OCA Exhibit 2

BEFORE THE STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION

In the matter of:

Abenaki Water Company)
DW 15-199)

Direct Prefiled Testimony

Of

Scott J. Rubin
On behalf of the Office of the Consumer Advocate

Dated: **March 24, 2016**

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Q. Please state your name and business address.

A. My name is Scott J. Rubin. My business address is 333 Oak Lane, Bloomsburg, PA.

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

A. I am an independent consultant and an attorney. My practice is limited to matters affecting the public utility industry.

Q. What is the purpose of your testimony in this case?

A. I have been asked by the New Hampshire Office of the Consumer Advocate ("OCA") to review the rate design proposal filed by Abenaki Water Company ("Abenaki" or "Company") in this case.

Q. What are your qualifications to provide this testimony in this case?

A. I have testified as an expert witness before utility commissions or courts in the District of Columbia, the province of Nova Scotia, and the states of Alaska, Arizona, California, Connecticut, Delaware, Kentucky, Illinois, Maine, Maryland, Mississippi, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, and West Virginia. I also have testified as an expert witness before two committees of the U.S. House of Representatives and one committee of the Pennsylvania House of Representatives. I also have served as a consultant to the staffs of two state utility commissions, as well as to several national utility trade associations, and state and local governments throughout the country. Prior to establishing my own consulting and law practice, I was employed by the Pennsylvania Office of Consumer Advocate from 1983 through January 1994 in increasingly responsible positions. From 1990 until I left state government, I was one of two senior attorneys in that Office. Among my other responsibilities in that position, I had a major

role in setting its policy positions on water and electric matters. In addition, I was responsible for supervising the technical staff of that Office. I also testified as an expert witness for that Office on rate design and cost of service issues.

Throughout my career, I developed substantial expertise in matters relating to the economic regulation of public utilities. I have published articles, contributed to books, written speeches, and delivered numerous presentations, on both the national and state level, relating to regulatory issues. I have attended numerous continuing education courses involving the utility industry. I also have participated as a faculty member in utility-related educational programs for the Institute for Public Utilities at Michigan State University, the American Water Works Association, and the Pennsylvania Bar Institute. Attachment SJR-1 to this testimony is my curriculum vitae.

Q. Have you contributed to any books on the topic of water utility rate design?

A. Yes. I served on the editorial committee for the fifth edition of *Water Rates, Fees, and Charges* (Manual M1) published by the American Water Works Association in 2000. That book is the primary rate-setting manual for the water utility industry, including cost-of-service studies and rate design.

Q. Do you have any experience that is particularly relevant to the issues in this case?

A. Yes, I do. I have testified as an expert witness in numerous water utility rate cases. For example, during the past three years, I have testified in water rate cases in the following jurisdictions: California (Apple Valley Ranchos and California Water Service), Connecticut (Aquarion), Kentucky (Water Service Co.), New Hampshire (Aquarion),

Nova Scotia (Halifax Regional Water), and Pennsylvania (City of Bethlehem, City of Lancaster, Pennsylvania-American, and United Water).

Q. Please summarize your recommendations and conclusions.

A. I summarize my conclusions and recommendations as follows:

- I do not take issue with Abenaki's proposed rate design for sewer rates.
- The existing rates in Belmont have a customer charge that is much too high. Almost 70% of the bill is completely beyond the customer's control.
- The existing rates in Bow have usage charges that are much too high. More revenue should be collected through fixed charges to help ensure the stability of Abenaki's revenue stream throughout the year.
- I question whether there is a reasonable justification for Belmont's existing rates for commercial customers being substantially higher than rates for residential customers.
- I recommend that the Company start to rationalize its rate structure. By rationalizing the rate structure, I mean that there should be a target to collect approximately one-third of residential revenues through customer charges and that the usage (per-ccf) rates should be moved closer together than they are today.
- The Company proposed a rate design that would immediately consolidate the residential rates in Bow and Belmont. This proposal leads to an extremely wide range of bill impacts that, in my opinion, is unreasonable, unfair to customers, and not consistent with traditional cost-based ratemaking principles.
- I have prepared a rate design that represents a reasonable first step in the process of rate consolidation while avoiding the extreme customer bill impacts of the Company's proposal.

Q. Please provide an overview of your understanding of the Company.

A. Abenaki has two service areas. The Bow area is the smaller area and contains 95 single-family residential customers and no non-residential customers. Customers are fairly homogenous in the Bow area. According to the Company's billing data for the test year

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(provided in response to OCA 2-12 and adjusted in Tech 2-3), the typical customer uses approximately 5,500 cubic feet of water per year (hereafter I will state consumption in units of 100 cubic feet, or ccf, so the typical customers uses about 55 ccf per year). Approximately 90% of customers in Bow use between 18 ccf and 114 ccf per year, with the lowest user registering 1 ccf and the highest using 154 ccf. So while there is some diversity among customers in Bow, it appears that most customers are fairly similar to one another.

The Company's second service area is in Belmont. The Company provides both water and sewer service to most of its Belmont customers. I do not take issue with the Company's proposed rate design for sewer service, so I will not discuss the sewer customers further. For water service, Belmont has 156 customers. Of those, 150 are single-family residential, one is multi-family residential (serving 32 residential units), and five are commercial (though the Company has two different commercial rate schedules, one of which applies only to a single customer). The single-family residential customers in Belmont use considerably less water than those in Bow. The typical customer in Belmont uses only 30 ccf per year (compared to 55 ccf in Bow). Approximately 90% of Belmont customers use between 7 ccf and 63 ccf per year. Interestingly, the 150 single-family customers in Belmont collectively use less water than the 95 single-family customers in Bow. In addition, the multi-family and commercial customers in Belmont collectively use almost 3,000 ccf per year.

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Q. What is your understanding of the Company's existing, permanent water rates?

A. The existing (permanent) water rates in the Bow area are structured very differently than the rates in the Belmont service area. Revenues in Bow come primarily from consumption (per-ccf) charges, while residential revenues in Belmont come primarily from the base customer charge. Specifically, under present rates, single-family residential customers in Bow provide revenues of $67,308 of which $11,400 (17%) come from the customer charge. This results from Bow customers paying very high usage rates ($10.20 per ccf) and a relatively low customer charge given the size of the utility ($10.00 per month). In contrast, single-family residential customers in Belmont provide water revenues of $84,375 of which $58,194 (69%) come from the customer charge. In Belmont, the reverse is true: the customer charge is extremely high ($32.33 per month) and the usage charge is lower than I would expect for a utility this size ($5.3388 per ccf).

Q. In your experience, are either the Bow or Belmont rates typical for small water utilities?

A. No. In my experience, both of the existing rate structures are unusual. It is typical for a smaller water utility to collect approximately 20% to 40% of its revenues through the customer charge. For example, the Florida Public Service Commission typically (but not always) permits small water utilities to collect up to 40% of revenues through the customer charge.[1] The California Urban Water Conservation Council has a best management practice that encourages water utilities to collect no more than 30% of

[1] See, e.g., *HC Waterworks, Inc.*, 15 FPSC 7:88 (July 8, 2015) ("Typically, we allocate no greater than 40 percent of the water revenue to the BFC [base facilities charge].").

revenues through the customer charge.[2] As I said, in my experience most smaller water utilities stay roughly in the range of 20% to 40% of revenues from the customer charge. This provides an appropriate balance between recovering fixed costs and providing customers with a strong incentive to use water efficiently, fix leaks in a timely manner, and otherwise conserve a limited natural resource.

The existing rates in Belmont have a customer charge that is much too high. Almost 70% of the bill is completely beyond the customer's control. When this is the case, the customer does not have a strong incentive to use water efficiently and avoid wasteful practices (such as unrepaired leaks). In contrast, the existing rates in Bow have usage charges that are much too high. More revenue should be collected through fixed charges to help ensure the stability of Abenaki's revenue stream throughout the year. With a very low percentage of revenues from customer charges, Abenaki runs the risk of failing to collect sufficient revenues during the winter or if there is a cool, wet summer.

Q. Do you have other concerns with the existing rate structure?

A. Yes. In Belmont, rates for commercial customers are substantially higher than rates for residential customers. I question whether there is a reasonable justification for this. It is much more typical to see either the same rates for residential and non-residential customers, or a slightly lower rate for non-residential customers because it may be more economical to sell one customer large amounts of water than it is to sell the same amount of water to multiple residential customers. In my experience, unless there is a detailed cost-of-service study justifying such a result, it is highly unusual to have non-residential

[2] California Urban Water Conservation Council, Retail Conservation Pricing as amended June 22, 2015, https://www.cuwcc.org/Committees/BMP-14-Committee/FileId/6617

rates that are significantly higher than residential rates, as is the case in Belmont (the residential usage rate is $5.3388 per ccf; the commercial rates are $15.0495 and $6.7967 per ccf (Commercial A and B, respectively).

Q. Are the differences in existing rates related to differences in the cost of providing service?

A. The Company has not prepared a cost-of-service study, so I cannot answer that question definitively. There are strong indications, however, that the rate differences are not driven by differences in the cost of service. I calculate that the average cost per ccf in Bow is approximately $18.37 under the Company's proposed revenue requirement.[3] A similar calculation shows that the average cost per ccf in Belmont is nearly the same at approximately $17.47 per ccf.[4] Thus, it does not appear that the differences in rate design are a function of significant differences in the cost of service.

Q. What do you recommend?

A. I recommend that the Company start to rationalize its rate structure. By rationalizing the rate structure, I mean that there should be a target to collect approximately one-third of residential revenues through customer charges and that the usage (per-ccf) rates should be moved closer together than they are today. With the wide diversity of rates presently, it would lead to excessive bill impacts to try to fully achieve these goals in one case, but I believe that some progress can be made in this case.

[3] Stand-alone revenue requirement of $100,687 (Company Filing, Sch. 1) divided by 5,481.2 ccf (response to OCA 2-9) equals $18.37 per ccf.

[4] Stand-alone revenue requirement of $137,010 (Company Filing, Sch. 1 of $138,799 less $1,792 for power and chemicals adjustment; Tech. 2-3) divided by 7,843.35 ccf (OCA 2-11 as amended by Tech. 2-2 and 2-3) equals $17.47 per ccf.

Q. What does the Company propose?

A. The Company proposed a rate design that consolidates all residential rates immediately, keeps one non-residential rate much higher than residential rates, and makes the other non-residential rate lower than the residential rate (where it is 27% higher today). Specifically, the Company proposed a $30.00 per month customer charge for all single-family residential customers and a usage charge of $8.7275 per ccf for residential customers. The Commercial A customer would continue to pay a substantially higher rate per ccf ($19.6385), but the Commercial B customers would pay a lower rate than residential customers ($8.4694, about 3% less than the residential rate). This stands in stark contrast to existing rates where the Commercial B rate is 27% higher than the residential rate per ccf.

This proposal leads to an extremely wide range of bill impacts that, in my opinion, is unreasonable, unfair to customers, and not consistent with traditional cost-based ratemaking principles.

Q. Can you be more specific about the impacts of the Company's proposed rate design?

A. Yes. Overall the Company has proposed to increase water rates by 21.8%. I used the Company's actual test-year billing data (as adjusted in Tech 2-3) to calculate the effect on each customer of the Company's proposed rates. Under Abenaki's proposed rate design, some customers would pay lower bills than they do today under permanent rates (the lowest would be a 7% reduction in the annual bill) while other customers would see their bills increase by two or three times the average increase. Indeed, one customer would see

an increase in its annual bill of more than 180% under the Company's proposal. Attachment SJR-2 shows this information in tabular and graphical form.

Q. In your opinion, is the Company's proposal a reasonable rate design?

A. No, the Company's proposed rate design is not reasonable. I usually expect to see a range of bill impacts that have the maximum increase to any customer of about two times the system-average percentage increase. In certain unusual cases (for instance where there is a very large utility with multiple customer classes) the highest increase might be as much as three times the system-average percentage increase. In this case, with an average increase of approximately 22%, I would expect nearly every customer to have an increase that is less than 45%. As I show on Attachment SJR-2, however, the Company's proposal has 16 customers (6% of all customers) with annual increases that exceed 45%, with 8 of those customers having increases of more than 65% (three times the system-average increase).

Q. Have you developed a rate design that is more reasonable than the Company's proposal?

A. Yes. On Attachment SJR-3 I show a rate design, and proof of revenues, that I developed to start the process of rationalizing the rate design. I move the customer charges in Belmont and Bow closer to each other by decreasing the Belmont charge and increasing the Bow charge. I also move the residential per-ccf charges closer together in the two areas, though there remains a substantial difference. I also limit the increases to the commercial customers to begin the process of moving their rates closer to the rates for other customers.

Q. How do you measure the reasonableness of your rate design proposal?

A. I assess the reasonableness of my proposal in three ways. First, I evaluate the percentage of residential revenues from fixed charges. By this measure, my proposal makes some progress toward the goal I described earlier of about one-third of residential revenues from the customer charge. Under this proposal, the percentage is about 37% for all residential customers (53% in Belmont and 20% in Bow), which is a little higher than I would prefer, but still much better than existing rates.

Second, I evaluate the effect on customers' bills. Attachment SJR-4 shows that fewer customers have increases in excess of two times the system-average percentage increase (seven customers compared to 16 under the Company's proposal), with no customers having increases more than three times the system-average increase (compared to eight customers under the Company's proposal).

Third, I calculate the difference between the revenues and cost-of-service on a stand-alone basis in each service area, in an attempt to minimize the revenue shifting inherent in any realignment of rates. The Company claims that its stand-along revenue requirement from Belmont is approximately $137,000 per year and its stand-alone revenues from Bow would be approximately $101,000 per year.[5] The Company's proposed rate design would collect $155,000 from Belmont ($18,000 more than the stand-alone cost-of-service) and $82,000 from Bow ($19,000 less than cost). My proposal keeps the two service areas closer to cost than the Company's proposal: revenues of $145,000 from Belmont and $93,000 from Bow -- differences of

[5] Filing, Sch. 1 (the Belmont figure is adjusted for power and chemicals per Tech. 2-3; see footnote 4, above).

approximately $8,000 from cost, which is a more reasonable differential than the Company proposed.

Q. How does your proposal compare to the Company's proposal?

A. Attachment SJR-5 shows present, Company-proposed, and my proposed rates. It can be seen that my proposal begins to move the rates closer together and starts to bring commercial rates in line with residential rates, but does not fully achieve any of these goals. When rates are as diverse as the Company's present rates, the process of rate consolidation may take several years to accomplish, so as to avoid excessive rate increases to some customers. In my opinion, my proposal represents a reasonable first step in the process of rate consolidation.

Q. What do you recommend?

A. I recommend that the Commission adopt my proposed rate design if it determines that the Company's revenue requirement claims are accurate.

Q. How do you recommend that rates should be designed if the Commission determines that the revenue requirement is less than the Company requested?

A. If the Commission finds that the Company over-stated its revenue requirement, then I recommend that the follow steps be followed in designing rates:

- I have not proposed any increase in the Commercial A and Commercial B customer charges, and I proposed a decrease in the Belmont residential customer charge, so those rates should remain as I recommend regardless of the revenue requirement.
- All other charges should be reduced proportionately from the rates I recommend to achieve the Commission-determined revenue requirement.

Q. Does this conclude your direct testimony?

A. Yes, it does.

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