

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

**BEFORE THE
RHODE ISLAND PUBLIC UTILITIES COMMISSION**

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

Docket No. 4025

Direct Testimony and Schedules of

Ernest Harwig

On behalf of

The United States Department of the Navy

Project 9095
April 1, 2009



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Direct Testimony of Ernest Harwig

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Ernest Harwig. My business address is 57 Cedar Summit Road, Asheville,
3 North Carolina, 28803.

4 **Q. WHAT IS YOUR OCCUPATION?**

5 A. I have been a consultant in the field of public utility regulation for over 25 years, with an
6 emphasis on water and wastewater utilities.

7 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

8 A. These are set forth in Appendix A of my testimony.

9 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING**

10 A. I am under contract to Brubaker & Associates, Inc. and have been asked to testify on
11 behalf of the United States Department of the Navy (Navy). Naval Station Newport in
12 Newport, Rhode Island purchases large volumes of water from the Water Division of the

1 City of Newport (NWD or Utility), and it would experience a significant increase in its cost
2 of water if the rates proposed by NWD were to become effective.

3 **Q. WHAT IS THE SUBJECT OF YOUR TESTIMONY?**

4 A. My direct testimony will focus on certain elements of NWD's claimed revenue
5 requirement and allocation of costs. In particular, I will discuss the basis for allocating
6 the City of Newport's support services to the Water Department, as outlined in its Cost
7 Allocation Manual (CAM); the appropriate method of financing of new plant in service
8 with projected service lives in excess of ten years; and the percentage of operating cost
9 requirements that is a reasonable addition to projected operating costs. I also discuss
10 the appropriateness of the current cost of service study and the implementation of the
11 study as ordered in Docket No. 3818.

12 My electing not to address other elements of the Utility's direct testimony should
13 not be construed as an endorsement of the positions put forth by it on any other issues.

14 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

15 A. 1. NWD is one of five Enterprise Funds that benefit from various support services
16 provided by other departments of the City of Newport. These support services are
17 financed by the City's General Fund, and their costs are in turn allocated among the
18 five Funds in accordance with a newly developed Cost Allocation Manual, as ordered
19 by the Commission in NWD's last rate case, Docket No. 3818. The City's allocations
20 add \$781,700 to NWD's administrative expense. This amount is excessive, because
21 NWD's share of costs is not based on the revenue requirement it is requesting in this
22 Docket, and the expenses associated with the City Council and the City Clerk are
23 apportioned on a simple count of the number of Council Docket items heard at each
24 meeting. A review of City Council minutes for Fiscal Year 2008 shows that the
25 number of Docket items is an unreliable proxy for the degree of attention given to
26 water department operations, and it overstates the amount of time spent on Water
27 Department matters by the Council and the Clerk. To the extent that support costs
28 are collected from Enterprise Fund customers, including Middletown retail water
29 customers, Portsmouth Water and Fire District (PWFD) and the Navy, taxpayers in
30 Newport are relieved of this burden. My corrections to the City's allocations reduce
31 the allocation to NWD by \$188,700, as shown in Schedule EH-2.

- 1 2. NWD proposes to finance \$1.65 million of capital improvements in Fiscal Year 2010
2 from current revenues. In response to Navy Data Request No. 1-2, NWD states that
3 several of these improvements have expected service lives of 10, 20 and even 50
4 years. In light of this, it is more appropriate to finance these long-lived improvements
5 with long-term debt. In this manner, costs will be spread out more in line with the
6 useful lives of these capital improvements, and the cost burden will not fall
7 exclusively on current ratepayers. Debt financing of these items reduces NWD's
8 revenue request by \$517,241, as summarized in Schedule EH-3.
- 9 3. NWD is requesting an Additional Revenue Requirement equal to 3.00% of its
10 operating costs. In light of the magnitude of NWD's overall rate increase request,
11 and to reduce rate shock, a 1.5% margin is more appropriate. My adjustment,
12 shown in Schedule EH-4, reduces NWD's request by \$129,288, as shown in
13 Schedule EH-1.
- 14 4. NWD proposes to collect any additional revenues granted to it through an equal
15 percent increase in rates to all customers. This only serves to perpetuate or even
16 exacerbate any disparities between the cost of serving individual customer classes
17 and the revenues collected from them via the existing rate design. When NWD's
18 demand study and cost of service study are completed later this year, the
19 Commission should conduct a Phase II of the instant proceeding to examine the
20 studies and to collect the revenue requirement approved in Phase I in a cost-based
21 manner.

22 NWD's Cost Allocation Manual

23 **Q. WHY HAS THE CITY OF NEWPORT DEVELOPED A COST ALLOCATION MANUAL** 24 **FOR ITS ENTERPRISE OPERATIONS?**

25 A. The Water Department is one of five Enterprise Funds administered by the City of
26 Newport. (The other four Funds are the Water Pollution Control Fund, the Maritime
27 Fund, the Beach Fund, and the Parking Fund.) These Enterprises receive support
28 services from other departments within the overall framework of City government, such
29 as the City Council and City Clerk, the City Manager and City Solicitor, Financing,
30 Accounting, Purchasing and Data Processing.

31 In prior NWD rate cases, a share of these costs was allocated to NWD primarily
32 in proportion to its share of the City's total budget. This method was not satisfactory to
33 all parties in those cases. In its Final Order in NWD's last rate case, Docket No. 3818,

1 the Commission directed the City to develop a CAM that set forth criteria reflecting each
2 Fund's use of City support services. The CAM describes these criteria in detail. NWD
3 has applied these criteria in the instant rate case to calculate its specific share of support
4 costs.

5 **Q. DO YOU AGREE WITH ALL THE CRITERIA FOUND IN THE CITY'S CAM AND**
6 **THEIR APPLICATION IN CALCULATING SPECIFIC ALLOCATION FACTORS?**

7 A. No, I do not. Specifically, I believe NWD grossly overstates its total share of the City's
8 operating budget at 22.30% (see RFC Schedule D Corrected 2). I also believe that
9 NWD overestimates the amount of time devoted to water utility operations by the City
10 Council and the City Clerk.

11 **Q. PLEASE EXPLAIN HOW NWD OVERSTATES ITS SHARE OF THE CITY'S BUDGET,**
12 **AND HOW THAT IN TURN OVER-ALLOCATES CITY SUPPORT COSTS TO WATER**
13 **OPERATIONS.**

14 A. RFC Schedule D Corrected 2 assumes that NWD's revenue requirement is \$19.94
15 million, instead of the approximately \$12 million it is actually requesting for Fiscal Year
16 2010. (The difference between these two figures is detailed in NWD's response to the
17 Division of Public Utilities & Carriers' Data Request No. 1-38.) On this basis, it
18 calculates that its share of the General Fund plus the other four Enterprise Funds is
19 22.30% of a total expenditure of \$89.42 million. Most notably, the \$19.94 million
20 includes \$8.35 million of debt funded capital expenditures, while NWD's revenue request
21 includes *only the debt service* costs for capital improvements.

1 **Q. DO YOU DISAGREE WITH NWD'S CALCULATION?**

2 A. Yes, I do. I believe it is appropriate to calculate NWD's share of the total budget on the
3 basis of its actual revenue request. This approach is also consistent with the
4 Compliance Filing made in Docket No. 3818.

5 **Q. WHAT IS THE EFFECT OF BASING NWD'S SHARE OF THE TOTAL CITY BUDGET**
6 **ON THE BASIS OF ITS ACTUAL REVENUE REQUIREMENT?**

7 A. As shown on my Schedule EH-2, NWD's share of the total budget drops to 13.72%.
8 Thus, its share of the support costs allocated to it with this factor, namely the City
9 Manager, City Solicitor, 80% of Finance costs and non-telephone MIS costs, decreases
10 accordingly.

11 **Q. PLEASE CONTINUE.**

12 A. NWD claims that the number of items pertaining to the Water Department in proportion
13 to the total number of items docketed for discussion at City Council meetings and
14 workshops is a reasonable way to estimate the amount of time and effort devoted to the
15 Water Department by the Council and by the City Clerk. (See Page 2 of the CAM and
16 NWD's response to PWFD's Data Request No. 1-10.) NWD has calculated that 11.40%
17 of all docketed items pertained to the water utility.

18 **Q. DO YOU AGREE WITH THIS METHOD OF ESTIMATING CITY COUNCIL AND CITY**
19 **CLERK EXPENSES IN RELATION TO THE WATER DEPARTMENT?**

20 A. No, I do not. I have reviewed the Minutes of City Council meetings occurring during the
21 2008 Fiscal Year. It is clear from my review that some docketed items are discussed
22 much more fully than others. As they pertain to NWD, in the majority of instances, the

1 Minutes simply note that a communication was received and the accompanying
2 resolution was adopted and voted unanimously by the Council. The Minutes reflected
3 little or no discussion of these items. Other subjects, in contrast, such as street paving,
4 entertainment licenses and environmental projects were often discussed in greater detail
5 than were water utility-related items. A simple tally of docketed items is thus an
6 unreliable proxy for the time actually spent by the Council on Enterprise Fund issues. In
7 view of this, I believe that an allocation factor of 5.00% is very generous.

8 To the extent that these support costs are collected from Enterprise Fund
9 customers, including Middletown retail water customers, PWF and the Navy, property
10 tax payers in Newport are relieved of this burden.

11 As a result of the two adjustments discussed above, the allocation of City support
12 service costs to NWD is decreased by \$188,700, as shown in Schedule EH-2.

13 **Rate-Financed Capital Improvement Projects**

14 **Q. HAVE YOU REVIEWED THE INDIVIDUAL ITEMS SLATED TO BE FINANCED FROM**
15 **CURRENT REVENUES?**

16 A. Yes, I have. They are shown on RFC Schedule 4. In response to the Navy's Data
17 Request No. 1-2, NWD provided its estimate of the service lives of the individual capital
18 improvements to be financed with current rates. These projects and their related service
19 lives are shown on Schedule EH-3. Several of these projects, including GIS and
20 Hydraulic Modeling, the main from Gardiner to Paradise, the Sherman Street Main
21 Improvements, Meter Replacements, Water Trench restoration and Fire Hydrant
22 replacement all have service lives of ten years or greater. The total investment cost of
23 these projects is \$553,199.

1 **Q. DO YOU BELIEVE IT IS APPROPRIATE TO FINANCE SUCH LONG-LIVED**
2 **PROJECTS WITH CURRENT REVENUES?**

3 A. Absolutely not. These projects will benefit NWD's customers for many years into the
4 future. But if they are financed entirely from current revenues, the entire burden of costs
5 for these projects will be borne by today's ratepayers. This is unfair because current
6 customers will be subsidizing future customer benefits and cost responsibility. The costs
7 of these projects should be spread out more in accord with their expected service lives
8 by financing them with long-term debt.

9 **Q. WHAT IS THE IMPACT ON NWD'S REVENUE REQUEST IF THESE PROJECTS ARE**
10 **DEBT FUNDED?**

11 A. NWD's revenue requirement would decrease by \$553,199. However this would be
12 offset by an increase in interest cost associated with debt to finance these projects.
13 Assuming interest only payments for the first year of construction, as posited by NWD in
14 RFC Schedule 5 Revised, the additional interest expense would be \$35,958. The net
15 effect is a reduction of \$517,241 to NWD's revenue request, as shown in
16 Schedule EH-3.

17 **Additional Revenue Requirement**

18 **Q. IS NWD REQUESTING AN ADDITIONAL AMOUNT OF REVENUE TO HELP COVER**
19 **UNEXPECTED INCREASES IN OPERATING AND CAPITAL COSTS?**

20 A. Yes, it is. NWD is requesting an additional 3.00% of operating expenses to cover such
21 contingencies.

1 **Q. DO YOU BELIEVE THIS REQUEST IS REASONABLE?**

2 A. No, I do not. I believe a 1.50% margin is adequate, given the magnitude of the percent
3 increase in rates NWD is requesting. My calculation of the additional revenue
4 requirement is shown on Schedule EH-4. This 1.50% margin is also consistent with the
5 Commission's Order and the Compliance Filing in Docket No. 3818.

6 **Q. DO YOU HAVE ANY ADDITIONAL THOUGHTS ON THE LEVEL OF INCREASE**
7 **SOUGHT BY NWD IN THIS CASE?**

8 A. Yes I do. NWD has the option to finance its capital improvements either with debt or
9 with financing from current revenues. Likewise, it can choose the percent of operating
10 costs to use as a cushion against unforeseen expenses. These items are under its
11 control. So I am somewhat surprised that NWD has chosen to finance \$1.65 million of
12 capital expenditures from rates and to once again propose a 3.00% margin, especially in
13 light of the current 10.3%¹ unemployment rate in the State of Rhode Island and the
14 current 11.2%² unemployment rate in the City of Newport. An increase in the cost of
15 water as proposed by NWD only makes it harder for those that are required to pay for
16 water service.

17 **Cost Allocation Proposed**

18 **Q. DO YOU AGREE WITH THE METHOD OF IMPOSING A RATE INCREASE**
19 **PROPOSED BY NWD?**

20 A. No, I do not.

¹United States Department of Labor, Bureau of Labor Statistics, Economy at a Glance, Rhode Island (www.bls.gov/eag/eag.ri.htm).

²LMI Data Center, Local Area Unemployment Statistics (www.dlt.ri/lmi/laus/town/newport.htm).

1 **Q. PLEASE EXPLAIN.**

2 A. NWD proposes to increase all rates by an equal percent to recover any revenue
3 increase it may be granted in this case. However, an across-the-board increase could
4 perpetuate, or even exacerbate, disparities between the revenues collected from each
5 customer class and the cost to serve those respective classes. This has been a concern
6 expressed by the Navy in several of NWD's past rate cases. There is no evidence
7 available to determine whether these potential inequities are indeed the case until NWD
8 produces a fully allocated cost of service study, based on the peak demand study
9 scheduled to begin in May of this year. Even so, NWD has indicated in its Response to
10 Navy Data Request No. 1-5 that it may have to seek a 60-day extension of the
11 Commission's deadline for filing the cost of service study. Given this timetable, the
12 study would not be available for analysis by the parties to this case until sometime in
13 November. Potential inequities would continue until cost-based rates are implemented.

14 **Q. WHEN THE COST STUDY IS FINALLY COMPLETED, HOW AND WHEN SHOULD**
15 **ITS RESULTS BE REFLECTED IN NWD'S RATE STRUCTURE?**

16 A. It should be implemented in a Phase II of the instant proceeding.

17 **Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

18 A Yes, it does.

Qualifications of Ernest Harwig

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. Ernest Harwig. My business mailing address is 57 Cedar Summit Road, Asheville, NC
3 28803.

4 **Q. WHAT IS YOUR OCCUPATION?**

5 A. I am a consultant in the field of public utility regulation. I work on a contract basis with
6 Brubaker & Associates, Inc., energy, economic and regulatory consultants.

7 **Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

8 A. I graduated from Austin College with a Bachelor of Arts Degree in Economics.
9 Subsequently, I received a Master of Arts Degree in International Economics from Texas
10 Tech University. I later attended seminars in Economics at the University of Cologne in
11 the Federal Republic of Germany. I also received a Master of Arts Degree while
12 completing all course work towards the Ph.D. at Southern Methodist University. My
13 major field was Industrial Organization.

14 Prior to joining Drazen-Brubaker & Associates, Inc., I was employed as a utility
15 rate analyst with the Public Service Commission of Wisconsin, where I represented the
16 Staff in private and municipal electric utility rate cases. I also prepared exhibits for
17 presentation in major electric utility rate cases.

18 I joined the firm of Drazen-Brubaker & Associates, Inc., in September 1975. In
19 addition to our main office in St. Louis, the firm also has branch offices in Phoenix,
20 Arizona; Chicago, Illinois; Corpus Christi, Texas; and Plano, Texas. In April 1995, the
21 firm of Brubaker & Associates, Inc. was formed. It includes most of the former DBA

1 principals and staff. At the firm, I have been engaged in the preparation of testimony
2 and exhibits relating to electric, gas, water, wastewater and steam utilities. These
3 included determinations of rate base, operating income and depreciation rates; the
4 performance of cost of service studies; and the design of rates for utility services. I have
5 also provided technical assistance in the negotiation of contracts for water and
6 wastewater services between municipal suppliers and industrial customers. I have been
7 a member of the American Water Works Association since 1986.

8 **Q. ARE YOU AN AUTHOR OF ANY PUBLICATIONS?**

9 A. Yes. I am the co-author of two articles: "Municipal Electric Utility Pricing," which
10 appeared in the February 1976 issue of Governmental Finance, and "Water Rates: An
11 Industrial User's View," which appeared in the May 1986 issue of Journal AWWA.

12 **Q. HAVE YOU PREVIOUSLY APPEARED BEFORE A REGULATORY COMMISSION?**

13 A. Yes. I have testified before the public utility regulatory commissions of Alabama,
14 California, Delaware, Illinois, Indiana, Kentucky, Minnesota, Missouri, New Hampshire,
15 New Jersey, Pennsylvania, Rhode Island, Tennessee, Texas, West Virginia and
16 Wisconsin. In addition, I have assisted both utility customers and suppliers in local rate
17 proceedings and contract negotiations for water and wastewater services in about
18 twenty states.

**Newport Water Department
RIPUC Docket No. 4025**

Summary of Navy Adjustments To NWD Revenue Requirement Proposal

<u>Line</u>	<u>Description</u>	<u>Amount Per NWD</u> (1)	<u>Navy Adjustment</u> (2)	<u>Adjusted Amount</u> (3)	<u>Reference</u> (4)
<u>Operating Revenue Requirements</u>					
1	Administration	\$2,568,543	(\$188,700)	\$2,379,843	Schedule EH-2
2	Customer Service	724,850	0	724,850	
3	Source of Supply - Island	633,700	0	633,700	
4	Source of Supply - Mainland	146,500	0	146,500	
5	Treatment - Newport Plant (Station One)	1,712,800	0	1,712,800	
6	Treatment - Lawton Valley	1,650,150	0	1,650,150	
7	Water Laboratory	249,450	0	249,450	
8	Transmission & Distribution Maintenance	1,100,900	0	1,100,900	
9	Fire Protection	21,000	0	21,000	
10	Total Operating Requirements	<u>\$8,807,893</u>	<u>(\$188,700)</u>	<u>\$8,619,193</u>	
<u>Capital Revenue Requirements</u>					
11	Contribution to Debt Service Account	\$1,893,101	\$35,958	\$1,929,059	Schedule EH-3
12	Contribution to Capital Spending Account	1,652,019	(553,199)	1,098,820	Schedule EH-3
13	Total Capital Requirements	<u>\$3,545,120</u>	<u>(\$517,241)</u>	<u>\$3,027,879</u>	
14	Subtotal -Revenue Requirements	\$12,353,013	(\$705,941)	\$11,647,072	
15	Additional Rev Requirements (Operating Revenue)	<u>\$264,237</u>	<u>(\$134,949)</u>	<u>\$129,288</u>	Schedule EH-4
16	Revenue Requirements before Offsets	\$12,617,250	(\$840,890)	\$11,776,360	
17	Less: Revenue Offsets	<u>(\$708,065)</u>	<u>\$0</u>	<u>(\$708,065)</u>	
18	Net Revenue Requirements	\$11,909,185	(\$840,890)	\$11,068,295	

Sources:

RFC Schedule 1
RFC Schedule D Corrected 2
NWD Response to Navy DR 1-4, Attachment
RFC Schedule 5 Revised

Newport Water Department
RIPUC Docket No. 4025

Adjustments to Cost Allocation Manual

<u>Line</u>	<u>City Service Item</u>	Budgeted Cost To Be <u>Allocated</u> (1)	Allocation Percent <u>Per NWD</u> (2)	Allocation To Water Dept. <u>Per NWD</u> (3)	Allocation Percent <u>Per Navy</u> (4)	Allocation To Water Dept. <u>Per Navy</u> (5)	Adjustment <u>(Col. 5 - Col. 3)</u> (6)
1	Audit Fees	\$ 84,875	6.18%	\$ 5,245	6.18%	\$ 5,245	\$ -
2	City Council	76,665	11.40%	8,740	5.00%	3,833	(4,907)
3	Citizen Survey	16,000	8.30%	1,328	8.30%	1,328	-
4	City Clerk	319,706	11.40%	36,446	5.00%	15,985	(20,461)
5	City Manager	418,103	22.30%	93,237	13.72%	57,364	(35,873)
6	Human Resources	303,388	12.90%	39,137	12.90%	39,137	-
7	City Solicitor	289,177	22.30%	64,486	13.72%	39,675	(24,811)
8	Finance Admin. - 80%	310,370	22.30%	69,213	13.72%	42,583	(26,630)
9	Finance Admin. - 10%	38,796	31.00%	12,027	31.00%	12,027	-
10	Purchasing	90,123	17.90%	16,132	17.90%	16,132	-
11	Assessment	113,456	10.00%	11,346	10.00%	11,346	-
12	Collections	313,663	20.50%	64,301	20.50%	64,301	-
13	Accounting - 5%	9,749	100.00%	9,749	100.00%	9,749	-
14	Accounting	383,951	16.90%	64,888	16.90%	64,888	-
15	Public Safety	28,531,884	0.10%	28,532	0.10%	28,532	-
16	Facilities Maint.	<u>823,521</u>	4.00%	<u>32,941</u>	4.00%	<u>32,941</u>	-
17	Total Legal & Admin.	\$ 32,123,427		\$ 557,747		\$ 445,065	\$ (112,682)
18	MIS - Communications	\$ 328,960	7.90%	\$ 25,988	7.90%	\$ 25,988	\$ -
19	MIS - Other Costs	<u>886,172</u>	22.30%	<u>197,616</u>	13.72%	<u>121,583</u>	<u>(76,034)</u>
20	Total MIS	\$ 1,215,132		\$ 223,604		\$ 147,571	\$ (76,034)
21	Total Administrative Cost	\$ 33,338,559		\$ 781,352		\$ -	\$ (188,716)
22	Use			\$ 781,700			\$ (188,700)

Source:
RFC Schedule D Corrected 2
Workpaper

**Newport Water Department
RIPUC Docket No. 4025**

Adjustments to Rate-Financed Capital Improvement Projects

<u>Line</u>	<u>Rate Funded Project</u>	<u>Estimated Service Lives Per NWD Response to Navy Dat. Req. 1-2 (1)</u>	<u>Rate Year 2010 (2)</u>
1	Safe Yield Study		
2	GIS and Hydraulic Modeling	20	\$ 90,000
3	IRP Update- RIDOH due Jan 2010	5	80,000
4	Water Quality Protection Plan Update- RIWRB	5	80,000
5	WSSMP 5 year Update- RIWRB due July 2012		
6	Easton Pond Dam Imprv - North & West Embank		
7	Maguire Amen #11 Sediment Assess prop for NOV-CA		
8	Sediment Assessment - Lawton Brook	NA	35,000
9	Maguire Amend #9- assist with NOV- CA		
10	LVWTP RIPDES CA- Constructed Wetlands; Maguire Amend #12		
11	Constructed Wetlands/Flow Diversion		
12	Main from Gardiner to Paradise	50	150,000
13	Intake at Paradise		
14	Intake at Watson & Nonquit		-
15	Intake at Sissons		
16	Demolition of Old Nonquit Pump Sta	NA	125,000
17	Dam and Dike Rehabilitation - Lawton Valley		
18	Dam and Spillway Rehabilitation - Station 1		
19	Lawton Valley WTP - Chloramine Conversion Design	NA	30,410
20	Lawton Valley Water Age Study		
21	LVWTP pH design		
22	Station 1 - Chloramine Conversion Design	NA	30,410
23	Sta 1 pH design		
24	City Agent for New LVWTP & Sta1 Imprv		
25	Ocean Ave Water project (closeout)		
26	Distribution Main Iprov.(Sherman St) Design & Construct	50	156,952
27	Meter Replacement	10	64,247
28	Forest Ave Pump Sta Imprv.		-
29	Water Trench Restoration	10	75,000
30	Fire Hydrant Replacement	50	17,000
31	LV 4 Mgal resrv Aeration- Design & Constr	5	600,000
32	Equipment and Vehicle Replacement	6	118,000
33	Fire Code Upgrades		
34	Gross Rate Funded Capital		\$ 1,652,019
35	Cost of Rate-Funded Projects with Service Lives of Ten Years or Greater		\$ 553,199
36	Interest Rate per NWD Response to Navy DR 1-4		<u>6.50%</u>
37	Additional Interest Cost		\$ 35,958
38	Cost of Remaining Rate-Funded Capital Improvements		\$ 1,098,820

Sources:
RFC Schedule 4
NWD Response to Navy Data Request No. 1-2 and No. 1-4

**Newport Water Department
RIPUC Docket No. 4025**

Calculation of Additional Revenue Requirement

<u>Line</u>	<u>Description</u>	<u>Amount</u> <u>(1)</u>
1	Total Operating Requirements	\$8,619,193
2	Additional Revenue Requirement at 1.50%	<u>1.50%</u>
3	Additional Revenue Requirement	\$129,288