

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION**

IN RE: THE CITY OF NEWPORT, UTILITIES DEPARTMENT, WATER DIVISION

APPLICATION TO CHANGE RATES

SEPTEMBER 7, 2012

City of Newport Department of Utilities



**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION**

**IN RE: CITY OF NEWPORT, UTILITIES DEPARTMENT, WATER DIVISION
APPLICATION TO CHANGE RATE SCHEDULES**

DOCKET NO.

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5. Notice to United States, Department of the Navy, and City Cities and Towns Served by Newport Water (pursuant to R.I.G.L. § 39-3-12.1).
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7. Appendix – Information required by R.I.G.L. § 39-3-12.1.
 - A. The status of its physical plant, including the volume of its water supply and the source of the supply.
 - B. The maintenance policy of the utility, to include the date distribution pipes were last installed, and the length of pipe installed for at least a ten (10) year duration.
 - C. The name and cost of each chemical introduced into the water supply during the most recent six (6) month period, including the amount used, and the purpose for the use.
 - D. The policy of the utility toward future expansion and renovation of the physical plant, including the amount of funds expended within the preceding year and expected to be expended within the next year for expansion, renovation, equipment purchase, and/or research and development.

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September 7, 2012

The Honorable Elia Germani, Chairman
State of Rhode Island
Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

RE: City of Newport, Utilities Department, Water Division,
Cost of Service Study Filing

Dear Chairman Germani:

On behalf of the City of Newport, Utilities Department, Water Division ("Newport Water"), enclosed you will find revised rate schedules, pursuant to a Cost of Service Study, which Newport Water proposes to place in effect in thirty (30) days. Newport Water proposes to change the existing rates it charges each of its customer classes through the enclosed Cost of Service Study. Newport Water's Application To Change Rates does not seek an increase in operating revenues.

Newport Water's filing includes pre-filed testimony from Harold J. Smith of Raftelis Financial Consulting, Inc., as well as schedules and exhibits in support of the revised rates. Additionally, Newport included information conforming to the mandates of R.I.G.L. §39-3-11. Pursuant to R.I.G.L. §39-3-12.1, Newport Water will also provide a copy of its rate filing to the following communities:

- (1) The Town of Middletown;
- (2) The Town of Portsmouth;
- (3) The United States, Department of the Navy, Department of Public Works.

Please note that Newport Water has not submitted any documentation required under Part II of the Commission's Rules of Practice and Procedure as Newport's overall revenue requirements are not in issue.

As part of this filing, Newport Water includes a copy of the proposed notice to be published in the Providence Journal. I respectfully ask that your staff immediately review the proposed notice so that it might be published within the period prescribed by law.

The following individuals should receive all correspondence for any additional information to be provided by the Public Utilities Commission: Julia Forgue, P.E., City of Newport, Director of Public Works, 70 Halsey Street, Newport, Rhode Island 02840; and Joseph A. Keough, Jr., Esquire, Keough & Sweeney, 41 Mendon Avenue, Pawtucket, Rhode Island 02861. Joseph A. Keough, Jr. will act as legal counsel for Newport Water and will represent the utility in all matters concerning this rate application.

Thank you for your attention to these matters.

Sincerely,



Joseph A. Keough, Jr.

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION**

**IN RE: CITY OF NEWPORT, UTILITIES DEPARTMENT, WATER DIVISION
APPLICATION TO CHANGE RATE SCHEDULES**

DOCKET NO.

NOTICE OF PROPOSED CHANGES IN RATES

In accordance with the Rhode Island Public Utilities Commission's Rules of Practice and Procedure and RIGL § 39-3-11, the City of Newport, Utilities Department, Water Division ("Newport Water"), hereby gives notice of its proposed changes in rates. Newport Water proposes to change the existing rates it charges each of its customer classes through the filing of a Cost of Service Study. Said Cost of Service Study and the proposed changes are contained in the written testimony and exhibits attached hereto and incorporated herein. It should be noted that Newport Water's application does not seek an increase in its operating revenues.

Additionally, Newport Water respectfully represents that:

- (1) Newport Water is a department of the City of Newport with its principal place of business at 70 Halsey Street, Newport, RI;
- (2) Correspondence should be addressed to Julia A. Forgue, P.E., Chief Engineer, City of Newport, Utilities Department, Water Division, 70 Halsey Street, Newport, RI, 02840 and to Joseph A. Keough, Jr., 41 Mendon Avenue, Pawtucket, Rhode Island 02861;
- (3) In accordance with the appropriate Rules and Regulations pursuant to RIGL §39-3-11, the accompanying documents contain data, information and testimony in support of said request;
- (4) Also submitted herewith are documents and statements in conformance with RIGL §39-3-12.1;
- (5) Attached hereto is information required by §1.5 of the Rules of Practice and Procedure for the Rhode Island Public Utilities Commission.

City of Newport, Utilities Department,
Water Division,
By its attorney,



Joseph A. Keough, Jr., Esquire
KEOUGH & SWEENEY, LTD.

41 Mendon Avenue
Pawtucket, RI 02861

(401) 724-3600 (phone)

(401) 724-9909 (fax)

jkeoughjr@keoughsweeney.com

CERTIFICATION

I, the undersigned, hereby certify that a true copy of the within was hand delivered to the Public Utilities Commission, 89 Jefferson Boulevard, RI 02888 and mailed via first class mail to the Department of Attorney General, 150 South Main Street, Providence, RI 02903 on the 7th day of September, 2012.



**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION**

**IN RE: CITY OF NEWPORT, UTILITIES DEPARTMENT, WATER DIVISION
APPLICATION TO CHANGE RATE SCHEDULES**

DOCKET NO:

NOTICE OF FILING AND PROPOSED CHANGE IN RATE SCHEDULES

On September 7, 2012, pursuant to Rhode Island General Laws § 39-3-11, the City of Newport, Utilities Department, Water Division ("Newport Water") hereby gives notice that it has filed with the Rhode Island Public Utilities Commission ("Commission") an application to change the existing rates it charges each of its customer classes through the filing of a Cost of Service Study. Newport Water's application does not seek an increase in its operating revenues.

The impact of Newport's request will vary based on customer classification. For a typical residential customer, who uses 60,000 gallons of water per year, the impact of this request will result in an increase of \$82.52 per year or 17.9%. The impact on all other customers will vary based on customer class. Please note that while Newport Water is requesting this change in rates, the Commission, after full investigation and hearings, may order different rates than proposed by Newport.

While the new rates are proposed to become effective October 7, 2012, the Commission can suspend the rates for up to eight months from the proposed effective date. No rate change will take effect until the Commission has conducted a full investigation and hearing on the proposal. The Commission will publish a notice of the hearing dates when they are scheduled. Ratepayers may comment on the proposed rate increases at that time.

A copy of the application is on file for examination at the Newport Water's office and at the offices of the Public Utilities Commission, 89 Jefferson Boulevard, Warwick, Rhode Island. A copy of the filing was also provided to The Town of Portsmouth, The Town of Middletown and the United States Navy. A copy was also provided to the Rhode Island Attorney General's Department, Consumer Division. Subscriber billing statements will contain notice of this filing. Some larger subscribers will receive notice in their monthly billing and others in their regular billing.

City of Newport, Utilities Department, Water Division
70 Halsey Street
Newport, RI 02840

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION**

**IN RE: CITY OF NEWPORT, UTILITIES DEPARTMENT, WATER DIVISION
APPLICATION TO CHANGE RATE SCHEDULES**

DOCKET NO:

**NOTICE OF FILING AND CHANGE IN RATE SCHEDULES TO CUSTOMERS OF THE CITY OF NEWPORT,
UTILITIES DEPARTMENT, WATER DIVISION**

On September 7, 2012, pursuant to Rhode Island General Laws § 39-3-11, the City of Newport, Utilities Department, Water Division ("Newport Water") hereby gives notice that it has filed with the Rhode Island Public Utilities Commission ("Commission") an application to change the existing rates it charges each of its customer classes through the filing of a Cost of Service Study. Newport Water's application does not seek an increase in its operating revenues.

The impact of Newport's request will vary based on customer classification. For a typical residential customer, who uses 60,000 gallons of water per year, the impact of this request will result in an increase of \$82.52 per year or 17.9%. The impact on all other customers will vary based on customer class. Please note that while Newport Water is requesting this change in rates, the Commission, after full investigation and hearings, may order different rates than proposed by Newport.

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A copy of the application is on file for examination at the Newport Water's office and at the offices of the Public Utilities Commission, 89 Jefferson Boulevard, Warwick, Rhode Island. A copy of the filing was also provided to The Town of Portsmouth, The Town of Middletown and the United States Navy. A copy was also provided to the Rhode Island Attorney General's Department, Consumer Division. Subscriber billing statements will contain notice of this filing. Some larger subscribers will receive notice in their monthly billing and others in their regular billing.

City of Newport, Utilities Department, Water Division
70 Halsey Street
Newport, RI 02840

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September 7, 2012

The Honorable Town Council
Town of Middletown
c/o City Clerk
350 East Main Road
Middletown, RI 02842

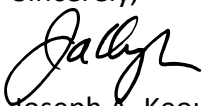
RE: Proposed Rate Change
City of Newport - Utilities Department -Water Division

Honorable Council Members:

Please be advised that the City of Newport, Utilities Department, Water Division ("Newport Water") will be filing for rate changes with the Rhode Island Public Utilities Commission on September 7, 2012. Enclosed you will find a copy of the documents being filed.

Additionally, in conformance with RIGL §39-3-12.1, enclosed with the filing you will find copies of Newport Water's compliance with the particulars of that provision.

Thank you for your attention to this these matters.

Sincerely,

Joseph A. Keough, Jr.

JAK:jak
Enclosure

KEOUGH & SWEENEY, LTD.

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September 7, 2012

United States
Department of the Navy
Department of Public Works
1 Simonpieti Drive
Newport, RI 02841-1711

RE: Proposed Rate Change
City of Newport - Utilities Department -Water Division

Dear Sir/Madam:

Please be advised that the City of Newport, Utilities Department, Water Division ("Newport Water") will be filing for rate changes with the Rhode Island Public Utilities Commission on September 7, 2012. Enclosed you will find a copy of the documents being filed.

Additionally, in conformance with RIGL §39-3-12.1, enclosed with the filing you will find copies of Newport Water's compliance with the particulars of that provision.

Thank you for your attention to this these matters.

Sincerely,


Joseph A. Keough, Jr.

JAK:jak
Enclosure

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September 7, 2012

The Honorable Town Council
The Town Portsmouth
c/o City Clerk
2200 East Main Road
Portsmouth, RI 02871

RE: Proposed Rate Change
City of Newport - Utilities Department -Water Division

Honorable Council Members:

Please be advised that the City of Newport, Utilities Department, Water Division ("Newport Water") will be filing for rate changes with the Rhode Island Public Utilities Commission on September 7, 2012. Enclosed you will find a copy of the documents being filed.

Additionally, in conformance with RIGL §39-3-12.1, enclosed with the filing you will find copies of Newport Water's compliance with the particulars of that provision.

Thank you for your attention to this these matters.

Sincerely,


Joseph A. Keough, Jr.

JAK:jak
Enclosure

CC: William McGlinn
Portsmouth Water & Fire District

PREFILED TESTIMONY

OF

**HAROLD J. SMITH
RAFTELIS FINANCIAL CONSULTING, INC.**

IN SUPPORT OF

**THE CITY OF NEWPORT, UTILITIES DEPARTMENT, WATER DIVISION
APPLICATION TO CHANGE RATES**

BEFORE THE

RHODE ISLAND PUBLIC UTILITIES COMMISSION

Docket No.

SEPTEMBER 7, 2012



1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is Harold J. Smith and my business address is 1031 South Caldwell Street,
4 Charlotte, North Carolina 28203.

5
6 **Q. By whom are you employed and in what capacity.**

7 A. I am a Vice President of Raftelis Financial Consultants, Inc. (RFC), a consulting firm
8 specializing in the areas of water and wastewater finance and pricing. RFC was established in
9 1993 in Charlotte, North Carolina, by George A. Raftelis to provide environmental and
10 management consulting services to public and private sector clients. RFC is a national leader in
11 the development of water and wastewater rates that satisfy local government objectives.

12

13 **Q. Please describe your educational background and work experience.**

14 A. I obtained a Master of Business Administration from Wake Forest University in 1997 and a
15 Bachelor of Science in Natural Resources from the University of the South in 1987. As an
16 employee of Raftelis Financial Consultants, I have been involved in numerous projects for public
17 utilities including a number of studies involving transition to new rate structures designed to
18 address specific pricing objectives. I have also served on engagements involving a wide range
19 of technical specialties including:

- 20 • Utility Cost of Service and Rate Structure Studies
21 • Privatization Feasibility Studies
22 • Privatization Procurements
23 • Utility Financial Planning Studies
24 • Municipal Financial Planning Studies

25

26

1 **Q. Have you previously testified before any regulatory agencies or in court on utility rate**
2 **related matters?**

3 A. Yes. I provided testimony for the City of Newport, Utilities Division, Water Department
4 (“Newport Water” or “Newport”) in six previous rate filings (Docket Nos. 3578, 3675, 3818,
5 4025, 4128 and 4243). I also provided testimony in the Providence Water Supply Board’s
6 most recent rate filings (Docket Nos. 3832, 4061 and 4070). I have also testified on behalf
7 of the Consumer Advocate before the Nova Scotia Utility and Review Board (W-HRWC-R-10)
8 and on behalf of Cecil County, Maryland before the Maryland Public Service Commission
9 (MPSC) in MPSC Case No. 9190.

10

11 **Q. Do you belong to any professional organizations or committees?**

12 A. Yes. I am a member of the American Water Works Association where I am the past chairman
13 of the Strategic Management Practices Committee, and I am a member of the Financial
14 Management Committee of the New England Water Works Association.

15

16 **Q Please describe your role in this proceeding?**

17 A. I worked with the City of Newport’s Finance Director, the Director of Utilities and the
18 Newport Water’s staff to develop pro forma revenue requirements and the resulting cost
19 allocations and cost based rates and charges. The results of my analyses are included in the
20 schedules incorporated herein with my testimony.

21

22 **Q. Please describe the purpose of your testimony.**

23 A. This testimony provides an explanation for each schedule attached to my testimony. The
24 schedules calculate Newport’s pro forma revenue requirements, commodity rates for retail
25 customers, and rates for the United States Department of the Navy (“Navy”) and the
26 Portsmouth Water and Fire District (“PWFD”). Other charges calculated in the model include a
27 base charge, and both public and private fire protection charges for Newport and portions of

1 Middletown and Portsmouth. The testimony also serves as a guide to other sources where
2 assumptions are used, the logic that was used in the development of the model, and the flow of
3 empirical and calculated information.

4

5 **II. COST OF SERVICE STUDY HISTORY**

6 **Q. Can you please provide a brief history of how Newport developed the full cost of service**
7 **study presented in this filing?**

8 A. Yes. In Docket 3818 (2007), the Commission ordered Newport to file a full cost of service
9 study by September 1, 2009.¹ Newport subsequently performed a full cost of service study that
10 allocated costs to customer classes based on how each class demands service. On November 2,
11 2009, Newport Water filed a cost allocation study and demand study with the Commission
12 (Docket 4128). Unfortunately, the proposed cost of service rates were not implemented due to
13 concerns regarding the validity of customer class peaking factors used in the cost allocation
14 process.

15

16 Newport, the PWFD, the Navy and the Division of Public Utilities and Carriers (“Division”)
17 reached a settlement in Docket 4128 regarding the implementation of cost of service rates. The
18 parties agreed that Newport would submit a cost of service study in a subsequent filing utilizing
19 a Cost Allocation Model (“COS Model”) agreed to by the parties. In addition, Newport agreed to
20 continue gathering daily demand data from a sample of customers during the months of June
21 through September in 2010 and 2011.

22

23 **Q. Was the COS Model agreed to by the parties in Docket 4128 used to calculate the rates**
24 **proposed in this filing?**

25 A. Yes, Newport developed the proposed rates in this filing using the COS Model approved by
26 the parties in the Docket 4128 Settlement Agreement. The COS Model developed in that

¹ This deadline was later extended to November 2009.

1 docket was updated to reflect current water sales projections; current revenue requirements;
2 and customer demand characteristics based on daily data gathered as part of the Demand
3 Study performed by Newport Water.

4

5 **III. CONTENT OF SCHEDULES**

6 **Q. Please provide a brief description of your pre-filed schedules.**

7 A. I divided the schedules filed with my testimony into three groups: Summary Schedules (HJS
8 Schedules A-1 through A-4); COS Model Schedules (HJS Schedules B-1 through B-11); and,
9 Support Schedules (D-1 through D-5).

10

11 **Summary Schedules**

12 HJS Schedule A1 - Revenue Requirements: Summarizes Newport Water's test year and rate year
13 in a format that exhibits the amounts allowed in Docket No. 4243 for FY12 with a rate year
14 adjustment for debt service. Note that with the exception of the adjustment for debt service, all
15 costs requested in this filing are the same as those approved in Docket No. 4243.

16

17 HJS Schedule A-2 - Proposed Rates and Charges: Summary of the proposed cost of service
18 based rates and a comparison with the existing rates. This schedule also shows the projected
19 rate year revenues from each charge.

20

21 HJS Schedule A-3 – Bill Impacts: This schedule compares typical customer bills from each
22 customer class under the current rates and proposed rates.

23

24 HJS Schedule A-4 – Revenue Proof: This schedule shows the rate year revenue projected to be
25 generated from the projected consumption, number of bills, and fire protection accounts based
26 on proposed rates and charges and compares this revenue to the rate year revenue

1 requirements to demonstrate that the proposed rates generate enough revenue to meet the
2 revenue requirements.

3

4 **COS Model Schedules**

5 HJS Schedule B-1 – Base Extra Capacity Cost Allocations: This schedule demonstrates the
6 assignment of Newport Water’s revenue requirements to Base/Extra Capacity cost categories.

7

8 HJS Schedule B-2 – Allocation of Costs to Water Rate Classes: This schedule shows the
9 allocation of costs from the Base/Extra Capacity cost categories to each customer class and the
10 base charge based on the percentages developed in HJS Schedule B-9.

11

12 HJS Schedule B-3 – Cost Allocation Bases: This schedule displays the allocation factors used to
13 assign costs to Base/Extra Capacity cost categories.

14

15 HJS Schedule B-4 – Allocation Analyses: This schedule shows the analyses performed to
16 develop some of the allocation factors shown on HJS Schedule B-3.

17

18 HJS Schedule B-5 – Capital Functionalization: This schedule assigns the two components of
19 Newport Water’s rate year capital costs (Debt Service and the contribution to the Capital
20 Spending restricted account) to functional categories based on the breakdown of the utility’s
21 existing fixed assets. This allows for the assignment of these costs to the appropriate Base/Extra
22 Capacity cost categories.

23

24 HJS Schedule B-6 – Water Demand History: This schedule shows the water demand history by
25 customer class for fiscal years (FY) 2000 through 2011. It also shows the projected rate year
26 demand approved in Docket 4243.

27

1 HJS Schedule B-7 – Water Production Peaking Analysis: This schedule demonstrates the
2 development of system peaking factors based on historical treatment plant production data.

3

4 HJS Schedule B-8 – Billed Demand Peaking Analysis: Determination of Customer Class Peaking
5 Factors: This schedule demonstrates the development of customer class peaking factors based
6 on historical billing records and the results of the daily meter reading performed on a sample of
7 Newport Water’s customers. The electronic version of this schedule allows for the use of
8 different data sources in the development of the customer class peaking factors.

9

10 HJS Schedule B-9 – System Demands Imposed by Each Customer Class’ Peaking Behavior: This
11 schedule demonstrates the peak demands, both Max Day and Max Hour, that each customer
12 class places on the system. The percentages developed in this schedule are used in HJS
13 Schedule B-2 to allocate costs from the Base/Extra Capacity cost components to each customer
14 class based on the demands that each class places on the system. This schedule also
15 demonstrates how each class’ demands are adjusted to account for unaccounted for water that
16 is produced at the treatment plants, but is not sold to customers.

17

18 HJS Schedule B-10 – Summary of Peak Load Distributions: This schedule shows each rate class’
19 share of system peaks and the Base/Extra Capacity distribution of system peaks. The
20 percentages derived in these schedules are used to develop the allocation factors shown in HJS
21 Schedule B-3 that are used to assign revenue requirements to each Base/Extra Capacity cost
22 category.

23

24 HJS Schedule B-11 – Fire Protection Demand Analysis: This schedule demonstrates the implied
25 demands that the fire protection system places on the system.

26

27

1 **Support Schedules**

2 **HJS Schedule D-1 – Water Accounts, by Size and Class:** This schedule shows the number of
3 Newport Water’s customer accounts by customer class and meter size.

4

5 **HJS Schedule D-2 – Fire Protection Accounts:** This schedule shows the number of fire hydrants
6 in the Newport Water service area and the number and connection size of Newport Water’s fire
7 protection accounts.

8

9 **HJS Schedule D-3 – Production Summary:** This schedule provides a summary of water plant
10 production data for the past five fiscal years.

11

12 **HJS Schedule D-4 – Demand Summary:** This schedule provides a summary of system demand
13 patterns over the past five fiscal years and also shows the calculation of Newport Water’s
14 unaccounted for water percentage.

15

16 **HJS Schedule D-5 – Development of Pumping Costs:** This schedule shows the build-up of costs
17 associated with the operation and maintenance of pumps used to pump treated water at the
18 two water treatment facilities. These costs are allocated differently than the other treatment
19 plant costs so must be identified separately.

20

21 **HJS Schedule D-6 – Debt Service Restricted Account Cash Flow:** This schedule shows the actual
22 monthly contributions and deductions to and from the Debt Service restricted account through
23 February of FY 2012 and the projected contributions and deductions for March 2012 through
24 June of FY 2017.

25

1 HJS Schedule D-7 – Development of Demand Factors: This schedule demonstrates how data
2 from the daily demand study is used to develop the class demand factors that are used in the
3 OS Model.

4
5 HJS Schedule D-8 Comparison of Rates Using Different Treatment Capital Allocations: This
6 schedule shows the difference between rates when capital costs are allocated based on the
7 COS Model and when they are allocated based on reserved capacity for Newport’s customers.

8
9 **IV. TEST YEAR AND RATE YEAR**

10 **Q. What are the proposed test year and rate year in this filing?**

11 A. Newport Water is not requesting any increased revenues in this filing. Newport is simply
12 implementing cost of service rates. Thus, the test year is the revenue requirement the
13 Commission allowed in Docket 4243 for Fiscal Year 2012 (July 1, 2011 to June 30, 2012), with an
14 adjustment for debt service in the rate year.²

15
16 HJS Schedule A-1 sets forth the proposed revenue requirements in the test year and rate year.
17 The only difference between the test and rate year revenue requirements is a funding decrease
18 to the Debt Service restricted account.

19
20 **Q. Why is there a decrease in the debt service contribution?**

21 A. The Commission will recall that in Docket 4243, Newport proposed a multi-year rate plan
22 pursuant to R.I.G.L. §39-15.1-4. Newport requested this multi-year rate plan to support
23 increased debt service for the design and construction of a new Lawton Valley Water Treatment
24 Plant and improvements to the Station One Water Treatment Facility (“Treatment Plant
25 Projects”).

² The increase in FY13 is subject to Newport’s compliance with the requirements of R.I.G.L. §39-15.1-4 and the terms of the Docket 4243 Settlement Agreement.

1 The parties reached a Settlement Agreement in Docket 4243, which the Commission approved.
2 In its subsequent report and order, the Commission authorized a multi-year rate plan that
3 allowed Newport to increase rates in four separate phases:

- 4 • FY12 \$2,222,258 (22.5%)³
- 5 • FY13 \$4,272,361 (35.3%)
- 6 • FY14 \$2,395,489 (14.6%)
- 7 • FY15 \$ 519,606 (2.7%)

8
9 Newport anticipated implementing the FY13, 14 and 15 increases on July 1 of each fiscal year.
10 However, the Commission's Order acknowledged that the dates and amounts in the multi-year
11 rate plan could change. Thus, the Commission ordered Newport Water to file a motion to
12 amend the multi-year rate plan if the debt service funding plan changed.

13
14 Since the conclusion of Docket 4243, certain details of the Treatment Plant Projects financing
15 plan came into clearer focus, and Newport does not need to implement the next phase of its
16 multi-year rate plan until April 2013. To that end, Newport filed a Petition To Amend Multi-Year
17 Rate Plan on June 14, 2012. The Commission approved this petition at its August 30, 2012 open
18 meeting.

19
20 Newport anticipates it will need to implement phase two of the multi-year increase in April
21 2013. This Docket will likely conclude in April 2013 as well. To avoid ratepayer confusion,
22 Newport proposes that the cost of service rates proposed in this filing become effective when
23 the phase two rates go into effect.

24

³ The increase in FY12 was an overall increase to support a total cost of service including O&M and Capital expenses. The increases for FY 13, 14 and 15 were for increased debt service only.

1 Thus, this filing incorporates the amount of the anticipated phase two debt service increase to
2 give the Division, interveners and other customers a more realistic view of their potential rates
3 if the cost of service rates take effect concurrently with the phase two increase authorized in
4 Docket 4243.

5

6 **Q. What is the proposed rate year Contribution to the Debt Service Restricted Account?**

7 A. In Docket 4243, Commission authorized an increase of \$4,272,500 for total debt service of
8 \$5,861,869 in FY13. However, Newport only needs to increase its debt service by \$1,986,710 to
9 a total of \$3,576,076. This increase is reflected in the rate year in HJS Schedule A-1.

10

11 **Q. How did Newport determine the rate year Contribution to Debt Service?**

12 A. The proposed rate year contribution to debt service is based on the cash flow analysis
13 shown on HJS Schedule D-6. This schedule shows the actual monthly contributions and
14 deductions to and from the Debt Service Restricted Account through February of FY12 and the
15 projected contributions and deductions for March 2012 through June of FY17.

16

17 As shown on D-6, Newport assumes that the monthly debt service contributions will increase in
18 April of FY 2013 to ensure it has funds available to make debt service payments in September
19 and March of each fiscal year through FY 2014.

20

21 **V. RATE YEAR WATER SALES PROJECTIONS**

22 **Q. What are the projected rate year water sales for this filing?**

23 A. The projected rate year water sales are the same as those approved in Docket 4243, and are
24 shown on HJS Schedule B-6.

25

26

27

1 **VI. DEMAND STUDY**

2 **Q. Does Newport's Cost of Service Study include a demand study?**

3 A. Yes. The Docket 3578 Settlement Agreement directed Newport to submit a demand study
4 with any cost allocation study if Newport sought to charge Portsmouth with any transmission,
5 distribution, or peak costs associated with supply or treatment. Thus, Newport conducted a
6 demand study in conjunction with its cost of service study. The demand study involved the
7 collection and analysis of customer demand data that allowed Newport to draw conclusions
8 about the way specific customer classes demand service.

9

10 **Q. Is the use of daily demand data in a cost of service study common within the water**
11 **industry?**

12 A. No. Until recently, daily water demand data collection required a person to actually read
13 each water meter included in the study on a daily basis, which was cost prohibitive. As a result,
14 the use of such data in a cost of service analysis is unusual.

15

16 **Q. Please describe the daily read program undertaken by Newport as part of the demand**
17 **study?**

18 A. This program involved the collection of daily consumption data from water meters in a
19 randomly selected sample of Newport's customers during the months of May through
20 September in the years 2009 to 2011.

21

22 **Q. How did you develop the sample of Newport's customers for the daily read program?**

23 A. In consultation with representatives from the Division, PWFD and the Navy, Chris Woodcock,
24 PWFD's rate consultant, suggested a sample selection methodology, which is basically a form of
25 multi-stage sampling.

26

1 First, Newport's customer base was divided by customer class (residential, commercial, and
2 Wholesale). For the residential and commercial classes, the population was stratified by
3 dividing each customer class into deciles based on annual consumption in Fiscal Year 2008.
4 After stratification, the sample population for the residential class was determined by randomly
5 selecting one percent (1%) of customers in each stratum. For the commercial class, three
6 accounts from each decile were randomly selected. This resulted in a sample population of 30
7 customers from the commercial class and 130 customers from the residential class.

8 Newport Water staff reviewed the initial list of accounts generated by the random sampling
9 methodology to verify that the selected accounts were active and would likely have some
10 consumption during the daily read period. Based on this review, we removed nine accounts on
11 the original list and replaced them with randomly selected accounts from the appropriate
12 customer class and stratum within the class.

13

14 Analysis of the 2009 data suggested that the data validity from some of the sample accounts
15 may have been compromised due to incompatibility between the data gathering devices and
16 meters. To rectify this problem, we replaced these accounts with randomly selected accounts
17 prior to the 2010 sampling period.

18

19 **Q. How was data collected from the sample group?**

20 A. Newport attached data collection devices that record daily water consumption to the
21 meters for the sample group. During the course of the sampling period, and at the end of the
22 sampling period, Newport downloaded data from these sampling devices to develop a record of
23 daily water consumption for each account.

24

25 **Q. Were the wholesale customers included in the daily read sample?**

26 A. Yes, Newport installed data gathering devices on the meters for the Navy, and PWFD
27 provided daily data it gathered using its SCADA system.

1 **Q. Did Newport successfully collect data from each of the accounts included in the randomly**
2 **selected sample in 2010 and 2011?**

3 A. Yes, Newport successfully gathered data in 2010 and 2011. Unfortunately, the data
4 gathered in 2010 was slightly out of compliance with the Docket 4128 Settlement Agreement
5 criteria, but the 2011 data did comply.

6

7 **Q. Does the Cost of Service Model in this filing incorporate data gathered during the daily**
8 **demand study?**

9 A. Yes, the demand factors used in the COS Model are based on daily demand study data
10 gathered in both 2010 and 2011.

11

12 **Q. Is using an average of demand factors developed using 2010 and 2011 data appropriate**
13 **considering that the 2010 data was out of compliance with the Settlement Agreement?**

14 A. Yes. The use of an average provides a more accurate picture of the long term demand
15 patterns of the customers served by Newport. While it would be better if the data from both
16 years met the criteria of the Settlement Agreement, I contend that an average of the two years
17 provides a better representation of each customer class' demand characteristics because the
18 data from a single year can be easily skewed by anomalous consumption by individual
19 customers during the sample period. Using two years of data serves to mitigate the impact of
20 these anomalies.

21

22 **Q. Is Newport continuing to gather daily data from the sample accounts?**

23 A. It is my understanding that the data gathering devices are still installed on the meters for
24 the sample accounts so it should be possible to gather data during the summer of 2012,
25 assuming the sampling devices continue to function properly. Newport downloaded data from
26 some devices in early August, but has not been able to fully verify the validity of the data at this
27 time.

1 **Q. Can the data from the summer of 2012 be used in the development of demand factors?**

2 A. Yes, if data for the summer of 2012 is gathered for the vast majority of the sample accounts,
3 this data could be used for the development of demand factors; however, since the proposed
4 rates need to go into effect by April 1, 2013, Newport did not have the ability to delay this filing
5 until after the end of the sampling period and used the 2010 and 2011 data instead.

6

7 **Q. Please describe in more detail how the demand factors were developed?**

8 A. The demand factors were developed using the methodology set forth in the Docket 4128
9 Settlement Agreement. This approach involves gathering daily data from the demand study
10 sample accounts and compiling annual demand data for the sample accounts using data from
11 the utility billing system. The daily data is used to identify peak day demand for each class and
12 the annual data is used to determine annual average day for each class. The demand factors are
13 determined by comparing the peak day demand for each class to average day demand.

14

15 **Q. What are the estimated Max Day to Max Hour ratios?**

16 A. The Max Day to Max Hour ratios recognize that demand fluctuates during the course of a
17 day, but since there is no hourly demand data, these ratios must be developed based on
18 assumptions about the way each class demands water during the course of a day.

19

20 **Q. How were the estimated Max Day to Max Hour ratios determined and how are they used
21 to determine the Max Hour demand factors?**

22 A. The Max Day to Max Hour ratios are those agreed to in the Docket 4128 Settlement
23 Agreement. The estimated Max Day to Max Hour ratios for each class were then multiplied by
24 the Max Day demand factors for each class to arrive at the Max Hour demand ratio for each
25 class.

26

27

1 **VII. ALLOCATION OF REVENUE REQUIREMENTS**

2 **Q. Once you develop demand factors for each class, what is the next step in determining the**
3 **cost of service by class?**

4 A. The next step is allocating revenue requirements to cost categories and customer classes.

5

6 **Q. How are revenue requirements allocated to cost categories and customer classes?**

7 A. Costs are allocated using the Base/Extra Capacity Cost Allocation Methodology which is a
8 three step process:

9 1. Assign costs to functional categories;

10

11 2. Assign costs from each functional category to Base/Extra Capacity cost categories based
12 on system demand characteristics; and

13

14 3. Allocate Base/Extra Capacity cost categories to customer classes based on customer
15 class demand patterns.

16

17 Since Newport Water budgets and tracks O&M costs within nine major accounts that
18 correspond to its primary functions, it was not necessary to assign O&M costs to functional
19 categories.

20

21 **VIII. ALLOCATION OF O&M COSTS**

22 **Q. Please described how O&M costs were assigned to the Base/Extra Capacity cost**
23 **categories.**

24 A. O&M costs are assigned to one or more of six Base/Extra Capacity costs categories based on
25 how they are incurred to meet the demands of the water system as a whole. RFC Schedule B-1
26 shows the assignment of costs to the Base/Extra Capacity categories.

27

28 The six cost categories consist of:

29 • Base –costs incurred to meet the average or “base” demands of the system.

30

- 1 • Max Day –costs incurred to meet peak daily demands of the system.
- 2
- 3 • Max Hour –costs incurred to meet peak hourly demands of the system.
- 4
- 5 • Meters –costs associated with installing, maintaining, repairing and replacing
- 6 water meters.
- 7
- 8 • Billing –costs associated with determining each customers’ consumption and
- 9 billing for that consumption.
- 10
- 11 • Fire Protection –costs associated with providing and maintaining hydrants
- 12 and associated infrastructure throughout the system and ensuring the
- 13 system is capable of meeting fire flow demands when needed.
- 14

15 Costs are assigned to categories using the allocation factors in RFC Schedule B-3. Most of the
16 allocation factors are developed using system wide demand data and others are developed
17 based on alternative analyses.

18

19 **Q. Please describe how the allocation factors on RFC Schedule B-3 were developed.**

20 A. The allocation factors were developed as follows:

21

22 **Average Day Demand**

23 The Average Day Demand allocator simply assigns all costs to the Base cost category in
24 recognition that Newport incurs these costs to meet the average demands placed on the
25 system.

26

27 **Maximum Day Demand**

28 The Max Day Demand allocation factor recognizes the way Newport incurs costs to meet peak
29 day demands placed on the system by all customer classes, and the potential peak day
30 demands placed on the system by the public and private fire protection. One way of
31 developing this allocator would be to simply look at plant production data and base the

1 allocations on the average day and peak day plant production. However, we used an approach
2 in this study to ensure that costs associated with the production and transmission of
3 unaccounted for water (“UFW”) are not recovered from PWFD since they take water directly at
4 the 4MG reservoir at the Lawton Valley plant.

5

6 For this study, we developed the Max Day allocation factor by first determining the Max Day
7 demands expected to be placed on the system by all customer classes during the Rate Year.
8 This is done by first determining the average day demands expected from each class by dividing
9 each class’ rate year demand by 365. We then adjusted this average day demand for each class
10 to account for UFW. To comply with the Docket 4128 Settlement Agreement, the COS Model
11 assigns UFW to the retail classes based on their respective average day demands, and to the
12 Navy based on twenty-five percent (25%) of its average day demand. This adjustment
13 effectively increases the demands of both retail classes and the Navy, and reduces PWFD’s
14 demands so that a smaller portion of costs are allocated to PWFD.

15

16 The adjusted average day demand for each class is then multiplied by the Max Day demand
17 factor for each class to determine the incremental demand each class places on the system as a
18 result of its peak day demands. The incremental demands for each class are then totaled to
19 arrive at the system wide incremental Max Day demand.

20

21 As mentioned earlier, the Max Day allocation factor must also recognize that public and private
22 fire protection place potential peak day demands on the system. This demand depends on fire
23 flow requirements. We determined fire flow demands based on a 4,000 gallon per minute fire
24 flow and an average fire event of 6 hours. This results in an implied peak day demand of 1,440
25 thousand gallons for the fire system.

26

1 The system wide average day, peak day and implied fire protection peak day demands are then
2 totaled to arrive at the total system wide peak day demand. The allocation factor is then
3 determined by dividing each component of the total peak day demand by the total peak day
4 demand to arrive at the allocation percentage shown on RFC Schedule B-3.

5

6 **Maximum Hour Demand**

7 The development of the Max Hour and Max Day allocation factors are similar, except Max Hour
8 also takes into account incremental peak hour demands placed on the system by all customers
9 and the fire protection system, both public and private.

10

11 **Fire Protection**

12 The Fire Protection allocation factor assigns all costs to the Fire Protection category to
13 recognize that the utility incurs these costs to meet potential demands placed on the system by
14 the public fire protection system and private fire connections.

15

16 **Non Administration O&M Costs (Minus Electricity and Chemicals)**

17 The Non-Administrative O&M Costs (Minus Electricity & Chemicals) factor allocates the
18 majority of costs tracked in the Administration account. RFC Schedules B-1 and B-4 shows the
19 development of these allocation factors. This factor is based on the percentages of O&M costs,
20 excluding Administration account, electricity and chemical costs, which are allocated to each
21 Base/Extra Capacity category once all allocations have been performed.

22

23 **Customer Service Salaries and Wages**

24 The Customer Service Salaries and Wages factor recognizes this department spends a portion of
25 its time as follows:

- 26 • Ensuring water meters are in place, properly maintained and calibrated;
- 27 • Maintaining and repairing service lines to meters; and

- 1 • Gathering data necessary to prepare customer bills.

2
3 This factor allocates the salaries and wages between these three categories based on estimates
4 of time spent performing each function.

5
6 **Non-Administrative Salaries and Wages**

7 The Non-Administrative Salaries and Wages factor is developed based on the allocation of labor
8 costs for all accounts except the Administration account.

9
10 **Total Non-Administrative Costs Before Offsets**

11 The Total Non-Administrative Costs Before Offsets factor is based on percentages of overall
12 costs, excluding those in the Administration account allocated to each Base/Extra Capacity cost
13 category once all allocations have been performed, but before the assignment of other non-
14 rate revenues to the categories.

15
16 **Capital Costs**

17 The Capital Costs factor is developed based on the allocation of capital costs to Base/Extra
18 Capacity categories that results from the allocation of capital costs described below.

19
20 **Total Non-Administrative Costs before Offsets**

21 See Above.

22
23 **Other Costs**

24 The Other Costs factor allocates costs that do not readily fall into a specific functional category.
25 This allocation factor is based on the percentages of overall costs allocated to each Base/Extra
26 Capacity cost categories once all allocations have been performed.

27

1 **Q. Once all of the allocation factors have been determined, what was the next step in the**
2 **cost allocation process?**

3 A. The next step was allocating O&M costs to the Base/Extra Capacity cost categories using the
4 allocation factors. RFC Schedule B-1 shows this step.

5

6 **Q. Please describe how Administration O&M costs were allocated.**

7 A. The majority of Administration costs were allocated using the Non-Administrative O&M
8 Costs (Minus Electricity & Chemical Salary Costs) factor described earlier. All other
9 Administration costs were allocated using the Other Costs allocation factor described above.
10 Several components of the legal and administrative services payment to the City of Newport
11 were allocated using the Total Non-Administrative Costs Before Offsets allocation factor. Other
12 line items in the Administration account were allocated using the Non-Administrative Salaries
13 and Wages factor. In addition, some Administration costs were allocated directly to specific
14 categories per the Docket 4128 Settlement Agreement.

15

16 **Q. Please describe the allocation of Customer Service O&M costs.**

17 A. Customer Service salaries were allocated using the Customer Service Salaries & Wages
18 allocation factor described earlier. As shown on RFC Schedule B-1, other Customer Service costs
19 were allocated between the Meters and Billing categories based on an analysis of Newport
20 Water's budget and consultation with Newport's staff regarding the way it incurs costs.

21

22 **Q. Please describe how Source of Supply O&M costs were allocated.**

23 A. Costs tracked in both source of supply accounts (Island and Mainland) are associated with
24 the operation and maintenance of reservoirs, raw water pumps and mains to ensure Newport
25 meets average day demand. Therefore, these costs were allocated using the Average Day cost
26 allocation factor, which results in the assignment of these costs to the Base category.

27

1 **Q. Please describe the allocation of Treatment O&M costs.**

2 A. The two treatment accounts (Station One and Lawton Valley) track costs associated with
3 treating raw water and pumping treated water to storage tanks for distribution. As such,
4 Newport incurs the majority of these treatment related costs to meet average day and peak
5 day demands. However, Newport also incurs pumping related and chemical costs in these
6 accounts. The pumping costs are related to meeting average day, peak day and peak hour
7 demands. The chemical costs are only related to meeting average day demands. As such, these
8 two treatment cost components are separated and allocated according to the Docket 4128
9 Settlement Agreement with pumping costs allocated based on Maximum Hour Demand
10 patterns and Chemical costs being allocated based on average day demand.

11

12 While Newport Water has always tracked chemical costs separately, it has not historically
13 tracked pumping costs separately. Therefore, it was necessary to determine the pumping
14 associated costs. RFC Schedule D-5 shows the results of this analysis. Based on this analysis,
15 we separated pumping related cost from treatment costs and allocated them separately.

16

17 We assigned the treatment costs to the Base, Max Day and Fire Protection categories using the
18 Max Day allocation factor described earlier, and assigned the pumping related costs to the
19 Base, Max Day, Max Hour and Fire protection categories using the Max Hour allocation factor.
20 Chemical costs were allocated using the Average Day allocation factor.

21

22 **Q. Please describe the allocation of Laboratory O&M costs.**

23 A. Newport incurs costs in this account for periodic water quality tests to ensure compliance
24 with regulatory requirements. Since peak day or peak hour demands do not affect these test
25 costs, they were assigned to the Base cost category.

26

27

1 **Q. Please describe how Transmission and Distribution O&M costs were allocated.**

2 A. With the exception of the Hydrant Maintenance and Services Maintenance line items,
3 Newport incurs costs in the Transmission and Distribution account to deliver water to meet
4 their customers' average day, peak day, peak hour and fire protection demands. Therefore,
5 these costs were assigned to the Base, Max Day, Max Hour and Fire Protection categories using
6 the Max Hour allocation factor. All the Hydrant Maintenance costs are allocated to the Fire
7 category and all the Services Maintenance costs are allocated to the Services category.

8

9 **Q. Please describe the allocation of Fire Protection O&M costs.**

10 A. Newport incurs costs tracked in the Fire Protection account solely to ensure the system can
11 meet fire protection demands. Therefore, these costs are assigned to the Fire Protection
12 category using the Fire Protection allocation factor.

13

14 **IX. ALLOCATION OF CAPITAL COSTS**

15 **Q. What is the next step in the cost allocation process?**

16 A. The next step is assigning Newport Water's capital costs to the appropriate cost categories.

17

18 **Q. Please describe the allocation of Newport Water's capital costs.**

19 A. Newport Water's capital costs consist of two components: (1) contributions to the Capital
20 Spending restricted account for cash funded capital projects: and, (2) contribution to the Debt
21 Service restricted account for capital projects financed with borrowed funds. To properly assign
22 these costs to the Base/Extra Capacity categories they must first be assigned to functional
23 categories. The capital costs are assigned to functions based on the make-up of the fixed assets
24 that currently comprise the system. This process involved assigning each of Newport Water's
25 fixed assets to the appropriate functional category. RFC Schedule B-5 shows the break-down of
26 fixed assets by functional categories. We then assigned the assets in each functional category to
27 corresponding Newport Water accounts so they could be assigned to Base/Extra Capacity

1 categories. For the most part, capital costs in each functional category are allocated using the
2 same allocation factors as the corresponding O&M costs, but capital costs assigned to the
3 treatment categories are allocated differently. RFC Schedule B-5 shows this assignment to
4 functional categories. RFC Schedule B-1 shows the assignment to Base/Extra Capacity
5 categories.

6

7 **Q. Please describe the allocation of capital costs associated with treatment?**

8 A. Treatment capital costs are not allocated to Base/Extra Capacity categories. Instead, they
9 are allocated directly to each customer class based on each class' proportionate share of
10 average day and peak day treatment capacity that will be available when the Treatment Plant
11 Projects are complete.

12

13 Each class' share of capacity is based on their twenty year projected average day and peak day
14 needs used in the design of the Treatment Plant Projects. PWFD indicated they would have
15 average day demands of 1.64 MGD and peak day demands of 3.0 MGD. PWFD provided this
16 information in 2009 to Camp, Dresser & McKee ("CDM"), Newport's adviser on the Treatment
17 Plant Projects. This information served as a basis for establishing the design capacities of the
18 Treatment Plant Projects.

19

20 The Navy indicated they will have average day demands of 0.95 MGD and peak day demands of
21 1.395 MGD. The remaining average day and peak day treatment plant capacity is apportioned
22 between the residential and non-residential classes and Fire Protection on the basis of their
23 current average and peak day demands. The residential class' assumed average day and peak
24 day demands are 3.02 MGD and 5.51 MGD, respectively. The non-residential class' assumed
25 average day and peak day demands are 2.39 MGD and 4.70 MGD, respectively. Fire Protection
26 has no average day demand, but its assumed peak day demand is 1.44 MGD.

27

1 **Q. Is this approach different than the approach used in the Docket 4128 Settlement**
2 **Agreement COS Model?**

3 A. Yes. The COS Model allocated treatment capital costs based on each class' actual historical
4 demands while the current approach allocates treatment capital costs based on each class'
5 projected demands.

6

7 **Q. Is this approach more fair and equitable?**

8 A. Yes. Newport used its customers' projected demands when it sized the Treatment Plant
9 Projects. This included its wholesale customers' demands. Newport sized the Treatment Plant
10 Projects to meet PWFd's (3.0 MGD) and the Navy's (1.395 MGD) projected peak day demands,
11 in addition to the projected peak day demands of all other customers. As such, Newport
12 incurred costs to provide the necessary treatment capacity, and the wholesale customers
13 should be responsible for those costs. The current treatment capital costs allocation ensures
14 that each class pays for the portion of the treatment plants based on the demands they
15 provided to Newport.

16

17 Additionally, this approach is consistent with the Navy's expressed desire to use the existing
18 rate setting process to fund its proportional share of the cost of the Treatment Plant Projects.

19

20 **Q. What is the difference in rates if treatment plant costs are assigned to wholesale**
21 **customers based on the demand projections provided by PWFd and the Navy?**

22 A. Included in my schedules is HJS Schedule D-8, which shows rates under the proposed
23 methodology compared to what rates would be if treatment capital costs were allocated
24 without regard to the amount of capacity each customer class requires.

25

26

27

1 **X. BASE, COMMODITY AND FIRE PROTECTION CHARGES**

2 **Q. Once you assigned all the O&M and Capital costs to Base/Extra Capacity cost categories,**
3 **what was the next step in the cost allocation process?**

4 A. The next step was allocating costs from the Base/Extra Capacity cost categories to class
5 specific Commodity, Base and Fire Protection Charges and the subsequent calculation of rates
6 and charges. RFC Schedule B-2 shows this process.

7

8 **Base Charge**

9 **Q. Please describe how costs are allocated to the base charge?**

10 A. All costs assigned to Meters, Services and Billing cost categories are assigned to the base
11 charge.

12

13 **Q. How is the base charge calculated?**

14 A. RFC Schedules A-2 and B-2 show the base charge calculation. This charge is designed to
15 recover the utility's fixed customer related costs related to tasks such as responding to
16 customer questions and complaints, and installing and maintaining water meters and service
17 lines. Additionally, the base charge is designed to recover costs associated with preparing a
18 customer's bill. These costs include those associated with reading meters, bill preparation and
19 mailing. Since these costs do not vary based on customer consumption, it is appropriate to
20 recover them through a fixed charge assessed at the time of billing.

21

22 However, these costs do vary by customer depending on billing frequency. While the cost of
23 meeting typical customer service requirements, installing and maintaining meters and services
24 is the same regardless of billing frequency, meter reading and bill preparation costs vary
25 depending on billing frequency.

26

27 Therefore, the base charge must be comprised of three components:

- 1 1. Recovery of monthly customer service, meter installation and maintenance costs;
- 2
- 3 2. Recovery of monthly cost associated with maintaining and repairing service lines; and,
- 4
- 5 3. Recovery of costs associated with meter reading and bill preparation.
- 6

7 The customer service and meter component is calculated by dividing the costs allocated to
8 Meters by the total number of equivalent 5/8 inch meters multiplied by twelve. The Services
9 component is calculated by dividing the costs allocated to Services by the total number of
10 equivalent connections multiplied by twelve. The billing component is determined by dividing
11 the total costs assigned to the Billing category by the total number of bills that Newport Water
12 is projected to prepare during the Rate Year. RFC Schedule B-2 shows these calculations. The
13 base charge for customers billed quarterly is then determined on RFC Schedule A-2 by
14 combining three monthly meter components and three monthly services components with one
15 billing component. The monthly base charge includes one monthly meter component, one
16 monthly services component and one billing component.

17

18 **Commodity Charge**

19 **Q. Please describe how costs are allocated to each customer class and how the commodity**
20 **charge for each class is calculated.**

21 A. The costs to the class specific commodity charges are allocated using the allocation
22 percentages shown at the top of RFC Schedule B-2. These percentages are developed based on
23 each customer class' demand characteristics.

24

25 **Q. How are these allocation percentages determined?**

26 A. RFC Schedule B-9 shows the development of these percentages. The percentages generally
27 reflect each class' share of each type of demand placed on the system as determined by
28 applying the demand factors developed using the Daily Demand Study data; however, there are
29 a couple of exceptions to this general rule.

1 **Q. Please explain these exceptions?**

2 First, certain percentages exclude PWFD's demands on the system. This exclusion of PWFD's
3 demands prevents the allocation of costs associated with the transmission and distribution
4 system to PWFD's commodity charge. This is done because PWFD takes water directly from a
5 Lawton Valley Treatment Plant storage tank and does not receive the benefits of meeting peak
6 hour demands offered by Newport Water's transmission and distribution system. Second, as
7 mentioned previously, capital costs associated with treatment facilities are allocated to each
8 class based on the capacity each class requested when the Treatment Plant Projects were
9 designed.

10

11 **Q. How is the commodity rate for each class calculated?**

12 A. We calculated the commodity rate per thousand gallons by dividing the total costs allocated
13 to each class by that class' projected rate year demand in thousands of gallons. For the retail
14 classes, the result is rounded up to the nearest cent to arrive at the commodity rate for that
15 class. For the Navy and PWFD, the result is rounded to the nearest tenth of a cent. RFC
16 Schedule A-2 shows the resulting rates and the percent change from the existing rates.

17

18 **Fire Protection Charges**

19 **Q. Please explain the allocation of costs to the Fire Protection Charges and how the charges**
20 **are calculated?**

21 A. All costs assigned to the Fire Protection cost category are allocated to the
22 Fire Protection Charges. These costs are then divided by the total number of 5/8 inch meter or
23 connection equivalents represented by the public fire hydrants and the private fire connections
24 to arrive at the charge per equivalent 5/8" connection. Meter equivalents are calculated using
25 demand factors based on the principles of the Hazen-Williams equation for flow through
26 pressure conduits as shown on RFC Schedule D-2. The charge for each private fire protection
27 connection size is determined by multiplying the calculated charge per 5/8" equivalent by the

1 appropriate demand factor. Public Fire Protection Charges are calculated using the demand
2 factor for a four inch connection. RFC Schedule A-2 shows the proposed Fire Protection
3 Charges along with the percent change from the existing charge.

4

5 **XI. RATE IMPACT**

6 **Q. Have you provided information on the projected impact of the proposed rates and charges**
7 **on customer's bills?**

8 A. Yes, RFC Schedule A-3 shows bills for different customer classes at a variety of consumption
9 levels under both the existing rates and charges and the proposed rates and charges.

10

11 **Q. Did you consider whether the revenues from the proposed rates and charges are sufficient**
12 **to cover Newport Water's revenue requirements?**

13 A. RFC Schedule A-4 serves as a revenue proof to determine revenue sufficiency of the
14 proposed rates and charges. This schedule shows the revenue that is expected from each
15 customer class or charge under the proposed rates as well as revenues from other non-rate
16 sources. This revenue is compared to Newport Water's rate year revenue requirements to
17 determine whether revenue will sufficiently cover costs. As shown, it is anticipated that the
18 proposed rates and charges will generate surplus revenue of approximately \$4,364. This
19 surplus is attributable to rounding within the cost allocation model.

20

21 **XII. CONCLUSION**

22 **Q. Does this conclude your testimony?**

23 A. Yes it does.

Newport Water Cost of Service Model

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HJS Schedule B-10	Summary of Peak Load Distributions (by Rate Class and Base/Extra-Capacity Categories)
HJS Schedule B-11	Fire Protection Demand Analysis

Supporting Data

HJS Schedule D-1	Water Accounts, by Size and Class
HJS Schedule D-2	Fire Protection Accounts
HJS Schedule D-3	Production Summary
HJS Schedule D-4	Demand Summary
HJS Schedule D-5	Development of Pumping Costs
HJS Schedule D-6	Debt Service Restricted Account Cashflow
HJS Schedule D-7	Demand Factor Calculations
HJS Schedule D-8	Comparison of Rates Using Different Treatment Capital Allocations

	Rate Year Approved in Docket 4243	Test Year FY 2013 Approved in Docket 4243	Adjustments To Test Year	Proposed Rate Year
O&M COSTS				
Administration				
Salaries & Wages	\$ 273,889	\$ 273,889		\$ 273,889
AFSCME retro	-	-		-
NEA retro	-	-		-
AFSCME benefits on retro pay	-	-		-
NEA benefits on retro pay	-	-		-
Standby Salaries	12,500	12,500		12,500
Accrued Benefits Buyout	175,000	175,000		175,000
Employee Benefits	128,202	128,202		128,202
Retiree Insurance Coverage	514,000	514,000		514,000
Workers Compensation	85,000	85,000		85,000
Annual Leave Buyback	2,400	2,400		2,400
Advertisement	9,000	9,000		9,000
Membership Dues & Subscriptions	2,500	2,500		2,500
Conferences & Training	4,000	4,000		4,000
Tuition Reimbursement	2,000	2,000		2,000
Consultant Fees	233,033	233,033		233,033
Postage	1,000	1,000		1,000
Fire & Liability Insurance	76,468	76,468		76,468
Telephone & Communication	5,500	5,500		5,500
Water	1,942	1,942		1,942
Electricity	5,805	5,805		5,805
Natural Gas	7,252	7,252		7,252
Property Taxes	226,774	226,774		226,774
Legal & Administrative				
Audit Fees	4,349	4,349		4,349
OPEB Contribution	-	-		-
City Counsel	4,649	4,649		4,649
Citizens Survey	-	-		-
City Clerk	3,381	3,381		3,381
City Manager	54,131	54,131		54,131
Human Resources	30,121	30,121		30,121
City Solicitor	20,459	20,459		20,459
Finance Adimistrative 80%	19,822	19,822		19,822
Finance Adimistrative 5%	7,020	7,020		7,020
Purchasing	18,314	18,314		18,314
Assessment	5,973	5,973		5,973
Collections	46,979	46,979		46,979
Accounting 5%	10,679	10,679		10,679
Accounting	70,516	70,516		70,516
Public Safety	-	-		-
Facilities Maintenance	13,266	13,266		13,266
Data Processing	143,888	143,888		143,888
Mileage Allowance	2,000	2,000		2,000
Gasoline & Vehicle Allowance	7,508	7,508		7,508
Repairs & Maintenance	1,200	1,200		1,200
Regulatory Expense	10,000	10,000		10,000
Regulatory Assessment	48,096	48,096		48,096
Office Supplies	20,000	20,000		20,000
Self Insurance	10,000	10,000		10,000
Unemployment Claims	12,000	12,000		12,000
Subtotal:	\$ 2,330,614	\$ 2,330,614	\$ -	\$ 2,330,614

	Rate Year Approved in Docket 4243	Test Year FY 2013 Approved in Docket 4243	Adjustments To Test Year	Proposed Rate Year
Customer Service				
Salaries & Wages	\$ 256,335	\$ 256,335		\$ 256,335
Overtime	10,200	10,200		10,200
Collections	-	-		-
Temp Salaries	10,200	10,200		10,200
Injury Pay	-	-		-
Employee Benefits	168,793	168,793		168,793
Annual Leave Buyback	5,000	5,000		5,000
Copying & binding	500	500		500
Conferences & Training	5,000	5,000		5,000
Support Services	26,002	26,002		26,002
Postage	31,706	31,706		31,706
Gasoline & Vehicle Allowance	33,421	33,421		33,421
Repairs & Maintenance	40,000	40,000		40,000
Meter Maintenance	10,000	10,000		10,000
Operating Supplies	5,000	5,000		5,000
Uniforms & protective Gear	1,000	1,000		1,000
Customer Service Supplies	10,343	10,343		10,343
Subtotal:	\$ 613,500	\$ 613,500	\$ -	\$ 613,500
Source of Supply - Island				
Salaries & Wages	\$ 258,897	\$ 258,897		\$ 258,897
Overtime	28,903	28,903		28,903
Temp Salaries	10,000	10,000		10,000
Injury Pay	-	-		-
Employee Benefits	134,334	134,334		134,334
Annual Leave Buyback	6,300	6,300		6,300
Electricity	42,108	42,108		42,108
Gas/Vehicle Maintenance	58,648	58,648		58,648
Repairs & Maintenance	7,425	7,425		7,425
Reservoir Maintenance	16,000	16,000		16,000
Operating Supplies	7,750	7,750		7,750
Uniforms & protective Gear	700	700		700
Chemicals	72,735	72,735		72,735
Subtotal:	\$ 643,800	\$ 643,800	\$ -	\$ 643,800
Source of Supply - Mainland				
Overtime	\$ 4,617	\$ 4,617		\$ 4,617
Temp Salaries	13,000	13,000		13,000
Permanent Part time	15,264	15,264		15,264
Employee Benefits	2,525	2,525		2,525
Electricity	120,189	120,189		120,189
Repairs & Maintenance	7,200	7,200		7,200
Reservoir Maintenance	4,500	4,500		4,500
Operating Supplies	630	630		630
Subtotal:	\$ 167,925	\$ 167,925	\$ -	\$ 167,925

	Rate Year Approved in Docket 4243	Test Year FY 2013 Approved in Docket 4243	Adjustments To Test Year	Proposed Rate Year
Station One				
Salaries & Wages	\$446,983	\$446,983		\$446,983
Overtime	60,021	60,021		60,021
Holiday Pay	17,045	17,045		17,045
Employee Benefits	\$278,523	\$278,523		\$278,523
Annual Leave Buyback	5,000	5,000		5,000
Conferences & Training	4,500	4,500		4,500
Fire & Liability Insurance	12,687	12,687		12,687
Electricity	\$252,674	\$252,674		\$252,674
Natural Gas	24,250	24,250		24,250
Rental of Equipment	600	600		600
Sewer Charge	293,020	293,020		293,020
Gas/Vehicle Maintenance	7,583	7,583		7,583
Repairs & Maintenance	\$25,000	\$25,000		\$25,000
Operating Supplies	\$25,210	\$25,210		\$25,210
Uniforms & protective Gear	1,062	1,062		1,062
Station One Pumping	\$22,428	\$22,428		\$22,428
Chemicals	354,210	354,210		354,210
Subtotal:	\$ 1,830,796	\$ 1,830,796	\$ -	\$ 1,830,796
Lawton Valley				
Salaries & Wages	\$459,704	\$459,704		\$459,704
Overtime	37,657	37,657		37,657
Holiday Pay	16,760	16,760		16,760
Employee Benefits	\$287,143	\$287,143		\$287,143
Annual Leave Buyback	3,966	3,966		3,966
Conferences & Training	3,000	3,000		3,000
Fire & Liability Insurance	18,614	18,614		18,614
Electricity	\$132,551	\$132,551		\$132,551
Natural Gas	29,909	29,909		29,909
Rental of Equipment	500	500		500
Sewer Charge	360,640	360,640		360,640
Gas/Vehicle Maintenance	7,882	7,882		7,882
Repairs & Maintenance	\$34,048	\$34,048		\$34,048
Operating Supplies	\$18,475	\$18,475		\$18,475
Uniforms & protective Gear	1,542	1,542		1,542
LV Pumping	\$31,646	\$31,646		\$31,646
Chemicals	169,977	169,977		169,977
Subtotal:	\$ 1,614,015	\$ 1,614,015	\$ -	\$ 1,614,015
Laboratory				
Salaries & Wages	\$ 104,358	\$ 104,358		\$ 104,358
Employee Benefits	64,208	64,208		64,208
Annual Leave Buyback	2,750	2,750		2,750
Repairs & Maintenance	1,700	1,700		1,700
Regulatory Assessment	32,000	32,000		32,000
Laboratory Supplies	18,684	18,684		18,684
Subtotal:	\$ 223,700	\$ 223,700	\$ -	\$ 223,700

	Rate Year Approved in Docket 4243	Test Year FY 2013 Approved in Docket 4243	Adjustments To Test Year	Proposed Rate Year
Transmission & Distribution				
Salaries & Wages	\$ 418,161	\$ 418,161		\$ 418,161
Overtime	52,364	52,364		52,364
Temp Salaries	10,000	10,000		10,000
Injury Pay	-	-		-
Employee Benefits	251,514	251,514		251,514
Annual Leave Buyback	10,943	10,943		10,943
Conferences & Training	4,000	4,000		4,000
Contract Services	12,430	12,430		12,430
Fire & Liability Insurance	18,748	18,748		18,748
Electricity	18,762	18,762		18,762
Heavy Equipment Rental	8,260	8,260		8,260
Gas/Vehicle Maintenance	110,305	110,305		110,305
Repairs & Maintenance	26,000	26,000		26,000
Main Maintenance	35,000	35,000		35,000
Hydrant Maintenance	35,000	35,000		35,000
Service Maintenance	30,000	30,000		30,000
Operating Supplies	10,000	10,000		10,000
Uniforms & protective Gear	1,761	1,761		1,761
Subtotal:	\$ 1,053,248	\$ 1,053,248	\$ -	\$ 1,053,248
Fire Protection				
Repair & Maintenance - Equipment	\$ 13,500	\$ 13,500		\$ 13,500
Subtotal:	\$ 13,500	\$ 13,500	\$ -	\$ 13,500
Total O&M Costs	\$ 8,491,098	\$ 8,491,098	\$ -	\$ 8,491,098

	Rate Year Approved in Docket 4243	Test Year FY 2013 Approved in Docket 4243	Adjustments To Test Year	Proposed Rate Year
CAPITAL COSTS				
Contribution to Capital Spending Acct.	\$ 2,500,000	\$ 2,500,000		\$ 2,500,000
Contribution to Debt Service Acct.	\$1,589,369	\$5,861,869	(\$2,285,789)	\$3,576,079
Total Capital Costs	\$ 4,089,369	\$ 8,361,869	\$ (2,285,789)	\$ 6,076,079
Operating Revenue Allowance	\$ 254,733	\$ 254,733		\$ 254,733
Total Costs before Offsets	\$ 12,835,200	\$17,107,700	\$ (2,285,789)	\$ 14,821,910
OFFSETS				
Nonrate Revenues				
Sundry charges	\$ 104,000	\$ 104,000		\$ 104,000
WPC cost share on customer service	296,856	296,856		296,856
Middletown cost share on customer serv	143,506	143,506		143,506
Rental of Property	108,167	108,167		108,167
Water Penalty	47,500	47,500		47,500
Miscellaneous	8,600	8,600		8,600
Investment Interest Income	3,900	3,900		3,900
Water Quality Protection Fees	22,500	22,500		22,500
Total Nonrate Revenues	\$ 735,029	\$ 735,029	\$ -	\$ 735,029
Net Costs to Be Recovered through Rates	\$ 12,100,171	\$16,372,671	\$ (2,285,789)	\$ 14,086,881

Rate Year O&M costs are those approved in Docket No. 4243.

Newport Water
 Cost Of Service Analysis
 HJS Schedule A-2
 Cost of Service Rates and Charges

(1)

		Docket 4243					
		Rates	Cost of Service	Proposed Rates	% Change	Projected Revenues	
Base Charge (per bill)							
Monthly							
5/8		\$ 18.75	\$ 7.7284	\$ 7.73	-59%	\$10,204	
3/4		\$ 18.75	7.8166	7.82	-58%	6,006	
1		\$ 18.75	8.5454	8.55	-54%	16,929	
1.5		\$ 18.75	10.3928	10.40	-45%	22,214	
2		\$ 18.75	12.1837	12.19	-35%	31,450	
3		\$ 18.75	21.9816	21.99	17%	13,194	
4		\$ 18.75	24.6294	24.63	31%	3,547	
5		\$ 18.75	28.1598	28.16	50%	338	
6		\$ 18.75	30.8077	30.81	64%	7,394	
8		\$ 18.75	37.8685	37.87	102%	454	
10		\$ 18.75	50.6662	50.67	170%	608	
Quarterly							
5/8		\$ 18.75	\$ 10.5725	\$ 10.58	-44%	450,920	
3/4		\$ 18.75	10.8373	10.84	-42%	104,671	
1		\$ 18.75	13.0235	13.03	-31%	20,379	
1.5		\$ 18.75	18.5658	18.57	-1%	13,816	
2		\$ 18.75	23.9385	23.94	28%	5,650	
3		\$ 18.75	53.3324	53.34	184%	3,627	
4		\$ 18.75	61.2758	61.28	227%	735	
5		\$ 18.75	71.8670	71.87	283%	0	
6		\$ 18.75	79.8104	79.82	326%	1,277	
8		\$ 18.75	100.9929	101.00	439%	0	
10		\$ 18.75	139.3860	139.39	643%	0	
						\$ 713,414	
Volume Charge (per 1,000 gallons)							
Retail							
Residential		\$ 6.43	\$ 8.3458	\$ 8.35	30%	5,261,602	
Commercial		\$ 6.43	\$ 8.6420	\$ 8.65	35%	4,321,947	
						\$ 9,583,549	
Wholesale							
Navy		\$ 3.9540	\$ 5.7809	\$ 5.7810	46%	1,034,631	
Portsmouth Water & Fire District		\$ 3.152	\$ 4.3634	\$ 4.3635	38%	1,869,843	
						\$ 2,904,474	
Fire Protection							
Public (per hydrant)							
		\$ 1,065.00	\$ 620.01	\$ 620.02	-42%	\$ 642,341	
Private (by Connection Size) (2)							
	Connection Size	Existing Charge Differential					
	<2		\$21.00	\$ 18.15	\$ 18.16	-14%	
	2	6.19	\$88.00	\$ 76.07	\$ 76.07	-14%	304
	4	38.32	\$541.00	\$ 263.27	\$ 263.28	-51%	16,060
	6	111.31	\$1,083.00	\$ 616.36	\$ 616.37	-43%	151,011
	8	237.21	\$2,478.00	\$ 1,225.37	\$ 1,225.38	-51%	75,974
	10	426.58	\$4,091.00	\$ 2,141.45	\$ 2,141.46	-48%	-
	12	689.04	\$6,568.00	\$ 3,411.10	\$ 3,411.10	-48%	6,822
						\$ 250,171	
Total Projected Rate Revenues						\$ 14,093,948	

(1) From HJS Schedule B-2, 'Allocation of Costs to Water Rate Classes'.

(2) From HJS Schedule D-2, 'Fire Protection Accounts'.

Customer Class	All Meter	Proposed			Proposed			Proposed			Proposed			Proposed			Proposed			
		5/8 Inch Meter			3/4 Inch Meter			1 Inch Meter			1.5 Inch Meter			2 Inch Meter			3 Inch Meter			
		Bill at Current Rates	Bill at Proposed Rates	Dollar Change	Percent Change	Bill at Proposed Rates	Dollar Change	Percent Change	Bill at Proposed Rates	Dollar Change	Percent Change	Bill at Proposed Rates	Dollar Change	Percent Change	Bill at Proposed Rates	Dollar Change	Percent Change	Bill at Proposed Rates	Dollar Change	Percent Change
Residential (Monthly)	Monthly Consumption (gallons)																			
	1,000	\$25.18	\$16.08	-\$9.10	-36.1%	\$16.17	-\$9.01	-35.8%	\$16.90	-\$8.28	-32.9%	\$18.75	-\$6.43	-25.5%	\$20.54	-\$4.64	-18.4%	\$30.34	\$5.16	20.5%
	2,000	\$31.61	\$24.43	-\$7.18	-22.7%	\$24.52	-\$7.09	-22.4%	\$25.25	-\$6.36	-20.1%	\$27.10	-\$4.51	-14.3%	\$28.89	-\$2.72	-8.6%	\$38.69	\$7.08	22.4%
	4,000	\$44.47	\$41.13	-\$3.34	-7.5%	\$41.22	-\$3.25	-7.3%	\$41.95	-\$2.52	-5.7%	\$43.80	-\$0.67	-1.5%	\$45.59	\$1.12	2.5%	\$55.39	\$10.92	24.6%
	5,000	\$50.90	\$49.48	-\$1.42	-2.8%	\$49.57	-\$1.33	-2.6%	\$50.30	-\$0.60	-1.2%	\$52.15	\$1.25	2.5%	\$53.94	\$3.04	6.0%	\$63.74	\$12.84	25.2%
	7,500	\$66.98	\$70.36	\$3.38	5.0%	\$70.45	\$3.47	5.2%	\$71.18	\$4.20	6.3%	\$73.03	\$6.05	9.0%	\$74.82	\$7.84	11.7%	\$84.62	\$17.64	26.3%
	10,000	\$83.05	\$91.23	\$8.18	9.8%	\$91.32	\$8.27	10.0%	\$92.05	\$9.00	10.8%	\$93.90	\$10.85	13.1%	\$95.69	\$12.64	15.2%	\$105.49	\$22.44	27.0%
	15,000	\$115.20	\$132.98	\$17.78	15.4%	\$133.07	\$17.87	15.5%	\$133.80	\$18.60	16.1%	\$135.65	\$20.45	17.8%	\$137.44	\$22.24	19.3%	\$147.24	\$32.04	27.8%
	20,000	\$147.35	\$174.73	\$27.38	18.6%	\$174.82	\$27.47	18.6%	\$175.55	\$28.20	19.1%	\$177.40	\$30.05	20.4%	\$179.19	\$31.84	21.6%	\$188.99	\$41.64	28.3%
	25,000	\$179.50	\$216.48	\$36.98	20.6%	\$216.57	\$37.07	20.7%	\$217.30	\$37.80	21.1%	\$219.15	\$39.65	22.1%	\$220.94	\$41.44	23.1%	\$230.74	\$51.24	28.5%
	30,000	\$211.65	\$258.23	\$46.58	22.0%	\$258.32	\$46.67	22.1%	\$259.05	\$47.40	22.4%	\$260.90	\$49.25	23.3%	\$262.69	\$51.04	24.1%	\$272.49	\$60.84	28.7%
Residential(Quarterly)																				
	1,000	\$25.18	\$18.93	-\$6.25	-24.8%	\$19.19	-\$5.99	-23.8%	\$21.38	-\$3.80	-15.1%	\$26.92	\$1.74	6.9%	\$32.29	\$7.11	28.2%	\$61.69	\$36.51	145.0%
	2,000	\$31.61	\$27.28	-\$4.33	-13.7%	\$27.54	-\$4.07	-12.9%	\$29.73	-\$1.88	-5.9%	\$35.27	\$3.66	11.6%	\$40.64	\$9.03	28.6%	\$70.04	\$38.43	121.6%
	3,000	\$38.04	\$35.63	-\$2.41	-6.3%	\$35.89	-\$2.15	-5.7%	\$38.08	\$0.04	0.1%	\$43.62	\$5.58	14.7%	\$48.99	\$10.95	28.8%	\$78.39	\$40.35	106.1%
	4,000	\$44.47	\$43.98	-\$0.49	-1.1%	\$44.24	-\$0.23	-0.5%	\$46.43	\$1.96	4.4%	\$51.97	\$7.50	16.9%	\$57.34	\$12.87	28.9%	\$86.74	\$42.27	95.1%
	5,000	\$50.90	\$52.33	\$1.43	2.8%	\$52.59	\$1.69	3.3%	\$54.78	\$3.88	7.6%	\$60.32	\$9.42	18.5%	\$65.69	\$14.79	29.1%	\$95.09	\$44.19	86.8%
	15,000	\$115.20	\$135.83	\$20.63	17.9%	\$136.09	\$20.89	18.1%	\$138.28	\$23.08	20.0%	\$143.82	\$28.62	24.8%	\$149.19	\$33.99	29.5%	\$178.59	\$63.39	55.0%
	60,000	\$404.55	\$511.58	\$107.03	26.5%	\$511.84	\$107.29	26.5%	\$514.03	\$109.48	27.1%	\$519.57	\$115.02	28.4%	\$524.94	\$120.39	29.8%	\$554.34	\$149.79	37.0%
	80,000	\$533.15	\$678.58	\$145.43	27.3%	\$678.84	\$145.69	27.3%	\$681.03	\$147.88	27.7%	\$686.57	\$153.42	28.8%	\$691.94	\$158.79	29.8%	\$721.34	\$188.19	35.3%
	100,000	\$661.75	\$845.58	\$183.83	27.8%	\$845.84	\$184.09	27.8%	\$848.03	\$186.28	28.1%	\$853.57	\$191.82	29.0%	\$858.94	\$197.19	29.8%	\$888.34	\$226.59	34.2%
	120,000	\$790.35	\$1,012.58	\$222.23	28.1%	\$1,012.84	\$222.49	28.2%	\$1,015.03	\$224.68	28.4%	\$1,020.57	\$230.22	29.1%	\$1,025.94	\$235.59	29.8%	\$1,055.34	\$264.99	33.5%
Commercial (Monthly)																				
	2,000	\$31.61	\$25.03	-\$6.58	-20.8%	\$25.12	-\$6.49	-20.5%	\$25.85	-\$5.76	-18.2%	\$27.70	-\$3.91	-12.4%	\$29.49	-\$2.12	-6.7%	\$39.29	\$7.68	24.3%
	5,000	\$50.90	\$50.98	\$0.08	0.2%	\$51.07	\$0.17	0.3%	\$51.80	\$0.90	1.8%	\$53.65	\$2.75	5.4%	\$55.44	\$4.54	8.9%	\$65.24	\$14.34	28.2%
	10,000	\$83.05	\$94.23	\$11.18	13.5%	\$94.32	\$11.27	13.6%	\$95.05	\$12.00	14.4%	\$96.90	\$13.85	16.7%	\$98.69	\$15.64	18.8%	\$108.49	\$25.44	30.6%
	25,000	\$179.50	\$223.98	\$44.48	24.8%	\$224.07	\$44.57	24.8%	\$224.80	\$45.30	25.2%	\$226.65	\$47.15	26.3%	\$228.44	\$48.94	27.3%	\$238.24	\$58.74	32.7%
	30,000	\$211.65	\$267.23	\$55.58	26.3%	\$267.32	\$55.67	26.3%	\$268.05	\$56.40	26.6%	\$269.90	\$58.25	27.5%	\$271.69	\$60.04	28.4%	\$281.49	\$69.84	33.0%
	40,000	\$275.95	\$353.73	\$77.78	28.2%	\$353.82	\$77.87	28.2%	\$354.55	\$78.60	28.5%	\$356.40	\$80.45	29.2%	\$358.19	\$82.24	29.8%	\$367.99	\$92.04	33.4%
	50,000	\$340.25	\$440.23	\$99.98	29.4%	\$440.32	\$100.07	29.4%	\$441.05	\$100.80	29.6%	\$442.90	\$102.65	30.2%	\$444.69	\$104.44	30.7%	\$454.49	\$114.24	33.6%
	75,000	\$501.00	\$656.48	\$155.48	31.0%	\$656.57	\$155.57	31.1%	\$657.30	\$156.30	31.2%	\$659.15	\$158.15	31.6%	\$660.94	\$159.94	31.9%	\$670.74	\$169.74	33.9%
	100,000	\$661.75	\$872.73	\$210.98	31.9%	\$872.82	\$211.07	31.9%	\$873.55	\$211.80	32.0%	\$875.40	\$213.65	32.3%	\$877.19	\$215.44	32.6%	\$886.99	\$225.24	34.0%
Commercial with 6" Fire Connection(Monthly Account)																				
Base Charge and Commodity Charges	120,000	\$996.60	\$1,130.76	\$134.16	13.5%	\$1,131.84	\$135.24	13.6%	\$1,140.60	\$144.00	14.4%	\$1,162.80	\$166.20	16.7%	\$1,184.28	\$187.68	18.8%	\$1,301.88	\$305.28	30.6%
Fire Protection Charge		\$1,083.00	\$616.37	-\$466.63	-43.1%	\$616.37	-\$466.63	-43.1%	\$616.37	-\$466.63	-43.1%	\$616.37	-\$466.63	-43.1%	\$616.37	-\$466.63	-43.1%	\$616.37	-\$466.63	-43.1%
Total Annual Charges		\$2,079.60	\$1,747.13	-\$332.47	-16.0%	\$1,748.21	-\$331.39	-15.9%	\$1,756.97	-\$322.63	-15.5%	\$1,779.17	-\$300.43	-14.4%	\$1,800.65	-\$278.95	-13.4%	\$1,918.25	-\$161.35	-7.8%

Newport Water
 Cost Of Service Analysis
 HJS Schedule A-3
 Bill Impacts - Cost of Service Rates
 Page 2 of 2

Customer Class	Monthly Consumption (gallons)	Bill at Current Rates	Proposed		
			Bill at Proposed Rates	Dollar Change	Percent Change
Portsmouth (Monthly)					
	10,000,000	\$31,539	\$43,660	\$12,121	38.4%
	20,000,000	\$63,059	\$87,295	\$24,236	38.4%
Avg. Monthly Bill	38,000,000	\$119,795	\$165,838	\$46,043	38.4%
	40,000,000	\$126,099	\$174,565	\$48,466	38.4%
	75,000,000	\$236,419	\$327,287	\$90,868	38.4%
	100,000,000	\$315,219	\$436,375	\$121,156	38.4%
	150,000,000	\$472,819	\$654,550	\$181,731	38.4%
Navy (Monthly)					
	10,000,000	\$39,559	\$58,115	\$18,556	46.9%
	20,000,000	\$79,099	\$115,925	\$36,826	46.6%
Avg. Monthly Bill (All Meters)	38,000,000	\$150,252	\$219,983	\$69,731	46.4%
	50,000,000	\$197,719	\$289,355	\$91,636	46.3%
	75,000,000	\$296,569	\$433,880	\$137,311	46.3%
	100,000,000	\$395,419	\$578,405	\$182,986	46.3%

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule A-4
 Revenue Proof

	Rate Year Revenue	
	Existing Rates	Proposed Rates
REVENUES		
Water Rates		
Base Charge (Billing Charge)	\$ 1,213,500	\$ 713,414
Volume Charge		
Residential	4,051,749	5,261,602
Commercial	3,212,730	4,321,947
Navy	707,651	1,034,631
Portsmouth Water & Fire District	1,350,692	1,869,843
Fire Protection		
Public	1,103,340	642,341
Private	465,460	250,171
Total Rate Revenues	\$ 12,105,122	\$ 14,093,948
Other Operating Revenues		
Sundry charges	\$ 104,000	104,000
WPC cost share on customer service	\$ 296,856	296,856
Middletown cost share on customer service	\$ 143,506	143,506
Rental of Property	\$ 108,167	108,167
Total Other Operating Revenues	\$ 652,529	652,529
Total Operating Revenues	\$ 12,757,651	\$ 14,746,477
Add: Non-Operating Revenues		
Water Penalty	47,500	47,500
Miscellaneous	8,600	8,600
Investment Interest Income	3,900	3,900
Water Quality Protection Fees	22,500	22,500
Total Non Operating Revenues	\$ 82,500	\$ 82,500
Total Revenues	\$ 12,840,151	\$ 14,828,977
COSTS		
Departmental O&M	\$ (8,491,098)	(8,491,098)
Capital Costs		
Contribution to Capital Spending Acct.	(2,500,000)	(2,500,000)
Contribution to Debt Service Acct.	(3,576,079)	(3,576,079)
Total Capital Costs	\$ (6,076,079)	(6,076,079)
Operating Revenue Allowance	(254,733)	(254,733)
Total Costs	\$ (14,821,910)	\$ (14,821,910)
Revenue Surplus (Deficit)	\$ (1,981,759)	\$ 7,067

Operation & Maintenance Costs

Administration

Salaries, Wages, & Benefits

Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated		
	Salaries & Wages	\$ 273,889	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
	AFSCME retro	\$ -	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
	NEA retro	\$ -	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
	AFSCME benefits on retro pay	\$ -	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
	NEA benefits on retro pay	\$ -	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
	Standby Salaries	\$ 12,500	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
	Accrued Benefits Buyout	\$ 175,000	Non-Administrative Wages & Salaries	61%	24%	2%	6%	5%	2%	0%	100%
	Employee Benefits	\$ 128,202	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
	Retiree Insurance Coverage	\$ 514,000	Non-Administrative Wages & Salaries	61%	24%	2%	6%	5%	2%	0%	100%
	Workers Compensation	\$ 85,000	Non-Administrative Wages & Salaries	61%	24%	2%	6%	5%	2%	0%	100%
	Annual Leave Buyback	\$ 2,400	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
	Subtotal	1,190,991									

	Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
All Other Administrative Costs										
Advertisement	9,000	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Membership Dues & Subscriptions	2,500	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Conferences & Training	4,000	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Tuition Reimbursement	2,000	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Consultant Fees	233,033	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Postage	1,000	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Fire & Liability Insurance	76,468	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Telephone & Communication	5,500	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Water	1,942	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Electricity	5,805	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Natural Gas	7,252	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Property Taxes	226,774	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Legal & Administrative	-									
Audit Fees	4,349	Total Non-Admin Costs Before Offsets	71%	16%	3%	3%	5%	1%	1%	100%
OPEB Contribution	-	Total Non-Admin Costs Before Offsets	71%	16%	3%	3%	5%	1%	1%	100%
City Counsel	4,649	Total Non-Admin Costs Before Offsets	71%	16%	3%	3%	5%	1%	1%	100%
Citizens Survey	-	Total Non-Admin Costs Before Offsets	71%	16%	3%	3%	5%	1%	1%	100%
City Clerk	3,381	Total Non-Admin Costs Before Offsets	71%	16%	3%	3%	5%	1%	1%	100%
City Manager	54,131	Total Non-Admin Costs Before Offsets	71%	16%	3%	3%	5%	1%	1%	100%
Human Resources	30,121	Non-Administrative Wages & Salaries	61%	24%	2%	6%	5%	2%	0%	100%
City Solicitor	20,459	Total Non-Admin Costs Before Offsets	71%	16%	3%	3%	5%	1%	1%	100%
Finance Adimistrative 80%	19,822	Total Non-Admin Costs Before Offsets	71%	16%	3%	3%	5%	1%	1%	100%
Finance Adimistrative 5%	7,020	Total Non-Admin Costs Before Offsets	71%	16%	3%	3%	5%	1%	1%	100%
Purchasing	18,314	Total Non-Admin Costs Before Offsets	71%	16%	3%	3%	5%	1%	1%	100%
Assessment	5,973	Capital Costs	70%	17%	5%	1%	6%	1%	1%	100%
Collections	46,979	100% Billing	0%	0%	0%	0%	100%	0%	0%	100%
Accounting 5%	10,679	Total Non-Admin Costs Before Offsets	71%	16%	3%	3%	5%	1%	1%	100%
Accounting	70,516	Non-Administrative Wages & Salaries	61%	24%	2%	6%	5%	2%	0%	100%
Public Safety	-	Total Non-Admin Costs Before Offsets	71%	16%	3%	3%	5%	1%	1%	100%
Facilities Maintenance	13,266	Total Non-Admin Costs Before Offsets	71%	16%	3%	3%	5%	1%	1%	100%
Data Processing	143,888	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Mileage Allowance	2,000	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Gasoline & Vehicle Allowance	7,508	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Repairs & Maintenance	1,200	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Regulatory Expense	10,000	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Regulatory Assessment	48,096	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Office Supplies	20,000	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Self Insurance	10,000	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Unemployment Claims	12,000	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
Subtotal	1,139,623									

	Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
Customer Service										
Salaries & Wages	281,735	Customer Service Salaries and Wages	0%	0%	0%	46%	41%	13%	0%	100%
Benefits	168,793	Customer Service Salaries and Wages	0%	0%	0%	46%	41%	13%	0%	100%
Copying & binding	500	100% billing (based on budget analysis)					100%			100%
Conferences & Training	5,000	100% billing (based on budget analysis)					100%			100%
Support Services	26,002	100% billing (software support & printing/mailing)					100%			100%
Postage	31,706	100% billing (based on budget analysis)					100%			100%
Gasoline & Vehicle Allowance	33,421	Customer Service Salaries and Wages	0%	0%	0%	46%	41%	13%	0%	100%
Repairs & Maintenance	40,000	100% metering (meter repairs)				100%				100%
Meter Maintenance	10,000	100% metering (based on budget analysis)				100%				100%
Operating Supplies	5,000	100% metering (based on budget analysis)				100%				100%
Uniforms & protective Gear	1,000	100% metering (based on budget analysis)				100%				100%
Customer Service Supplies	10,343	100% billing (based on budget analysis)					100%			100%
Subtotal	613,500									
Source of Supply - Island										
Salaries & Wages	\$ 258,897	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Overtime	\$ 28,903	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Temp Salaries	\$ 10,000	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Injury Pay	\$ -	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Employee Benefits	\$ 134,334	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Annual Leave Buyback	\$ 6,300	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Electricity	\$ 42,108	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Gas/Vehicle Maintenance	\$ 58,648	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Repairs & Maintenance	\$ 7,425	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Reservoir Maintenance	\$ 16,000	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Operating Supplies	\$ 7,750	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Uniforms & protective Gear	\$ 700	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Chemicals	\$ 72,735	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Subtotal	\$ 643,800									
Source of Supply - Mainland										
Overtime	\$ 4,617	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Temp Salaries	\$ 13,000	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Permanent Part time	\$ 15,264	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Employee Benefits	\$ 2,525	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Electricity	\$ 120,189	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Repairs & Maintenance	\$ 7,200	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Reservoir Maintenance	\$ 4,500	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Operating Supplies	\$ 630	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Subtotal	\$ 167,925									

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule B-1
 Base Extra Capacity Cost Allocations

Docket No. XXXX

	Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
Station One (Excludes pumping and chemicals)										
Salaries & Wages	\$ 446,983	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Overtime	\$ 60,021	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Holiday Pay	\$ 17,045	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Employee Benefits	\$ 278,523	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Annual Leave Buyback	\$ 5,000	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Conferences & Training	\$ 4,500	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Fire & Liability Insurance	\$ 12,687	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Electricity	\$ 252,674	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Natural Gas	\$ 24,250	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Rental of Equipment	\$ 600	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Sewer Charge	\$ 293,020	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Gas/Vehicle Maintenance	\$ 7,583	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Repairs & Maintenance	\$ 25,000	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Operating Supplies	\$ 25,210	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Uniforms & protective Gear	\$ 1,062	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Station One Pumping	\$ 22,428	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Station One Chemicals	\$ 354,210	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Subtotal	\$ 1,830,796									
Lawton Valley (Excludes pumping and chemicals)										
Salaries & Wages	\$459,704	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Overtime	\$37,657	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Holiday Pay	\$16,760	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Employee Benefits	\$287,143	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Annual Leave Buyback	\$3,966	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Conferences & Training	\$3,000	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Fire & Liability Insurance	\$18,614	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Electricity	\$132,551	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Natural Gas	\$29,909	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Rental of Equipment	\$500	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Sewer Charge	\$360,640	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Gas/Vehicle Maintenance	\$7,882	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Repairs & Maintenance	\$34,048	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Operating Supplies	\$18,475	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Uniforms & protective Gear	\$1,542	Maximum Day Demand Patterns	62%	38%	0%	0%	0%	0%	0%	100%
Lawton Valley Pumping	\$31,646	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Lawton Valley Chemicals	\$169,977	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Subtotal	1,614,015									

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule B-1
 Base Extra Capacity Cost Allocations

Docket No. XXXX

	Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
Laboratory										
Salaries & Wages	\$ 104,358	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Employee Benefits	\$ 64,208	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Annual Leave Buyback	\$ 2,750	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Repairs & Maintenance	\$ 1,700	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Regulatory Assessment	\$ 32,000	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Laboratory Supplies	\$ 18,684	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Subtotal	\$ 223,700									
Transmission and Distribution										
Salaries & Wages	\$ 418,161	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Overtime	\$ 52,364	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Temp Salaries	\$ 10,000	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Injury Pay	\$ -	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Employee Benefits	\$ 251,514	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Annual Leave Buyback	\$ 10,943	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Conferences & Training	\$ 4,000	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Contract Services	\$ 12,430	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Fire & Liability Insurance	\$ 18,748	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Electricity	\$ 18,762	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Heavy Equipment Rental	\$ 8,260	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Gas/Vehicle Maintenance	\$ 110,305	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Repairs & Maintenance	\$ 26,000	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Main Maintenance	\$ 35,000	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Hydrant Maintenance	\$ 35,000	100% Fire	0%	0%	0%	0%	0%	0%	100%	100%
Service Maintenance	\$ 30,000	100% Services	0%	0%	0%	0%	0%	100%	0%	100%
Operating Supplies	\$ 10,000	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Uniforms & protective Gear	\$ 1,761	Maximum Hour Demand Patterns	56%	34%	10%	0%	0%	0%	0%	100%
Subtotal	\$ 1,053,248									
Fire Protection	13,500	100% Fire	0%	0%	0%	0%	0%	0%	100%	100%
Total O&M Costs	8,491,098									

		Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
CAPITAL COSTS		Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
	Water Supply	1,395,751	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
	Treatment Station 1	1,609,150									
	Treatment Lawton Valley	508,569									
	Treatment Both Plants	654,700									
	T&D Pumping	64,843									
	T&D	1,565,588									
	Fire	25,119									
	Meters	22,481									
	Services	22,481									
	Billing	207,398									
	Total Capital Costs excluding Treatment	3,303,660									
	Revenue Allowance	254,733	100% base	100%							100%
	Total Costs before Offsets	12,049,491									
OFFSETS											
Nonrate Revenues											
	Sundry charges	104,000	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
	WPC cost share on customer service	296,856	50/50 Split between Metering and Billing	0%	0%	0%	50%	50%	0%	0%	100%
	Middletown cost share on customer service	143,506	50/50 Split between Metering and Billing	0%	0%	0%	50%	50%	0%	0%	100%
	Rental of Property	108,167	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
	Water Penalty	47,500	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
	Miscellaneous	8,600	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
	Investment Interest Income	3,900	Non Admin less electricity & chemicals	66%	19%	2%	5%	5%	2%	1%	100%
	Water Quality Protection Fees	22,500	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
	Total Nonrate Revenues	735,029									
	Net Costs To Recover Through Rates	\$ 11,314,462									

Operation & Maintenance Costs

Administration

Salaries, Wages, & Benefits

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Salaries & Wages	180,414	53,033	5,352	14,025	13,881	4,725	2,459	273,889
AFSCME retro	-	-	-	-	-	-	-	-
NEA retro	-	-	-	-	-	-	-	-
AFSCME benefits on retro pay	-	-	-	-	-	-	-	-
NEA benefits on retro pay	-	-	-	-	-	-	-	-
Standby Salaries	8,234	2,420	244	640	634	216	112	12,500
Accrued Benefits Buyout	106,749	42,544	3,807	9,839	9,014	2,869	178	175,000
Employee Benefits	84,448	24,824	2,505	6,565	6,498	2,211	1,151	128,202
Retiree Insurance Coverage	313,536	124,957	11,183	28,900	26,474	8,427	523	514,000
Workers Compensation	51,849	20,664	1,849	4,779	4,378	1,394	87	85,000
Annual Leave Buyback	1,581	465	47	123	122	41	22	2,400
Subtotal	746,810	268,906	24,988	64,871	61,000	19,883	4,532	1,190,991

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule B-1
 Base Extra Capacity Cost Allocations

Docket No. XXXX

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
All Other Administrative Costs								
Advertisement	5,928	1,743	176	461	456	155	81	9,000
Membership Dues & Subscriptions	1,647	484	49	128	127	43	22	2,500
Conferences & Training	2,635	775	78	205	203	69	36	4,000
Tuition Reimbursement	1,317	387	39	102	101	34	18	2,000
Consultant Fees	153,502	45,122	4,554	11,933	11,811	4,020	2,092	233,033
Postage	659	194	20	51	51	17	9	1,000
Fire & Liability Insurance	50,370	14,806	1,494	3,916	3,876	1,319	687	76,468
Telephone & Communication	3,623	1,065	107	282	279	95	49	5,500
Water	1,279	376	38	99	98	33	17	1,942
Electricity	3,824	1,124	113	297	294	100	52	5,805
Natural Gas	4,777	1,404	142	371	368	125	65	7,252
Property Taxes	149,379	43,910	4,432	11,612	11,493	3,912	2,036	226,774
Legal & Administrative								
Audit Fees	3,078	716	121	134	215	52	33	4,349
OPEB Contribution	-	-	-	-	-	-	-	-
City Counsel	3,290	765	129	143	230	55	35	4,649
Citizens Survey	-	-	-	-	-	-	-	-
City Clerk	2,393	557	94	104	167	40	26	3,381
City Manager	38,311	8,913	1,507	1,666	2,680	644	410	54,131
Human Resources	18,373	7,323	655	1,694	1,551	494	31	30,121
City Solicitor	14,480	3,369	570	630	1,013	243	155	20,459
Finance Adimistrative 80%	14,029	3,264	552	610	981	236	150	19,822
Finance Adimistrative 5%	4,968	1,156	195	216	348	84	53	7,020
Purchasing	12,962	3,015	510	564	907	218	139	18,314
Assessment	4,171	1,002	299	41	375	41	45	5,973
Collections	-	-	-	-	46,979	-	-	46,979
Accounting 5%	7,558	1,758	297	329	529	127	81	10,679
Accounting	43,014	17,143	1,534	3,965	3,632	1,156	72	70,516
Public Safety	-	-	-	-	-	-	-	-
Facilities Maintenance	9,389	2,184	369	408	657	158	100	13,266
Data Processing	94,781	27,861	2,812	7,368	7,293	2,482	1,292	143,888
Mileage Allowance	1,317	387	39	102	101	34	18	2,000
Gasoline & Vehicle Allowance	4,946	1,454	147	384	381	130	67	7,508
Repairs & Maintenance	790	232	23	61	61	21	11	1,200
Regulatory Expense	6,587	1,936	195	512	507	172	90	10,000
Regulatory Assessment	31,681	9,313	940	2,463	2,438	830	432	48,096
Office Supplies	13,174	3,873	391	1,024	1,014	345	180	20,000
Self Insurance	6,587	1,936	195	512	507	172	90	10,000
Unemployment Claims	7,905	2,324	234	614	608	207	108	12,000
Subtotal	722,724	211,869	23,053	53,001	102,328	17,865	8,783	1,139,623

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule B-1
 Base Extra Capacity Cost Allocations

Docket No. XXXX

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Customer Service								
Salaries & Wages	-	-	-	128,413	116,547	36,776	-	281,735
Benefits	-	-	-	76,935	69,825	22,033	-	168,793
Copying & binding	-	-	-	-	500	-	-	500
Conferences & Training	-	-	-	-	5,000	-	-	5,000
Support Services	-	-	-	-	26,002	-	-	26,002
Postage	-	-	-	-	31,706	-	-	31,706
Gasoline & Vehicle Allowance	-	-	-	15,233	13,825	4,363	-	33,421
Repairs & Maintenance	-	-	-	40,000	-	-	-	40,000
Meter Maintenance	-	-	-	10,000	-	-	-	10,000
Operating Supplies	-	-	-	5,000	-	-	-	5,000
Uniforms & protective Gear	-	-	-	1,000	-	-	-	1,000
Customer Service Supplies	-	-	-	-	10,343	-	-	10,343
Subtotal								
Source of Supply - Island								
Salaries & Wages	258,897	-	-	-	-	-	-	258,897
Overtime	28,903	-	-	-	-	-	-	28,903
Temp Salaries	10,000	-	-	-	-	-	-	10,000
Injury Pay	-	-	-	-	-	-	-	-
Employee Benefits	134,334	-	-	-	-	-	-	134,334
Annual Leave Buyback	6,300	-	-	-	-	-	-	6,300
Electricity	42,108	-	-	-	-	-	-	42,108
Gas/Vehicle Maintenance	58,648	-	-	-	-	-	-	58,648
Repairs & Maintenance	7,425	-	-	-	-	-	-	7,425
Reservoir Maintenance	16,000	-	-	-	-	-	-	16,000
Operating Supplies	7,750	-	-	-	-	-	-	7,750
Uniforms & protective Gear	700	-	-	-	-	-	-	700
Chemicals	72,735	-	-	-	-	-	-	72,735
Subtotal								
Source of Supply - Mainland								
Overtime	4,617	-	-	-	-	-	-	4,617
Temp Salaries	13,000	-	-	-	-	-	-	13,000
Permanent Part time	15,264	-	-	-	-	-	-	15,264
Employee Benefits	2,525	-	-	-	-	-	-	2,525
Electricity	120,189	-	-	-	-	-	-	120,189
Repairs & Maintenance	7,200	-	-	-	-	-	-	7,200
Reservoir Maintenance	4,500	-	-	-	-	-	-	4,500
Operating Supplies	630	-	-	-	-	-	-	630
Subtotal								

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule B-1
 Base Extra Capacity Cost Allocations

Docket No. XXXX

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Station One (Excludes pumping and chemicals)								
Salaries & Wages	277,881	169,102	-	-	-	-	-	446,983
Overtime	37,314	22,707	-	-	-	-	-	60,021
Holiday Pay	10,597	6,448	-	-	-	-	-	17,045
Employee Benefits	173,153	105,371	-	-	-	-	-	278,523
Annual Leave Buyback	3,108	1,892	-	-	-	-	-	5,000
Conferences & Training	2,798	1,702	-	-	-	-	-	4,500
Fire & Liability Insurance	7,887	4,800	-	-	-	-	-	12,687
Electricity	252,674	-	-	-	-	-	-	252,674
Natural Gas	15,076	9,174	-	-	-	-	-	24,250
Rental of Equipment	373	227	-	-	-	-	-	600
Sewer Charge	293,020	-	-	-	-	-	-	293,020
Gas/Vehicle Maintenance	4,714	2,869	-	-	-	-	-	7,583
Repairs & Maintenance	15,542	9,458	-	-	-	-	-	25,000
Operating Supplies	15,673	9,537	-	-	-	-	-	25,210
Uniforms & protective Gear	660	402	-	-	-	-	-	1,062
Station One Pumping	12,531	7,626	2,271	-	-	-	-	22,428
Station One Chemicals	354,210	-	-	-	-	-	-	354,210
Subtotal								
Lawton Valley (Excludes pumping and chemicals)								
Salaries & Wages	285,789	173,915	-	-	-	-	-	459,704
Overtime	23,411	14,246	-	-	-	-	-	37,657
Holiday Pay	10,419	6,341	-	-	-	-	-	16,760
Employee Benefits	178,511	108,632	-	-	-	-	-	287,143
Annual Leave Buyback	2,466	1,500	-	-	-	-	-	3,966
Conferences & Training	1,865	1,135	-	-	-	-	-	3,000
Fire & Liability Insurance	11,572	7,042	-	-	-	-	-	18,614
Electricity	132,551	-	-	-	-	-	-	132,551
Natural Gas	18,594	11,315	-	-	-	-	-	29,909
Rental of Equipment	311	189	-	-	-	-	-	500
Sewer Charge	360,640	-	-	-	-	-	-	360,640
Gas/Vehicle Maintenance	4,900	2,982	-	-	-	-	-	7,882
Repairs & Maintenance	21,167	12,881	-	-	-	-	-	34,048
Operating Supplies	11,486	6,989	-	-	-	-	-	18,475
Uniforms & protective Gear	959	583	-	-	-	-	-	1,542
Lawton Valley Pumping	17,682	10,760	3,205	-	-	-	-	31,646
Lawton Valley Chemicals	169,977	-	-	-	-	-	-	169,977
Subtotal								

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule B-1
 Base Extra Capacity Cost Allocations

Docket No. XXXX

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated		
Laboratory										
Salaries & Wages	104,358	-	-	-	-	-	-	104,358		
Employee Benefits	64,208	-	-	-	-	-	-	64,208		
Annual Leave Buyback	2,750	-	-	-	-	-	-	2,750		
Repairs & Maintenance	1,700	-	-	-	-	-	-	1,700		
Regulatory Assessment	32,000	-	-	-	-	-	-	32,000		
Laboratory Supplies	18,684	-	-	-	-	-	-	18,684		
Subtotal										
Transmission and Distribution										
Salaries & Wages	233,638	142,179	42,345	-	-	-	-	418,161		
Overtime	29,257	17,804	5,303	-	-	-	-	52,364		
Temp Salaries	5,587	3,400	1,013	-	-	-	-	10,000		
Injury Pay	-	-	-	-	-	-	-	-		
Employee Benefits	140,528	85,517	25,469	-	-	-	-	251,514		
Annual Leave Buyback	6,114	3,721	1,108	-	-	-	-	10,943		
Conferences & Training	2,235	1,360	405	-	-	-	-	4,000		
Contract Services	6,945	4,226	1,259	-	-	-	-	12,430		
Fire & Liability Insurance	10,475	6,374	1,898	-	-	-	-	18,748		
Electricity	10,483	6,379	1,900	-	-	-	-	18,762		
Heavy Equipment Rental	4,615	2,808	836	-	-	-	-	8,260		
Gas/Vehicle Maintenance	61,630	37,505	11,170	-	-	-	-	110,305		
Repairs & Maintenance	14,527	8,840	2,633	-	-	-	-	26,000		
Main Maintenance	19,555	11,900	3,544	-	-	-	-	35,000		
Hydrant Maintenance	-	-	-	-	-	-	35,000	35,000		
Service Maintenance	-	-	-	-	-	30,000	-	30,000		
Operating Supplies	5,587	3,400	1,013	-	-	-	-	10,000		
Uniforms & protective Gear	984	599	178	-	-	-	-	1,761		
Subtotal										
Fire Protection	-	-	-	-	-	-	13,500	13,500		
Total O&M Costs		Non-Administrative O&M	4,317,095	1,045,839	105,550	276,580	273,749	93,171	48,500	6,160,484

		Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
CAPITAL COSTS		Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Water Supply		1,395,751	-	-	-	-	-	-	1,395,751
Treatment Station 1									
Treatment Lawton Valley									
Treatment Both Plants									
Allocated Based on Reserved Capacity									
T&D Pumping		36,230	22,047	6,566	-	-	-	-	64,843
T&D		874,736	532,314	158,538	-	-	-	-	1,565,588
Fire		-	-	-	-	-	-	25,119	25,119
Meters		-	-	-	22,481	-	-	-	22,481
Services		-	-	-	-	-	22,481	-	22,481
Billing		-	-	-	-	207,398	-	-	207,398
Total Capital Costs excluding Treatment		2,306,717	554,361	165,104	22,481	207,398	22,481	25,119	3,303,660
		70%	17%	5%	1%	6%	1%	1%	100%
Revenue Allowance		254,733	-	-	-	-	-	-	254,733
Total Costs before Offsets	Total Non-Admin Costs	6,878,545	1,600,201	270,653	299,061	481,147	115,652	73,619	9,718,877
		71%	16%	3%	3%	5%	1%	1%	100%
OFFSETS									
Nonrate Revenues									
Sundry charges		68,506	20,137	2,032	5,325	5,271	1,794	934	104,000
WPC cost share on customer service		-	-	-	148,428	148,428	-	-	296,856
Middletown cost share on customer service		-	-	-	71,753	71,753	-	-	143,506
Rental of Property		71,251	20,944	2,114	5,539	5,482	1,866	971	108,167
Water Penalty		31,289	9,197	928	2,432	2,407	819	427	47,500
Miscellaneous		5,665	1,665	168	440	436	148	77	8,600
Investment Interest Income		2,569	755	76	200	198	67	35	3,900
Water Quality Protection Fees		22,500	-	-	-	-	-	-	22,500
Total Nonrate Revenues		201,780	52,699	5,319	234,118	233,975	4,695	2,444	735,029
Net Costs To Recover Through Rates		\$ 6,676,765	\$ 1,547,501	\$ 265,335	\$ 64,943	\$ 247,172	\$ 110,957	\$ 71,175	\$ 8,983,848

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Non-Admin O&M Costs	\$ 4,317,095	\$ 1,045,839	\$ 105,550	\$ 276,580	\$ 273,749	\$ 93,171	\$ 48,500	\$ 6,160,484
Less: Chemicals								\$ -
Station One	\$ (354,210)							\$ (354,210)
Lawton Valley	\$ (169,977)							\$ (169,977)
Source Supply	\$ (72,735)							\$ (72,735)
Electricity								\$ -
Source Supply	\$ (162,297)							\$ (162,297)
Station One	\$ -	\$ -	\$ -					\$ -
Lawton Valley	\$ -	\$ -	\$ -					\$ -
Costs Adjusted	\$ 3,557,876	\$ 1,045,839	\$ 105,550	\$ 276,580	\$ 273,749	\$ 93,171	\$ 48,500	\$ 5,401,265
	66%	19%	2%	5%	5%	2%	1%	100%
	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Non-Administrative Labor								
Administration	190,229	55,918	5,643	14,788	14,637	4,982	2,593	288,789
Customer Service	0	0	0	128,413	116,547	36,776	0	281,735
Source of Supply - Island	297,800	0	0	0	0	0	0	297,800
Source of Supply - Mainland	32,881	0	0	0	0	0	0	32,881
Station One	328,899	200,149	0	0	0	0	0	529,049
Lawton Valley	322,085	196,002	0	0	0	0	0	518,087
Laboratory	107,108	0	0	0	0	0	0	107,108
Transmission/Distribution	274,596	167,104	49,768	0	0	0	0	491,468
Total	1,553,598	619,173	55,411	143,200	131,183	41,757	2,593	2,546,917
Percent	61%	24%	2%	6%	5%	2%	0%	100%

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule B-2
 Allocation of Costs to Water Rate Classes

Docket No. XXXX

ALLOCATION PERCENTAGES		Commodity Charges						
		Base Charge	Retail		Navy	Portsmouth	Fire	Total % Allocated
Allocation Basis	Residential		Non-Residential					
Base	<i>Average annual demand</i>		41%	32%	9%	18%	0%	100%
Base Excluding PWFD			50%	40%	10%	0%	0%	100%
Base Excluding PWFD & 50% Navy			53%	42%	6%	0%	0%	100%
Water Quality Protection Fees			56%	44%	0%	0%	0%	100%
Total Base to Class			43%	34%	8%	14%	0%	100%
Max Day	<i>Estimated customer peaking factors</i>		28%	26%	5%	18%	22%	100%
Base Excluding PWFD			34%	32%	6%	0%	27%	100%
Max Day Excluding PWFD & 50% Navy			35%	33%	3%	0%	28%	100%
Total Max Day to Class			32%	30%	4%	8%	25%	100%
Max Hour	<i>Estimated customer peaking factors</i>		17%	22%	3%	9%	49%	100%
Base Excluding PWFD			19%	24%	3%	0%	54%	100%
Max Hour Excluding PWFD & 50% Navy			19%	24%	1%	0%	55%	100%
Total Max Hour to Class			19%	24%	2%	0%	55%	100%
Metering	<i>Direct Assignment</i>	100%						100%
Billing	<i>Direct Assignment</i>	100%						100%
Services	<i>Direct Assignment</i>	100%						100%
Fire	<i>Direct Assignment</i>						100%	100%
Treatment Plant Avg. Day	<i>Assured Capacity</i>		38%	30%	12%	21%		100%
Treatment Plant Max. Day	<i>Assured Capacity</i>		34%	29%	9%	19%	9%	100%

ALLOCATION RESULTS		Commodity Charges						
		Rate Year	Base Charge	Retail		Navy	Portsmouth	Fire
Residential	Commercial							
Base								
Base excluding T&D&WQPF & Pumping	5,421,435		2,220,152	1,760,412	463,722	977,149		5,421,435
Transmission & Distribution	1,426,897		752,044	596,314	78,540	-		1,426,897
Pumping	30,213		15,093	11,968	3,152	-		30,213
Water Quality Protection Fees	(22,500)		(12,549)	(9,951)	-	-		(22,500)
Revenue Offsets	(179,280)		(77,859)	(61,737)	(14,215)	(25,468)		(179,280)
Administrative Charges	1,469,535		638,205	506,048	116,522	208,758		1,469,535
Max Day								
Max Day Except T&D & Pumping	691,440		194,299	182,888	36,340	125,747	152,167	691,440
Transmission & Distribution	868,327		308,142	290,045	28,816	-	241,324	868,327
Pumping	40,433		13,888	13,072	2,597	-	10,876	40,433
Revenue Offsets	(52,699)		(17,004)	(16,006)	(2,231)	(4,141)	(13,317)	(52,699)
Administrative Charges	480,775		155,129	146,019	20,356	37,780	121,491	480,775
Max Hour								
Max Hr. Except T&D & Pumping	-		-	-	-	-	-	-
Transmission & Distribution	258,611		49,403	63,245	3,877	-	142,086	258,611
Pumping	12,042		2,266	2,901	356	-	6,518	12,042
Revenue Offsets	(5,319)		(1,015)	(1,300)	(83)	-	(2,920)	(5,319)
Administrative Charges	48,041		9,171	11,741	751	-	26,377	48,041
Metering		299,061						299,061
Revenue Offsets	(234,118)		(234,118)					(234,118)
Administrative Charges	117,872		117,872					117,872
Services		115,652						115,652
Revenue Offsets	(4,695)		(4,695)					(4,695)
Administrative Charges	37,747		37,747					37,747
Billing		481,147						481,147
Revenue Offsets	(233,975)		(233,975)					(233,975)
Administrative Charges	163,328		163,328					163,328
Fire							73,619	73,619
Revenue Offsets	(2,444)						(2,444)	(2,444)
Administrative Charges	13,315						13,315	13,315
Treatment Plant Capital Costs								
Treatment Plant Avg. Day	1,723,560		650,087	515,470	204,673	353,330		1,723,560
Treatment Plant Max. Day	1,048,859		359,519	306,834	91,447	196,661	94,397	1,048,859
Total To Recover through Rates	\$ 14,086,881	\$ 742,019	\$ 5,258,971	\$ 4,317,965	\$ 1,034,620	\$ 1,869,815	\$ 863,490	\$ 14,086,881

COST OF SERVICE PER UNIT

Description of Billing Units	Metering						Total
	(1)	(2)	(2)	(2)	(2)	(3)	
equivalent meters x 12 months		1000's of gallons annually	1000's of gallons annually	1000's of gallons annually	1000's of gallons annually	Equivalent Connections	
Percentage of Dollars Allocated	1.3%	37.3%	30.7%	7.3%	13.3%	5.5%	100.0%
Allocated Cost	\$ 182,815	\$ 5,258,971	\$ 4,317,965	\$ 1,034,620	\$ 1,869,815	\$ 779,000	\$ 14,086,881
Divided by: Number of Units	207,132	630,132	499,647	178,971	428,519	161,036	
Unit Cost of Service	\$0.8826	\$8.35	\$8.64	\$5.78	\$4.36	\$4.84	
	<i>per equiv per month</i>	<i>per 1000 gallons</i>	<i>per 1000 gallons</i>	<i>per 1000 gallons</i>	<i>per 1000 gallons</i>	<i>Equivalent connections</i>	

Description of Billing Units	Billing		Services		Hydrants	
	No. of bills per year	Equivalent Connections	No. of Hydrants			
Percentage of Dollars Allocated	2.9%	1.1%	0.6%			
Allocated Cost	\$ 410,500	\$ 148,705	\$ 84,490			
Divided by: Number of Units	65,094	275,639	1,036			
Unit Cost of Service	\$6.3063	\$0.5395	\$81.5540			
	<i>per bill</i>	<i>per equiv</i>	<i>per Hydrant</i>			

(1)

- (1) From HJS Schedule D-1, 'Water Accounts, by Size and Class'.
- (2) From HJS Schedule B-6, 'Water Demand History'.
- (3) From HJS Schedule D-2, 'Fire Protection Accounts'.

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule B-3
 Cost Allocation Bases

<u>Allocation Basis</u>	Used to allocate the following cost categories	Source Schedule	Base	Max Day	Max Hour	Metering	Billing	Services	Direct Fire Protection	Total % Allocated
Average Day Demand Patterns	<i>Supply, Laboratory</i>	N/A	100%							100%
Maximum Day Demand Patterns	<i>Treatment</i>	B-1	62%	38%	0%					100%
Maximum Hour Demand Patterns	<i>Pumping, Transmission/Distribution, Storage</i>	B-1	56%	34%	10%					100%
Fire Protection	<i>Public/Private Fire Protection Costs</i>	D-2							100%	100%
Non Admin less electricity & chemicals	<i>Administration Salaries, Wages, & Benefits</i>	B-1	66%	19%	2%	5%	5%	2%	1%	100%
Customer Service Salaries and Wages	<i>Customer Service Salaries, Wages, & Benefits</i>	B-4	0%	0%	0%	46%	41%	13%	0%	100%
Non-Administrative Wages & Salaries	<i>Administrative Labor Related</i>	B-1	61%	24%	2%	6%	5%	2%	0%	100%
Capital Costs	<i>Certain Legal and Administrative</i>	B-1	70%	17%	5%	1%	6%	1%	1%	0%
Total Non-Admin Costs before Offsets	<i>Certain Legal and Administrative</i>	B-1	71%	16%	3%	3%	5%	1%	1%	100%
Other Costs	<i>Administration Non-Salary Costs</i>	B-1	66%	19%	2%	5%	5%	2%	1%	100%
Treatment Plant Capital										

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule B-4
 Allocation Analyses

Administration 15-500-2200

Salaries by Staff Position

Director of Utilities	\$	63,851
Administrative Secretary	\$	27,753
Deputy Director - Finance	\$	58,372
Deputy Director - Engineering	\$	55,027
Financial Analyst	\$	68,886
Salary \$ Allocation Results	\$	273,889

Resulting % Allocation of Administration Salaries, Wages, & Benefits

Customer Service 15-500-2209

Salaries by Staff Position

Meter Repairman/Reader	\$	36,757
Meter Repairman/Reader	\$	38,996
Principal Account Clerk	\$	35,687
Meter Repairman/Reader		46,483
Maintenance Mechanic	\$	45,889
SAE - Sr. Maintenance Mechanic	\$	-
Water Meter Foreman	\$	52,523
Salary \$ Allocation Results	\$	256,335

Resulting % Allocation of Customer Service Salaries, Wages, & Benefits

Treatment Plant Capital

		Base (Avg. Day)	Max Day	Total
Treatment Station 1	\$	1,609,150	\$ 1,000,378	\$ 608,772
Treatment Lawton Valley		508,569	\$ 316,168	\$ 192,401
Treatment Both Plants		654,700	\$ 407,014	\$ 247,686
	\$	2,772,419	\$ 1,723,560	\$ 1,048,859
				\$ 2,772,419

	Residential	Non-Residential	Navy	PWFD	Fire	Treatment Plant Capacity
Capacity Reserved for Avg. Day Demand (MGD) ¹	3.02	2.39	0.95	1.64	N/A	8
% of Avg. Day Treatment Capacity	37.7%	29.9%	11.9%	20.5%	N/A	100%
Capacity Reserved for Max. Day Demand (MGD) ¹	5.48	4.68	1.395	3.00	1.44	16
% of Max. Day Treatment Capacity	34.28%	29.25%	8.72%	18.75%	9.00%	100%

¹ Per Demand study to determine required treatment capacity after DB treatment plant projects

Allocation of Salary Costs								Total Allocated
Base	Max Day	Max Hour	Metering	Billing	Services	Direct Fire Protection		
66%	19%	2%	5%	5%	2%	1%	100%	
66%	19%	2%	5%	5%	2%	1%	100%	
66%	19%	2%	5%	5%	2%	1%	100%	
66%	19%	2%	5%	5%	2%	1%	100%	
\$ 180,414	\$ 53,033	\$ 5,352	\$ 14,025	\$ 13,881	\$ 4,725	\$ 2,459	\$ 273,889	
66%	19%	2%	5%	5%	2%	1%	100%	

			50%	50%			100%
			50%	50%			100%
				100%			100%
			100%				100%
			33%	33%	34%		100%
			100%				100%
			33%	33%	34%		100%
			\$ 116,835	\$ 106,039	\$ 33,460		\$ 256,335
0%	0%	0%	46%	41%	13%	0%	100%

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule B-5
 Capital Functionalization

Functional Break Down of Existing Fixed Assets

	Supply	Treatment Station 1	Treatment Lawton Valley	Treatment Both Plants	T&D	T&D Pump	Fire	Meters	Services	Billing	
TRANSMISSION/DISTRIBUTION \$	20,846,331				100%						100%
LAWTON VALLEY \$	7,116,282		100%								100%
STATION 1 \$	22,516,441	100%									100%
TREATMENT BOTH \$	9,161,055			100%							100%
STORAGE \$	1,060,548				100%						100%
SOURCE OF SUPPLY \$	19,453,649	100%									100%
METERS/SERVICES \$	629,135							50%	50%		100%
T&D PUMPING \$	907,332					100%					100%
BILLING \$	2,902,066									100%	100%
FIRE \$	351,481						100%				100%
WORK IN PROGRESS \$	-	50%	50%								100%
Total \$	84,944,321										
LABORATORY \$	80,000	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
LAND AND ROW \$	3,594,491	23%	27%	8%	11%	26%	1%	0%	0%	3%	100%
\$	3,674,491										
Total Fixed Assets \$	88,618,812										

	Supply	Treatment Station 1	Treatment Lawton Valley	Treatment Both Plants	T&D	T&D Pump	Fire	Meters	Services	Billing	Total	
TRANSMISSION/DISTRIBUTION \$	20,846,331	-	-	-	20,846,331	-	-	-	-	-	20,846,331	
LAWTON VALLEY \$	7,116,282	-	7,116,282	-	-	-	-	-	-	-	7,116,282	
STATION 1 \$	22,516,441	22,516,441	-	-	-	-	-	-	-	-	22,516,441	
TREATMENT BOTH \$	9,161,055	-	-	9,161,055	-	-	-	-	-	-	9,161,055	
STORAGE \$	1,060,548	-	-	-	1,060,548	-	-	-	-	-	1,060,548	
SOURCE OF SUPPLY \$	19,453,649	19,453,649	-	-	-	-	-	-	-	-	19,453,649	
METERS/SERVICES \$	629,135	-	-	-	-	-	-	314,568	314,568	-	629,135	
T&D PUMPING \$	907,332	-	-	-	-	907,332	-	-	-	-	907,332	
BILLING \$	2,902,066	-	-	-	-	-	-	-	-	2,902,066	2,902,066	
FIRE \$	351,481	-	-	-	-	-	351,481	-	-	-	351,481	
WORK IN PROGRESS \$	-	-	-	-	-	-	-	-	-	-	-	
Total \$	84,944,321	19,453,649	22,516,441	7,116,282	9,161,055	21,906,879	907,332	351,481	314,568	314,568	2,902,066	84,944,321
		22.90%	26.51%	8.38%	10.78%	25.79%	1.07%	0.41%	0.37%	0.37%	3.42%	
LABORATORY \$	80,000	80,000	-	-	-	-	-	-	-	-	-	80,000
LAND AND ROW \$	3,594,491	823,198	952,802	301,132	387,658	927,008	38,395	14,873	13,311	13,311	122,803	3,594,491
\$	3,674,491	903,198	952,802	301,132	387,658	927,008	38,395	14,873	13,311	13,311	122,803	3,674,491
		25%	26%	8%	11%	25%	1%	0%	0%	0%	3%	
Total Allocated	\$ 20,356,847	\$ 23,469,243	\$ 7,417,413	\$ 9,548,713	\$ 22,833,887	\$ 945,727	\$ 366,354	\$ 327,879	\$ 327,879	\$ 3,024,870	\$ 88,618,812	
		22.97%	26.48%	8.37%	10.78%	25.77%	1.07%	0.41%	0.37%	0.37%	3.41%	

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule B-5
 Capital Functionalization

Functionalization of Capital Costs

		Supply	Treatment Station 1	Treatment Lawton Valley	Treatment Both Plants	T&D	T&D Pump	Fire	Meters	Services	Billing	
Capital Spending Restricted Account	\$ 2,500,000	23%	26%	8%	11%	26%	1%	0%	0%	0%	3%	100%
Debt Service	\$ 3,576,079	23%	26%	8%	11%	26%	1%	0%	0%	0%	3%	100%
	\$ 6,076,079											

		Supply	Treatment Station 1	Treatment Lawton Valley	Treatment Both Plants	T&D	T&D Pump	Fire	Meters	Services	Billing	Total
Capital Spending Restricted Account	\$ 2,500,000	\$ 574,281	\$ 662,084	\$ 209,251	\$ 269,376	\$ 644,160	\$ 26,680	\$ 10,335	\$ 9,250	\$ 9,250	\$ 85,334	\$ 2,500,000
Debt Service	\$ 3,576,079	\$ 821,470	\$ 947,066	\$ 299,319	\$ 385,324	\$ 921,427	\$ 38,163	\$ 14,784	\$ 13,231	\$ 13,231	\$ 122,064	\$ 3,576,079
	\$ 6,076,079	\$ 1,395,751	\$ 1,609,150	\$ 508,569	\$ 654,700	\$ 1,565,588	\$ 64,843	\$ 25,119	\$ 22,481	\$ 22,481	\$ 207,398	\$ 6,076,079

	Annual Demand in 1000s Gallons											Baseline	Rate Year	
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	3-Year Average	Docket 4243
Annual Demand by Class														
Residential	682,937	698,765	773,872	780,666	736,577	716,037	749,409	734,137	780,264	690,544	644,285	640,966	705,031	630,132
Commercial	724,094	640,379	580,798	583,184	663,766	573,711	493,539	456,486	505,014	519,521	457,376	502,475	493,970	499,647
Navy	466,167	450,247	307,051	348,222	511,299	417,869	373,306	278,441	247,728	225,392	173,790	137,731	215,637	178,971
Portsmouth	438,179	442,582	455,142	451,723	422,944	429,465	463,253	445,232	473,338	444,777	412,324	398,827	443,480	428,519
Total (in 1000's Gallons)	2,311,377	2,231,973	2,116,863	2,163,795	2,334,586	2,137,082	2,079,508	1,914,297	2,006,344	1,880,234	1,687,775	1,679,999	1,858,118	1,737,269
		-3.4%	-5.2%	2.2%	7.9%	-8.5%	-2.7%	-7.9%	4.8%	-6.3%	-10.2%	-0.5%		

	Combined Station #1 and LV WTP Production Volumes in 1,000 gals					Peaking Comparison		
	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Production Peaks	System Peaks Estimated from Daily Demand Data	System Diversity Ratio (1)
Annual Production	2,456,363	2,524,784	2,437,440	2,440,630	2,304,024	2,467,618		
Average Day Production	6,730	6,917	6,678	6,687	6,312	6,761		
Maximum Month Production	256,796	269,819	280,875	254,088	268,468	268,261		
Maximum Day Production	10,165	10,724	12,100	9,800	10,163	10,875		
Max Day Date	6/28/2007	8/4/2007	7/18/2008	8/23/2010	7/23/2011			
Maximum Day Peaking Factor	1.51	1.55	1.81	1.47	1.61	1.61	1.78	1.11
Max-Day to Avg. Day/Max-Month Ratio	1.19	1.23	1.34	1.20	1.17	1.17		
Maximum Hour	13,800	15,200	13,250	10,700	12,100	12,100		
Maximum Hour Peaking Factor	2.05	2.20	1.98	1.60	1.92	1.92	2.47	1.29

Coincident Noncoincident
 Excluding Fire Protection

(1) Calculated according to AWWA M-1 Guidelines

Estimation of Each Customer Class' Peaking Factors

Customer Class	Max Day Demand Factor From Daily Read	Max Hour Demand Factor From Daily Read
	Demand Study	Demand Study
Residential	1.69	2.25
Commercial	1.82	2.73
Navy	1.62	2.04
Portsmouth	2.01	2.68
Fire (5)		
Estimated Systemwide Peaks	1.78	2.47

1.78	2.37
2.18	3.27
1.49	1.79
1.91	2.54

(5) Fire peaking behavior is estimated using a separate methodology demonstrated in HJS Schedule B-11, Fire Protection Demand Analysis'.

Rate Year Demand (1,000 gallons)							
Customer Class	Annual Demand	Average Daily Demand	Lost Water Adjustment	Adjusted Average Daily Demand	% Average Demand by Class	% Average Demand Ex PWFD & 50% Navy	% Average Demand Ex PWFD
Residential	630,132	1,726	941	2,667	40.95%	53%	50%
Commercial	499,647	1,369	746	2,115	32.47%	42%	40%
Navy	178,971	490	67	557	8.55%	6%	10%
Portsmouth	428,519	1,174	-	1,174	18.02%	0%	0%
Fire					N/A	N/A	N/A
Total, w Fire Prot.	1,737,269	4,760	27%	6,514	100%	100%	100%

(1)

Production 2,377,518 6,514 26.93%

Customer Class	Max Day Calculations				% of Daily Peaks			Max Hour Calculations			% of Hourly Peaks		
	Max Day Peaking Factor	Demand x Peaking Factor (3)	Incremental Peak Demand	% of Daily Peaks	With Full PWFD & Navy	Without PWFD & 50% Navy	Without PWFD	Max Hour Peaking Factor	Demand x Peaking Factor (3)	Incremental Peak Demand	With Full PWFD & Navy	Without PWFD & 50% Navy	Without PWFD
Residential	1.69	4,506	1,839	28.1%	28.1%	35.5%	34.3%	2.25	6,008	1,502	17.1%	19.1%	18.8%
Commercial	1.82	3,846	1,731	26.5%	26.5%	33.4%	32.3%	2.73	5,769	1,923	21.9%	24.5%	24.1%
Navy	1.62	901	344	5.3%	5.3%	3.3%	6.4%	2.04	1,137	236	2.7%	1.5%	3.0%
Portsmouth	2.01	2,364	1,190	18.2%	18.2%	0.0%	0.0%	2.68	3,152	788	9.0%	0.0%	0.0%
Fire	(2)	1,440	1,440	22.0%	22.0%	27.8%	26.9%		5,760	4,320	49.3%	54.9%	54.1%
Total, w Fire Prot.		13,057	6,543	100.0%	100.0%	100.0%	100.0%		21,826	8,769	100.0%	100.0%	100.0%
Total, without Fire Protection		11,617	5,103						16,066	4,449			

(demand is in thousands of gallons)

- (1) From HJS Schedule D-4. The lost water adjustment is made to the peaking analysis so that Portsmouth will not share in that portion of certain operating costs. Navy allocation is reduced to 25%.
- (2) From HJS Schedule B-11, Fire Protection Demand Analysis'.

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule B-10
 Summary of Peak Load Distributions (by Rate Class and Base/Extra-Capacity Categories)

Docket No. XXXX

EACH RATE CLASS' SHARE OF SYSTEM PEAKS

Rate Class	Average Demand	Daily Peaks	Hourly Peaks
Retail			
Residential	41%	28%	17%
Commercial	32%	26%	22%
Navy	9%	5%	3%
Portsmouth	18%	18%	9%
Fire	N/A	22%	49%
	100%	100%	100%

Percentages are from HJS Schedule B-9, 'System Demands Imposed by Each Customer Class' Peaking Behavior '.

BASE/EXTRA-CAPACITY DISTRIBUTION OF SYSTEM PEAKS

	Incremental Demand	% Distribution for Max Day	% Distribution for Max Hour
Base	6,761	62.2%	55.9%
Extra Capacity			
Max Day	4,114	37.8%	34.0%
Max Hour	1,225		10.1%
Fire Protection			
Max Day	-	0.0%	0.0%
Max Hour	-		0.0%
Total%		100.0%	100.0%
Total 1000's Gallons		10,875	12,100

Incremental demand data is from HJS Schedule B-11, 'Fire Protection Demand Analysis'.
 and from HJS Schedule B-9, 'System Demands Imposed by Each Customer Class' Peaking Behavior '.

FIRE PROTECTION ASSUMPTIONS

Fire Protection Flow (gals per minute)	4,000
Hourly Fire Protection Flow (1000's of gallons)	240
Length of Fire Event (in hours)	6

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule D-1
 Water Accounts, by Size and Class

Connection Size	Meter Factors	COMMERCIAL				RESIDENTIAL				WHOLESALE (Monthly)			
		Meter Read Frequency		Equivalent Meters		Meter Read Frequency		Equivalent Meters		Navy		Portsmouth	
		Monthly	Quarterly	Monthly	Quarterly	Monthly	Quarterly	Monthly	Quarterly	Meters	Equivalents	Meters	Equivalents
5/8	1.0	98	576	98	576	12	10,079	12	10079	0	0	0	0
3/4	1.1	53	173	58	190	10	2,241	11	2465	1	1	0	0
1	1.4	141	42	197	59	24	349	34	489	0	0	0	0
1.5	1.8	145	29	261	52	30	157	54	283	3	5	0	0
2	2.9	173	16	502	46	42	43	122	125	0	0	0	0
3	11.0	38	6	418	66	12	11	132	121	0	0	0	0
4	14.0	10	3	140	42	1	0	14	0	0	0	1	14
5	18.0	1	0	18	0	0	0	0	0	0	0	0	0
6	21.0	11	1	231	21	1	3	21	63	8	168	0	0
8	29.0	0	0	0	0	1	0	29	0	0	0	0	0
10	43.5	0	0	0	0	0	0	0	0	1	44	0	0
Total	14,546	670	846	1,923	1,052	133	12,883	429	13,625	13	218	1	14

Billed Monthly
 Billed Quarterly
 Billed Annually

Equivalent Billing Units	
817	9,804
13,729	54,916
374	374
Total	65,094

Equivalent Meter Units	
2,584	31,008
14,677	176,124
N/A	N/A
Total	207,132

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule D-2
 Fire Protection Accounts

	Connection Size	Existing Differential	Number of Connections	Equivalent Connections (2)	% of Equiv Connections
Public Hydrants					
Newport	6	111.31	619	68,901	
Middletown	6	111.31	408	45,415	
Portsmouth	6	111.31	9	1,002	
Subtotal: Public Hydrants			1036	115,318	72%
Private Fire Connections					
	2	6.19	4	25	
	4	38.32	61	2,337	
	6	111.31	245	27,271	
	8	237.21	62	14,707	
	10	426.58	0	-	
	12	689.04	2	1,378	
Subtotal: Private Fire Connections			374	45,718	28%
Total Fire Connections			1,410	161,036	100%

- (1) Demand factors are based on the principles of the Hazen-Williams equation for flow through pressure conduits. For more information, see the AWWA M1 rate manual chapter on fire protection charges.
- (2) Equivalent connections are arrived at by multiplying the number of connections by the demand factor.

General Water Service

Connection Size	Service Cost	No. of Services	Equivalent Connections	% of Equiv Connections
5/8	1.000	10,765	10,765	
3/4	1.000	2,478	2,478	
1	1.860	556	1,034	
1.5	4.630	364	1,685	
2	6.150	274	1,685	
3	11.060	67	741	
4	11.060	15	166	
5	11.060	1	11	
6	11.060	24	265	
8	11.060	1	11	
10	11.060	1	11	
Subtotal General Service		14,546	18,853	82%
Private Fire Connections				
2	6.150	4	25	
4	11.060	61	675	
6	11.060	245	2,710	
8	11.060	62	686	
10	11.060	0	-	
12	11.060	2	22	
Subtotal: Private Fire Connections		374	4,117	18%
Annualized Total Retail & Private Fire Connections			12	
		14,920	275,639	100%

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule D-3
 Production Summary

	Station #1			Lawton Valley			Combined	
	In Gallons	in 1000's		In Gallons	in 1000's		In Gallons	in 1000's
<u>FY 07 JULY 2006 - JUNE 2007</u>	1,176,356,210	1,176,356	August	1,280,006,852	1,280,007	August	2,456,363,062	2,456,363
Max. Month June	116,724,700	116,725		140,288,300	140,288		256,795,580	256,796
<u>FY 08 JULY 2007 - JUNE 2008</u>	1,268,356,660	1,268,357	July	1,256,427,700	1,256,428	July	2,524,784,360	2,524,784
Max. Month August	141,803,530	141,804		144,557,900	144,558		269,819,450	269,819
<u>FY 09 JULY 2008 - JUNE 2009</u>	1,152,697,400	1,152,697	July	1,284,742,500	1,284,743	July	2,437,439,900	2,437,440
Max. Month March	110,288,000	110,288		177,163,200	177,163		280,874,500	280,875
<u>FY 10 JULY 2009 - JUNE 2010</u>	1,333,422,150	1,333,422	August 2009	1,107,207,665	1,107,208	August 2009	2,440,629,815	2,440,630
Max. Month October	121,112,610	121,113		139,731,200	139,731		254,088,090	254,088
<u>FY 11 JULY 2010 - JUNE 2011</u>	1,242,460,000	1,242,460	August 2010	1,061,564,200	1,061,564	July 2010	2,304,024,200	2,304,024
Max. Month July	136,103,000	136,103		133,325,700	133,326		268,467,600	268,468

MAX DAY PRODUCTION AVAILABLE FOR SALE

	Station #1			Lawton Valley			Combined	
	In Gallons	in 1000's		In Gallons	in 1000's		In Gallons	in 1000's
<u>FY 07 JULY 2006 - JUNE 2007</u>	5,114,940	5,115	8/14/2006	5,958,100	5,958	6/28/2007	10,165,100	10,165
	includes booster to LV at 1,256,000 Gallons							
<u>FY 08 JULY 2007 - JUNE 2008</u>	6,179,670	6,180	6/10/2008	6,805,400	6,805	8/4/2007	10,723,620	10,724
	includes booster to LV at 2,251,000 Gallons							
<u>FY 09 JULY 2008 - JUNE 2009</u>	4,341,000	4,341	7/18/2008	7,845,700	7,846	7/18/2008	12,100,100	12,100
	includes booster to LV at 324,000 Gallons							
<u>FY 10 JULY 2009 - JUNE 2010</u>	4,664,000	4,664	8/27/2009	6,168,500	6,169	8/23/2010	9,800,400	9,800
<u>FY 11 JULY 2010 - JUNE 2011</u>	5,729,355	5,729	8/3/2011	5,654,800	5,655	7/23/2011	10,162,555	10,163

PEAK HOURLY FLOW

	Date	Station #1		Date	Lawton Valley	
<u>FY 07 JULY 2006 - JUNE 2007</u>	7/6/2006	5.8	MGD	7/1/2006	8.0	MGD
<u>FY 08 JULY 2007 - JUNE 2008</u>	8/26/2007	7.2	MGD	6/18/2008	8.0	MGD
<u>FY 09 JULY 2008 - JUNE 2009</u>	7/18/2008	5.25	MGD	7/18/2008	8.0	MGD
<u>FY 10 JULY 2009 - JUNE 2010</u>	9/2/2009	4.70	MGD	9/2/2009	6.0	MGD
<u>FY 11 JULY 2010 - JUNE 2011</u>	10/15/2010	6.10	MGD	10/15/2010	6.0	MGD

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule D-4
 Demand Summary

Fiscal Year Annual Demand	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Residential	734,137	780,264	690,544	644,285	640,966
Commercial (includes governmental)	456,486	505,014	519,521	457,376	502,475
Navy	278,441	247,728	225,392	173,790	137,731
Portsmouth	445,232	473,338	444,777	412,324	398,827
Total 1000's Gallons	1,914,297	2,006,344	1,880,234	1,687,775	1,679,999
	-6.7%	4.8%	-6.3%	-10.2%	-0.5%

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule D-5
 Development of Pumping Costs

Pumping Labor and Benefits

Station One		Lawton Valley	
Labor hours per day pump	0.5000	Labor hours per day pumping	0.2500
Days per year	365	Days per year	365
Total Hours	182.5000	Total Hours	91.2500
Average per hour pay	\$23.06	Average per hour pay	\$22.07
Average per hour benefits	\$10.82	Average per hour benefits	\$11.69
Pumping Salaries	\$4,208.45	Pumping Salaries	\$2,013.89
Pumping Benefits	\$1,974.65	Pumping Benefits	\$1,066.71

Pumping Repairs and Supplies

Station One		Lawton Valley	
50275 Repair & Maintenance - Equipment		Repair & Maintenance - Equipment	
None	\$0.00	Vendor	amount
Total Repair & Maintenance Pumping	\$0.00	NAPA Auto Partd	\$622.90
		Ralco Electric	\$328.83
		Total Repair & Maintenance Pumping	\$951.73
50311 Operating Supplies		Operating Supplies	
Vendor	amount	Vendor	amount
National Electric Testing	\$60.00	National Electric Testing	\$300.00
ABB Inc.	\$1,122.00	Ralco Electric	\$525.00
RE Erickson	\$1,140.00	Harbor Controls	\$1,000.00
Ralco	\$268.00		
Total - Operating Supplies - Pumping	\$2,590.00	Total Operating Supplies Pumping	\$1,825.00

Pumping Electricity

Station One		Lawton Valley	
Annual Pumping Power	\$13,655	Annual Pumping Power	\$25,789

Total Pumping Costs

Station One		Lawton Valley	
Pumping Salaries	\$4,208	Pumping Salaries	\$2,014
Pumping Benefits	\$1,975	Pumping Benefits	\$1,067
Total Repair & Maintenance Pumping	\$0	Total Repair & Maintenance Pumping	\$952
Total - Operating Supplies - Pumping	\$2,590	Total Operating Supplies Pumping	\$1,825
Annual Pumping Power	\$13,655	Annual Pumping Power	\$25,789
Total Annual Pumping Costs	\$22,428	Total Annual Pumping Costs	\$31,646

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule D-6
 Debt Service Restricted Account Cashflow

	FY 2012											
	July	August	September	October	November	December	January	February	March	April	May	June
Debt Service Account												
Beginning Cash Balance	\$ 1,989,949	\$ 1,989,964	\$ 2,325,118	\$ 1,789,176	\$ 1,952,744	\$ 1,555,935	\$ 1,688,396	\$ 1,820,952	\$ 1,953,399	\$ 1,795,553	\$ 1,928,001	\$ 2,060,448
Additions												
From Rates		\$335,137	\$167,569	\$167,569	\$167,569	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447
Interest Income	15	17	18	14	15	14	108	-	-	-	-	-
Total Additions	\$ 15	\$ 335,154	\$ 167,587	\$ 167,583	\$ 167,584	\$ 132,461	\$ 132,556	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447
Deductions												
Existing Debt Service			703,529	4,015	564,393					290,293		
Proposed Debt Service												
Total Deductions	\$ -	\$ -	\$ 703,529	\$ 4,015	\$ 564,393	\$ -	\$ -	\$ -	\$ -	\$ 290,293	\$ -	\$ -
Ending Cash Balance	\$ 1,989,964	\$ 2,325,118	\$ 1,789,176	\$ 1,952,744	\$ 1,555,935	\$ 1,688,396	\$ 1,820,952	\$ 1,953,399	\$ 1,795,553	\$ 1,928,001	\$ 2,060,448	\$ 2,192,896

Annual Contribution From Rates
\$1,764,974

Annual Debt Service Payments
\$ 1,562,229

	FY 2013											
	July	August	September	October	November	December	January	February	March	April	May	June
% increase in DS Alolowance	125%											
Debt Service Account												
Beginning Cash Balance	\$ 2,192,896	\$ 2,325,343	\$ 2,457,790	\$ 1,070,862	\$ 1,203,310	\$ 1,335,757	\$ 1,468,205	\$ 1,600,652	\$ 1,733,099	\$ 1,163,231	\$ 1,461,238	\$ 1,759,244
Additions												
From Rates	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$298,007	\$298,007	\$298,007
Interest Income	-	-	-	-	-	-	-	-	-	-	-	-
Total Additions	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 298,007	\$ 298,007	\$ 298,007
Deductions												
Existing Debt Service			1,452,264							297,365		
Proposed Debt Service (\$53.1 M Loan)			67,111							404,951		
Total Deductions	\$ -	\$ -	\$ 1,519,375	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 702,316	\$ -	\$ -
Ending Cash Balance	\$ 2,325,343	\$ 2,457,790	\$ 1,070,862	\$ 1,203,310	\$ 1,335,757	\$ 1,468,205	\$ 1,600,652	\$ 1,733,099	\$ 1,163,231	\$ 1,461,238	\$ 1,759,244	\$ 2,057,251

Annual Contribution From Rates
\$2,086,046

Annual Debt Service
\$ 2,221,691

(1) Estimated debt service on \$53M borrowing projected to close in June 2012.

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule D-6
 Debt Service Restricted Account Cashflow

FY 2014													
	July	August	September	October	November	December	January	February	March	April	May	June	
% increase in DS Alolowance	0%												
Debt Service Account													
Beginning Cash Balance	\$ 2,057,251	\$ 2,355,257	\$ 2,653,264	\$ 1,116,713	\$ 1,414,719	\$ 1,712,726	\$ 2,010,732	\$ 2,308,739	\$ 2,606,746	\$ 1,539,682	\$ 1,837,689	\$ 2,135,696	
Additions													
From Rates	\$298,007	\$298,007	\$298,007	\$298,007	\$298,007	\$298,007	\$298,007	\$298,007	\$298,007	\$298,007	\$298,007	\$298,007	
Interest Income	-	-	-	-	-	-	-	-	-	-	-	-	
Total Additions	\$ 298,007	\$ 298,007	\$ 298,007	\$ 298,007	\$ 298,007	\$ 298,007	\$ 298,007	\$ 298,007	\$ 298,007	\$ 298,007	\$ 298,007	\$ 298,007	
Deductions													
To Capital Restricted Acct.													
Existing Debt Service			1,074,138							284,800			
Proposed Debt Service (\$53.1 M Loan)			710,298							776,557			
Proposed Debt Service (\$26.9 M Loan)			50,122							303,713			
Total Deductions	\$ -	\$ -	\$ 1,834,558	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,365,070	\$ -	\$ -	\$ -	
Ending Cash Balance	\$ 2,355,257	\$ 2,653,264	\$ 1,116,713	\$ 1,414,719	\$ 1,712,726	\$ 2,010,732	\$ 2,308,739	\$ 2,606,746	\$ 1,539,682	\$ 1,837,689	\$ 2,135,696	\$ 2,433,702	

Annual Contribution From Rates
\$ 3,576,079

Annual Debt Service
\$ 3,199,628

FY 2015													
	July	August	September	October	November	December	January	February	March	April	May	June	
% increase in DS Alolowance	91%												
Debt Service Account													
Beginning Cash Balance	\$ 2,433,702	\$ 3,002,910	\$ 3,572,119	\$ 38,594	\$ 607,801	\$ 1,177,009	\$ 1,746,215	\$ 2,315,516	\$ 2,884,723	\$ 1,736,288	\$ 2,305,496	\$ 2,874,703	
Additions													
From Rates	\$569,193	\$569,193	\$569,193	\$569,193	\$569,193	\$569,193	\$569,193	\$569,193	\$569,193	\$569,193	\$569,193	\$569,193	
Interest Income	15	17	260,018	14	15	14	108	15	15	15	15	15	
Total Additions	\$ 569,208	\$ 569,210	\$ 829,211	\$ 569,207	\$ 569,208	\$ 569,206	\$ 569,301	\$ 569,208	\$ 569,208	\$ 569,208	\$ 569,208	\$ 569,208	
Deductions													
Existing Debt Service			1,091,878							271,435			
Proposed Debt Service (\$53.1 M Loan)			2,721,710							762,552			
Proposed Debt Service (\$26.9 M Loan)			532,511							582,418			
Proposed Debt Service (\$5.0 M Loan)			16,637							101,238			
Total Deductions	\$ -	\$ -	\$ 4,362,736	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,717,643	\$ -	\$ -	\$ -	
Ending Cash Balance	\$ 3,002,910	\$ 3,572,119	\$ 38,594	\$ 607,801	\$ 1,177,009	\$ 1,746,215	\$ 2,315,516	\$ 2,884,723	\$ 1,736,288	\$ 2,305,496	\$ 2,874,703	\$ 3,443,911	

Annual Contribution From Rates
\$6,830,311

Annual Debt Service
\$ 6,080,379

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule D-7
 Demand Factor Calculations

Demand Factors For COS Model	Non-			
	Residential	Residential	Navy	PWFD
Summer 2011 Max. Day Demand Factor	1.78	2.18	1.49	1.91
Summer 2010 Max. Day Demand Factor	1.60	1.46	1.74	2.12
Two Year Average Max. Day Demand Factor	1.69	1.82	1.62	2.01
Summer 2011 Max. Hour Demand Factor	2.37	3.27	1.99	2.54
Summer 2010 Max. Hour Demand Factor	2.14	2.18	2.09	2.82
Two Year Average Max. Hour Demand Factor	2.25	2.73	2.04	2.68

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule D-7
 Demand Factor Calculations

Summer 2011

	Residential	Commercial	Navy	PWFD
Annual Average Day ¹	16,973	58,419	421,795	1,128,293
Daily Read Maximum Day ²	30,139	127,359	630,462	2,153,297
Maximum Day Demand Factor	1.78	2.18	1.49	1.91

1-Total Consumption by Daily Read Accounts for 12 Mo. Including Daily Sample Period/365

2 - Class maximum day from daily read data

Max Day Diversity Factor Calculation		Residential	Commercial	Navy	PWFD	
Class Average Day (mgd)		2.60	1.94	0.51	1.13	
Class MD Demand Factor		1.78	2.18	1.49	1.91	Total MD Demand
Max Day Demand (Avg. Day X MD Demand Factor)		4.62	4.23	0.76	2.15	11.8
System Average Day (mgd)		6.2				
System Maximum Day (mgd)		10.2				
System Maximum Hour (mgd)		12.1				
Noncoincident MD Capacity Factor		11.8	/	6.2	=	1.90
Coincident MD Capacity Factor		10.2	/	6.2	=	1.65
System MD Diversity		1.90	/	1.65	=	1.16

Maximum Hour Demand Factor Calculation

	Residential	Commercial	Navy	PWFD
MD Capacity Factor	1.78	2.18	1.49	1.91
Estimated Maximum-Hour (MH)/MD Ratio ³	1.33	1.50	1.33	1.33
Calculated MH Capacity Factor	2.37	3.27	1.99	2.54

Max Hour Diversity Factor Calculation		Residential	Commercial	Navy	PWFD	
Class Average Day (mgd)		2.60	1.94	0.51	1.13	
Class MH Demand Factor		2.37	3.27	1.99	2.54	Total MH Demand
Max Hour Demand (Avg. Day X MH Demand Factor)		6.2	6.3	1.0	2.9	16.38
System Average Day (mgd)		6.2				
System Maximum Day (mgd)		10.2				
System Maximum Hour (mgd)		12.1				
Noncoincident MH Capacity Factor		16.4	/	6.2	=	2.65
Coincident MH Capacity Factor		12.1	/	6.2	=	1.96
System MH Diversity		2.65	/	1.96	=	1.35

3- MH/MD Ratio Assumptions:

- Residential =24 hr. / 18 hr.
- Commercial =24 hr. / 16 hr.
- Navy =24 hr. / 18 hr.
- PWFD =24 hr. / 18 hr.

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule D-7
 Demand Factor Calculations

Summer 2010

	Residential	Commercial	Navy	PWFD
CY 2010 Average Day1	16,113	64,857	389,778	1,217,104
Daily Read Maximum Day2	25,827	94,462	678,122	2,578,702
Maximum Day Demand Factor	1.60	1.46	1.74	2.12

1- Total CY 2010 Consumption for daily read accounts/365

2 - Class maximum day from daily read data

Max Day Diversity Factor Calculation

	Residential	Commercial	Navy	PWFD	
Class Average Day (mgd)	2.8	2.2	0.6	1.2	
Class MD Demand Factor	1.60	1.46	1.74	2.12	Total MD Demand
Max Day Demand (Avg. Day X MD Demand Factor)	4.51	3.19	1.13	2.55	11.38
System Average Day (mgd)	6.9				
System Maximum Day (mgd)	11.3				
System Maximum Hour (mgd)	11.4				
Noncoincident MD Capacity Factor	11.38	/	6.859080822	=	1.66
Coincident MD Capacity Factor	11.2663	/	6.859080822	=	1.64
System MD Diversity	1.66	/	1.64	=	1.01

Maximum Hour Demand Factor Calculation

	Residential	Commercial	Navy	PWFD
MD Capacity Factor	1.60	1.46	1.74	2.12
Estimated Maximum-Hour (MH)/MD Ratio ³	1.33	1.50	1.33	1.33
Calculated MH Capacity Factor	2.14	2.18	2.09	2.82

Max Hour Diversity Factor Calculation

	Residential	Commercial	Navy	PWFD	
Class Average Day (mgd)	2.8	2.2	0.6	1.2	
Class MH Demand Factor	2.14	2.18	2.09	2.82	Total MH Demand
Max Hour Demand (Avg. Day X MH Demand Factor)	6.01	4.79	1.36	3.40	15.56
System Average Day (mgd)	6.9				
System Maximum Day (mgd)	11.3				
System Maximum Hour (mgd)	11.4				
Noncoincident MH Capacity Factor	15.56	/	6.859080822	=	2.27
Coincident MH Capacity Factor	11.4	/	6.859080822	=	1.66
System MH Diversity	2.27	/	1.66	=	1.36

3- MH/MD Ratio Assumptions:

Residential =24 hr. / 18 hr.

Commercial =24 hr. / 16 hr.

Navy =24 hr. / 18 hr.

PWFD =24 hr. / 18 hr.

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule D-8
 Comparison of Rates Using Different Treatment Capital Allocations

		Treatment Capital Allocated per Settlement COS Model			Treatment Capital Allocated Based on Reserved Capacity		
		Proposed Rates	% Change	Projected Revenues	Proposed Rates	% Change	Projected Revenues
Base Charge (per bill)							
Monthly							
	5/8	\$ 7.70	-59%	\$10,164	\$ 7.73	-59%	\$10,204
	3/4	7.79	-58%	5,983	7.82	-58%	6,006
	1	8.51	-55%	16,850	8.55	-54%	16,929
	1.5	10.35	-45%	22,108	10.40	-45%	22,214
	2	12.13	-35%	31,295	12.19	-35%	31,450
	3	21.88	17%	13,128	21.99	17%	13,194
	4	24.51	31%	3,529	24.63	31%	3,547
	5	28.02	49%	336	28.16	50%	338
	6	30.66	64%	7,358	30.81	64%	7,394
	8	37.68	101%	452	37.87	102%	454
	10	50.40	169%	605	50.67	170%	608
Quarterly							
	5/8	\$ 10.53	-44%	448,789	\$ 10.58	-44%	450,920
	3/4	10.79	-42%	104,188	10.84	-42%	104,671
	1	12.97	-31%	20,285	13.03	-31%	20,379
	1.5	18.49	-1%	13,757	18.57	-1%	13,816
	2	23.84	27%	5,626	23.94	28%	5,650
	3	53.08	183%	3,609	53.34	184%	3,627
	4	60.98	225%	732	61.28	227%	735
	5	71.51	281%	0	71.87	283%	0
	6	79.40	323%	1,270	79.82	326%	1,277
	8	100.46	436%	0	101.00	439%	0
	10	138.63	639%	0	139.39	643%	0
				\$ 710,065			\$ 713,414
Volume Charge (per 1,000 gallons)							
Retail							
	Residential	\$ 8.32	29%	5,242,698	\$ 8.35	30%	5,261,602
	Commercial	\$ 8.66	35%	4,326,943	\$ 8.65	35%	4,321,947
				\$ 9,569,641			\$ 9,583,549
Wholesale							
	Navy	\$5.2810	34%	945,146	\$ 5.78	46%	1,034,631
	Portsmouth Water & Fire	\$4.3120	37%	1,847,774	\$ 4.36	38%	1,869,843
				\$ 2,792,920			\$ 2,904,474
Fire Protection							
Public (per hydrant)		\$ 710.86	-33%	\$ 736,451	\$ 620.02	-42%	\$ 642,341
Private (by Connection Size) (2)							
	Connection Size	Existing Charge Differential					
	<2	\$ 19.33	-8%		\$ 18.16	-14%	
	2	6.19	-8%	324	76.07	-14%	304
	4	38.32	-46%	17,959	263.28	-51%	16,060
	6	111.31	-35%	173,276	616.37	-43%	151,011
	8	237.21	-43%	87,997	1,225.38	-51%	75,974
	10	426.58	-39%	-	2,141.46	-48%	-
	12	689.04	-39%	7,950	3,411.10	-48%	6,822
				\$ 287,506			\$ 250,171

Total Projected Rate Revenues \$ 14,096,583

\$ 14,093,948

STATUS OF PHYSICAL PLANT Newport Water Division

The Newport Water Division (NWD) is a water supplier that serves a population of approximately 45,000 customers. The transient population served can be higher as Newport is a seasonal community. The retail service area includes the City of Newport, Town of Middletown and a small section of the Town of Portsmouth. NWD also provides water wholesale to the Portsmouth Water & Fire District and Naval Station Newport. NWD owns and operates the water distribution system in Newport, Middletown and the small section in Portsmouth. The Portsmouth Water & Fire District and Naval Station Newport own and operate their respective water distribution systems.

The NWD obtains its raw water supply from a system of nine (9) surface reservoirs. Nonquit Pond and Harold E. Watson Reservoir are located on the mainland across the Sakonnet River from Aquidneck Island and comprise more than half of the total system storage. The remaining seven supplies (St. Mary's Pond, Lawton Valley Reservoir, Sisson Pond, North Easton Pond, South Easton Pond, Nelson (Paradise) Pond, and Gardiner's Pond) are located on Aquidneck Island where the systems' two water treatment plants are located.

Each reservoir collects and stores runoff from its own watershed. St. Mary's, Sisson, Lawton Valley, and North and South Easton Ponds are also designated as raw water distribution reservoirs because they can provide intermediate storage between another reservoir and a treatment plant. Except for 1.0 square mile in Newport, watersheds for the nine reservoirs are located in Little Compton (3.8 sq. mi.), Tiverton (6.4 sq. mi.), Portsmouth (2.5 sq. mi.) and Middletown (6.2 sq. mi.).

Water treatment is provided at the 7 million gallons per day ("MGD") Lawton Valley Water Treatment Plant ("WTP") in Portsmouth and the 9 MGD Newport Station 1 WTP in Newport. The Lawton Valley Plant was constructed in 1942 and has gone through several upgrades since then. Lawton Valley is a conventional treatment plant providing chemical addition, coagulation, flocculation, sedimentation, filtration, fluoridation and disinfection. Newport Station 1 went into service on March 6, 1991. It is capable of producing treated water at an average rate of 6MDG with minimum and maximum rates of 3MGD and 9MGD, respectively. Treatment processes include chemical addition, coagulation, upflow clarification, granular activated carbon filtration, fluoridation and disinfection.

In 2004, a comprehensive compliance evaluation ("Compliance Evaluations") of Newport's water treatment plants was completed. The purpose of the evaluation was to determine whether each plant's existing processes could continue to produce drinking water that complies with the current drinking water regulations as well as future regulations coming into effect over the next 5 to 10 years. The evaluations provided recommendations, both short term and long term, to maintain compliance with drinking water regulations. Both plants have experienced difficulty meeting the standards of the Disinfectant/Disinfectant by Product Rule. In November 2004, the City secured services

of an engineering firm to pilot and design the short-term improvements identified in the Compliance Evaluations. Piloting necessary for the use of chloramines as a secondary disinfectant at both plants was performed and expanded at the recommendation of EPA's Office of Research and Development in order to have results that address the disinfectant byproduct situation and keep lead levels in the distribution system below action levels. Results of the pilot testing for a short term solution completed in 2008 were inconclusive and it was decided to proceed with long term improvements at both treatment plants.

In March 2008, the City awarded a contract to an engineering firm to serve as the City Advisor for the procurement and the implementation of the long term improvements at the water treatment plants. The long term improvements include the construction of a new plant to replace the Lawton Valley Facility and upgrades to the existing Station 1 plant to regain the original 9MGD capacity. During Phase One of the City Advisor contract a Design-Build ("DB") delivery method was selected for the long term improvements. Pilot testing of alternative treatment processes was conducted in 2009 and 2010. The City Council approved an advanced treatment approach in April, 2010 that offers more reliability and certainty; greater ability to address future regulations without upgrades; and, less likelihood of public concerns relative to health effects. Evaluations of treatment plant layouts, environmental and engineering investigations were completed in order to prepare a Request for Proposals (RFP) from DB proposers. The RFP was issued in November 2010 with proposals due in May 2011. The DB contract was awarded in January 2012.

There are three service areas or pressure zones in the NWD water distribution system identified as Low, Medium, and High.

- The Low service area is supplied by the Newport Station 1 WTP. Four pumps at the WTP supply water to the Low Service area. Storage in the Low Service Area is provided by the 3 million gallon ("Mgal") storage tank located on Reservoir Road in Middletown.
- The Medium Service area is supplied from the Lawton Valley WTP. Treated water from Lawton Valley is discharged to a 4 Mgal distribution reservoir. Water is pumped from this 4 Mgal reservoir to a nearby 2 Mgal storage tank. The 2 Mgal tank feeds the Medium Service Area and sets the hydraulic gradient in the distribution system. The Medium Service Area can also be provided water from one of two booster pumps located at Newport Station 1. Also Newport Station 1 can receive water at a 2MGD rate from the Lawton Valley WTP. This demonstrates the systems flexibility to move treated water to be used by each plant. A normally closed interconnection exists between the low and medium service area. Raytheon Corporation in Portsmouth draws water directly from the 2Mgal tank.
- The High Service Area is provided by a booster pumping station on Forest Avenue in Middletown that pumps water to the 1.5 Mgal tank on Goulart Lane in Portsmouth. A normally closed interconnection exists between the medium and

high service areas. An emergency interconnection exists between the High Service Area and Portsmouth Water and Fire District at Mitchell's Lane.

The NWD's system consists of approximately 168 miles of transmission and distribution mains, 3300 valves and 1,034 fire hydrants. There are approximately 14,500 metered service connections in the NWD distribution system which includes services in Newport, Middletown and a small section of Portsmouth. NWD owns all the meters in the system. The NWD has substantially completed the replacement of old meters, downsizing large meters, and converting to a radio read metering system.

New Water Main Installations 2002-2011
Newport Water Division

<u>Year</u>	<u>Location</u>		<u>Length</u>	<u>Size/Mat</u>
2002	Columbia Rd	Middletown	653	8"DI
	Honeyman Ave	Middletown	610	8"DI
	Marshall Ter	Middletown	220	8"DI
	Ward Ave	Middletown	250	8"DI
	Central St	Newport	540	8"DI
	Dresser St.	Newport	860	8"DI
2003	Turner Rd	Middletown	4960	12"DI
	Ward Ave	Middletown	578	8"DI
	Bancroft	Newport	510	8"DI
	Warner Place	Newport	290	8"DI
2004	Ridge Road	Newport	166	8" DI
	Ridge Road	Newport	3252	12" DI
	Harrison Ave	Newport	1446	12" DI
2005	Castle Hill Ave	Newport	1400	8"DI
	Ridge Road	Newport	650	8"DI
	Ocean Ave	Newport	5140	8"DI
	Harrison Ave	Newport	3400	12"DI
2006	McAllister St	Newport	600	8"DI
	Ocean Ave	Newport	9700	12"DI
	Ledge Road	Newport	1650	8"DI
	North Drive	Middletown	1360	8"DI
	South Drive	Middletown	1840	8"DI
	Circle Drive	Middletown	2400	8"DI
2007	Ocean Ave	Newport	200	12"DI
	Lakeview Ave	Newport	300	8"DI
	Xavier Ter	Newport	140	8"DI
2008	Howard Street	Newport	80	6"DI
2009	Halidon Terrace	Newport	350	8"DI
2010	Boss Ct.	Newport	190	6"DI
	Dixon St.	Newport	730	8"DI
	Howard St.	Newport	490	8"DI
	Goodwin St.	Newport	360	8"DI
	Underwood Ct.	Newport	350	6"DI
	Walnut St.	Newport	550	8"DI
	Byrnes Ct.	Newport	350	8"DI
	Bachelor St.	Newport	420	8"DI
	Katzman Pl.	Newport	280	6"DI

New Water Main Installations 2002-2011
Newport Water Division

<u>Year</u>	<u>Location</u>		<u>Length</u>	<u>Size/Mat</u>
2010	LaSalle Pl.	Newport	310	6"DI
	Wesley St.	Newport	510	8"DI
	Pine St.	Newport	240	8"DI
	Gladding Ct.	Newport	150	6"DI
	Sunshine Ct.	Newport	320	8"DI
	Guerny Ct.	Newport	200	6"DI
	Tyler St.	Newport	420	8"DI
	Kay Terrace	Newport	270	6"DI
	Everrett St.	Newport	590	8"DI
	Manning Terrace	Newport	480	6"DI
	Haskell Ave.	Newport	300	8"DI
	Hoffman Pl.	Newport	210	6"DI
	Ashurst Pl.	Newport	240	6"DI
	Hunter Ave.	Newport	500	8"DI
	Sagamore St.	Newport	360	8"DI
	King Phillip Rd.	Newport	350	8"DI
	Ellwood Pl.	Newport	160	6"DI
	Bedlow Pl.	Newport	360	6"DI
	Greene Lane	Newport	580	8"DI
	Porter Ave.	Newport	250	8"DI
	Yale St.	Newport	400	6"DI
	Rowland Rd.	Newport	360	8"DI
	Downing St.	Newport	320	8"DI
	Fir St.	Newport	430	8"DI
	Tomkins Ct.	Newport	90	6"DI
	Guinn Ct.	Newport	150	6"DI
	Elizabeth St.	Newport	320	6"DI
	Redwod St.	Newport	530	8"DI
	Cottage St.	Newport	230	8"DI
2011	NONE			

POLICY RELATED TO FUTURE EXPANSION AND RENOVATIONS
OF THE PHYSICAL PLANT
Newport Water Division

The Newport Water Division maintains its treatment facilities to ensure that they operate in accordance with all regulatory requirements and accepted standards in order to provide and deliver the safest and most reliable drinking water to all of its customers.

In 2004, a comprehensive compliance evaluation (“Compliance Evaluations”) of Newport’s two water treatment plants was completed. The Compliance Evaluations were a comprehensive study of each facility to determine their ability to continue to meet current and future drinking water regulations with the present treatment processes as well as future regulations coming into effect over the next 5 to 10 years. The Compliance Evaluations provided recommendations, both short term and long term, to maintain compliance with drinking water regulations. In November 2004, the City of Newport secured the services of an engineering firm to pilot and design the short term improvements identified in the Compliance Evaluations. Piloting necessary for the use of chloramines as a secondary disinfectant at both plants was performed and expanded at the recommendation of EPA’s Office of Research and Development in order to have results that addressed the disinfectant byproduct situation and keep lead levels in the distribution system below action levels. Results of the pilot testing for a short term solution completed in 2008 were inconclusive and it was decided to proceed with long term improvements at both treatment plants.

In March 2008, the City of Newport awarded a contract to an engineering firm to serve as the City Advisor for the procurement and the implementation of the long term improvements at Newport’s water treatment plants. The long term improvements include the construction of a new plant to replace the Lawton Valley Facility and upgrades to the existing Station 1 plant to regain the original 9 million gallons per day capacity. During Phase One of the City Advisor contract, a Design-Build (“DB”) delivery method was selected for the long term improvements. Pilot testing of alternative treatment processes was conducted in 2009 and 2010. An advanced treatment approach was approved by the City Council in April 2010 that offers more reliability and certainty; greater ability to address future regulations without upgrades; and, less likelihood of public concerns relative to health effects. Evaluations of treatment plant layouts, environmental and engineering investigations were completed in order to prepare a Request for Proposals (RFP) from DB proposers. The RFP was issued in November 2010 with proposals due in May 2011. The City awarded the DB Contract for the improvements to the Station 1 and Lawton Valley Water Treatment Plants in January 2012. The water treatment plant improvements are scheduled for completion by December 2014.

In January 2010, the City submitted an update to the Water Infrastructure Replacement Plan (IRP) to the RIDOH for review and approval. The long term improvements recommended for the treatment facilities were incorporated into the IRP.

The Capital Improvement Plan adopted by the Newport Water Division is implemented in accordance with the 2010 Water Infrastructure Replacement Plan and the recommendations from the 2004 Compliance Evaluations.