

THE STATE OF NEW HAMPSHIRE

CHAIRMAN
Martin P. Honigberg

COMMISSIONERS
Kathryn M. Bailey
Michael S. Giaimo

EXECUTIVE DIRECTOR
Debra A. Howland



PUBLIC UTILITIES COMMISSION

21 S. Fruit Street, Suite 10
Concord, N.H. 03301-2429

TDD Access: Relay NH
1-800-735-2964

Tel. (603) 271-2431

FAX (603) 271-3878

Website:
www.puc.nh.gov

February 15, 2018

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

HPUC 15 FEB 18 AM 11:45

Re: DW 17-179: Pennichuck Water Works, Inc.
Interim Petition for Approval of 2017 Qualified Capital Project Adjustment Charge
Staff Recommendation for Approval

Dear Ms. Howland:

On November 20, 2017, Pennichuck Water Works, Inc. ("PWW" or "Company"), filed an Interim Petition for Approval of its 2017 Qualified Capital Project Adjustment Charge ("Interim QCPAC Petition") in accordance with Commission Order No. 26,070 (November 7, 2017) in Docket DW 16-806. Specifically, PWW's Interim QCPAC Petition requests that the Commission, 1) approve PWW's proposed 2017 projects for recovery under the Qualified Capital Project Adjustment Charge ("QCPAC") mechanism in 2018, subject to the Commission's audit and prudence review of the final costs associated with those projects; 2) receive PWW's proposed 2018 and 2019 projects for informational purposes only; and 3) take such further action and make such other findings and orders as in its judgement may be just, reasonable, and in the public good. The purpose of this letter is to recommend that the Commission grant approval of the Company's proposed 2017 projects for recovery under the QCPAC mechanism in 2018 as well as accept PWW's proposed 2018 and 2019 projects for informational purposes only. Following is a detailed explanation relative to Staff's review and recommendation for approval of PWW's Interim QCPAC Petition.

Summary of QCPAC Mechanism

In Order No. 26,070, the Commission approved a Settlement Agreement which not only provided for a general rate increase for PWW but also established a revised ratemaking structure for the Company, as well. This new ratemaking structure was principally necessitated by the

City of Nashua's ("City") acquisition of PWW in 2012.¹ Among the effects of this acquisition, was the elimination of PWW's access to equity markets for obtaining financing capital. As a result, the Company is now primarily reliant upon debt financing to meet its capitalization needs. As such, the new ratemaking structure was designed with the goal of enabling PWW to have the necessary cash flows to adequately satisfy its debt service and loan covenant requirements.

In order to promote the Company's necessity to maintain adequate cash flows even between rate proceedings, Order No. 26,070 also established the QCPAC mechanism as a replacement for PWW's pilot Water Infrastructure and Conservation Adjustment ("WICA") program. Like the WICA program, the QCPAC mechanism enables the Company to receive rate recovery on previously approved capital projects which are undertaken and completed between rate proceedings. However, whereas the WICA program only allowed for rate recovery on a limited scope of non-revenue producing capital projects, the QCPAC mechanism allows for rate recovery on essentially all of PWW's debt financed capital projects. Order No. 26,070 established the following criteria that proposed QCPAC projects must meet in order to be eligible for rate recovery: 1) the projects proposed by PWW must be completed, in service, and used and useful within the previous fiscal year for which the QCPAC filing is made; 2) the capital projects must have been financed by debt that has been approved by the Commission in accordance with RSA 369; and 3) the capital projects must specifically correspond with a capital budget which has been previously submitted by PWW and approved by the Commission.

PWW's annual QCPAC filings, which are anticipated to be received by approximately March of each year, will be in two phases. The first phase will contain a detailed reporting on the prior fiscal year's eligible QCPAC projects previously approved by the Commission, including the actual amounts expended to acquire and/or construct such assets. That information will be subject to review and audit by Staff and will be the basis for the annual QCPAC surcharge approved by the Commission. The QCPAC surcharge will be based on 1) 1.1 times the debt service associated with the approved and completed Qualified Capital Project's ("QCP's"), and 2) the incremental property taxes applicable to the approved and completed QCP's. The second phase shall consist of 1) a proposed budget for all capital project expenditures planned during the fiscal year in which the QCPAC filing is made for the purpose of receiving preliminary approval from the Commission; and 2) a forecast of capital project expenditures for the following two fiscal years, for informational purposes only. It is anticipated that the Commission's rulings concerning PWW's annual QCPAC requests will occur by approximately September of each year.

¹ See *Joint Petition of City of Nashua, et.al*, Order No. 25,292 (November 23, 2011) in Docket DW 11-026.

Background to Interim QCPAC Filing

On January 31, 2017, PWW filed a petition, in accordance with the WICA program in existence at that time, requesting approval of an annual WICA surcharge increase of 1.66% for completed and in-service 2016 WICA-eligible projects, as well as requesting approval of its 2017 WICA-eligible projects. PWW's filing also contained information relative to its anticipated WICA-eligible projects for 2018 and 2019. PWW's petition was assigned Docket No. DW 17-017, and, accordingly, Staff reviewed PWW's WICA petition and conducted discovery. However, the Settlement Agreement approved by Order No. 26,070 resolved PWW's request for a WICA surcharge increase based on the 2016 WICA-eligible projects by instituting a step increase for PWW based on all of its 2016 and certain 2017 capital additions. As such, PWW agreed to withdraw its WICA petition in DW 17-017, as well as agreed to file an Interim QCPAC Petition within fifteen days of the issuance of Order No. 26,070. The purpose of requiring PWW to submit an Interim QCPAC Petition was to enable it to request and receive approval from the Commission for its fiscal year 2017 QCPAC budget as well as submit its projected capital expenditures for fiscal years 2018 and 2019. Upon approval of its 2017 QCPAC budget, PWW will then submit its first full QCPAC filing in March of this year, including a formal request for the establishment of the initial QCPAC surcharge based on the completed and in-service QCP's contained in the previously approved 2017 QCPAC budget.

PWW's Interim QCPAC Filing

As previously stated, on November 20, 2017, PWW submitted its Interim QCPAC Petition to the Commission. In support of its Petition, PWW's filing also includes the Direct Testimony of Donald L. Ware, the Company's Chief Operating Officer. On December 11, 2017, a Letter of Participation was submitted by the Office of the Consumer Advocate ("OCA") in accordance with RSA 363:28.

Pursuant to Order No. 26,070, PWW's Interim QCPAC Petition includes a proposed budget of its 2017 QCP's for Commission approval as well as a forecast of its anticipated capital project expenditures for the years 2018 and 2019, for informational purposes. Mr. Ware's testimony states that the submissions for all three years are based on the Capital Expenditure (Capex) budgets which were approved by PWW's Board of Directors in January of 2017 and have been previously provided to the Commission in the Company's response to Staff Data Request 2-21 in DW 16-806. At that time, PWW's projected Capex for the years 2017-2019 was as follows: 2017 - \$9,787,000; 2018 - \$10,754,500; 2019 - \$9,736,000. However, for purposes of the instant Interim QCPAC Petition, while PWW's projected Capex for 2018 and 2019 are unchanged, its total 2017 capital expenditures are now projected to be \$6,289,612. Of that amount, \$1,023,612 is associated with debt which was included in PWW's step adjustment

approved in Order No. 26,070. Therefore, PWW's Interim QCPAC Petition requests approval for the estimated remaining 2017 Capex budget of \$5,266,000 (\$6,289,612 - \$1,023,612). An estimated \$4,498,643 of this amount will be funded by debt anticipated to be obtained by PWW in March of this year.² Additionally, the Company is seeking to recover approximately \$767,357 in capital expenditures associated with remaining State Revolving Fund ("SRF") loan proceeds associated with its Amherst Street water main replacement project.³

Mr. Ware's testimony explains in detail the reasons for the approximate \$3.5 million decrease in PWW's 2017 projected Capex from the original amount of \$9,787,000 submitted in DW 16-806 to the revised amount of \$6,289,612 reported in the Company's Interim QCPAC Petition. These explanations range from scheduling constraints caused by either construction permit delays or an inability to coordinate certain projects with municipalities; resource restraints related to either available personnel or funding; as well as the realization that certain budgeted capital projects were either not necessary or not as extensive as originally anticipated. As a result, certain projects have been deferred to 2018, 2019 or later.

Mr. Ware's testimony states that if the 2017 QCP's proposed in the instant filing are approved by the Commission in this docket, PWW will be requesting rate recovery for such in its initial full 2018 QCPAC petition to be submitted in March of this year. Based on the projected rates and terms of the debt which will be financing these projects, PWW estimates that it will be seeking recovery of an annual amount of approximately \$474,000 in the form of a surcharge from customers effective on or about March 1, 2018. PWW further estimates that such will result in an approximate 1.50% increase for typical residential general metered customers, or an approximate \$0.81 increase in their average monthly bills.

Staff's Review and Recommendation

Staff reviewed PWW's filing and propounded discovery on January 9, 2018. The Company submitted its responses to Staff's discovery on January 24, 2018. A copy of PWW's discovery responses are attached to this correspondence.

² On February 2, 2018, the Commission issued Order No. 26,101 in Docket DW 17-183 approving up to \$32.5 million in bond financing debt through the New Hampshire Business Finance Authority (NHBFA). The proceeds of this debt will be used to finance PWW's capital expenditures for the years 2017-2020. PWW anticipates that the closing on this debt will occur in March, 2018.

³ On April 26, 2016, the Commission issued Order No. 25,877 in Docket DW 16-236 approving \$1.4 million in State Revolving Fund (SRF) financing for PWW's Amherst Street water main replacement project. Of the total debt approved by the Commission in that order, \$632,643 was included in the step adjustment approved by the Commission in Order No. 26,070 (November 7, 2017) in DW 16-806. Therefore, the remaining portion of that debt not yet included in PWW's rates is \$767,357 (\$1,400,000 - \$632,643).

Additionally, a report dated April 3, 2017 from Staff consultant, Douglas W. Brogan, has been attached to this correspondence. Mr. Brogan's report pertains to the engineering and operational aspects of PWV's DW 17-017 WICA filing for 2017. Even though PWV subsequently withdrew its petition in that case, Mr. Brogan's report is still considered valuable because, in it, he addresses PWV's proposed main replacement projects for 2017-2019, which Staff considers to be a significant portion of PWV's overall capital expenditure proposal in the instant docket. In his report, Mr. Brogan concludes that the Company's "proposed 2017-2019 projects appear reasonable." In light of Mr. Brogan's report, Staff requested that he review PWV's instant filing. Upon review, Mr. Brogan indicated to Staff that he noted no cause for deviating from his original conclusion.

Using the Company's 2017 project outline contained in its petition, Staff has summarized PWV's proposed 2017 QCP budget as follows:

a. General Projects	\$ 864,270
b. Nashua and Amherst Paving	412,789
c. Amherst Street Area Water Main Replacement Project	856,000
d. City Sewer Projects	560,643
e. Main Street Area Main Replacement Project	837,599
f. NHDOT Route 101 Widening Project	172,100
g. Information Technology Projects	826,842
h. Miscellaneous Equipment Purchases	<u>735,757</u>
Total Proposed 2017 QCP Budget	<u>\$5,266,000</u>

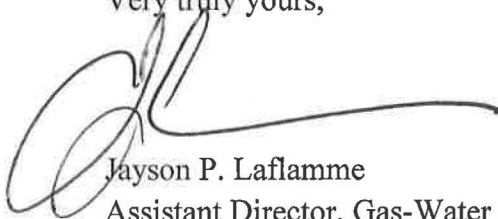
Based on its review of PWV's filing, Staff recommends that the Commission approve the above proposed 2017 Qualified Capital Projects for recovery under the QCPAC mechanism which is to be filed by PWV in March of this year and will be subject to the Commission's audit and prudence review of the final costs associated with those projects. Staff also recommends that the Commission accept submission of PWV's proposed 2018 capital projects with a current budget of \$10,754,500 and 2019 capital projects with a current budget of \$9,736,000, for informational purposes only.

Prior to filing this letter with the Commission, Staff provided a final draft to the OCA. In response, the OCA indicated agreement with Staff's recommendation to approve the proposed 2017 Qualified Capital Projects for recovery subject to audit prudence review as noted, and to accept PWV's proposed 2018 and 2019 capital budgets for informational purposes. The OCA also indicated general support for PWV's cash flow based ratemaking structure, including the QCPAC mechanism, as approved in Order No. 26,070.

DW 17-179: Pennichuck Water Works, Inc.
Staff Recommendation for Approval of Interim QCPAC Petition
February 15, 2018

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

Very truly yours,

A handwritten signature in black ink, consisting of a large, stylized 'J' followed by a horizontal line extending to the right.

Jayson P. Laflamme
Assistant Director, Gas-Water Division

Attachments

cc: Service List

PENNICHUCK WATER WORKS, INC.
DW 17-179
INTERIM PETITION FOR APPROVAL OF 2017 QUALIFIED CAPITAL PROJECT
ANNUAL ADJUSTMENT CHARGE
RESPONSE TO STAFF DATA REQUESTS – SET 1

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

Date of Response: 1/24/18
Witness: Donald L. Ware

REQUEST: **Re: Page 6 (Bates 13), Line 13 through Page 9 (Bates 16), Line 20:** Mr. Ware's testimony indicates there is an approximate \$3.5 million total reduction in projected 2017 capital expenditures from that which was indicated in the Company's response to Staff 2-21 in DW16-806. However, the sum of the seven individual project reductions described in Mr. Ware's testimony appears to equal approximately \$5.4 million; a difference of \$1.9 million, as follows:

<u>Project Description</u>	<u>Net Change</u>
1. Replacement of Brass Meters with High Lead Content:	\$ 495,000
2. Information Technology Projects:	720,000
3. PWW-PEU Interconnection Project:	311,500
4. Snow Station Pumping Station Upgrade:	122,000
5. Replacement of Milford Booster Station:	550,000
6. Improvements to the Northwest High Pressure System:	800,000
7. Replacement of Water Mains:	<u>2,428,000</u>
Total	<u>\$5,426,500</u>

Please reconcile and explain this difference.

RESPONSE:

The approximate \$3.5 million in reductions is the approximate difference between the original budget of \$9,789,000 and the total projected 2017 capital expenditures of \$6,077,658 as detailed on Exhibit 1. While there were about \$5,426,500 in project reductions there were also project additions as detailed in Exhibit 1.

PENNICHUCK WATER WORKS, INC.
DW 17-179
INTERIM PETITION FOR APPROVAL OF 2017 QUALIFIED CAPITAL PROJECT
ANNUAL ADJUSTMENT CHARGE
RESPONSE TO STAFF DATA REQUESTS – SET 1

Date Request Received: 1/9/18
Request No. Staff 1-2

Date of Response: 1/24/18
Witness: Donald L. Ware

REQUEST: Re: Page 7 (Bates 14), Lines 17 14 - 20: Mr. Ware states that the PWW-PEU Interconnection Project, which is estimated to cost \$311,000, has been deferred to 2018. However, it does not appear that this project has been included in the list of projected 2018 capital additions indicated on Bates 23.

- a) Please explain why this project is not included on Bates 23.
- b) Will deferring this project to 2018 impact any of the other 2018 capital projects currently listed on Bates 23? Please explain

RESPONSE:

a) Per the filed testimony, the Capex Budgets presented in this interim QCPAC filing were those approved by the Board in January 2017. No changes were made to the Board January 2017 approved 2018 and 2019 budgets as it was not known in January 2017 that this project would be deferred. As with the WICA process, the QCPAC process will update the projects approved for the year the QCPAC is being sought but there will be no corresponding update to the remaining year Capital Budgets until the Board approves new budgets in the next year. The QCPAC filing made at the end of January 2018 will include new 2018 and 2019 Capex Budgets as approved by the Board in January of 2018 plus a Capex Budget for 2020. The new 2018 and 2019 Capex budgets will reflect project deferrals from 2017 as well as shifts in priorities and available Capex dollars.

b) Yes. As described above, the deferral of projects from 2017 will have an impact on 2018 projects that the Company sought preliminary approval from its Board in January 2017. The impacts of these deferrals will show up in the January 2018 Board approved 2018, 2019 and 2020 Capital Budgets.

PENNICHUCK WATER WORKS, INC.
DW 17-179
INTERIM PETITION FOR APPROVAL OF 2017 QUALIFIED CAPITAL PROJECT
ANNUAL ADJUSTMENT CHARGE
RESPONSE TO STAFF DATA REQUESTS – SET 1

Date Request Received: 1/9/18
Request No. Staff 1-3

Date of Response: 1/24/18
Witness: Donald L. Ware

REQUEST: **Re: Page 8 (Bates 15), Line 7:** Is not the resulting reduction relative to the Snow Station Pumping Station Upgrade actually \$112,000 ($\$125,000 - \$13,323 = \$111,677$) instead of the \$122,000 amount indicated in Mr. Ware's testimony? Please explain.

RESPONSE:

The Staff is correct. The entry should have been \$122,000 not \$112,000.

PENNICHUCK WATER WORKS, INC.
DW 17-179
INTERIM PETITION FOR APPROVAL OF 2017 QUALIFIED CAPITAL PROJECT
ANNUAL ADJUSTMENT CHARGE
RESPONSE TO STAFF DATA REQUESTS – SET 1

Date Request Received: 1/9/18
Request No. Staff 1-4

Date of Response: 1/24/18
Witness: Donald L. Ware

REQUEST: Re: Page 8 (Bates 15), Lines 18 – 23: Mr. Ware states that the Improvements to the Northwest High Pressure System Project, which is estimated to cost \$800,000, are deferred to 2019. However, it does not appear that this project has been included in the list of projected 2019 capital additions indicated on Bates 24.

- a) Please explain why this project is not included on Bates 24.
- b) Will deferring this project to 2019 impact any of the other 2019 capital projects currently listed on Bates 24? Please explain.

RESPONSE:

a) As noted in the response to DR 1-2, and per the filed testimony, the Capex Budgets presented in this interim QCPAC filing were those approved by the Board in January 2017. No changes were made to the Board January 2017 approved 2018 and 2019 budgets as it was not known in January 2017 that this project would be deferred. As with the WICA process, the QCPAC process will update the projects approved for the year the QCPAC is being sought but there will be no corresponding update to the remaining year Capital Budgets until the Board approves new budgets in the next year. The QCPAC filing made at the end of January 2018 will include new 2018 and 2019 Capex Budgets as approved by the Board in January of 2018 plus a Capex Budget for 2020. The new 2018 and 2019 Capex budgets will reflect project deferrals from 2017 as well as shifts in priorities and available Capex dollars.

b) Yes. As described above, the deferral of projects from 2017 into 2019 will have an impact on 2019 projects that the Company sought preliminary approval from its Board in January 2017. The impacts of these deferrals will show up in the January 2018 Board approved 2018, 2019 and 2020 Capital Budgets.

PENNICHUCK WATER WORKS, INC.
DW 17-179
INTERIM PETITION FOR APPROVAL OF 2017 QUALIFIED CAPITAL PROJECT
ANNUAL ADJUSTMENT CHARGE
RESPONSE TO STAFF DATA REQUESTS – SET 1

Date Request Received: 1/9/18
Request No. Staff 1-5

Date of Response: 1/24/18
Witness: Donald L. Ware

REQUEST: Re: Page 9 (Bates 16), Lines 1 – 20:

- a) Please specifically identify the Water Main Replacement Projects listed on Bates 21-22 which sum to the previously projected spending amount of \$4,428,000 indicated on Page 9, Line 2.
- b) Please specifically identify the Water Main Replacement Projects listed on Bates 21-22 which sum to the revised projected spending amount of \$2,000,000 indicated on Page 9, Line 4.
- c) Have any of the Water Main Replacement Projects previously planned for 2017 been deferred to 2018 or 2019? If yes, please specifically identify these projects, as well as indicate to which year it has been deferred.
- d) If the Company's response to (c) is "yes", will the deferral of previously planned 2017 Water Main Replacement projects to 2018 and 2019 impact other 2018 and 2019 capital projects which are currently indicated on Bates 23 and 24? Please explain.

RESPONSE:

- a) See attached Exhibit 1 from QCPAC Interim Filing. I have highlighted the Water Main Replacement Projects that were included in the originally 2017 Capex budget of \$4,428,000 in yellow. The total of the highlighted projects is \$4,313,000.
- b) See attached Exhibit 1 from QCPAC Interim Filing. I have highlighted the Water Main Replacement Projects that were included in the revised approximate total of about \$2,000,000 green. The total of the highlighted projects is \$2,667,031. The cells labeled I70, I71 and I72 had an estimated water main replacement cost of \$480,000 at the time this spreadsheet was prepared. This amount should have been in the \$2,000,000 estimate of replacement projects to be completed in 2017 making the actual total about \$2,500,000.
- c) Yes. In its filing, the Company identified the Water Main Replacement Projects that would be deferred. The revised years for implementation were noted in the original submission column labeled "Explanation for Change/Addition/Deletion since 1/18/2017".
- d) Yes. Please see the responses to Staff DR1-2b) and Staff DR1-4b)

A		B		C		D		E		F		G		H		I		J		K		L		M		N		O	
Permeable Storm Water Inlet																												QCPAC Interim Filing Exhibit 1	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
1		2		3		4		5		6		7		8		9		10		11		12		13					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
70	Routing Issues	Engineer reviewed cost notes include to note items shared of City project	Deferred	No Bond sought	No QC/PAC sought	\$	175,000	\$	-	-	Nashua	Yes	-	-	Project deferred to 2018
77	Factor Station	Replace 12" & 8" G.I. with 60" R of 10" HDPE	Deferred	No Bond sought	No QC/PAC sought	\$	280,000	\$	-	-	Nashua	Yes	-	-	Project deferred to 2018
78	Route 101 Winding, Bedford	NHDOT Project													
79	Route 101 Winding, Bedford	Relocate water main on Route 101	2018 Bond	TBD	No	\$	46,200	\$	-	-	Bedford	Yes	28.97	1,338	NHDOT project that was added in Spring of 2017
80	Route 101 Winding, Bedford	Relocate water main along Nashua Road	2018 Bond	TBD	No	\$	93,100	\$	-	-	Bedford	Yes	28.97	1,249	NHDOT project that was added in Spring of 2017
81	Route 101 Winding, Bedford	Relocate water main on Red Hill Road	2018 Bond	TBD	No	\$	13,400	\$	-	-	Bedford	Yes	28.97	146	NHDOT project that was added in Spring of 2017
82	Route 101 Winding, Bedford	Relocate Sewer on Nashua Road	2018 Bond	TBD	No	\$	15,400	\$	-	-	Bedford	Yes	28.97	142	NHDOT project that was added in Spring of 2017
83	Route 122 @ Nashua/Lane Lane Water Main Relocation	Water Main Relocation to accommodate Town of Andover Street Drain installation	2018 Bond	TBD	No	\$	34,020	\$	-	-	Andover	Yes	29.37	1,610	Town of Andover Street Drain project added in Fall of 2017
84	Traffic Devices - Used for field locating assets on I-93 project	Upgrade to In-pave device down street	2018 Bond	TBD	No	\$	72,000	\$	66,625	\$	Merrimack	Yes	27.48	1,886	
85	Engineering Replacement Vehicles (2)	Replace 2 Vehicles	DW14.130	25/35	11/7/2014	Partial	64,000	Financed with 2014 Bond	54,000		Merrimack				Pd and property taxes recovered in DW16 R6 Stop Increase
86	Complete PWS Gen-Specific Hydraulic Model	Distribution Model Phase 2	Deferred	No Bond sought	No QC/PAC sought	\$	25,000	\$	-	-	Merrimack				Project underway, will not be used and useful in 2017
87	PWS DBI Interconnection - TDH Highway to River	DW Highway to Merrimack River Boreas station	Deferred	No Bond sought	No QC/PAC sought	\$	311,300	\$	-	-	Merrimack				Deferred to 2018 due to change of final NHDES permitting
88	WTP - Conversion to LED Lighting	WTP - Conversion to LED Lighting	Deferred	No Bond sought	No QC/PAC sought	\$	80,000	\$	-	-	Nashua				Deferred, final time not available to complete in 2017
89	Booster/Wall/Churn Feed pump implementation	Booster/Wall/Churn Feed pump implementation	DW14.131	25/35	11/7/2014	Partial		Financed with 2014 Bond	18,345		Nashua				Pd and property taxes recovered in DW16 R6 Stop Increase
90	Booster/Wall/Churn Feed pump implementation	Booster/Wall/Churn Feed pump implementation	2018 Bond	TBD	No	\$	60,000	\$	38,000	\$	Deer	Yes	31.41	1,191	Project deferred through year end
91	Booster/Wall/Churn Feed pump implementation	Replace VFD on Twin Ridge Wall	2018 Bond	TBD	No	\$	2,000	\$	2,000	\$	Plastow	Yes	26.88	50	Budgeted under Booser/Wall/Churn Feed pump replacement
92	Install/replace treatment systems in small CWA's	Install/replace treatment systems in small CWA's	Deferred	No Bond sought	No QC/PAC sought	\$	15,000	\$	-	-	Deer				Budget place holder. No treatment system upgrades/replacements YTD
93	Misc. Structural Improvements	Misc. Structural Improvements	Deferred	No Bond sought	No QC/PAC sought	\$	20,000	\$	-	-	Nashua				Budget place holder. No structural improvements YTD
94	Replace Vehicle #61	Replace 7 year old truck with 110,000 miles	2018 Bond	TBD	No	\$	60,000	\$	45,000	\$	Nashua	No			
95	Replace Vehicle #62	Replace 7 year old truck with 135,000 miles	2018 Bond	TBD	No	\$	60,000	\$	45,000	\$	Nashua	No			
96	Replace Vehicle #66	Replace 7 year old truck with 100,000 miles	2018 Bond	TBD	No	\$	35,000	\$	35,000	\$	Nashua	No			
97	Replace vehicle #204	Replace 6 year old truck with 176,200 miles	2018 Bond	TBD	No	\$	60,000	\$	45,000	\$	Nashua	No			Change from beginning of budget year as to type of vehicle being replaced
98	Replace Vehicle #63	Replace 7 year old truck with 111,025 miles	2018 Bond	TBD	No	\$	35,000	\$	35,000	\$	Nashua	No			
99	Replace Vehicle #64	Replace 9 year old truck with 191,250 miles	2018 Bond	TBD	No	\$	63,000	\$	63,000	\$	Nashua	No			
100	Install overhead crane and door WTP process area	Install overhead crane and door WTP process area	2018 Bond	TBD	No	\$	73,000	\$	73,000	\$	Nashua	Yes	31.67	2,375	
101	Merrimack River Floating pontoon, transfer platform	Merrimack River Floating pontoon, transfer platform	2018 Bond	TBD	No	\$	75,000	\$	25,000	\$	Merrimack	Yes	27.48	447	Miscellaneous new equipment than anticipated
102	Misc. equipment purchases	Misc. equipment purchases				\$	28,000	\$	-	-					
103	Misc. equipment purchases	Purchase New Electric Multi-Meter	2018 Bond	TBD	No	\$	1,800	\$	-	-	Nashua	No	31.67	48	Budgeted under WTP Misc. equipment purchase
104	Misc. equipment purchases	Install meter on Blue Trireme Trail	2018 Bond	TBD	No	\$	2,400	\$	-	-	Andover	Yes	29.47	77	Budgeted under WTP Misc. equipment purchase
105	Misc. equipment purchases	Replace VFD on Shale Gas Pump at WTP	2018 Bond	TBD	No	\$	3,500	\$	-	-	Nashua	Yes	31.67	111	Budgeted under WTP Misc. equipment purchase
106	Misc. equipment purchases	WTP - Replace No. 10 Discharge Motor	2018 Bond	TBD	No	\$	17,177	\$	-	-	Nashua	Yes	31.67	544	Budgeted under WTP Misc. equipment purchase
107	Purchase new lab equipment	Purchase new lab equipment				\$	33,000	\$	-	-	Nashua				
108	Purchase new lab equipment	House Cleaner	2018 Bond	TBD	No	\$	5,900	\$	-	-	Nashua	No			Budgeted under Purchase new lab equipment
109	WTP structural/HVAC	Replace Compressor on A/C Unit #16 WTP	2018 Bond	TBD	No	\$	10,000	\$	5,568	\$	Nashua	Yes			
110	New Security upgrades to ensure facilities	New Fencing/Security Projects	Deferred	No Bond sought	No QC/PAC sought	\$	25,000	\$	-	-	Nashua	Yes			Budget place holder. No New Fencing/Security Projects YTD
111	Replace Classifier (2) Valves, Blowers and Actuators	Replace Classifier (2) Valves, Blowers and Actuators	Deferred	No Bond sought	No QC/PAC sought	\$	35,000	\$	-	-	Nashua	Yes			Deferred
112	Misc. SCADA Electrical upgrades	Misc. SCADA Electrical				\$	30,000	\$	-	-	Nashua	Yes			
113	Misc. SCADA Electrical upgrades	Valleyfield - Install Global Communications	2018 Bond	TBD	No	\$	5,000	\$	-	-	Plastow	Yes	26.88	134	Budgeted under Misc. SCADA Electrical upgrades
114	Misc. SCADA Electrical upgrades	Amosby VPD replacement for high flow pumps will use this budgeted amount	2018 Bond	TBD	No	\$	23,500	\$	-	-	Nashua	Yes	31.67	744	Budgeted under Misc. SCADA Electrical upgrades
115	Misc. SCADA Electrical upgrades	Review all SCADA Computer and Upgrade Screens	2018 Bond	TBD	No	\$	45,000	\$	-	-	Nashua	Yes	31.67	1,362	Unbudgeted. Security upgrades require hardware replacement
116	WTP Rehabilitation (3)	WTP Rehabilitation	Deferred	No Bond sought	No QC/PAC sought	\$	80,000	\$	-	-	Deer	Yes	31.43	-	Budget place holder. No WTP Rehabilitation Projects YTD
117	WTP Closed Circuit Camera system replacement	Closed Circuit Camera replacement equipment	Deferred	No Bond sought	No QC/PAC sought	\$	60,000	\$	-	-	Nashua				Deferred
118	WTP - Replace overhead glass, renovate WTP reception	Replace overhead glass, renovate WTP reception	Deferred	No Bond sought	No QC/PAC sought	\$	80,000	\$	-	-	Nashua				
119	Complete Fencing around WTP for security	Perimeter fencing at WTP	2018 Bond	TBD	No	\$	80,000	\$	5,588	\$	Nashua	Yes	31.67	177	Main Gate opening mechanism replaced. Fencing deferred
120	Office renovation-replacement assets	Office renovation-replacement assets	Deferred	No Bond sought	No QC/PAC sought	\$	80,000	\$	-	-	Nashua	Yes			Deferred
121	Water Supply - Warehouse Public Education	Facilities / Potable - Phase 1	Deferred	No Bond sought	No QC/PAC sought	\$	20,000	\$	-	-	Nashua	Yes			Will not be completed until 2018
122	Stormwater BMP Notification and Community Education	Stormwater BMP Notification and Community Education	Deferred	No Bond sought	No QC/PAC sought	\$	12,000	\$	-	-	Nashua	Yes			Original estimate did not include bullet proof glass and other security features
123	Security upgrade assets	Office Security for Front Reception Area	2018 Bond	TBD	No	\$	10,000	\$	20,790	\$	Merrimack	No			
124	Adjustable Driv-It Tips	Accommodate back issues	2018 Bond	TBD	No	\$	6,088	\$	-	-	Merrimack	No			
125	Asset Management - Phase 3	Asset Management 2016 Carry over	2018 Bond	TBD	No	\$	200,000	\$	200,000	\$	Merrimack	Yes	27.48	5,496	
126	Continuance of R.A.M. Flood Assets (carry over)	Continuance to R.A.M. Flood Assets (carry over)	2018 Bond	TBD	No	\$	11,000	\$	11,000	\$	Merrimack	Yes	27.48	302	
127	Firewall	Firewall replacement	2018 Bond	TBD	No	\$	50,000	\$	36,426	\$	Merrimack	No	27.48	1,001	
128	Asset Management - Phase 4	Continue progress on Asset Management implementation	2018 Bond	TBD	No	\$	736,000	\$	450,000	\$	Merrimack	Yes	27.48	11,616	Reduced level of work than budgeted due to staff time diverted to PFOA response
129	Click Mobile Upgrade	Upgrade ClickMobile to work on iPads	2018 Bond	TBD	No	\$	150,000	\$	5,400	\$	Merrimack	Yes	27.48	148	2016 Work completed. 2017 work deferred until 2018
130	Click Mobile Upgrade	Transition PADS to ClickMobile Platform	2018 Bond	TBD	No	\$	5,100	\$	5,100	\$	Merrimack	Yes	27.48	142	Budgeted for mobile Upgrade Click Mobile to work on iPads
131	Infocore upgrade	Upgrade Infocore to the latest version	2018 Bond	TBD	No	\$	5,000	\$	3,150	\$	Merrimack	Yes	27.48	87	
132	Exchange Upgrade	Exchange Upgrade to the latest version	2018 Bond	TBD	No	\$	31,600	\$	20,420	\$	Merrimack	Yes	27.48	561	
133	Retention/Airlock Solutions	Initiation/Move to Archive older stagnant files	Deferred	No Bond sought	No QC/PAC sought	\$	80,000	\$	-	-	Merrimack	No			Deferred until 2018
134	Massive Enhancements	Bill prints/Forms, Forms input, ClickMobile input, CSS and Dashboard/Control	Deferred	No Bond sought	No QC/PAC sought	\$	180,000	\$	-	-	Merrimack	No			Waiting for vendor acceptance of software enhancements
135	Miscellaneous Software		Deferred	No Bond sought	No QC/PAC sought	\$	15,000	\$	-	-	Merrimack	No			Budget place holder
136	Miscellaneous Software	Upgrade Symantec/AVM	2018 Bond	TBD	No	\$	10,340	\$	-	-	Merrimack	No			Budgeted for under Misc. Software
137	Miscellaneous Software	Backup/Info Data Collection software	2018 Bond	TBD	No	\$	6,700	\$	-	-	Merrimack	No			Budgeted for under Misc. Software
138	Miscellaneous Hardware		Deferred	No Bond sought	No QC/PAC sought	\$	18,000	\$	-	-	Merrimack	No			Budget place holder. No Misc. Hardware purchased YTD
139	LIHIS upgrade	Upgrade to Laboratory Information Systems software	Deferred	No Bond sought	No QC/PAC sought	\$	11,000	\$	-	-	Merrimack	No			Review of new version deferred until 2018
140	Badge Swipe for IT Area	Allow for tracking of traffic after hours into IT Area - Security	Deferred	No Bond sought	No QC/PAC sought	\$	2,000	\$	-	-	Merrimack	No			Project cancelled for 2017
141	Upgrade into Click	Track Dig safe work under new stormwater inlet	Deferred	No Bond sought	No QC/PAC sought	\$	2,000	\$	-	-	Merrimack	No			Project cancelled for 2017
142	Website Upgrades to Upstream	Update Website - Enhance content/visuals	2018 Bond	TBD	No	\$	36,000	\$	21,700	\$	Merrimack	No			
143	IT Security Threats	ISO 27001 Equivalency Project	2018 Bond	TBD	No	\$	40,500	\$	-	-	Merrimack	No			Evaluation of IT infrastructure for security
144	Physical Security for Public		Deferred	No Bond sought	No QC/PAC sought	\$	8,000	\$	-	-	Merrimack	No			Deferred
145	Physical Security for Public		Deferred	No Bond sought	No QC/PAC sought	\$	12,000	\$	-	-	Merrimack	No			Deferred
146	Investment in Developer (unified) Services	One time investment unified services	DW14.131	25/35	11/7/2014	Partial		Financed with 2014 Bond	14,109		Veter	Yes	31.12	1,129	Pd and property taxes recovered in DW16 R6 Stop Increase
147	Investment in Developer (unified) Services	One time investment unified services	2018 Bond	TBD	No	\$	50,000	\$	-	-	Nashua	Yes			Unified investment amount not in original capital budget
148							9,976,000	\$	2,240,000	\$	1,022,812				
149							9,976,000	\$	2,240,000	\$	1,022,812				
150							9,976,000	\$	2,240,000	\$	1,022,812				
151							9,976,000	\$	2,240,000	\$	1,022,812				
152							9,976,000	\$	2,240,000	\$	1,022,812				
153							9,976,000	\$	2,240,000	\$	1,022,812				
154							9,976,000	\$	2,240,000	\$	1,022,812				
155							9,976,000	\$	2,240,000	\$	1,022,812				
156							9,976,000	\$	2,240,000	\$	1,022,812				
157							9,976,000	\$	2,240,000	\$	1,022,812				
158							9,976,000	\$	2,240,000	\$	1,022,812				
159							9,976,000	\$	2,240,000	\$	1,022,812				
160							9,976,000	\$	2,240,000	\$	1,022,812				
161							9,976,000	\$	2,240,000	\$	1,022,812				
162							9,976,000	\$	2,240,000	\$	1,022,812				
163							9,976,000	\$	2,240,000	\$	1,022,812				
164							9,976,000	\$	2,240,000	\$	1,022,812				
165							9,976,000	\$	2,240,000	\$	1,022,812				
166							9,976,000	\$	2,240,000	\$	1,022,812				
167							9,976,000	\$	2,240,000	\$	1,022,812				
168							9,976,000	\$	2,240,000	\$	1,022,812				
169							9,976,000	\$	2,240,000	\$	1,022,812				
170							9,976,000	\$	2,240,000	\$	1,022,812				
171							9,976,000	\$	2,240,000	\$	1,022,812				
172							9,976,000	\$	2,240,000	\$	1,022,812				
173							9,976,000	\$	2,240,000	\$	1,022,812				
174							9,976,000	\$	2,240,000	\$	1,022,812				
175							9,976,000	\$	2,240,000	\$	1,022,812				
176							9,976,000	\$	2,240,000	\$	1,022,812				
177							9,976,000	\$	2,240,000	\$	1,022,812				
178															

PENNICHUCK WATER WORKS, INC.
DW 17-179
INTERIM PETITION FOR APPROVAL OF 2017 QUALIFIED CAPITAL PROJECT
ANNUAL ADJUSTMENT CHARGE
RESPONSE TO STAFF DATA REQUESTS – SET 1

Date Request Received: 1/9/18
Request No. Staff 1-6

Date of Response: 1/24/18
Witness: Donald L. Ware

REQUEST: **Re: Bates 21-22:** Certain projects listed on this schedule are indicated as related to Financing Docket No. DW 14-131. However, this particular docket does not appear to be one that is related to Pennichuck Water Works. Please explain.

RESPONSE:

The referred to Financing Docket No should have been DW 14-130 for each project where Docket DW 14-131 was used. This was the result of dragging one cell into another in excel.

PENNICHUCK WATER WORKS, INC.
DW 17-179
INTERIM PETITION FOR APPROVAL OF 2017 QUALIFIED CAPITAL PROJECT
ANNUAL ADJUSTMENT CHARGE
RESPONSE TO STAFF DATA REQUESTS – SET 1

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

Date of Response: 1/24/18
Witness: Donald L. Ware

REQUEST: **Re: Bates 24:** It does not appear that the following projects have been classified to a specific asset account:

a) Tinker Road Water Main Replacement:	\$ 225,000
b) Replace Flashboard Bowers Pond:	<u>600,000</u>
Total	<u>\$ 825,000</u>

Please explain.

RESPONSE:

Chart of accounts were not applied to those two projects when these schedules were submitted as part of the PWW rate case in January of 2017. The Chart of accounts for these two projects are as follows:

a) Tinker Road Water Main Replacement:	Acct 331
b) Replace Flashboard Bowers Pond:	Acct 305

Whereas the Chart of Account was originally lists on these schedules for purposed of determining depreciation expense associated with the new assets and whereas depreciation expense is not part of the revenue determination in the QCPAC process the Company did not update the original submissions in regards to Chart of Accounts and deprecation expense.

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: April 3, 2017

AT (OFFICE): NHPUC

FROM: Douglas W. Brogan

SUBJECT: DW 17-017, Pennichuck Water Works, Inc.
2017 WICA Adjustment Filing

TO: Mark A. Naylor
Director, Gas & Water Division

This memo is being submitted at your request to provide observations and recommendations in relation to docket DW 17-017, the 2017 WICA adjustment filing of Pennichuck Water Works, Inc. (Pennichuck or company). I have filed recommendations as a consultant to the Commission in the company's three most recent WICA dockets, DW 13-358, DW 15-043 and DW 16-220. In the current docket the company is seeking approval of a WICA surcharge for projects completed in 2016, approval of projects proposed for 2017, and preliminary approval of 2018 projects. My review is limited primarily to the engineering and operational aspects of the current filing and is based on review of the filing, case discovery and associated materials. My comments focus in particular on the water main project listings in Attachment B, pages 1 through 4, of the testimony of Donald Ware in the case.

2016 Projects

The projects completed in 2016 differed in many instances from what was approved in DW 16-220. As such 'year 1' projects depend increasingly on coordination with City of Nashua and Town of Amherst sewer, drain and paving projects, as well as gas company projects, such changes can continue to be expected. Internal company pressures can affect WICA project evolution as well.

Recently adopted quarterly reporting of project changes shows significant variations in overall project listings, as well as individual project scope and cost, not only by year end, but quarter by quarter throughout the year. These changes carried through to significant variations, both up and down, in total projected WICA feet of main and dollars as the year progressed as well.

Reasons for such changes in 2016 included emergency projects added, projects deferred due to allocation of Staff to critical, unplanned non-WICA projects or for other reasons, refining of project lengths and/or paving costs, cost increases as a result of higher than expected bid pricing, deferred projects added back, addition of projects late in the construction season, and paving deferred to 2017. While the Staff allocation issue is somewhat unique, the other kinds of impacts are again not uncommon during the first year of the three year WICA cycle.

Reasons for some higher than anticipated individual project costs, and costs per foot of main, were probed in discovery (responses to Staff 1-3 and 1-4), with the company supplying adequate explanations for those higher costs.

The company has affirmed that the projects completed in 2016 and proposed for inclusion in its WICA surcharge are used and useful. These include valve, service and hydrant replacements in addition to the water main work.

2017 - 2019 Projects

Approximately half of the water main replacement projects proposed for 2017 are based on coordination with municipal or gas company projects, the other half solely on Pennichuck's current rating system for selection of mains for replacement. All are described in company testimony (Donald Ware, pp. 12-13).

The company's current replacement goal is 15,000 feet of main per year (Ware testimony, p. 5). The WICA program is subject to two rate caps - 2% per year and 7.5% between rate cases. The latter cap is not a factor at this time, and WICA rates will be reset to zero in the company's current rate case, DW 16-806.

The extent of WICA projects proposed for 2017 was limited by the availability of Staff resources resulting from the same critical non-WICA work as in 2016 (Ware testimony, pp. 10-11) - a situation presumably unlikely to recur often. However, WICA expenditures for 2018 and 2019 were also constrained, in this case by the 2% per year rate cap (response to Staff 1-1). This latter constraint, combined with steadily increasing contractor bid costs per foot, will make it difficult to reach the 15,000 foot per year replacement goal in future years. This can be seen to some extent in the numbers below (numbers are the average of the three future years proposed in each docket; lengths are in feet, spending in millions of dollars):

	DW 12-359	DW 13-358	DW 15-043	DW 16-220	DW 17-017
Length of Main	7,462	10,205	14,473	15,247	12,655
Total WICA Spending	2.3	2.8	5.0	5.6	5.1

While proposed WICA spending remains near the rate cap limit, the number of replacement feet it yields will likely continue to decline over time.

However, two other significant factors will also impact future WICA filings:

- 1) The company is in the fourth of its five year development of an asset management program. When completed, the program is intended to provide an even more detailed basis for selecting main replacements than the company's current rating system. The more accurate and time-appropriate selection of individual mains may replace the 15,000 foot per year goal. See Ware testimony, pp. 4-5.
- 2) Continuation of the WICA program itself must be evaluated in the company's current rate case (Order 25,230 in DW 10-091 (p. 17); and Order 25,693 in DW 13-130 (pp. 10-11)); and an

alternate capital investment recovery mechanism (annual step increases) has been proposed by the company in that case.

Details and costs of the proposed future year projects were again investigated in discovery, with reasonable responses again provided by the company.

Conclusion

The company's 2016 projects appear to have been completed prudently, and its proposed 2017 - 2019 projects appear reasonable. As such, I support approval of the company's petition.

I trust these comments are responsive to your request. Please let me know if you need anything further in this regard.

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.

Executive.Director@puc.nh.gov
alexander.speidel@puc.nh.gov
amanda.noonan@puc.nh.gov
brian.buckley@oca.nh.gov
carolann.howe@pennichuck.com
donald.ware@pennichuck.com
james.brennan@oca.nh.gov
jay.kerrigan@pennichuck.com
jayson.laflamme@puc.nh.gov
larry.goodhue@pennichuck.com
ocalitigation@oca.nh.gov
robyn.descoteau@puc.nh.gov
rwh@rathlaw.com
steve.frink@puc.nh.gov

Docket #: 17-179-1 Printed: February 15, 2018

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.