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HPUC 10 JUL '15 PM 12:47

July 10, 2015

Debra A. Howland
Executive Director
New Hampshire Public Utilities Commission
21 S. Fruit St., Suite 10
Concord, NH 03301

Re: DW 15-133, Pennichuck Water Works, Inc.
Petition for Approval of Special Contract
Wholesale Service to Tyngsborough Water District
Staff Recommendation to Approve

Dear Ms. Howland:

On May 1, 2015, Pennichuck Water Works, Inc. (PWW) filed for approval of a special contract with the Tyngsborough (Massachusetts) Water District (TWD or District). Along with the contract, PWW filed a petition that summarizes the company's request; the testimony of Donald L. Ware, Chief Operating Office of PWW; the testimony of Christopher P.N. Woodcock, a cost of service consultant; and a statement of special circumstances as required by Puc 1606.02(b). On May 14, 2015, the Office of the Consumer Advocate (OCA) filed a letter with the Commission, indicating it intended to participate in the review of this filing. After review, Staff and OCA recommend approval.

At the present time PWW is providing water service to TWD at retail rates according to Schedule G-M of its current tariff. In Docket No. DE 98-191, PWW acquired certain property interests at the Pheasant Lane Mall (PLM) in Nashua, which is located in both Nashua and Tyngsborough. PWW acquired PLM's water mains located in Nashua, while TWD acquired PLM's mains in Tyngsborough. PWW continued to sell water to TWD pursuant to a water supply agreement that was also filed in that docket. Subsequently, TWD interconnected its main water distribution system with its water system on the PLM property. This served to help TWD reduce the water it was purchasing from PWW at retail rates by buying water from the City of Lowell, as well as establish a second source of supply.

Recently TWD approached PWW and inquired about a different arrangement for procuring water. This inquiry was initiated after the need to replace the 6-inch meter in TWD's booster station became apparent, and at a significant cost. PWW indicated that a cost of service analysis would need to be performed to determine if water could be sold by PWW to TWD at a rate which would be beneficial to both parties. In addition, PWW indicated that a special contract would require TWD to commit to the purchase of a specified amount of water, and that TWD would need to limit its peak demands if pricing

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was to be different from retail rates. At TWD's request, PWW engaged the services of Mr. Woodcock to conduct a cost of service study. Mr. Woodcock's cost of service analysis is included with his testimony. Mr. Woodcock's study indicates that PWW can offer TWD a special contract that would fully recover the costs of serving TWD, while also providing a contribution to PWW's fixed costs well in excess of the amount paid under the current retail water agreement. The cost of service study recommends a rate of \$2.094 per hundred cubic feet (CCF) provided TWD purchases a minimum of 250,000 gallons of water per day during a calendar year. On April 24, 2015, PWW and TWD executed a Wholesale Water Supply Contract (the Special Contract) incorporating the recommendations of the cost of service study, to be effective upon approval by this Commission.

Other significant provisions of the Special Contract include the payment of a Base Monthly Fixed Fee (BMFF) of \$21,287.60, which reflects a minimum daily purchase of 250,000 gallons over the course of a calendar year, even if TWD takes less than an average of 250,000 gallons per day. TWD agrees to make an upfront payment of \$30,000, to be adjusted to final costs, to cover the cost of the cost of service study, the legal and regulatory costs, and the replacement of the existing 6-inch meter. TWD will pay a fixed monthly meter charge of \$38.75 to cover meter reading, annual meter testing, and bill processing. TWD's volumetric 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 to core system customers in the City of Nashua, as may be approved by the Commission. TWD agrees to limit its peak day demand to 400,000 gallons, and to limit its peak hourly demand to 400 gallons per minute (576,000 gallons per day). Finally, the Special Contract has an initial term of three years, and provides for two automatic renewal terms of three years each in the absence of six months advance notice by TWD to PWW.

PWW estimated that it will receive \$255,916 in annual revenues from this Special Contract, as illustrated on exhibit 3 to Mr. Ware's testimony. With expenses to serve TWD estimated at \$63,733, PWW anticipates it will receive a net annual contribution to its existing operations of \$192,183. This is an increase of \$176,680 over the net revenues the company receives now under its current arrangement with TWD.

Staff and OCA conducted discovery on PWW's filing and met with the company in a technical session. Responses to the discovery requests are attached to this letter. An error was discovered in the calculation of total inch-feet with respect to PWW's 16-inch water mains. Correction of this error sets the volumetric rate at \$2.101 per CCF. As a result of this slight increase in the volumetric rate, revenues would increase by about \$854 annually to \$256,305.

Both Staff and OCA recommend approval of the Special Contract. PWW has demonstrated that special circumstances exist, pursuant to RSA 378:18, which render a departure from PWW's existing tariff rates to be just, reasonable, and consistent with the public interest. The Special Contract requires TWD to purchase at least 250,000 gallons per day, providing a guarantee with respect to the associated revenues. PWW is not required to make any capital improvements in order to undertake its contractual obligations under this Special Contract. Further, because TWD has its own storage capability, PWW is protected from high peaking factors since TWD will not need to receive water to meet instantaneous

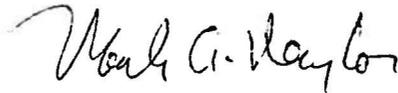
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demands. If TWD wishes in the future to increase the maximum quantity of water it is permitted to purchase under the Special Contract, it shall provide written notice to PWW, at least one year in advance of the time it desires to begin increased purchases. This time period will permit PWW to evaluate the capacity of its facilities to produce water to meet such increased demand.

In summary, for the reasons detailed above, Staff and the OCA recommend the Commission approve this Special Contract between TWD and PWW as proposed, with the slight change in the volumetric rate as previously described.

If there are any questions regarding this recommendation, please let me know.

Sincerely,



Mark A. Naylor
Director, Gas & Water Division

Attachments
Cc: service list

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Pennichuck Water Works, Inc.
Petition for Approval of Special Contract with Tyngsborough Water District
Staff Data Requests to PWW – Set 1

Date Request Received: 05/28/15

Date of Response: 06/01/15

Request No. Staff 1-1

Witness: Donald L. Ware

REQUEST:

Please provide the electronic version of Mr. Woodcock's schedules (CW Schedule 1 through CW Schedule 6) which accompany his direct testimony.

RESPONSE:

See the attached file which consists of Mr. Woodcock's electronic version of the schedules (CW Schedule 1 through CW Schedule 6) which accompanied his direct testimony.

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OCA Set 1 to Pennichuck Water Works, Inc.

Date Request Received: 06/02/15

Date of Response: 06/9/15

Request No. OCA 1-1

Witness: Donald L. Ware

REQUEST:

Reference: Ware testimony, page 3, un-numbered line 13. The sentence beginning on this line contains a typographical error, referring to "PLW". Please state whether this should be a reference to PLM or PWW.

RESPONSE: The correct reference is to PLM.

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OCA Set 1 to Pennichuck Water Works, Inc.

Date Request Received: 06/02/15

Date of Response: 06/9/15

Request No. OCA 1-2

Witness: Donald L. Ware

REQUEST:

Reference: Ware testimony, pages 7-8, item number 5. The testimony states that the BMFF will be adjusted by the same percentage as future changes in "volumetric general metered service rates". The proposed Wholesale Water Supply Contract, pages 4-5, section 6(b), states that the BMFF will be adjusted by the same percentage as future changes "in the rates paid by residential customers in Nashua." Please indicate which of these statements is accurate.

RESPONSE: The statement regarding the adjustment of the BMFF in the Wholesale Water Supply Contract is more accurate.

Pennichuck Water Works, Inc.

DW 15-133

OCA Set 1 to Pennichuck Water Works, Inc.

Date Request Received: 06/02/15

Date of Response: 06/9/15

Request No. OCA 1-3

Witness: Donald L. Ware

REQUEST:

Reference: Ware testimony, page 9, paragraph that begins with "Fourth." Please reconcile the statement in this paragraph with the provision in the proposed Wholesale Water Supply Contract, page 3, section 4, that exempts water for "non-training firefighting purposes and other declared emergencies" from counting toward the maximum day and peak hour limitations in the contract.

RESPONSE: During a non-training firefighting event, it is possible that the TWD booster pump could reach a maximum flow rate of about 500 gpm, depending on the location of the fire event in relation to the TWD storage tank and the TWD booster station, thus exceeding the contractual peak hour rate of 400 gpm. Normal peak hour flow rates are limited to between 380 and 400 gpm based on the TWD booster pump size and TWD distribution system hydraulics.

Pennichuck Water Works, Inc.

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OCA Set 1 to Pennichuck Water Works, Inc.

Date Request Received: 06/02/15

Date of Response: 06/9/15

Request No. OCA 1-4

Witness: Donald L. Ware

REQUEST:

Reference: proposed Wholesale Water Supply Contract, page 3, section 4. Concerning this provision:

- a. How will PWW determine if maximum day or peak hour demands were exceeded as a result of an emergency, rather than as a result of other factors.
- b. If there a penalty, fee, or change in rates if the maximum day or peak hour demands are exceeded? If so, what is the penalty, fee, or change in rates and where is that provision in the proposed contract?
- c. If maximum day or peak hour demands are exceeded because of an emergency, will TWD pay the contract rate for all water used as a result of that emergency? If not, please explain how the amount of water used for the emergency would be determined and provide a reference to the relevant provision in the proposed contract.
- d. Will PWW's meter for TWD, or other facilities, be capable of measuring and recording maximum day and peak hour usage? If not, then how will PWW enforce this provision?
- e. What is the maximum rate of flow that can be safely accommodated from PWW to TWD through the facilities PWW intends to have in place on the effective date of the contract? Will this rate of flow be physically restricted to 400 gallons per minute? If not, why not?

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OCA Set 1 to Pennichuck Water Works, Inc.

Date Request Received: 06/02/15

Date of Response: 06/9/15

Request No. OCA 1-4

Witness: Donald L. Ware

RESPONSE:

- a. The peak hour demand of 400 gpm can only be exceeded if there is a fire, hydrant flushing, or leak that is large enough to reduce the system head that the TWD pump is working against. These events would be considered emergency events.

Regarding maximum day flows, the TWD booster station will be controlled through the Supervisory, Control and Data Acquisition (SCADA) system to shut the booster station off when flows out of the station during any day reach 400,000 gallons, unless the TWD storage tank reaches a critical low operating level. The pump size and SCADA controls limit exceedances of the contract limits to emergency conditions only.

- b. There is no penalty proposed for TWD exceeding the peak hour or maximum day demands.
- c. TWD will pay the contract rate for all water purchased.
- d. The meter is capable of measuring and recording maximum day and peak hour usage.
- e. PWW can deliver in excess of 1000 gpm to TWD without impacting the pressure to PWW's customers. The flow rate through the TWD booster station is limited to the capacity of the booster pumps in the booster station. Under normal operating conditions, the flow rate of a booster pump is between 380 and 400 gpm. Because only one booster pump can run at a time, the flow out of the station is effectively limited to 380 to 400 gpm.

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OCA Set 1 to Pennichuck Water Works, Inc.

Date Request Received: 06/02/15

Date of Response: 06/9/15

Request No. OCA 1-5

Witness: Donald L. Ware

REQUEST:

Reference: Ware testimony, Exhibit 3. Please provide a work paper showing the calculation of \$0.52 as the variable cost to produce and deliver a CCF of water to TWD.

RESPONSE: Attached is a spreadsheet prepared by PWV's water supply manager detailing the variable cost to produce water and deliver a CCF of water to TWD, including the electrical costs associated with the Armory Booster Station. The \$0.52 per CCF was a data entry error. Revised Exhibit 3 reflects \$0.42 per CCF as the variable cost to produce water

**Tyngsborough Water District (TWD)
Wholesale Water Agreement Analysis
Exhibit 3
Revised 5/3/2015**

	<u>Current TWD</u>		<u>Proposed TWD</u>	
	Retail		Wholesale	
Type of Customer -				
Annual Usage (CCF) -	1730		121,992	
Monthly Meter Charge ^{1,2} - \$	903.02	\$	38.75	
Volumetric Charge per CCF ³ - \$	3.32	\$	2.094	
Projected Annual Revenue - \$	16,579.84	\$	255,916.20	
Estimated expenses ⁴ - \$	901.60	\$	51,411.63	
Annual Contribution to PWW operations - \$	15,678.24	\$	204,504.57	
Net Benefit to PWW of TWD becoming wholesale customer - \$	188,826.33			

Data:

Minimum Daily Usage - Wholesale -	250,000	gallons per day
PWW investment in Cost of Service Study - \$	7,500	
PWW investment in NHPUC approval - \$	7,500	
PWW investment in new meter - \$	<u>15,000</u>	
Total PWW investment in TWD wholesale - \$	30,000	To be paid up front by TWD
Variable Cost for WTP to produce a CCF of water ⁵ - \$	0.42	

Notes:

1. Retail charges are based on current tariff charges and 2014 usage
2. Monthly Meter charge for Wholesale reflects the expenses associated with reading the meter and producing the bills.
3. Volumetric Charge reflects current retail rate and COSS recommended wholesale rate
4. Estimated expenses reflect the variable cost to produce the water used by TWD.
5. Includes cost of chemicals and power to treat and deliver the water to the south end of Nashua

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OCA Set 1 to Pennichuck Water Works, Inc.

Date Request Received: 06/02/15

Date of Response: 06/9/15

Request No. OCA 1-6

Witness: Christopher Woodcock

REQUEST:

Reference: Woodcock testimony, page 5, lines 18-21. Please provide the analysis of transmission and distribution pipe described by the witness.

RESPONSE:

Please see the spreadsheet "Total Pipe 2013 PWW Page 89.xls" attached to OCA Data Request 1-7.

Pennichuck Water Works, Inc.

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OCA Set 1 to Pennichuck Water Works, Inc.

Date Request Received: 06/02/15

Date of Response: 06/9/15

Request No. OCA 1-7

Witness: Christopher Woodcock

REQUEST:

Please provide complete electronic copies with all formulas, references, and links intact of the following files that are linked into the file provided in response to Staff data request set 1:

- a. Amory Station Flow 2011-2014.xls
- b. Armory Booster Cost.xls
- c. Copy of DW 10-091 -- Attachment A -- Revenue Requirement Schedules -- Settlement.xlsx
- d. Core assets -structures elec pumping and tanks only (for Tyngsboro coss) thru 9-30-14 (excel).xlsx
- e. Total Pipe 2013 PWW Page 89.xls

RESPONSE:

The requested spreadsheet files are attached.

Pennichuck Water Works, Inc.
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OCA Set 1 to Pennichuck Water Works, Inc.

Date Request Received: 06/02/15

Date of Response: 06/9/15

Request No. OCA 1-8

Witness: Christopher Woodcock

REQUEST:

Reference: electronic copy of Woodcock exhibit CW, Sch. 2 Pro Forma RR tab, cell W16 (and note on cell W5). Please explain the meaning of this number and provide the source document and any workpapers associated with the calculation of this number.

RESPONSE:

This is the amount of Fuel or Power Purchased for pumping at the Water Treatment Plant from the February 2011 Study that was presented to the Commission by PWW. See Schedule 13 page 2 (37th page of the pdf file)

This number is the cost of fuel/power at the treatment facility. We broke this cost out so that only the power costs associated with the Treatment Facility and Armory pumping station (\$6300) are included in the costs allocable to Tyngsborough. Other pumping facilities are not used by Tyngsborough, so we eliminated those costs from the total pumping costs to derive amounts attributable to Tyngsborough.

R Pennichuck Water Works, Inc.

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OCA Set 1 to Pennichuck Water Works, Inc.

Date Request Received: 06/02/15

Date of Response: 06/9/15

Request No. OCA 1-9

Witness: Christopher Woodcock

REQUEST:

Reference: Woodcock testimony, Exhibit CW Sch. 1, page 3. The schedule shows \$10,518 in Customer Advances for Construction allocable (in part) to Tyngsborough. Please explain when and why Tyngsborough provided any advances to PWW. If Tyngsborough did not actually provide such an advance (that is, if the amount is the result of an allocation formula), please explain why it is reasonable to allocate a portion of such advances to Tyngsborough.

RESPONSE:

As noted in my testimony, we used the Company's most recent rate filing with the PUC (DW 10-091) as the basis for this filing. Transmission and Distribution costs were allocated to Tyngsborough based on pipe that provides service to Tyngsborough (see response to OCA Data Request #7 – spreadsheet "Total Pipe 2013 PWW Page 89.xls"). For this pipe, it is unknown what amounts, if any, were Customer Advances for Construction. Some of the pipe *may* have been advanced by others. Because we did not know if any was advanced, we continued to allocate a small portion of this line item to Tyngsborough.

Pennichuck Water Works, Inc.

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OCA Set 1 to Pennichuck Water Works, Inc.

Date Request Received: 06/02/15

Date of Response: 06/9/15

Request No. OCA 1-10

Witness: Christopher Woodcock

REQUEST:

Reference: Woodcock testimony, Exhibit CW Sch. 5, page 1.

- a. Please state the time period from which annual consumption was measured for General Water customers.
- b. Does the consumption (column 1) for the other contract customers represent actual annual consumption during a specific time period, or does it represent a contract minimum average day consumption? If the former, please state the specific time period and provide the contract minimum average day consumption.
- c. Why is the annual consumption for Tyngsborough the contract minimum average day consumption rather than the actual total consumption for Tyngsborough during the same time period for which other consumption data are shown?
- d. Are the Maximum Day and Maximum hour amounts for the other contract customers taken directly from PWW's contracts with those customers, or were some calculations or measurements used to develop those numbers? If the latter, please provide all calculations and measurements used to develop those numbers.

RESPONSE:

- a. With the exception of the amounts for Tyngsborough, these are the same amounts from the submission in DW 10-091 (see Schedule 7, page 1 of 2 attached to OCA 1-8). The report indicates that it is an update of an April 2010 report. The consumption data would thus be from a period in that time frame.
- b. The consumption values are the actual values.
- c. Tyngsborough was not purchasing water from PWW during the time period of the other consumption values. Because the contract calls for Tyngsborough to pay for the minimum amount (section 6 (b)), this was the value that was selected.
- d. The Maximum Day and Maximum Hour values are based on the contractual amounts from each contract and are the same as those used in DW 10-091.

SERVICE LIST - EMAIL ADDRESSES - DOCKET RELATED

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

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Docket #: 15-133-1 Printed: July 10, 2015

FILING INSTRUCTIONS:

a) Pursuant to N.H. Admin Rule Puc 203.02 (a), with the exception of Discovery, file 7 copies, as well as an electronic copy, of all documents including cover letter with:

DEBRA A HOWLAND
EXECUTIVE DIRECTOR
NHPUC
21 S. FRUIT ST, SUITE 10
CONCORD NH 03301-2429

b) Serve an electronic copy with each person identified on the Commission's service list and with the Office of Consumer Advocate.

c) Serve a written copy on each person on the service list not able to receive electronic mail.