

THE STATE OF NEW HAMPSHIRE

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June 29, 2009

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

Re: DW 09-111, Pennichuck Water Works, Inc.  
Petition for Authority to Issue Long Term Debt



Dear Ms. Howland:

On June 9, 2009, Pennichuck Water Works, Inc. (PWW) filed a petition with the Commission seeking authority pursuant to RSA 369 to issue long term debt in the amount of \$300,000. Accompanying the petition was the prefiled testimony of Donald L. Ware, President of PWW, and Thomas C. Leonard, Treasurer of PWW. After review, Staff recommends Commission approval of PWW's request.

PWW seeks authority from the Commission to borrow up to \$300,000 from the Department of Environmental Services (DES) to finance construction of the Armory Booster Station in Nashua. PWW has received initial approval for funds to be available via the recently passed American Recovery and Reinvestment Plan (ARRP) of 2009. These funds will be disbursed by DES in the same manner as State Revolving Loan Fund (SRF) money has been handled in the past. While the Commission approved a recent PWW request for use of ARRP funds for three other projects<sup>1</sup>, the Armory Booster Station project received subsequent initial approval from DES under a separate ranking for 'green projects' that involve energy savings, use of renewable energy resources, or water conservation<sup>2</sup>.

The loan documents PWW expects to enter will set forth the exact terms and conditions of the loan, but are expected to be substantially the same as those in prior SRF loans. It is expected that PWW's \$300,000 loan will be repaid over a 20 year term, with an interest rate of 3.744%. Significantly, 50% of the loan principal will be forgiven and will not

<sup>1</sup> See Order No. 24,957 (April 16, 2009) in DW 09-063

<sup>2</sup> According to the testimony of Mr. Ware, the Armory Booster project is projected to provide water to PWW's customers along the southern end of the DW Highway with a savings in energy use of 64%, far exceeding the "green" project goal of at least savings of 20%.

accrue interest. As with prior SRF loans, DES would make disbursements of funds based on invoices submitted by contractors engaged by PWW, and those advances would accrue interest at a rate of 1% until substantial completion of the capital projects. Approximately six months after project completion, monthly payments of principal and interest will begin, with 50% of the principal forgiven.

As described in PWW's petition and testimony, PWW proposes to use the proceeds of this long term debt to construct a booster station adjacent to the National Guard Armory in south Nashua to serve the southern portion of the DW Highway. The costs of this alternative were compared to the cost of upgrading the company's existing Timberline Station, which currently provides service to the area by boosting pressures higher than the proposed station would, and then reducing them through a pressure reducing valve. As mentioned, construction of the Armory Booster Station yields a net energy savings of 64% which translates to nearly \$13,000 in annual cost savings over the Timberline alternative. PWW has secured the necessary easements for the work, and hopes to have the major part of the project completed by early next year.

The impact of the proposed financing on PWW's balance sheet is minimal. Although the initial loan amount is \$300,000, forgiveness of 50% of the principal amount will leave PWW with only \$150,000 to repay. The terms of the loan are extremely favorable to the company and its customers. In its review of this request, Staff has submitted some discovery requests to PWW and the responses are attached to this letter.

The Directors of PWW and of Pennichuck Corporation, PWW's parent company, have authorized PWW to enter into the loan agreements with DES for the purpose of implementing the above capital improvement, as indicated by Attachment TCL-5 to Mr. Leonard's testimony.

As stated, Staff recommends the Commission approve PWW's request for financing authority in this docket. The terms of the financing resulting from the ARRP are extremely favorable. Staff has reviewed the proposed use of the funds and concurs with the improvements planned.

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

Sincerely,

A handwritten signature in blue ink that reads "Mark A. Naylor". The signature is fluid and cursive, with a large initial "M" and "N".

Mark A. Naylor  
Director, Gas & Water Division

Attachment - discovery responses  
cc: Service list

## PENNICHUCK WATER WORKS

DW 09-111

Responses to Staff's Data Requests – Set 1

Data Request Received: June 18, 2009  
Response No.: Staff 1-1

Date of Response: 6/25/09  
Witness: Donald L. Ware

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**REQUEST:** When would the Armory booster station likely be constructed?

**RESPONSE:** Pennichuck Water Works ("PWW" or the "Company") plans to bid this project as soon as it obtains the approval of the NHDES. Prior to the Company attaining the NHDES approval to bid the project, PWW must take the following three actions: (i) acquire financing approval from the NHPUC; (ii) complete an Environmental Review with the NHDES; and (iii) complete and sign the NHDES loan documents. The Company hopes to be able to bid this project by mid to late August 2009, and to award the work to construct the Armory booster station in late September or early October 2009. The Company anticipates the start of construction by mid-to-late October, and completion of the station, exclusive of final landscaping, within a four-month time frame after initiation of construction.

**PENNICHUCK WATER WORKS**

**DW 09-111**

Responses to Staff's Data Requests – Set 1

Data Request Received: June 18, 2009  
Response No.: Staff 1-2

Date of Response: 6/25/09  
Witness: Donald L. Ware

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**REQUEST:** Has the company procured all necessary easements?

**RESPONSE:** Yes.

## PENNICHUCK WATER WORKS

DW 09-111

Responses to Staff's Data Requests – Set 1

Data Request Received: June 18, 2009  
Response No.: Staff 1-3

Date of Response: 6/25/09  
Witness: Donald L. Ware

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**REQUEST:** Please comment on the advantage of using variable frequency pumps in this instance in light of their relative loss of overall pumping efficiency (Don Ware testimony page 5, lines 5-6).

**RESPONSE:** The Armory Booster Station will be a constant pressure booster station. It will need to deliver a steady output pressure through a range of flows rated from 0 to 1500 gallons per minute. A steady pressure output from a centrifugal pump across a range of flows can only occur one of the following three ways: (i) via the use of a variable frequency drive (a "VFD"); (ii) via the use of a pressure-reducing valve; or (iii) via the use of a pressure-relief valve. A VFD produces constant pressure over a range of flows by changing the pump speed, which is in contrast to a constant speed pump ("CSP"). A CSP maintains flow rates at a constant pressure by either (a) creating a backpressure on the pump via a pressure-reducing valve in order to reduce the pump flow output to the desired level; or (b) running the pump at the design flow rate and pressure and relieving from the discharge side of the pump to the suction side of the pump that extra water that is pumped beyond the system demand. Due to the wide range of flows that need to be pumped, the VFD method of producing uniform pressure is far more efficient (even with the loss in efficiency through the drive) than using a CSP because both CSP scenarios result in substantially higher electrical usage than the VFD operating scenario.

**PENNICHUCK WATER WORKS**

**DW 09-111**

Responses to Staff's Data Requests – Set 1

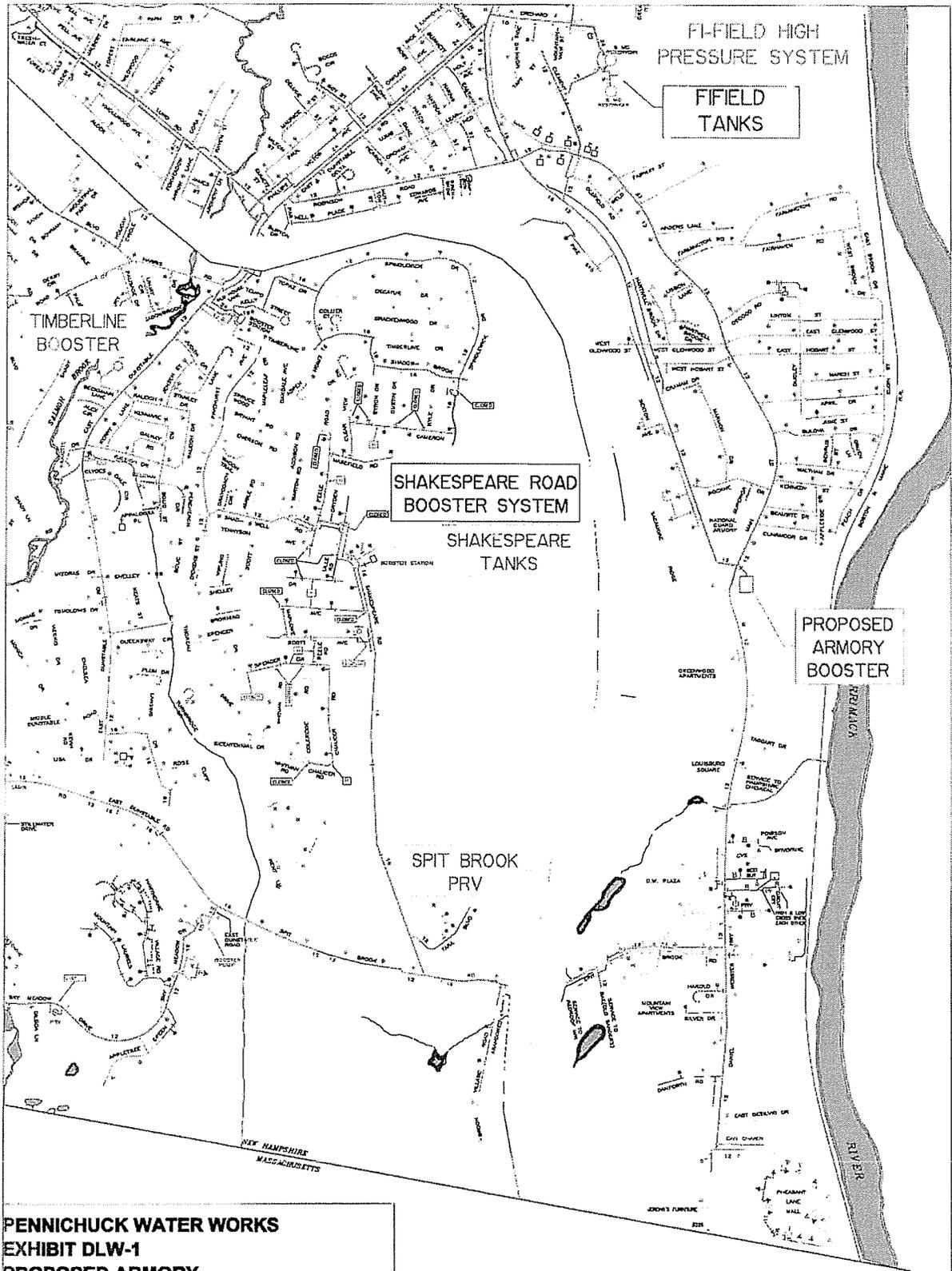
Data Request Received: June 18, 2009  
Response No.: Staff 1-4

Date of Response: 6/25/09  
Witness: Donald L. Ware

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**REQUEST:** Please confirm that the legend colors for the Fifield Pressure Zone and Armory Booster Station High Pressure System on Attachment DLW-1 should be red and tan, respectively, not blue and red as indicated.

**RESPONSE:** The legend on Attachment DLW-1 should be corrected to show the Amory Booster Station High Pressure System as tan and the Fifield Pressure zone as red. A revised DLW-1 is attached with the corrected legend.



**PENNICHUCK WATER WORKS**  
**EXHIBIT DLW-1**  
**PROPOSED ARMORY**  
**BOOSTER STATION**  
**HIGH PRESSURE SYSTEM**

DATE 6/03/09

**PENNICHUCK**  
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- ===== FIFIELD PRESSURE ZONE (HGL 305)
- SOUTHWEST HIGH PRESSURE SYSTEM (HGL 456)
- ARMORY BOOSTER STATION (HGL 330) HIGH PRESSURE SYSTEM

**PENNICHUCK WATER WORKS**

**DW 09-111**

Responses to Staff's Data Requests – Set 1

Data Request Received: June 18, 2009  
Response No.: Staff 1-5

Date of Response: 6/25/09  
Witness: Donald L. Ware

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**REQUEST:** Please indicate the status of the project ranked # 62 (water main replacements on Buck, Van Buren, Fletcher, Green & Armory Streets) on the revised DES regular (non-green) priority list dated 6/9/09, where the project is annotated "System declined ARRA funding".

**RESPONSE:** These projects are currently under construction. The Company went out to bid with these projects in the beginning of March 2009 in order to mate the construction of these projects with the City of Nashua's emergency sewer work on these streets. The Company had applied for ARRA funding for these projects with the desire that the funds would be available for projects that were already underway. When ARRA funding was offered to the Company in May 2009, The Company could not, however, accept such funding for these projects as they did not qualify for ARRA funding because they were already under construction when the funding was offered.

**PENNICHUCK WATER WORKS**

**DW 09-111**

Responses to Staff's Data Requests – Set 1

Data Request Received: June 18, 2009  
Response No.: Staff 1-6

Date of Response: 6/25/09  
Witness: Donald L. Ware

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**REQUEST:** Please confirm that the full sentence on page 1, lines 4-5 of Mr. Leonard's testimony should be omitted.

**RESPONSE:** Yes, lines 4-5 on page 1 of Mr. Leonard's testimony should be omitted. Mr. Leonard is not a professional engineer.

PURSUANT TO N.H. ADMIN RULE 203.09 (d), FILE DISCOVERY

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RATHER THAN WITH THE EXECUTIVE DIRECTOR

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BULK MATERIALS:

Upon request, Staff may waive receipt of some of its multiple copies of bulk materials filed as data responses. Staff cannot waive other parties' right to receive bulk materials.

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