

**BEFORE THE
PUBLIC UTILITIES COMMISSION
OF RHODE ISLAND**

**PAWTUCKET WATER)
SUPPLY BOARD) DOCKET NO. 3945**

**DIRECT TESTIMONY
OF
JEROME D. MIERZWA**

**ON BEHALF OF THE
DIVISION OF PUBLIC UTILITIES AND CARRIERS**

JULY 16, 2008

EXETER

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1 forecasting and activities related to federal regulation. I was also responsible for
2 preparing NFG Supply's Purchase Gas Adjustment ("PGA") filings and developing
3 interstate pipeline and spot market supply gas price projections. These forecasts were
4 utilized for internal planning purposes as well as in NFG Distribution's purchased gas
5 cost proceedings.

6 In April 1990, I accepted a position as a Utility Analyst with Exeter
7 Associates, Inc. In December 1992, I was promoted to Senior Regulatory Analyst.
8 Effective April 1, 1996, I became a principal of Exeter Associates. Since joining
9 Exeter Associates, my assignments have included evaluating the gas purchasing
10 practices and policies of natural gas utilities, water utility class cost of service and
11 rate design analysis, sales and rate forecasting, performance-based incentive
12 regulation, revenue requirement analysis, the unbundling of utility services and the
13 evaluation of customer choice natural gas transportation programs.

14 Q. HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY
15 PROCEEDINGS ON UTILITY RATES?

16 A. Yes. I have provided testimony on more than 100 occasions in proceedings before
17 the Federal Energy Regulatory Commission ("FERC"), utility regulatory
18 commissions in Delaware, Georgia, Illinois, Indiana, Louisiana, Maine, Montana,
19 Nevada, New Jersey, Ohio, Pennsylvania, Texas and Virginia, as well as before this
20 Commission.

21 Q. HAVE YOU PREVIOUSLY TESTIFIED ON WATER UTILITY ISSUES
22 BEFORE THIS COMMISSION?

23 A. Yes. I was asked by the Division of Public Utilities and Carriers ("the Division") to
24 testify on water utility issues in Pawtucket Water Supply Board ("PWSB") Docket
25 No. 2674. I was also asked by the Division to testify on cost allocation and rate

1 design issues in Kent County Water Authority Docket Nos. 2555 and 3311,
2 Providence Water Supply Board Docket Nos. 2048, 3163 and 3832 and City of
3 Newport – Water Division Docket No. 2985.

4 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

5 A. My testimony evaluates PWSB’s class cost of service study and rate design
6 proposals.

7 Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

8 A. Following this introductory section, my testimony is divided into two additional
9 sections. The first section provides an overview of cost of service methodologies.
10 In the next section, I address PWSB’s cost of service study and rate design proposals.

11

12 **II. Overview of Cost of Service Methodologies**

13 Q. WHAT IS THE OBJECTIVE OF A COST OF SERVICE STUDY?

14 A. A cost of service study is conducted to assist a utility or commission in determining
15 the level of costs properly recoverable from each of the various classes to which the
16 utility provides service. Allocation of recoverable costs to each class of service is
17 generally based on cost causation principles.

18 Q. WHAT ARE THE PRIMARY COST OF SERVICE STUDY

19 METHODOLOGIES UTILIZED FOR WATER UTILITIES?

20 A. The two most commonly used and widely recognized methods of allocating costs
21 to customer classes for water utilities are the base-extra capacity method and the
22 commodity-demand method. Both of these methods are set forth in the American
23 Water Works Association’s (“AWWA”) Principles of Water Rates, Fees and Charges
24 (“AWWA M1 Manual”).

25 Q. PLEASE SUMMARIZE EACH OF THESE METHODS.

1 A. Under the base-extra capacity method, investment and costs are first classified into
2 four primary functional cost categories: base or average capacity, extra capacity,
3 customer, and direct fire protection. Customer costs are commonly further divided
4 between meter and service related and account or bill related costs. Extra capacity
5 costs may also be divided between maximum day and maximum hour costs. Once
6 investment and costs are classified to these functional categories, they are then
7 allocated to customer classes. Base costs are allocated according to average water
8 use, and extra capacity costs are allocated on the basis of the excess of peak demands
9 over average demands. Meter and service related customer costs are allocated on the
10 basis of relative meter and service investment or a proxy thereof. Account related
11 customer costs are allocated in proportion to the number of customers or the number
12 of bills.

13 The commodity-demand method follows the same general procedures.
14 However, usage related costs are classified as commodity and demand related rather
15 than as base and extra capacity related. Commodity related costs are allocated to
16 customer classes on the basis of total water use (which is equivalent to average
17 demand), and demand related costs are allocated on the basis of each class'
18 contribution to peak demand rather than on the basis of class demands in excess
19 of average use.

20 Q. WHAT COST OF SERVICE METHODOLOGY HAS PWSB UTILIZED
21 IN ITS FILING?

22 A. The cost of service study presented in this proceeding utilizes the same base extra-
23 capacity methodology utilized in PWSB Docket Nos. 3378 and 3674.

24

1 **III. Evaluation of PWSB's Cost of Service Study and Rate Design Proposals**

2 Q. WHAT CHANGES HAVE BEEN MADE TO THE COST OF SERVICE
3 STUDY PRESENTED BY PWSB IN THIS PROCEEDING FROM THOSE
4 STUDIES ACCEPTED BY THE DIVISION IN THE DOCKETS SINCE
5 2001 (DOCKET NO. 3378)?

6 A. The basic structure of the study presented by PWSB in this proceeding is the same as
7 that reviewed and accepted by the Division in dockets since 2001. Generally, the
8 prior studies have been updated to reflect more current information. As a result of
9 utilizing more recent information, PWSB witness Christopher J. Woodcock is
10 proposing one change to the cost allocation process related to the allocation of costs
11 associated with meters and service pipes.

12 Q. PLEASE ELABORATE ON THE PROPOSED CHANGE TO THE
13 ALLOCATION OF THE COSTS ASSOCIATED WITH METERS AND
14 SERVICE PIPES.

15 A. In Docket No. 3378, the Division submitted a data request asking for an analysis of
16 the time spent by the employees of the Transmission & Distribution (“T&D”)
17 department. Based on that response, the Division recommended a revision to the
18 allocation of T&D operating costs as follows: 50 percent mains; 20 percent services;
19 and 30 percent hydrants. PWSB accepted this allocation.

20 For this proceeding, PWSB reviewed the time spent by T&D operating
21 employees and determined that a revised allocation of T&D operating costs was
22 appropriate. The revised allocation is as follows: 13 percent mains; 78 percent
23 services; and 9 percent hydrants. This change has resulted in a significant shift in
24 costs onto service charges. In general, service charges would have increased by more
25 than 170 percent as a result of the updated T&D allocation.

1 Q. WHAT COST ALLOCATION CHANGE IS PWSB PROPOSING TO
2 ADDRESS THE SIGNIFICANT INCREASE IN SERVICE CHARGES?

3 A. To mitigate the significant increase in service charges, PWSB has revised the
4 allocation of administrative and capital costs. More specifically, PWSB has
5 transferred the administrative and capital costs associated with meters and services
6 and billing to the consumption charge.

7 Q. DID THIS COST ALLOCATION CHANGE ELIMINATE THE
8 SIGNIFICANT INCREASE IN SERVICE CHARGES?

9 A. The proposed change in the allocation of administrative and capital costs reduced the
10 magnitude of the service charge increases, but the increases remained significant,
11 approximately 55 percent.

12 Q. DID PWSB PROPOSE FURTHER COST ALLOCATION CHANGES TO
13 MITIGATE THE SERVICE CHARGE INCREASES?

14 A. Yes. PWSB further reduced the billing and service components of the service charge
15 by 35 percent and 20 percent, respectively. This results in service charge increases
16 which are more in line with the overall rate increase.

17 Q. DO YOU AGREE WITH PWSB'S COST ALLOCATION PROPOSALS?

18 A. I generally agree with PWSB's use of the base-extra capacity methodology and the
19 changes to mitigate the significant increases in service charges which would
20 otherwise occur. The time spent by T&D operating employees on services may revert
21 back to the percentages utilized in Docket No. 3378 and, therefore, a gradual increase
22 in service charges is reasonable. However, I do recommend one refinement to the
23 allocation of T&D expenses in PWSB's cost study, and propose one change to the
24 allocation of public fire protection costs.

1 Q. PLEASE EXPLAIN YOUR RECOMMENDED REFINEMENT TO PWSB'S
2 COST OF SERVICE STUDY.

3 A. PWSB has allocated a portion of T&D Salaries & Wages - Police Details to the
4 metering function. Police details would generally be required for transmission and
5 distribution main replacement and maintenance rather than meter replacement.
6 Therefore, I recommend that the metering function be excluded from an allocation
7 of police details expense. PWSB witness Woodcock has agreed to this refinement
8 (Response to DIV 4-2). Thus, this change should be reflected in the cost of service
9 study presented in witness Woodcock's rebuttal testimony.

10 Q. WHAT CHANGE ARE YOU PROPOSING TO THE ALLOCATION OF
11 PUBLIC FIRE PROTECTION COSTS?

12 A. PWSB has proposed a significant 46 percent decrease to public fire protection
13 charges. I believe that this decrease is too drastic and granting the full decrease
14 at this time could result in a significant increase in fire protection charges in future
15 PWSB proceedings. Additionally, the proposed substantial decrease in fire protection
16 charges results in larger rate increases for other rate classes. To mitigate the potential
17 for significant rate fluctuations, I recommend that public fire protection rates be
18 reduced by one-half the proposed amount. This would result in a decrease consistent
19 with the decrease proposed for private fire protection service. I recommend that the
20 additional public fire protection revenues be used to decrease consumption charges on
21 a uniform percentage basis.

22 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

23 A. Yes, it does at this time.
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