OCA Exhibit 2

BEFORE THE STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION

In the matter of:

Aquarion Water Company of New Hampshire, Inc.	)
DW 12-085	)
Permanent Rate Case	)

Direct Prefiled Testimony

Of

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

Dated: **January 11, 2013**

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 proposals of Aquarion Water Company of New Hampshire, Inc. ("Aquarion" or "Company") to make permanent its Water Infrastructure and Conservation Adjustment ("WICA") and to make various other changes in its tariffs.

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

A. Yes, I do. I have testified on numerous occasions concerning water utility tariffs, including automatic adjustment mechanisms similar to WICA. I also testified on rate design and tariff-related issues on behalf of the Connecticut Office of Consumer Counsel in the 2010 rate case filed by Aquarion's affiliate, Aquarion Water Company of Connecticut.

Q. Did you review the testimony and exhibits of any Company witnesses?

A. Yes. I reviewed the testimony and exhibits of Troy Dixon. I also reviewed numerous responses to discovery requests and various documents related to Aquarion's WICA in other dockets.

Q. Please summarize your conclusions.

A. My conclusions can be summarized as follows:

- Aquarion should not be permitted to continue using a WICA. It has not demonstrated a need for such an extraordinary ratemaking mechanism, and many of the projects it has included in the WICA during the pilot period are routine capital expenditures that have no effect on the safety or reliability of service.

- If Aquarion is permitted to continue using a WICA, however, emergency response or other unplanned capital spending should not be eligible for inclusion in the WICA. Such costs are a routine part of any utility's business and should not be subject to special ratemaking treatment (absent an extraordinary storm or other disaster).

- If the WICA is continued, Aquarion's WICA should be modified to exclude customer metering expenditures. Aquarion is required to replace (or test) customer meters on a set schedule. If Aquarion desires to upgrade meters to a different technology, it should be able to accommodate such an upgrade either on the regular maintenance schedule or, if the O&M savings are compelling, by upgrading meters more quickly and using the O&M savings to help pay for the carrying charges between rate cases.

- If Aquarion is permitted to continue using a WICA, it should be required to prepare – and submit to the Commission for review – a detailed infrastructure plan, similar to the plans that Aquarion's affiliate in Connecticut are required to prepare.

- If the Commission decides to adopt Aquarion's proposed missed appointment fee, it should also adopt a reciprocal Missed Appointment Credit to Customers, similar to the provision in the Connecticut tariff of Aquarion's affiliate.

- Aquarion's proposed pay at the door fee should not be imposed on a customer the first time in any 12-month period when the customer pays in that manner. I believe it would be reasonable, however, for Aquarion to impose such a fee the second time a customer pays at the premises during a 12-month period.

WICA

Q. What is your understanding of the Company's WICA?

A. The WICA that is part of Aquarion's existing tariffs is the result of a pilot program adopted by the Commission in September 2009 as part of a settlement. The Commission's review of the pilot program was required by that settlement.

The WICA enables the Company to adjust its rates annually to recover capital-related costs for certain types of improvements to the Company's distribution system. In this case, Aquarion is proposing to make the WICA permanent without making any changes to the tariff.

Q. What is the purpose of the WICA?

A. The WICA was intended to enable Aquarion to proactively replace distribution facilities directly related to improving the reliability and safety of the distribution system. Mr. Dixon states that the purpose of the WICA is "to increase system reliability, improve service to the customer, and reduce water lost due to leakage." Bates page 91, lines 6-7. Similarly, the Company's tariff states that the WICA "provides the Company with the resources to accelerate asset replacement for infrastructure for the purpose of improving or protecting water quality and the reliability of service and to comply with evolving

regulatory requirements imposed by the Safe Drinking Water Act." Tariff, Second Revised Page 16.

Q. Does the WICA pilot as it currently operates meet these objectives?

A. No, it does not. The Company has not provided any information about WICA's effect on the reliability of service it provides to customers or the effect of the WICA on water lost from leakage. To the contrary, the Company has stated in responses to discovery that no such problems exist. I have attached as Attachment SJR-2 Aquarion's responses to OCA 2-4 (stating that Aquarion does not have problems with pressure, taste or smell), OCA 2-5 (stating that the Company does not have water quality problems), and OCA 3-5 (showing the small number of water pressure, water quality and main break/service interruption inquiries for 2010, 2011 and to date in 2012).

The Company's annual reports to this Commission, however, show that during the approximately two years that WICA has been in place, Aquarion's levels of non-revenue water and unaccounted for water have increased. Attachment SJR-3 has copies of the relevant pages from Aquarion's 2009, 2010, and 2011 annual reports. Attachment SJR-4 shows two graphs that I created from the data, after correcting a computation error in the 2011 annual report.

Q. What is the error you corrected in the 2011 annual report?

A. The 2011 annual report has an error in the calculation of the rolling annual figure for Water Sales. The comparable figure for December 2010 is 643.34 million gallons ("MG"). The next month, January 2011, should be that amount minus water sales in

January 2010 (30.30 MG) plus water sales in January 2011 (38.01 MG). That is, the rolling 12-month figure should have increased by 7.71 MG (38.01 less 30.30), to total 651.05 MG. But the 2011 annual report shows a rolling annual figure for water sales of 670.48 MG. This overstatement of water sales in January 2011 by nearly 20 MG also affects the water sales figures in February through November 2011. The December 2011 figure is calculated correctly.

The overstatement of water sales in the 2011 report has the effect of understating the level of unaccounted for water (unaccounted for water is Production less Water Sales less Non-Revenue). So while the 2011 annual report shows unaccounted for figures ranging from 11.6% (October) to 15.5% (March), the actual figures range from 13.2% (December) to 20.1% (March).

Q. Please describe your conclusions from these data, including the graphs in Attachment SJR-4.

A. The graphs show that Aquarion's level of unaccounted for water has been increasing since 2009. Aquarion's highest levels of unaccounted for water during this three-year period were recorded in 2011, after the WICA pilot had been in effect for more than a year. Similarly, something happened to Aquarion's level of non-revenue water in 2011. During calendar years 2008, 2009, and 2010, Aquarion's non-revenue water total 40.6 MG, 89.4 MG, and 63.9 MG, respectively. In 2011, however, its non-revenue water totaled 186.0 MG – almost as much as the previous three years combined.

Q. What is non-revenue water?

A. Non-revenue water represents water that is used for known purposes but is not sold to customers. For example, water that is used for hydrant flushing, fire fighting, or for maintenance inside a treatment plant is non-revenue water.

Q. Why did Aquarion's non-revenue water increase so dramatically in 2011?

A. I do not know. What I do know is that the increase in non-revenue water coupled with the increase in unaccounted for water means that for every gallon of water Aquarion sold in 2011, it produced approximately 1.5 gallons. Specifically, Aquarion produced 926.7 MG, but sold only 618.4 MG to customers in that year.

In contrast, in 2008 (before the WICA pilot was approved), Aquarion produced about 1.25 gallons for each gallon it sold. Indeed, in 2008 Aquarion sold more water than it did in 2011 (644.3 MG in 2008 compared to 618.4 MG in 2011), but produced much less water (811.2 MG in 2008 compared to 926.7 MG in 2011).

Q. What does this information suggest about the efficacy of the WICA pilot for Aquarion?

A. These data suggest that the WICA pilot has not been achieving its purpose. As Mr. Dixon acknowledged, the goals of WICA are to increase reliability and reduce levels of non-revenue and unaccounted for water. Aquarion's experience during the first two years of its WICA shows that it is moving in exactly the wrong direction. Rather than helping reduce (or even maintain) reliability and loss levels, Aquarion's water losses have been increasing dramatically: Its water production increased by more than 100

million gallons in 2011 compared to 2008, but it actually sold less water to customers in 2011 than in 2008.

Q. From your review of the WICA tariff, is there a structural reason why Aquarion's WICA has not been effective?

A. Yes, there is a structural problem with Aquarion's WICA tariff. As I discussed above, the fundamental purpose of WICA is to enhance levels of reliability (and reduce water losses) by having Aquarion proactively replace infrastructure that is nearing the end of its useful life. The pilot WICA tariff, however, does not reflect those goals.

The WICA tariff permits Aquarion to recover costs associated with essentially any distribution system capital expenditures that are not revenue-producing. There is no requirement that the work enhances reliability, reduces losses, or even be preventive in nature. As a consequence, much of the work that Aquarion has included in the WICA has been for responding to main breaks and other equipment failures, and upgrading meters from manual meters to meters that can be read remotely. From my review of Aquarion's plans for 2013-2015, as provided in its 2012 WICA filing (DW 12-325), it does not appear that Aquarion is planning to deviate from its past practice in this regard. Much of the projected WICA spending for the next three years is for meter upgrades and responding to main breaks or other emergencies.

Compounding the problem is that during the initial period of the WICA pilot program, Aquarion decreased its spending on transmission and distribution ("T&D") operations and maintenance ("O&M") expenses, as I show on Attachment SJR-5. I do

not know whether the existence of the WICA pilot had an effect on Aquarion's T&D O&M spending decisions, but the reduction in O&M spending during 2009 and 2010 coupled with the inclusion in WICA of capital costs unrelated to the enhancement of reliability may have contributed to Aquarion's increased levels of water losses.

Q. You stated that Aquarion has included in the WICA pilot capital costs related to emergency repairs and upgrading water meters. Can you be more specific?

A. On Attachment SJR-6, I show the percentage of Aquarion's actual and proposed expenditures under WICA that the Company characterizes as being for emergency or unplanned work. With the exception of water meter replacements, a majority of the costs included in the WICA as currently structured are for this type of emergency or unplanned work.

In addition to this unplanned work, during 2010 through 2012 Aquarion has spent approximately $464,000 on water meters, essentially all of which has been for upgrading meters from manual-read to remote-read. This represents approximately 19% of the capital costs included in the WICA during these years. Once again, Aquarion has not demonstrated that these expenditures are related to improving reliability. Indeed, I believe it is just as likely that these expenditures would result in expense reductions for Aquarion – savings that are not captured through the WICA mechanism.

Q. Have Aquarion's meter reading expenses been reduced during this time period?

A. Yes. According to Aquarion's annual reports, its meter reading expense has declined from $30,609 in 2008 to $25,131 in 2011. While I support utilities' efforts to save costs,

it is important that the ratemaking process not provide perverse incentives or disincentives to utilities. The way the WICA is currently structured, Aquarion is allowed to adjust its rates annually to recover the capital costs it incurs for meter enhancements, but customers must wait until the next base rate to receive credit for the cost savings made possible by those capital investments. This is inequitable and should not be perpetuated if the WICA is made permanent.

Q. Is it possible that the new radio-read meter upgrades could result in increased revenues?

A. Yes. A new meter may measure customer usage more accurately. Consequently, if a customer's old meter has been under recording usage, the upgrade to a new meter may result in increased revenues to the Company, which revenues would not be reflected in the ratemaking process until a base rate case

Q. What do you recommend?

A. My primary recommendation is that the WICA pilot should be terminated for Aquarion and the WICA should be removed from Aquarion's tariff. Aquarion has not demonstrated a need for such an extraordinary ratemaking mechanism, and many of the projects it has included in the WICA during the pilot period are routine capital expenditures that have no effect on the safety or reliability of service.

If, however, the Commission disagrees and decides to retain the WICA, then I have three recommendations for changes in the WICA. These changes should be adopted

whether the Commission wishes to continue WICA as a pilot program or if it decides to make WICA permanent.

First, emergency response or other unplanned capital spending should not be eligible for inclusion in the WICA. Such costs are a routine part of any utility's business and should not be subject to special ratemaking treatment (absent an extraordinary storm or other disaster). Rather, capital costs recovered through WICA should be limited to costs that a utility incurs for planned projects that proactively replace distribution system infrastructure that is nearing the end of its useful life. This change would be consistent with the underlying purpose of WICA which is to improve the reliability of service and ultimately reduce Aquarion's non-revenue water (including water losses).

Second, I recommend that WICA be modified to exclude customer metering expenditures. Aquarion is required to replace (or test) customer meters on a set schedule. PUC 605.04. As a practical matter, smaller meters are nearly always replaced since that is more cost effective than trying to test them on site or make a second trip to reinstall a tested meter. If Aquarion desires to upgrade meters to a different technology, it should be able to accommodate such an upgrade either on the regular maintenance schedule or, if the O&M savings are compelling, by upgrading meters more quickly and using the O&M savings to help pay for the carrying charges between rate cases. The current system, however, is inequitable in that it allows Aquarion to recover the capital costs from customers, but it permits Aquarion to retain any O&M savings until the next base rate case.

Third, if Aquarion is permitted to continue using a WICA, it should be required to prepare – and submit to the Commission for review – a detailed infrastructure plan. Aquarion's affiliate in Connecticut already is required to prepare such a plan, and update it periodically. I am attaching as Attachment SJR-7 a copy of the order from what was then known as the Connecticut Department of Public Utility Control that established the WICA in that state. Importantly, the infrastructure plan requires a water utility to assess the condition of its infrastructure and prioritize projects for repair or replacement, using specified criteria. Utilities in Connecticut also must "detail the benefit to ratepayers of the proposed project(s) and, where applicable, [provide] a cost/benefit analysis." CT Order, p. 10.

I understand that Aquarion provided some of this type of information for main replacement projects to Commission Staff in 2009, but I am not certain if it has been updated since that time. Moreover, the information I reviewed from the 2009 case did not contain any type of cost-benefit analysis. It also did not contain any analysis for projects that have been included in the WICA but that are not main replacements (such as projects involving services, valves, hydrants, and meters). If Aquarion is allowed to continue using WICA, it should update its main prioritization analysis and WICA should be limited to projects on that priority list.

Q. Does the Connecticut WICA also address your concerns about routine capital spending, such as emergency response?

A. Yes, it does. In fact, Aquarion's Connecticut affiliate raised that issue and the Connecticut order responded as follows:

> Aquarion also takes issue with the Department's review of projects in that such review may hinder programmatic investment such as hydrant or service line replacement. Aquarion states that, in a WICA filing, it would become unwieldy to attempt to identify and specify upfront which specific hydrants and service lines will be replaced or rehabilitated. Aquarion Written Exceptions, p. 3. The Department expects there to be an ongoing capital improvement program for items that are among other things, not suitable or fall within the framework of the WICA application process. The Department cautions against utilities trying to fit all future capital investment within the WICA program and expects items such as programmatic investment to go forward.

Connecticut Order, p. 10. In other words, in Connecticut the WICA is designed solely for proactive projects that enhance the safety and reliability of service to customers. Routine capital investments, such as emergency response to broken mains or service lines, do not qualify for inclusion in the WICA.

If this Commission decides to permit Aquarion to continue its WICA, on either a pilot or permanent basis, I recommend that it require Aquarion to use the same type of reporting, justification, and limits that are currently in effect for Aquarion's affiliate in Connecticut.

Proposed Tariff Changes

Q. Is the Company proposing any changes to the terms, conditions, and miscellaneous charges in its tariff?

A. Yes, the Company is proposing changes in its tariffs, in addition to the rate increase it is requesting.

Q. Do you have any concerns or suggested changes to those tariff changes?

A. Yes, I will discuss the following proposed tariff changes:

- Missed appointment fee of $44.00 (Second Revised Page 11)
- Collect at the door fee of $44.00 (Second Revised Page 11)

Q. What is Aquarion's proposed missed appointment fee?

A. Aquarion is proposing to charge a customer $44.00 if the customer is not at home when a service call has been scheduled.

Q. Do you oppose the concept of a missed appointment fee?

A. No, I do not oppose the concept of a missed appointment fee, but in my opinion the fee should be reciprocal. That is, the customer also should be compensated if the Company fails to appear during the time scheduled for a service call. In addition, the Company must clearly notify customers of the fee when the service appointment is made.

Q. Are you aware of any precedent for such a reciprocal fee?

A. Yes. I was a witness for the Office of Consumer Counsel in Connecticut in the most recent rate case for Aquarion's affiliate in that state. The Connecticut company proposed a nearly identical missed appointment tariff provision and I recommended that the fee should be reciprocal. The utility and the Connecticut commission agreed with that recommendation. In response to data request OCA 2-1 in this case (attached as Attachment SJR-8), Aquarion provides the language that appears in the Connecticut tariff. If the Commission decides to adopt the missed appointment fee, I recommend that a reciprocal Missed Appointment Credit to Customers, similar to the Connecticut provision, also should be included in Aquarion's tariff.

Q. What is Aquarion's proposed collect at the door fee?

A. The Company is proposing a new tariff provision that would allow it to collect $44.00 from a customer if the customer pays its outstanding bill at the customer's premises in order to avoid a disconnection of service.

Q. Do you oppose the concept of a collect at the door fee?

A. I oppose the concept of a collect at the door fee under certain circumstances, but it may be proper under other circumstances. Initially, I note that the Commission's regulations permit a utility to charge a fee for collecting a customer payment at the customer's premises during the disconnection process. PUC 1203.11(q). So I do not question the lawfulness of Aquarion's proposal.

I am concerned, however, with the fairness of Aquarion's proposed tariff, particularly when it is imposed on a customer who has limited financial means or who may have been away from home for an extended period of time. While I recognize that Aquarion incurs some costs when an employee travels to a customer's premises to perform a disconnection but receives a payment, Aquarion could not provide information about the number of such instances that occur. (See Aquarion's response to data request OCA 2-7, attached as Attachment SJR-9.)

Moreover, I note that the Commission's regulations restrict a customer's ability to pay at its premises to no more than two times in any 12-month period. PUC 1203.11(r). Thus, I believe that the potential for customer abuse already is limited by regulation.

Q. What do you recommend?

A. I recommend that Aquarion's proposed pay at the door fee should not be imposed on a customer the first time in any 12-month period when the customer pays in that manner. I believe it would be reasonable, however, for Aquarion to impose such a fee the second time a customer pays at the premises during a 12-month period. In this way, customers would not be subjected to this fee simply because they have made a mistake or fallen on hard times. But customers who are appearing to abuse the process by repeatedly paying at the premises to avoid disconnection would be subject to this fee, or, if the behavior continued, other sanctions consistent with the Commission's rules.

Q. Does this conclude your direct testimony?

A. Yes, it does.