BEFORE THE

PUBLIC UTILITIES COMMISSION

OF RHODE ISLAND

PAWTUCKET WATER	**)**	
SUPPLY BOARD	**)**	**DOCKET NO. 4550**

DIRECT TESTIMONY OF

JEROME D. MIERZWA

ON BEHALF OF THE
DIVISION OF PUBLIC UTILITIES AND CARRIERS

June 18, 2015

EXETER
ASSOCIATES, INC.
10480 Little Patuxent Parkway, Suite 300
Columbia, Maryland 21044

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I. INTRODUCTION

Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

A. My name is Jerome D. Mierzwa. I am a Principal and Vice President of Exeter Associates, Inc. ("Exeter"). My business address is 10480 Little Patuxent Parkway, Suite 300, Columbia, Maryland 21044. Exeter specializes in providing public utility-related consulting services.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I graduated from Canisius College in Buffalo, New York in 1981 with a Bachelor of Science Degree in Marketing. In 1985, I received a Master's Degree in Business Administration with a concentration in finance, also from Canisius College. In July 1986, I joined National Fuel Gas Distribution Corporation ("NFG Distribution") as a Management Trainee in the Research and Statistical Services ("RSS") Department. I was promoted to Supervisor RSS in January 1987. While employed with NFG Distribution, I conducted various financial and statistical analyses related to the Company's market research activity and state regulatory affairs. In April 1987, as part of a corporate reorganization, I was transferred to National Fuel Gas Supply Corporation's ("NFG Supply") rate department where my responsibilities included

utility cost of service and rate design analysis, expense and revenue requirement forecasting, and activities related to federal regulation. I was also responsible for preparing NFG Supply's Purchase Gas Adjustment ("PGA") filings and developing interstate pipeline and spot market supply gas price projections. These forecasts were utilized for internal planning purposes as well as in NFG Distribution's purchased gas cost proceedings.

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

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

A. Yes. I have provided testimony on more than 200 occasions in proceedings before the Federal Energy Regulatory Commission ("FERC"), utility regulatory commissions in Delaware, Georgia, Illinois, Indiana, Louisiana, Maine, Maryland, Montana, Nevada, New Jersey, Ohio, Pennsylvania, Texas, and Virginia, as well as before this Commission.

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

A. Yes. I was asked by the Division of Public Utilities and Carriers ("Division") to testify on water utility cost allocation and rate design issues in Pawtucket Water

Supply Board ("PWSB") Docket Nos. 2674 and 3945. I was also asked by the Division to testify on cost allocation and rate design issues in Providence Water Supply Board Docket Nos. 2048, 3163, 3832, and 4406; Kent County Water Authority Docket Nos. 2555 and 3311; and City of Newport – Water Division Docket Nos. 2985 and 4355.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony addresses the class cost of service ("CCOS") study and rate design proposals presented by PWSB in this proceeding.

Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

A. Following this introductory section, my testimony is divided into two additional sections. The first additional section provides an overview of water utility cost of service methodologies. In the final section, I discuss the CCOS study filed by PWSB in its application and present several recommendations concerning future CCOS studies.

II. OVERVIEW OF COST OF SERVICE METHODOLOGIES

Q. WHAT IS THE OBJECTIVE OF A CCOS STUDY?

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

Q. WHAT ARE THE PRIMARY COST OF SERVICE STUDY METHODS UTILIZED FOR WATER UTILITIES?

A. The two most commonly used and widely recognized methods of allocating costs to customer classes for water utilities are the base-extra-capacity method and the

commodity-demand method. Both of these methods are set forth in the American Water Works Association's ("AWWA") *Principles of Water Rates, Fees and Charges* ("AWWA M1 Manual").

Q. PLEASE SUMMARIZE EACH OF THESE METHODS.

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

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

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

A. The CCOS study presented by PWSB in this proceeding utilizes the base extra-capacity methodology. This method has been used by PWSB in prior base rate proceedings, including its most recent proceeding at Docket No. 4171 which was filed in April 2010.

III. EVALUATION OF PWSB'S CCOS STUDY

Q. WAS THE CCOS STUDY FILED BY PWSB IN THIS PROCEEDING PREPARED USING THE SAME GENERAL APPROACH USED IN PRIOR PROCEEDINGS?

A. Yes. The CCOS study filed by PWSB in this proceeding was prepared using the same general approach used since Docket No. 3378 which was filed in 2001.

Q. DOES THE CCOS STUDY FILED BY PWSB GENERALLY PROVIDE A REASONABLE INDICATION OF THE COSTS ASSOCIATED WITH SERVING PWSB'S VARIOUS CUSTOMERS?

A. Yes, it does.

Q. DO YOU HAVE RECOMMENDATIONS CONCERNING FUTURE CCOS STUDIES PREPARED BY PWSB?

A. Yes. Many of the allocation factors used by PWSB in the CCOS study presented in this proceeding are the same factors that have been used in prior proceedings. PWSB should evaluate updating several of these factors in future proceedings. This would include the maximum-day and maximum-hour demand extra-capacity factors used in PWSB's CCOS study and the factor used to allocate transmission and distribution ("T&D") operations and maintenance ("O&M") expenses (Factor O).

Q. HOW DID PWSB DEVELOP THE MAXIMUM-DAY AND MAXIMUM-HOUR EXTRA-CAPACITY DEMAND FACTORS USED IN ITS CCOS STUDY?

A. The CCOS study filed by PWSB in this proceeding is presented by witness Christopher P.N. Woodcock. In Docket No. 3378, witness Woodcock testified that:

> There are no demand studies of the users of the Pawtucket system. As a result I have had to rely on studies conducted elsewhere, the usage data that is available in Pawtucket, and my judgement. [page 14, lines 21-24]

The CCOS study filed by PWSB in this proceeding uses the same extra-capacity demand factors used in Docket No. 3378.

Q. HOW DO YOU RECOMMEND PWSB EVALUATE UPDATING ITS EXTRA-CAPACITY FACTORS?

A. Appendix A of the AWWA M1 Manual presents a procedure to develop extra-capacity factors from monthly billing data. I recommend that PWSB utilize this procedure to evaluate the reasonableness of its extra-capacity factors for future proceedings. I would note that PWSB did not fully adopt monthly billing until May 2011 and, therefore, monthly billing data was not available in prior proceedings to develop extra-capacity factors using the procedure presented in the AWWA M1 Manual. While the AWWA M1 Manual does indicate that data other than monthly billing data can be used to determine extra-capacity demand factors, it indicates that the results will be less accurate.

Q. IS THERE EVIDENCE THAT THE REASONABLENESS OF PWSB'S EXTRA-CAPACITY DEMAND FACTORS SHOULD BE EVALUATED FOR FUTURE PROCEEDINGS?

A. Yes. Actual maximum-day usage data is available for the Town of Cumberland ("Cumberland"), PWSB's only wholesale customer. That usage data suggests a maximum-day capacity factor for Cumberland of 4.5 to 4.8. In its CCOS study, PWSB has assigned Cumberland a maximum-day capacity factor of 2.5.

Q. WOULD IT BE APPROPRIATE TO ONLY ADJUST THE CUMBERLAND WHOLESALE EXTRA-CAPACITY DEMAND FACTORS IN THIS PROCEEDING?

A. No. The AWWA M1 Manual presents guidelines to assess the overall reasonableness of the extra-capacity demand factors assigned to the various customer classes. Assigning a maximum-day extra-capacity factor in the range of 4.5 to 4.8 to the wholesale class would violate those guidelines. Thus, if the wholesale extra-capacity factors were to be adjusted, the extra-capacity factors of the other customer classes would also require adjustment to comply with the AWWA M1 Manual guidelines. I would further note that even without adjusting the demand factors of the other customer classes, only adjusting the demand factors of wholesale customer's would approximately double the rate increase indicated for the wholesale class.

Q. PLEASE DESCRIBE HOW T&D O&M EXPENSES ARE ALLOCATED IN PWSB'S CCOS STUDY.

A. T&D O&M expenses are allocated to functional cost category based on Factor O. Factor O is based on an analysis of the time spent by PWSB employees performing various O&M functions. The Factor O used by PWSB in the CCOS study presented in this proceeding is the same Factor O used in Docket No. 3945 which was filed in 2008. More specifically, PWSB's Factor O analysis used in Docket No. 3945 found that 13 percent of employee T&D O&M time was spent on mains-related activities, 7 percent was spent on hydrant-related activities, and 80 percent was spent on

services-related activities. Mains-related activity costs are then allocated to the base and extra-capacity functional cost categories, hydrant-related activity costs are assigned to the direct fire functional cost category, and services-related activity costs are assigned to the metering functional cost category.

Q. HAS UPDATED FACTOR O COST INFORMATION BEEN MADE AVAILABLE?

A. Yes. In Div. 1-5, the Division asked PWSB to provide any analysis which supported the reasonableness of the continued use of Factor O from Docket No. 3945, or to provide an updated analysis for Factor O. In response, PWSB provided an updated analysis of Factor O indicating an assignment of 23 percent of T&D O&M expense to mains, 51 percent to services, and 26 percent to hydrants.

Q. ARE YOU RECOMMENDING THAT UPDATED FACTOR O BE REFLECTED IN PWSB'S CCOS STUDY?

A. No, not at this time. Reflecting an updated Factor O in PWSB's CCOS study would result in significant decreases in monthly service charges and a significant increase in the monthly public fire service surcharge. On balance, however, there would be very little change in the total monthly customer charge for most customers. Therefore, I am not recommending the use of an updated Factor O at this time, but recommend that PWSB evaluate updating Factor O in future proceedings.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

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