

STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION

AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.
DW 15-____

2016 WATER INFRASTRUCTURE
AND CONSERVATION ADJUSTMENT FILING

DIRECT TESTIMONY OF
CARL MCMORRAN

OCTOBER 30, 2015

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

2 A. My name is Carl McMorran, and my business address is 7 Scott Road, Hampton,
3 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 NH” 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 NH 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 in Poland, Ohio. I supervised a 6 MGD surface
22 water treatment plant, source water protection and reservoir management
23 activities, and operations and maintenance for major distribution facilities (tanks,
24 boosters, etc.). I also had interim supervisory duties at other Aqua Ohio

1 production facilities and acted as operations consultant for the water system of the
2 City of Campbell, Ohio.

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

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

15
16 I currently hold Class IV Water Treatment and Distribution licenses in both New
17 Hampshire and Maine. I previously held a Class IV Water System license in Ohio
18 and a Class A Water System license in Pennsylvania. I also held a Lake Manager
19 certification from 1995 through 2008. I also currently serve on the Board of
20 Directors for the New Hampshire Water Works Association.

21

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

1 A. Yes, I provided live and pre-filed testimony before the PUC in the Company's
2 most recent rate case Docket DW 12-085. I also provided pre-filed testimony in
3 the Company's previous water infrastructure and conservation adjustment
4 ("WICA") filings Dockets DW 09-211, DW 10-293, DW 11-238, DW 12-325,
5 DW 13-314 and DW 14-300.

6

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

8 A. My testimony discusses the WICA-eligible projects constructed in 2015 and the
9 projects proposed for 2016. I also provide as part of Attachment CM-1 the
10 proposed budget for WICA projects for 2017 and 2018¹. Debra Kirven will
11 discuss the surcharge calculations and the associated rate impact for the projects
12 that have been put into service in 2015.

13

14 **Q. Please briefly describe the attachments to your testimony.**

15 A. Attachment CM-1 to this testimony identifies Aquarion's completed 2015 WICA
16 projects and their respective costs as well as budgeted costs for projects
17 anticipated for 2016-2018. Consistent with the approved Settlement Agreement in
18 the Company's last general rate case, the Company has also prepared an updated
19 main replacement prioritization analysis and infrastructure inventory which is
20 provided as Attachment CM-2 to this testimony.

21

¹ Each year referenced in this petition for the WICA projects means the program year. Each program year runs from October 1 to September 30.

1 **Q. Was there any change in the scope of the projects constructed in 2015 from**
2 **what was approved by the Commission in Docket DW 14-300?**

3 A. Yes. The proposed main replacement on Cable Road from Central Road to
4 Huntervale Avenue in Rye was removed. The Company filed a letter on August
5 3, 2015 to inform the Commission, OCA and the Towns of this change.

6

7 **Q. Were there any other changes from the originally approved WICA budget**
8 **for 2015?**

9 A. Yes. During 2015, the Company replaced four service lines and two hydrants. The
10 total cost of these categories did not exceed the \$50,000 threshold required for
11 inclusion in the WICA surcharge. Therefore, the proposed surcharge does not
12 include any costs associated with these items.

13

14 **Q. What action is the Company requesting in this WICA filing with regard to**
15 **the projects put into service during the 2015 program year?**

16 A. With regard to the projects completed in 2015, the Company is requesting that the
17 PUC approve a surcharge consistent with that proposed by Ms. Kirven in her
18 testimony. These projects are all currently in service and the costs associated with
19 them were prudently incurred and are consistent with the approved WICA project
20 budget for 2015.

21

1 **Q. What action is the Company requesting with regard to the proposed WICA**
2 **projects reflected in the budgets for 2016, 2017, and 2018 shown in**
3 **Attachment CM-1?**

4 A. With regard to the projects listed for 2016, the Company is requesting that the
5 Commission approve these projects for inclusion in the WICA surcharge to be
6 effective as of January 1, 2017, subject to a prudency review of the actual costs
7 when the Company makes its WICA surcharge filing in November 2016. With
8 regard to the projects listed for 2017, the Company is requesting that the
9 Commission preliminarily approve these proposed projects for the WICA
10 program, subject to the Commission's final review next year. Finally, with regard
11 to the projects listed for 2018, the Company is not requesting any action and is
12 simply providing these projects for informational purposes only.

13
14 **Q. Please describe the selection process and the main replacement projects that**
15 **the Company proposes to include in the WICA program for 2016.**

16 A. As in previous filings, Company staff has used the same objective scoring system,
17 with a few improvements, to evaluate pipe segments for replacement. The data
18 has been enhanced since the Company's last filing through updates to the
19 Company's geographic information system (GIS). This reflects updates on
20 individual pipe segments from field work, a capital efficiency study performed by
21 the engineering firm of Tata & Howard, and a hydraulic model of the system.
22 The pipe segment evaluation was conducted in two phases. The first phase
23 included scoring pipe segments based on the most critical characteristics of breaks

1 and leaks, pipe age, materials characteristics, need for bleeders and hydraulic
2 capacity. The second phase involved scoring the top pipe segments from the first
3 phase based on the characteristics of critical customers, pipe lining and schedule
4 coordination (factors that would not individually merit replacement, but are
5 essential to differentiating high scoring mains from each other). Staff judgment
6 and budget constraints are used to make a final selection, if needed.

7

8 Proposed Main Replacement Projects for 2016

9

10 Lafayette Road (Hampton): Several pipe segments were identified by the
11 hydraulic model to be a significant restriction of flow between the center of town
12 and the high school. Several segments also have a history of main breaks.

- 13 1. H068 to Park Ave (south): 280-ft of 6-in cast-iron main
- 14 2. H068 to Park Ave (north): 260-ft of 6-in cast-iron main
- 15 3. Park Avenue (north) to Stickney Terrace: 240-ft of 6-in cast-iron main
- 16 4. Stickney Terrace to Winnacunnet Road: 820-ft of 6-in cast-iron main

17 Manchester Street (Hampton): 460-ft of 6-in asbestos-cement main. This main is
18 too shallow, requires a winter bleeder, and past breaks demonstrate that the pipe
19 has reached the end of its useful life.

20 North Shore Road between Cusack Road and Quinlan Lane (Hampton): 910-ft of
21 cast-iron main. This main segment is too shallow, requires a winter bleeder, and
22 has a main break history.

1 Sunsurf Avenue (Hampton) off Cliff Avenue: 360-ft of 2-inch, unlined, cast-iron
2 main installed in 1910. It has experienced multiple main breaks in recent years.

3

4 Main Replacement Projects Originally Proposed for 2016, but were Postponed

5

6 Ocean Boulevard (Hampton): Boars Head Terrace to Fuller Acres: 2,200-ft of 8-
7 inch, unlined, cast-iron main installed in 1910

8 Ocean Boulevard (Hampton): Boars Head Terrace to Dumas Avenue: 820-ft of 8-
9 inch, unlined, cast-iron main installed in 1910.

10 Both of these mains scored high enough for consideration as they have had a
11 history of main breaks, serve as transmission mains to the Glade Path Tank and
12 Hampton Beach, and are adjacent projects. Owing to the high estimated
13 replacement cost, they are being postponed for at least a year to evaluate cleaning
14 and lining alternatives.

15

16 Proposed Main Replacement Projects 2017 and 2018

17 The main replacement projects selected for 2016 were a handful of the 43 pipe
18 segments that were at the top of the scoring list (see CM-2). For 2017, we have
19 tentatively scheduled the three mains on High Street and Park Avenue in
20 Hampton and Shop Road in North Hampton. Scheduling of actual replacement
21 depends on the results of the evaluation of alternatives expected to be conducted
22 in 2016. The 2018 projects are the top scoring main segments whose estimated

1 costs roughly fit budget targets. It is quite probable that this listing will change as
2 a result of updates to the Company's GIS database.

3

4 **Q. Does this conclude your direct testimony?**

5 **A. Yes.**