

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

**CITY OF NEWPORT ) DOCKET NO. 4595**

**DIRECT TESTIMONY**

**OF**

**JEROME D. MIERZWA**

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

**April 14, 2016**

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**EXETER**

**ASSOCIATES, INC.**

10480 Little Patuxent Parkway, Suite 300  
Columbia, Maryland 21044

BEFORE THE  
PUBLIC UTILITIES COMMISSION  
OF RHODE ISLAND

CITY OF NEWPORT ) DOCKET NO. 4595

DIRECT TESTIMONY OF JEROME D. MIERZWA

**I. INTRODUCTION**

1  
2 Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS  
3 ADDRESS?

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

8 Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND  
9 EXPERIENCE.

10 A. I graduated from Canisius College in Buffalo, New York, in 1981 with a Bachelor of  
11 Science Degree in Marketing. In 1985, I received a Master's Degree in Business  
12 Administration with a concentration in finance, also from Canisius College. In July  
13 1986, I joined National Fuel Gas Distribution Corporation ("NFG Distribution") as a  
14 Management Trainee in the Research and Statistical Services Department ("RSS").  
15 I was promoted to Supervisor RSS in January 1987. While employed with NFG  
16 Distribution, I conducted various financial and statistical analyses related to the  
17 Company's market research activity and state regulatory affairs. In April 1987, as  
18 part of a corporate reorganization, I was transferred to National Fuel Gas Supply  
19 Corporation's ("NFG Supply") rate department where my responsibilities included

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

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

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

17 A. Yes. I have provided testimony on more than 200 occasions in proceedings before  
18 the Federal Energy Regulatory Commission ("FERC"), utility regulatory  
19 commissions in Delaware, Georgia, Illinois, Indiana, Louisiana, Maine, Montana,  
20 Nevada, New Jersey, Ohio, Pennsylvania, Texas, Utah, and Virginia, as well as  
21 before the Public Utilities Commission of Rhode Island ("Commission").

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

24 A. Yes. I was asked by the Division of Public Utilities and Carriers ("the Division") to  
25 testify on water utility issues in City of Newport-Water Division ("Newport") Docket

1 Nos. 2985 and 4355. I was also asked by the Division to testify on cost allocation  
2 and rate design issues in Pawtucket Water Supply Board Docket Nos. 2674 and 3945;  
3 Kent County Water Authority Docket Nos. 2555 and 3311; and Providence Water  
4 Supply Board Docket Nos. 2048, 3163 and 3832.

5 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

6 A. My testimony addresses the Class Cost of Service (“CCOS”) Study presented by  
7 Newport and the distribution of the revenue increase authorized by the Commission  
8 in this proceeding to the various customer classes.

9 Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS CONCERNING  
10 NEWPORT’S CCOS STUDY AND THE DISTRIBUTION OF THE  
11 REVENUE INCREASE AUTHORIZED BY THE COMMISSION IN THIS  
12 PROCEEDING.

13 A. My recommendations concerning Newport’s CCOS Study and distribution of the  
14 revenue increase authorized in this proceeding are as follows:

- 15 • With one exception, I generally find Newport’s CCOS Study to be reasonable.  
16 The exception concerns the allocation of water treatment capital costs.  
17 Newport has proposed to allocate water treatment capital costs based on the  
18 capacity reserved on behalf of each of its wholesale customers. As I explain  
19 in my testimony, this is unreasonable and results in a misallocation of costs. I  
20 recommend that Newport’s CCOS Study be modified to reflect an allocation  
21 of water treatment capital costs utilizing Newport’s historic practice of  
22 allocating these costs based on the base-extra capacity method.
- 23 • Newport has proposed to distribute the revenue increase authorized in this  
24 proceeding based on the results of its CCOS Study. As just explained,  
25 Newport’s CCOS Study should be modified to reflect an allocation of water  
26 treatment capital costs based on the base-extra capacity method. However,  
27 under this approach, the volumetric rates of retail customers will be reduced,  
28 while the volumetric rates of wholesale customers would likely increase  
29 significantly. To provide for gradualism, I recommend that retail volumetric  
30 rates remain unchanged and that the increase in revenues generated above the  
31 indicated cost of service of retail customers be proportionately allocated to

1                   reduce the volumetric rates of Newport’s two wholesale customers.

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

3   A.   Following this introductory section, my testimony is divided into three additional  
4       sections. The first section provides an overview of water utility cost of service  
5       methodologies. Next, I address Newport’s CCOS Study. Finally, I present my  
6       recommendations concerning the distribution of the revenue increase authorized by  
7       the Commission in this proceeding.

8

9                   **II. OVERVIEW OF COST OF SERVICE METHODOLOGIES**

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

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

15   Q.             WHAT ARE THE PRIMARY COST OF SERVICE STUDY

16                   METHODOLOGIES UTILIZED FOR WATER UTILITIES?

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

22   Q.             PLEASE SUMMARIZE EACH OF THESE METHODS.

23   A.   Under the base-extra capacity method, investment and costs are first classified into  
24       four primary functional cost categories: base or average capacity, extra capacity,  
25       customer, and direct fire protection. Customer costs are commonly further divided

1 between meter and service related and account or bill related costs. Extra capacity  
2 costs may also be divided between maximum day and maximum hour costs. Once  
3 investment and costs are classified to these functional categories, they are then  
4 allocated to customer classes. Base costs are allocated according to average water  
5 use, and extra capacity costs are allocated on the basis of the excess of peak demands  
6 over average demands. Meter and service related customer costs are allocated on the  
7 basis of relative meter and service investment or a proxy thereof. Account related  
8 customer costs are allocated in proportion to the number of customers or the number  
9 of bills. The CCOS Study presented by Newport in this proceeding utilizes the base  
10 extra-capacity methodology.

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

### 18 19 **III. EVALUATION OF NEWPORT'S CLASS COST OF SERVICE STUDY**

20 Q. PLEASE IDENTIFY THE CUSTOMER CLASSES INCLUDED IN  
21 NEWPORT'S CCOS STUDY.

22 A. Newport's CCOS Study includes two retail classes—Residential and Non-  
23 Residential; two wholesale customers—the Navy and Portsmouth Water and Fire  
24 Department ("PWFD"); and Public and Private Fire Protection.

1 Q. DOES THE CCOS STUDY SPONSORED BY NEWPORT IN THIS  
2 PROCEEDING UTILIZE THE SAME PROCEDURES AGREED TO AND  
3 APPROVED BY THE COMMISSION IN THE COMPANY’S TWO MOST  
4 RECENT PREVIOUS PROCEEDINGS IN DOCKET NOS. 4128 AND  
5 4355?

6 A. Generally yes, with one exception. That exception concerns Newport’s proposed  
7 allocation of water treatment capital costs based on the capacity reserved on behalf of  
8 each of its wholesale customers (design demands). In preparing the CCOS Study,  
9 Newport has also updated the study utilized in Docket No. 4355 to reflect more recent  
10 information (e.g., water sales projections, proposed rate year expenses, customer  
11 demands, etc.).

12 Q. PLEASE EXPLAIN NEWPORT’S PROPOSAL TO ALLOCATE WATER  
13 TREATMENT CAPITAL COSTS BASED ON DESIGN DEMANDS?

14 A. As explained in the direct testimony of Newport witness Julia Forgue, Newport began  
15 planning significant capital projects at its two water treatment plants—Lawton Valley  
16 and Station 1—in 2008. The projects included the design and construction of a new  
17 Lawton Valley Water Treatment plant and significant improvements to the Station 1  
18 Water Treatment Plant (collectively, the “WTP Projects”). When Newport sized the  
19 WTP Projects, it used 20-year projected average day and peak day demands provided  
20 by its wholesale customers—PWFD and the Navy. PWFD informed Newport that it  
21 would have average day demands of 1.64 MGD and peak day demands of 3.0 MGD.  
22 The Navy informed Newport that it would have average day demands of 0.95 MGD  
23 and peak day demands of 1.395 MGD. This information served as a basis for  
24 establishing the design capacities of the WTP Projects, and Newport used its  
25 wholesale customers’ projected demands when it sized the WTP Projects. Since the

1 WTP Projects were sized based on projected demands, Newport has proposed to  
2 allocate costs based on projected demands.

3 Q. HOW DOES NEWPORT'S PROPOSED METHOD OF ALLOCATING  
4 WATER TREATMENT CAPITAL COSTS COMPARE TO THE METHOD  
5 THAT WAS AGREED TO AND APPROVED IN DOCKET NO. 4355?

6 A. In Docket No. 4355, treatment capital costs were allocated to the base-extra capacity  
7 functional cost categories and then to each customer class based on the base and extra  
8 capacity demands of each class. In this proceeding, water treatment capital costs are  
9 allocated directly to each customer class based on each class' proportion share of base  
10 (average day) and extra capacity (maximum day) treatment capacity used to design  
11 the WTP Projects.

12 Q. DO YOU AGREE WITH NEWPORT'S PROPOSED ALLOCATION OF  
13 TREATMENT CAPITAL COSTS?

14 A. No, I do not. Newport's proposed allocation of treatment capital costs is inconsistent  
15 with actual customer class demands and the treatment facilities required to serve each  
16 class. Therefore, Newport's proposal results in a misallocation of costs. For  
17 example, as explained by Newport witness Harold J. Smith (page 24, lines 11-14),  
18 Newport's WTP Project facilities were designed based on a maximum day demand of  
19 1.395 MGD for the Navy. However, based on actual daily meter reads, the Navy's  
20 current maximum daily demand is 2.084 MGD. That is, the Navy is using water  
21 treatment facilities being paid for by other customers. Thus, Newport's proposal  
22 would significantly understate the maximum day water treatment capital costs that  
23 should be assigned to the Navy.

24 Q. WHAT DO YOU RECOMMEND WITH RESPECT TO THE  
25 ALLOCATION OF WATER TREATMENT CAPITAL COSTS?



1 A. I recommend that water treatment capital costs continue to be allocated based on  
2 actual utilization of the WTP Project facilities utilizing the base-extra capacity  
3 method agreed to and approved in Docket Nos. 4128 and 4355.

4 Q. HAVE YOU REVISED NEWPORT'S CCOS STUDY TO REFLECT AN  
5 ALLOCATION OF WATER TREATMENT CAPITAL COSTS USING THE  
6 BASE-EXTRA CAPACITY METHOD?

7 A. No, I have not because it was unnecessary to do so. HJS Schedule D-8 sponsored by  
8 witness Smith identifies the results of a CCOS Study which allocates treatment  
9 capital costs using the base-extra capacity method.

10

11 **IV. REVENUE DISTRIBUTION**

12 Q. HOW HAS NEWPORT PROPOSED TO DISTRIBUTE THE REVENUE  
13 INCREASE AUTHORIZED BY THE COMMISSION IN THIS  
14 PROCEEDING?

15 A. Newport is proposing to distribute the revenue increase authorized in this proceeding  
16 based on the results of its CCOS Study. The proposed increases in rates based on  
17 Newport's requested increase are identified in JHS Schedule D-8. If the increase  
18 authorized by the Commission is less than Newport's requested increase, rates would  
19 be designed by adjusting the costs included in the CCOS Study to reflect the cost of  
20 service approved by the Commission.

21 Q. HJS SCHEDULE D-8 ALSO IDENTIFIES CCOS STUDY RATES USING  
22 THE BASE-EXTRA CAPACITY METHOD TO ALLOCATE WATER  
23 TREATMENT CAPITAL COSTS. ARE YOU PROPOSING TO SET  
24 RATES BASED ON THE RESULTS OF THIS CCOS STUDY?

1 A. I am proposing that the results of the base-extra capacity CCOS study serve as a guide  
2 to setting rates in this proceeding. As shown on HJS Schedule D-8, under the base-  
3 extra capacity method, even at the revenue increase requested by Newport, the  
4 volumetric rates of the retail classes would be reduced, while the volumetric rates of  
5 the Navy and PWFD would increase by 37 and 27 percent, respectively. If Newport's  
6 requested increase is reduced by the Commission in this proceeding, the decrease in  
7 retail volumetric charges will be even greater. Because cost allocation is an art rather  
8 than an exact science, and to provide for gradualism, I recommend that retail  
9 volumetric rates remain unchanged and that the increase in revenues generated above  
10 the indicated cost of service of retail customers be proportionately allocated to reduce  
11 the volumetric rates of Newport's two wholesale customers.

12 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

13 A. Yes, it does.

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