

STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION

AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.  
DW 11-\_\_\_

2011 WATER INFRASTRUCTURE  
AND CONSERVATION ADJUSTMENT FILING

DIRECT TESTIMONY OF  
CARL MCMORRAN

OCTOBER 27, 2011

1 **Q. Mr. McMorran, please state your name and business address.**

2 A. My name is Carl McMorran, and my business address is 1 Merrill Industrial  
3 Drive, Hampton, New Hampshire 03842.

4

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

6 A. I am the Operations Manager for Aquarion Water Company of New Hampshire,  
7 Inc. (“Aquarion” or the “Company”).

8

9 **Q. Please describe your educational background.**

10 A. I have a Bachelor's Degree in Biology from Bucknell University and a Master of  
11 Environmental Science Degree from Miami University. I have also taken  
12 graduate level courses in business administration, and attended (and presented at)  
13 many water works seminars and conferences.

14

15 **Q. Please describe your business/professional background.**

16 A. I have worked for Aquarion since November 2008. As Operations Manager, I  
17 oversee all operations, maintenance, capital improvement and administrative  
18 activities for the New Hampshire division.

19

20 From April 1999 through October 2008, I served as Production Manager for the  
21 Struthers Division of Aqua Ohio. I supervised a 6 MGD surface water treatment  
22 plant, source water protection and reservoir management activities, and operations  
23 and maintenance for major distribution facilities (tanks, boosters, etc.). I also had

1 interim supervisory duties at other Aqua Ohio production facilities and acted as  
2 operations consultant for the City of Campbell's (Ohio) water system.

3  
4 From August 1990 through March 1999, I served as Water Quality / Technical  
5 Services Manager for the Bangor (Maine) Water District. I supervised source  
6 water protection and watershed management activities, water quality laboratory,  
7 regulatory compliance, cross connection, metering and service activities.

8  
9 From June 1982 through July 1990, I worked as an Environmental Protection  
10 Specialist for the Susquehanna River Basin Commission, which regulates water  
11 resources in Maryland, New York and Pennsylvania. I conducted water quality  
12 assessment surveys, water pollution control and hydropower regulation activities.

13  
14 I currently hold Class IV Water Treatment and Distribution licenses in both New  
15 Hampshire and Maine. I previously held a Class IV Water System license in Ohio  
16 and a Class A Water System license in Pennsylvania. I also held a Lake Manager  
17 certification from 1995 through 2008.

18  
19 **Q. Have you previously testified before the New Hampshire Public Utilities**  
20 **Commission (“PUC” or the “Commission”)?**

21 A. I have not provided live testimony before the PUC, but I did submit written pre-  
22 filed testimony in Docket DW 10-293, the Company’s previous water  
23 infrastructure and conservation adjustment (“WICA”) filing.

1 **Q. What is the purpose of your testimony in this proceeding?**

2 A. My testimony supports the Company's 2011 WICA filing and discusses the  
3 projects that are included in that filing for the years 2012 through 2014 as well as  
4 the results of the projects constructed in 2011, as approved in the 2010 WICA  
5 proceeding. The projects I will discuss are outlined in Attachment CM-1. Troy  
6 Dixon will discuss the surcharge calculations and the associated rate impact for  
7 these projects.

8

9 **Q. What is the basis for the Company's filing in this case?**

10 A. The settlement agreement in the Company's last rate case, Docket DW 08-098,  
11 provided as follows in Section II.H.2:

12 The Company agrees to file a three year projected budget of proposed  
13 WICA eligible projects no later than November 1 of each year. Each such  
14 budget shall show projects broken down into three years. Year 1 projects  
15 are those proposed to be constructed in the succeeding twelve month  
16 period. Year 2 projects are those proposed to be constructed in the next  
17 twelve month period. Year 3 projects are those proposed to be constructed  
18 in the twelve months following Year 2. Year 3 projects shall be provided  
19 for advisory purposes and discussion. Year 2 projects shall be provided for  
20 review and approval by the Commission. Year 1 projects shall be provided  
21 for final review and informational purposes. Staff or any party may  
22 request a hearing prior to the Commission's granting approval for a  
23 project to become eligible for cost recovery through the WICA. The  
24 determination as to whether to hold a hearing on the eligibility of any  
25 project for WICA cost recovery shall be at the discretion of the  
26 Commission.  
27

28 Accordingly, approximately two years ago, in Docket DW 09-211, the Company  
29 submitted its first three year list of projects proposed for WICA eligibility. By  
30 Order 25,065 dated January 15, 2010, the Commission approved the proposed  
31 projects for construction in 2010 and gave preliminary approval to the projects

1 proposed for 2011. Projects anticipated for construction in 2012 were provided  
2 for informational purposes. Similarly, approximately one year ago, in Docket  
3 DW 10-293, the Company submitted its second three year list of projects  
4 proposed for WICA eligibility. By Order 25,186 dated December 22, 2010, the  
5 Commission approved the proposed projects for construction in 2011 and gave  
6 preliminary approval to the projects proposed for 2012. Projects anticipated for  
7 construction in 2013 were provided for informational purposes. Since that time,  
8 the Company has constructed the projects approved for 2011. Specifically,  
9 between October 1, 2010 and September 30, 2011, the Company replaced 2,460  
10 feet of 8-inch main on Atlantic Avenue, House 106 to Woodland Road (North  
11 Hampton), 1,031 customer meters, ten services, eight hydrants, seven valves and  
12 one production meter. These completed projects are each listed in Attachment  
13 CM-1 and are the subject of the proposed surcharge as detailed in Mr. Dixon's  
14 testimony.

15

16 **Q. Was there any change in the scope of the projects constructed in 2011 from**  
17 **what was approved by the Commission in Docket DW 10-293?**

18 A. The general scope of projects was the same as approved by the PUC, with some  
19 differences in quantities occurring due to financial and schedule factors.

20 First, the length of main replaced on Atlantic Avenue (House 106 to Woodland  
21 Road) was increased by 820 feet due to a favorable bid. Specifically, the length  
22 of main replaced increased from the proposed 1,620 feet to 2,460 feet actually

1 constructed because contractor bids came in lower than the Company's  
2 projections, so the savings were allocated to installing more length of main.

3 We also installed 137 more meters than projected because additional capital funds  
4 were available. Specifically, the Company aggressively installed 1,031 radio  
5 meters instead of the 894 radio meters that were budgeted in order to improve  
6 operating efficiency.

7 Also, eight hydrants, ten services and seven valves were replaced, compared to  
8 six, eight and four, respectively, as proposed. Twenty-one of these replacements  
9 were reactive and performed in response to malfunctions discovered during the  
10 course of routine maintenance activities. The Company will provide the  
11 supporting invoices and project cost accounting to the Commission staff for its  
12 review and audit.

13

14 **Q. Does Attachment CM-1 also update the three year (2011 – 2013) list of**  
15 **proposed WICA projects that the Company previously filed in Docket DW**  
16 **10-293?**

17 A. Yes, Attachment CM-1 also provides the most recent project list proposed for the  
18 years 2012 through 2014. Similar to the list provided in Docket DW 10-293, the  
19 current proposal for 2012 through 2014 includes additional main replacements on  
20 Atlantic Avenue and meter, service, hydrant and valve replacements. Proposed  
21 main replacement projects were prioritized from 56 potential main replacement  
22 projects based on main break history, pipe age/useful life, material integrity,  
23 criticality to system function, water quality problems, hydraulic capacity,

1 schedule coordination with other projects (e.g., road paving or sewer projects),  
2 water utility staff input and concerns, and capital budget constraints. The priority  
3 list is updated at least annually. The proposed WICA projects for 2012 through  
4 2014 also include annual replacements of eight hydrants, 22 service lines and  
5 seven distribution valves, based on historical activity levels. The number of  
6 proposed service lines replacements has been increased. Factors such as service  
7 line material (lead, galvanized iron or other non-copper material), ease of access  
8 and digging aspect of the service line location, and break history are considered  
9 with respect to the probability of having to return for future repairs. Service lines  
10 will be renewed, instead of being repaired, if there is any reasonable probability  
11 that it will avoid the expense of another repair in the foreseeable future.

12 In addition, approximately 1,750 direct read meters are targeted for replacement  
13 with radio read meters in 2012, specifically, 850 periodic meter replacements and  
14 900 seasonal meter replacements. Our plan is to begin reading and billing  
15 seasonal accounts on a monthly schedule in 2012. The Company views the  
16 monthly billing of the seasonal customers as an important first step in moving  
17 towards monthly billing for all metered customers.

18 The Company is on pace to complete the conversion of all radio read meters in  
19 2013. The number of meters to be replaced is based primarily on required  
20 periodic meter replacements per PUC meter test. Attachment CM-1 provides  
21 further detail with respect to the different prioritization factors utilized in  
22 determining the associated infrastructure replacements. The implementation of  
23 the WICA pilot program continues to allow the Company to target main

1 replacements at a faster rate than would have otherwise been possible in its  
2 absence.

3 **Q. Is there any difference between the projects listed on Attachment CM-1 for**  
4 **2012 and those preliminarily approved by the Commission in Docket DW 10-**  
5 **293?**

6 A. The 2012 projects listed on Attachment CM-1 are consistent with the 2012  
7 projects that the Commission preliminarily approved in Docket DW 10-293, but  
8 there are some differences between them. Attachment CM-1 provides updated  
9 projections for the 2012 projects, which were made in response to revised capital,  
10 operating, maintenance, financial and management considerations that became  
11 more apparent and refined as the Company got closer to the time for  
12 implementing the 2012 projects. Specifically, the customer meter replacement  
13 projections for 2012 have been increased from 986 to 1,744 meters. The  
14 difference represents the seasonal meters that we plan to replace with radio  
15 meters, which the Company decided to undertake in order to obtain monthly  
16 meter readings and enhance its operating efficiency. Hydrant replacement  
17 projections have been increased from six to eight based on historical data,  
18 specifically, because a higher number of hydrants have been replaced during the  
19 past few years. Service line replacement projections have been increased from  
20 eight to twenty-two, and the reason for this difference is that the Company intends  
21 to conduct more full replacements instead of repairs in order to reduce the  
22 frequency and expense of repairing multiple leaks. Main replacement projects  
23 have been re-prioritized based on results of this year's main replacement, main

1 break and leak detection work. We were able to install more main on Atlantic  
2 Avenue this year than projected and have budgeted to finish the remaining main  
3 between Woodland Avenue and Maple Road in 2012. Due to leaks and main  
4 breaks on the two transmission mains to the beach, we plan to make main  
5 replacements on Ocean Boulevard and Route 101, which otherwise would have  
6 been lower on our priority list. The Church Street main replacement has been  
7 moved down the priority list. Finally, valve replacement projections have been  
8 increased from four to seven valves because a few more malfunctioning valves  
9 have been found than previously detected. There have been no changes to the  
10 assumptions and projections for control valves or production meters.

11

12 **Q. What action is the Company requesting with regard to the projects shown on**  
13 **Attachment CM-1?**

14 A. With regard to the projects constructed in 2011, the Company is requesting that  
15 the PUC approve a surcharge consistent with that proposed by Mr. Dixon in his  
16 testimony. With regard to the projects listed for 2012, the Company is requesting  
17 that the Commission approve these projects for inclusion in the WICA to be  
18 effective as of January 1, 2013, subject to a prudence review of the final costs.  
19 With regard to the projects listed for 2013, the Company is requesting that the  
20 Commission preliminarily approve these proposed projects for the WICA  
21 program, subject to the Commission's final review next year. Finally, with regard  
22 to the projects listed for 2014, the Company is not requesting any action and is  
23 simply providing these projects for informational purposes only.

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

2 **A. Yes.**

3