STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION

Pennichuck Water Works, Inc.
Petition for Special Contract
Wholesale Service to the Tyngsborough Water District

DW 15-____

Direct Testimony of Donald L. Ware

May 1, 2015

Professional and Educational Background

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

A. My name is Donald L. Ware. I am the Chief Operating Officer of Pennichuck Water Works, Inc. (the "Company"). I have worked for the Company since 1995.

Q. Please describe your educational background.

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

Q. Please describe your professional background.

A. Prior to joining Pennichuck, I served as the General Manager of the Augusta Water District in Augusta, Maine from 1986 to 1995. I served as the District's engineer between 1982 and 1986.

Q. What are your responsibilities as President of the Company?

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

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to describe why the Company is seeking approval from the New Hampshire Public Utilities Commission (NHPUC) to enter into a special contract to provide wholesale water service to the Tyngsborough Water District (TWD). I will describe the special

circumstances that detail why the Company selling water to TWD at a wholesale rate lower than its general tariffed rates is just and consistent with the public interest.

Q. Please describe the background of PWW's water service relationship with TWD.

A. TWD approached PWW in late 1998 seeking to purchase water from PWW, which led to NHPUC Docket No. DE 98-191. Order No. 22,212 (April 13, 1999) enabled PWW to acquire ownership of the New Hampshire portion of a 10" water main surrounding the Pheasant Lane Mall ("PLM"), which was owned by PLM. Previously, PWW delivered water to PLM through a 6" meter located in a meter pit along Dan Chen Lane in Nashua. PLM distributed the water through the 10" main to its tenant stores, which are located entirely in Nashua. In addition, PLW provided water to a restaurant outbuilding, separate from the main mall, located in Tyngsborough, Massachusetts. A map detailing the PLM site, water main, and the relative locations of the main PLM building, the outbuildings, the water mains providing service to the PLM property, and the New Hampshire/Massachusetts State line is attached as Exhibit 1. At the time of the filing in Docket No. DE 98-191, TWD had been approached by PLM about providing water service to a second restaurant outbuilding located on the PLM property in Tyngsborough, but not interconnected to TWD's main system. In discussions among PWW, TWD and PLM, it was decided that the appropriate way to serve the proposed restaurant was for PWW to take over ownership of the PLM water mains

in Nashua and for TWD to take over ownership of the PLM water mains in Tynsgborough, and for PWW to deliver water to TWD, which would serve the two restaurants located in Tyngsborough. Order No. 23,212 facilitated the transfer of the PLM water main to PWW and TWD, allowing PWW to sell water to TWD. The Water Supply Agreement submitted in Docket No. DE 98-191 provided for sales to TWD under PWW's retail tariff.

Q. What is the nature of PWW's current service to TWD?

A. Between 1999 and 2006, TWD purchased water from PWW to provide water service to the two restaurant outbuildings located on PLM property in Massachusetts. In 2006, TWD interconnected its main water distribution system with its water system on the PLM property. The interconnection accomplished the following:

1. TWD reduced its purchased water costs from PWW's tariff rate by buying water from the City of Lowell to serve its customers on the PLM property. The purchased water savings helped pay for the interconnection.
2. The interconnection provided TWD with two sources of water supply to its main distribution system, one from the City of Lowell and one from PWW, instead of just a single source of supply from the City of Lowell. In order to accomplish the interconnection, TWD constructed a booster station to lift the water from PWW's hydraulic grade line to match TWD's main system hydraulic grade line. A PWW meter was placed in the booster station.

Since 1999, PWW has been selling water to TWD under tariffed rates. At present, TWD pays a monthly meter charge of $903.02 for a 6" meter and a volumetric rate of $3.30 per 100 cubic feet ("CCF") of water. An 8-year history of TWD's purchased water from PWW and the City of Lowell is attached as Exhibit 2 to this testimony, which shows that TWD has bought the majority of its water supply from the City of Lowell.

Q. How do the City of Lowell's rates compare to PWW's tariff rate?

A. The City of Lowell currently sells its water to TWD at a volumetric rate of $2.547 per CCF, which is about 23% less than PWW's current volumetric rate of $3.30 per CCF.

Q. What caused TWD and PWW to reconsider the existing agreement and seek approval of a special contract at this time?

A. In the summer of 2014, a flange on the 6" water meter in the TWD booster station cracked. The crack was welded to allow continued use of the meter until it could be replaced. The excess cost to replace the meter (the difference between a meter adequate to meet TWD's base needs versus a meter large enough to provide fire protection to TWD from PWW), in accordance with the existing PWW-TWD Water Supply Agreement was estimated to be more than $8,500. The additional cost to replace the meter caused TWD to ask if there was any way to get a better water rate from PWW. PWW responded that a special contract rate would require:

1. A cost of service study ("COSS") to determine what PWW could charge. The COSS would be submitted to the NHPUC and any special contract would need to be approved by the NHPUC.

2. A special contract would require TWD to commit to purchasing a specified amount of water and to limit its peak demands if pricing was to be different from the existing retail rate.

Based on a review of the PWW-Hudson Water wholesale water contract, the pricing associated with that contract, and the relative locations and assets used to provide service to Hudson and TWD, it appeared that a COSS might produce a rate favorable to PWW and TWD. Consequently, TWD requested that PWW complete a COSS (at TWD's expense) to determine what pricing PWW could offer if TWD committed to purchase a minimum annual amount of water.

Q. Did PWW have a COSS completed?

A. Yes. Chris Woodcock of Woodcock and Associates completed a COSS in late 2014 for PWW. A copy of the COSS is attached along with testimony from Mr. Woodcock describing the process followed in performing the COSS. The COSS indicated that PWW could offer TWD a special contract that would recover the costs of serving TWD, while also providing a contribution to PWW's fixed costs well in excess of the current retail water purchase agreement. Attached as Exhibit 3 is a spreadsheet detailing current revenues and costs associated with selling water to TWD. It compares current PWW retail rates to projected revenues and costs associated with PWW selling water to TWD through a special contract based on the COSS results. The COSS recommends a special contract rate of $2.094 per CCF provided TWD purchases a minimum of 250,000 gallons of water per day during a calendar year.

Q. Please describe the key provisions of the proposed PWW-TWD Wholesale Water Supply contract.

A. The key provisions of the proposed Wholesale Water Supply Contract are as follows:

1. TWD will make an upfront payment (adjustable to the final actual costs) in the amount of $30,000 to cover the following costs incurred by PWW associated with the development and approval of this special contract:

   (i) the cost of the Company completing the Cost of Service Study required for this Agreement, estimated at $7,500;

   (ii) the legal cost to file the Wholesale Water Supply Contract petition with the NHPUC, estimated at $7,500; and

   (iii) the cost to replace the existing 6" Fireline Meter with a new 6" Fireline Meter, estimated at $15,000.

2. TWD will pay a Base Monthly Fixed Fee ("BMFF") of $21,287.60, which reflects a minimum daily purchase of 250,000 gallons of water per day from PWW over the course of a calendar year, even if TWD uses less than an average of 250,000 gallons per day.
3. TWD will pay a volumetric rate of $2.094 per 100 CCF of water used in excess of 250,000 gallons per day.
4. TWD will pay a fixed monthly meter charge of $38.75 to cover the cost of reading the meter, processing the bill and testing the meter on an annual basis.
5. The TWD Volumetric Rate and BMFF will be adjusted by the same percentage and at the same time as any future change in the

volumetric rates for general metered service, as adjudicated by the NHPUC, which the Company charges to its core system customers in the City of Nashua.

6. TWD will limit its peak day demand to 400,000 gallons per day and its peak hourly demand to 400 gallons per minute (576,000 gallons per day).

Q. Please explain how the terms of the proposed PWW-TWD wholesale water contract charges comport with the recommendations of the Cost of Service Study.

A. The BFMM and volumetric charges match those in the COSS based on the TWD's Contractual usage rates of 0.25 MGD Average Day, 0.40 MGD Maximum Day, and 0.576 MGD Maximum Hour.

The monthly meter charge provides PWW with the vehicle to collect the customer related charges associated with the meter charge that are not collected elsewhere in the TWD charges.

The monthly fixed charge insures that that TWD will pay its share of the expenses associated with the water supply facilities that provide service to TWD as well as recovering the variable costs (power, chemicals, sludge disposal, etc.) associated with producing 250,000 gallons of water per day and, additionally, to provide a prorated contribution from TWD toward PWW's Administrative and Management costs.

Q. Please explain the circumstances that justify departing from the Company's tariff and approving a special contract for TWD.

A. First, TWD is one of three wholesale customers of PWW. The other two,

the Towns of Hudson and Milford, are served under special contracts.

Second, TWD will be PWW's third largest user at a guaranteed purchased water amount of 250,000 gallons per day or a minimum of 91,250,000 gallons per year. PWW's largest user, Anheuser-Busch, used 228,131,000 gallons in 2014. PWW's second largest user, the Town of Hudson, used 113,995,200 gallons in 2014. Both Anheuser-Busch and the Town of Hudson are served under special contracts.

Third, TWD can purchase water from another supplier, the City of Lowell. Without the special contract pricing, TWD will continue to purchase water from the City of Lowell, resulting in PWW losing about $177,000 contribution towards PWW's fixed costs and overhead it would not otherwise get.

Fourth, TWD has its own storage so it does not have the high peaking factor on its usage that most customers have. Hence, it does not need to receive water to meet instantaneous demands.

Fifth, the proposed pricing was arrived at using a cost of service approach and better reflects the cost to serve TWD than the tariffed rate.

Q. What is the economic advantage of the proposed wholesale water Contract to TWD?

A. If TWD purchased 250,000 gallons of water per day through its 6" meter at PWW's existing retail rate, it would pay an annual fee of $413,410 based on a volumetric charge of $3.30 per CCF and a monthly meter charge for a 6" water meter at a rate of $903.02 per month. If TWD continued to buy that 250,000 gallons per day from the City of Lowell, its annual cost would

be $310,714 per year, or $102,696 less per year than PWW's retail rate. If the proposed TWD wholesale water agreement is approved, TWD would be able to purchase that same 250,000 gallons per day from PWW for $255,916 per year, or a savings of $54,798 per year over the current purchase water cost from the City of Lowell.

Q. Does PWW have the capacity to serve the requested TWD wholesale water delivery requirements?

A. Yes. The most critical link of the distribution system between PWW and TWD, the Armory Booster Station, has 60% additional capacity above existing demand and the demand that will be placed on it with the addition of the TWD wholesale water purchase. The Armory Booster Station has a peak day capacity of 1 MGD (with the largest pump out of service) and almost 1.6 MGD versus the peak day flow through the station of 0.412 MGD.

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

A. Yes. PWW believes that the proposed PWW-TWD wholesale water contract is just and reasonable for both TWD and all of PWW's customers. The proposed wholesale contract results in TWD committing to purchase a minimum of 250,000 gallons of water per day from PWW. This commitment provides benefit to TWD's rate payers whose purchased water costs will be reduced by almost $55,000 per year, while providing a contribution to PWW's fixed costs of almost $177,000 that it would otherwise need to collect from all of PWW's customers.

It should also be noted that the proposed form of the wholesale water

agreement is similar to PWW's wholesale agreements with the Towns of Hudson and Milford. In all three cases, there are sources of supply other than PWW. In all three cases, there is a base fee that is substantially greater than PWW's tariffed monthly meter charge. In all three cases, the special contracts set limits on the maximum amount of usage on a daily and peak hour basis, which can only be accomplished because all three communities have their own storage water facilities.

Q. Does that complete your testimony?

A. Yes.