## STATE OF NEW HAMPSHIRE

#### **BEFORE THE**

# PUBLIC UTILITIES COMMISSION

Pennichuck East Utility, Inc. Petition for Authority to Issue Long term Debt State Revolving Fund Loan Amendment W&E Main Replacement Project

DW 14-\_\_\_\_

# DIRECT PREFILED TESTIMONY OF JOHN J. BOISVERT

November 14, 2014

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#### **Professional and Educational Background**

Q. What is your name and what is your position with Pennichuck East Utility, Inc.?
A. My name is John J. Boisvert. I am the Chief Engineer of Pennichuck Water Works, Inc.
("PWW"), which provides services to Pennichuck East Utility, Inc. ("PEU" or the
"Company") pursuant to a management allocation agreement. I have worked for PWW
since February 1, 2006. I am a licensed professional engineer in New Hampshire and
Maine.

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## Q. Please describe your educational background.

9 A. I have a Bachelor of Science degree and a Master of Science degree in Civil Engineering
10 from the University of New Hampshire in Durham, New Hampshire. I also have a
11 Master's degree in Environmental Law and Policy from Vermont Law School in South
12 Royalton, Vermont.

13 Q. Please describe your professional background.

14 Prior to joining PWW, I served as a Team Leader for Weston & Sampson Engineers of A. 15 Portsmouth, New Hampshire in their Water Practices Group from 2000 to 2006. Prior to Weston & Sampson I was employed by the Layne Christensen Company of Shawnee 16 Mission, Kansas as Regional Manager for their Geosciences Division in Dracut, 17 18 Massachusetts from 1994 to 2000. I completed graduate school in 1992 and was employed by Hoyle, Tanner, & Associates of Manchester, New Hampshire as a Project 19 Engineer from 1992 to 1994. Prior to entering full time graduate programs at the 20 21 University of New Hampshire and Vermont Law School, I was employed by Civil Consultants of South Berwick, Maine as a Project Engineer from 1986 to 1989 and by 22

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Underwood Engineers of Portsmouth, New Hampshire as a project Engineer from 1985 to 1986.

- **3** Q. What are your responsibilities as Chief Engineer of the Company?
- A. As Chief Engineer, I am responsible for the planning, design, permitting, construction,
  and startup of major capital projects, including pipelines, reservoirs/dams, building
  structures, pumping facilities, treatment facilities, and groundwater supplies. I provide
  regular technical assistance to PWW's Water Supply Department, Operations
  Department, Customer Service Department, and Senior Management.
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## Q. What is the purpose of your testimony?

- A. I provide technical information in support of the Company's request for a \$510,000
  amendment to the 2014 State Revolving Fund (SRF) loan in the amount of \$550,000
  approved by the Commission in Docket No. DW 14-020. The additional funds will
  enable the Company to complete the water main replacement project at the W&E
  community water system in Windham, NH, which is designed to address problems with
  chronic leakage and frequent pipe failures.
- 16 .Q. In Docket No. DW 14-020, the Commission approved \$550,000 in SRF loan
  17 financing to replace water main in the W&E system. How is this request related
  18 to that approval?
- A. In that proceeding, I testified that the Company intended to complete the W&E main
  replacement project, which at the time was estimated as 8,500 linear feet in total, in two
  or three phases over several years. Subsequent to the Commission's approval of
  financing for the first phase of the project, the New Hampshire Department of
  Environmental Services ("NHDES") notified the Company that funds were presently

1		available for the second phase of the project in the amount of \$510,000 (See Attachment
2		A to Petition). PEU's original plan was to bid and construct the first phase of the water
3		main replacement project, between 4,000 and 4,500 linear feet, in 2014, and then
4		complete the remaining 4,000 to 4,500 linear feet, in 2015 or thereafter. In light of the
5		current availability of additional funds through an amended application, the Company is
6		now planning to complete the project under a single contract over the time frame
7		beginning in the fall of 2014 and extending through the spring of 2015. Based on
8		updated estimates, the project will replace approximately 8,800 linear feet of substandard
9		2-inch polyethylene pipe with 4, 6, and 8-inch PVC water main, main-to-stop sections of
10		services, and other appurtenances.
11	Q.	What motivated the Company to combine the two project phases into one?
12	А.	As engineering staff completed the final design of the project in August 2014, it was
13		determined to bid the entire scope of the project (Phases 1 and 2) for the following
14		reasons:
15		1. The NHDES, in August, advised that where projects are completed in phases over
16		two construction seasons, we had the option of going out to bid for both phases and
17		securing a contractor for both phases even though funding would come in two
18		different years.
19		2. The NHDES suggested that it may be desirable to approve multi-year funding when it
20		is known that a project will span more than one construction season and where loan
21		recipients wish to spread capital expenditures out over time to manage cash flow and

1 3. The NHDES also indicated that additional 2014 loan funds were available at current 2 interest rates (2.72% as opposed to the 2015 rate 3.392%). 3 4. As the project design work was fully completed, it became apparent that the street 4 layout for this water system did not provide a clear way to readily divide the project 5 into two or more phases based on the funds secured in 2014 and those identified as 6 available in 2015. 7 5. Each phase of the project is relatively small with respect to street restoration and 8 pavement. A larger paving (reconstruction) project would lead to reduced 9 mobilization/demobilization costs. 10 6. Portions of the first phase of the project would have to carry over into 2015, related to 11 construction scheduling and completion, so it seemed reasonable to incorporate the 12 remaining work into the bid to achieve the efficiencies of having one contractor work 13 continuously on the project. 14 7. If PEU did not bid the entire project, the option to file an amended SRF application 15 would not be available. 16 8. Consolidating the phases into a single project eliminates the need to separately bid the 17 second phase, which will result in savings in engineering (plans & specifications), administration (advertising and issuing documents), and contractor mobilization 18 19 (overhead) costs for the project. 20 0. Was the project competitively bid? 21 Yes. The project was bid in accordance with NHDES rules. PEU received four bids for Α. 22 the project on September 2, 2014 (bid tabulation attached). American Excavating 23 (American) of Derry, NH is the low bid on the project. American's base bid is

\$890,147.20 and \$119,625.00 for the bid alternate (pavement overlay). If the base bid and the bid alternate are accepted, the contract award would be for \$1,009,772.20.

# 3 Q. The project included a bid alternate for pavement restoration, what is the purpose 4 of the bid alternate?

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5 The project was bid with a base bid scope covering pipe installation and trench repair Α. 6 plus a bid alternate for a final pavement overlay. In recent years, the Company has 7 worked with local towns to complete final pavement overlays when required. Most 8 towns have an annual paving bid/program where multiple town streets are put out to bid 9 and completed in a single paving contract. The rate per ton for asphalt paving is 10 generally less expensive for a town paving bid than the Company sees in a pipe project 11 bid. It is often less expensive for the Company to pay the town to complete the final overlay as part of their program than it is for our pipeline contractor to subcontract 12 13 paving. In addition, the SRF loan requires that all work completed with SRF funds incorporate Davis-Bacon wage rates, thereby increasing our costs further. By having the 14 15 final paving bid as an alternative, the Company now has the option of electing to go with American to complete the paving or forego the use of SRF funds and use an alternate 16 source of capital to pay the Town of Windham to complete the final overlay. 17 18 The 2013 budget for the project was \$950,000 (\$550,000 [2014] plus \$400,000 Q. 19 [2015]). The Company is now seeking a total loan of \$1,060,000. What is the 20 purpose/reason for additional funds above American's bid price?

A. American's bid price does not contain any contingency funds. The Company
 recommends adding a 5% contingency to American's bid price of \$1,009,772.20 to
 ensure project completion. This brings the total request for SRF funding to \$1,060,000.

- 1 Q. Are there cost savings by completing the project under a single contract and loan? 2 Yes. The savings achieved by completing the project under a single loan and Α. 3 construction contract are approximately \$63,000, including approximately \$41,000 in interest payments over the life of the loan (the cost savings of completing a single project 4 5 of \$1,060,000 at 2.72%, as opposed to a project of \$550,000 at 2.72% and a second 6 project of \$510,000 at 3.392%), approximately \$1,100 in bid advertising, and approximately \$21,000 in contractor mobilization expense. 7 8 Q. Does this conclude your written testimony? 9 A. Yes.
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