

**STATE OF NEW HAMPSHIRE**  
**BEFORE THE**  
**PUBLIC UTILITIES COMMISSION**

**AQUARION WATER COMPANY OF NEW HAMPSHIRE**

**DOCKET NO. DW 08-098**

**DIRECT TESTIMONY**

**OF**

**TROY M. DIXON**

August 27, 2008

1 Q. Please state your name and business address.

2 A. My name is Troy M. Dixon. My business address is 600 Lindley Street,  
3 Bridgeport, Connecticut.

4

5 Q. By whom are you employed?

6 A. I am employed by Aquarion Water Company of Connecticut (“AWCCT”), an  
7 affiliate of Aquarion Water Company of New Hampshire (the “Company”), as  
8 Manager, Regulatory Compliance.

9

10 Q. Please describe your educational background.

11 A. I have a Bachelor’s Degree in economics and accounting from College of the Holy  
12 Cross in Worcester, MA.

13

14 Q. What has been your business experience?

15 A. I was hired by AWCCT in February 2003. During my employment I have been  
16 responsible for the preparation of regulatory filings for AWCCT and its regulated  
17 water affiliates. Additionally I have been responsible for the bill analysis work  
18 associated with each respective company’s rate case filings.

19

20 Q. Have you previously testified or submitted written testimony before regulatory  
21 agencies?

22 A. Yes, I have testified on behalf of Aquarion Water Company’s regulated water  
23 utility subsidiaries in the states of Connecticut and Massachusetts. I have not

1 previously provided testimony before the New Hampshire Public Utilities  
2 Commission.

3

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

5 A. My testimony will address the billing analysis and pro forma revenue adjustments  
6 in this case. Additionally I will discuss the rate design as proposed by the  
7 Company.

8

9 Q. Please discuss the billing analysis compiled for this case.

10 A. The billing analysis is contained within Schedule 5. Using actual test year billing  
11 detail as its basis, Schedule 5A sets forth the pro forma revenues by class at both  
12 present and proposed rates. Schedules 5B through 5E represent each of the  
13 metered classes of customers based on the detailed billing units and quantities  
14 from the test year. Schedules 5F and 5G provide pro forma revenues for public  
15 and private fire service. Finally, Schedule 5H represents miscellaneous revenues.

16

17 Q. Please comment on the accuracy of the billing analysis.

18 A. The accuracy of the billing analysis is measured by taking its derived results and  
19 comparing them to the actual book revenues after taking into consideration any  
20 appropriate pro forma adjustments. A minimal variance is needed as the units  
21 contained within the billing analysis are multiplied by the proposed rates to  
22 produce the ultimate revenues requested within the case. The results in this case  
23 are extremely accurate. For example, within the residential class, which accounts

1 for over 73% of metered revenues, the difference between bill analysis and  
2 adjusted billed revenues is a mere 0.03%. Similar results exist for the remainder  
3 of the metered classes.

4  
5 Q. Please explain the results presented on Schedule 1A.

6 A. Schedule 1A compares pro forma revenues at present and proposed rates. It  
7 begins with book revenues. Pro forma adjustments are then applied to arrive at  
8 pro forma revenues at present rates. A further adjustment is then made to reflect  
9 the revenue increases from proposed rates, which then produces total pro forma  
10 revenues at proposed rates. The pro forma revenues at both present and proposed  
11 rates match the results derived in the billing analysis in Schedule 5.

12  
13 Q. Please describe the pro forma adjustments to revenues at present rates, as shown  
14 on page one of Schedule 1A.

15 A. The pro forma adjustments are itemized more fully on page two of the schedule.  
16 The adjustments can be broken down into three major areas:

- 17 1. Unbilled Elimination
- 18 2. Surcharge Eliminations
- 19 3. Miscellaneous Items

20  
21 Q. Please discuss the unbilled elimination adjustment.

22 A. This adjustment removes the revenue impact created by unbilled revenues booked  
23 in March 2008, which are offset by the reversal of the March 2007 entry for

1 unbilled revenues. Although minimal, elimination of these entries allows for  
2 examination of actual billed revenues within the twelve month test year without  
3 the impact of estimates.

4  
5 Q. Please discuss the surcharge eliminations.

6 A. In Order No. 24,665 dated September 12, 2006 and Order No. 24,670 dated  
7 September 22, 2006, as part of Case DW 05-119, the NH PUC authorized the  
8 Company to implement Rate Case Expense and Temporary Rate Recoupment  
9 surcharges. These surcharges were in effect for the 12 month period from October  
10 2006 through September 2007. As such these surcharges were in place for six  
11 months of the test year and cause an overstatement of operating revenues for rate  
12 setting purposes. This adjustment eliminates the surcharges billed in the test year  
13 period.

14  
15 Q. Please discuss the miscellaneous adjustments.

16 A. Miscellaneous adjustments include 1) reclassification of revenues between  
17 metered sales and other water revenues, 2) adjustment of antenna rental income  
18 based on contractual increases and corrections for new and/or expired leases, 3)  
19 adjustments to fire revenues based on year-end hydrant and connection counts,  
20 and 4) adjustment to late payment fees based upon all other pro forma adjustments  
21 made to operating revenues.

22

1 Q. Describe how the adjustments that produce pro forma revenues at proposed rates  
2 are derived on a class by class basis.

3 A. The adjustments to arrive at pro forma revenues at proposed rates are produced as  
4 a direct result of the rate design used in this case. In that rate design, the  
5 Company has two objectives. First, considerable time and money was spent on a  
6 cost of service study in the prior rate case. That study ensured that the appropriate  
7 amount of rate relief was being collected from each class of customer. Therefore,  
8 a key objective for the Company is to continue to follow the findings of that case.  
9 In its simplest form the easiest way to follow the study would be to implement an  
10 across-the-board increase with equal percentage increases for all classes of  
11 customer.

12 The second objective, however was to introduce inclining block rates designed to  
13 promote conservation. It became clear from the start of rate design that the only  
14 way to fully maintain both objectives would be to create volumetric rates and/or  
15 minimum service charges that would be different for each class of customer. This  
16 is as the direct result of introducing multiple usage tiers. Unless each class of  
17 customers had the same proportionate level of usage in its respective usage tiers,  
18 varying rates depending on customer class would be required.

19 The Company chose to accept this minor divergence from the cost of service  
20 study in favor of maintaining uniform pricing amongst the respective classes of  
21 customers. The uniform rates provide for a simpler, easier to understand billing  
22 structure which the Company found to be favorable to the more stringent  
23 adherence to the prior cost of service study. Therefore, while rate increases are

1 uniform across each class, the resulting overall revenue requirement increases are  
2 not entirely uniform.

3

4 Q. Did the Company apply inclining block rates to all metered customers?

5 A. The Company did not apply inclining block rates to industrial customers or  
6 seasonal customers. Regarding industrial customers, the Company is following  
7 the treatment it used in its most recent Massachusetts rate case where inclining  
8 block rates were also implemented, yet not assigned to the Industrial class. The  
9 basic concept here is that industrial usage is fairly steady and not weather  
10 sensitive. As a result, industrial customers are not as susceptible to conservation  
11 as other classes of customer.

12

13 Likewise, the Company chose not to incorporate inclining block rates into the  
14 seasonal rate design. There are really two reasons for this treatment. First and  
15 foremost, seasonal customers are not billed at regular fixed intervals. In general,  
16 the meter is set early in the season but is not read again for billing until the  
17 customer calls to have the meter removed at the end of the season. Therefore,  
18 given the sharp contrast to the regularly read monthly or quarterly billed customer,  
19 the lack of fixed billing intervals makes it difficult to establish an appropriate and  
20 fair consumption level at which conservation rates would initiate. Secondly, the  
21 seasonal volumetric rate as proposed in this case is substantially higher than even  
22 the second tier billing rate for other metered customers. While the seasonal rate is

1 justified by the previous cost of service study, its comparatively high rate  
2 nonetheless bears an inherent price signal for seasonal customers.

3

4 Q. Please describe the development of the rate design.

5 A. Schedule A of the rate filing shows a required revenue increase of \$1,056,070  
6 over pro forma revenues at present rates of \$5,009,914, or a 21.08% increase.

7 Within the \$5,009,914 of revenues, though, are miscellaneous charges which will  
8 not be increased. Subtraction of these unaffected miscellaneous revenues yields a  
9 revenue pool \$4,596,773 to be increase at the rate of 21.3%.

10

11 The first step in the design was to increase the anticipated late payment fee by this  
12 percentage. Additionally all fixed items, inclusive of minimum service charges,  
13 public fire hydrants and private fire connection would receive this increase as well  
14 as the volumetric rates for seasonal and industrial customers. These increases  
15 represent \$497,235 of the total required increase. The remaining \$558,835 must  
16 be collected from the volumetric charges for the residential, commercial and  
17 public authority classes of customer.

18

19 Next, the Company needed to determine the amount of water to be included in the  
20 first billing tier, or put more simply, at what point customers should begin to  
21 experience the higher rate for increased usage. The Company determined, based  
22 on the test year billing data that the "base" usage for a regular residential customer  
23 was 15 CCF per quarter, or 5CCF per month. "Base" usage is defined here as that

1 usage used during the winter quarter of January through March. That period is  
2 generally deemed as representative of the non-weather sensitive portion of  
3 consumption. The Company believes that amounts over those levels are more  
4 susceptible to conservation efforts, and therefore chose to set this as the break  
5 point for the pricing signal.

6 The Company then separated the test year consumption into the newly created rate  
7 blocks. From that point, a 2:1 second tier to first tier ratio of price increases was  
8 judged to be adequate to send a pricing signal to conserve. Finally, a 13.34%  
9 increase to the first tier and a corresponding 26.68% second tier increase produced  
10 all but \$209 of the required revenue shortfall. While the proposed overall increase  
11 to the volumetric charges is consistent with the 21.3% increases applied to the  
12 other rates, variation between usage patterns in the different classes yielded  
13 smaller increases for the residential classes as compared to the commercial and  
14 public authority classes.

15  
16 Q. Mr. Dixon, in your opinion, does the proposed rate design provide for the  
17 implementation of inclining block rates while still preserving the findings of the  
18 prior rate case's cost of service study.

19 A. Yes, it does.

20  
21 Q. Mr. Dixon, does this conclude your testimony?

22 A. Yes, it does.

23

AFFIDAVIT

STATE OF NEW HAMPSHIRE PUBLIC UTILITY COMMISSION

TROY M. DIXON, being first duly sworn, deposes and states:

That he is the Troy M. Dixon whose direct testimony accompanies this Affidavit, that said direct testimony is a true and accurate statement of his answers to the questions contained herein, and that he adopts those answers as his sworn testimony in this proceeding.

  
\_\_\_\_\_  
TROY M. DIXON

SWORN TO and SUBSCRIBED before me this 27 day of August

  
\_\_\_\_\_  
Notary Public

**BARBARA TSOUPAS**  
**NOTARY PUBLIC**  
My Commission Expires July 31, 2009