

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

CITY OF NEWPORT) DOCKET NO. 4355

SURREBUTTAL TESTIMONY

OF

JEROME D. MIERZWA

ON BEHALF OF THE

DIVISION OF PUBLIC UTILITIES AND CARRIERS

FEBRUARY 7, 2013

EXETER

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

BEFORE THE
PUBLIC UTILITIES COMMISSION
OF RHODE ISLAND

CITY OF NEWPORT) DOCKET NO. 4355

REBUTTAL TESTIMONY OF JEROME D. MIERZWA

1

I. Introduction

2 Q.

WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS
ADDRESS?

3

4 A.

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

7

8 Q.

WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

9 A.

The primary purpose of my rebuttal testimony is to address the rebuttal
testimony of City of Newport witness Harold J. Smith and the direct testimony
of Portsmouth Water & Fire District ("PWFD") witness Christopher P.N.
Woodcock. I also briefly discuss Newport's December 28, 2012 compliance
filing in Docket No. 4243.

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14

15

II. Docket No. 4243 Compliance Filing

16 Q.

BEFORE ADDRESSING THE TESTIMONY OF WITNESSES SMITH
AND WOODCOCK, PLEASE DISCUSS NEWPORT'S COMPLIANCE
FILING IN DOCKET NO. 4243.

17

18

1 A. As explained in my direct testimony, in Docket No. 4243, the Commission
2 approved a multi-year rate plan for Newport to reflect increases in debt
3 service associated with the design and construction of a new Lawton Valley
4 Water Treatment Plant and improvements to the Station One Water
5 Treatment Facility (collectively "Treatment Plant Projects"). The cost of
6 service study filed by Newport in Docket 4355 reflected \$1,986,710 in
7 additional debt service costs related to the Treatment Plant Projects as an
8 estimate for the next phase of its approved multi-year rate plan. The actual
9 amount of the requested increase in debt service costs was to be made
10 through a compliance filing in the near future. On December 28, 2012,
11 Newport made its compliance filing in Docket No. 4243, seeking an increase
12 in debt service of \$2,145,647.

13
14 **III. Production Demand Factors**

15 Q. WHAT IS THE FIRST COST OF SERVICE STUDY ISSUE THAT YOU
16 WILL ADDRESS?

17 A. First, I will address the Water Production Peaking Analyses presented in
18 Schedule B-7 which develops production demand factors that are used to
19 determine Newport's average day, maximum day and maximum hour costs
20 (collectively "base-extra capacity costs") in the cost of service study.

21 Q. PLEASE EXPLAIN HOW NEWPORT INITIALLY DETERMINED THE
22 PRODUCTION DEMAND FACTORS IN SCHEDULE B-7.

23 A. Witness Smith initially determined average day and maximum day production
24 demand factors based on an average of FY 2008-FY 2010 production
25 volumes, and the maximum hour production demand factor based on an

1 average of FY 2010-FY 2012 production volumes. In my direct testimony I
2 recommended that each production demand factor should be determined
3 based on FY 2008-FY 2010 production volumes and noted that Newport had
4 conceptually agreed to this change.

5 Q. WHAT IS WITNESS WOODCOCK'S CONCERN WITH NEWPORT'S
6 SCHEDULE B-7 AND THE CALCULATION OF PRODUCTION
7 DEMAND FACTORS?

8 A. Witness Woodcock also notes that the Company used the period FY 2008-FY
9 2010 to calculate average day and maximum day production demand factors,
10 but used the period FY 2010-FY 2012 to calculate the maximum hour
11 production demand factor. He claims that it is inappropriate to mix time
12 periods as Newport has done, and recommends that a three-year average of
13 production volumes for the period FY 2010-FY 2012 be used to calculate
14 each production demand factor.

15 Q. WHAT HAS WITNESS SMITH PROPOSED IN HIS REBUTTAL
16 TESTIMONY WITH RESPECT TO PRODUCTION DEMAND
17 FACTORS?

18 A. Under the base-extra capacity cost of service study method used by Newport,
19 costs are initially allocated to the average day, maximum day and maximum
20 hour cost categories based on production demand factors. The costs
21 allocated to these functional base-extra capacity categories are subsequently
22 assigned to each customer class based on the relative average day,
23 maximum day and maximum hour demands of each class ("class demand
24 factors"). These class demand factors were developed based on a sampling
25 of customer usage data collected during the summers of 2011 and 2012.

1 Because base-extra capacity costs have been assigned to class based on
2 2011 and 2012 usage data, witness Smith recommends that the production
3 demand factors used in the cost of service study should be determined based
4 on an average of FY 2011 and FY 2012 production volumes.

5 Q. IS WITNESS SMITH'S PROPOSAL TO BASE PRODUCTION
6 DEMAND FACTORS BASED ON AN AVERAGE OF FY 2011 AND FY
7 2012 PRODUCTION VOLUMES REASONABLE?

8 A. Yes.

9
10 **IV. Allocation of Treatment Plant Project Costs**

11 Q. HOW IS NEWPORT PROPOSING TO ALLOCATE TREATMENT
12 PLANT PROJECT COSTS IN THE COST OF SERVICE STUDY?

13 A. Newport is proposing to allocate the costs associated with the Treatment
14 Plant Projects based on the projected peak demands provided to Newport by
15 the Navy and PWFD.

16 Q. IN YOUR DIRECT TESTIMONY, DID THE DIVISION AGREE WITH
17 NEWPORT'S PROPOSAL TO ALLOCATE TREATMENT PLANT
18 PROJECT COSTS BASED ON PROJECTED PEAK DEMANDS?

19 A. No. In my direct testimony I noted that the Treatment Plant Project facilities
20 are not anticipated to be in service until at least 2015, and recommended that
21 any potential change to the allocation of treatment capital costs be deferred
22 until a time closer to the in-service date of the Treatment Plant Projects.

1 Q. DOES NEWPORT WITNESS SMITH CONTINUE TO SUPPORT AN
2 ALLOCATION OF TREATMENT PLANT PROJECT COSTS BASED
3 ON PROJECTED PEAK DEMANDS IN HIS REBUTTAL TESTIMONY?

4 A. Yes. Witness Smith claims that Newport is simply asking that the Navy and
5 PWFD pay for the capacity they claimed they needed when Newport was in
6 the planning stages for the Treatment Plant Projects. He claims Newport
7 sized the capacity of the Treatment Plant Projects according to the stated
8 needs of the Navy and PWFD. He further claims that under the existing cost
9 allocation procedures which were agreed upon in Docket No. 4128, the Navy
10 and PWFD will only pay for the capacity they requested if they use it. If the
11 actual demands of the Navy and PWFD are less than the requested capacity,
12 then the Navy and PWFD will only pay for a portion of the capacity they
13 requested.

14 Q. SHOULD NEWPORT'S PROPOSED CHANGE TO THE
15 ALLOCATION OF TREATMENT PLANT BE ADOPTED?

16 A. No. Witness Smith notes that the capacity requested by the Navy and the
17 PWFD are less than their current capacity needs. The Navy and PWFD are
18 projected to require 27 percent of the capacity of the Treatment Plant Project
19 facilities, while Newport will require the remaining 73 percent. Under the cost
20 allocation procedures agreed upon in Docket No. 4128, treatment costs are
21 allocated based on actual use. The Treatment Plant Projects will be in
22 service for at least 20 years. While in service, the treatment capacity needs
23 of Newport, the Navy and PWFD are likely to differ from current projections.
24 For example, Newport's treatment capacity needs may increase beyond
25 current projections and the needs of the Navy and PWFD may decrease

1 below current projections. Newport's proposal to allocate Treatment Plant
2 Project costs based on projected capacity needs is incomplete because it fails
3 to address the important cost allocation inequities that could result. For
4 example, say in 15 years, treatment plant capacity paid for by one party
5 (Party A) is not required by Party A, but is needed to serve another party
6 (Party B). Under these circumstances, Party A could claim that it should be
7 compensated by Party B for the 15-year period during which Party A paid for
8 capacity that is now required to serve Party B. Because Newport's proposal
9 does not address how differences between projected and actual capacity
10 requirements will be resolved, it should not be adopted.

11 Q. HAVE YOU PREPARED A REVISED COST OF SERVICE STUDY TO
12 REFLECT NEWPORT'S ACTUAL FILED INCREASE IN DEBT
13 SERVICE COSTS AND YOUR RECOMMENDATION WITH
14 RESPECT TO THE ALLOCATION OF TREATMENT COSTS?

15 A. Yes. I have attached a revised cost of service study to my testimony. This
16 revised study also incorporates the revised asset listing provided by Newport
17 in the supplemental response to PWFD 2-1.

18 Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

19 A. Yes, it does.

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Newport Water Cost of Service Model

Index of Model Schedules

Summary Schedules

- JDM Schedule Surrebuttal A-1 Revenue Requirements
- JDM Schedule Surrebuttal A-2 Cost of Service Rates and Charges
- JDM Schedule Surrebuttal A-3 Bill Impacts
- JDM Schedule Surrebuttal A-4 Revenue Proof

COS Model Schedules

- JDM Schedule Surrebuttal B-1 Base Extra Capacity Cost Allocations
- JDM Schedule Surrebuttal B-2 Allocation of Costs to Water Rate Classes
- JDM Schedule Surrebuttal B-3 Cost Allocation Bases
- JDM Schedule Surrebuttal B-4 Allocation Analyses
- JDM Schedule Surrebuttal B-5 Capital Functionalization
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- JDM Schedule Surrebuttal B-7 Water Production Peaking Analysis
- JDM Schedule Surrebuttal B-8 Billed Demand Peaking Analysis: Determination of Customer Class Peak
- JDM Schedule Surrebuttal B-9 System Demands Imposed by Each Customer Class' Peaking Behavior
- JDM Schedule Surrebuttal B-10 Summary of Peak Load Distributions (by Rate Class and Base/Extra-Capac
- JDM Schedule Surrebuttal B-11 Fire Protection Demand Analysis

Supporting Data

- JDM Schedule Surrebuttal D-1 Water Accounts, by Size and Class
- JDM Schedule Surrebuttal D-2 Fire Protection Accounts
- JDM Schedule Surrebuttal D-3 Production Summary
- JDM Schedule Surrebuttal D-4 Demand Summary
- JDM Schedule Surrebuttal D-5 Development of Pumping Costs
- JDM Schedule Surrebuttal D-6 Debt Service Restricted Account Cashflow
- JDM Schedule Surrebuttal D-7 Demand Factor Calculations

	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	(\$2,126,853)	\$3,735,016
Total Capital Costs	\$ 4,089,369	\$ 8,361,869	\$ (2,126,853)	\$ 6,235,016
Operating Revenue Allowance	\$ 254,733	\$ 254,733		\$ 254,733
Total Costs before Offsets	\$ 12,835,200	\$17,107,700	\$ (2,126,853)	\$ 14,980,847
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 service	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	\$ (2,126,853)	\$ 14,245,818

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

Newport Water
 Cost Of Service Analysis
 JDM Schedule Surrebuttal 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	\$ 7.7374	\$ 7.74	-59%	\$10,213
3/4	\$	18.75	7.8252	7.83	-58%	6,010
1	\$	18.75	8.5521	8.55	-54%	16,933
1.5	\$	18.75	10.3958	10.40	-45%	22,206
2	\$	18.75	12.1812	12.18	-35%	31,428
3	\$	18.75	21.9433	21.94	17%	13,166
4	\$	18.75	24.5792	24.58	31%	3,539
5	\$	18.75	28.0938	28.09	50%	337
6	\$	18.75	30.7297	30.73	64%	7,375
8	\$	18.75	37.7588	37.76	101%	453
10	\$	18.75	50.4990	50.50	169%	606
						112,266
Quarterly						
5/8	\$	18.75	\$ 10.5721	10.57	-44%	450,582
3/4	\$	18.75	10.8357	10.84	-42%	104,629
1	\$	18.75	13.0164	13.02	-31%	20,358
1.5	\$	18.75	18.5476	18.55	-1%	13,799
2	\$	18.75	23.9037	23.90	27%	5,641
3	\$	18.75	53.1900	53.19	184%	3,617
4	\$	18.75	61.0977	61.10	226%	733
5	\$	18.75	71.6414	71.64	282%	0
6	\$	18.75	79.5491	79.55	324%	1,273
8	\$	18.75	100.6364	100.64	437%	0
10	\$	18.75	138.8571	138.86	641%	0
						\$ 712,899
Volume Charge (per 1,000 gallons)						\$825,165
Retail						
Residential	\$	6.43	\$ 8.2230	8.22	28%	5,181,579
Non-Residential	\$	6.43	\$ 9.1703	9.17	43%	4,581,899
						\$ 9,763,479
Wholesale						
Navy	\$	3.9540	\$ 5.2750	5.28	33%	944,078
Portsmouth Water & Fire District	\$	3.152	\$ 4.1811	4.18	33%	1,791,691
						\$ 2,735,769
Fire Protection						
Public (per hydrant)	\$	1,065.00	\$ 720.03	720.03	-32%	\$ 745,236
Private (by Connection Size) (2)						
			Existing Charge			
Connection Size			Differential			
<2		\$21.00	\$ 19.37	\$ 19.37	-8%	
2	6.19	\$88.00	\$ 81.17	\$ 81.17	-8%	325
4	38.32	\$541.00	\$ 295.04	\$ 295.04	-45%	18,292
6	111.31	\$1,083.00	\$ 708.79	\$ 708.79	-35%	173,655
8	237.21	\$2,478.00	\$ 1,422.44	\$ 1,422.44	-43%	88,191
10	426.58	\$4,091.00	\$ 2,495.92	\$ 2,495.92	-39%	-
12	689.04	\$6,568.00	\$ 3,983.72	\$ 3,983.72	-39%	7,967
						\$ 288,430
Total Projected Rate Revenues						\$ 14,245,813

(1) From JDM Schedule Surrebuttal B-2, 'Allocation of Costs to Water Rate Classes'.
 (2) From JDM Schedule Surrebuttal D-2, 'Fire Protection Accounts'.

Customer Class	Proposed																				
	All Meter			5/8 Inch Meter			3/4 Inch Meter			1 Inch Meter			1.5 Inch Meter			2 Inch Meter			3 Inch Meter		
	Monthly Consumption (gallons)	Bill at Current Rates	Proposed Dollar Change	Proposed Percent Change	Bill at Proposed Rates	Proposed Dollar Change	Proposed Percent Change	Bill at Proposed Rates	Proposed Dollar Change	Proposed Percent Change	Bill at Proposed Rates	Proposed Dollar Change	Proposed Percent Change	Bill at Proposed Rates	Proposed Dollar Change	Proposed Percent Change	Bill at Proposed Rates	Proposed Dollar Change	Proposed Percent Change		
Residential (Monthly)	1,000	\$25.18	\$15.96	-36.6%	\$16.05	-\$9.13	-36.3%	\$16.78	-\$8.40	-33.4%	\$18.62	-\$6.56	-26.1%	\$20.40	-\$4.78	-19.0%	\$30.17	-\$4.99	-19.3%	\$4.99	
	2,000	\$31.61	\$24.18	-23.5%	\$24.27	-\$7.34	-23.2%	\$25.00	-\$6.61	-20.9%	\$26.84	-\$4.77	-15.1%	\$28.63	-\$2.98	-9.4%	\$38.39	-\$6.78	-17.4%	\$6.78	
	4,000	\$44.47	\$40.63	-8.6%	\$40.72	-\$3.75	-8.4%	\$41.44	-\$3.03	-6.8%	\$43.29	-\$1.18	-2.7%	\$45.07	\$0.60	1.4%	\$54.84	\$10.37	23.3%	\$10.37	
	5,000	\$50.90	\$48.85	-4.0%	\$48.94	-\$1.96	-3.9%	\$49.67	-\$1.23	-2.4%	\$51.51	\$0.61	1.2%	\$53.30	\$2.40	4.7%	\$63.06	\$12.16	23.9%	\$12.16	
	7,500	\$66.98	\$69.41	3.6%	\$69.50	\$2.52	3.8%	\$70.22	\$3.25	4.9%	\$72.07	\$5.09	7.6%	\$73.85	\$6.88	10.3%	\$83.62	\$16.64	24.8%	\$16.64	
	10,000	\$83.05	\$89.97	8.3%	\$90.06	\$7.01	8.4%	\$90.78	\$7.73	9.3%	\$92.63	\$9.58	11.1%	\$94.41	\$11.36	13.7%	\$104.17	\$21.12	25.4%	\$21.12	
	15,000	\$115.20	\$131.08	13.8%	\$131.17	\$15.97	13.9%	\$131.90	\$16.70	14.5%	\$133.74	\$18.54	16.1%	\$135.53	\$20.33	17.6%	\$145.29	\$30.09	26.1%	\$30.09	
	20,000	\$147.35	\$172.20	16.9%	\$172.29	\$24.94	16.9%	\$173.01	\$25.66	17.4%	\$174.86	\$27.51	18.7%	\$176.64	\$28.29	19.9%	\$186.40	\$39.05	26.5%	\$39.05	
	25,000	\$179.50	\$213.31	18.8%	\$213.40	\$33.90	18.9%	\$214.13	\$34.63	19.3%	\$215.97	\$36.47	20.3%	\$217.76	\$38.26	21.3%	\$227.52	\$48.02	26.8%	\$48.02	
	30,000	\$211.65	\$254.43	20.2%	\$254.52	\$42.87	20.3%	\$255.24	\$43.59	20.6%	\$257.09	\$45.44	21.5%	\$258.87	\$47.22	22.3%	\$268.63	\$56.98	26.9%	\$56.98	

Residential(Quarterly)

1,000	\$25.18	\$18.80	-\$6.38	-25.4%	\$19.06	-\$6.12	-24.3%	\$21.24	-\$3.94	-15.6%	\$26.77	\$1.59	6.3%	\$32.13	\$6.95	27.6%	\$61.41	\$36.23	143.9%	\$36.23
2,000	\$31.61	\$27.02	-\$4.59	-14.5%	\$27.28	-\$4.33	-13.7%	\$29.46	-\$2.15	-6.8%	\$34.99	\$3.38	10.7%	\$40.35	\$8.74	27.6%	\$69.64	\$38.03	120.3%	\$38.03
3,000	\$38.04	\$35.24	-\$2.80	-7.4%	\$35.50	-\$2.54	-6.7%	\$37.69	-\$0.35	-0.9%	\$43.22	\$5.18	13.6%	\$48.57	\$10.53	27.7%	\$77.86	\$39.82	104.7%	\$39.82
4,000	\$44.47	\$43.46	-\$1.01	-2.3%	\$43.73	-\$0.74	-1.7%	\$45.91	\$1.44	3.2%	\$51.44	\$6.97	15.7%	\$56.80	\$12.33	27.7%	\$86.08	\$41.61	93.6%	\$41.61
5,000	\$50.90	\$51.69	\$0.79	1.5%	\$51.95	\$1.05	2.1%	\$54.13	\$3.23	6.3%	\$59.66	\$8.76	17.2%	\$65.02	\$14.12	27.7%	\$94.31	\$43.41	85.3%	\$43.41
10,000	\$115.20	\$133.92	\$18.72	16.2%	\$134.18	\$18.98	16.5%	\$136.36	\$21.16	18.4%	\$141.89	\$26.69	23.2%	\$147.25	\$32.05	27.8%	\$176.54	\$61.34	53.2%	\$61.34
15,000	\$147.35	\$193.99	\$46.64	31.6%	\$194.22	\$46.87	31.6%	\$196.40	\$47.05	31.6%	\$198.57	\$48.17	31.6%	\$200.74	\$48.39	31.6%	\$202.91	\$48.61	31.6%	\$48.61
20,000	\$179.50	\$233.15	\$53.65	29.9%	\$233.40	\$54.90	29.9%	\$233.65	\$56.15	29.9%	\$233.90	\$57.40	29.9%	\$234.15	\$57.65	29.9%	\$234.40	\$57.90	29.9%	\$57.90
25,000	\$211.65	\$283.87	\$172.22	81.4%	\$284.12	\$172.47	81.4%	\$284.37	\$172.72	81.4%	\$285.02	\$173.27	81.4%	\$285.57	\$173.82	81.4%	\$286.12	\$174.37	81.4%	\$174.37
30,000	\$254.43	\$333.33	\$78.90	31.0%	\$333.60	\$79.17	31.0%	\$333.87	\$79.44	31.0%	\$334.14	\$79.71	31.0%	\$334.41	\$79.98	31.0%	\$334.68	\$80.25	31.0%	\$80.25

Commercial (Monthly)

Customer Class	Proposed																				
	All Meter			5/8 Inch Meter			3/4 Inch Meter			1 Inch Meter			1.5 Inch Meter			2 Inch Meter			3 Inch Meter		
	Monthly Consumption (gallons)	Bill at Current Rates	Proposed Dollar Change	Proposed Percent Change	Bill at Proposed Rates	Proposed Dollar Change	Proposed Percent Change	Bill at Proposed Rates	Proposed Dollar Change	Proposed Percent Change	Bill at Proposed Rates	Proposed Dollar Change	Proposed Percent Change	Bill at Proposed Rates	Proposed Dollar Change	Proposed Percent Change	Bill at Proposed Rates	Proposed Dollar Change	Proposed Percent Change		
Commercial (Monthly)	2,000	\$31.61	\$26.08	-14.3%	\$26.17	-\$5.44	-17.2%	\$26.89	-\$4.72	-14.9%	\$28.74	-\$2.87	-9.1%	\$30.52	-\$1.09	-3.4%	\$40.28	-\$8.67	-21.4%	\$8.67	
	5,000	\$83.05	\$73.59	-11.3%	\$73.68	-\$9.46	-11.3%	\$74.40	-\$8.65	-10.3%	\$76.25	-\$6.80	-8.9%	\$78.10	-\$4.95	-6.3%	\$97.79	-\$19.69	-20.1%	\$19.69	
	10,000	\$115.20	\$103.99	-10.6%	\$104.18	-\$11.21	-9.7%	\$104.37	-\$10.83	-9.4%	\$104.56	-\$10.44	-9.1%	\$104.75	-\$10.05	-8.8%	\$125.34	-\$14.61	-11.6%	\$14.61	
	20,000	\$211.65	\$197.50	-7.2%	\$197.69	-\$14.15	-6.7%	\$197.88	-\$13.77	-6.3%	\$198.07	-\$13.39	-5.9%	\$198.26	-\$13.01	-5.5%	\$238.85	-\$40.87	-17.1%	\$40.87	
	40,000	\$423.30	\$395.00	-6.7%	\$395.19	-\$28.30	-6.7%	\$395.38	-\$28.01	-6.6%	\$395.57	-\$27.72	-6.5%	\$395.76	-\$27.43	-6.4%	\$478.62	-\$40.86	-8.5%	\$40.86	
	50,000	\$501.00	\$466.25	-7.1%	\$466.44	-\$34.75	-6.9%	\$466.63	-\$34.56	-6.8%	\$466.82	-\$34.37	-6.7%	\$467.01	-\$34.18	-6.6%	\$561.26	-\$94.25	-16.8%	\$94.25	
	75,000	\$661.75	\$619.51	-6.2%	\$619.70	-\$42.24	-6.4%	\$619.89	-\$42.05	-6.3%	\$620.08	-\$41.86	-6.2%	\$620.27	-\$41.67	-6.1%	\$745.51	-\$125.24	-17.0%	\$125.24	
	100,000	\$790.35	\$733.33	-6.1%	\$733.52	-\$57.02	-7.2%	\$733.71	-\$56.83	-7.2%	\$733.90	-\$56.64	-7.1%	\$734.09	-\$56.45	-7.0%	\$881.65	-\$148.32	-16.9%	\$148.32	

Commercial with 6" Fire Connection(Monthly Account)

Customer Class	Proposed																				
	All Meter			5/8 Inch Meter			3/4 Inch Meter			1 Inch Meter			1.5 Inch Meter			2 Inch Meter			3 Inch Meter		
	Annual Consumption (gallons)	Bill at Current Rates	Proposed Dollar Change	Proposed Percent Change	Bill at Proposed Rates	Proposed Dollar Change	Proposed Percent Change	Bill at Proposed Rates	Proposed Dollar Change	Proposed Percent Change	Bill at Proposed Rates	Proposed Dollar Change	Proposed Percent Change	Bill at Proposed Rates	Proposed Dollar Change	Proposed Percent Change	Bill at Proposed Rates	Proposed Dollar Change	Proposed Percent Change		
Commercial with 6" Fire Connection(Monthly Account)	120,000	\$996.60	\$1,193.28	19.7%	\$1,194.34	\$197.74	19.8%	\$1,205.06	\$206.46	20.7%	\$1,225.18	\$228.58	22.9%	\$1,246.61	\$250.01	25.1%	\$1,363.75	\$367.15	36.8%	\$367.15	
		\$1,083.00	\$708.79	-34.6%	\$708.79	-\$374.21	-34.6%	\$708.79	-\$374.21	-34.6%	\$708.79	-\$374.21	-34.6%	\$708.79	-\$374.21	-34.6%	\$708.79	-\$374.21	-34.6%	\$374.21	
		\$2,079.60	\$1,902.08	-8.5%	\$1,903.13	-\$176.47	-8.5%	\$1,911.85	-\$167.75	-8.1%	\$1,933.98	-\$145.62	-7.0%	\$1,955.40	-\$124.20	-6.0%	\$2,072.55	-\$77.05	-3.0%	\$77.05	

Base Charge and Commodity Charges

Fire Protection Charge

Total Annual Charges

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	\$41,836	\$10,297	32.6%
	20,000,000	\$63,059	\$83,647	\$20,588	32.6%
	38,000,000	\$119,795	\$158,907	\$39,113	32.6%
	40,000,000	\$126,099	\$167,270	\$41,171	32.6%
	75,000,000	\$236,419	\$313,609	\$77,190	32.6%
	100,000,000	\$315,219	\$418,137	\$102,918	32.6%
	150,000,000	\$472,819	\$627,193	\$154,374	32.6%
Navy (Monthly)					
	10,000,000	\$39,559	\$53,054	\$13,496	34.1%
	20,000,000	\$79,099	\$105,805	\$26,706	33.8%
	38,000,000	\$150,252	\$200,755	\$50,503	33.6%
	50,000,000	\$197,719	\$264,056	\$66,337	33.6%
	75,000,000	\$296,569	\$395,932	\$99,363	33.5%
	100,000,000	\$395,419	\$527,807	\$132,389	33.5%

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

	Rate Year Revenue	
	Existing Rates	Proposed Rates
REVENUES		
Water Rates		
Base Charge (Billing Charge)	\$ 1,213,500	\$ 712,899
Volume Charge		
Residential	4,051,749	5,181,579
Commercial	3,212,730	4,581,899
Navy	707,651	944,078
Portsmouth Water & Fire District	1,350,692	1,791,691
Fire Protection		
Public	1,102,275	745,236
Private	466,001	288,430
Total Rate Revenues	\$ 12,104,598	\$ 14,245,813
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	\$ 12,757,127	\$ 14,898,342
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	\$ 12,839,627	\$ 14,980,842
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.	(3,735,016)	(\$3,735,016)
Total Capital Costs	\$ (6,235,016)	(6,235,016)
Operating Revenue Allowance	(254,733)	(254,733)
Total Costs	\$ (14,980,847)	\$ (14,980,847)
Revenue Surplus (Deficit)	\$ (2,141,220)	(5)

Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
\$ 273,889	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
\$ -	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
\$ -	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
\$ -	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
\$ -	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
\$ 12,500	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
\$ 175,000	Non-Administrative Wages & Salaries	59%	25%	4%	6%	5%	2%	0%	100%
\$ 128,202	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
\$ 514,000	Non-Administrative Wages & Salaries	59%	25%	4%	6%	5%	2%	0%	100%
\$ 85,000	Non-Administrative Wages & Salaries	59%	25%	4%	6%	5%	2%	0%	100%
\$ 2,400	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
1,190,991									

Operation & Maintenance Costs

- Administration
- Salaries, Wages, & Benefits
- Salaries & Wages
- AFSCME retro
- NEA retro
- AFSCME benefits on retro pay
- NEA benefits on retro pay
- Standby Salaries
- Accrued Benefits Buyout
- Employee Benefits
- Retiree Insurance Coverage
- Workers Compensation
- Annual Leave Buyback
- Subtotal

Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
	All Other Administrative Costs								
	Advertisement	9,000							
	Membership Dues & Subscriptions	2,500							
	Conferences & Training	4,000							
	Tuition Reimbursement	2,000							
	Consultant Fees	233,033							
	Postage	1,000							
	Fire & Liability Insurance	76,468							
	Telephone & Communication	5,500							
	Water	1,942							
	Electricity	5,805							
	Natural Gas	7,252							
	Property Taxes	226,774							
	Legal & Administrative	-							
	Audit Fees	4,349							
	OPEB Contribution	-							
	City Counsel	4,649							
	Citizens Survey	-							
	City Clerk	3,381							
	City Manager	54,131							
	Human Resources	30,121							
	City Solicitor	20,459							
	Finance Administrative 80%	19,822							
	Finance Administrative 5%	7,020							
	Purchasing	18,314							
	Assessment	5,973							
	Collections	46,979							
	Accounting 5%	10,679							
	Accounting	70,516							
	Public Safety	-							
	Facilities Maintenance								
	Data Processing	13,266							
	Mileage Allowance	143,888							
	Gasoline & Vehicle Allowance	2,000							
	Repairs & Maintenance	7,508							
	Regulatory Expense	1,200							
	Regulatory Assessment	10,000							
	Office Supplies	48,096							
	Self Insurance	20,000							
	Unemployment Claims	12,000							
	Subtotal	1,139,623							
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Total Non-Admin Costs Before Offsets	67%	22%	4%	2%	4%	1%	1%	100%
	Total Non-Admin Costs Before Offsets	67%	22%	4%	2%	4%	1%	1%	100%
	Total Non-Admin Costs Before Offsets	67%	22%	4%	2%	4%	1%	1%	100%
	Total Non-Admin Costs Before Offsets	67%	22%	4%	2%	4%	1%	1%	100%
	Total Non-Admin Costs Before Offsets	67%	22%	4%	2%	4%	1%	1%	100%
	Non-Administrative Wages & Salaries	59%	25%	4%	6%	5%	2%	0%	100%
	Total Non-Admin Costs Before Offsets	67%	22%	4%	2%	4%	1%	1%	100%
	Total Non-Admin Costs Before Offsets	67%	22%	4%	2%	4%	1%	1%	100%
	Total Non-Admin Costs Before Offsets	67%	22%	4%	2%	4%	1%	1%	100%
	Total Non-Admin Costs Before Offsets	67%	22%	4%	2%	4%	1%	1%	100%
	Capital Costs	64%	27%	5%	0%	3%	0%	1%	100%
	100% Billing	0%	0%	0%	0%	100%	0%	0%	100%
	Total Non-Admin Costs Before Offsets	67%	22%	4%	2%	4%	1%	1%	100%
	Non-Administrative Wages & Salaries	59%	25%	4%	6%	5%	2%	0%	100%
	Total Non-Admin Costs Before Offsets	67%	22%	4%	2%	4%	1%	1%	100%
	Total Non-Admin Costs Before Offsets	67%	22%	4%	2%	4%	1%	1%	100%
	Total Non-Admin Costs Before Offsets	64%	20%	3%	5%	5%	2%	1%	100%
	Total Non-Admin Costs Before Offsets	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%

Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
2,330,614 x									
Customer Service									
Salaries & Wages	Customer Service Salaries and Wages	0%	0%	0%	46%	41%	13%	0%	100%
Benefits	Customer Service Salaries and Wages	0%	0%	0%	46%	41%	13%	0%	100%
281,735	100% billing (based on budget analysis)					100%			100%
168,793	100% billing (based on budget analysis)					100%			100%
500	100% billing (software support & printing/ mailing)					100%			100%
5,000	100% billing (based on budget analysis)					100%			100%
26,002	Customer Service Salaries and Wages	0%	0%	0%	46%	41%	13%	0%	100%
31,706	100% metering (meter repairs)				100%				100%
33,421	100% metering (based on budget analysis)				100%				100%
40,000	100% metering (based on budget analysis)				100%				100%
10,000	100% metering (based on budget analysis)				100%				100%
5,000	100% metering (based on budget analysis)				100%				100%
1,000	100% billing (based on budget analysis)					100%			100%
10,343	100% billing (based on budget analysis)					100%			100%
613,500 x									
Source of Supply - Island									
Salaries & Wages	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Overtime	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
258,897	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
28,903	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
10,000	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
\$ -	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Employee Benefits	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
134,334	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
6,300	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
42,108	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
58,648	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
7,425	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
16,000	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
7,750	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
700	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
72,735	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
643,800 x									
Source of Supply - Mainland									
Overtime	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
4,617	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
13,000	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
15,264	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
2,525	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
120,189	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
7,200	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
4,500	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
630	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
167,925 x									

Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
\$ 446,983	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 60,021	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 17,045	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 278,523	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 5,000	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 4,500	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 12,687	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 252,674	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
\$ 24,250	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 600	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 293,020	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
\$ 7,583	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 25,000	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 25,210	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 1,062	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 22,428	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ 354,210	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
\$ 1,830,796									
\$ 459,704	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 37,657	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 16,760	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 287,143	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 3,966	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 3,000	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 18,614	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 132,551	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
\$ 29,909	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 500	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 360,640	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
\$ 7,882	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 34,048	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 18,475	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 1,542	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
\$ 31,646	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ 169,977	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
\$ 1,614,015									

Station One (Excludes pumping and chemicals)

Salaries & Wages	\$ 446,983
Overtime	\$ 60,021
Holiday Pay	\$ 17,045
Employee Benefits	\$ 278,523
Annual Leave Buyback	\$ 5,000
Conferences & Training	\$ 4,500
Fire & Liability Insurance	\$ 12,687
Electricity	\$ 252,674
Natural Gas	\$ 24,250
Rental of Equipment	\$ 600
Sewer Charge	\$ 293,020
Gas/Vehicle Maintenance	\$ 7,583
Repairs & Maintenance	\$ 25,000
Operating Supplies	\$ 25,210
Uniforms & protective Gear	\$ 1,062
Station One Pumping	\$ 22,428
Station One Chemicals	\$ 354,210
Subtotal	\$ 1,830,796

Lawton Valley (Excludes pumping and chemicals)

Salaries & Wages	\$ 459,704
Overtime	\$ 37,657
Holiday Pay	\$ 16,760
Employee Benefits	\$ 287,143
Annual Leave Buyback	\$ 3,966
Conferences & Training	\$ 3,000
Fire & Liability Insurance	\$ 18,614
Electricity	\$ 132,551
Natural Gas	\$ 29,909
Rental of Equipment	\$ 500
Sewer Charge	\$ 360,640
Gas/Vehicle Maintenance	\$ 7,882
Repairs & Maintenance	\$ 34,048
Operating Supplies	\$ 18,475
Uniforms & protective Gear	\$ 1,542
Lawton Valley Pumping	\$ 31,646
Lawton Valley Chemicals	\$ 169,977
Subtotal	\$ 1,614,015

Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
\$ 104,358	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
\$ 64,208	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
\$ 2,750	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
\$ 1,700	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
\$ 32,000	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
\$ 18,684	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
\$ 223,700 x									
\$ 418,161	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ 52,364	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ 10,000	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ -	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ 251,514	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ 10,943	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ 4,000	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ 12,430	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ 18,748	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ 18,762	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ 8,260	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ 110,305	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ 26,000	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ 35,000	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ 35,000	100% Fire	0%	0%	0%	0%	0%	0%	100%	100%
\$ 30,000	100% Services	0%	0%	0%	0%	0%	100%	0%	100%
\$ 10,000	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ 1,761	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
\$ 1,053,248 x									
\$ 13,500	100% Fire	0%	0%	0%	0%	0%	0%	100%	100%
\$ 8,491,098									

Laboratory

Salaries & Wages
 Employee Benefits
 Annual Leave Buyback
 Repairs & Maintenance
 Regulatory Assessment
 Laboratory Supplies
 Subtotal

Transmission and Distribution

Salaries & Wages
 Overtime
 Temp Salaries
 Injury Pay
 Employee Benefits
 Annual Leave Buyback
 Conferences & Training
 Contract Services
 Fire & Liability Insurance
 Electricity
 Heavy Equipment Rental
 Gas/Vehicle Maintenance
 Repairs & Maintenance
 Main Maintenance
 Hydrant Maintenance
 Service Maintenance
 Operating Supplies
 Uniforms & protective Gear
 Subtotal

Fire Protection

Total O&M Costs

Rate Year
1,414,794
1,631,101
515,507
663,631
65,728
1,655,458
32,997
22,787
22,787
210,227
6,235,016
254,733
14,980,847

CAPITAL COSTS

Water Supply
 Treatment Station 1
 Treatment Lawton Valley
 Treatment Both Plants
 T&D Pumping
 T&D
 Fire
 Meters
 Services
 Billing

Total Capital Costs

Revenue Allowance

Total Costs before Offsets

OFFSETS

Nonrate Revenues

Sundry charges
 WPC cost share on customer service
 Middletown cost share on customer service
 Rental of Property
 Water Penalty
 Miscellaneous
 Investment Interest Income
 Water Quality Protection Fees

Total Nonrate Revenues

Net Costs To Recover Through Rates

Allocation Notes	Base		Max Day		Max Hour		Metering		Billing		Services		Fire		Total % Allocated	
	Base	100%	Max Day	Max Hour	Max Hour	Metering	Billing	Billing	Services	Services	Fire	Fire	Total % Allocated	Total % Allocated		
100% Base	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Maximum Day Demand Patterns	60%	60%	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Maximum Day Demand Patterns	60%	60%	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Maximum Day Demand Patterns	50%	50%	33%	18%	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Maximum Hour Demand Patterns	50%	50%	33%	18%	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
100% Fire	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%	100%
100% Meters	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
100 % Services	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%	100%
100% Billing	0%	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	100%	100%
100% base	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%

104,000
296,856
143,506
108,167
47,500
8,600
3,900
22,500
735,029
\$ 14,245,818

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Administration								
Salaries, Wages, & Benefits								
Salaries & Wages	175,537	53,981	9,280	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	8,011	2,464	424	640	634	216	112	12,500
Accrued Benefits Buyout	103,052	43,446	6,601	9,839	9,014	2,869	178	175,000
Employee Benefits	82,166	25,268	4,344	6,565	6,498	2,211	1,151	128,202
Retiree Insurance Coverage	302,679	127,607	19,389	28,900	26,474	8,427	523	514,000
Workers Compensation	50,054	21,102	3,206	4,779	4,378	1,394	87	85,000
Annual Leave Buyback	1,538	473	81	123	122	41	22	2,400
Subtotal	723,037	274,341	43,326	64,871	61,000	19,883	4,532	1,190,991

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
All Other Administrative Costs								
Advertisement	5,768	1,774	305	461	456	155	81	9,000
Membership Dues & Subscriptions	1,602	493	85	128	127	43	22	2,500
Conferences & Training	2,564	788	136	205	203	69	36	4,000
Tuition Reimbursement	1,282	394	68	102	101	34	18	2,000
Consultant Fees	149,353	45,929	7,896	11,933	11,811	4,020	2,092	233,033
Postage	641	197	34	51	51	17	9	1,000
Fire & Liability Insurance	49,009	15,071	2,591	3,916	3,876	1,319	687	76,468
Telephone & Communication	3,525	1,084	186	282	279	95	49	5,500
Water	1,245	383	66	99	98	33	17	1,942
Electricity	3,720	1,144	197	297	294	100	52	5,805
Natural Gas	4,648	1,429	246	371	368	125	65	7,252
Property Taxes	145,341	44,695	7,684	11,612	11,493	3,912	2,036	226,774
Legal & Administrative								
Audit Fees	2,903	942	167	103	166	40	28	4,349
OPEB Contribution	-	-	-	-	-	-	-	-
City Counsel	3,103	1,007	178	110	178	43	30	4,649
Citizens Survey	-	-	-	-	-	-	-	-
City Clerk	2,257	732	130	80	129	31	22	3,381
City Manager	36,133	11,725	2,076	1,281	2,071	496	349	54,131
Human Resources	17,737	7,478	1,136	1,694	1,551	494	31	30,121
City Solicitor	13,657	4,432	785	484	783	188	132	20,459
Finance Adimistrative 80%	13,231	4,294	760	469	758	182	128	19,822
Finance Adimistrative 5%	4,686	1,521	269	166	269	64	45	7,020
Purchasing	12,225	3,967	702	433	701	168	118	18,314
Assessment	3,802	1,605	290	22	201	22	32	5,973
Collections	-	-	-	-	46,979	-	-	46,979
Accounting 5%	7,128	2,313	410	253	409	98	69	10,679
Accounting	41,525	17,506	2,660	3,965	3,632	1,156	72	70,516
Public Safety	-	-	-	-	-	-	-	-
Facilities Maintenance	8,855	2,873	509	314	508	122	85	13,266
Data Processing	92,219	28,359	4,875	7,368	7,293	2,482	1,292	143,888
Mileage Allowance	1,282	394	68	102	101	34	18	2,000
Gasoline & Vehicle Allowance	4,812	1,480	254	384	381	130	67	7,508
Repairs & Maintenance	769	237	41	61	61	21	11	1,200
Regulatory Expense	6,409	1,971	339	512	507	172	90	10,000
Regulatory Assessment	30,825	9,479	1,630	2,463	2,438	830	432	48,096
Office Supplies	12,818	3,942	678	1,024	1,014	345	180	20,000
Self Insurance	6,409	1,971	339	512	507	172	90	10,000
Unemployment Claims	7,691	2,365	407	614	608	207	108	12,000
Subtotal	699,172	223,974	38,194	51,873	100,399	17,419	8,592	1,139,623

	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								

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Station One (Excludes pumping and chemicals)								
Salaries & Wages	269,894	177,089	-	-	-	-	-	446,983
Overtime	36,241	23,780	-	-	-	-	-	60,021
Holiday Pay	10,292	6,753	-	-	-	-	-	17,045
Employee Benefits	168,176	110,347	-	-	-	-	-	278,523
Annual Leave Buyback	3,019	1,981	-	-	-	-	-	5,000
Conferences & Training	2,717	1,783	-	-	-	-	-	4,500
Fire & Liability Insurance	7,661	5,026	-	-	-	-	-	12,687
Electricity	252,674	-	-	-	-	-	-	252,674
Natural Gas	14,642	9,608	-	-	-	-	-	24,250
Rental of Equipment	362	238	-	-	-	-	-	600
Sewer Charge	293,020	-	-	-	-	-	-	293,020
Gas/Vehicle Maintenance	4,579	3,004	-	-	-	-	-	7,583
Repairs & Maintenance	15,095	9,905	-	-	-	-	-	25,000
Operating Supplies	15,222	9,988	-	-	-	-	-	25,210
Uniforms & protective Gear	641	421	-	-	-	-	-	1,062
Station One Pumping	11,165	7,326	3,938	-	-	-	-	22,428
Station One Chemicals	354,210	-	-	-	-	-	-	354,210
Subtotal								
Lawton Valley (Excludes pumping and chemicals)								
Salaries & Wages	277,575	182,129	-	-	-	-	-	459,704
Overtime	22,738	14,919	-	-	-	-	-	37,657
Holiday Pay	10,120	6,640	-	-	-	-	-	16,760
Employee Benefits	173,381	113,762	-	-	-	-	-	287,143
Annual Leave Buyback	2,395	1,571	-	-	-	-	-	3,966
Conferences & Training	1,811	1,189	-	-	-	-	-	3,000
Fire & Liability Insurance	11,239	7,375	-	-	-	-	-	18,614
Electricity	132,551	-	-	-	-	-	-	132,551
Natural Gas	18,059	11,850	-	-	-	-	-	29,909
Rental of Equipment	302	198	-	-	-	-	-	500
Sewer Charge	360,640	-	-	-	-	-	-	360,640
Gas/Vehicle Maintenance	4,759	3,123	-	-	-	-	-	7,882
Repairs & Maintenance	20,559	13,489	-	-	-	-	-	34,048
Operating Supplies	11,155	7,320	-	-	-	-	-	18,475
Uniforms & protective Gear	931	611	-	-	-	-	-	1,542
Lawton Valley Pumping	15,753	10,336	5,556	-	-	-	-	31,646
Lawton Valley Chemicals	169,977	-	-	-	-	-	-	169,977
Subtotal								

	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	208,159	136,582	73,420	-	-	-	-	418,161
Overtime	26,067	17,103	9,194	-	-	-	-	52,364
Temp Salaries	4,978	3,266	1,756	-	-	-	-	10,000
Injury Pay	-	-	-	-	-	-	-	-
Employee Benefits	125,203	82,151	44,161	-	-	-	-	251,514
Annual Leave Buyback	5,447	3,574	1,921	-	-	-	-	10,943
Conferences & Training	1,991	1,306	702	-	-	-	-	4,000
Contract Services	6,188	4,060	2,182	-	-	-	-	12,430
Fire & Liability Insurance	9,333	6,124	3,292	-	-	-	-	18,748
Electricity	9,340	6,128	3,294	-	-	-	-	18,762
Heavy Equipment Rental	4,112	2,698	1,450	-	-	-	-	8,260
Gas/Vehicle Maintenance	54,909	36,028	19,367	-	-	-	-	110,305
Repairs & Maintenance	12,943	8,492	4,565	-	-	-	-	26,000
Main Maintenance	17,423	11,432	6,145	-	-	-	-	35,000
Hydrant Maintenance	-	-	-	-	-	-	35,000	35,000
Service Maintenance	-	-	-	-	-	30,000	-	30,000
Operating Supplies	4,978	3,266	1,756	-	-	-	-	10,000
Uniforms & protective Gear	877	575	309	-	-	-	-	1,761
Subtotal								
Fire Protection	-	-	-	-	-	-	13,500	13,500
Total O&M Costs	4,220,929	1,064,545	183,010	276,580	273,749	93,171	48,500	6,160,484
Non-Administrative O&M								

	Base		Max Day		Max Hour		Metering		Billing		Services		Fire		Total \$			
CAPITAL COSTS																		
Water Supply	1,414,794	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,414,794	-	
Treatment Station 1	984,880	646,221	-	-	-	-	-	-	-	-	-	-	-	-	-	1,631,101	-	
Treatment Lawton Valley	311,270	204,237	-	-	-	-	-	-	-	-	-	-	-	-	-	515,507	-	
Treatment Both Plants	400,709	262,922	-	-	-	-	-	-	-	-	-	-	-	-	-	663,631	-	
T&D Pumping	32,719	21,468	11,540	-	-	-	-	-	-	-	-	-	-	-	-	65,728	-	
T&D	824,080	540,713	290,664	-	-	-	-	-	-	-	-	-	-	-	-	1,655,458	-	
Fire	-	-	-	-	-	-	-	-	-	-	-	-	32,997	-	-	32,997	-	
Meters	-	-	-	22,787	-	-	-	-	-	-	-	-	-	-	-	22,787	-	
Services	-	-	-	-	-	-	-	-	-	-	22,787	-	-	-	22,787	-	-	
Billing	-	-	-	-	-	-	-	-	210,227	-	-	-	-	-	210,227	-	-	
Total Capital Costs	3,968,452	1,675,561	302,205	22,787	22,787	0%	0%	2%	210,227	3%	0%	0%	1%	1%	6,235,016	100%	254,733	
Revenue Allowance	254,733	64%	27%	5%	0%	0%	2%	4%	3%	3%	0%	0%	1%	1%	6,235,016	100%	254,733	
Total Costs before Offsets	8,444,114	2,740,106	485,215	299,368	483,976	2%	2%	4%	483,976	4%	1%	1%	1%	1%	12,650,233	100%	12,650,233	
OFFSETS																		
Nonrate Revenues																		
Sundry charges	66,654	20,498	3,524	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	69,325	21,319	3,665	5,539	5,482						1,866		971		108,167			
Water Penalty	30,443	9,362	1,609	2,432	2,407						819		427		47,500			
Miscellaneous	5,512	1,695	291	440	436						148		77		8,600			
Investment Interest Income	2,500	769	132	200	198						67		35		3,900			
Water Quality Protection Fees	22,500	-	-	-	-						-		-		22,500			
Total Nonrate Revenues	196,934	53,642	9,222	234,118	233,975				233,975		4,695		2,444		735,029			
Net Costs To Recover Through Rates	\$ 8,247,180	\$ 2,686,464	\$ 475,993	\$ 65,250	\$ 250,001	\$ 111,264	\$ 79,053	\$ 11,915,204										

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Non-Admin O&M Costs								
Less: Chemicals	\$ 4,220,929	\$ 1,064,545	\$ 183,010	\$ 276,580	\$ 273,749	\$ 93,171	\$ 48,500	\$ 6,160,484
Station One								
Lawton Valley	\$ (354,210)							\$ (354,210)
Source Supply	\$ (169,977)							\$ (169,977)
Electricity	\$ (72,735)							\$ (72,735)
Source Supply	\$ (162,297)							\$ (162,297)
Station One	\$ -	\$ -						\$ -
Lawton Valley	\$ -	\$ -						\$ -
Costs Adjusted	\$ 3,461,710	\$ 1,064,545	\$ 183,010	\$ 276,580	\$ 273,749	\$ 93,171	\$ 48,500	\$ 5,401,265
	64%	20%	3%	5%	5%	2%	1%	100%

Non-Administrative Labor

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Administration	185,087	56,918	9,785	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	319,446	209,602	0	0	0	0	0	529,049
Lawton Valley	312,828	205,259	0	0	0	0	0	518,087
Laboratory	107,108	0	0	0	0	0	0	107,108
Transmission/Distribution	244,651	160,526	86,292	0	0	0	0	491,468
Total	1,499,801	632,305	96,077	143,200	131,183	41,757	2,593	2,546,917
Percent	59%	25%	4%	6%	5%	2%	0%	100%

ALLOCATION PERCENTAGES Cost Category	Allocation Basis	Commodity Charges					Total % Allocated	
		Base Charge	Retail		Navy	Portsmouth		Fire
			Residential	Non-Residential				
Base	Average annual demand	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%	15%	0%	100%	
Max Day	Estimated customer peaking factors	28%	34%	5%	15%	18%	100%	
Base Excluding PWFD		33%	40%	6%	0%	22%	100%	
Max Day Excluding PWFD & 50% Navy		34%	41%	3%	0%	22%	100%	
Total Max Day to Class		30%	36%	5%	10%	20%	100%	
Max Hour	Estimated customer peaking factors	17%	25%	3%	8%	46%	100%	
Base Excluding PWFD		19%	27%	4%	0%	50%	100%	
Max Hour Excluding PWFD & 50% Navy		19%	28%	2%	0%	51%	100%	
Total Max Hour to Class		19%	28%	2%	0%	51%	100%	
Metering	Direct Assignment	100%					100%	
Billing	Direct Assignment	100%					100%	
Services	Direct Assignment	100%					100%	
Fire	Direct Assignment					100%	100%	

ALLOCATION RESULTS Cost Category	Rate Year	Commodity Charges					Total \$ Allocated	
		Base Charge	Retail		Navy	Portsmouth		Fire
			Residential	Commercial				
Base								
Base excluding T&D&WQPF & Pumping	7,068,451	2,887,509	2,289,576	607,259	1,284,107	-	7,068,451	
Transmission & Distribution	1,316,026	693,347	549,772	72,907	-	-	1,316,026	
Pumping	59,637	29,770	23,606	6,261	-	-	59,637	
Water Quality Protection Fees	(22,500)	(12,549)	(9,951)	-	-	-	(22,500)	
Revenue Offsets	(174,434)	(74,586)	(59,141)	(14,180)	(26,526)	-	(174,434)	
Administrative Charges	1,422,209	608,124	482,196	115,612	216,277	-	1,422,209	
Max Day								
Max Day Except T&D & Pumping	1,837,476	509,318	620,551	95,356	273,456	338,796	1,837,476	
Transmission & Distribution	863,499	290,037	353,380	27,151	-	192,931	863,499	
Pumping	39,130	12,743	15,526	2,386	-	8,476	39,130	
Revenue Offsets	(53,642)	(15,898)	(19,370)	(2,445)	(5,353)	(10,575)	(53,642)	
Administrative Charges	498,315	147,688	179,942	22,713	49,731	98,241	498,315	
Max Hour								
Max Hr. Except T&D & Pumping	-	-	-	-	-	-	-	
Transmission & Distribution	464,180	88,391	129,834	8,837	-	237,117	464,180	
Pumping	21,035	3,931	5,774	786	-	10,544	21,035	
Revenue Offsets	(9,222)	(1,755)	(2,577)	(183)	-	(4,707)	(9,222)	
Administrative Charges	81,520	15,511	22,783	1,617	-	41,609	81,520	
Metering								
Metering	299,368	299,368	-	-	-	-	299,368	
Revenue Offsets	(234,118)	(234,118)	-	-	-	-	(234,118)	
Administrative Charges	116,744	116,744	-	-	-	-	116,744	
Services								
Services	115,959	115,959	-	-	-	-	115,959	
Revenue Offsets	(4,695)	(4,695)	-	-	-	-	(4,695)	
Administrative Charges	37,302	37,302	-	-	-	-	37,302	
Billing								
Billing	483,976	483,976	-	-	-	-	483,976	
Revenue Offsets	(233,975)	(233,975)	-	-	-	-	(233,975)	
Administrative Charges	161,399	161,399	-	-	-	-	161,399	
Fire								
Fire	81,497	-	-	-	-	81,497	81,497	
Revenue Offsets	(2,444)	-	-	-	-	(2,444)	(2,444)	
Administrative Charges	13,124	-	-	-	-	13,124	13,124	
	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	
Total To Recover through Rates	\$ 14,245,818	\$ 741,960	\$ 5,181,579	\$ 4,581,899	\$ 944,078	\$ 1,791,691	\$ 1,004,611	\$ 14,245,818

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	1000's of gallons annually	Equivalent Connections	
Percentage of Dollars Allocated	1.3%	36.4%	32.2%	6.6%	12.6%	6.4%	100.0%
Allocated Cost	\$ 181,994	\$ 5,181,579	\$ 4,581,899	\$ 944,078	\$ 1,791,691	\$ 912,433	\$ 14,245,818
Divided by: Number of Units	207,132	630,132	499,647	178,971	428,519	160,963	
Unit Cost of Service	\$0.8786	\$8.22	\$9.17	\$5.28	\$4.18	\$5.67	
	per equiv per month	per 1000 gallons	per 1000 gallons	per 1000 gallons	per 1000 gallons	Equivalent connections	

Description of Billing Units	Services		Hydrants	
	No. of bills per year	Equivalent Connections	No. of Hydrants	
Percentage of Dollars Allocated	2.9%	1.0%	0.6%	
Allocated Cost	\$ 411,400	\$ 148,566	\$ 92,177	
Divided by: Number of Units	65,095	275,772	1,035	
Unit Cost of Service	\$6.3200	\$0.5387	\$89.0603	
	per bill	per equiv	per Hydrant	

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

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

Allocation Basis	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	Supply, Laboratory	N/A	100%							100%
Maximum Day Demand Patterns	Treatment	B-1	60%	40%	0%					100%
Maximum Hour Demand Patterns	Pumping, Transmission/Distribution, Storage	B-1	50%	33%	18%					100%
Fire Protection	Public/Private Fire Protection Costs	D-2							100%	
Non Admin less electricity & chemicals	Administration Salaries, Wages, & Benefits	B-1	64%	20%	3%	5%	5%	2%	1%	100%
Customer Service Salaries and Wages	Customer Service Salaries, Wages, & Benefits	B-4	0%	0%	0%	46%	41%	13%	0%	100%
Non-Administrative Wages & Salaries	Administrative Labor Related	B-1	59%	25%	4%	6%	5%	2%	0%	100%
Capital Costs	Certain Legal and Administrative	B-1	64%	27%	5%	0%	3%	0%	1%	0%
Total Non-Admin Costs before Offsets	Certain Legal and Administrative	B-1	67%	22%	4%	2%	4%	1%	1%	100%
Other Costs	Administration Non-Salary Costs	B-1	64%	20%	3%	5%	5%	2%	1%	100%
Treatment Plant Capital										

Newport Water Division
 Cost Of Service Analysis
 JDM Schedule Surrebuttal 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

Allocation of Salary Costs							Total Allocated
Base	Max Day	Max Hour	Metering	Billing	Services	Direct Fire Protection	
64%	20%	3%	5%	5%	2%	1%	100%
64%	20%	3%	5%	5%	2%	1%	100%
64%	20%	3%	5%	5%	2%	1%	100%
64%	20%	3%	5%	5%	2%	1%	100%
64%	20%	3%	5%	5%	2%	1%	100%
\$ 175,537	\$ 53,981	\$ 9,280	\$ 14,025	\$ 13,881	\$ 4,725	\$ 2,459	\$ 273,889
64%	20%	3%	5%	5%	2%	1%	100%

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

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

Treatment Plant Capital

	Base (Avg. Day)	Max Day	Total
Treatment Station 1	\$ 1,631,101	\$ 646,221	\$ 1,631,101
Treatment Lawton Valley	\$ 515,507	\$ 204,237	\$ 515,507
Treatment Both Plants	\$ 663,631	\$ 262,922	\$ 663,631
	\$ 2,810,239	\$ 1,113,380	\$ 2,810,239

	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	5.12	5.04	1.395	3.00	1.44	16
% of Max. Day Treatment Capacity	32.01%	31.52%	8.72%	18.75%	9.00%	100%

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

Newport Water Division
 Cost Of Service Analysis
 JDM Schedule Surrebuttal 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	\$ 21,792,121				100%						100%
LAWTON VALLEY	\$ 7,116,282										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%
METERS/SERVICES	\$ 629,135							50%	50%		100%
T&D PUMPING	\$ 907,332				100%						100%
BILLING	\$ 2,902,066									100%	100%
FIRE	\$ 455,504						100%				100%
WORK IN PROGRESS	\$ -										100%
Total	\$ 85,994,134										100%
LABORATORY	\$ 80,000	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
LAND AND ROW	\$ 3,594,491	23%	8%	11%	27%	1%	1%	0%	0%	0%	100%
Total	\$ 3,674,491										3%
Total Fixed Assets	\$ 89,668,625										

Total Fixed Assets \$ 89,668,625

	Supply	Treatment Station 1	Treatment Lawton Valley	Treatment Both Plants	T&D	T&D Pump	Fire	Meters	Services	Billing	Total
TRANSMISSION/DISTRIBUTION	\$ 21,792,121				\$ 21,792,121						\$ 21,792,121
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
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	\$ 455,504						455,504				455,504
WORK IN PROGRESS	\$ -										-
Total	\$ 85,994,134	\$ 22,516,441	\$ 7,116,282	\$ 9,161,055	\$ 22,852,669	\$ 907,332	\$ 455,504	\$ 314,568	\$ 314,568	\$ 2,902,066	\$ 85,994,134
LABORATORY	\$ 80,000										80,000
LAND AND ROW	\$ 3,594,491	\$ 941,171	\$ 297,455	\$ 382,925	\$ 955,225	\$ 37,926	\$ 19,040	\$ 13,149	\$ 13,149	\$ 121,304	\$ 3,594,491
Total	\$ 893,148	\$ 941,171	\$ 297,455	\$ 382,925	\$ 955,225	\$ 37,926	\$ 19,040	\$ 13,149	\$ 13,149	\$ 121,304	\$ 3,674,491
Total Allocated	\$ 20,346,797	\$ 23,457,612	\$ 7,413,737	\$ 9,543,981	\$ 23,807,894	\$ 945,258	\$ 474,543	\$ 327,716	\$ 327,716	\$ 3,023,371	\$ 89,668,625
	22.69%	26.16%	8.27%	10.64%	26.55%	1.05%	0.53%	0.37%	0.37%	3.37%	

Newport Water Division
 Cost Of Service Analysis
 JDM Schedule Surrebuttal 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										100%
Debt Service	\$ 3,735,016										100%
	\$ 6,235,016										

	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	\$ 654,008	\$ 205,698	\$ 266,090	\$ 663,774	\$ 26,354	\$ 13,230	\$ 9,137	\$ 9,137	\$ 84,293	\$ 2,500,000
Debt Service	\$ 3,735,016	\$ 847,516	\$ 977,093	\$ 397,541	\$ 991,683	\$ 39,373	\$ 19,766	\$ 13,651	\$ 13,651	\$ 125,934	\$ 3,735,016
	\$ 6,235,016	\$ 1,631,101	\$ 515,507	\$ 663,631	\$ 1,655,458	\$ 65,728	\$ 32,997	\$ 22,787	\$ 22,787	\$ 210,227	\$ 6,235,016

	Annual Demand in 1000s Gallons										Baseline	Rate Year
	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	3-Year Average
773,872	780,666	736,577	716,037	749,409	734,137	780,264	690,544	644,285	640,966	618,574	634,608	630,132
580,798	583,184	663,766	573,711	493,539	456,486	505,014	519,521	457,376	502,475	472,437	477,429	499,647
307,051	348,222	511,299	417,869	373,306	278,441	247,728	225,392	173,790	137,731	222,858	178,126	178,971
455,142	451,723	422,944	429,465	463,253	445,232	473,338	444,777	412,324	398,827	407,837	406,329	428,519
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	1,721,705	1,696,493	1,737,269
	2.2%	7.9%	-8.5%	-2.7%	-7.9%	-4.8%	-6.3%	-10.2%	-0.5%	2.5%		

Annual Demand by Class

Residential
 Commercial
 Navy
 Portsmouth

Total (in 1000's Gallons)

	Combined Station #1 and LV WTP Production Volumes in 1,000 gals					Peaking Comparison			
	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	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	2,165,686	2,234,855		
Average Day Production	6,730	6,917	6,678	6,687	6,312	5,933	6,123		
Maximum Month Production	256,796	269,819	280,875	254,088	268,468	256,324	262,396		
Maximum Day Production	10,165	10,724	12,100	9,800	10,163	10,118	10,140		
Max Day Date	6/28/2007	8/4/2007	7/18/2008	8/23/2010	7/23/2011	7/7/2012			
Maximum Day Peaking Factor	1.51	1.55	1.81	1.47	1.61	1.71	1.66	1.99	1.20
Max-Day to Avg. Day/Max-Month Ratio	1.19	1.23	1.34	1.20	1.17	1.22	1.20	1.20	
Maximum Hour	13,800	15,200	13,250	10,700	12,100	12,500	12,300		
Maximum Hour Peaking Factor	2.05	2.20	1.98	1.60	1.92	2.11	2.01	2.77	1.38

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 Demand Study	Max Hour Demand Factor From Daily Read Demand Study
Residential	1.82	2.43
Commercial	2.26	3.39
Navy	1.73	2.31
Portsmouth	1.99	2.65
Fire	1.99	2.77
Estimated Systemwide Peaks		

(5)

(5) Fire peaking behavior is estimated using a separate methodology demonstrated in JDM Schedule Surrebuttal 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 Ex Demand Ex Demand Ex Demand Ex
Residential	630,132	1,726	914	2,640	53%
Commercial	499,647	1,369	724	2,093	42%
Navy	178,971	490	65	555	10%
Portsmouth	428,519	1,174	-	1,174	0%
Fire					N/A
Total, w Fire Prot.	1,737,269	4,760	25%	6,462	100%

Allocation of UAW for Demand Analysis
 53.7%
 42.5%
 3.8%

Production (1)
 2,358,811 6,462 26.35%

Customer Class	Max Day Calculations				Max Hour Calculations				% of Daily Peaks				% of Hourly Peaks			
	Max Day Peaking Factor	Demand x Peaking Factor (3)	Incremental Peak Demand	% of Daily Peaks	Max Hour Peaking Factor	Demand x Peaking Factor (3)	Incremental Peak Demand	% of Daily Peaks	With Full PWFD & Navy	Without PWFD & Navy	With Full PWFD & Navy	Without PWFD & Navy	With Full PWFD & Navy	Without PWFD & Navy		
Residential	1.82	4,805	2,165	27.7%	2.43	6,415	1,610	33.6%	27.7%	33.6%	17.1%	19.0%	17.1%	18.7%		
Commercial	2.26	4,731	2,638	33.8%	3.39	7,096	2,365	40.9%	33.8%	39.7%	25.2%	28.0%	25.2%	27.4%		
Navy	1.73	960	405	5.2%	2.31	1,283	322	3.1%	5.2%	6.1%	3.4%	1.9%	3.4%	3.7%		
Portsmouth	1.99	2,336	1,162	14.9%	2.65	3,111	775	0.0%	14.9%	0.0%	8.2%	0.0%	8.2%	0.0%		
Fire		1,440	1,440	18.4%		5,760	4,320	22.3%	18.4%	21.7%	46.0%	51.1%	46.0%	50.1%		
Total, w Fire Prot.		14,272	7,810	100.0%		23,665	9,393	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
Total, without Fire Protection		12,832	6,370			17,905	5,073									

(demand is in thousands of gallons)

(1) From JDM Schedule Surrebuttal 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 JDM Schedule Surrebuttal B-11, Fire Protection Demand Analysis.

Summary of Peak Load Distributions (by Rate Class and Base/Extra-Capacity Categories)

EACH RATE CLASS' SHARE OF SYSTEM PEAKS

Rate Class	Average Demand	Daily Peaks	Hourly Peaks
Retail			
7 Residential	41%	28%	17%
Commercial	32%	34%	25%
Navy	9%	5%	3%
Portsmouth	18%	15%	8%
Fire	N/A	18%	46%
	100%	100%	100%

Percentages are from JDM Schedule Surrebuttal 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	6,123	60.4%	49.8%
Extra Capacity			
Max Day	4,017	39.6%	32.7%
Max Hour	2,160		17.6%
Fire Protection			
Max Day	-	0.0%	0.0%
Max Hour	-		0.0%
Total %		100.0%	100.0%
Total 1000's Gallons		10,140	12,300

Incremental demand data is from JDM Schedule Surrebuttal B-11, 'Fire Protection Demand Analysis', and from JDM Schedule Surrebuttal 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
 JDM Schedule Surrebuttal 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		Meter Read Frequency		Equivalent Meters		Navy		Portsmonth			
		Monthly	Quarterly	Monthly	Quarterly	Monthly	Quarterly	Monthly	Quarterly	Monthly	Quarterly	Meters	Equivalents	Meters	Equivalents	Meters	Equivalents		
5/8	1.0	98	576	98	576	12	10,079	12	10,079	0	0	0	0	0	0	0	0		
3/4	1.1	53	173	58	190	10	2,241	11	2,465	1	1	1	1	0	0	0	0		
1	1.4	141	42	197	59	24	349	34	489	0	0	0	0	0	0	0	0		
1.5	1.8	145	29	261	52	30	157	54	283	3	5	5	5	0	0	0	0		
2	2.9	173	16	502	46	42	43	122	125	0	0	0	0	0	0	0	0		
3	11.0	38	6	418	66	12	11	132	121	0	0	0	0	0	0	0	0		
4	14.0	10	3	140	42	1	0	14	0	0	0	0	0	0	0	0	14		
5	18.0	1	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0		
6	21.0	11	1	231	21	1	3	21	63	8	168	8	168	0	0	0	0		
8	29.0	0	0	0	0	1	0	29	0	0	0	0	0	0	0	0	0		
10	43.5	0	0	0	0	0	0	0	0	1	44	1	44	0	0	0	0		
Total	14,546	670	846	1,923	1,052	133	12,883	429	13,625	13	218	13	218	1	1	14	14		

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

Equivalent Billing Units	
817	9,804
13,729	54,916
375	375
Total	65,095

Billed Monthly
 Billed Quarterly
 Billed Annually

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

Connection Size	Existing Differential	Number of Connections	Equivalent Connections	
			(1)	(2)
6	111.31	618	68,790	
6	111.31	408	45,415	% of Equiv Connections
6	111.31	9	1,002	
Subtotal: Public Hydrants			1035	115,207
				72%

Private Fire Connections

2	6.19	4	25	
4	38.32	62	2,376	
6	111.31	245	27,271	
8	237.21	62	14,707	
10	426.58	0	-	% of Equiv Connections
12	689.04	2	1,378	
Subtotal: Private Fire Connections			375	45,757
Total Fire Connections			1,410	160,963
				28%
				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	
			(1)	(2)
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	% of Equiv Connections
8	11.060	1	11	
10	11.060	1	11	
Subtotal General Service			14,546	18,853
				82%

Subtotal General Service

Private Fire Connections

2	6.150	4	25	
4	11.060	62	686	
6	11.060	245	2,710	
8	11.060	62	686	
10	11.060	0	-	% of Equiv Connections
12	11.060	2	22	
Subtotal: Private Fire Connections			375	4,128
				18%

Subtotal: Private Fire Connections

Annualized

Total Retail & Private Fire Connections

12	14,921	275,772	100%
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Newport Water Division
 Cost Of Service Analysis
 JDM Schedule Surrebuttal D-3
 Production Summary

	Station #1		Lawton Valley		Combined	
	In Gallons	In 1000's	In Gallons	In 1000's	In Gallons	In 1000's
FY 07 JULY 2006 - JUNE 2007	1,176,356,210	1,176,356	1,280,006,852	1,280,007	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
FY 08 JULY 2007 - JUNE 2008	1,268,356,660	1,268,357	1,256,427,700	1,256,428	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
FY 09 JULY 2008 - JUNE 2009	1,152,697,400	1,152,697	1,284,742,500	1,284,743	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
FY 10 JULY 2009 - JUNE 2010	1,333,422,150	1,333,422	1,107,207,665	1,107,208	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
FY 11 JULY 2010 - JUNE 2011	1,242,460,000	1,242,460	1,061,564,200	1,061,564	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
FY 12 JULY 2011 - JUNE 2012	981,876,000	981,876	1,183,810,000	1,183,810	2,165,685,750	2,165,686
Max. Month July	110,561,700	110,562	145,762,000	145,762	256,323,700	256,324

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
FY 07 JULY 2006 - JUNE 2007	5,114,940	5,115	5,958,100	5,958	10,165,100	10,165
includes booster to LV at 1,256,000 Gallons						
FY 08 JULY 2007 - JUNE 2008	6,179,670	6,180	6,805,400	6,805	10,723,620	10,724
includes booster to LV at 2,251,000 Gallons						
FY 09 JULY 2008 - JUNE 2009	4,341,000	4,341	7,845,700	7,846	12,100,100	12,100
includes booster to LV at 324,000 Gallons						
FY 10 JULY 2009 - JUNE 2010	4,664,000	4,664	6,168,500	6,169	9,800,400	9,800
FY 11 JULY 2010 - JUNE 2011	5,729,355	5,729	5,654,800	5,655	10,162,555	10,163
FY 12 JULY 2011 - JUNE 2012	4,624,292	4,624	5,869,900	5,870	10,118,190	10,118

PEAK HOURLY FLOW

Date	Station #1	Lawton Valley
7/6/2006	5.8 MGD	8.0 MGD
8/26/2007	7.2 MGD	8.0 MGD
7/18/2008	5.25 MGD	8.0 MGD
9/2/2009	4.70 MGD	6.0 MGD
10/15/2010	6.10 MGD	6.0 MGD
7/5/2011	6.50 MGD	6.0 MGD

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

Fiscal Year Annual Demand	FY 2009	FY 2010	FY 2011	FY 2012
Residential	690,544	644,285	640,966	618,574
Commercial (includes governmental)	519,521	457,376	502,475	472,437
Navy	225,392	173,790	137,731	222,858
Portsmouth	444,777	412,324	398,827	407,837
Total 1000's Gallons	1,880,234	1,687,775	1,679,999	1,721,705
	-6.3%	-10.2%	-0.5%	2.5%

Newport Water Division
 Cost Of Service Analysis
 JDM Schedule Surrebuttal 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
 JDM Schedule Surrebital D-6
 Debt Service Restricted Account Cashflow

	July	August	September	October	November	December	January	February	March	April	May	June
FY 2012												
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	\$ 2,042,962
Additions												
From Rates		\$335,137	\$167,509	\$167,509	\$167,509	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447
Interest Income		17	18	14	15	14	108	108	108	108	108	108
Total Additions	\$ 15	\$ 335,154	\$ 167,527	\$ 167,523	\$ 167,524	\$ 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		17,486	400
Proposed Debt Service				4,015	564,393				290,293		17,486	400
Total Deductions	\$ -	\$ -	\$ 703,529	\$ 4,015	\$ 564,393	\$ -	\$ -	\$ -	\$ 290,293	\$ -	\$ 17,486	\$ 400
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	\$ 2,042,962	\$ 2,175,010

Annual Contribution From Rates
 \$1,764,974

Annual Debt Service Payments
 \$ 1,580,115

	July	August	September	October	November	December	January	February	March	April	May	June
FY 2013												
Debt Service Account												
Beginning Cash Balance	\$ 2,175,010	\$ 2,307,457	\$ 2,439,904	\$ 1,334,238	\$ 1,466,685	\$ 1,599,133	\$ 1,731,580	\$ 1,864,027	\$ 1,996,475	\$ 1,426,606	\$ 1,737,857	\$ 2,049,109
Additions												
From Rates	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447
Interest Income												
Total Additions	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447
Deductions												
Existing Debt Service			1,238,114						702,316			
Total Deductions	\$ -	\$ -	\$ 1,238,114	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 702,316	\$ -	\$ -	\$ -
Ending Cash Balance	\$ 2,307,457	\$ 2,439,904	\$ 1,334,238	\$ 1,466,685	\$ 1,599,133	\$ 1,731,580	\$ 1,864,027	\$ 1,996,475	\$ 1,426,606	\$ 1,737,857	\$ 2,049,109	\$ 2,360,360

% increase in DS Allowance
 135%

Annual Contribution From Rates
 \$2,125,780

Annual Debt Service
 \$ 1,940,430

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

	July	August	September	October	November	December	January	February	March	April	May	June
FY 2014												
0%												
% increase in DS Allowance Debt Service Account												
Beginning Cash Balance	\$ 2,360,360	\$ 2,671,611	\$ 2,982,863	\$ 1,159,928	\$ 1,471,179	\$ 1,782,431	\$ 2,093,682	\$ 2,404,933	\$ 2,716,185	\$ 1,615,829	\$ 1,927,080	\$ 2,238,332
Additions												
From Rates	\$311,251	\$311,251	\$311,251	\$311,251	\$311,251	\$311,251	\$311,251	\$311,251	\$311,251	\$311,251	\$311,251	\$311,251
Interest Income												
Total Additions	\$ 311,251	\$ 311,251	\$ 311,251	\$ 311,251	\$ 311,251	\$ 311,251	\$ 311,251	\$ 311,251	\$ 311,251	\$ 311,251	\$ 311,251	\$ 311,251
Deductions												
To Capital Restricted Acct.			1,794,436						1,061,357			
Existing Debt Service			346,750						350,250			
Proposed Debt Service (\$31 M Loan)												
Total Deductions	\$ -	\$ -	\$ 2,134,186	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,411,607	\$ -	\$ -	\$ -
Ending Cash Balance	\$ 2,671,611	\$ 2,982,863	\$ 1,159,928	\$ 1,471,179	\$ 1,782,431	\$ 2,093,682	\$ 2,404,933	\$ 2,716,185	\$ 1,615,829	\$ 1,927,080	\$ 2,238,332	\$ 2,549,583

Annual Contribution From Rates
\$3,735,016

Annual Debt Service
\$ 3,545,793

	July	August	September	October	November	December	January	February	March	April	May	June
FY 2015												
110%												
% increase in DS Allowance Debt Service Account												
Beginning Cash Balance	\$ 2,549,583	\$ 3,203,226	\$ 3,856,871	\$ 17,644	\$ 671,286	\$ 1,324,929	\$ 1,978,570	\$ 2,632,306	\$ 3,285,949	\$ 2,227,319	\$ 2,880,961	\$ 3,534,604
Additions												
From Rates	\$653,628	\$653,628	\$653,628	\$653,628	\$653,628	\$653,628	\$653,628	\$653,628	\$653,628	\$653,628	\$653,628	\$653,628
Interest Income	15	17	18	14	15	14	108	15	15	15	15	15
Total Additions	\$ 653,643	\$ 653,645	\$ 653,646	\$ 653,642	\$ 653,643	\$ 653,641	\$ 653,736	\$ 653,643	\$ 653,643	\$ 653,643	\$ 653,643	\$ 653,643
Deductions												
To Capital Restricted Acct.			3,813,586						1,033,986			
Existing Debt Service			679,287						678,287			
Proposed Debt Service (\$31 M Loan)												
Total Deductions	\$ -	\$ -	\$ 4,492,873	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,712,273	\$ -	\$ -	\$ -
Ending Cash Balance	\$ 3,203,226	\$ 3,856,871	\$ 17,644	\$ 671,286	\$ 1,324,929	\$ 1,978,570	\$ 2,632,306	\$ 3,285,949	\$ 2,227,319	\$ 2,880,961	\$ 3,534,604	\$ 4,188,247

Annual Contribution From Rates
\$7,843,534

Annual Debt Service
\$ 6,205,146

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

Demand Factors For COS Model	Residential	Non-Residential	Navy	PWFD
Summer 2011 Max. Day Demand Factor	1.78	2.18	1.49	1.91
Summer 2012 Max. Day Demand Factor	1.86	2.35	1.97	2.07
Two Year Average Max. Day Demand Factor	1.82	2.26	1.73	1.99
Summer 2011 Max. Hour Demand Factor	2.37	3.27	1.99	2.54
Summer 2012 Max. Hour Demand Factor	2.49	3.52	2.62	2.75
Two Year Average Max. Hour Demand Factor	2.43	3.39	2.31	2.65

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 2012

	Residential	Commercial	Navy	PWFD
Annual Average Day ¹	16,366	57,808	616,576	1,127,654
Daily Read Maximum Day ²	30,513	135,620	1,213,663	2,329,051
Maximum Day Demand Factor	1.86	2.35	1.97	2.07

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)	2.37	1.76	0.66	1.13	
Class MD Demand Factor	1.86	2.35	1.97	2.07	Total MD Demand
Max Day Demand (Avg. Day X MD Demand Factor)	4.42	4.12	1.29	2.33	12.2
System Average Day (mgd)	5.9				
System Maximum Day (mgd)	10.1				
System Maximum Hour (mgd)	12.6				
Noncoincident MD Capacity Factor	12.2	/	5.9	=	2.06
Coincident MD Capacity Factor	10.1	/	5.9	=	1.71
System MD Diversity	2.06	/	1.71	=	1.20

Maximum Hour Demand Factor Calculation

	Residential	Commercial	Navy	PWFD
MD Capacity Factor	1.86	2.35	1.97	2.07
Estimated Maximum-Hour (MH)/MD Ratio ³	1.33	1.50	1.33	1.33
Calculated MH Capacity Factor	2.49	3.52	2.62	2.75

Max Hour Diversity Factor Calculation					
	Residential	Commercial	Navy	PWFD	
Class Average Day (mgd)	2.37	1.76	0.66	1.13	
Class MH Demand Factor	2.49	3.52	2.62	2.75	Total MH Demand
Max Hour Demand (Avg. Day X MH Demand Factor)	5.90	6.19	1.72	3.11	16.91
System Average Day (mgd)	5.9				
System Maximum Day (mgd)	10.1				
System Maximum Hour (mgd)	12.6				
Noncoincident MH Capacity Factor	16.91	/	5.9	=	2.86
Coincident MH Capacity Factor	12.6	/	5.9	=	2.13
System MH Diversity	2.86	/	2.13	=	1.34

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.