** Please see MVD’s testimony which explains its reasoning for seeking to purchase
3 water from PWW on a continuum, throughout the year for the next three to six
4 years.

5 **4. Description of Terms and Rates of Proposed Wholesale Contract**

6 **Q. What is the basis for the proposed Wholesale Water Contract?**

7 **A.** The basic form and overall terms of the proposed Wholesale Contract, attached as
8 Attachment DLW-2, follows the same form as the existing Emergency Special
9 Contract, with the following specific economic considerations include in the
10 Wholesale Contract rates:

11 1. MVD will pay an annual fixed fee to provide for its share of the City Bond
12 Fixed Revenue Requirement, the 1.0 Debt Service Revenue Requirement
13 and the 0.1 Debt Service Revenue Requirement.

14 2. MVD will pay a Volumetric Charge that is based upon it paying for its
15 appropriate share of the variable cost to operate the Company’s: (1) raw
16 water facilities, (2) water treatment facilities, (3) distribution system
17 maintenance, and (4) administrative expenses.

18 3. MVD will pay a fixed monthly meter charge that reflects the cost of
19 operating and maintaining the water meter serving Merrimack.

20 4. MVD will purchase a minimum of 91.24 million gallons of water per year
21 which is equivalent to 121,992 hundred cubic feet (“CCF”) or 250,000
22 Gallons per Day (“GPD”).

23 5. MVD will limit their annual average daily usage to: (1) 250,000 GPD, (2)
24 their maximum daily usage to 500,000 GPD and (3) their peak hour usage

1 to 500,000 GPD.

2 **Q. Does the Company have sufficient supplies to provide this quantity of water**
3 **to MVD?**

4 **A.** Yes.

5 **Q. Was a Cost of Services used to determine the proposed rates in the proposed**
6 **Wholesale Contract?**

7 **A.** Yes. PWW had a Cost of Service Study (“COSS”) performed by Raftelis based
8 on the approved Revenue Requirements from the Company’s last rate case, DW
9 19-084. The COSS is included as Attachment DLW-1 to this testimony.

10 **Q. What are the proposed rates in the proposed Wholesale Water contract and**
11 **how do they compare to PWW’s current General Metered customer rates**
12 **(those approved in DW19-084 and currently charged to MVD outside of the**
13 **current emergency contract)?**

14 **A.** The Base Monthly Fixed Fee is proposed to be \$15,143.13 (\$181,718 per annum).
15 In comparison, as a GM customer, MVD does not pay a Base Monthly Fixed Fee.
16 The proposed MVD Volumetric Charge, derived from the Cost of Service Study
17 (COSS) referenced below, is \$0.9403 per CCF. The current Volumetric Charge,
18 as approved in DW 19-084 for a General Metered PWW customer is \$3.99 per
19 CCF (after annual adjustments associated with Municipal Fire protection and
20 exclusive of any approved QCPAC’s). The \$0.9403 per CCF is subject to the
21 additional impact of the surcharges from the 3.90% QCPAC granted in DW 20-
22 020, the 1.56 QCPAC granted in DW 21-023, and the 1.80% QCPAC granted in
23 DW 22-006. The QCPAC’s will not be recoupable as the existing MVD
24 Volumetric Charge is currently being charged the QCPAC. MVD is hopeful that

1 the proposed MVD Wholesale Contract Volumetric Charge will become effective
2 on or before June 1, 2023. MVD is very hopeful that the proposed Wholesale
3 Contract can be approved and effective no later than June 1, 2023, such that MVD
4 can meet the summer demands created by its customers, with the water and rates
5 from this Wholesale Contract included in their overall water supply capacity.

6 **Q. On what expenses are the rates calculated?**

7 **A.** The base Volumetric Charge and monthly meter rate proposed in this Wholesale
8 Contract are based on the expenses approved in the Company's last full rate case,
9 Docket No. DW19-084, which are subject to any QCPAC's or changes in
10 permanent rates, that become effective on or before the effective date of the
11 proposed Wholesale Contract.

12 **Q. What is the monthly meter charge in the proposed Wholesale Water**
13 **contract?**

14 **A.** There will be a monthly meter charge of \$78.33, which is reflective of the cost to
15 read and bill MVD monthly, in addition to the cost to test the 6" meter for
16 accuracy every year.

17 **Q. Will the Volumetric Charge ever change other than to reflect the QCPAC**
18 **adjustments?**

19 **A.** Yes, the Volumetric Charge will be adjusted by the same percentage and at the
20 same time as any future change in the Volumetric Charges for general metered
21 service, as adjudicated by the New Hampshire Public Utilities Commission
22 ("Commission"), inclusive of QCPAC's, which PWW charges to its core system
23 customers in the City of Nashua.

24 **Q. Please summarize the key provisions of the proposed Wholesale Water**

1 **Contract.**

2 A. The key provisions of the Wholesale Contract are as follows:

3 1. The proposed Wholesale Contract requires PWW to provide up to an average
4 annual flow of 250,000 GPD, a peak day flow of 500,000 GPD and a
5 maximum hourly flow rate of 500,000 GPD.

6 2. MVD will pay a monthly bill, in arrears, consisting of three parts,
7 (1) a monthly meter charge,
8 (2) a base monthly fixed charge, and
9 (3) a monthly Volumetric Charge, which will be based on the actual volume
10 of water used during the billing month.

11 3. MVD guarantees a minimum a daily base usage of 250,000 gallons per
12 day (equal to 334.2 CCF per day), during each contract year for the
13 duration of this contract, or a minimum annual purchase volume of
14 121,992 CCF. The contract year (“Contract Year”) shall begin on
15 September 1st of each year and end on August 31st of the following
16 calendar year. In the event that the daily usage of MVD is less than an
17 average of 334.2 CCF/day over any monthly billing period within any
18 contract year, MVD will pay the Volumetric Charge for 334.2
19 CCF/day for that month, and MVD will carryover a usage credit into
20 the next month in the amount of the difference between the 334.2
21 CCF/day paid for in the previous months bill and the actual CCF/day
22 usage in the months bill. Credits will carry over month-to-month
23 during each Contract Year. There will be no carryover of these
24 volumetric credits from contract year to Contract Year (i.e., from

1 August to September). If any carryover volumetric credits exist at the
2 end of August, then that credit will be zeroed out going into September
3 of the next Contract year.

4 4. MVD is required to complete upgrades to the SCADA and Station controls of
5 its existing booster station as part of the Wholesale Contract. The contractual
6 upgrade of SCADA controls will need to be completed within 9 months of the
7 Wholesale Contract being approved by the NHPUC.

8 5. MVD will pay for 100% of the costs associated with the design, and
9 installation of the SCADA and Station controls.

10 6. PWW will purchase and provide the six-inch turbine meter to be
11 installed in MVD Station.

12 7. MVD will pay 100% of the costs of the COSS which was required to
13 develop the proposed Wholesale Contract.

14 8. MVD will pay 100% of the legal costs associated with obtaining
15 regulatory approval of the Wholesale Contract.

16 **Q. Please explain how each of the charges comport with the recommendations of**
17 **the Cost of Service Study.**

18 A. The charges match those detailed in the COSS based on MVD's contractual rates
19 of 250,000 GPD Average Day, 500,000 GPD Maximum Day and 500,000 GPD
20 Maximum Hour. See Attachment DLW-1, "Allocation Factors" schedule.

21 The monthly meter charge provides PWW with the mechanism to collect the
22 customer related charges associated with monthly meter reading and billing as
23 well as annual testing of the meter.

24 The base monthly fixed charge ensures that MVD will pay its share of the

1 expenses associated with the water supply facilities that provide service to MVD,
2 as well as MVD's share of the CBFRR, regardless of its actual usage. This
3 charge is fixed for the length of the contract unless PWW is required to make an
4 investment in the water supply facilities specifically required to service MVD, in
5 which case a new COSS will be completed to determine the proper allocation of
6 PWW's expenses and return on the investment in its water supply facilities that
7 would be allocable to MVD, under this contract. The COSS set the base monthly
8 fixed charge at \$15,362.50 per month based on the allowed usage volumes
9 specified in the proposed Wholesale Contract. This rate will not change during
10 the duration of the Wholesale Contract unless PWW must make additional
11 investment in the water supply facilities that specifically service MVD and a new
12 COSS is completed which establishes the appropriate sharing of the new
13 investment, that is approved by the Commission. Finally, this rate is charged each
14 month regardless of whether MVD uses any water or not.

15 The MVD Volumetric Charge were determined in the COSS as the rate necessary
16 to pay for the variable costs associated with producing MVD's water, as well as,
17 providing a prorated contribution from MVD toward PWW's Administrative and
18 Management, Water supply and Distribution Administrative expenses. The
19 Volumetric Charge established for MVD by the COSS was \$0.9448 per CCF.

20 This rate is based on the DW 19-084 expenses and is to subject to the QCPAC's
21 granted in in DW 20-020 and DW 21-023 as well as the QCPAC being sought in
22 DW22-006.

23 The Annual Minimum Annual Usage charge provides rate stability in the event
24 MVD uses less water than the minimum amount.

1 **Q. What is the proposed term and effective date for the proposed Wholesale**
2 **Water Contract?**

3 A. The term of the proposed Wholesale Contract is up to six years, consisting of an
4 initial 3-year term followed by up to (3) one-year extensions. The three
5 successive extension terms renew automatically, as “evergreen” provisions in the
6 Wholesale Contract, unless MVD decides to terminate the contract at the end of
7 either: (1) the initial three-year term (“Initial Term”), or (2) the end of any of the
8 three 1-year renewal terms following its effective date. Although the Contract
9 year will run September to August, PWW and MVD wish to obtain NHPUC
10 approval on or before June 1, 2023. The months June through August will be
11 referred to as a Stub Year. In order to terminate at one of these specified
12 termination dates, MVD must provide written notice to PWW at least 6 months
13 prior to the date on which the Initial Term or Renewal Term expires.

14 **5. Policy Reasons Supporting a Special Contract**

15 **Q. Why should MVD have a special contract? Please explain how MVD is**
16 **different from PWW’s General Metered customers.**

17 A. Under the terms of the proposed Wholesale Contract, MVD will be PWW’s 6th
18 largest customer, in terms of demand. It should be noted that PWW’s five largest
19 current volumetric users: A-B, the Town of Hudson, the Town of Tyngsboro,
20 Pennichuck East Utility and Milford all have special contracts with PWW. MVD
21 will also be a large customer. Additionally, MVD has:

- 22 1. Its own water storage facilities, which results in MVD’s usage being
23 steady and consistent, without troublesome hourly or daily peaks
24 during seasonal peaking periods (which are inefficient in the overall

1 delivery of water by PWW into its distribution system).

- 2 2. MVD paid for the entire cost of constructing the existing Route 101A
3 interconnection between MVD and PWW.
- 4 3. MVD has six large wells capable of providing 100% of MVD's
5 essential water supply.
- 6 4. The rates proposed in the Wholesale Contract were arrived at using a
7 cost of service approach which is appropriate under the circumstances
8 because it is more reflective of the actual cost to serve MVD based
9 upon the facts detailed above, as opposed to the tariffed rate that
10 would otherwise apply, absent a wholesale water contract.
- 11 5. PWW currently provides MVD with a second source of water supply
12 in the event that one or more of MVD's wells are not operational, or
13 have become contaminated. The existing interconnection provided
14 about 50% of MVD's water over the past year while MVD completed
15 the installation of water treatment facilities to remove Perfluorinated
16 compounds from its well water.
- 17 6. The variable cost of producing a CCF of water through the Nashua
18 Water Treatment plant, Year-to-Date in 2022 is about \$0.66 per CCF
19 (based on a complete carbon change out every three years, plus all
20 chemicals and electricity for 100% of water being pumped from the
21 Merrimack River) versus the proposed MVD's Volumetric Charge of
22 \$0.9448 per CCF, which if subjected to the proposed 13.5% increase
23 in rates being sought by PWW in DW 22-032 would be \$1.0723 per
24 CCF. The proposed MVD Volumetric Charge, in conjunction with the

1 guaranteed minimum annual volume purchase amount, ensures that
2 MVD pays a ratable share of PWV's administrative and general
3 expenses, Water supply and Distribution administrative expenses per
4 the COSS.

5 See also, the Statement of Special Circumstances attached to this testimony as
6 Attachment DLW-3.

7 **Q. What is the economic benefit of the proposed Wholesale Water Contract to**
8 **MVD?**

9 A. If MVD were to be billed as a G-M customer it would be billed a monthly meter
10 charge for one 6" water meter at a rate of \$1,091.40 per month, and a Volumetric
11 Charge of \$3.99 per CCF (based on the permanent rates established in DW 19-
12 084, inclusive of the 11/23/2022 annual adjustment from that docket, based on the
13 shift in revenue requirement from G-M customer to Municipal Fire customers)
14 which would result in annual bill to MVD of \$499,857, based on MVD
15 purchasing 121,992 CCF of water (250,000 GPD). Under the provisions of the
16 proposed Wholesale Contract MVD's annual bill would be \$300,548.

17 **Q. Please explain which party, MVD or PWV, are responsible for payment of**
18 **costs associated with this Wholesale Water Contract?**

19 A. MVD will pay for 100% of the cost to design and construct the required
20 improvements to its existing Route 101A Booster Station. MVD continue to own,
21 maintain and operate the Route 101A booster station.

22 PWV will purchase, provide, and maintain a 6" turbine meter to MVD to
23 measure the flow of water from PWV to MVD through MVD's existing Route
24 101A booster station. This meter will be the property of PWV and PWV will be

1 responsible for reading the meter and testing its accuracy on an annual basis.
2 MVD will pay PWW for 100% of the cost to complete COSS required to develop
3 the various Wholesale Contract charges from PWW to MVD.
4 MVD will pay PWW for 100% of the legal costs associated with obtaining the
5 regulatory approval required for PWW to serve MVD via a Wholesale Contract.

6 **Q. What is the benefit of the proposed Wholesale Water Contract to the
7 Company and its customers?**

8 **A.** Long term contracts such as what is proposed benefit the Company and its
9 customers because guaranteed revenues are secured over a term of years. These
10 guaranteed revenues help stabilize cash flow. As I stated earlier, usage of water
11 by MVD will not affect peak demand because MVD has its own storage. MVD
12 already has an interconnection point so no construction is necessary to provide the
13 water under the proposed Wholesale Contract. For these reasons, the proposed
14 Wholesale Contract has benefits to MVD, the Company, and customers.

15 **Q. Do you have a sense of whether MVD will need a special contract after the 3-
16 year Initial Term and three 1-year Renewal Terms?**

17 **A.** No. I would defer to the testimony of MVD.

18 **Q. Do you have anything else you would like to add?**

19 **A.** Yes. PWW believes that the proposed Wholesale Contract is just and reasonable
20 for both MVD's and PWW's customers. The proposed Wholesale Contract
21 results in MVD paying its fair share of PWW's costs to serve them based upon
22 the usage constraints defined in this contract. MVD is in need of additional source
23 of supply, to fully meet its base and seasonal water usage demands going forward,
24 while it continues to investigate options for that supply, including consideration of

1 a longer-term Wholesale Contract with PWW. MVD has committed to
2 purchasing a minimum fixed amount of water each year while limiting its
3 demands on the PWW system by reducing its peak day and peak hour flow
4 requirements. MVD as a customer, with a guaranteed minimum annual purchase
5 amount of 250,000 GPD, for the next 3 to 6 years provides PWW and its
6 customers a guaranteed contribution to the fixed expenses associated with its
7 water supply facilities as well as a contribution to PWW's general, administrative,
8 water supply and distribution expense that will not change regardless of whether
9 MVD take no water, or 250,000 GPD. The annual minimum usage requirement
10 ensures that MVD will pay its fair share of PWW's administrative and general
11 expenses, WTP administrative and Distribution administrative expenses for the
12 duration of the Contract. In summation, PWW believes that the proposed
13 Wholesale Contract with MVD is just and reasonable and is consistent with the
14 public interest.

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

16 A. Yes.