

1 **Introduction**

2 **Q. Mr. Vaughan, please state your full name and business address.**

3 A. My name is Donald J.E. Vaughan. My business address is 37 Northwest Drive, Plainville,  
4 Connecticut 06062.

5 **Q. By whom are you employed and in what capacity?**

6 A. I am President and CEO of New England Service Company, Inc. (“NESC”). In that capacity, I  
7 am responsible for management oversight of all aspects of the operations of its subsidiaries,  
8 namely; Valley Water Systems in Connecticut, Colonial Water Company, Mountain Water  
9 Systems and Plymouth Water Company in Massachusetts, and Abenaki Water Company in New  
10 Hampshire. My responsibility also includes management of NESC’s non-regulated activities.

11 **Q. Please describe your educational background and professional experience.**

12 A. I have a Bachelor of Science degree in Civil Engineering from Northeastern University and a  
13 Master of Business Administration from Nichols College. I am a registered professional  
14 engineer. From 1976 to 1980, I served as the Director of Water Operations for the City of  
15 Worcester. In that capacity, I was involved in all phases of supply and distribution activities.  
16 Subsequently, I was employed by Citizen’s Utilities as Assistant General Manager for California  
17 Water Properties. I also served as President and General Manager of Southbridge Water Supply  
18 and as the Superintendent of Supply Operations for Aquarion Water Company with  
19 responsibilities primarily in Connecticut. In 1992, I joined Plainville Water Company (now  
20 Valley Water Systems, Inc.). In 1996, I managed the formation of New England Service  
21 Company which now holds the subsidiaries noted above.

22 **Q. Have you previously testified before the New Hampshire Public Utilities Commission or**  
23 **other regulatory bodies?**

1 A. Yes, I have provided testimony to the Massachusetts Department of Public Utilities (“DPU”), the  
2 New Hampshire Public Utility Commission (“PUC”), and the Connecticut Public Utility  
3 Regulatory Authority (“PURA”) on several prior occasions.

4 **Q. Please describe the purpose of your testimony.**

5 A. My testimony is to provide background information and support that will assist understanding of  
6 the following subjects: (1) the Rosebrook Water System’s (RWS) need for a rate adjustment, and;  
7 (2) the capital expenditures that have taken place since Abenaki Water Company (“AWC”, or the  
8 “Company”) acquired RWS in September of 2016 and the resulting operational efficiencies  
9 which have and will continue to provide direct benefits to customers, and; (3) a proposed capital  
10 investment plan for 2018-2020 designed to realize even greater plant optimization through  
11 necessary and prudent improvements that, for the most part, address the extreme pressure  
12 gradient issue, and; (4) substantiation for AWC’s acquisition price of RWS as well as the ensuing  
13 system (customer) benefits and sustaining its viability.

14 **Q. Please provide a brief discussion of the Rosebrook Water System.**

15 A. Rosebrook, after several years of languishing under ownership which had its focus on business  
16 interests elsewhere, was acquired by Abenaki Water Company on September 23<sup>rd</sup>, 2016. Abenaki  
17 acquired Rosebrook’s assets through Wells Fargo Bank, which held the rights of the system  
18 previously owned by an equity group then having title to the present Omni properties.

19 The entire resort area is anchored by the Mt. Washington Hotel, which serves as the economic  
20 engine to Bretton Woods. The Rosebrook Water System is an essential part and a necessary asset  
21 to the present and future environmental health of the region from many perspectives.

22 The system itself is an operating sub-division of Abenaki Water Co. It produces, treats, and  
23 distributes drinking water to approximately 410 metered customers consisting of 390 residential

1 (mostly second and seasonal homes) and 20 commercial entities. About 60% of total water  
2 demands comes from the Omni Hotel properties.

3 Rosebrook's physical plant is composed of two wells, a 650,000 gallon storage tank, and mostly  
4 ductile iron distribution piping ranging from 8" to 16" in diameter. Public fire protection is  
5 provided through about 65 hydrants and several internal sprinkler systems.

6 While there is a small, local Abenaki operating office located in the service area, the system's  
7 principal administrative, customer service, and accounting functions take place at 32 Artisan  
8 Court, in Laconia.

9 **Q. What test year has the Company selected and what was the test year in its previous rate**  
10 **docket?**

11 A. In this filing, the Company is using the twelve months ending 9/30/17. In Rosebrook Water  
12 Company's previous rate case, the test year ending 12/31/11 was used.

13 **Q. Why is AWC requesting new rates for the Rosebrook Water System?**

14 A. AWC recognizes that unless it files a rate application as soon as possible its financial viability  
15 will be endangered. At this juncture, the Rosebrook Water System on a stand-alone basis is  
16 providing an insufficient return. This insufficient return is clearly dragging down the  
17 performance of AWC as a whole. The company estimates that with this filing, approved  
18 permanent rates will not go into effect until sometime near the end of 2018 or during the 1<sup>st</sup>  
19 quarter of 2019. That said, AWC must be focused on submitting the filing as soon as possible,  
20 particularly subsequent to making considerable capital expenditures, and because with a year's  
21 period of ownership, it can credibly document RWS' known and measurable operating and  
22 maintenance expenses. Furthermore, the Company is in a position to show firm, pro forma  
23 expenses for the twelve months following the test year based on its first hand and intimate  
24 knowledge of the Rosebrook system.

1 **Q. What return on equity is the Company seeking?**

2 A. The factors cited in the following are some of the significant reasons why the Company is  
3 requesting a ROE of 11.6%.

4 (1) In this significant and unique area of the state, proper operation of the water system is  
5 absolutely essential and a necessity to the everyday and on-going tourism, commercial, and  
6 seasonal recreational activities of Bretton Woods. It is an economic engine and source of  
7 employment in an otherwise remote area and hence, the requirement for an optimally performing  
8 Rosebrook Water System. To achieve this objective, Rosebrook must continually invest in its  
9 infrastructure, which it has already done in the test year and subsequently.

10 For Rosebrook to adequately invest (after attracting and earning capital) it must provide a return  
11 to incent those who are providing the funds. If it cannot do that, then it is financially impaired in  
12 making ongoing plant improvements. Those investors, also, will look elsewhere for appropriate  
13 market returns.

14 (2) Risks related to the system are many. Much of them are due to:

15 (a) The system is in an isolated region in the state. As such, among other things, recruiting and  
16 retaining skilled, qualified personnel are very difficult due to the sparse labor pool.

17 (b) The sub-alpine environment and steep terrain make for difficult winter operating and  
18 maintenance conditions in addition to those posed by extreme hydraulic pressures.

19 (c) As virtually a stand-alone system, its small size is the primary factor in revenue and expense  
20 volatility which is caused by costly weather events, malfunctions and main breaks. For example,  
21 on November 3<sup>rd</sup>, 2017, a powerful storm blasted the area forcing the Omni Mt. Washington  
22 Hotel, the company's biggest customer, to shut down for several days. Various other similarly  
23 cost intensive events have occurred, impacting the Company.

1 (d) Prior to the acquisition of Rosebrook, it had virtually no debt and was owned with almost  
2 100% equity. Accordingly, the Company had a very high cost of capital. Post-acquisition under  
3 Abenaki, the capital structure is significantly leveraged toward debt and consequently will have a  
4 much lower cost of capital to the benefit of its customers. On the other side of the debt, AWC's  
5 creditor for the Rosebrook system (CoBank) will be keenly observing the Company's ability to  
6 earn a risk-adjusted return that allows it to service its obligations and concurrently properly fund  
7 its capital program.

8 As an aside, the Company firmly believes its requested ROE is justified due to the risk  
9 associated with its size. Therefore, it is currently collaborating with two other small water  
10 companies in engaging a cost of capital expert witness to prepare testimony focused on size  
11 premium. The companies expect a petition covering the subject will be filed with the  
12 Commission in the next 45-60 days.

13 In summary, the company requests a reasonable opportunity to earn a competitive return on its  
14 invested capital that will allow a successful start to its essential capital program going forward  
15 (see PFT following).

16 **Q. What are your comments on Rosebrook's rate structure?**

17 A. The Rosebrook system has unique water demand characteristics that might be expected with a ski  
18 resort. Several of the residences are occupied on a vacation rental basis while others are available  
19 for longer-term tenancy. Many of the residences are used as secondary homes for the owners.  
20 Consequently, water demand varies (peak demand occurs in February) depending on snow and  
21 general weather conditions which in turn have a direct link to rental activity as well as Omni  
22 Hotel occupancy. This combination of factors, particularly for a smaller system, imposes a fair  
23 degree of revenue volatility on system financials.

24 When Rosebrook's monthly base charge for a 5/8" meter (\$9.91) is considered, it is apparent that  
25 in aggregate, revenue from this category is disproportionately low compared to on-going

1 operating costs. As this situation continues, dependence on volumetric charges increases when  
2 expected water demand decreases. Hence, revenue stability becomes a constant concern for  
3 Rosebrook which must balance fair and equitable rate structures versus the necessity to cover  
4 increasing infrastructure and supply costs. As volatility occurs, and demand lowers, the difficulty  
5 in covering fixed costs increases and Rosebrook becomes subject to insufficient returns adversely  
6 affecting continued investment. This then precipitates the need for a future resource-consuming  
7 rate filing.

8 To avoid this condition, and to better provide Rosebrook with more stable revenues, we urge  
9 approval of the base charge increase as proposed by Stephen P. St. Cyr whose recommendation is  
10 nearby. This proposal will assist in stabilizing revenues going forward while easing the  
11 volumetric charges proposed but necessary to satisfy the requested revenue requirement.

12 **Q. Does AWC have any employees?**

13 A. It does not. The long distances and travel time between AWC's operating systems would make it  
14 cost prohibitive (and nearly impossible) to assign a dedicated company employee to properly  
15 cover the service areas. This would be especially true for operator availability to function on a  
16 stand-by basis. Secondly, there is not a sufficient amount of field, administrative and financial  
17 work to warrant a full time person to perform all duties, nor is there a single person with the  
18 necessary qualifications and experience to fulfill all the responsibilities. Consequently, AWC  
19 utilizes the talent pool from NESO. For example, there are at least two people available to project  
20 manage plant improvements and address O&M responsibilities. Please refer to the affiliate  
21 agreement which is included as Exhibit 1.

22 **Q. Since AWC acquired ownership of the Rosebrook system, what has been the extent of the**  
23 **Company's investment in its plant?**

24 A. Rosebrook has directed funds concentrating largely on metering plant. The Company determined  
25 that this particular area had the highest priority for beginning investments.

1 As reported in the Staff Audit Division's May 2013 examination, Rosebrook's entire data  
2 collection and billing procedure was overdue for significant and cost-effective upgrades. The  
3 process as it existed was resource draining. We agreed.

4 Installation of radio read meters have been completed for nearly 100% of the customers. This  
5 project is enabling more accurate invoicing, virtual elimination of estimated bills, facilitation of  
6 monthly billing, earlier homeowner detection of leaks, the ability to calculate unaccounted for  
7 water on a monthly basis, and over the long-term, a reduction in operating expenses. Importantly  
8 also, it secures accurate and timely revenue recognition which is vital in enabling the company to  
9 meet all other financial obligations, including continued investment.

10 One other priority allocation of capital has been for the evaluation, planning, and engineering of a  
11 system-wide pressure reduction project. Over \$25,000 has been invested in this very significant  
12 initiative, and although not yet used and useful, it lays the groundwork for what we would call, as  
13 a minimum, phase one of an essential pressure reduction effort. We use the term "phase one"  
14 because at this juncture, we cannot accurately predict the Omni Hotel's expansion plans and the  
15 timetable associated with them. However, whether or not the expansion plans materialize,  
16 Rosebrook *must* follow through on a system-wide pressure reduction project. As an essential part  
17 of the project, Rosebrook has already completed a hydraulic model which will be invaluable for  
18 the engineering to follow.

19 **Q. Please elaborate on the pressure reduction project.**

20 A. The effort surrounding the initiative to reduce the extreme high pressure in certain locations of  
21 the system stems from the original design location of the 650,000 gallon storage tank. In more  
22 technical terms, we estimate that the single hydraulic gradient controlling the system is in the  
23 vicinity of 200 ft. higher than what is considered operationally safe. For example, pressures in

1 the low elevations of the system, such as at the Omni Mt. Washington Hotel, far exceed the state  
2 maximum standard of 100psi.

3 Operation of the system at pressures bordering 200psi, since its inception, has had a history of  
4 negative consequences. These, in one way or another, have been examples of the difficulties and  
5 hazardous aspects of system operation. Noteworthy events having taken place include:

- 6 • Rosebrook Water Company was informed their commercial package and commercial  
7 auto policy, running from 6/23/15 to 6/23/16 would not be renewed. This event was  
8 triggered by an extensive damage claim by Rosebrook following a water hammer  
9 incident which flooded several townhouses during a hydrant flushing operation.
- 10 • In 2010, a high pressure event during a repair at Abenaki's well house caused major  
11 damage to that facility and forced the Mt. Washington Hotel to close for three days.

12 The system pressure consequences, history, and implications into the future are well known and  
13 we believe must be satisfactorily addressed. To be specific, there have been several water  
14 pressure incidents in the recent past that have adversely impacted the hotel and ancillary  
15 buildings, some more severely than others, but still continuing on a random basis and all adding  
16 to unanticipated operating costs and service issues for the resort complex and residences. As  
17 mentioned, these troublesome consequences have included ongoing sprinkler system issues, water  
18 hammer occurrences, residential damage, as well as insurance coverage complications.

19 The Department of Environmental Services (DES) has been well aware of the situation for some  
20 time. In their sanitary survey report, dated August 4, 2014, they concluded "pressure in the  
21 distribution system, as a result of storage tank elevation, is much higher than necessary for  
22 adequate water service and fire flow. This pressure presents serious questions about power  
23 consumption and about safety of the operation when making pipe repairs. We urge the system

1 owner to consider alternate ways of using the existing tank and adopting a lower pressure  
2 gradient.”

3 In support of the pressure reduction project, we have included correspondence from DES, dated  
4 1/26/17 and Twin Mountain Fire Department dated 2/25/17 as Exhibits 2 and 3, respectively.

5 Because of all contained in the preceding, we initiated a study by engaging Horizons Engineering  
6 from Littleton, to assist us with solving the problem once and for all. Horizons has provided us  
7 with a proposal (approximately \$80,000) to prepare an engineering design and construction  
8 documents to build 3-4 coordinated pump stations, pressure reducing valve and vaults, among  
9 other items that will solve this major problem. In phase one of the engineering drawings,  
10 Horizons has identified the physical locations for all the infrastructure associated with the  
11 improvements to the project. Having contacted the property owners, Abenaki is working on  
12 finalizing details with each to obtain easements. Furthermore, Abenaki has developed a hydraulic  
13 model that provides various flow rates at numerous pressure levels expected under any number of  
14 operating conditions, thus verifying the solution. To date Abenaki has invested approximately  
15 \$25,000 to conclude the phase one portion of the project.

16 Venturing forward into the final phase of the engineering design portion of the work represents a  
17 significant financial commitment. In addition to the design cost, the Horizon’s report estimates  
18 construction cost at about \$1.4MM. Given the very nature of a conceptual estimate, we would  
19 take a more conservative approach and suggest that the proposed construction might be more  
20 likely in the \$1.5-2MM. range. Only project bids will narrow the cost down to what will be  
21 closer to the actual amount.

22 **Q. With the understanding of the pressure reduction project, what are Abenaki’s plans for**  
23 **capital additions for 2018 and later years?**

1 A. Included with this testimony is Exhibit 4, which lays out the company's plans for the next 4  
2 years. As expected, the pressure reduction project has the biggest capital expenditure. It is not  
3 exactly known what elements of the project will cost, but that information (project bids) will be  
4 available before this docket is complete.

5 In order to make this rate filing as efficient as possible, the company requests step increases for  
6 improvements beyond the test year which will be used and useful for the ultimate benefit of  
7 Rosebrook's customers.

8 **Q. Does Abenaki plan to seek recovery of transaction costs incurred in the acquisition of**  
9 **Rosebrook?**

10 A. Yes, as it indicated it would in testimony filed in the DW 16-448 acquisition proceeding. In that  
11 docket, the company had little control over the length of the acquisition proceeding, the  
12 discovery/hearing period or the amount of resources required in the effort, all of which had a  
13 direct bearing on the total expense. Please refer to the testimony of Steve St. Cyr which further  
14 details this request.

15 **Q. Does the Company seek recovery of the acquisition premium which was an element of the**  
16 **transaction?**

17 A. As indicated earlier, Rosebrook was a floundering, directionless water utility whose owners were  
18 struggling with foreclosure pressures. Absent was any semblance of efficiency or sign of  
19 leadership. Abenaki viewed Rosebrook as a system that over time would provide synergies and  
20 cost savings to all its customers in addition to those of Rosebrook.

21 Because the transaction was consummated, it secured for Rosebrook an entity having a team of  
22 seasoned operators and managers who have already had a positive impact on system performance.

1 Abenaki seeks recovery of the acquisition premium in regulatory alignment with jurisdictions  
2 such as in Massachusetts and Connecticut. Abenaki has already incurred financial losses  
3 subsequent to its ownership, and requests, as incentive to own and stabilize poorly managed  
4 systems, recovery of the premium paid.

5 In the final analysis, Rosebrook was an example of a struggling, underperforming water system.  
6 The sellers were no longer interested in managing the company and wanted to move on to other  
7 things. When considering the entire transaction from start to finish, Abenaki is the right owner to  
8 provide the investments necessary for the future of the system.

9 **Q. Does this conclude your testimony?**

10 A. Yes.

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