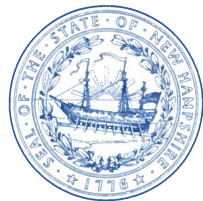


THE STATE OF NEW HAMPSHIRE



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PUBLIC UTILITIES COMMISSION

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

December 29, 2017

NH-PUC 29DEC17-10:38

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

Re: DW 17-194, West Swanzezy Water Company, Inc.  
Petition for Authority to Issue Evidence of Long-Term Indebtedness  
Staff Recommendation for Approval

Dear Ms. Howland:

On December 13, 2017, West Swanzezy Water Company, Inc. ("West Swanzezy", "company") submitted a request pursuant to RSA 369:1 for authority to issue evidence of long-term indebtedness. The company seeks permission to borrow \$24,500 from its owner, Sarah Brown, in order to purchase and install variable frequency drives ("VFDs") and SCADA which were recommended by the NH Department of Environmental Services ("NHDES") earlier in 2017. Costs related to the purchase and installation of the VFDs and SCADA, including the proposed financing, are all components of the step increase included in West Swanzezy's current rate case, DW 17-103<sup>1</sup>. After reviewing this instant request, Staff recommends that the Commission approve West Swanzezy's proposed financing.

Under RSA 369:1, public utilities engaged in business in this state may issue evidence of indebtedness payable more than 12 months after the date thereof only if the Commission finds the proposed issuance to be "consistent with the public good." Analysis of the public good involves looking beyond the actual terms of the proposed financing to the use of the funds and the effect on rates to insure the public good is protected. *See Appeal of Easton*, 125 N.H. 205, 211 (1984). "[C]ertain financing related circumstances are routine, calling for more limited Commission review of the purposes and impacts of the financing, while other requests may be at the opposite end of the spectrum, calling for vastly greater exploration of the intended uses and impacts of the proposed financing." *Lakes Region Water Company, Inc.*, Order No. 25,753 (January 13, 2015) at 4-5, citing *Public Service Company of NH*, Order No. 25,050, 94 NH PUC 691, 699 (2009). Consistent with past financing dockets of this nature, Staff reviewed West Swanzezy's filing as a routine financing.

<sup>1</sup> DW 17-103, Request for Change in Rates, filed July 21, 2017.

The filing describes the terms associated with the \$24,500 financing. West Swanzey has secured a 5.00% interest rate loan from its owner, Sarah Brown, which will be repaid over a 10-year term beginning in January 2018.

Staff's review process included discussions with Sarah Brown and West Swanzey's accountant, Stephen St. Cyr, regarding the company's decision to accept the loan offered by Ms. Brown. The company researched State Revolving Loan Funds (SRF); however, the application process is lengthy and with competitive awarding of funds, the results of SRF funding are uncertain. The VFDs and SCADA projects are detailed in the NHDES Sanitary Survey as recommendations to "maintain compliance and continue to provide an acceptable level of service to the customer."<sup>2</sup> Ms. Brown felt it was in the best interest of the customers to address these recommendations right away. Staff also researched consumer and personal loan interest rates at banks local to West Swanzey, NH finding a range from 7.44% to 9.99% for loans up to 36 months. The choice to accept the loan offered by Ms. Brown to finance the VFDs and SCADA projects is the best choice in this situation.

Staff has reviewed and supports the financing as presented by West Swanzey. The procurement of the proposed loan at 5.00% interest ensures that the Company will finance the VFDs and SCADA at the lowest reasonable cost to customers. Staff therefore believes that West Swanzey has demonstrated that the proposed use of the funds is appropriate and consistent with the Company's duty to provide "reasonably safe and adequate and in all other respects just and reasonable" service to its customers. RSA 374:1.

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

Sincerely,



Robyn J. Descoteau  
Utility Analyst, Gas & Water Division

Attachment: Promissory Note between West Swanzey Water Company, Inc. and Sarah G. Brown, dated November 1, 2017, Attachment A  
NHDES letter to West Swanzey Water Company, Inc. dated June 13, 2017, Attachment B

Cc: Service List

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<sup>2</sup> NHDES letter to West Swanzey Water Company, Inc. dated June 13, 2017.

## PROMISSORY NOTE

\$24,500.00

Keene, New Hampshire  
November 1, 2017

FOR VALUE RECEIVED, West Swanzey Water Company, Inc., promise to pay to the order of Sarah G. Brown at PO Box 10, West Swanzey, New Hampshire 03469 (or such other address as the holder may by written notice to the maker designates) the sum of TWENTY-FOUR THOUSAND FIVE HUNDRED DOLLARS, with interest at the rate of Five percent (5%) per annum on the unpaid balance, payable in monthly installments of Two Hundred Fifty-Nine and Eighty-Six Cents (\$259.86) each commencing on or before the first day of December, 2017, and on the first day of each succeeding month thereafter without further notice, to be applied by the holder first on the payment of interest and the balance on the payment of principal, until the entire principal and interest have been paid. THE MATURITY DATE OF THIS NOTE IS NOVEMBER 1, 2027.

Default continuing for thirty (30) days in the payment of any installment or in the performance of any condition of the mortgage given to secure payment of this note shall make the balance of principal and accrued interest immediately due and payable at the absolute option of the holder, and acceptance of any payment after such default shall not be deemed a waiver of this provision.

Upon default in the payment of any installment continuing for fifteen (15) days or in the performance of any condition of the security agreement given to secure payment of this note, the holder may declare the entire balance of principal and accrued interest immediately due and payable at the option of the holder. Failure to exercise this option shall not constitute a waiver of the right to exercise the same in the event of any subsequent default or defaults.

It is agreed that any amount advanced by said holder for payment of any tax, assessment, insurance or to extinguish any lien on the mortgaged premises, including legal expenses incurred in mortgage foreclosure, may, at the option of the holder, be added to the principal of this note and be deemed to be secured by said mortgage.

Presentment for payment, notice of dishonor or protest are hereby waived.

The maker may prepay the balance due on this note, or any part thereof, at any time without penalty.

This note is secured by a mortgage on real estate at West Street, Swanzey, New Hampshire.

West Swanzey Water Company, Inc.

By: Sarah G. Brown  
Sarah G. Brown, President



The State of New Hampshire  
**Department of Environmental Services**

Clark B. Freise, Assistant Commissioner



June 13, 2017

SARAH BROWN  
WEST SWANZEY WATER CO  
2 S WINCHESTER STREET  
WEST SWANZEY NH 03469

Subject: PWS West SwanzeY: West SwanzeY Water Company (2301020)  
Sanitary Survey 05/23/2017

Dear Ms. Brown:

On May 23, 2017, I conducted a sanitary survey on the West SwanzeY water system. The purpose of the survey was to review the capacity of the water system's sources, treatment, distribution, and management to continually produce safe drinking water. I would like to thank Mark Houghton, primary operator, and Bryan Wetherby, operator, for their assistance in conducting the survey.

**SUMMARY**

The West SwanzeY Water Company (West SwanzeY) system staff interviewed as part of this survey were relatively new to the water system, but very knowledgeable about water systems in general and approach their jobs in a professional manner. Everett E Houghton Company, Inc. was hired to take over operations of the water system and brings a good approach to maintaining system operation. Water quality monitoring records show that the system is in compliance with current standards including compliance with bacterial standards, and action levels for lead and copper. This sanitary survey did not identify any significant deficiencies.

The following is a list of issues that we recommend the managers of the water system consider to maintain compliance, and continue to provide an acceptable level of service to the customers:

- The well stations should be better secured/protected from animal and rodent intrusion.
- The installation of VFDs on the well pumps offers the possible benefits of decrease operational costs and more effective fire protection and system maintenance.
- We encourage West SwanzeY to consider installing a SCADA system to facilitate system safety, operation, and recordkeeping;
- We recommend that the system investigate the development of an Asset Management Plan to include developing a GIS map of the water system, complete a water system inventory, and compile record drawings.

A more descriptive discussion on each of these issues is included below under "Recommendations".

DES Website: [www.des.nh.gov](http://www.des.nh.gov)  
P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095  
Telephone: (603) 271-2513 • Fax: (603) 271-5171 • TDD Access: Relay NH 1-800-735-2964

Ms. Sarah Brown  
June 13, 2017  
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#### Staffing and Operator Certifications

The West Swanzey Water Company requires a Grade I Treatment and Grade I Distribution operator. The current operator is qualified for operation of this water system. The following operator is listed for this system:

Operator	Certificate No.	Treatment Level	Distribution Level
Mark Houghton	1928	2	2

#### ACKNOWLEDGEMENTS

The following are among the positive features which were noted during this survey and for which we commend the Town:

1. Staff interviewed as part of this survey are competent and professional in the operation and maintenance of the water system.
2. We commend the operators for making the recent change to their chemical treatment in favor of a higher concentration of orthophosphate to help control lead and copper.
3. A new flow meter was installed in 2014 replace an aging meter and correct inaccurate well pumping information.
4. The average daily demand is less than 5% of the capacity of a single well. With redundant wells, the system is in great shape for continual water supply and future expansion.

#### ISSUES AND RECOMMENDATIONS

##### Pumps, Pumping Facilities, and Controls

1. The well pumphouse door has daylight along the bottom when closed, which can be a place for rodents to enter. A threshold or other preventer should be installed to keep out unwanted critters.

Also, cloth or mesh screens should be placed over the drain piping from the well pumphouses where they daylight outdoors to keep critters from climbing up into the structure.

2. System operation could be made easier and more effective through the installation of variable frequency drives (VFDs) to replace the existing across the line motor starters. Across the line motor starters put an immediate hammer on the system piping and pumps. VFDs could ramp up the speed of the pumps to create less stress on the existing equipment and decrease the possibility of water main breaks. This impacts the frequency of maintenance and expected life of both the pumps and mains.

VFDs combined with some minor piping modifications in the pump house could also allow for more operational flexibility. Both the pumps and hydro tank can directly output into the system simultaneously allowing for an increase in flow. This increases the ability for fire protection and makes water main flushing more effective.

##### Monitoring, Reporting, and Data Verification

1. The Well #1 pumphouse is connected to a telephone line for alarm signaling, but is correctly not active. Use of an active system or updated SCADA system would facilitate system operation, especially during hours when the system is unmanned, as well as position West Swanzey for

Ms. Sarah Brown  
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### SYSTEM DESCRIPTION

The West Swanzy Water Co. provides domestic water to approximately 81 service connections serving an estimated population of 203 people. This population is based on a standard calculation of 2.5 people per connection and is likely low because of several apartment complex connections. The reported average daily demand in 2016 was just under 20,000 gallons per day. The West Swanzy Water Company serves a franchise area of the Town of Swanzy. The water system was originally constructed to serve the Homestead Woolen Mills complex. In 1988, the West Swanzy Water Company purchased the water system and the entire water infrastructure.

The water system is comprised of two gravel wells, associated piping and distribution system, and a 10,000-gallon hydropneumatic storage tank. The gravel packed wells are located off West Street, along a gravel drive. Gravel Packed well # 1 was installed in 1967 and is 76 feet deep with an estimated yield of 350 gpm. The well is located within a walk-in concrete building housing the vertical turbine, motor, electrical controls, chemical feed systems, hydropneumatic storage tank, and associated piping and valves. The chemical feed systems include the addition of polyorthophosphate and soda ash with a chemical feed pumps and day tanks. The system made a change to the polyorthophosphate in April/May 2017 to increase the amount of orthophosphate in the blend and help with corrosion control. The system currently uses the following chemical feed systems:

- Soda Ash
- CP 718 OrthoPolyphosphate (28% Ortho / 10% Poly Blend)

Gravel packed Well # 2 is located approximately 50 feet south in an identical building. Well #2 was installed in 1967 and is 77 feet deep and has an estimated yield of 350 gpm. The building also houses the vertical turbine, motor, and associated piping and valves. The discharge from Well #2 is manifolded with Well #1 inside Well #1 pumphouse, but has its own chemical injection (also inside Well #1 pumphouse) and also has a diverted pipeline leaving the Well #2 building that used to serve a small portion of the system. This pipeline is currently shut off from the system by a valve in the well house. The wells operate off of a pressure sensor and alternate operation with each cycle.

The wells are summarized as follows:

Well	DES Data Base 2301020-	Depth	Location	Current Pumping Capacity / Safe Yield (gpm)
1	001	76	Well pumphouse	350
2	002	77	Well pumphouse	350

The distribution system is comprised of 6-inch and 8-inch diameter piping. Material of construction includes black iron, and asbestos cement. According to the operator, the distribution system has a limited number of valves and hydrants. Each water user has an individual service water meter.

Ms. Sarah Brown  
June 13, 2017  
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more rapid and effective emergency response. SCADA is also a significant improvement for collection, storage and future use of operating records. SCADA systems have become more affordable, and most water systems now use SCADA. We encourage West Swanzey to consider investing in this improvement.

System Management and Operation

1. Our Asset Management Grant program was discussed as part of this survey. The NHDES Drinking Water Program offers a matching grant up to \$20,000 for water systems to hire a consultant engineer to perform a system assessment and begin asset management initiatives. We recommend West Swanzey consider applying for this grant to help determine the priority of system upgrades required to maintain the desired level of service provided to customers.

It is also important that water systems maintain records of existing conditions and upgrades to the distribution system. The mapping of existing mains and retaining them electronically could also be included in the asset management plan. Contact Luis Adorno at 271-2472 or [Luis.Adorno@des.nh.gov](mailto:Luis.Adorno@des.nh.gov) for more information about our Asset Management program.

I can be reached at 271-1746 or [Randal.Suozzo@des.nh.gov](mailto:Randal.Suozzo@des.nh.gov) if there are any questions regarding this letter.

Sincerely,



Randal A. Suozzo, P.E.  
Drinking Water and Groundwater Bureau

cc: Mark Houghton, Primary Operator

**SERVICE LIST - EMAIL ADDRESSES - DOCKET RELATED**

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**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

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ocalitigation@oca.nh.gov

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Docket #: 17-194-1      Printed: December 29, 2017

**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.**