



**RHODE ISLAND PUBLIC UTILITIES COMMISSION  
DOCKET 4595**

**PREFILED REBUTTAL TESTIMONY**

**OF**

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

**IN SUPPORT OF**

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

**JUNE 3, 2016**

1 **I. INTRODUCTION**

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

3 A. My name is Harold J. Smith and my business address is 227 West Trade Street,  
4 Suite 1400, Charlotte, North Carolina 28202.

5  
6 **Q. Are you the same Harold Smith who submitted pre-filed direct testimony in  
7 this docket?**

8 A. Yes, I am.  
9

10 **Q. What is the purpose of this testimony?**

11 A. I would like to respond to certain points or conclusions made in the pre-filed  
12 testimony filed by Ms. Sherwood and Mr. Mierzwa on behalf of the Division of  
13 Public Utilities and Carriers ("Division"), Mr. Woodcock on behalf of the  
14 Portsmouth Water and Fire District ("Portsmouth"), and Mr. Collins on behalf of  
15 the United States Department of the Navy ("Navy").  
16

17 **Q: How is your testimony organized?**

18 A. First, I will provide a summary of the adjustments I made to Newport's original  
19 Cost of Service Model ("COS Model"). Second, I will address issues raised in the  
20 testimony of more than one of the witnesses for the Division and the  
21 Interveners. Finally, I will address issues raised by individual witnesses that were  
22 not addressed in the testimony of the other witnesses.  
23  
24  
25  
26

**II. Summary of Adjustments**

**Q. Can you provide a summary of the adjustments you made to your original COS Model?**

**A.** Yes. The following is a list of changes I made to Newport's proposed revenue requirements:

- Reduced Telephone and Communications Expense by \$415 (See Julia Fargue Rebuttal Testimony).
- Revised Self Insurance Expense by \$5,000 (See Julia Fargue Rebuttal Testimony).
- Revised Consultant Fees (See Julia Fargue Rebuttal Testimony).
- Reduced Salaries and Wages and Benefits Expenses (See Julia Fargue Rebuttal Testimony).
- Relabeled Bond Advisor Fees to Bank Trustee Fees (See Julia Fargue Rebuttal Testimony).
- Revised contributions to Newport's Restricted Capital Account to \$2,700,000/year (See Julia Fargue Rebuttal Testimony).
- Updated Legal and Administrative Expense and Data Processing Expense (See Laura Sitrin Rebuttal Testimony).

I also made the following changes to the COS Model:

- The allocation of treatment capital costs was changed such that they are now allocated to base extra capacity cost categories and customer classes based on historical class demand (See Harold Smith Rebuttal Testimony).
- Corrected calculation of Base Charge Revenue at Existing Rates on Revenue Proof (See Harold Smith Rebuttal Testimony).
- The water consumption volume for the Residential class in FY 2015 on HJS Schedules B-6 and D-4 reflects the replacement of July 2014 billed Residential

1 consumption with billed consumption from July 2015 (See Harold Smith Rebuttal  
2 Testimony).

3

4 • Removed Lawton Valley and Station One Electricity Expense to calculate  
5 Administration Non-salary costs. (See Harold Smith Rebuttal Testimony).

6

7 • The asset values presented on HJS Schedule B-5 were updated to reflect  
8 revisions made in response to feedback from the various parties (See Harold  
9 Smith Rebuttal Testimony).

10

11 • Recalculated Navy demand factors to exclude the volume of water lost during a  
12 main break event (See Harold Smith Rebuttal Testimony).

13

14 • Updated meters and fire services in HJS Schedule D-1 and D-2 per Newport's  
15 response to Portsmouth Data Request 1-15.

16

17 • Revised Miscellaneous Revenue Amounts pursuant to Newport's Response to  
18 Portsmouth 3-7.

19

20 • Updated the Capital and Debt Service cash flows in HJS Schedule D-6 through  
21 March 31, 2016.

22

23

24 **Q. What are the results of Newport's adjustments?**

25 A. Originally, Newport's proposed rates were designed to collect \$1,304,595 of  
26 additional operating revenue to support a total cost of service of \$20,151,440. As a  
27 result of Newport's adjustments, its rates are designed to collect additional  
28 operating revenue of \$975,639 to support a total cost of service of \$19,564,370.

29 The resulting rate impacts are set forth in HJS Rebuttal Schedules A-2 and A-3.

30

31

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34

1 **III. Common Issues**

2 **Q. Please summarize the issues that were addressed by more than one of the**  
3 **witnesses.**

4 A. There were two issues addressed by more than one witness. Both Mr. Mierzwa for  
5 the Division and Mr. Woodcock for Portsmouth addressed Newport's proposed  
6 allocation of capital costs associated with Newport's water treatment facilities,  
7 while both Mr. Mierzwa and Mr. Collins for the Navy proposed incorporating  
8 gradualism into the rate setting process.  
9

10 **Allocation of Treatment Capital**

11 **Q. Please describe the issues that Mr. Mierzwa and Mr. Woodcock raised with**  
12 **respect to the allocation of treatment capital costs.**

13 A. The original rate application in this Docket proposed to allocate treatment plant  
14 capital costs based on the amount of capacity Portsmouth and the Navy claimed  
15 they would need before Newport built the new Lawton Valley Plant and upgraded  
16 the Station One Plant (a/k/a "Reserved Capacity"). Since Newport incurred costs to  
17 provide the necessary treatment capacity, it believes the wholesale customers  
18 should be responsible for those costs. Thus, the allocation of treatment capital costs  
19 based on Reserved Capacity ensured that each class paid for the portion of the  
20 treatment plants based on the projected demands they provided to Newport.  
21

22 Mr. Mierzwa opposes the proposed allocation of treatment capital costs based on  
23 Reserved Capacity because it does not reflect the way each customer class uses the  
24 treatment facilities. Specifically, under the Reserved Capacity approach, the Navy is  
25 allocated treatment capital costs associated with meeting a maximum day demand

1 of 1.395 MGD when the Navy's actual maximum day demand in FY 2015 was 2.084  
2 MGD.

3  
4 Mr. Woodcock's position with regard to the allocation of treatment capital costs is  
5 difficult to determine since his responses to data requests contradict his testimony,  
6 and his testimony itself seems contradictory. Initially, it appeared that Mr.  
7 Woodcock's objection to the proposed methodology resulted from his  
8 misinterpretation of Newport's allocation of treatment capital costs. On page 22 of  
9 his direct testimony Mr. Woodcock characterized the proposed allocation as  
10 Newport "seeking to allocate these costs based only on a single purpose set of  
11 bonds – those used to finance the treatment plant upgrades." However, in his  
12 response to Newport Water Data Request 1-4, Mr. Woodcock acknowledged that  
13 Newport's proposed approach does not allocate costs based on a single purpose set  
14 of bonds, but instead allocates treatment plant capital costs differently from the  
15 rest of its bond costs." He concludes his response to this data request by stating:  
16 "Those allocations should be based on actual usage like all other costs."

17  
18 On page 19 of his testimony, he suggests that the basis for the allocation of  
19 treatment capital costs should be the design of the treatment plants instead of the  
20 actual demands that each customer class places on these facilities. Thus, Mr.  
21 Woodcock's proposal is unclear. To the extent he suggests an allocation based on  
22 the design of the treatment plants, Newport disagrees.

23  
24  
25

1 **Q. Do you agree that treatment capital costs should be allocated based on the actual**  
2 **demands of the respective customer classes?**

3 A. I do not disagree with this approach as it does result in an allocation that reflects  
4 actual demands each class places on the treatment facilities. However, this  
5 approach does place the retail customers at risk of paying for “oversized” treatment  
6 facilities if the demands of the Navy and/or Portsmouth decline significantly from  
7 the current level. If the Navy decides to reduce activities at the Newport Base, or if  
8 Portsmouth decides to purchase more water from another wholesale provider, the  
9 retail class would pay a larger share of the cost for treatment facilities that were  
10 designed and built specifically to meet the demands of the Navy and Portsmouth.

11  
12 **Q. Does Newport agree to change the allocation of treatment capital costs?**

13 A. Yes. Newport agrees to allocate treatment capital costs based on actual usage as  
14 proposed by the Division. As in Docket 4355, Newport withdraws its request to  
15 allocate these costs based on Reserved Capacity without prejudice to requesting  
16 this allocation in future rate filings. If wholesale demands decline materially from  
17 their current level, Newport would likely ask the Commission to consider an  
18 approach that ensures the retail customer classes are not burdened with the cost of  
19 treatment facilities constructed on behalf of the Navy and Portsmouth.

20  
21 **Q. What impact does this change have on the proposed rates?**

22 A. As demonstrated on Schedule HJS D-8 Rebuttal, making this change along with  
23 Newport’s other rebuttal adjustments (and changing the Navy’s max day  
24 consumption as addressed below) results in slightly lower Base Charges and  
25 volumetric rates for the retail classes, slightly higher volumetric rates for the  
26 wholesale rate classes, and significantly higher fire protection charges.

1 **Gradualism**

2 **Q. Please explain how the Navy and Division propose to incorporate gradualism into**  
3 **the rate design process?**

4 A. Mr. Collins, on behalf of the Navy, proposes to achieve gradualism by limiting the  
5 increase in rate revenue recovered from any one class to no greater than 1.5 times  
6 the percent increase in system revenue. The unrecovered revenue resulting from  
7 setting rates below the cost of service level for some classes would be allocated to  
8 those rate classes for whom the calculated cost of service rates are less than 1.5  
9 times the system average. In Mr. Collins' proposal, rates for the Navy, Portsmouth  
10 and Private Fire customers would be set such that revenue generated from rates  
11 would be 10% greater than revenue that would be recovered under the existing  
12 rates while rates for the Residential and Non-Residential classes and hydrants  
13 would increase by 5.7%.

14  
15 Mr. Mierzwa's proposal for the Division involves leaving the rates for Newport's  
16 retail classes at existing levels, which are higher than the cost to serve the retail  
17 classes. The excess revenue generated by setting rates at a higher level than the  
18 cost of service for the retail class would allow for smaller rate increases to  
19 Newport's other rate classes.

20  
21 **Q. Do you agree with Mr. Collins' and Mr. Mierzwa's proposed approaches to**  
22 **incorporating gradualism into the rate setting process?**

23 A. In general I do not oppose the concept of applying the concept of gradualism in an  
24 effort to mitigate severe adverse rate impacts on individual customer classes, but I  
25 am opposed to Mr. Collins' suggestion to place an artificial limit on increases for the  
26 various customer classes. This is not an equitable way to assign costs caused by



1 Newport's customers. Further, Mr. Collins cites the Commission's Order in Docket  
2 4065 (In Re: Narragansett Electric Company) to support his position. However, this  
3 Order approved a Settlement Agreement and does not seem to provide precedent  
4 for capping increases on customer classes. I also don't agree with Mr. Mierzwa that  
5 the residential and non-residential rates should be artificially inflated. Instead, as  
6 examined in more detail below, Newport will consider changing the Navy's rate  
7 based on their max day consumption, which will moderate its rate.

8  
9 **Q. Are there any other issues that were raised by multiple witnesses?**

10 A. No.  
11

12 **IV. INDIVIDUAL ISSUES**

13 **Q. Are there any issues raised only by Ms. Sherwood?**

14 A. Yes, Ms. Sherwood pointed out that Newport miscalculated anticipated Base  
15 Charge revenue at existing rates presented on HJS Schedule A-4 (\$851,329), and  
16 that anticipated Base Charge revenue under existing rates would be \$934,255. Ms.  
17 Sherwood recommends reducing Newport's requested revenue requirements by  
18 \$82,926 which is the difference between the erroneous amount of \$851,329  
19 presented in my direct testimony and the \$934,255 she calculated.  
20

21 **Q. Do you agree with Ms. Sherwood's testimony?**

22 A. I agree that an incorrect formula in the COS Model submitted with my direct  
23 testimony resulted in an understatement of the Base Charge revenue under existing  
24 rates and that the formula should be corrected. As shown in the table below, using  
25 the updated meter counts results in \$936,424 of anticipated Base Charge revenue

(which is a slight difference from Ms. Sherwood's calculation of \$934,255) under existing rates.

Meter Size	Existing Base Charge	Number of Meters	Revenue
5/8	\$ 4.89	10,749	\$ 630,751
3/4	\$ 5.01	2,496	\$ 150,060
1	\$ 6.07	567	\$ 41,300
1.5	\$ 8.78	376	\$ 39,615
2	\$ 11.35	263	\$ 35,821
3	\$ 25.22	58	\$ 17,553
4	\$ 28.90	16	\$ 5,549
5	\$ 33.80	-	\$ -
6	\$ 37.48	32	\$ 14,392
8	\$ 47.29	1	\$ 567
10	\$ 65.07	1	\$ 781
Portsmouth Base Charge (4")	\$ 2.86	1	\$ 34
Base Charge Revenue Under Existing Rates			\$ 936,424

However, I do not agree that Newport's requested rate year revenue requirements should be reduced as a result of this correction because the anticipated revenue under *existing* rates does not impact Newport's anticipated rate year expenses, or the rate revenue required to meet these expenses.

**Q. Were there any other issues were raised by Ms. Sherwood?**

A. Ms. Sherwood did address other components of Newport's proposed revenue requirements (Salaries and Wages, Accrued Benefits Buyout, Consultant Fees, Telephone and Communications and Self Insurance) that Julia Forgue addresses in her rebuttal testimony.

1   **Q. Are there any issues that were raised only by Mr. Collins?**

2   A. Yes, Mr. Collins addressed the Navy's FY 2105 maximum day consumption used to  
3   calculate demand factors.

4  
5   **Q. Please describe Mr. Collins' concern with the Navy's maximum day consumption**  
6   **and the Navy's Maximum Day Demand Factor.**

7   A. Mr. Collins points out that the Navy's FY 2015 maximum day of consumption  
8   coincides with a water main break on the Navy base, which resulted in a large  
9   volume of lost water. He goes on to point out that due to the main break, the  
10   metered consumption on the measured maximum day is not truly indicative of the  
11   Navy's normal demand patterns, and that a Maximum Day Demand Factor based on  
12   consumption including water lost due to the main break likely overstates the Navy's  
13   true maximum day demand.

14  
15   **Q. Does Mr. Collins suggest that the Navy's Maximum Day Demand Factor be**  
16   **revised?**

17   A. He does not, but as referenced above, Newport reexamined the Navy's max day  
18   consumption based on Mr. Collins' testimony.

19  
20   **Q. Is Newport willing to change to the Navy's maximum day consumption and**  
21   **resulting Maximum Day Demand Factor?**

22   A. At the current time, and depending on the resolution of outstanding issues raised  
23   by the other parties, Newport is willing to consider a change to the Navy's  
24   maximum day consumption. To that end, I recalculated the Navy's demand factors  
25   excluding the volume lost during the main break event. This was accomplished by  
26   excluding the volume consumed between the dates of March 6, 2015 and March

1 18, 2015, identifying the new maximum day (March 27, 2015) and then  
2 recalculating the average day. The new maximum day volume is divided by the new  
3 average day volume to arrive at the new maximum day peaking factor.  
4

5 **Q. How would this change affect rates?**

6 A. Making this change alone to the COS Model submitted with my original testimony  
7 reduces the increase to the Navy volume charge from 25% to 17%, while the public  
8 and private fire protection charges and the volume charge for all other classes  
9 increase. In the rebuttal COS Model, if Newport does not make this change, the  
10 Navy's volume charge will increase by 34%.  
11

12 **Q. Are there any issues raised only by Mr. Woodcock?**

13 A. Yes, in addition to the allocation of treatment capital costs, Mr. Woodcock raised  
14 many other issues. Julia Forgue's rebuttal testimony addresses Mr. Woodcock's  
15 suggestions related to Chemical, Electric, Consultant Fees, and Capital expenses,  
16 and Ms. Sitrin addresses Mr. Woodcock's proposed cut to Legal and Administrative  
17 and Data Processing expenses. I will address the following issues:  
18

- 19 • Restricted Capital Funding;
- 20 • The asset listing used for the functionalization of capital costs;
- 21 • The derivation of class demand factors;
- 22 • Inconsistent time periods used to calculate water use and sales
- 23 • Errors on Schedule B-1;
- 24 • Miscellaneous revenues; and,
- 25 • The projection of rate year demand for the Residential class.  
26

1 **Q. Do you agree with Mr. Woodcock’s testimony that Newport sought to “recover**  
2 **anticipated capital costs for four years beyond the rate year”?**

3 A. No I do not. Newport originally asked to increase the contribution to its Restricted  
4 Capital Account from \$2,500,000/year to \$3,180,502/year, which is an increase of  
5 \$680,502. Newport based the annual funding amount of \$3,180,502 on the average  
6 projected annual rate funded capital expenses for Fiscal Years 2016 through 2021 as  
7 shown on the Capital Improvement Plan attached to Julia Forgue’s Direct Testimony  
8 as Exhibit 1. Newport used this average for two reasons.

9  
10 First, using an average was consistent with past practice. Mr. Woodcock himself  
11 suggested that Newport use an average for its Capital Costs in Docket 4025. Second,  
12 and more important, the use of an average *reduced* Newport’s rate increase. Mr.  
13 Woodcock argues that Newport can only recover anticipated costs in the rate year,  
14 which is “the twelve month period for which new rates are designed to recover the  
15 proposed cost of service.” Newport’s rate year is FY 2017, in which the anticipated  
16 capital costs are \$3,384,200. Thus, had Newport used the rate year capital amount,  
17 the increase for capital would have been \$884,200 not \$680,502.

18  
19 **Q. Mr. Woodcock also suggests that Newport can use funds in its Restricted Capital**  
20 **Account balance to mitigate the overall rate increase. Does Newport agree?**

21 A. Yes. As set forth in Ms. Forgue’s testimony, Newport reduced the requested  
22 increase to its Capital Account by \$480,502. Thus, Newport seeks only a \$200,000  
23 increase, which would bring its annual funding of this account to \$2,700,000, and  
24 this change is reflected in my updated COS Model.

**Q. Please explain Mr. Woodcock's issue with the asset listing?**

A. Mr. Woodcock has two issues with the asset listing we used to allocate capital costs to functional categories in the COS model. His first issue relates to the potential misclassification of twelve assets in an asset list consisting of almost five hundred entries. During correspondence and conversations with Mr. Woodcock and the Division's representative, Thomas Catlin, and Larry Allen, representing the Navy, regarding Newport's updated asset listing, Mr. Woodcock pointed out that these twelve assets appeared to have been assigned to the wrong functional category and suggested that Newport re-examine the assignment of these assets. In response to his suggestion, I worked with Newport Water's staff to either verify the assignment of these twelve assets, or reassign them to the appropriate category. The results of that exercise are summarized in the table below:

Function Code	Asset Description	Action Taken
T	Water System Eval	Confirmed as treatment related project
T	Water System Eval	Confirmed as treatment related project
WW	Lee's Wharf Pump Station	Wastewater pump station - Do not include
SS	Paradise Avenue Pump Station	Raw water pump station - Reassigned from T to SS
TDP	Forest Ave Pump Station	Distribution pump station - Reassigned from T to TDP
SS	Paradise Avenue Pump Station	Raw water pump station - Reassigned from T to SS
ST	Reservoir Tank Improve	Storage Tank - Reassigned from TD to ST
ST	Reservoir Road Standpipe	Storage Tank - Reassigned from TD to ST
ST	Painting of Water Tank	Storage Tank - Reassigned from TD to ST
ST	Distribution Standpipes	Storage Tank - Reassigned from TD to ST
M	SRF Remote Meter Reading	Meters - Reassigned from B to M
M	SRF Remote Meter Reading	Meters - Reassigned from B to M

As shown in the table, I confirmed that two of the assets were assigned properly; nine assets were reassigned to the category that reflects their actual function; and, one wastewater asset erroneously included in the water asset listing was removed from the list. The impact of the asset reassignment is shown in the table below:

Functional Category	Values from Direct Testimony	Values after Reassignment	Difference
TRANSMISSION/DISTRIBUTION	\$ 35,166,501	\$ 34,349,799	\$ (816,703)
LAWTON VALLEY	\$ 47,328,373	\$ 47,328,373	\$ -
STATION 1	\$ 41,940,359	\$ 41,940,359	\$ -
TREATMENT BOTH	\$ 9,271,267	\$ 8,733,230	\$ (538,037)
STORAGE	\$ 1,060,548	\$ 1,877,251	\$ 816,703
SOURCE OF SUPPLY	\$ 25,033,596	\$ 25,539,067	\$ 505,471
METERS	\$ 3,686,804	\$ 6,575,750	\$ 2,888,946
SERVICES	\$ 3,726,343	\$ 3,726,343	\$ -
T&D PUMPING	\$ 1,061,977	\$ 1,082,596	\$ 20,619
BILLING	\$ 3,151,248	\$ 262,302	\$ (2,888,946)
FIRE	\$ 390,166	\$ 390,166	\$ -
<b>Total</b>	<b>\$ 171,817,184</b>	<b>\$ 171,805,236</b>	<b>\$ 11,947</b>

These corrections resulted in an \$11,947 change in the values, and resulted in a very slight change to Portsmouth's base charge, which is currently \$2.86 per month or \$34.32 per year.

**Q. Please address Mr. Woodcock's second issue related to the asset values.**

A. Mr. Woodcock's second issue with asset values relates to the value of service lines in Newport's system. This disagreement began in Docket 4355, so some history is required:

- In 2009 Newport filed a COS in Docket 4128.
- The parties to that Docket – including Portsmouth – reached a settlement agreement whereby Newport delayed the implementation of the COS rates until it collected daily demand data from an agreed upon sample of its customers.
- As part of the Settlement Agreement, the parties developed an Excel Spreadsheet Model ("Newport COS Model") to calculate cost of service based rates once Newport collected the daily demand data.
- This Newport COS Model included a value of \$75,103,292 for Newport's total fixed assets.

- 1 • This asset list did not contain separate values for Meters and Services.
- 2
- 3 • Rather, both assets were listed in one category “Meters/Services” – valued at
- 4 \$2,976,622.
- 5
- 6 • When the parties settled Docket 4128, Portsmouth did not object to Newport’s
- 7 total asset value, nor did it specifically object to Newport’s value for
- 8 Meters/Services.
- 9
- 10 • In Docket 4355 (filed in September 2012), Newport sought to implement the
- 11 Newport COS Model from Docket 4128 using the daily demand data it had
- 12 collected.
- 13
- 14 • When Mr. Woodcock filed his direct testimony in Docket 4355, he raised
- 15 questions about some of Newport’s asset values, but not the Meters and
- 16 Services.
- 17
- 18 • Mr. Woodcock did not challenge the Meters and Services values until he filed his
- 19 rebuttal testimony.
- 20
- 21 • In his rebuttal, Mr. Woodcock argued that Newport should value its meters and
- 22 services separately.
- 23
- 24 • The parties in Docket 4355, including Portsmouth, eventually reached a
- 25 settlement.
- 26
- 27 • The Joint Settlement Schedules continued to use a combined value for Meters
- 28 and Services (\$1,838,794) as part of a compromise, and agreed that the values
- 29 represented “a fair and reasonable compromise given the information available
- 30 in this docket.”
- 31
- 32 • Newport also agreed to provide updated asset values “with its next general rate
- 33 filing.”
- 34
- 35
- 36



1 **Q. Did Newport provide updated, and separate, values for meters and services in this**  
2 **Docket?**

3 A. Yes. As explained in my direct testimony, Newport performed an exhaustive  
4 analysis of its asset records to determine accurate asset values. As Mr. Woodcock  
5 and the Division acknowledged in Docket 4355, Newport first began combining  
6 values for meters and services in 2006. Before that, Newport reported separate  
7 valuations for meters and services. According to Newport's fixed asset records, the  
8 value for services alone in 2005 was \$2,738,410. Thus, we used this figure as the  
9 starting point. Then we added the net value of services installed since 2005 to arrive  
10 at the total value of \$3,726,343 for service line assets, and used this number in our  
11 rate filing.  
12

13 **Q. Do you agree with Mr. Woodcock's claim that the Docket 4355 Settlement**  
14 **Agreement required Newport to "provide an updated asset valuation list in**  
15 **advance of its next general rate case to allow all parties to, including Portsmouth**  
16 **to review and reach an agreement on the accuracy of the asset listing?"**

17 A. No. The actual language used in the Settlement Agreement is:

18  
19 "23. Newport agrees to provide an updated schedule of fixed asset values with  
20 its next general rate filing. The Parties will try to determine and agree on the  
21 schedule of fixed asset values before or when Newport makes its next filing."  
22

23 **Q. Did Newport provide information pertaining to the asset analysis to**  
24 **representatives of the Navy, the Division and Portsmouth when it filed this rate**  
25 **case?**

26 A. Yes, on December 21, 2015, I sent a memo describing the asset analysis to  
27 representatives for the Navy, the Division and Portsmouth. On January 7, 2016,  
28 representatives for all parties met via conference call to discuss the analysis. Prior

1 to the call I sent an updated asset listing to all parties, and Mr. Woodcock  
2 responded with a number of questions about the updated asset listing. During the  
3 call I described the analysis and presented the updated asset listing that resulted  
4 from the analysis. Soon after that call Mr. Woodcock provided additional  
5 comments relating to assets that he believed had been improperly assigned.  
6

7 **Q. Did you respond to Mr. Woodcock's questions and comments?**

8 A. I did, and in many cases agreed to make changes based on his input and he was  
9 informed that I would make these changes.  
10

11 **Q. Were these changes reflected in the asset values presented with your direct**  
12 **testimony?**

13 A. No, they were not because the application to change rates had already been filed  
14 with the Commission, but I have included them in the asset values in the rebuttal  
15 schedules submitted with this rebuttal testimony. The largest of these changes was  
16 moving approximately \$2.88 million dollars of asset values from the Billing category  
17 to the Meters category.  
18

19 **Q. How does the current value of service line assets compare to the value used in**  
20 **Newport's last cost of service filing?**

21 A. As referenced above, in Docket 4355, services and meters were consolidated into  
22 one category and the value used in the original filing was \$629,135. In the Docket  
23 4355 Settlement Agreement, the combined value for meters and services was  
24 increased to \$1,838,794. For this filing, meters and services were separated into  
25 two groups. The value for meters is currently \$6,575,750 while the value of services  
26 is \$3,726,343, for a combined value of \$10,302,093. This represents an increase in

1 value for Meters and Services of \$8,463,299 when compared to the final value used  
2 in the Docket 4355 Settlement Agreement.

3  
4 **Q. What impact does the significant increase in Meters and Services value have on**  
5 **rates?**

6 A. The increase in the value of Meters and Services means that a much larger portion  
7 of Newport's capital costs are recovered through the Base Charge. In Docket 4355,  
8 \$327,153 in capital costs were allocated to the Base Charge. In this Docket \$584,570  
9 is allocated to the Base Charge. That represents an increase of 79% over the final  
10 amount in Docket 4355 and is the reason why the increase in the Base Charges,  
11 with the exception of Portsmouth's Base Charge, is significantly higher than the  
12 increases to the Volume Charges.

13  
14 **Q. What is Mr. Woodcock's proposal to address his objection to the value of services**  
15 **in Newport's system?**

16 A. Mr. Woodcock proposes to use the Pawtucket Water Supply Board's (PWSB) value  
17 for service lines as a proxy for the value of Newport's services.

18  
19 **Q. Do you agree with his suggested approach to estimating the value of Newport's**  
20 **services?**

21 A. I do not. Using this approach would be akin to Providence Water using the value of  
22 Newport's treatment facilities as the basis for its allocation of capital costs. There is  
23 no data to suggest that the PWSB's value for its services should be substituted for  
24 the values developed from Newport's records. Mr. Woodcock did not provide any  
25 evidence of how the PWSB developed its value for services, and did not provide any  
26 underlying analysis or workpapers that substantiate or explain the PWSB's values.

1 On the other hand, Newport performed a thorough analysis of its fixed asset  
2 records and determined a valuation based on actual data, and not a proxy based on  
3 another utility's unexplained values.  
4

5 **Q. How would the allocation of capital costs to the Base Charge change if the value**  
6 **for services was adjusted as Mr. Woodcock suggests?**

7 **A.** If Newport incorporated Mr. Woodcock's \$6,884,836 value for services in the COS  
8 Model submitted with my direct testimony, and no other changes were made, the  
9 allocation of capital costs to the Base Charge would be \$783,257, which represents  
10 an increase of 140% over the amount of capital costs allocated to the Base Charge  
11 in Docket 4355.  
12

13 **Q. What effect would using the PWSB's value for services have on Portsmouth's**  
14 **rates?**

15 **A.** As set forth in HJS Rebuttal Schedule D-8 A, column B, if Newport incorporated the  
16 PWSB's services values into its rebuttal position, and no other change was made to  
17 Newport's rebuttal position, Portsmouth's Volume Charge decreases 1%, from a  
18 26% increase to a 25% increase, and its billing charge decreases by a penny from  
19 \$1.54/month to \$1.53/month. On the other hand, the Base charges for other  
20 customers and certain private fire charges increase substantially.  
21

22 **Q. Did Mr. Woodcock raise any other issues with the COS Model you prepared?**

23 **A.** Yes, he objected to Newport's updated demand factors, Newport's Treatment  
24 Facilities Allocator and the time periods Newport used to calculate water use and  
25 sales. His testimony on these three subjects reveals the inconsistent nature of  
26 Portsmouth's positions.

1 On the one hand, Mr. Woodcock maintains that because of efforts in previous  
2 Dockets, "Portsmouth hoped and expected that this rate filing would not result in  
3 continued disagreements about previously resolved issues regarding matters such  
4 as cost allocations, [and] customer demands..." (Woodcock Direct, p. 4) Mr.  
5 Woodcock maintains that Newport should not have developed new demand factors  
6 because of the "considerable time and money" spent to derive customer demand  
7 data in past Dockets.

8  
9 Yet, where changes to the agreed upon Newport COS Model benefit Portsmouth,  
10 Mr. Woodcock suggests changes:

11  
12 "For treatment capital costs, the Newport Water model applies a 63% allocation  
13 to base costs and 37% to Maximum Day. However, according to Newport Water,  
14 the treatment plants have a design basis of a combined average day demand of 8  
15 MGD and a maximum day of 16 MGD. This data calls for an allocation of 50% of  
16 treatment capital costs to base (average day) and 50% to maximum day  
17 demands. **Although this proposal is a change to the model previously agreed-to**  
18 **by the parties, it is nevertheless proper because the final design and**  
19 **construction basis is now available to correctly allocate these costs."**  
20 (Woodcock Direct, p. 19, emphasis added)

21  
22 "Newport Water used a two year average in some instances and a three-year  
23 average in other instances when making this calculation... **Newport Water**  
24 **justifies these inconsistencies by pointing out that it is what was done in the**  
25 **settlement model in Docket 4355.** (See Portsmouth 1-5 and Portsmouth 2-2)  
26 **While this may be true, it does not mean that it is correct."** (Woodcock Direct,  
27 p. 23, emphasis added)

28  
29 Thus, Portsmouth acknowledges there are circumstances when the Newport COS  
30 Model should be amended, and Newport believes it has done so in conformance  
31 with accepted rate making principals.  
32

1   **Q. Please explain Mr. Woodcock’s issue with regard to the demand factors used in**  
2   **the COS model?**

3   A. Mr. Woodcock has a number of issues with the customer class demand factors used  
4   in the COS Model. He first asserts that Newport used a different methodology to  
5   determine retail class demand factors than set forth in the Newport COS Model  
6   approved in Docket 4355.

7  
8   **Q. Is he correct?**

9   A. Yes, as described in my direct testimony, and in response to Portsmouth Data  
10   Request 1-3, Newport developed demand factors for the retail classes using the  
11   methodology in the American Water Works Association Manual M-1, Principles of  
12   Water Rates, Fees and Charges (Appendix A), which is the standard industry  
13   practice for estimating class peaking factors using monthly billing data.

14  
15   **Q. On page 15 of his testimony, Mr. Woodcock maintains that “Newport Water’s**  
16   **decision to simply disregard the time, effort and expense to gather the data**  
17   **needed to correctly calculate demand and instead substitute a less sophisticated**  
18   **theoretical calculation is unjustifiable.” Do you agree?**

19   A. No. I do not. Mr. Woodcock repeatedly states that Newport decided to “discard”  
20   the demand data it previously developed. That is not the case. Newport merely  
21   updated the demand data according to standard industry practice using information  
22   previously unavailable to Newport.

23  
24   **Q. Please explain.**

25   A. I changed the methodology for calculating retail demand because Newport now has  
26   monthly billing data that allows it to use the American Water Works Association

1 (“AWWA”) methodology, which is the industry standard for estimating class  
2 demand factors. This monthly billing data for the retail classes was not available  
3 prior to FY 2015 because Newport did not bill on a monthly basis. In fact, when  
4 Newport attempted to apply the AWWA methodology in previous dockets using  
5 quarterly and/or tertiary billing data, Mr. Woodcock characterized Newport’s  
6 efforts as “absurd” in his Docket 3578 direct testimony.

7  
8 **Q. Why didn’t you use the peaking factors from Docket 4355?**

9 A. Primarily because the peaking factors used in Docket 4355 were based on data  
10 gathered in 2011 and 2012 and were somewhat dated. Additionally, the peaking  
11 factors used in Docket 4355 were developed based on daily data gathered from  
12 *samples* of the Residential and Non-Residential classes instead of the *entire*  
13 population of each class. The peaking factors for this filing were developed by  
14 applying the industry standard methodology to current data gathered from the  
15 *entire* population of the Residential and Non-Residential classes.

16  
17 **Q. On page 18 of his Direct Testimony, Mr. Woodcock states that “Newport Water  
18 should not be permitted...to update some customers, and not others.” Did  
19 Newport Water fail to update the demand factors for its wholesale customers?**

20 A. No. Newport did update the demand factors for Portsmouth and the Navy.  
21

22 **Q. Then what objection does Mr. Woodcock have to the updated demand factors for  
23 the wholesale customers?**

24 A. Mr. Woodcock suggests that Newport should have used the methodology in the M-  
25 1 Manual to estimate the demand factors for Portsmouth and the Navy.  
26

1   **Q. Do you agree?**

2   A. No, I do not.

3

4   **Q. What method did you use to determine the peaking factor for the Navy and**  
5   **Portsmouth?**

6   A. Demand factors for the Navy and Portsmouth were determined using actual daily  
7   meter data for each wholesale customer. The first step in the process involved  
8   calculating each customer's average daily demand by dividing total annual demand  
9   during a fiscal year by 365 days. The next step was to identify the maximum day for  
10   each customer. Once the maximum day is determined, the maximum day demand  
11   factor is calculated by dividing the maximum day volume by the average day  
12   volume. As previously mentioned, the re-calculation of the Navy demand factors  
13   was modified would exclude consumption that occurred during a main break event  
14   in the Navy system.

15

16   **Q. Is the approach used to determine demand factors for the Navy and Portsmouth**  
17   **less accurate than the method used to determine the retail class demand factors?**

18   A. No. In fact, the approach used for the Navy and Portsmouth is *more* accurate  
19   because it uses the customer's *actual* maximum day demand as the basis for  
20   calculating the demand factor.

21

22   **Q. If the approach used for the wholesale customer is more accurate, why was it not**  
23   **used for the retail classes?**

24   A. Because daily demand data for the entire retail classes is not available.

25

26



1   **Q. Did Mr. Woodcock express any other concerns regarding the demand factors?**

2   A. Yes, he claims that I misapplied the AWWA methodology by using system demand  
3   data from 2013 and customer billing data from 2015, and he also claims I applied  
4   weekly usage adjustment factors during the development of retail class peaking  
5   factors "...without any basis for doing so..."

6

7   **Q. Are these claims correct?**

8   A. No, they are not. The AWWA methodology requires the use of system data and  
9   billing data to determine demand factors. As I stated in my response to  
10   Portsmouth's Data Request 1-3, the AWWA M-1 Manual states:

11

12       "The system-wide demand data that are necessary to undertake the analysis  
13       include: (1) the **highest ratio** of system maximum day (MD) demand to system  
14       average day (AD) demand **over a representative number of years** (2) the system  
15       maximum month (Max month or MM) for **that highest year**; and (3) the system  
16       maximum hour demand for **that year**." (Emphasis added)

17

18   I used the ratio from 2013 because it had the highest ratio of max day demand to  
19   average demand – a factor of 1.71. If I used the ratio from 2015 in combination with  
20   the billing data from 2015, it would have been lower (1.56).

21

22   With regard to Mr. Woodcock's claim that weekly adjustment factors were  
23   misapplied, the following excerpt from the M-1 Manual clearly states that an  
24   adjustment should be applied or the resulting peaking factors will likely understate  
25   class maximum day demand.

26

27       "The ratio of the overall system coincident maximum day demand (11.55 mgd)  
28       to the average daily demand for the system maximum month (8.60 mgd) [11.55  
29       mgd/8.60 mgd = 1.34] is an indication of the potential relationship between  
30       these two demands for each of the retail customer classes for the example

1 utility. It must be recognized, however, that daily and weekly fluctuations  
2 throughout the month of maximum consumption for each customer class do  
3 occur. These variations would tend to understate the actual maximum daily  
4 demand for the class that occurs during the maximum month if only the 1.34  
5 factor applicable to the system were applied to the maximum month ratios  
6 developed above for each class. **Accordingly, there should be an allowance for**  
7 **such fluctuations factored into the calculation of the maximum day peaking**  
8 **factor for each class.”** (AWWA Manual M-1 page 316, emphasis added)  
9

10 **Q. On page 16 of his testimony, Mr. Woodcock maintains that Newport should not**  
11 **have used a weekly adjustment factor for residential and non-residential**  
12 **customers, and that Newport admitted that there was very little variation in**  
13 **demand for these two classes of customers. Do you agree?**

14 A. No. Mr. Woodcock is correct that my response to Portsmouth’s Data Request 1-4  
15 stated that the data gathered for the Daily Demand Study in 2011 and 2012  
16 indicated very little daily variability of demand for the Residential and Non-  
17 Residential class. However, we are not using the data from the 2011/2012 Daily  
18 Demand Study in this Docket, we are using the AWWA methodology. Thus, the use  
19 of an adjustment factor is justified. I also explained in this response that “It would  
20 not be appropriate to apply weekly adjustment factors to the Navy and Portsmouth  
21 because their peaks were determined based on daily data such that the actual  
22 relationship between the Max Day and Average Day is known.”  
23

24 Furthermore, the application of this adjustment factor resulted in a slightly higher  
25 allocation of costs to the retail classes than if no adjustment were applied. When  
26 no adjustment is applied, the wholesale customers, who are already seeing a large  
27 increase in rates, are allocated a larger portion of costs which results in even  
28 greater rate increases. So despite Mr. Woodcock’s assertion that Newport’s COS  
29 Model “...disadvantages Portsmouth and its customers and benefits Newport

1 Water's retail customers" the application of weekly adjustment factors actually  
2 benefits the wholesale customers, including Portsmouth.  
3

4 **Q. Do you agree with Mr. Woodcock that the demand factors from Docket 4355**  
5 **should be used for this filing?**

6 A. I do not. The demand factors for all customer classes used in the COS Model for  
7 this filing were developed according to standard industry practice and using the  
8 best available data. Mr. Woodcock's claims that "... in every case where Newport  
9 Water introduces a new method in its rate calculation, the new method always  
10 penalizes Portsmouth and benefits Newport Water's retail rate payers."

11  
12 Incorporating Newport's demand factors instead of Mr. Woodcock's has very little  
13 effect on Portsmouth's rates, but they negatively impact Public Fire Protection and  
14 Private Fire Protection customers. Thus, Newport's demand factors are not  
15 designed to "penalize" Portsmouth.  
16

17 **Q. What is the impact on Portsmouth's rates if you incorporate Mr. Woodcock's**  
18 **demand factors?**

19 A. As set forth in HJS Rebuttal Schedule D-8 A, column C, if Newport incorporated Mr.  
20 Woodcock's demand factors into its rebuttal position, and no other change was  
21 made to Newport's rebuttal position, the increase to Portsmouth's Volume Charge  
22 is negligible, from \$6.4848 per thousand gallons to a \$6.4915 per thousand gallons,  
23 but the fire protection charges increase substantially.  
24  
25

1 **Q. Please explain Mr. Woodcock's issue with the inconsistent time periods used to**  
2 **calculate water use and sales?**

3 A. Mr. Woodcock identifies several instances where averages used to project demand  
4 or develop demand factors are based on different time periods. Specifically, he  
5 asserts that:

- 6 • Rate Year demand projections are based on the average demand during the two  
7 previous fiscal years for which actual data is available.
- 8 • On HJS B7, the maximum day factor is based on one year (2013 – the highest  
9 value) but the maximum hour is based on an average of 2014-2015;
- 10 • The Navy and Portsmouth maximum day values are based only on FY 2015;
- 11 • The allocation of lost water is based on projected Rate Year sales, but the  
12 projection of lost water in the Rate Year is based on a three year average.

13  
14 In general, the time periods for which this data was used in the COS Model are the  
15 same as those used in the Newport COS Model the parties agreed to in Dockets  
16 4128 and 4355. A two year average of historical water sales was used to project  
17 rate year demand in Docket 4355, and a two year average is used in the current  
18 COS Model. In Docket 4355, the projection of lost water was based on a three year  
19 average of historical lost water, and lost water projections in the current COS model  
20 are based on a three year average.

21  
22 With regard to the data used in developing demand factors, since the demand  
23 factors used in the current COS model were developed differently than those used  
24 in Docket 4355 it was necessary to establish a new convention for the use of data.  
25 While for reasons described above the system data used to determine the peaking  
26 factors for the retail classes is from 2013, in all cases 2015 water sales data is used.

1 The peaking factors for the Navy and Portsmouth are based on 2015 data and the  
2 billing data used in the derivation of retail class demand factors is from 2015. As  
3 such, the inconsistent time periods Mr. Woodcock alludes to are in fact  
4 nonexistent. The time periods are either consistent with those used in Docket  
5 4355, or are consistent between customer classes when the current approach  
6 differs from that used in Docket 4355.

7  
8 **Q. Please explain Mr. Woodcock's issue with regard to errors on Schedule B-1?**

9 **A.** Mr. Woodcock identified some misaligned cost line item labels on page 22 of the  
10 schedules submitted with my direct testimony. This misalignment has no impact on  
11 the calculation of rates and the labels have been aligned properly. Mr. Woodcock  
12 also identified that electricity costs at Station 1 and Lawton Valley had not been  
13 excluded from the Non-Administrative costs used to develop the cost allocation  
14 factors for a number of the administrative costs. Electricity costs at Station 1 and  
15 Lawton Valley were not excluded in Newport COS Model developed in in Dockets  
16 4128 and 4355; therefore, their exclusion is not a deviation from the approved  
17 Newport COS Model. However, a review of testimony from these two dockets did  
18 not reveal any reason for including these expenses so my rebuttal COS Model  
19 excludes these costs when developing the allocation factor.

20  
21 **Q. Please explain Mr. Woodcock's issue with regard to miscellaneous revenue?**

22 **A.** Mr. Woodcock mentions that he requested additional detail regarding Newport's  
23 proposed miscellaneous revenue two days before he filed his direct testimony. In its  
24 timely response to Portsmouth's third set of data requests, Newport agreed that  
25 Newport's projections of miscellaneous revenue in the rate year should be revised.  
26 The COS model included with this testimony incorporates the revised projections.

1 **Q. Please explain Mr. Woodcock's issue regarding Newport's projection of rate year**  
2 **water demand for the Residential class?**

3 A. Mr. Woodcock points out that the historical water sales data for the Residential  
4 class in FY 2015 includes sales reflected in a quarterly bill sent to this class in July of  
5 2014. As a result, the historical demand for the Residential class in FY 2015 includes  
6 water that was actually used in FY 2014. To correct this problem Mr. Woodcock  
7 replaced the value for July 2014 with the billed volume for the Residential class in  
8 July of 2015.

9

10 **Q. Do you agree with this revision?**

11 A. I do, and the COS model included with this testimony includes that revision.

12

13 **Q. Are there any other issues that were raised by Mr. Woodcock?**

14 A. No.

15

16 **Q. Do you have any final comments on Mr. Woodcock's proposed revisions?**

17 A. Yes. As referenced above, I prepared HJS Schedule D-8 A to show the individual  
18 effect of incorporating Mr. Woodcock's suggestions regarding service values and  
19 demand factors on Newport's Rebuttal position. In addition, the last column on HJS  
20 Schedules D-8 A shows the combined effect of these suggested changes on  
21 Newport's Rebuttal position.

22

23 These changes have very little effect on Portsmouth's rates, but would dramatically  
24 increase the base charges and fire protection charges. It is Newport's position that  
25 its rebuttal rates in Column A of HJS Schedule D-8A Rebuttal are far more equitable

1 to *all* classes of customers, especially if Newport revises the Navy's max day  
2 consumption. Thus, the Commission should not accept Mr. Woodcock's revisions.

3

4 **V. CONCLUSION**

5 **Q. Do you recommend that the Commission approve the rates proposed in your**  
6 **rebuttal schedules that are attached to your testimony?**

7 A. Yes I do. The resulting rates and charges are just and reasonable, reflect the  
8 current and anticipated demands of each customer or customer class, and  
9 should serve to keep Newport on sound financial footing.

10

11 **Q: Does this conclude your testimony?**

12 A: Yes it does.

### CERTIFICATION

I hereby certify that on June 3, 2016, I sent a copy of the within to all parties set forth on the attached Service List by electronic mail and copies to Luly Massaro, Commission Clerk, by electronic mail and regular mail.

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Rhode Island Public Utilities Commission  
Docket 4595  
FY 2017 Rate Filing

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Account		Test Year (FY2015)	Test Year Normalizing Adjustments	Normalized Test Year	Rate Year Adjustments	Proposed Rate Year - FY2017
<b>O&amp;M COSTS</b>						
<b>Administration</b>						
50001	Salaries & Wages	\$ 262,222	\$ -	\$ 262,222	\$ 19,360	\$ 281,582
	AFSCME retro	-	\$ -	\$ -	\$ -	-
	NEA retro	-	\$ -	\$ -	\$ -	-
	AFSCME benefits on retro pay	-	\$ -	\$ -	\$ -	-
	NEA benefits on retro pay	-	\$ -	\$ -	\$ -	-
50044	Standby Salaries	12,528	\$ -	\$ 12,528	\$ 6,192	18,720
50520	Accrued Benefits Buyout	15,500	\$ -	\$ 15,500	\$ 43,500	59,000
50100	Employee Benefits	110,408	\$ -	\$ 110,408	\$ 8,649	119,057
50103	Retiree Insurance Coverage	351,563	\$ -	\$ 351,563	\$ 18,437	370,000
50105	Workers Compensation	59,456	\$ -	\$ 59,456	\$ 4,544	64,000
50175	Annual Leave Buyback	3,260	\$ -	\$ 3,260	\$ 40	3,300
50207	Advertisement	4,041	\$ -	\$ 4,041	\$ 4,959	9,000
50210	Membership Dues & Subscriptions	4,447	\$ -	\$ 4,447	\$ (1,947)	2,500
50212	Conferences & Training	868	\$ -	\$ 868	\$ 3,132	4,000
50214	Tuition Reimbursement	-	\$ -	\$ -	\$ 2,000	2,000
50220	Consultant Fees	210,410	\$ -	\$ 210,410	\$ (5,410)	205,000
50238	Postage	360	\$ -	\$ 360	\$ 640	1,000
50239	Fire & Liability Insurance	16,853	\$ -	\$ 16,853	\$ 50,147	67,000
50251	Telephone & Communication	5,569	\$ -	\$ 5,569	\$ 31	5,600
50305	Water	1,275	\$ -	\$ 1,275	\$ 740	2,015
50306	Electricity	10,121	\$ -	\$ 10,121	\$ (2,165)	7,956
50307	Natural Gas	5,918	\$ -	\$ 5,918	\$ (692)	5,226
50308	Property Taxes	464,200	\$ -	\$ 464,200	\$ 104,843	569,043
50266	Legal & Administrative		\$ -	\$ -	\$ -	-
	Audit Fees	4,349	\$ -	\$ 4,349	\$ (116)	4,233
	OPEB Contribution		\$ -	\$ -	\$ 19,200	19,200
	City Council	4,649	\$ -	\$ 4,649	\$ 1,075	5,724
	City Clerk	3,381	\$ -	\$ 3,381	\$ (401)	2,980
	City Manager	54,131	\$ -	\$ 54,131	\$ 7,347	61,478
	Human Resources	30,121	\$ -	\$ 30,121	\$ 3,737	33,858
	City Solicitor	20,459	\$ -	\$ 20,459	\$ 3,203	23,662
	Finance Adimistrative 50%	19,822	\$ -	\$ 19,822	\$ 7,432	27,254
	Finance Adimistrative 5%	7,020	\$ -	\$ 7,020	\$ (4,743)	2,277
	Finance Admin 10% Inv/Debt		\$ -	\$ -	\$ -	-
	Purchasing	18,314	\$ -	\$ 18,314	\$ (1,054)	17,260
	Assessment					14,561
	Collections	46,979	\$ -	\$ 46,979	\$ 773	47,752
75543	Accounting - Wires - 5%	10,679	\$ -	\$ 10,679	\$ 2,059	12,738
	Accounting	70,516	\$ -	\$ 70,516	\$ (3,125)	67,391
	Facilities Maintenance	13,266	\$ -	\$ 13,266	\$ 15,893	29,159
50267	Data Processing	143,888	\$ -	\$ 143,888	\$ 28,336	172,224
50268	Mileage Allowance	875	\$ -	\$ 875	\$ 1,125	2,000
50271	Gasoline & Vehicle Allowance	9,354	\$ -	\$ 9,354	\$ (3,965)	5,389
50275	Repairs & Maintenance	-	\$ -	\$ -	\$ 1,200	1,200
50280	Regulatory Expense	590	\$ -	\$ 590	\$ 4,410	5,000
50281	Regulatory Assessment	79,698	\$ -	\$ 79,698	\$ 302	80,000
50361	Office Supplies	14,469	\$ -	\$ 14,469	\$ 531	15,000
50505	Self Insurance	118	\$ -	\$ 118	\$ 4,882	5,000
50515	Unemployment Claims	-	\$ -	\$ -	\$ -	-
	<b>Subtotal:</b>	<b>\$ 2,091,677</b>	<b>\$ -</b>	<b>\$ 2,091,677</b>	<b>\$ 345,102</b>	<b>\$ 2,451,341</b>

Account	Test Year (FY2015)	Test Year Normalizing Adjustments	Normalized Test Year	Rate Year Adjustments	Proposed Rate Year - FY2017
<b>Customer Service</b>					
50001 Salaries & Wages	\$ 263,080	\$ -	\$ 263,080	\$ 46,230	\$ 309,310
50002 Overtime	116	\$ -	\$ 116	\$ 5,293	5,409
Collections		\$ -	\$ -	\$ -	-
50004 Temp Salaries	18,831	\$ -	\$ 18,831	\$ (3,855)	14,976
50056 Injury Pay	-	\$ -	\$ -	\$ -	-
50100 Employee Benefits	149,435	\$ -	\$ 149,435	\$ 41,370	190,805
50120 Bank Fees (lock box)	13,711	\$ -	\$ 13,711	\$ 3,089	16,800
50175 Annual Leave Buyback	4,531	\$ -	\$ 4,531	\$ (31)	4,500
50205 Copying & binding	511	\$ -	\$ 511	\$ (11)	500
50212 Conferences & Training	(263)	\$ -	\$ (263)	\$ 5,263	5,000
50225 Support Services	32,784	\$ -	\$ 32,784	\$ (6,609)	26,175
50238 Postage	57,265	\$ -	\$ 57,265	\$ 17,415	74,680
50271 Gasoline & Vehicle Allowance	39,667	\$ -	\$ 39,667	\$ (12,722)	26,945
50275 Repairs & Maintenance	33,449	\$ -	\$ 33,449	\$ 1,551	35,000
50299 Meter Maintenance	7,734	\$ -	\$ 7,734	\$ 2,266	10,000
50311 Operating Supplies	3,658	\$ -	\$ 3,658	\$ 1,342	5,000
50320 Uniforms & protective Gear	957	\$ -	\$ 957	\$ 43	1,000
50380 Customer Service Supplies	166	\$ -	\$ 166	\$ 4,834	5,000
<b>Subtotal:</b>	<b>\$ 625,632</b>	<b>\$ -</b>	<b>\$ 625,632</b>	<b>\$ 105,468</b>	<b>\$ 731,100</b>
<b>Source of Supply - Island</b>					
50001 Salaries & Wages	\$ 321,324	\$ -	\$ 321,324	\$ (11,374)	\$ 309,950
50002 Overtime	36,123	\$ -	\$ 36,123	\$ (3,123)	33,000
50004 Temp Salaries	-	\$ -	\$ -	\$ 26,180	26,180
50056 Injury Pay	-	\$ -	\$ -	\$ -	-
50100 Employee Benefits	185,081	\$ -	\$ 185,081	\$ (9,431)	175,650
50175 Annual Leave Buyback	3,783	\$ -	\$ 3,783	\$ 17	3,800
50306 Electricity	38,527	\$ -	\$ 38,527	\$ 11,353	49,880
50271 Gas/Vehicle Maintenance	63,620	\$ -	\$ 63,620	\$ (4,341)	59,279
50275 Repairs & Maintenance	11,633	\$ -	\$ 11,633	\$ (1,633)	10,000
50277 Reservoir Maintenance	16,236	\$ -	\$ 16,236	\$ (236)	16,000
50311 Operating Supplies	2,802	\$ -	\$ 2,802	\$ 4,698	7,500
50320 Uniforms & protective Gear	935	\$ -	\$ 935	\$ 575	1,510
50335 Chemicals	72,671	\$ -	\$ 72,671	\$ (5,871)	66,800
<b>Subtotal:</b>	<b>\$ 752,735</b>	<b>\$ -</b>	<b>\$ 752,735</b>	<b>\$ 6,814</b>	<b>\$ 759,549</b>
<b>Source of Supply - Mainland</b>					
50002 Overtime	\$ 13,513	\$ -	\$ 13,513	\$ (1,903)	\$ 11,610
50004 Temp Salaries	18,784	\$ -	\$ 18,784	\$ 11,212	29,996
50005 Permanent Part time	14,200	\$ -	\$ 14,200	\$ (1,300)	12,900
50100 Employee Benefits	6,453	\$ -	\$ 6,453	\$ (3,928)	2,525
50306 Electricity	122,917	\$ -	\$ 122,917	\$ 31,507	154,424
50275 Repairs & Maintenance	13,908	\$ -	\$ 13,908	\$ (6,908)	7,000
50277 Reservoir Maintenance	-	\$ -	\$ -	\$ 4,500	4,500
50311 Operating Supplies	236	\$ -	\$ 236	\$ 764	1,000
<b>Subtotal:</b>	<b>\$ 190,011</b>	<b>\$ -</b>	<b>\$ 190,011</b>	<b>\$ 33,944</b>	<b>\$ 223,955</b>

		Test Year (FY2015)	Test Year Normalizing Adjustments	Normalized Test Year	Rate Year Adjustments	Proposed Rate Year - FY2017
<b>Account</b>						
<b>Station One</b>						
50001	Salaries & Wages	\$ 519,694	\$ -	\$ 519,694	\$ (8,619)	\$ 511,075
50002	Overtime	110,009	\$ -	\$ 110,009	\$ (7,069)	102,940
50003	Holiday Pay	18,936	\$ -	\$ 18,936	\$ 3,096	22,032
50045	Lead Plant Operator Stipend	6,627	\$ -	\$ 6,627	\$ 5,853	12,480
50100	Employee Benefits	\$ 296,163	\$ -	\$ 296,163	\$ (31,247)	\$ 264,916
50175	Annual Leave Buyback	11,785	\$ -	\$ 11,785	\$ 215	12,000
50212	Conferences & Training	1,049	\$ -	\$ 1,049	\$ 3,451	4,500
50239	Fire & Liability Insurance	60,531	\$ -	\$ 60,531	\$ (25,531)	35,000
50306	Electricity	\$ 207,037	\$ -	\$ 207,037	\$ 5,447	\$ 212,484
50307	Natural Gas	43,410	\$ -	\$ 43,410	\$ -	43,410
50260	Rental of Equipment	922	\$ -	\$ 922	\$ 78	1,000
50305	Sewer Charge	108,472	\$ -	\$ 108,472	\$ 90,968	199,440
50271	Gas/Vehicle Maintenance	9,831	\$ -	\$ 9,831	\$ (4,442)	5,389
50275	Repairs & Maintenance	\$ 9,738	\$ -	\$ 9,738	\$ 57,049	\$ 66,787
50311	Operating Supplies	\$ 18,895	\$ -	\$ 18,895	\$ (1,734)	\$ 17,161
50320	Uniforms & protective Gear	1,027	\$ -	\$ 1,027	\$ 399	1,426
50335	Chemicals	350,158	\$ -	\$ 350,158	\$ 16,157	366,315
<b>Subtotal:</b>		<b>\$ 1,774,284</b>	<b>\$ -</b>	<b>\$ 1,774,284</b>	<b>\$ 104,071</b>	<b>\$ 1,878,355</b>
<b>Lawton Valley</b>						
50001	Salaries & Wages	\$ 449,625	\$ -	\$ 449,625	\$ 48,916	\$ 498,541
50002	Overtime	98,692	\$ -	\$ 98,692	\$ 211	98,903
50003	Holiday Pay	15,904	\$ -	\$ 15,904	\$ 4,088	19,992
50045	Lead Plant Operator Stipend	7,830	\$ -	\$ 7,830	\$ 4,650	12,480
50100	Employee Benefits	\$ 273,138	\$ -	\$ 273,138	\$ 4,864	\$ 278,002
50175	Annual Leave Buyback	7,368	\$ -	\$ 7,368	\$ 32	7,400
50212	Conferences & Training	850	\$ -	\$ 850	\$ 3,270	4,120
50239	Fire & Liability Insurance	93,577	\$ -	\$ 93,577	\$ (39,577)	54,000
50306	Electricity	\$ 310,343	\$ -	\$ 310,343	\$ 64,748	\$ 375,091
50307	Natural Gas	34,663	\$ -	\$ 34,663	\$ -	34,663
50260	Rental of Equipment	722	\$ -	\$ 722	\$ 278	1,000
50305	Sewer Charge	358,682	\$ -	\$ 358,682	\$ 139,918	498,600
50271	Gas/Vehicle Maintenance	7,482	\$ -	\$ 7,482	\$ (2,093)	5,389
50275	Repairs & Maintenance	\$ 19,922	\$ -	\$ 19,922	\$ 41,429	\$ 61,351
50311	Operating Supplies	\$ 8,971	\$ -	\$ 8,971	\$ 4,340	\$ 13,311
50320	Uniforms & protective Gear	1,539	\$ -	\$ 1,539	\$ (236)	1,303
50335	Chemicals	262,215	\$ -	\$ 262,215	\$ 66,452	328,667
<b>Subtotal:</b>		<b>\$ 1,951,523</b>	<b>\$ -</b>	<b>\$ 1,951,523</b>	<b>\$ 341,291</b>	<b>\$ 2,292,814</b>
<b>Laboratory</b>						
50001	Salaries & Wages	\$ 114,425	\$ -	\$ 114,425	\$ 6,754	\$ 121,179
50100	Employee Benefits	54,984	\$ -	\$ 54,984	\$ 3,724	58,708
50175	Annual Leave Buyback	1,560	\$ -	\$ 1,560	\$ (60)	1,500
50275	Repairs & Maintenance	256	\$ -	\$ 256	\$ 1,444	1,700
50281	Regulatory Assessment	47,696	\$ -	\$ 47,696	\$ (672)	47,024
50339	Laboratory Supplies	16,924	\$ -	\$ 16,924	\$ 18,703	35,627
<b>Subtotal:</b>		<b>\$ 235,845</b>	<b>\$ -</b>	<b>\$ 235,845</b>	<b>\$ 29,893</b>	<b>\$ 265,738</b>

		Test Year (FY2015)	Test Year Normalizing Adjustments	Normalized Test Year	Rate Year Adjustments	Proposed Rate Year - FY2017
<b>Account</b>						
<b>Transmission &amp; Distribution</b>						
50001	Salaries & Wages	\$ 437,907	\$ -	\$ 437,907	\$ 77,312	\$ 515,219
50002	Overtime	48,703	\$ -	\$ 48,703	\$ 3,661	52,364
50004	Temp Salaries	18,106	\$ -	\$ 18,106	\$ 8,074	26,180
50056	Injury Pay	-	\$ -	\$ -	\$ -	-
50100	Employee Benefits	259,991	\$ -	\$ 259,991	\$ 52,315	312,306
50175	Annual Leave Buyback	7,484	\$ -	\$ 7,484	\$ 16	7,500
50212	Conferences & Training	1,776	\$ -	\$ 1,776	\$ 2,224	4,000
50225	Contract Services	10,524	\$ -	\$ 10,524	\$ 11,001	21,525
50239	Fire & Liability Insurance	20,061	\$ -	\$ 20,061	\$ (8,061)	12,000
50306	Electricity	34,641	\$ -	\$ 34,641	\$ (14,034)	20,607
50260	Heavy Equipment Rental	10,706	\$ -	\$ 10,706	\$ (2,446)	8,260
50271	Gas/Vehicle Maintenance	93,222	\$ -	\$ 93,222	\$ (23,165)	70,057
50275	Repairs & Maintenance	28,521	\$ -	\$ 28,521	\$ (2,521)	26,000
50276	Main Maintenance	94,546	\$ -	\$ 94,546	\$ (3,346)	91,200
50296	Service Maintenance	28,090	\$ -	\$ 28,090	\$ 1,910	30,000
50311	Operating Supplies	4,964	\$ -	\$ 4,964	\$ 3,036	8,000
50320	Uniforms & protective Gear	1,725	\$ -	\$ 1,725	\$ 2,275	4,000
<b>Subtotal:</b>		<b>\$ 1,100,967</b>	<b>\$ -</b>	<b>\$ 1,100,967</b>	<b>\$ 108,251</b>	<b>\$ 1,209,218</b>
<b>Fire Protection</b>						
50275	Repair & Maintenance - Equipment	\$ 11,585	\$ -	\$ 11,585	\$ 12,215	\$ 23,800
<b>Subtotal:</b>		<b>\$ 11,585</b>	<b>\$ -</b>	<b>\$ 11,585</b>	<b>\$ 12,215</b>	<b>\$ 23,800</b>
<b>Total O&amp;M Costs</b>		<b>\$ 8,734,259</b>	<b>\$ -</b>	<b>\$ 8,734,259</b>	<b>\$ 1,087,051</b>	<b>\$ 9,835,871</b>

Account	Test Year (FY2015)	Test Year Normalizing Adjustments	Normalized Test Year	Rate Year Adjustments	Proposed Rate Year - FY2017
<b>CAPITAL COSTS</b>					
Contribution to Capital Spending Acct.	\$2,575,497	(\$235,664)	\$2,339,833	\$ 360,167	\$ 2,700,000
Contribution to Debt Service Acct.	\$6,810,996	\$ 4	\$ 6,811,000	\$ -	\$ 6,811,000
<b>Total Capital Costs</b>	<b>\$ 9,386,493</b>	<b>\$ (235,660)</b>	<b>\$ 9,150,833</b>	<b>\$ 360,167</b>	<b>\$ 9,511,000</b>
<b>Operating Revenue Allowance</b>	<b>\$ 262,028</b>	<b>\$ (1,469)</b>	<b>\$ 260,558</b>	<b>\$ 34,518</b>	<b>\$ 295,076</b>
<b>Total Costs before Offsets</b>	<b>\$18,382,779</b>	<b>\$ (237,130)</b>	<b>\$ 18,145,650</b>	<b>\$ 1,481,736</b>	<b>\$ 19,641,947</b>
<b>OFFSETS</b>					
<b>Nonrate Revenues</b>					
Sundry charges	\$ 147,125	\$ -	\$ 147,125	\$ (20,875)	\$ 126,250
WPC cost share on customer service	\$ 291,365	\$ -	\$ 291,365	\$ 38,635	\$ 330,000
Middletown cost share on customer service	\$ 146,895	\$ -	\$ 146,895	\$ 20,105	\$ 167,000
Rental of Property	\$ 91,893	\$ -	\$ 91,893	\$ 3,307	\$ 95,200
Water Penalty	\$ 54,474	\$ -	\$ 54,474	\$ (3,274)	\$ 51,200
Miscellaneous	\$ 7,853	\$ -	\$ 7,853	\$ 2,647	\$ 10,500
Investment Interest Income	\$ 3,090	\$ -	\$ 3,090	\$ (1,840)	\$ 1,250
Water Quality Protection Fees	\$ 23,638	\$ -	\$ 23,638	\$ (1,388)	\$ 22,250
<b>Total Nonrate Revenues</b>	<b>\$ 766,333</b>	<b>\$ -</b>	<b>\$ 766,333</b>	<b>\$ 37,317</b>	<b>\$ 803,650</b>
<b>Net Costs to Be Recovered through Rates</b>	<b>\$17,616,446</b>	<b>\$ (237,130)</b>	<b>\$ 17,379,317</b>	<b>\$ 1,444,419</b>	<b>\$ 18,838,297</b>

Rhode Island Public Utilities Commission  
Docket 4595  
FY 2017 Rate Filing  
HJS Schedule A-1B Rebuttal  
Revenue Requirements by Account

		Test Year (FY2015)	Test Year Normalizing Adjustments	Normalized Test Year	Rate Year Adjustments	Proposed Rate Year - FY2017
50001	Salaries & Wages	\$ 2,368,277	\$ -	\$ 2,368,277	\$ 178,579	\$ 2,546,856
50002	Overtime	\$ 307,156	\$ -	\$ 307,156	\$ (2,929)	\$ 304,227
50003	Holiday Pay	\$ 34,840	\$ -	\$ 34,840	\$ 7,184	\$ 42,024
50004	Temp Salaries	\$ 55,721	\$ -	\$ 55,721	\$ 41,612	\$ 97,333
50005	Permanent Part time	\$ 14,200	\$ -	\$ 14,200	\$ (1,300)	\$ 12,900
50044	Standby Salaries	\$ 12,528	\$ -	\$ 12,528	\$ 6,192	\$ 18,720
50045	Lead Plant Operator Stipend	\$ 14,457	\$ -	\$ 14,457	\$ 10,503	\$ 24,960
50056	Injury Pay	\$ -	\$ -	\$ -	\$ -	\$ -
50100	Employee Benefits	\$ 1,335,653	\$ -	\$ 1,335,653	\$ 66,316	\$ 1,401,969
50103	Retiree Insurance Coverage	\$ 351,563	\$ -	\$ 351,563	\$ 18,437	\$ 370,000
50105	Workers Compensation	\$ 59,456	\$ -	\$ 59,456	\$ 4,544	\$ 64,000
50120	Bank Fees (lock box)	\$ 13,711	\$ -	\$ 13,711	\$ 3,089	\$ 16,800
50175	Annual Leave Buyback	\$ 39,771	\$ -	\$ 39,771	\$ 229	\$ 40,000
50205	Copying & binding	\$ 511	\$ -	\$ 511	\$ (11)	\$ 500
50207	Advertisement	\$ 4,041	\$ -	\$ 4,041	\$ 4,959	\$ 9,000
50210	Membership Dues & Subscriptions	\$ 4,447	\$ -	\$ 4,447	\$ (1,947)	\$ 2,500
50212	Conferences & Training	\$ 4,280	\$ -	\$ 4,280	\$ 17,340	\$ 21,620
50214	Tuition Reimbursement	\$ -	\$ -	\$ -	\$ 2,000	\$ 2,000
50220	Consultant Fees	\$ 210,410	\$ -	\$ 210,410	\$ (5,410)	\$ 205,000
50225	Support Services/Contract Services	\$ 43,308	\$ -	\$ 43,308	\$ 4,392	\$ 47,700
50238	Postage	\$ 57,625	\$ -	\$ 57,625	\$ 18,055	\$ 75,680
50239	Fire & Liability Insurance	\$ 191,022	\$ -	\$ 191,022	\$ (23,022)	\$ 168,000
50251	Telephone & Communication	\$ 5,569	\$ -	\$ 5,569	\$ 31	\$ 5,600
50260	Rental of Equipment	\$ 12,350	\$ -	\$ 12,350	\$ (2,090)	\$ 10,260
50266	Legal & Administrative	\$ 303,686	\$ -	\$ 303,686	\$ 51,281	\$ 369,528
50267	Data Processing	\$ 143,888	\$ -	\$ 143,888	\$ 28,336	\$ 172,224
50268	Mileage Allowance	\$ 875	\$ -	\$ 875	\$ 1,125	\$ 2,000
50271	Gasoline & Vehicle Allowance	\$ 223,176	\$ -	\$ 223,176	\$ (50,728)	\$ 172,448
50275	Repairs & Maintenance	\$ 129,012	\$ -	\$ 129,012	\$ 103,826	\$ 232,838
50276	Main Maintenance	\$ 94,546	\$ -	\$ 94,546	\$ (3,346)	\$ 91,200
50277	Reservoir Maintenance	\$ 16,236	\$ -	\$ 16,236	\$ 4,264	\$ 20,500
50280	Regulatory Expense	\$ 590	\$ -	\$ 590	\$ 4,410	\$ 5,000
50281	Regulatory Assessment	\$ 127,394	\$ -	\$ 127,394	\$ (370)	\$ 127,024
50296	Service Maintenance	\$ 28,090	\$ -	\$ 28,090	\$ 1,910	\$ 30,000
50299	Meter Maintenance	\$ 7,734	\$ -	\$ 7,734	\$ 2,266	\$ 10,000
50305	Water/Sewer Charge	\$ 468,429	\$ -	\$ 468,429	\$ 231,626	\$ 700,055
50306	Electricity	\$ 723,586	\$ -	\$ 723,586	\$ 96,856	\$ 820,442
50307	Natural Gas	\$ 83,991	\$ -	\$ 83,991	\$ (692)	\$ 83,299
50308	Property Taxes	\$ 464,200	\$ -	\$ 464,200	\$ 104,843	\$ 569,043
50311	Operating Supplies	\$ 39,526	\$ -	\$ 39,526	\$ 12,446	\$ 51,972
50320	Uniforms & protective Gear	\$ 6,183	\$ -	\$ 6,183	\$ 3,056	\$ 9,239
50335	Chemicals	\$ 685,044	\$ -	\$ 685,044	\$ 76,738	\$ 761,782
50339	Laboratory Supplies	\$ 16,924	\$ -	\$ 16,924	\$ 18,703	\$ 35,627
50361	Office Supplies	\$ 14,469	\$ -	\$ 14,469	\$ 531	\$ 15,000
50380	Customer Service Supplies	\$ 166	\$ -	\$ 166	\$ 4,834	\$ 5,000
50505	Self Insurance	\$ 118	\$ -	\$ 118	\$ 4,882	\$ 5,000
50515	Unemployment Claims	\$ -	\$ -	\$ -	\$ -	\$ -
50520	Accrued Benefits Buyout	\$ 15,500	\$ -	\$ 15,500	\$ 43,500	\$ 59,000
60001	Hydrant Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>		<b>8,734,259</b>	<b>-</b>	<b>8,734,259</b>	<b>1,087,051</b>	<b>9,835,871</b>



Rhode Island Public Utilities Commission  
Docket 4595  
FY 2017 Rate Filing  
HJS Schedule A-2 Rebuttal  
Cost of Service Rates and Charges

		<b>Docket 4355</b>				
		<b>Rates</b>	<b>Cost of Service</b>	<b>Proposed Rates</b>	<b>% Change</b>	<b>Projected Revenues</b>
<b>Base Charge (per bill)</b>						
Monthly						
5/8	\$	4.89	\$ 5.4100	\$ 5.41	11%	\$697,825
3/4	\$	5.01	5.6741	5.68	13%	170,127
1	\$	6.07	7.5307	7.54	24%	51,302
1.5	\$	8.78	12.0147	12.02	37%	54,234
2	\$	11.35	16.8012	16.81	48%	53,052
3	\$	25.22	44.2738	44.28	76%	30,819
4	\$	28.90	52.1988	52.20	81%	10,022
5	\$	33.80	62.7655	62.77	86%	0
6	\$	37.48	70.6905	70.70	89%	27,149
8	\$	47.29	91.8238	91.83	94%	1,102
10	\$	65.07	130.1279	130.13	100%	1,562
Portsmouth Base Charge (4")	\$	2.86	1.5310	1.54	-46%	18
						1,097,213
<b>Volume Charge (per 1,000 gallons)</b>						
Retail						
Residential	\$	10.02	\$ 9.9845	\$ 9.99	0%	6,605,608
Non-Residential	\$	11.22	\$ 10.5507	\$ 10.56	-6%	4,828,085
						\$ 11,433,693
Wholesale						
Navy	\$	6.5189	\$ 7.6335	\$ 7.6335	17%	1,886,070
Portsmouth Water & Fire District	\$	5.1507	\$ 6.4847	\$ 6.4848	26%	2,806,504
						\$ 4,692,574
<b>Fire Protection</b>						
Public (per hydrant)	\$	944.22	\$ 1,115.86	\$ 1,115.86	18%	\$ 1,159,379
<b>Private (by Connection Size)</b>						
Connection Size	Existing Charge					
<2		\$25.99	\$ 36.33	\$ 36.33	40%	
2	6.19	\$108.85	\$ 152.14	\$ 152.15	40%	-
4	38.32	\$399.08	\$ 532.83	\$ 532.84	34%	39,430
6	111.31	\$951.11	\$ 1,232.06	\$ 1,232.07	30%	289,536
8	237.21	\$1,903.25	\$ 2,438.10	\$ 2,438.10	28%	134,096
10	426.58	\$3,335.46	\$ 4,252.22	\$ 4,252.23	27%	-
12	689.04	\$5,320.45	\$ 6,766.54	\$ 6,766.54	27%	-
						\$ 463,062
<b>Total Projected Rate Revenues</b>						<b>\$ 18,845,920</b>

Customer Class	Proposed 5/8 Inch Meter					Proposed 3/4 Inch Meter				Proposed 1 Inch Meter				Proposed 1.5 Inch Meter				Proposed 2 Inch Meter				Proposed 3 Inch Meter			
	Consumption per Bill (gallons)	Annual Bill at Current Rates	Annual Bill at Proposed Rates	Dollar Change	Percent Change	Annual Bill at Current Rates	Annual Bill at Proposed Rates	Dollar Change	Percent Change	Annual Bill at Current Rates	Annual Bill at Proposed Rates	Dollar Change	Percent Change	Annual Bill at Current Rates	Annual Bill at Proposed Rates	Dollar Change	Percent Change	Annual Bill at Current Rates	Annual Bill at Proposed	Dollar Change	Percent Change	Annual Bill at Current Rates	Annual Bill at Proposed	Dollar Change	Percent Change
Residential (Monthly)	1,000	\$178.92	\$184.80	\$5.88	3.3%	\$180.36	\$188.04	\$7.68	4.3%	\$193.08	\$210.36	\$17.28	9.7%	\$225.60	\$264.12	\$38.52	21.5%	\$256.44	\$321.60	\$65.16	36.4%	\$422.88	\$651.24	\$228.36	127.6%
	2,000	\$299.16	\$304.68	\$5.52	1.8%	\$300.60	\$307.92	\$7.32	2.4%	\$313.32	\$330.24	\$16.92	5.7%	\$345.84	\$384.00	\$38.16	12.8%	\$376.68	\$441.48	\$64.80	21.7%	\$543.12	\$771.12	\$228.00	76.2%
	4,000	\$539.64	\$544.44	\$4.80	0.9%	\$541.08	\$547.68	\$6.60	1.2%	\$553.80	\$570.00	\$16.20	3.0%	\$586.32	\$623.76	\$37.44	6.9%	\$617.16	\$681.24	\$64.08	11.9%	\$783.60	\$1,010.88	\$227.28	42.1%
	5,000	\$659.88	\$664.32	\$4.44	0.7%	\$661.32	\$667.56	\$6.24	0.9%	\$674.04	\$689.88	\$15.84	2.4%	\$706.56	\$743.64	\$37.08	5.6%	\$737.40	\$801.12	\$63.72	9.7%	\$903.84	\$1,130.76	\$226.92	34.4%
	7,500	\$960.48	\$964.02	\$3.54	0.4%	\$961.92	\$967.26	\$5.34	0.6%	\$974.64	\$989.58	\$14.94	1.6%	\$1,007.16	\$1,043.34	\$36.18	3.8%	\$1,038.00	\$1,100.82	\$62.82	6.5%	\$1,204.44	\$1,430.46	\$226.02	23.5%
	10,000	\$1,261.08	\$1,263.72	\$2.64	0.2%	\$1,262.52	\$1,266.96	\$4.44	0.4%	\$1,275.24	\$1,289.28	\$14.04	1.1%	\$1,307.76	\$1,343.04	\$35.28	2.8%	\$1,338.60	\$1,400.52	\$61.92	4.9%	\$1,505.04	\$1,730.16	\$225.12	17.9%
	15,000	\$1,862.28	\$1,863.12	\$0.84	0.0%	\$1,863.72	\$1,866.36	\$2.64	0.1%	\$1,876.44	\$1,888.68	\$12.24	0.7%	\$1,908.96	\$1,942.44	\$33.48	1.8%	\$1,939.80	\$1,999.92	\$60.12	3.2%	\$2,106.24	\$2,329.56	\$223.32	12.0%
	20,000	\$2,463.48	\$2,462.52	-\$0.96	0.0%	\$2,464.92	\$2,465.76	\$0.84	0.0%	\$2,477.64	\$2,488.08	\$10.44	0.4%	\$2,510.16	\$2,541.84	\$31.68	1.3%	\$2,541.00	\$2,599.32	\$58.32	2.4%	\$2,707.44	\$2,928.96	\$221.52	9.0%
	25,000	\$3,064.68	\$3,061.92	-\$2.76	-0.1%	\$3,066.12	\$3,065.16	-\$0.96	0.0%	\$3,078.84	\$3,087.48	\$8.64	0.3%	\$3,111.36	\$3,141.24	\$29.88	1.0%	\$3,142.20	\$3,198.72	\$56.52	1.8%	\$3,308.64	\$3,528.36	\$219.72	7.2%
	30,000	\$3,665.88	\$3,661.32	-\$4.56	-0.1%	\$3,667.32	\$3,664.56	-\$2.76	-0.1%	\$3,680.04	\$3,686.88	\$6.84	0.2%	\$3,712.56	\$3,740.64	\$28.08	0.8%	\$3,743.40	\$3,798.12	\$54.72	1.5%	\$3,909.84	\$4,127.76	\$217.92	5.9%

Customer Class	Proposed					Proposed				Proposed				Proposed				Proposed				Proposed			
	Monthly Consumption (gallons)	Annual Bill at Current Rates	Annual Bill at Proposed Rates	Dollar Change	Percent Change	Annual Bill at Current Rates	Annual Bill at Proposed Rates	Dollar Change	Percent Change	Annual Bill at Current Rates	Annual Bill at Proposed Rates	Dollar Change	Percent Change	Annual Bill at Current Rates	Annual Bill at Proposed Rates	Dollar Change	Percent Change	Annual Bill at Current Rates	Annual Bill at Proposed	Dollar Change	Percent Change	Annual Bill at Current Rates	Annual Bill at Proposed	Dollar Change	Percent Change
Non-Residential (Monthly)	2,000	\$327.96	\$318.36	-\$9.60	-2.9%	\$329.40	\$321.60	-\$7.80	-2.4%	\$342.12	\$343.92	\$1.80	0.5%	\$374.64	\$397.68	\$23.04	7.0%	\$405.48	\$455.16	\$49.68	15.1%	\$543.12	\$771.12	\$228.00	69.5%
	5,000	\$731.88	\$698.52	-\$33.36	-4.6%	\$733.32	\$701.76	-\$31.56	-4.3%	\$746.04	\$724.08	-\$21.96	-3.0%	\$778.56	\$777.84	-\$0.72	-0.1%	\$809.40	\$835.32	\$25.92	3.5%	\$903.84	\$1,130.76	\$226.92	31.0%
	9,000	\$1,270.44	\$1,205.40	-\$65.04	-5.1%	\$1,271.88	\$1,208.64	-\$63.24	-5.0%	\$1,284.60	\$1,230.96	-\$53.64	-4.2%	\$1,317.12	\$1,284.72	-\$32.40	-2.6%	\$1,347.96	\$1,342.20	-\$5.76	-0.5%	\$1,384.80	\$1,610.28	\$225.48	17.7%
	25,000	\$3,424.68	\$3,232.92	-\$191.76	-5.6%	\$3,426.12	\$3,236.16	-\$189.96	-5.5%	\$3,438.84	\$3,258.48	-\$180.36	-5.3%	\$3,471.36	\$3,312.24	-\$159.12	-4.6%	\$3,502.20	\$3,369.72	-\$132.48	-3.9%	\$3,308.64	\$3,528.36	\$219.72	6.4%
	30,000	\$4,097.88	\$3,866.52	-\$231.36	-5.6%	\$4,099.32	\$3,869.76	-\$229.56	-5.6%	\$4,112.04	\$3,892.08	-\$219.96	-5.4%	\$4,144.56	\$3,945.84	-\$198.72	-4.8%	\$4,175.40	\$4,003.32	-\$172.08	-4.2%	\$3,909.84	\$4,127.76	\$217.92	5.3%
	40,000	\$5,444.28	\$5,133.72	-\$310.56	-5.7%	\$5,445.72	\$5,136.96	-\$308.76	-5.7%	\$5,458.44	\$5,159.28	-\$299.16	-5.5%	\$5,490.96	\$5,213.04	-\$277.92	-5.1%	\$5,521.80	\$5,270.52	-\$251.28	-4.6%	\$5,112.24	\$5,326.56	\$214.32	3.9%
	50,000	\$6,790.68	\$6,400.92	-\$389.76	-5.7%	\$6,792.12	\$6,404.16	-\$387.96	-5.7%	\$6,804.84	\$6,426.48	-\$378.36	-5.6%	\$6,837.36	\$6,480.24	-\$357.12	-5.3%	\$6,868.20	\$6,537.72	-\$330.48	-4.9%	\$6,314.64	\$6,525.36	\$210.72	3.1%
	75,000	\$10,156.68	\$9,568.92	-\$587.76	-5.8%	\$10,158.12	\$9,572.16	-\$585.96	-5.8%	\$10,170.84	\$9,594.48	-\$576.36	-5.7%	\$10,203.36	\$9,648.24	-\$555.12	-5.5%	\$10,234.20	\$9,705.72	-\$528.48	-5.2%	\$9,320.64	\$9,522.36	\$201.72	2.0%
	100,000	\$13,522.68	\$12,736.92	-\$785.76	-5.8%	\$13,524.12	\$12,740.16	-\$783.96	-5.8%	\$13,536.84	\$12,762.48	-\$774.36	-5.7%	\$13,569.36	\$12,816.24	-\$753.12	-5.6%	\$13,600.20	\$12,873.72	-\$726.48	-5.4%	\$12,326.64	\$12,519.36	\$192.72	1.4%

Customer Class		Proposed 5/8 Inch Meter				Proposed 3/4 Inch Meter				Proposed 1 Inch Meter				Proposed 1.5 Inch Meter				Proposed 2 Inch Meter				Proposed 3 Inch Meter			
	Annual Consumption (gallons)	Annual Bill at Current Rates	Annual Bill at Proposed Rates	Dollar Change	Percent Change	Annual Bill at Current Rates	Annual Bill at Proposed Rates	Dollar Change	Percent Change	Annual Bill at Current Rates	Annual Bill at Proposed Rates	Dollar Change	Percent Change	Annual Bill at Current Rates	Annual Bill at Proposed Rates	Dollar Change	Percent Change	Annual Bill at Current Rates	Annual Bill at Proposed	Dollar Change	Percent Change	Annual Bill at Current Rates	Annual Bill at Proposed	Dollar Change	Percent Change
Non-Residential with 6" Fire Connection(Monthly Account)																									
Base Charge and Commodity Charges	9,000	\$159.66	\$159.96	\$0.30	0.2%	\$155.16	\$163.20	\$8.04	5.0%	\$167.88	\$185.52	\$17.64	11.0%	\$200.40	\$239.28	\$38.88	24.4%	\$231.24	\$296.76	\$65.52	41.0%	\$397.68	\$626.40	\$228.72	143.3%
Fire Protection Charge		\$951.11	\$1,232.07	\$280.96	29.5%	\$951.11	\$1,232.07	\$280.96	29.5%	\$951.11	\$1,232.07	\$280.96	29.5%	\$951.11	\$1,232.07	\$280.96	29.5%	\$951.11	\$1,232.07	\$280.96	29.5%	\$951.11	\$1,232.07	\$280.96	29.5%
Total Annual Charges		\$1,110.77	\$1,392.03	\$281.26	25.3%	\$1,106.27	\$1,395.27	\$289.00	26.0%	\$1,118.99	\$1,417.59	\$298.60	26.9%	\$1,151.51	\$1,471.35	\$319.84	28.8%	\$1,182.35	\$1,528.83	\$346.48	31.2%	\$1,348.79	\$1,858.47	\$509.68	45.9%

Customer Class	Monthly Consumption (gallons)	Bill at Current Rates	Proposed		
			Bill at Proposed Rates	Dollar Change	Percent Change
Portsmouth (Monthly)					
Avg. Monthly Bill	10,000,000	\$51,512	\$64,900	\$13,388	26.0%
	20,000,000	\$103,019	\$129,748	\$26,729	25.9%
	38,000,000	\$195,731	\$246,475	\$50,743	25.9%
	40,000,000	\$206,033	\$259,444	\$53,411	25.9%
	75,000,000	\$386,307	\$486,412	\$100,105	25.9%
	100,000,000	\$515,075	\$648,532	\$133,457	25.9%
Navy (Monthly)	150,000,000	\$772,610	\$972,772	\$200,162	25.9%
	10,000,000	\$65,236	\$76,335	\$11,099	17.0%
	20,000,000	\$130,443	\$152,670	\$22,227	17.0%
	38,000,000	\$247,718	\$290,073	\$42,355	17.1%
	50,000,000	\$325,956	\$381,675	\$55,719	17.1%
Avg. Monthly Bill (All Meters)	75,000,000	\$488,929	\$572,513	\$83,583	17.1%
	100,000,000	\$651,905	\$763,350	\$111,445	17.1%

Docket No. 4595  
Rhode Island Public Utilities Commission  
Docket 4595  
FY 2017 Rate Filing  
HJS Schedule A-4 Rebuttal  
Revenue Proof

		Rate Year Revenue	
		Existing Rates	Proposed Rates
<b>REVENUES</b>			
<b>Water Rates</b>			
Base Charge (Billing Charge)	\$	936,424	\$ 1,097,213
Volume Charge			
Residential		6,625,444	6,605,608
Commercial		5,129,840	4,828,085
Navy		1,610,677	1,886,070
Portsmouth Water & Fire District		2,229,129	2,806,504
Fire Protection			
Public		981,045	1,159,379
Private		357,722	463,062
Total Rate Revenues	\$	17,870,281	\$ 18,845,920
<b>Other Operating Revenues</b>			
Sundry charges	\$	126,250	126,250
WPC cost share on customer service	\$	330,000	330,000
Middletown cost share on customer service	\$	167,000	167,000
Rental of Property	\$	95,200	95,200
Total Other Operating Revenues	\$	718,450	718,450
<b>Total Operating Revenues</b>	<b>\$</b>	<b>18,588,731</b>	<b>\$ 19,564,370</b>
<b>Add: Non-Operating Revenues</b>			
Water Penalty		51,200	51,200
Miscellaneous		10,500	10,500
Investment Interest Income		1,250	1,250
Water Quality Protection Fees		22,250	22,250
<b>Total Non Operating Revenues</b>	<b>\$</b>	<b>85,200</b>	<b>\$ 85,200</b>
<b>Total Revenues</b>	<b>\$</b>	<b>18,673,931</b>	<b>\$ 19,649,570</b>
<b>COSTS</b>			
<b>Departmental O&amp;M</b>	\$	(9,835,871)	(9,835,871)
<b>Capital Costs</b>			
Contribution to Capital Spending Acct.		(2,700,000)	(2,700,000)
Contribution to Debt Service Acct.		(6,811,000)	(\$6,811,000)
<b>Total Capital Costs</b>	<b>\$</b>	<b>(9,511,000)</b>	<b>(9,511,000)</b>
<b>Operating Revenue Allowance</b>		(295,076)	(295,076)
<b>Total Costs</b>	<b>\$</b>	<b>(19,641,947)</b>	<b>\$ (19,641,947)</b>
<b>Revenue Surplus (Deficit)</b>	<b>\$</b>	<b>(968,016)</b>	<b>\$ 7,623</b>

		Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
<b>Operation &amp; Maintenance Costs</b>											
Administration											
Salaries, Wages, & Benefits											
Salaries & Wages	\$	281,582	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
AFSCME retro	\$	-	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
NEA retro	\$	-	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
AFSCME benefits on retro pay	\$	-	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
NEA benefits on retro pay	\$	-	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Standby Salaries	\$	18,720	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Accrued Benefits Buyout	\$	59,000	Non-Administrative Wages & Salaries	58%	22%	8%	6%	5%	2%	0%	100%
Employee Benefits	\$	119,057	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Retiree Insurance Coverage	\$	370,000	Non-Administrative Wages & Salaries	58%	22%	8%	6%	5%	2%	0%	100%
Workers Compensation	\$	64,000	Non-Administrative Wages & Salaries	58%	22%	8%	6%	5%	2%	0%	100%
Annual Leave Buyback	\$	3,300	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Subtotal		915,659									

	Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
All Other Administrative Costs										
Advertisement	9,000	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Membership Dues & Subscription	2,500	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Conferences & Training	4,000	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Tuition Reimbursement	2,000	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Consultant Fees	205,000	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Postage	1,000	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Fire & Liability Insurance	67,000	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Telephone & Communication	5,600	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Water	2,015	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Electricity	7,956	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Natural Gas	5,226	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Property Taxes	569,043	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Legal & Administrative	-									
Audit Fees	4,233	Total Non-Admin Costs Before Offsets	64%	21%	7%	4%	2%	2%	0%	100%
OPEB Contribution	19,200	Total Non-Admin Costs Before Offsets	64%	21%	7%	4%	2%	2%	0%	100%
City Council	5,724	Total Non-Admin Costs Before Offsets	64%	21%	7%	4%	2%	2%	0%	100%
City Clerk	2,980	Total Non-Admin Costs Before Offsets	64%	21%	7%	4%	2%	2%	0%	100%
City Manager	61,478	Total Non-Admin Costs Before Offsets	64%	21%	7%	4%	2%	2%	0%	100%
Human Resources	33,858	Non-Administrative Wages & Salaries	58%	22%	8%	6%	5%	2%	0%	100%
City Solicitor	23,662	Total Non-Admin Costs Before Offsets	64%	21%	7%	4%	2%	2%	0%	100%
Finance Adimistrative 50%	27,254	Total Non-Admin Costs Before Offsets	64%	21%	7%	4%	2%	2%	0%	100%
Finance Adimistrative 5%	2,277	Total Non-Admin Costs Before Offsets	64%	21%	7%	4%	2%	2%	0%	100%
Finance Admin 10% Inv/Debt	-	Total Non-Admin Costs Before Offsets	64%	21%	7%	4%	2%	2%	0%	100%
Purchasing	17,260	Total Non-Admin Costs Before Offsets	64%	21%	7%	4%	2%	2%	0%	100%
Assessment	14,561	Total Non-Admin Costs Before Offsets	64%	21%	7%	4%	2%	2%	0%	100%
Collections	47,752	100% Billing	0%	0%	0%	0%	100%	0%	0%	100%
Accounting - Wires - 5%	12,738	Total Non-Admin Costs Before Offsets	64%	21%	7%	4%	2%	2%	0%	100%
Accounting	67,391	Non-Administrative Wages & Salaries	58%	22%	8%	6%	5%	2%	0%	100%
Facilities Maintenance	29,159	Non-Administrative Wages & Salaries	58%	22%	8%	6%	5%	2%	0%	100%
Data Processing	172,224	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Mileage Allowance	2,000	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Gasoline & Vehicle Allowance	5,389	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Repairs & Maintenance	1,200	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Regulatory Expense	5,000	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Regulatory Assessment	80,000	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Office Supplies	15,000	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Self Insurance	5,000	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Unemployment Claims	-	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Subtotal	1,535,682									

	Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
Customer Service										
Salaries & Wages	334,195	Customer Service Salaries and Wages	0%	0%	0%	49%	39%	12%	0%	100%
Benefits	190,805	Customer Service Salaries and Wages	0%	0%	0%	49%	39%	12%	0%	100%
Copying & binding	500	100% billing (based on budget analysis)					100%			100%
Conferences & Training	5,000	100% billing (based on budget analysis)					100%			100%
Support Services	26,175	100% billing (software support & printing/mailing)					100%			100%
Postage	74,680	100% billing (based on budget analysis)					100%			100%
Bank Fees (lock box)	16,800	100% billing (based on budget analysis)					100%			100%
Gasoline & Vehicle Allowance	26,945	Customer Service Salaries and Wages	0%	0%	0%	49%	39%	12%	0%	100%
Repairs & Maintenance	35,000	100% metering (meter repairs)				100%				100%
Meter Maintenance	10,000	100% metering (based on budget analysis)				100%				100%
Operating Supplies	5,000	100% metering (based on budget analysis)				100%				100%
Uniforms & protective Gear	1,000	100% metering (based on budget analysis)				100%				100%
Customer Service Supplies	5,000	100% billing (based on budget analysis)					100%			100%
<b>Subtotal</b>	<b>731,100</b>									
Source of Supply - Island										
Salaries & Wages	\$ 309,950	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Overtime	\$ 33,000	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Temp Salaries	\$ 26,180	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Injury Pay	\$ -	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Employee Benefits	\$ 175,650	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Annual Leave Buyback	\$ 3,800	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Electricity	\$ 49,880	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Gas/Vehicle Maintenance	\$ 59,279	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Repairs & Maintenance	\$ 10,000	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Reservoir Maintenance	\$ 16,000	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Operating Supplies	\$ 7,500	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Uniforms & protective Gear	\$ 1,510	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Chemicals	\$ 66,800	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
<b>Subtotal</b>	<b>\$ 759,549</b>									
Source of Supply - Mainland										
Overtime	\$ 11,610	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Temp Salaries	\$ 29,996	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Permanent Part time	\$ 12,900	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Employee Benefits	\$ 2,525	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Electricity	\$ 154,424	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Repairs & Maintenance	\$ 7,000	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Reservoir Maintenance	\$ 4,500	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
Operating Supplies	\$ 1,000	Average Day Demand Patterns	100%	0%	0%	0%	0%	0%	0%	100%
<b>Subtotal</b>	<b>\$ 223,955</b>									



	Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
<b>Station One (Excludes chemicals)</b>										
Salaries & Wages	\$ 511,075	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Overtime	\$ 102,940	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Holiday Pay	\$ 22,032	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Lead Plant Operator Stipend	\$ 12,480	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Employee Benefits	\$ 264,916	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Annual Leave Buyback	\$ 12,000	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Conferences & Training	\$ 4,500	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Fire & Liability Insurance	\$ 35,000	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Electricity	\$ 212,484	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Natural Gas	\$ 43,410	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Rental of Equipment	\$ 1,000	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Sewer Charge	\$ 199,440	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Gas/Vehicle Maintenance	\$ 5,389	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Repairs & Maintenance	\$ 66,787	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Operating Supplies	\$ 17,161	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Uniforms & protective Gear	\$ 1,426	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Station One Chemicals	\$ 366,315	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Subtotal	\$ 1,878,355									
<b>Lawton Valley (Excludes chemicals)</b>										
Salaries & Wages	\$498,541	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Overtime	\$98,903	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Holiday Pay	\$19,992	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Lead Plant Operator Stipend	\$12,480	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Employee Benefits	\$278,002	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Annual Leave Buyback	\$7,400	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Conferences & Training	\$4,120	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Fire & Liability Insurance	\$54,000	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Electricity	\$375,091	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Natural Gas	\$34,663	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Rental of Equipment	\$1,000	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Sewer Charge	\$498,600	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Gas/Vehicle Maintenance	\$5,389	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Repairs & Maintenance	\$61,351	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Operating Supplies	\$13,311	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Uniforms & protective Gear	\$1,303	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Lawton Valley Chemicals	\$328,667	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Subtotal	2,292,814									

	Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
Laboratory										
Salaries & Wages	\$ 121,179	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Employee Benefits	\$ 58,708	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Annual Leave Buyback	\$ 1,500	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Repairs & Maintenance	\$ 1,700	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Regulatory Assessment	\$ 47,024	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Laboratory Supplies	\$ 35,627	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Subtotal	<b>\$ 265,738</b>									
Transmission and Distribution										
Salaries & Wages	\$ 515,219	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
Overtime	\$ 52,364	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
Temp Salaries	\$ 26,180	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
Injury Pay	\$ -	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
Employee Benefits	\$ 312,306	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
Annual Leave Buyback	\$ 7,500	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
Conferences & Training	\$ 4,000	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
Contract Services	\$ 21,525	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
Fire & Liability Insurance	\$ 12,000	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
Electricity	\$ 20,607	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
Heavy Equipment Rental	\$ 8,260	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
Gas/Vehicle Maintenance	\$ 70,057	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
Repairs & Maintenance	\$ 26,000	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
Main Maintenance	\$ 91,200	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
Hydrant Maintenance	\$ -	100% Fire	0%	0%	0%	0%	0%	0%	100%	100%
Service Maintenance	\$ 30,000	100% Services	0%	0%	0%	0%	0%	100%	0%	100%
Operating Supplies	\$ 8,000	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
Uniforms & protective Gear	\$ 4,000	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
Subtotal	<b>\$ 1,209,218</b>									
Fire Protection	23,800	100% Fire	0%	0%	0%	0%	0%	0%	100%	100%
<b>Total O&amp;M Costs</b>	<b>9,835,871</b>									

	Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
<b>CAPITAL COSTS</b>										
Water Supply	1,417,514	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Treatment Station 1	2,320,726	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Treatment Lawton Valley	2,618,866	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
Treatment Both Plants	483,244	Maximum Day Demand Patterns	63%	37%	0%	0%	0%	0%	0%	100%
T&D Pumping	59,904	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
T&D	2,004,586	Maximum Hour Demand Patterns	40%	24%	36%	0%	0%	0%	0%	100%
Fire	21,589	100% Fire	0%	0%	0%	0%	0%	0%	100%	100%
Meters	363,862	100% Meters	0%	0%	0%	100%	0%	0%	0%	100%
Services	206,193	100 % Services	0%	0%	0%	0%	0%	100%	0%	100%
Billing	14,514	100% Billing	0%	0%	0%	0%	100%	0%	0%	100%
<b>Total Capital Costs excluding Treatment</b>	<b>9,511,000</b>									
<b>Revenue Allowance</b>	<b>295,076</b>	100% base	100%							100%
<b>Total Costs before Offsets</b>	<b>19,641,947</b>									
<b>OFFSETS</b>										
<b>Nonrate Revenues</b>										
Sundry charges	126,250	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
WPC cost share on customer serv	330,000	50/50 Split between Metering and Billing	0%	0%	0%	50%	50%	0%	0%	100%
Middletown cost share on custom	167,000	50/50 Split between Metering and Billing	0%	0%	0%	50%	50%	0%	0%	100%
Rental of Property	95,200	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Water Penalty	51,200	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Miscellaneous	10,500	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Investment Interest Income	1,250	Non Admin less electricity & chemicals	60%	19%	7%	5%	6%	2%	0%	100%
Water Quality Protection Fees	22,250	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
<b>Total Nonrate Revenues</b>	<b>803,650</b>									
<b>Net Costs To Recover Through Rates</b>	<b>\$ 18,838,297</b>									
	\$ -									

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Operation & Maintenance Costs								
Administration								
Salaries, Wages, & Benefits								
Salaries & Wages	169,763	53,238	20,677	15,411	16,579	4,765	1,149	281,582
AFSCME retro	-	-	-	-	-	-	-	-
NEA retro	-	-	-	-	-	-	-	-
AFSCME benefits on retro pay	-	-	-	-	-	-	-	-
NEA benefits on retro pay	-	-	-	-	-	-	-	-
Standby Salaries	11,286	3,539	1,375	1,025	1,102	317	76	18,720
Accrued Benefits Buyout	34,043	13,079	4,642	3,453	2,858	901	24	59,000
Employee Benefits	71,778	22,510	8,742	6,516	7,010	2,015	486	119,057
Retiree Insurance Coverage	213,492	82,022	29,109	21,652	17,923	5,652	150	370,000
Workers Compensation	36,928	14,188	5,035	3,745	3,100	978	26	64,000
Annual Leave Buyback	1,990	624	242	181	194	56	13	3,300
Subtotal	539,280	189,201	69,822	51,982	48,767	14,683	1,925	915,659

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
All Other Administrative Costs								
Advertisement	5,426	1,702	661	493	530	152	37	9,000
Membership Dues & Subscriptions	1,507	473	184	137	147	42	10	2,500
Conferences & Training	2,412	756	294	219	236	68	16	4,000
Tuition Reimbursement	1,206	378	147	109	118	34	8	2,000
Consultant Fees	123,592	38,759	15,053	11,220	12,070	3,469	837	205,000
Postage	603	189	73	55	59	17	4	1,000
Fire & Liability Insurance	40,394	12,668	4,920	3,667	3,945	1,134	273	67,000
Telephone & Communication	3,376	1,059	411	306	330	95	23	5,600
Water	1,215	381	148	110	119	34	8	2,015
Electricity	4,797	1,504	584	435	468	135	32	7,956
Natural Gas	3,151	988	384	286	308	88	21	5,226
Property Taxes	343,070	107,589	41,785	31,144	33,504	9,629	2,323	569,043
Legal & Administrative								
Audit Fees	2,707	893	290	168	88	75	11	4,233
OPEB Contribution	12,279	4,052	1,315	763	400	340	51	19,200
City Council	3,661	1,208	392	227	119	102	15	5,724
City Clerk	1,906	629	204	118	62	53	8	2,980
City Manager	39,318	12,973	4,212	2,443	1,280	1,090	162	61,478
Human Resources	19,536	7,506	2,664	1,981	1,640	517	14	33,858
City Solicitor	15,133	4,993	1,621	940	493	420	62	23,662
Finance Administrative 50%	17,430	5,751	1,867	1,083	567	483	72	27,254
Finance Administrative 5%	1,456	481	156	90	47	40	6	2,277
Finance Admin 10% Inv/Debt	-	-	-	-	-	-	-	-
Purchasing	11,039	3,642	1,182	686	359	306	46	17,260
Assessment	9,313	3,073	998	579	303	258	38	14,561
Collections	-	-	-	-	47,752	-	-	47,752
Accounting - Wires - 5%	8,147	2,688	873	506	265	226	34	12,738
Accounting	38,885	14,939	5,302	3,944	3,265	1,029	27	67,391
Facilities Maintenance	16,825	6,464	2,294	1,706	1,413	445	12	29,159
Data Processing	103,832	32,562	12,646	9,426	10,140	2,914	703	172,224
Mileage Allowance	1,206	378	147	109	118	34	8	2,000
Gasoline & Vehicle Allowance	3,249	1,019	396	295	317	91	22	5,389
Repairs & Maintenance	723	227	88	66	71	20	5	1,200
Regulatory Expense	3,014	945	367	274	294	85	20	5,000
Regulatory Assessment	48,231	15,126	5,874	4,378	4,710	1,354	327	80,000
Office Supplies	9,043	2,836	1,101	821	883	254	61	15,000
Self Insurance	3,014	945	367	274	294	85	20	5,000
Unemployment Claims	-	-	-	-	-	-	-	-
Subtotal	900,698	289,775	109,001	79,058	126,712	25,119	5,318	1,535,682

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Customer Service								
Salaries & Wages	-	-	-	162,346	130,271	41,578	-	334,195
Benefits	-	-	-	92,690	74,377	23,738	-	190,805
Copying & binding	-	-	-	-	500	-	-	500
Conferences & Training	-	-	-	-	5,000	-	-	5,000
Support Services	-	-	-	-	26,175	-	-	26,175
Postage	-	-	-	-	74,680	-	-	74,680
Bank Fees (lock box)	-	-	-	-	16,800	-	-	16,800
Gasoline & Vehicle Allowance	-	-	-	13,089	10,503	3,352	-	26,945
Repairs & Maintenance	-	-	-	35,000	-	-	-	35,000
Meter Maintenance	-	-	-	10,000	-	-	-	10,000
Operating Supplies	-	-	-	5,000	-	-	-	5,000
Uniforms & protective Gear	-	-	-	1,000	-	-	-	1,000
Customer Service Supplies	-	-	-	-	5,000	-	-	5,000
Source of Supply - Island								
Salaries & Wages	309,950	-	-	-	-	-	-	309,950
Overtime	33,000	-	-	-	-	-	-	33,000
Temp Salaries	26,180	-	-	-	-	-	-	26,180
Injury Pay	-	-	-	-	-	-	-	-
Employee Benefits	175,650	-	-	-	-	-	-	175,650
Annual Leave Buyback	3,800	-	-	-	-	-	-	3,800
Electricity	49,880	-	-	-	-	-	-	49,880
Gas/Vehicle Maintenance	59,279	-	-	-	-	-	-	59,279
Repairs & Maintenance	10,000	-	-	-	-	-	-	10,000
Reservoir Maintenance	16,000	-	-	-	-	-	-	16,000
Operating Supplies	7,500	-	-	-	-	-	-	7,500
Uniforms & protective Gear	1,510	-	-	-	-	-	-	1,510
Chemicals	66,800	-	-	-	-	-	-	66,800
Source of Supply - Mainland								
Overtime	11,610	-	-	-	-	-	-	11,610
Temp Salaries	29,996	-	-	-	-	-	-	29,996
Permanent Part time	12,900	-	-	-	-	-	-	12,900
Employee Benefits	2,525	-	-	-	-	-	-	2,525
Electricity	154,424	-	-	-	-	-	-	154,424
Repairs & Maintenance	7,000	-	-	-	-	-	-	7,000
Reservoir Maintenance	4,500	-	-	-	-	-	-	4,500
Operating Supplies	1,000	-	-	-	-	-	-	1,000

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Station One (Excludes chemicals)								
Salaries & Wages	319,539	191,536	-	-	-	-	-	511,075
Overtime	64,361	38,579	-	-	-	-	-	102,940
Holiday Pay	13,775	8,257	-	-	-	-	-	22,032
Lead Plant Operator Stipend	7,803	4,677	-	-	-	-	-	12,480
Employee Benefits	165,633	99,283	-	-	-	-	-	264,916
Annual Leave Buyback	7,503	4,497	-	-	-	-	-	12,000
Conferences & Training	2,814	1,686	-	-	-	-	-	4,500
Fire & Liability Insurance	21,883	13,117	-	-	-	-	-	35,000
Electricity	212,484	-	-	-	-	-	-	212,484
Natural Gas	27,141	16,269	-	-	-	-	-	43,410
Rental of Equipment	625	375	-	-	-	-	-	1,000
Sewer Charge	199,440	-	-	-	-	-	-	199,440
Gas/Vehicle Maintenance	3,369	2,020	-	-	-	-	-	5,389
Repairs & Maintenance	41,757	25,030	-	-	-	-	-	66,787
Operating Supplies	10,730	6,432	-	-	-	-	-	17,161
Uniforms & protective Gear	892	534	-	-	-	-	-	1,426
Station One Chemicals	366,315	-	-	-	-	-	-	366,315
Lawton Valley (Excludes chemicals)								
Salaries & Wages	311,702	186,839	-	-	-	-	-	498,541
Overtime	61,837	37,066	-	-	-	-	-	98,903
Holiday Pay	12,500	7,492	-	-	-	-	-	19,992
Lead Plant Operator Stipend	7,803	4,677	-	-	-	-	-	12,480
Employee Benefits	173,815	104,187	-	-	-	-	-	278,002
Annual Leave Buyback	4,627	2,773	-	-	-	-	-	7,400
Conferences & Training	2,576	1,544	-	-	-	-	-	4,120
Fire & Liability Insurance	33,762	20,238	-	-	-	-	-	54,000
Electricity	375,091	-	-	-	-	-	-	375,091
Natural Gas	21,672	12,991	-	-	-	-	-	34,663
Rental of Equipment	625	375	-	-	-	-	-	1,000
Sewer Charge	498,600	-	-	-	-	-	-	498,600
Gas/Vehicle Maintenance	3,369	2,020	-	-	-	-	-	5,389
Repairs & Maintenance	38,358	22,993	-	-	-	-	-	61,351
Operating Supplies	8,322	4,989	-	-	-	-	-	13,311
Uniforms & protective Gear	815	488	-	-	-	-	-	1,303
Lawton Valley Chemicals	328,667	-	-	-	-	-	-	328,667

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Laboratory								
Salaries & Wages	121,179	-	-	-	-	-	-	121,179
Employee Benefits	58,708	-	-	-	-	-	-	58,708
Annual Leave Buyback	1,500	-	-	-	-	-	-	1,500
Repairs & Maintenance	1,700	-	-	-	-	-	-	1,700
Regulatory Assessment	47,024	-	-	-	-	-	-	47,024
Laboratory Supplies	35,627	-	-	-	-	-	-	35,627
Transmission and Distribution								
Salaries & Wages	205,168	122,981	187,070	-	-	-	-	515,219
Overtime	20,852	12,499	19,013	-	-	-	-	52,364
Temp Salaries	10,425	6,249	9,506	-	-	-	-	26,180
Injury Pay	-	-	-	-	-	-	-	-
Employee Benefits	124,365	74,546	113,394	-	-	-	-	312,306
Annual Leave Buyback	2,987	1,790	2,723	-	-	-	-	7,500
Conferences & Training	1,593	955	1,452	-	-	-	-	4,000
Contract Services	8,572	5,138	7,815	-	-	-	-	21,525
Fire & Liability Insurance	4,779	2,864	4,357	-	-	-	-	12,000
Electricity	8,206	4,919	7,482	-	-	-	-	20,607
Heavy Equipment Rental	3,289	1,972	2,999	-	-	-	-	8,260
Gas/Vehicle Maintenance	27,898	16,722	25,437	-	-	-	-	70,057
Repairs & Maintenance	10,354	6,206	9,440	-	-	-	-	26,000
Main Maintenance	36,317	21,769	33,114	-	-	-	-	91,200
Hydrant Maintenance	-	-	-	-	-	-	-	-
Service Maintenance	-	-	-	-	-	30,000	-	30,000
Operating Supplies	3,186	1,910	2,905	-	-	-	-	8,000
Uniforms & protective Gear	1,593	955	1,452	-	-	-	-	4,000
Fire Protection	-	-	-	-	-	-	23,800	23,800
Non-Administrative O&M	<b>5,069,033</b>	<b>1,102,438</b>	<b>428,160</b>	<b>319,126</b>	<b>343,306</b>	<b>98,669</b>	<b>23,800</b>	<b>7,384,530</b>



	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Water Supply	1,417,514	-	-	-	-	-	-	1,417,514
Treatment Station 1	1,450,985	869,741	-	-	-	-	-	2,320,726
Treatment Lawton Valley	1,637,391	981,475	-	-	-	-	-	2,618,866
Treatment Both Plants	302,138	181,106	-	-	-	-	-	483,244
T&D Pumping	23,855	14,299	21,751	-	-	-	-	59,904
T&D	798,258	478,487	727,841	-	-	-	-	2,004,586
Fire	-	-	-	-	-	-	21,589	21,589
Meters	-	-	-	363,862	-	-	-	363,862
Services	-	-	-	-	-	206,193	-	206,193
Billing	-	-	-	-	14,514	-	-	14,514
	<b>5,630,142</b>	<b>2,525,107</b>	<b>749,591</b>	<b>363,862</b>	<b>14,514</b>	<b>206,193</b>	<b>21,589</b>	<b>9,511,000</b>
	59%	27%	8%	4%	0%	2%	0%	100%
	295,076	-	-	-	-	-	-	295,076
Total Non-Admin Costs	<b>10,994,251</b>	<b>3,627,545</b>	<b>1,177,751</b>	<b>682,988</b>	<b>357,820</b>	<b>304,862</b>	<b>45,389</b>	<b>17,190,606</b>
	64%	21%	7%	4%	2%	2%	0%	100%
	76,115	23,870	9,271	6,910	7,433	2,136	515	126,250
	-	-	-	165,000	165,000	-	-	330,000
	-	-	-	83,500	83,500	-	-	167,000
	57,395	17,999	6,991	5,210	5,605	1,611	389	95,200
	30,868	9,680	3,760	2,802	3,015	866	209	51,200
	6,330	1,985	771	575	618	178	43	10,500
	754	236	92	68	74	21	5	1,250
	22,250	-	-	-	-	-	-	22,250
	<b>193,712</b>	<b>53,771</b>	<b>20,883</b>	<b>264,065</b>	<b>265,245</b>	<b>4,813</b>	<b>1,161</b>	<b>803,650</b>
	<b>\$ 10,800,539</b>	<b>\$ 3,573,774</b>	<b>\$ 1,156,867</b>	<b>\$ 418,923</b>	<b>\$ 92,575</b>	<b>\$ 300,049</b>	<b>\$ 44,229</b>	<b>\$ 16,386,956</b>

<b>Non-Admin O&amp;M Costs</b>	\$	5,069,033	\$	1,102,438	\$	428,160	\$	319,126	\$	343,306	\$	98,669	\$	23,800	\$	<b>7,384,530</b>
Less: Chemicals																\$ -
Station One	\$	(366,315)														\$ (366,315)
Lawton Valley	\$	(328,667)														\$ (328,667)
Source Supply	\$	(66,800)														\$ (66,800)
Electricity																\$ -
Source Supply	\$	(204,304)	\$	-												\$ (204,304)
Station One	\$	(212,484)	\$	-												\$ (212,484)
Lawton Valley	\$	(375,091)	\$	-												\$ (375,091)
Costs Adjusted	\$	3,515,372	\$	1,102,438	\$	428,160	\$	319,126	\$	343,306	\$	98,669	\$	23,800	\$	5,830,869
		<b>60%</b>		<b>19%</b>		<b>7%</b>		<b>5%</b>		<b>6%</b>		<b>2%</b>		<b>0%</b>		<b>100%</b>

Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
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**Non-Administrative Labor**

Administration	183,039	57,402	22,293	16,616	17,875	5,137	1,239	303,602
Customer Service	0	0	0	162,346	130,271	41,578	0	334,195
Source of Supply - Island	369,130	0	0	0	0	0	0	369,130
Source of Supply - Mainland	54,506	0	0	0	0	0	0	54,506
Station One	405,178	242,869	0	0	0	0	0	648,047
Lawton Valley	390,666	234,171	0	0	0	0	0	624,836
Laboratory	122,679	0	0	0	0	0	0	122,679
Transmission/Distribution	239,433	143,519	218,311	0	0	0	0	601,263
Total	1,764,630	677,961	240,605	178,963	148,146	46,715	1,239	3,058,260
Percent	58%	22%	8%	6%	5%	2%	0%	100%

ALLOCATION PERCENTAGES		Commodity Charges						
		Base Charge	Retail		Navy	Portsmouth	Fire	Total % Allocated
			Residential	Non-Residential				
Cost Category	Allocation Basis							
Base	Average annual demand		39%	27%	13%	21%	0%	100%
Base Excluding PWFD			50%	34%	16%	0%	0%	100%
Base Excluding PWFD & 50% Navy			54%	37%	9%	0%	0%	100%
Water Quality Protection Fees			59%	41%	0%	0%	0%	100%
Total Base to Class			41%	28%	12%	18%	0%	100%
Max Day	Estimated customer peaking factors		31%	25%	9%	17%	18%	100%
Base Excluding PWFD			37%	30%	11%	0%	22%	100%
Max Day Excluding PWFD & 50% Navy			39%	32%	6%	0%	23%	100%
Total Max Day to Class			33%	26%	9%	13%	19%	100%
Max Hour	Estimated customer peaking factors		17%	20%	5%	9%	48%	100%
Base Excluding PWFD			19%	22%	6%	0%	53%	100%
Max Hour Excluding PWFD & 50% Navy			20%	22%	3%	0%	55%	100%
Total Max Hour to Class			20%	22%	3%	0%	55%	100%
Metering	Direct Assignment	100%						100%
Billing	Direct Assignment	100%						100%
Services	Direct Assignment	100%						100%
Fire	Direct Assignment						100%	100%
Treatment Plant Avg. Day	Assured Capacity		0%	0%	0%	0%	0%	0%
Treatment Plant Max. Day	Assured Capacity		0%	0%	0%	0%	0%	0%

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Allocation of Costs to Water Rate Classes

**ALLOCATION RESULTS****Cost Category**

Base									
Base excluding T&D&WQPF & Pumping	9,702,554	3,809,890	2,634,366	1,226,069	2,032,229			9,702,554	
Transmission & Distribution	1,267,842	684,447	473,264	110,132	-			1,267,842	
Pumping	23,855	11,849	8,193	3,813	-			23,855	
Water Quality Protection Fees	(22,250)	(13,154)	(9,096)	-	-			(22,250)	
Revenue Offsets	(171,462)	(70,277)	(48,593)	(20,898)	(31,694)	-		(171,462)	
Administrative Charges	1,439,978	590,200	408,097	175,509	266,172			1,439,978	
Max Day									
Max Day Except T&D & Pumping	2,853,284	881,097	705,543	266,077	483,126	517,441		2,853,284	
Transmission & Distribution	759,962	299,314	239,677	45,194	-	175,778		759,962	
Pumping	14,299	5,316	4,256	1,605	-	3,122		14,299	
Revenue Offsets	(53,771)	(17,576)	(14,074)	(4,638)	(7,161)	(10,322)		(53,771)	
Administrative Charges	478,976	156,562	125,368	41,312	63,791	91,944		478,976	
Max Hour									
Max Hr. Except T&D & Pumping	-	-	-	-	-	-		-	
Transmission & Distribution	1,156,000	-	228,860	257,050	35,635	634,456		1,156,000	
Pumping	21,751	-	4,177	4,692	1,301	-	11,581	21,751	
Revenue Offsets	(20,883)	(4,132)	(4,641)	(655)	-	(11,455)		(20,883)	
Administrative Charges	178,823	35,383	39,741	5,608	-	98,090		178,823	
Metering	682,988	682,988	-	-	-	-		682,988	
Revenue Offsets	(264,065)	(264,065)	-	-	-	-		(264,065)	
Administrative Charges	131,040	131,040	-	-	-	-		131,040	
Services	304,862	304,862	-	-	-	-		304,862	
Revenue Offsets	(4,813)	(4,813)	-	-	-	-		(4,813)	
Administrative Charges	39,802	39,802	-	-	-	-		39,802	
Billing	357,820	357,820	-	-	-	-		357,820	
Revenue Offsets	(265,245)	(265,245)	-	-	-	-		(265,245)	
Administrative Charges	175,479	175,479	-	-	-	-		175,479	
Fire	45,389						45,389	45,389	
Revenue Offsets	(1,161)						(1,161)	(1,161)	
Administrative Charges	7,243						7,243	7,243	
Treatment Plant Capital Costs		Treatment Capital Allocated Using B/EC (See Schedule HJS-5)							
Treatment Plant Avg. Day	-	-	-	-	-	-	-	-	
Treatment Plant Max. Day	-	-	-	-	-	-	-	-	
Total To Recover through Rates	\$ 18,838,297	\$ 1,157,868	\$ 6,601,955	\$ 4,823,843	\$ 1,886,063	\$ 2,806,463	\$ 1,562,105	\$ 18,838,297	

**COST OF SERVICE PER UNIT**

Description of Billing Units  
Percentage of Dollars Allocated  
Allocated Cost  
Divided by: Number of Units  
**Unit Cost of Service**

Metering						
(1)	(2)	(2)	(2)	(2)	(3)	
Equivalent meters x 12 months	1000's of gallons annually	1000's of gallons annually	1000's of gallons annually	1000's of gallons annually	Equivalent Connections	Total
2.9%	35.0%	25.6%	10.0%	14.9%	8.0%	100.0%
\$ 549,963	\$ 6,601,955	\$ 4,823,843	\$ 1,886,063	\$ 2,806,463	\$ 1,510,634	\$ 18,838,297
208,188	661,222	457,205	247,078	432,782	157,692	
<b>\$2.6417</b>	<b>\$9.98</b>	<b>\$10.55</b>	<b>\$7.63</b>	<b>\$6.48</b>	<b>\$9.58</b>	
per equiv per month	per 1000 gallons	per 1000 gallons	per 1000 gallons	per 1000 gallons	Equivalent connections	

Description of Billing Units  
Percentage of Dollars Allocated  
Allocated Cost  
Divided by: Number of Units  
**Unit Cost of Service**

Billing	Services	Hydrants
No. of bills per year	Equivalent Connections	No. of Hydrants
1.4%	1.8%	0.3%
\$ 268,054	\$ 339,851	\$ 51,472
175,084	274,672	1,039
<b>\$1.5310</b>	<b>\$1.2373</b>	<b>\$49.5395</b>
per bill	per equiv	per Hydrant

(1)

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

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Cost Allocation Bases

<b>Allocation Basis</b>	<b>Used to allocate the following cost categories</b>	<b>Source Schedule</b>	<b>Base</b>	<b>Max Day</b>	<b>Max Hour</b>	<b>Metering</b>	<b>Billing</b>	<b>Services</b>	<b>Direct Fire Protection</b>	<b>Total % Allocated</b>
Average Day Demand Patterns	<i>Supply, Laboratory</i>	N/A	100%							100%
Maximum Day Demand Patterns	<i>Treatment</i>	B-1	63%	37%	0%					100%
Maximum Hour Demand Patterns	<i>Pumping, Transmission/Distribution, Storage</i>	B-1	40%	24%	36%					100%
Fire Protection	<i>Public/Private Fire Protection Costs</i>	D-2							100%	100%
Non Admin less electricity & chemicals	<i>Administration Salaries, Wages, &amp; Benefits</i>	B-1	60%	19%	7%	5%	6%	2%	0%	100%
Customer Service Salaries and Wages	<i>Customer Service Salaries, Wages, &amp; Benefits</i>	B-4	0%	0%	0%	49%	39%	12%	0%	100%
Non-Administrative Wages & Salaries	<i>Administrative Labor Related</i>	B-1	58%	22%	8%	6%	5%	2%	0%	100%
Capital Costs	<i>Certain Legal and Administrative</i>	B-1	59%	27%	8%	4%	0%	2%	0%	0%
Total Non-Admin Costs before Offsets	<i>Certain Legal and Administrative</i>	B-1	64%	21%	7%	4%	2%	2%	0%	100%
Other Costs	<i>Administration Non-Salary Costs</i>	B-1	60%	19%	7%	5%	6%	2%	0%	100%
Treatment Plant Capital	<i>Treatment Capital Costs</i>	B-4	63%	37%	0%	0%	0%	0%	0%	

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Allocation Analyses

**Administration 15-500-2200**

## Salaries by Staff Position

Director of Utilities	\$ 76,683
Administrative Secretary	\$ 28,121
Deputy Director - Finance	\$ 56,548
Deputy Director - Engineering	\$ 65,365
Financial Analyst	\$ 54,865
<b>Salary \$ Allocation Results</b>	<b>\$ 281,582</b>

**Resulting % Allocation of Administration Salaries, Wages, & Benefits**

Allocation of Salary Costs							Total Allocated
Base	Max Day	Max Hour	Metering	Billing	Services	Direct Fire Protection	
60%	19%	7%	5%	6%	2%	0%	100%
60%	19%	7%	5%	6%	2%	0%	100%
60%	19%	7%	5%	6%	2%	0%	100%
60%	19%	7%	5%	6%	2%	0%	100%
60%	19%	7%	5%	6%	2%	0%	100%
<b>\$ 169,763</b>	<b>\$ 53,238</b>	<b>\$ 20,677</b>	<b>\$ 15,411</b>	<b>\$ 16,579</b>	<b>\$ 4,765</b>	<b>\$ 1,149</b>	<b>\$ 281,582</b>
<b>60%</b>	<b>19%</b>	<b>7%</b>	<b>5%</b>	<b>6%</b>	<b>2%</b>	<b>0%</b>	<b>100%</b>

**Customer Service 15-500-2209**

## Salaries by Staff Position

Meter Repairman/Reader	\$ 46,419
Meter Repairman/Reader	\$ 44,244
Principal Account Clerk	\$ 37,889
Meter Repairman/Reader	\$ 46,372
Maintenance Mechanic	\$ 50,777
Principal Account Clerk	\$ 21,204
Water Meter Foreman	\$ 62,405
<b>Salary \$ Allocation Results</b>	<b>\$ 309,310</b>

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

	50%	50%		100%			
	50%	50%		100%			
		100%		100%			
	100%			100%			
	33%	33%	34%	100%			
	100%			100%			
	33%	33%	34%	100%			
	\$ 150,258	\$ 120,571	\$ 38,482	\$ 309,310			
0%	0%	0%	49%	39%	12%	0%	100%

**Treatment Plant Capital**

		Base (Avg. Day)	Max Day	Total
Treatment Station 1	\$ 2,320,726	\$ 1,450,985	\$ 869,741	\$ 2,320,726
Treatment Lawton Valley	2,618,866	\$ 1,637,391	\$ 981,475	\$ 2,618,866
Treatment Both Plants	483,244	\$ 302,138	\$ 181,106	\$ 483,244
	<b>\$ 5,422,837</b>	<b>\$ 3,390,515</b>	<b>\$ 2,032,321</b>	<b>\$ 5,422,837</b>

	Residential	Non-Residential	Navy	PWFD	Fire	Treatment Plant Capacity
Capacity Reserved for Avg. Day Demand (MGD) <sup>1</sup>	3.20	2.21	0.95	1.64	N/A	8
% of Avg. Day Treatment Capacity	40.0%	27.6%	11.9%	20.5%	N/A	100%
Capacity Reserved for Max. Day Demand (MGD) <sup>1</sup>	5.81	4.35	1.395	3.00	1.44	16
% of Max. Day Treatment Capacity	36.33%	27.20%	8.72%	18.75%	9.00%	100%

<sup>1</sup> Per Demand study to determine required treatment capacity for design of DB treatment plant projects.

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HJS Schedule B-5 Rebuttal  
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	\$ 34,349,799					100%						100%
LAWTON VALLEY	\$ 47,328,373			100%								100%
STATION 1	\$ 41,940,359		100%									100%
TREATMENT BOTH	\$ 8,733,230				100%							100%
STORAGE	\$ 1,877,251					100%						100%
SOURCE OF SUPPLY	\$ 25,539,067	100%										100%
METERS	\$ 6,575,750								100%			100%
SERVICES	\$ 3,726,343									100%		100%
T&D PUMPING	\$ 1,082,596						100%					100%
BILLING	\$ 262,302										100%	100%
FIRE	\$ 390,166							100%				100%
WORK IN PROGRESS		100%	0%	0%								100%
Total	\$ 171,805,236											
LABORATORY	\$ 80,000	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
LAND AND ROW	\$ 3,594,491	15%	24%	28%	5%	21%	1%	0%	4%	2%	0%	100%
	\$ 3,674,491											

**Total Fixed Assets \$ 175,479,728**

		Supply	Treatment Station 1	Treatment Lawton Valley	Treatment Both Plants	T&D	T&D Pump	Fire	Meters	Services	Billing	Total
TRANSMISSION/DISTRIBUTION	\$ 34,349,799	\$ -	\$ -	\$ -	\$ -	\$ 34,349,799	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 34,349,799
LAWTON VALLEY	\$ 47,328,373	-	-	47,328,373	-	-	-	-	-	-	-	47,328,373
STATION 1	\$ 41,940,359	-	41,940,359	-	-	-	-	-	-	-	-	41,940,359
TREATMENT BOTH	\$ 8,733,230	-	-	-	8,733,230	-	-	-	-	-	-	8,733,230
STORAGE	\$ 1,877,251	-	-	-	-	1,877,251	-	-	-	-	-	1,877,251
SOURCE OF SUPPLY	\$ 25,539,067	25,539,067	-	-	-	-	-	-	-	-	-	25,539,067
METERS	\$ 6,575,750	-	-	-	-	-	-	-	6,575,750	-	-	6,575,750
SERVICES	\$ 3,726,343	-	-	-	-	-	-	-	-	3,726,343	-	3,726,343
T&D PUMPING	\$ 1,082,596	-	-	-	-	-	1,082,596	-	-	-	-	1,082,596
BILLING	\$ 262,302	-	-	-	-	-	-	-	-	-	262,302	262,302
FIRE	\$ 390,166	-	-	-	-	-	-	390,166	-	-	-	390,166
WORK IN PROGRESS	\$ -	-	-	-	-	-	-	-	-	-	-	-
Total	\$ 171,805,236	\$ 25,539,067	\$ 41,940,359	\$ 47,328,373	\$ 8,733,230	\$ 36,227,050	\$ 1,082,596	\$ 390,166	\$ 6,575,750	\$ 3,726,343	\$ 262,302	\$ 171,805,236
		15%	24%	28%	5%	21%	1%	0%	4%	2%	0%	
LABORATORY	\$ 80,000	80,000	-	-	-	-	-	-	-	-	-	80,000
LAND AND ROW	\$ 3,594,491	534,326	877,472	990,199	182,716	757,939	22,650	8,163	137,577	77,962	5,488	3,594,491
	\$ 3,674,491	\$ 614,326	\$ 877,472	\$ 990,199	\$ 182,716	\$ 757,939	\$ 22,650	\$ 8,163	\$ 137,577	\$ 77,962	\$ 5,488	\$ 3,674,491
		17%	24%	27%	5%	21%	1%	0%	4%	2%	0%	
Total Allocated	\$ 26,153,393	\$ 42,817,831	\$ 48,318,572	\$ 8,915,946	\$ 36,984,988	\$ 1,105,246	\$ 398,329	\$ 6,713,328	\$ 3,804,305	\$ 267,790	\$ 175,479,728	
% of Total Asset Value		15%	24%	28%	5%	21%	1%	0%	4%	2%	0%	

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HJS Schedule B-5 Rebuttal  
Capital Functionalization

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## 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	\$ 2,700,000	15%	24%	28%	5%	21%	1%	0%	4%	2%	0%	100%
Debt Service	\$ 6,811,000	15%	24%	28%	5%	21%	1%	0%	4%	2%	0%	100%
	<u>\$ 9,511,000</u>											

		Supply	Treatment Station 1	Treatment Lawton Valley	Treatment Both Plants	T&D	T&D Pump	Fire	Meters	Services	Billing	Total
Capital Spending Restricted Account	\$ 2,700,000	\$ 402,406	\$ 658,812	\$ 743,449	\$ 137,184	\$ 569,066	\$ 17,006	\$ 6,129	\$ 103,294	\$ 58,535	\$ 4,120	\$ 2,700,000
Debt Service	\$ 6,811,000	\$ 1,015,107	\$ 1,661,914	\$ 1,875,418	\$ 346,060	\$ 1,435,521	\$ 42,899	\$ 15,461	\$ 260,568	\$ 147,659	\$ 10,394	\$ 6,811,000
	<u>\$ 9,511,000</u>	<u>\$ 1,417,514</u>	<u>\$ 2,320,726</u>	<u>\$ 2,618,866</u>	<u>\$ 483,244</u>	<u>\$ 2,004,586</u>	<u>\$ 59,904</u>	<u>\$ 21,589</u>	<u>\$ 363,862</u>	<u>\$ 206,193</u>	<u>\$ 14,514</u>	<u>\$ 9,511,000</u>

..



Annual Demand by Class	Annual Demand in 1000s Gallons														Demand Projection Options		Rate Year Demand Projection
	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	2-Year	3-Year	
Residential	773,872	780,666	736,577	716,037	749,409	757,478	780,264	690,544	644,285	640,966	618,574	663,331	651,514	670,930	661,222	661,925	661,222
Non-Residential	580,798	583,184	663,766	573,711	493,539	469,164	505,014	519,521	454,981	502,475	472,437	485,331	446,842	467,568	457,205	466,580	457,205
Navy	307,051	348,222	511,299	417,869	373,306	223,457	247,728	225,392	173,790	137,731	222,858	250,769	276,891	217,265	247,078	248,308	247,078
Portsmouth	455,142	451,723	422,944	429,465	463,253	450,942	473,338	444,777	412,324	398,827	407,837	411,578	455,255	410,309	432,782	425,714	432,782
<b>Total (in 1000's Gallons)</b>	<b>2,116,863</b>	<b>2,163,795</b>	<b>2,334,586</b>	<b>2,137,082</b>	<b>2,079,508</b>	<b>1,901,042</b>	<b>2,006,344</b>	<b>1,880,234</b>	<b>1,685,380</b>	<b>1,679,999</b>	<b>1,721,706</b>	<b>1,811,009</b>	<b>1,830,502</b>	<b>1,766,072</b>	<b>1,798,287</b>	<b>1,802,528</b>	<b>1,798,287</b>
		2.2%	7.9%	-8.5%	-2.7%	-8.6%	5.5%	-6.3%	-10.4%	-0.3%	2.5%	5.2%	1.1%	-3.5%			

Combined Station #1 and LV WTP Production Volumes in 1,000 gals									Peaking Comparison		
									Production Peaks	System Peaks Estimated from Daily Demand Data	System Diversity Ratio (1)
2007	2008	2009	2010	2011	2012	2013	2014	2015			
Annual Production	2,456,363	2,524,784	2,437,440	2,440,630	2,304,024	2,059,646	2,071,219	2,115,343	2,027,100	2,071,221	2.15
Average Day Production	6,730	6,917	6,678	6,687	6,312	5,643	5,675	5,795	5,554	5,674.58	
Maximum Month Production	256,796	269,819	280,875	254,088	268,468	244,463	236,739	227,653	219,066	223,360	
Maximum Day Production	10,165	10,724	12,100	9,800	10,163	10,606	9,721	9,462	8,690	9,076	1.26
Max Day Date	6/28/2007	8/4/2007	7/18/2008	8/23/2010	7/23/2011	7/7/2012	7/7/2012	7/6/2013	7/25/2014		
Maximum Day Peaking Factor	1.51	1.55	1.81	1.47	1.61	1.88	1.71	1.63	1.56	1.7	
Max-Day to Avg. Day/Max-Month Ratio	1.19	1.23	1.34	1.20	1.17	1.34	1.27	1.29	1.23	1.3	1.18
Maximum Hour	13,800	15,200	13,250	10,700	12,100	12,500	14,200	12,500	16,000	14,250	
Maximum Hour Peaking Factor	2.05	2.20	1.98	1.60	1.92	2.22	2.50	2.16	2.88	2.5	
									Coincident	Noncoincident	
									Excluding Fire Protection		

(1) Calculated according to AWWA M-1 Guidelines

**Estimation of Each Customer Class' Peaking Factors**

		Max Day Demand Factor	Max Hour Demand Factor
<b>Customer Class</b>	Residential	2.10	2.80
	Non-Residential	2.28	3.42
	Navy	2.04	2.71
	Portsmouth	2.13	2.85
	Fire		
<b>Estimated Systemwide Peaks</b>		2.15	2.97

(5)

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

## System Demands Imposed by Each Customer Class' Peaking Behavior

Customer Class	Rate Year Demand (1,000 gallons)					
	Annual Demand	Average Daily Demand	Lost Water Adjustment	Adjusted Average Daily Demand	% Average Demand by Class	% Average Demand Ex PWFD & 50% Navy
Residential	661,222	1,812	411	2,223	39.27%	54%
Non-Residential	457,205	1,253	284	1,537	27.15%	37%
Navy	247,078	677	38	715	12.64%	9%
Portsmouth	432,782	1,186	-	1,186	20.95%	0%
Fire					N/A	N/A
<b>Total, w Fire Prot.</b>	<b>1,798,287</b>	<b>4,927</b>	<b>13%</b>	<b>5,661</b>	<b>100%</b>	<b>100%</b>
(1)						
<i>Production</i>	2,066,248	5,661	12.97%			

Customer Class	Max Day Calculations				% of Daily Peaks			Max Hour Calculations			% of Hourly Peaks		
	Max Day Peaking Factor	Demand x Peaking Factor (3)	Incremental Peak Demand	% of Daily Peaks	With Full PWFD & Navy	Without PWFD & 50% Navy	Without PWFD	Max Hour Peaking Factor	Demand x Peaking Factor	Incremental Peak Demand	With Full PWFD & Navy	Without PWFD & 50% Navy	Without PWFD
Residential	2.10	4,675	2,452	30.9%	30.9%	39.4%	37.2%	2.80	6,233	1,558	17.4%	19.8%	19.2%
Non-Residential	2.28	3,500	1,963	24.7%	24.7%	31.5%	29.8%	3.42	5,251	1,750	19.5%	22.2%	21.6%
Navy	2.04	1,456	740	9.3%	9.3%	5.9%	11.2%	2.71	1,941	485	5.4%	3.1%	6.0%
Portsmouth	2.13	2,530	1,345	16.9%	16.9%	0.0%	0.0%	2.85	3,374	843	9.4%	0.0%	0.0%
Fire	(2)	1,440	1,440	18.1%	18.1%	23.1%	21.8%		5,760	4,320	48.2%	54.9%	53.2%
<b>Total, w Fire Prot.</b>		13,601	7,940	100.0%	100.0%	100.0%	100.0%		22,559	8,957	100.0%	100.0%	100.0%
<b>Total, without Fire Protection</b>		<b>12,161</b>	<b>6,500</b>					<b>16,799</b>	<b>4,637</b>				
(demand is in thousands of gallons)													

(1) From HJS Schedule D-4 Rebuttal. The lost water adjustment is made to the peaking analysis so that Portsmouth will not share in that portion of certain operating costs.

Navy allocation is reduced to 25%.

(2) From HJS Schedule B-11 Rebuttal, Fire Protection Demand Analysis'.

**EACH RATE CLASS' SHARE OF SYSTEM PEAKS**

<u>Rate Class</u>	Average Demand	Daily Peaks	Hourly Peaks
<b>Retail</b>			
Residential	39%	31%	17%
Non-Residential	27%	25%	20%
<b>Navy</b>	13%	9%	5%
<b>Portsmouth</b>	21%	17%	9%
<b>Fire</b>	N/A	18%	48%
	<b>100%</b>	<b>100%</b>	<b>100%</b>

**BASE/EXTRA-CAPACITY DISTRIBUTION OF SYSTEM PEAKS**

	Incremental Demand	% Distribution for Max Day	% Distribution for Max Hour
Base	5,675	<b>62.5%</b>	<b>39.8%</b>
Extra Capacity			
Max Day	3,401	<b>37.5%</b>	<b>23.9%</b>
Max Hour	5,174		<b>36.3%</b>
Fire Protection			
Max Day	-	<b>0.0%</b>	<b>0.0%</b>
Max Hour	-		<b>0.0%</b>
<b>Total%</b>		<b>100.0%</b>	<b>100.0%</b>
<b>Total 1000's Gallons</b>		<b>9,076</b>	<b>14,250</b>

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

Rhode Island Public Utilities Commission

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HJS Schedule D-1 Rebuttal

Water Accounts, by Size and Class

Connection Size	Meter Factors	NON-RESIDENTIAL		RESIDENTIAL		WHOLESALE (Monthly)			
		Meter Read Frequency	Equivalent Meters	Meter Read Frequency	Equivalent Meters	Navy		Portsmouth	
		Monthly	Monthly	Monthly	Monthly	Meters	Equivalents	Meters	Equivalents
5/8	1.0	890	890	9,854	9,854	5	5	0	0
3/4	1.1	305	336	2,190	2,409	1	1	0	0
1	1.4	220	308	346	484	1	1	0	0
1.5	1.8	197	355	178	320	1	2	0	0
2	2.9	168	487	94	273	1	3	0	0
3	11.0	40	440	18	198	0	0	0	0
4	14.0	14	196	2	28	0	0	1	14
5	18.0	-	-	-	-	0	0	0	0
6	21.0	16	336	8	168	8	168	0	0
8	29.0	-	-	1	29	0	0	0	0
10	43.5	-	-	-	-	1	44	0	0
Total	<b>14,560</b>	1,850	3,348	12,691	13,763	18	224	1	14

Billed Monthly  
Billed Quarterly  
Billed Annually

Equivalent Billing Units	
<b>14,560</b>	<b>174,720</b>
-	-
<b>364</b>	<b>364</b>
<b>Total</b>	<b>175,084</b>

Equivalent Meter Units	
<b>17,349</b>	<b>208,188</b>
-	-
<b>N/A</b>	<b>N/A</b>
<b>Total</b>	<b>208,188</b>

## Rhode Island Public Utilities Commission

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FY 2017 Rate Filing

HJS Schedule D-2 Rebuttal

Fire Protection Accounts

	Connection Size	Existing Differential	Number of Connections	Equivalent Connections (2)	
<b>Public Hydrants</b>					
Newport	6	111.31	620	69,013	
Middletown	6	111.31	410	45,637	
Portsmouth	6	111.31	9	1,002	% of Equiv Connections
<b>Subtotal: Public Hydrants</b>			<b>1039</b>	<b>115,652</b>	<b>73%</b>
<b>Private Fire Connections</b>					
	2	6.19	0	-	
	4	38.32	74	2,836	
	6	111.31	235	26,158	
	8	237.21	55	13,046	
	10	426.58	0	-	% of Equiv Connections
	12	689.04	0	-	
<b>Subtotal: Private Fire Connections</b>			<b>364</b>	<b>42,040</b>	<b>27%</b>
<b>Total Fire Connections</b>			<b>1,403</b>	<b>157,692</b>	<b>100%</b>

- (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	
5/8	1.000	10,749	10,749	
3/4	1.000	2,496	2,496	
1	1.860	567	1,055	
1.5	4.630	376	1,741	
2	6.150	263	1,617	
3	11.060	58	641	
4	11.060	17	188	
5	11.060	0	0	
6	11.060	32	354	
8	11.060	1	11	% of Equiv Connections
10	11.060	1	11	
<b>Subtotal General Service</b>		<b>14,560</b>	<b>18,863</b>	<b>82%</b>
<b>Private Fire Connections</b>				
	2	6.150	0	-
	4	11.060	74	818
	6	11.060	235	2,599
	8	11.060	55	608
	10	11.060	0	-
	12	11.060	0	-
<b>Subtotal: Private Fire Connections</b>		<b>364</b>	<b>4,026</b>	<b>18%</b>
<b>Annualized</b>			<b>12</b>	
<b>Total Retail &amp; Private Fire Connections</b>		<b>14,924</b>	<b>274,672</b>	<b>100%</b>



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HJS Schedule D-3 Rebuttal  
Production Summary

	Max. Month:	Station #1		Max. Month:	Lawton Valley		Max. Month:	Combined	
		In Gallons	In 1000's		In Gallons	In 1000's		In Gallons	In 1000's
<u>FY 12 JULY 2011 - JUNE 2012</u>	July	1,183,810,000	1,183,810	July	875,836,000	875,836	July	2,059,646,000	2,059,646
		145,762,000	145,762			98,700		99	
<u>FY 13 JULY 2012 - JUNE 2013</u>	July	1,076,157,000	1,076,157	July	995,062,000	995,062	July	2,071,219,000	2,071,219
		116,038,000	116,038			120,700,600		120,701	
<u>FY14 JULY 2013 - JUNE 2014</u>	September	1,151,855,000	1,151,855	July	963,487,700	963,488	July	2,115,342,700	2,115,343
		123,318,000	123,318			113,098,100		113,098	
<u>FY 15 JULY 2014 - JUNE 2015</u>	July	874,221,000	874,221	August	1,152,879,049	1,152,879	August	2,027,100,049	2,027,100
		103,314,000	103,314			117,426,100		117,426	
<u>FY16 JULY 2015 - JUNE 2016</u>									

MAX DAY PRODUCTION AVAILABLE FOR SALE

	Station #1			Lawton Valley			Combined		
	Max Day Production			Max Day Production			Max Day Production		
	Max Day	In Gallons	in 1000's	Max Day	In Gallons	in 1000's	Max Day	In Gallons	in 1000's
<u>FY 12 JULY 2011 - JUNE 2012</u>	7/4/2011	5,703,000	5,703	8/3/2011	5,981,000	5,981	7/23/2011	10,606,000	10,606
<u>FY 13 JULY 2012 - JUNE 2013</u>	7/6/2012	4,697,000	4,697	9/25/2012	5,400,000	5,400	7/7/2012	9,721,000	9,721
<u>FY14 JULY 2013 - JUNE 2014</u>	9/30/2013	4,749,000	4,749	7/6/2013	5,025,000	5,025	7/6/2013	9,462,000	9,462
<u>FY 15 JULY 2014 - JUNE 2015</u>	9/16/2014	4,096,000	4,096	7/25/2014	5,100,000	5,100	7/25/2014	8,690,000	8,690
<u>FY16 JULY 2015 - JUNE 2016</u>									

PEAK HOURLY FLOW

	Date	Station #1		Date	Lawton Valley	
<u>FY 12 JULY 2011 - JUNE 2012</u>	7/5/2011	6.50	MGD	7/7/2011	6.0	MGD
<u>FY 13 JULY 2012 - JUNE 2013</u>	6/11/2013	8.20	MGD	7/17/2012	6.0	MGD
<u>FY14 JULY 2013 - JUNE 2014</u>	10/16/2013	6.50	MGD	7/7/2013	6.0	MGD
<u>FY 15 JULY 2014 - JUNE 2015</u>	8/29/2014	9.00	MGD	11/12/2014	7.0	MGD
<u>FY16 JULY 2015 - JUNE 2016</u>						

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HJS Schedule D-4 Rebuttal  
Demand Summary

	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
<b>Fiscal Year Annual Demand</b>										
Residential	718,022	757,478	780,264	690,544	644,285	640,966	618,574	663,331	651,514	670,930
Non-Residential	505,804	469,164	505,014	519,521	454,981	502,475	472,437	485,331	446,842	467,568
Navy	373,306	223,457	247,728	225,392	173,790	137,731	222,858	250,769	276,891	217,265
Portsmouth	453,618	450,942	473,338	444,777	412,324	398,827	407,837	411,578	455,255	410,309
Total 1000's Gallons	<b>2,050,751</b>	<b>1,901,042</b>	<b>2,006,344</b>	<b>1,880,234</b>	<b>1,685,380</b>	<b>1,679,999</b>	<b>1,721,706</b>	<b>1,811,009</b>	<b>1,830,502</b>	<b>1,766,072</b>
		-7.3%	5.5%	-6.3%	-10.4%	-0.3%	2.5%	5.2%	1.1%	-3.5%

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
<b>Max Month Demand</b>									
Residential	79,586	103,115	83,630	83,630	83,630		196,307	185,908	76,838
Commercial	51,545	66,684	61,978	61,978	61,978		67,646	78,970	58,767
Navy	29,771	30,475	24,640	24,640	24,640		25,677	33,876	30,167
Portsmouth	51,270	58,023	61,048	46,840	46,840		51,672	50,961	45,224
<b>NonCoincident Max Month</b>	<b>212,172</b>	<b>258,296</b>	<b>231,296</b>	<b>217,088</b>	<b>217,088</b>	-	<b>341,302</b>	<b>349,715</b>	<b>210,996</b>
<b>Coincident Max Month</b>	<b>196,132</b>	<b>221,941</b>	<b>201,008</b>				<b>314,693</b>	<b>335,417</b>	
<b>Production Volume, Max Month</b>	<b>256,796</b>	<b>269,819</b>	<b>280,875</b>						

#### Unaccounted for Water Analysis

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Average
Billed Consumption (1,000 gals.)	1,901,042	2,006,344	1,880,234	1,685,380	1,679,999	1,721,706	1,811,009	1,830,502	1,766,072	1,802,528
Total Water Produced (1,000 gals.)	2,456,363	2,524,784	2,437,440	2,440,630	2,304,024	2,059,646	2,071,219	2,115,343	2,027,100	2,071,221
Unaccounted for Water (1,000 gals.)	555,321	518,440	557,206	755,250	624,026	337,940	260,210	284,841	261,028	268,693
Percent Unaccounted for Water	22.61%	20.53%	22.86%	30.94%	27.08%	16.41%	12.56%	13.47%	12.88%	12.97%

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Development of Pumping Costs

**Pumping Labor and Benefits**

<b>Station One</b>		<b>Lawton Valley</b>	
Labor hours per day pump	0.5000	Labor hours per day pumping	0.5000
Days per year	365	Days per year	365
Total Hours	182.5000	Total Hours	182.5000
Average per hour pay	\$25.59	Average per hour pay	\$24.52
Average per hour benefits	\$13.48	Average per hour benefits	\$14.18
Pumping Salaries	\$4,670.18	Pumping Salaries	\$4,474.90
Pumping Benefits	\$2,460.10	Pumping Benefits	\$2,587.85

**Pumping Repairs and Supplies**

<b>Station One</b>		<b>Lawton Valley</b>	
50275 Repair & Maintenance - Equipment		Repair & Maintenance - Equipment	
None	\$0.00	Vendor	amount
Total Repair & Maintenance Pumping	\$0.00	None	\$0.00
		Total Repair & Maintenance Pumping	\$0.00
50311 Operating Supplies		Operating Supplies	
Vendor	amount	Vendor	amount
Total - Operating Supplies - Pumping	\$0.00	Total Operating Supplies Pumping	\$0.00

**Pumping Electricity**

<b>Station One</b>		<b>Lawton Valley</b>	
Annual Pumping Power	\$2,132	Annual Pumping Power	\$67,529

**Total Pumping Costs**

<b>Station One</b>		<b>Lawton Valley</b>	
Pumping Salaries	\$4,670	Pumping Salaries	\$4,475
Pumping Benefits	\$2,460	Pumping Benefits	\$2,588
Total Repair & Maintenance Pumping	\$0	Total Repair & Maintenance Pumping	\$0
Total - Operating Supplies - Pumping	\$0	Total Operating Supplies Pumping	\$0
Annual Pumping Power	\$2,132	Annual Pumping Power	\$67,529
<b>Total Annual Pumping Costs</b>	<b>\$9,262</b>	<b>Total Annual Pumping Costs</b>	<b>\$74,592</b>

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HJS Schedule D-6- Rebuttal  
Debt Service Restricted Account Cashflow

**Debt Service Account****Beginning Cash Balance****Additions**

From Rates  
From Capital Restricted Acct.  
Interest Income

**Total Additions****Deductions**

Existing Debt Service  
To Capital Restricted Acct.  
Proposed Debt Service

**Total Deductions****Ending Cash Balance**

FY 2012 Actual											
July	August	September	October	November	December	January	February	March	April	May	June
\$ 1,989,949	\$ 1,989,964	\$ 2,325,118	\$ 1,789,176	\$ 1,952,745	\$ 1,555,935	\$ 1,688,396	\$ 1,820,952	\$ 1,953,399	\$ 3,105,596	\$ 3,238,043	\$ 3,353,004
	\$335,137	\$167,569	\$167,569	\$167,569	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447
-	-	-	-	-	-	-	-	1,310,042	-	-	-
15	17	18	14	15	14	108	0	0	0	0	0
\$ 15	\$ 335,154	\$ 167,587	\$ 167,583	\$ 167,584	\$ 132,461	\$ 132,556	\$ 132,447	\$ 1,442,489	\$ 132,447	\$ 132,447	\$ 132,447
		703,529	4,015	564,393			-	290,293		17,486	401
\$ -	\$ -	\$ 703,529	\$ 4,015	\$ 564,393	\$ -	\$ -	\$ -	\$ 290,293	\$ -	\$ 17,486	\$ 401
\$ 1,989,964	\$ 2,325,118	\$ 1,789,176	\$ 1,952,745	\$ 1,555,935	\$ 1,688,396	\$ 1,820,952	\$ 1,953,399	\$ 3,105,596	\$ 3,238,043	\$ 3,353,004	\$ 3,485,051

Annual  
Contribution  
From Rates  
\$1,764,975

Annual Debt  
Service  
Payments  
\$ 1,580,116

**Debt Service Account****Beginning Cash Balance****Additions**

From Rates  
From Capital Restricted Acct.  
Interest Income

**Total Additions****Deductions**

To Capital Restricted Acct.  
Existing Debt Service

**Total Deductions****Ending Cash Balance**

FY 2013 Actual											
July	August	September	October	November	December	January	February	March	April	May	June
\$ 3,485,051	\$ 3,617,499	\$ 3,749,946	\$ 2,644,279	\$ 2,776,727	\$ 2,520,419	\$ 2,520,419	\$ 1,475,292	\$ 1,607,739	\$ 1,037,970	\$ 1,170,417	\$ 1,302,864
\$132,447	\$132,447	\$132,447	\$132,447	\$132,447		\$264,895	\$132,447	\$132,447	\$132,447	\$132,447	\$321,865
-	-	-	-	-	-	-	-	-	-	-	-
0	0	0	0	0	0	19	0	0	0	0	9
\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 0	\$ 264,914	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 321,874
		1,238,114		388,755				702,217			
\$ -	\$ -	\$ 1,238,114	\$ -	\$ 388,755	\$ -	\$ -	\$ -	\$ 702,217	\$ -	\$ -	\$ -
\$ 3,617,499	\$ 3,749,946	\$ 2,644,279	\$ 2,776,727	\$ 2,520,419	\$ 2,520,419	\$ 1,475,292	\$ 1,607,739	\$ 1,037,970	\$ 1,170,417	\$ 1,302,864	\$ 1,624,738

Annual  
Contribution  
From Rates  
\$1,778,786

Annual Debt  
Service  
\$ 2,329,086

**Debt Service Account****Beginning Cash Balance****Additions**

From Rates  
From Capital Restricted Acct.  
Interest Income

**Total Additions****Deductions**

To Capital Restricted Acct.  
Existing Debt Service

**Total Deductions****Ending Cash Balance**

FY 2014 Actual											
July	August	September	October	November	December	January	February	March	April	May	June
\$ 1,624,738	\$ 1,936,007	\$ 850,248	\$ 1,161,524	\$ 1,472,779	\$ 1,773,422	\$ 2,084,681	\$ 2,395,942	\$ 2,707,204	\$ 1,675,614	\$ 1,986,873	\$ 1,986,881
\$311,251	\$311,251	\$311,251	\$311,251	\$311,251	\$311,251	\$311,251	\$311,251	\$311,251	\$311,251	\$0	\$622,503
-	-	-	-	-	-	-	-	-	-	-	-
17	22	24	4	-	8	9	11	11	8	8	10
\$ 311,269	\$ 311,274	\$ 311,275	\$ 311,256	\$ 311,251	\$ 311,259	\$ 311,261	\$ 311,262	\$ 311,263	\$ 311,259	\$ 8	\$ 622,513
-	-	-	-	-	-	-	-	-	-	-	-
\$ -	\$ 1,397,032	\$ -	\$ -	\$ 10,609	\$ -	\$ -	\$ -	\$ 1,342,853	\$ -	\$ -	\$ -
\$ -	\$ 1,397,032	\$ -	\$ -	\$ 10,609	\$ -	\$ -	\$ -	\$ 1,342,853	\$ -	\$ -	\$ -
\$ 1,936,007	\$ 850,248	\$ 1,161,524	\$ 1,472,779	\$ 1,773,422	\$ 2,084,681	\$ 2,395,942	\$ 2,707,204	\$ 1,675,614	\$ 1,986,873	\$ 1,986,881	\$ 2,609,394

Annual  
Contribution  
From Rates  
\$3,735,016

Annual Debt  
Service  
2,750,494

FY 2015												
	July	August	September	October	November	December	January	February	March	April	May	June
<b>Debt Service Account</b>												
<b>Beginning Cash Balance</b>	\$ 2,609,394	\$ 3,176,988	\$ 4,209,585	\$ 571,079	\$ 673,663	\$ 1,241,249	\$ 1,808,836	\$ 2,376,426	\$ 2,944,018	\$ 2,079,572	\$ 2,647,164	\$ 3,214,757
<b>Additions</b>												
From Rates	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583
From Capital Restricted Acct.	\$ -	\$ 465,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Income	12	14	17	1	3	4	7	10	11	8	11	14
<b>Total Additions</b>	\$ 567,595	\$ 1,032,597	\$ 567,600	\$ 567,584	\$ 567,586	\$ 567,587	\$ 567,590	\$ 567,593	\$ 567,594	\$ 567,591	\$ 567,594	\$ 567,597
<b>Deductions</b>												
To Capital Restricted Acct.	-	-	-	465,000	-	-	-	-	-	-	-	-
Existing Debt Service	-	-	4,206,106	-	-	-	-	-	1,432,040	-	-	-
<b>Total Deductions</b>	\$ -	\$ -	\$ 4,206,106	\$ 465,000	\$ -	\$ -	\$ -	\$ -	\$ 1,432,040	\$ -	\$ -	\$ -
<b>Ending Cash Balance</b>	\$ 3,176,988	\$ 4,209,585	\$ 571,079	\$ 673,663	\$ 1,241,249	\$ 1,808,836	\$ 2,376,426	\$ 2,944,018	\$ 2,079,572	\$ 2,647,164	\$ 3,214,757	\$ 3,782,354
FY 2016												
	July	August	September	October	November	December	January	February	March	April	May	June
<b>Debt Service Account</b>												
<b>Beginning Cash Balance</b>	\$ 3,782,354	\$ 4,349,953	\$ 5,304,709	\$ 70,593	\$ 638,176	\$ 1,205,760	\$ 1,773,347	\$ 2,340,936	\$ 2,908,528	\$ 2,080,618	\$ 2,648,201	\$ 3,215,784
<b>Additions</b>												
From Rates	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583
From Capital Restricted Acct.	-	529,779	-	-	-	-	-	-	-	-	-	-
Interest Income	16	20	23	0	1	4	6	9	12	-	-	-
<b>Total Additions</b>	\$ 567,599	\$ 1,097,382	\$ 567,606	\$ 567,583	\$ 567,584	\$ 567,587	\$ 567,589	\$ 567,592	\$ 567,595	\$ 567,583	\$ 567,583	\$ 567,583
<b>Deductions</b>												
To Capital Restricted Acct.	-	-	529,779	-	-	-	-	-	-	-	-	-
Existing Debt Service	-	142,627	5,271,942	-	-	-	-	-	1,395,505	-	-	-
<b>Total Deductions</b>	\$ -	\$ 142,627	\$ 5,801,722	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,395,505	\$ -	\$ -	\$ -
<b>Ending Cash Balance</b>	\$ 4,349,953	\$ 5,304,709	\$ 70,593	\$ 638,176	\$ 1,205,760	\$ 1,773,347	\$ 2,340,936	\$ 2,908,528	\$ 2,080,618	\$ 2,648,201	\$ 3,215,784	\$ 3,783,367
FY 2017												
	July	August	September	October	November	December	January	February	March	April	May	June
<b>Debt Service Account</b>												
<b>Beginning Cash Balance</b>	\$ 3,783,367	\$ 5,229,808	\$ 5,797,391	\$ 915,300	\$ 1,482,883	\$ 2,050,466	\$ 2,618,049	\$ 3,185,632	\$ 3,753,215	\$ 2,965,488	\$ 3,533,071	\$ 4,100,654
<b>Additions</b>												
From Rates	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583
From Capital Restricted Acct.	-	-	-	-	-	-	-	-	-	-	-	-
From Accrued Benefits Buyout and Retiree Ins.	878,858	-	-	-	-	-	-	-	-	-	-	-
Interest Income	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Additions</b>	\$ 1,446,441	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583
<b>Deductions</b>												
To Capital Restricted Acct.	-	-	-	-	-	-	-	-	-	-	-	-
Existing Debt Service	-	-	5,449,674	-	-	-	-	-	1,355,310	-	-	-
<b>Total Deductions</b>	\$ -	\$ -	\$ 5,449,674	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,355,310	\$ -	\$ -	\$ -
<b>Ending Cash Balance</b>	\$ 5,229,808	\$ 5,797,391	\$ 915,300	\$ 1,482,883	\$ 2,050,466	\$ 2,618,049	\$ 3,185,632	\$ 3,753,215	\$ 2,965,488	\$ 3,533,071	\$ 4,100,654	\$ 4,668,237

Annual  
Contribution  
From Rates  
\$6,810,996

Annual Debt  
Service  
\$ 5,638,146

Annual  
Contribution  
From Rates  
\$6,810,996

Annual Debt  
Service  
\$ 6,810,074

Annual  
Contribution  
From Rates  
\$6,810,996

Annual Debt  
Service  
\$ 6,804,984

FY 2018													
July	August	September	October	November	December	January	February	March	April	May	June		
Debt Service Account													
Beginning Cash Balance	\$ 4,668,237	\$ 5,235,820	\$ 5,803,403	\$ 880,712	\$ 1,448,295	\$ 2,015,878	\$ 2,583,461	\$ 3,151,044	\$ 3,718,627	\$ 2,976,168	\$ 3,543,751	\$ 4,111,334	Annual Contribution From Rates \$6,810,996
Additions													
From Rates	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	
From Capital Restricted Acct.	-	-	-	-	-	-	-	-	-	-	-	-	
Interest Income	-	-	-	-	-	-	-	-	-	-	-	-	
Total Additions	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	
Deductions													Annual Debt Service \$ 6,800,316
To Capital Restricted Acct.	-	-	-	-	-	-	-	-	-	-	-	-	
Existing Debt Service	-	-	5,490,274	-	-	-	-	-	1,310,042	-	-	-	
Total Deductions	\$ -	\$ -	\$ 5,490,274	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,310,042	\$ -	\$ -	\$ -	
Ending Cash Balance	\$ 5,235,820	\$ 5,803,403	\$ 880,712	\$ 1,448,295	\$ 2,015,878	\$ 2,583,461	\$ 3,151,044	\$ 3,718,627	\$ 2,976,168	\$ 3,543,751	\$ 4,111,334	\$ 4,678,917	

FY 2019													
July	August	September	October	November	December	January	February	March	April	May	June		
Debt Service Account													
Beginning Cash Balance	\$ 4,678,917	\$ 5,246,500	\$ 5,814,083	\$ 844,448	\$ 1,412,031	\$ 1,979,614	\$ 2,547,197	\$ 3,114,780	\$ 3,682,363	\$ 2,990,566	\$ 3,558,149	\$ 4,125,732	Annual Contribution From Rates \$6,810,996
Additions													
From Rates	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	
From Capital Restricted Acct.	-	-	-	-	-	-	-	-	-	-	-	-	
Interest Income	-	-	-	-	-	-	-	-	-	-	-	-	
Total Additions	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	
Deductions													Annual Debt Service \$ 6,796,598
To Capital Restricted Acct.	-	-	-	-	-	-	-	-	-	-	-	-	
Existing Debt Service	-	-	5,537,218	-	-	-	-	-	1,259,381	-	-	-	
Total Deductions	\$ -	\$ -	\$ 5,537,218	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,259,381	\$ -	\$ -	\$ -	
Ending Cash Balance	\$ 5,246,500	\$ 5,814,083	\$ 844,448	\$ 1,412,031	\$ 1,979,614	\$ 2,547,197	\$ 3,114,780	\$ 3,682,363	\$ 2,990,566	\$ 3,558,149	\$ 4,125,732	\$ 4,693,315	

FY 2020													
July	August	September	October	November	December	January	February	March	April	May	June		
Debt Service Account													
Beginning Cash Balance	\$ 4,693,315	\$ 5,260,898	\$ 5,828,481	\$ 805,867	\$ 1,373,450	\$ 1,941,033	\$ 2,508,616	\$ 3,076,199	\$ 3,643,782	\$ 3,007,209	\$ 3,574,792	\$ 4,142,375	Annual Contribution From Rates \$6,810,996
Additions													
From Rates	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	\$567,583	
From Capital Restricted Acct.	-	-	-	-	-	-	-	-	-	-	-	-	
Interest Income	-	-	-	-	-	-	-	-	-	-	-	-	
Total Additions	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	\$ 567,583	
Deductions													Annual Debt Service \$ 6,794,353
To Capital Restricted Acct.	-	-	-	-	-	-	-	-	-	-	-	-	
Existing Debt Service	-	-	5,590,197	-	-	-	-	-	1,204,155	-	-	-	
Total Deductions	\$ -	\$ -	\$ 5,590,197	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,204,155	\$ -	\$ -	\$ -	
Ending Cash Balance	\$ 5,260,898	\$ 5,828,481	\$ 805,867	\$ 1,373,450	\$ 1,941,033	\$ 2,508,616	\$ 3,076,199	\$ 3,643,782	\$ 3,007,209	\$ 3,574,792	\$ 4,142,375	\$ 4,709,958	

Rhode Island Public Utilities Commission  
Docket 4595  
FY 2017 Rate Filing  
HJS Schedule D-7 Rebuttal  
Demand Factor Calculations

FY 2015 Retail Billed Consumption<sup>1</sup>

	July	August	September	October	November	December	January	February	March	April	May	June	Total	Avg Day	Max Mon	Avg Day
Residential	62,233	70,970	75,691	67,674	62,773	48,876	42,772	57,187	42,091	39,574	51,478	47,554	668,873	1,833	75,691	2,523
Non Residential	47,402	52,743	58,767	50,371	46,452	36,419	26,733	30,526	24,069	24,918	34,950	34,218	467,568	1,281	58,767	1,959

1 - Residential consumption for July is actually from July 2015 since the July 2014 bill was a quarterly bill and included consumption for a three month period.

	Based on Monthly Billing Data		Based on Daily Meter Data <sup>2</sup>		
	Residential	Non Residential	Navy	PWFD	
FY 2015 Average Day (MGD)	1.83	1.28	FY 2015 Average Day	0.54	1.12
Avg. Day of Max Month (MGD)	2.52	1.96	FY 15 Maximum Day	1.10	2.39
MM/AD Factor	1.38	1.53	Max Day/Avg Day	2.04	2.13
System MD/MM Ratio	1.27	1.27			
Weekly Usage Adjustment	1.20	1.17			
<b>Max Day Capacity Factor</b>	<b>2.10</b>	<b>2.28</b>	<b>Max Day Capacity Factor</b>	<b>2.04</b>	<b>2.13</b>

2 - Max Day Demand Factors for PWFD and the Navy are based on daily meter read data. PWFD data provided by W. McGinn. Navy data gathered using data profilers installed on Navy meters.

System Demand Data

System Avg. Day	5.67
System Max Day	9.72
Avg. Day of System Max. Month	7.64
System MD/MM Ratio	1.27

<b>Max Day Diversity Factor Calculation</b>	Residential	Commercial	Navy	PWFD	
Class Average Day (mgd)	1.83	1.28	0.54	1.12	
Class MD Demand Factor	2.10	2.28	2.04	2.13	<b>Total MD Demand</b>
Max Day Demand (Avg. Day X MD Demand Factor)	3.85	2.92	1.10	2.39	<b>10.3</b>
System Average Day (mgd)	5.67	Year		2013	UAW Adj. 11%
System Maximum Day (mgd)	9.72				
System Maximum Hour (mgd)	14.20				
	MD Demand		AD Demand		
Noncoincident MD Capacity Factor	10.3	/	5.67	=	1.81
Coincident MD Capacity Factor	9.7	/	5.67	=	1.71
			<b>Max Day Diversity Factor</b>		<b>1.06</b>

<b>Maximum Hour Demand Factor Calculation</b>	Residential	Commercial	Navy	PWFD	
MD Capacity Factor	2.10	2.28	2.04	2.13	
Estimated Maximum-Hour (MH)/MD Ratio <sup>3</sup>	1.33	1.50	1.33	1.33	
Calculated MH Capacity Factor	2.80	3.42	2.71	2.85	
<b>Max Hour Diversity Factor Calculation</b>	Residential	Commercial	Navy	PWFD	
Class Average Day (mgd)	1.83	1.28	0.54	1.12	
Class MH Demand Factor	2.80	3.42	2.71	2.85	<b>Total MH Demand</b>
Max Hour Demand (Avg. Day X MH Demand Factor)	5.1	4.4	1.5	3.2	<b>14.17</b>
System Average Day (mgd)	5.7				
System Maximum Day (mgd)	9.7				
System Maximum Hour (mgd)	14.2				
	MD Demand		AD Demand		
Noncoincident MH Capacity Factor	14.2	/	5.7	=	2.50
Coincident MH Capacity Factor	14.20	/	5.7	=	2.50
			<b>Max Hour Diversity Factor</b>		<b>1.00</b>

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.

## Rhode Island Public Utilities Commission

Docket 4595

FY 2017 Rate Filing

HJS Schedule D-8 Rebuttal

Comparison of Rates Using Different Treatment Capital Allocations

		Treatment Capital Allocated Based on Reserved Capacity			Treatment Capital Allocated Using Base/Extra Capacity		
		Proposed Rates	% Change	Projected Revenues	Proposed Rates	% Change	Projected Revenues
<b>Base Charge (per bill)</b>							
Monthly							
5/8		\$ 5.45	11%	\$702,985	\$ 5.41	11%	\$697,825
3/4		\$ 5.71	14%	\$171,026	\$ 5.68	13%	\$170,127
1		\$ 7.58	25%	\$51,574	\$ 7.54	24%	\$51,302
1.5		\$ 12.09	38%	\$54,550	\$ 12.02	37%	\$54,234
2		\$ 16.90	49%	\$53,336	\$ 16.81	48%	\$53,052
3		\$ 44.54	77%	\$31,000	\$ 44.28	76%	\$30,819
4		\$ 52.51	82%	\$10,082	\$ 52.20	81%	\$10,022
5		\$ 63.15	87%	\$0	\$ 62.77	86%	\$0
6		\$ 71.12	90%	\$27,310	\$ 70.70	89%	\$27,149
8		\$ 92.39	95%	\$1,109	\$ 91.83	94%	\$1,102
10		\$ 130.94	101%	\$1,571	\$ 130.13	100%	\$1,562
Portsmouth Base Charge (4")		\$ 1.55	-46%	\$19	\$ 1.54	-46%	\$18
				\$1,104,562			\$1,097,213
<b>Volume Charge (per 1,000 gallons)</b>							
Retail							
Residential		\$ 10.22	2%	6,757,689	\$ 9.99	0%	6,605,608
Non-Residential		\$ 10.73	-4%	4,905,810	\$ 10.56	-6%	4,828,085
				11,663,498			11,433,693
Wholesale							
Navy		\$ 7.4504	14%	1,840,830	\$ 7.6335	17%	1,886,070
Portsmouth Water & Fire District		\$ 6.4554	25%	2,793,780	\$ 6.4848	26%	2,806,504
				4,634,610			4,692,574
<b>Fire Protection</b>							
Public (per hydrant)		\$ 989.34	5%	1,027,924	\$ 1,115.86	18%	1,159,379
Private (by Connection Size)							
Connection Size	Existing Charge Differential						
<2		\$ 34.75	34%	-	\$ 36.33	40%	-
2	6.19	\$ 145.53	34%	-	\$ 152.15	40%	-
4	38.32	\$ 489.97	23%	36,258	\$ 532.84	34%	39,430
6	111.31	\$ 1,106.09	16%	259,931	\$ 1,232.07	30%	289,536
8	237.21	\$ 2,168.77	14%	119,282	\$ 2,438.10	28%	134,096
10	426.58	\$ 3,767.27	13%	-	\$ 4,252.23	27%	-
12	689.04	\$ 5,982.72	12%	-	\$ 6,766.54	27%	-
				\$ 415,471			\$ 463,062
<b>Total Projected Rate Revenues</b>		<b>\$ 18,846,066</b>			<b>\$ 18,845,920</b>		



Rhode Island Public Utilities Commission  
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FY 2017 Rate Filing  
HJS Schedule D-8A Rebuttal  
Comparison of Rates Using Portsmouth Proposals

		A			B			C			D		
		Newport Rebuttal Position			Newport Rebuttal Position with Service Asset Values Proposed by Portsmouth			Newport Rebuttal Position with Demand Factors From Docket 4355			Newport Rebuttal Position with Service Asset Values Proposed by Portsmouth and Demand Factors from Docket 4355		
		Proposed Rates	% Change	Projected Revenues	Proposed Rates	% Change	Projected Revenues	Proposed Rates	% Change	Projected Revenues	Proposed Rates	% Change	Projected Revenues
Base Charge (per bill)													
Monthly													
	5/8	\$ 5.41	11%	\$697,825	\$ 6.00	23%	\$773,928	\$ 5.41	11%	\$697,825	\$ 6.00	23%	\$773,928
	3/4	\$ 5.68	13%	\$170,127	\$ 6.26	25%	\$187,500	\$ 5.68	13%	\$170,127	\$ 6.26	25%	\$187,500
	1	\$ 7.54	24%	\$51,302	\$ 8.64	42%	\$58,787	\$ 7.54	24%	\$51,302	\$ 8.64	42%	\$58,787
	1.5	\$ 12.02	37%	\$54,234	\$ 14.82	69%	\$66,868	\$ 12.02	37%	\$54,234	\$ 14.82	69%	\$66,868
	2	\$ 16.81	48%	\$53,052	\$ 20.51	81%	\$64,730	\$ 16.81	48%	\$53,052	\$ 20.51	81%	\$64,730
	3	\$ 44.28	76%	\$30,819	\$ 50.76	101%	\$35,329	\$ 44.28	76%	\$30,819	\$ 50.76	101%	\$35,329
	4	\$ 52.20	81%	\$10,022	\$ 58.59	103%	\$11,249	\$ 52.20	81%	\$10,022	\$ 58.59	103%	\$11,249
	5	\$ 62.77	86%	\$0	\$ 69.03	104%	\$0	\$ 62.77	86%	\$0	\$ 69.03	104%	\$0
	6	\$ 70.70	89%	\$27,149	\$ 76.86	105%	\$29,514	\$ 70.70	89%	\$27,149	\$ 76.86	105%	\$29,514
	8	\$ 91.83	94%	\$1,102	\$ 97.74	107%	\$1,173	\$ 91.83	94%	\$1,102	\$ 97.74	107%	\$1,173
	10	\$ 130.13	100%	\$1,562	\$ 135.58	108%	\$1,627	\$ 130.13	100%	\$1,562	\$ 135.58	108%	\$1,627
Portsmouth Base Charge (4")		\$ 1.54	-46%	\$18	\$ 1.53	-47%	\$18	\$ 1.54	-46%	\$18	\$ 1.53	-47%	\$18
				\$1,097,213			\$1,230,722			\$1,097,213			\$1,230,722
Volume Charge (per 1,000 gallons)													
Retail													
	Residential	\$ 9.99	0%	6,605,608	\$ 9.90	-1%	6,546,098	\$ 9.66	-4%	6,387,405	\$ 9.57	-4%	6,327,895
	Non-Residential	\$ 10.56	-6%	4,828,085	\$ 10.46	-7%	4,782,364	\$ 10.88	-3%	4,974,390	\$ 10.78	-4%	4,928,670
				11,433,693			11,328,462			11,361,795			11,256,564
Wholesale													
	Navy	\$ 7.6335	17%	1,886,070	\$ 7.5653	16%	1,869,219	\$ 7.3463	13%	1,815,109	\$ 7.2813	12%	1,799,049
	Portsmouth Water & Fire District	\$ 6.4848	26%	2,806,504	\$ 6.4279	25%	2,781,878	\$ 6.4915	26%	2,809,403	\$ 6.4345	25%	2,784,735
				4,692,574			4,651,098			4,624,512			4,583,784
Fire Protection													
	Public (per hydrant)	\$ 1,115.86	18%	1,159,379	\$ 1,103.98	17%	1,147,035	\$ 1,214.57	29%	1,261,938	\$ 1,201.59	27%	1,248,452
Private (by Connection Size)													
	Connection Size	Existing Charge Differential											
	<2	\$ 36.33	40%	-	\$ 47.07	81%	-	\$ 37.64	45%	-	\$ 48.37	86%	-
	2	\$ 152.15	40%	-	\$ 197.12	81%	-	\$ 157.64	45%	-	\$ 202.55	86%	-
	4	\$ 532.84	34%	39,430	\$ 610.90	53%	45,207	\$ 566.82	42%	41,945	\$ 644.51	61%	47,694
	6	\$ 1,232.07	30%	289,536	\$ 1,302.60	37%	306,111	\$ 1,330.78	40%	312,733	\$ 1,400.21	47%	329,049
	8	\$ 2,438.10	28%	134,096	\$ 2,495.62	31%	137,259	\$ 2,648.46	39%	145,665	\$ 2,703.63	42%	148,700
	10	\$ 4,252.23	27%	-	\$ 4,290.18	29%	-	\$ 4,630.52	39%	-	\$ 4,664.25	40%	-
	12	\$ 6,766.54	27%	-	\$ 6,777.37	27%	-	\$ 7,377.58	39%	-	\$ 7,381.60	39%	-
				\$ 463,062			\$ 488,577			\$ 500,343			\$ 525,443
Total Projected Rate Revenues		\$ 18,845,920			\$ 18,845,894			\$ 18,845,802			\$ 18,844,965		

Newport Water Division  
 Budget for Rate Filing  
 FY 2017  
 HJS Schedule D-9 Rebuttal  
 Expense Detail - Administration  
 15-500-2200

Account	Description	comments	Docket 4243	Actual FY 2015 Test Year	Change from Test year to Proposed	BudgetFY 2016	Proposed FY 2017 Rate Year
50001	Salaries & Wages						\$ 3
	Director of Utilities - 60%	S12-H					
	Aministrative Secretary - 60%	NO1-12					
	Deputy Director - Finance - 60%	S10-I					
	Deputy Director - Finance - 60%	S10-E					
	Deputy Director - Engineering - 60%	S10-G					
	Financial Analyst	NO2-17					
	Total		\$ 273,889	\$ 262,222	\$ 19,360	\$ 271,971	\$ 281,582
50044	Standby Salaries						
	3 employees per week at \$100 per week subject to Union negotiation	3 employees 8 hours per wk 52 wks	\$ 18,720	\$ 12,500	\$ 12,528	\$ 6,192	\$ 12,500
50520	Accrued Benefits Buyout						
	vacation payout & sick time payout avg 3 per year for employees with 10 yrs of service Vac / sick / FICA		\$ 112,000	\$ 175,000	\$ 15,500	\$ 43,500	\$ 175,000
50100	Employee Benefits						
	Director of Utilities - 60%						
	Aministrative Secretary - 60%						
	Deputy Director - Finance - 60%						
	Deputy Director - Engineering - 60%						
	Financial Analyst						
	Benefits on standby salaries, buyouts and annual leave buyback						
	Total		\$ 122,883	\$ 128,202	\$ 110,408	\$ 8,649	\$ 114,859
50103	Retiree Insurance Coverage	see workpaper	\$ 514,000	\$ 351,563	\$ 18,437	\$ 457,380	\$ 370,000
50105	Workers Compensation						
	avg change over 2013 - 2015 = 3.8%		\$ 64,000	\$ 85,000	\$ 59,456	\$ 4,544	\$ 89,250
50175	Annual Leave Buyback	1 employee	\$ 3,260	\$ 2,400	\$ 3,260	\$ 40	\$ 3,260
50207	Advertisement		\$ 9,000	\$ 9,000	\$ 4,041	\$ 4,959	\$ 9,000

Newport Water Division  
 Budget for Rate Filing  
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50210 Membership Dues & Subscriptions									
Utilities Director	\$	408							
Laboratory Supervisor	\$	266							
Supervisor treatment plants	\$	266							
Distribution Supervisor	\$	266							
Deputy Director - Finance	\$	418							
Deputy Director - Engineering	\$	344							
Water Meter Foreman	\$	266							
Financial Analyst	\$	266							
Other	\$	-							
Total	\$	2,500	\$	2,500	\$	4,447	\$	(1,947)	\$ 2,500
50212 Conferences & Training									
	\$	4,000	\$	4,000	\$	868	\$	3,132	\$ 4,000
50214 Tuition Reimbursement									
	\$	2,000	\$	2,000	\$	-	\$	2,000	\$ 2,000
50216 Water Management Study									
50220 Consultant Fees									
Legal Fees	K& S	2015 \$9,435	\$	125,000					
Financial Consultant	Raftelis	\$11,070	\$	75,000					
Bank Trustee Fees		\$9,000	\$	10,000					
Wimborne property tax advisor		\$1,160							
other Committed in 2015		\$179,745	\$	40,000					
Total		\$210,410	\$	250,000	\$	233,033	\$	210,410	\$ 39,590
									200,000
									Rebuttal Adjustment \$ (45,000)
									Rebuttal Amount \$ 205,000
50238 Postage									
	\$	1,000	\$	1,000	\$	360	\$	640	\$ 1,000
50239 Fire & Liability Insurance									
2% increase per year	see workpaper		\$	67,000	\$	76,468	\$	16,853	\$ 50,147
									77,000
50251 Telephone & Communication									
	see workpaper Serv		\$	5,685					
	see workpaper equip		\$	330					
			\$	6,015	\$	5,500	\$	5,569	\$ 446
									5,500
									Rebuttal Adjustment \$ (415)
									Rebuttal Amount \$ 5,600
50305 Water									
Gallons		46,363							
water rate		\$ 11.2200							
Fixed Charge		\$ 1,495							
total		\$ 2,015.19	\$	1,942.00	\$	1,275	\$	740	\$ 1,942
									2,015

Newport Water Division  
 Budget for Rate Filing  
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50306 Electricity									
70 Halsey St.	2 yr avg								
Kwh Annual usage		35,246							
total cost		\$ 7,956	\$ 5,805	\$ 10,121	\$ (2,165)	\$ 5,805	\$ 7,956		
50307 Natural Gas	4 yr avg								
	therms	4,400							
Total Cost		\$ 5,226	\$ 7,252	\$ 5,918	\$ (692)	\$ 7,252	\$ 5,226		
50308 Property Taxes									
Portsmouth		\$ 482,851							
Tiverton		\$ 42,133							
Little Compton		\$ 54,146							
Middletown		\$ 13,287							
Total		\$ 592,417	\$ 226,774	\$ 464,200	\$ 104,843	\$ 411,200	\$ 569,043		
50266 Legal & Administrative		\$ 309,657	\$ 309,657	\$ 309,699	\$ 59,829	\$ 309,669	\$ 369,528		
50267 Data Processing (MIS)		\$ 143,888	\$ 143,888	\$ 143,888	\$ 28,336	\$ 143,888	\$ 172,224		
50268 Mileage Allowance		\$ 2,000	\$ 2,000	\$ 875	\$ 1,125	\$ 2,000	\$ 2,000		
50271 Gasoline & Vehicle Allowance									
See workpaper	1 vehicle								
	\$ 5,389								
Total		\$ 5,389	\$ 7,508	\$ 9,354	\$ (3,965)	\$ 8,276	\$ 5,389		
50275 Repairs & Maintenance									
Halsey St smoke Detector Service		\$ 450							
Other		\$ 400							
Heater Maintenance		\$ 350							
total		\$ 1,200	\$ 1,200	\$ 1,200		\$ 1,200	\$ 1,200		
50280 Regulatory Expense (now electronic COR notices to customers)		\$ 5,000	\$ 10,000	\$ 590	\$ 4,410	\$ 10,000	\$ 5,000		
50281 Regulatory Assessment									
RIWWA - Assessment		\$ 1,000							
RI Div of PUC - Assessment		\$ 57,000							
RI Dept of Health - License		\$ 22,000							
misc									
Total		\$ 80,000	\$ 48,096	\$ 79,698	\$ 302	\$ 63,000	\$ 80,000		

Newport Water Division  
 Budget for Rate Filing  
 FY 2017  
 HJS Schedule D-9 Rebuttal  
 Expense Detail - Administration  
 15-500-2200

50361 Office Supplies									
2013	\$11,371								
2014	\$13,525	\$	15,000	\$	20,000	\$	14,469	\$	531
2015	\$14,469							\$	20,000
								\$	15,000
50505 Self Insurance									
		\$	10,000	\$	10,000	\$	118	\$	9,882
								\$	10,000
									Rebuttal Adjustment
								\$	(5,000)
									Rebuttal Amount
								\$	5,000
50515 Unemployment Claims									
		\$	-	\$	12,000	\$	-	\$	-
								\$	-
50464 Water Revenue reserve									
"not included in budget"		\$	254,733			\$			-
<b>Total</b>									
			\$		2,330,614	\$	2,097,690	\$	404,066
								\$	2,418,252
								\$	2,451,341

Newport Water Division  
 Budget for Rate Filing  
 FY 2016  
 HJS Schedule D-10 Rebuttal  
 Expense Detail - Customer Service  
 15-500-2209

Account	Description	Comments detail for 2017		Docket 4243	Actual FY 2015 Test Year	Change from Test year to Proposed	Budget FY 2016	Proposed FY 2017 Rate Year
50001	Salaries & Wages	Water Meter Repair	UT2A					
		Water Meter Repair	UT2C					
		Principal Account Clerk	UC2X					
		Principal Account Clerk	add					
		Water Meter Repair	UT2X					
		Maintenance Mechanic	UT3F					
		Sr. Maintenance Mechanic	UT2A					
		Water Meter Foreman	UT6D					
		Total		\$256,335	\$263,080	\$46,230	\$285,241	\$309,310
50002	Overtime	low OT in 2015	hours 150					
		suspend shutoffs	rate \$33.50					
		includes 7.65% ->	total \$5,409	\$10,200	\$116	\$5,293	\$6,000	\$5,409
50004	Temp Salaries	PT cleerk 52 wks @12 X 24 hrs.		\$14,976	\$10,200	\$18,831	(\$3,855)	\$19,743
50056	Injury Pay			\$0	\$0	\$0		\$0
50100	Employee Benefits	Water Meter Repair	UT2A					
		Water Meter Repair	UT2C					
		Principal Account Clerk	UC2X					
		Principal Account Clerk						
		Water Meter Repair	UT2X					
		Maintenance Mechanic	UT3F					
		Sr. Maintenance Mechanic	UT2A					
		Water Meter Foreman	UT6D					
		Benefits for OT, Injury & Annual leave Buyback						
		Total		\$168,793	\$149,435	\$41,370	\$178,152	\$190,805
50120	Bank Fees (lock box)	\$1400 per month	\$ 16,800	\$0	\$13,711	\$3,089	\$30,000	\$16,800
50175	Annual Leave Buyback		2 employees	\$5,000	\$4,531	(\$31)	\$5,000	\$4,500
50205	Copying & binding			\$500	\$511	(\$11)	\$500	\$500

Newport Water Division  
 Budget for Rate Filing  
 FY 2016  
 HJS Schedule D-10 Rebuttal  
 Expense Detail - Customer Service  
 15-500-2209

50212 Conferences & Training						
Backflow Prevention Device Inspectors / Tester						
Recertification Training	\$700					
Cross Connection Control Surveyor						
Trainign & Certification	\$1,150					
Fundamentals of Cross Conection Control	\$850					
American Backflow Prevention Association	\$300					
Misc Training Courses	\$2,000					
Total	\$5,000	\$5,000	-\$263	\$5,263	\$5,000	\$5,000
50225 Support Services						
Printing & mailing (TouchPoint Communications)	\$16,975					
Opal Maintenance Contract	\$5,700					
Badger/orion service contract	\$3,500					
total	\$26,175	\$26,002	\$32,784	(\$6,609)	\$26,000	\$26,175
50238 Postage						
Mailing Service	\$74,400					
USPS	\$280					
total	\$74,680	\$31,706	\$57,265	\$17,415	\$69,530	\$74,680
50271 Gasoline & Vehicle Allowance	\$5,389					
# vehicles	5					
	\$26,945	\$33,421	\$39,667	(\$12,722)	\$33,421	\$26,945
50275 Repairs & Maintenance						
Small Meters	\$10,000					
Large Meters	\$15,000					
Meter Pits	\$3,500					
Strainers	\$2,000					
Misc Parts and/or repair	\$2,700					
meter gun repair						
Trimble Handheld Repair and / or Replacement	\$3,850					
CE /ME Receiver Reapair and / or Replacement	\$2,950					
Total	\$40,000	\$40,000	\$33,449	\$1,551	\$30,000	\$35,000

Newport Water Division  
 Budget for Rate Filing  
 FY 2016  
 HJS Schedule D-10 Rebuttal  
 Expense Detail - Customer Service  
 15-500-2209

50299 Meter Maintenance							
Appurtenant piping, tail pieces, ss fasteners	\$3,500						
Annual Calibration of Navy meters	\$2,500						
reducing flanges							
Annual Calibration of Portable Meter Tester	\$750						
Certification of Backflow Testing Equipment	\$250						
Reducing Flanges	\$2,000						
Misc. Apts	\$1,000						
Total	\$10,000	\$10,000	\$7,734	\$2,266	\$10,000	\$10,000	
50311 Operating Supplies							
Repair External meter devices	\$2,500						
new tool & misc costs	\$2,500						
gas detectors							
confined space entry equipment							
Machine & Tool Lubricant, Replace Blades,							
Drill Bits, etc							
Tools (crimping, cutting, drilling, etc.)							
Service and Pit Keys							
Total	\$5,000	\$5,000	\$3,658	\$1,342	\$5,000	\$5,000	
50320 Uniforms & protective Gear							
Safety Vests	\$150						
Hi Viz Jackets	\$300						
Gloves, Safety Glasses, Respirator, etc.	\$550						
	\$1,000	\$1,000	\$957	\$43	\$1,000	\$1,000	
50380 Customer Service Supplies							
Conservation material	\$ 5,000	\$10,343	\$166	\$4,834	\$5,000	\$5,000	



Newport Water Division  
 Budget for Rate Filing  
 FY 2016  
 HJS Schedule D-11 Rebuttal  
 Expense Detail - Source of Supply - Island  
 15-500-2212

Account	Description		Docket 4243	Actual FY 2015 Test Year	Change from Test year to Proposed	Budget 2015	Budget FY 2016	Proposed FY 2017 Rate Year
50001	Salaries & Wages							
	Supervisor Water Dist/Coll 50%	N5G						
position tr	Position from (Distribution/Collection Foreman	UT5D						
	Distribution/Collection Mechanic	UT4						
	Distribution/Collection Operator	UT3D						
	Distribution/Collection Operator	UT3C						
	Distribution/Collection Operator	UT3B						
	Laborer	UT2A						
	adjustment for vacancies							
	Total		\$ 258,897	\$ 321,324	\$ (11,374)	#####	\$ 298,525	\$ 309,950
50002	Overtime							
	hours	1,000						
	rate	\$ 33.00						
	total	\$ 33,000	\$ 28,903	\$ 36,123	\$ (3,123)	\$ 28,903	\$ 28,903	\$ 33,000
50004	Temp Salaries 2 people 19 weeks @\$16/hour plus 7.65%							
		\$ 26,180	\$ 10,000	\$ -	\$ 26,180	\$ 10,000	\$ 13,425	\$ 26,180
50056	Injury Pay		\$ -	\$ -				\$ -
50100	Employee Benefits							
	Supervisor Water Dist/Coll 50%							
	Distribution/Collection Foreman							
	Distribution/Collection Mechanic							
	Distribution/Collection Operator							
	Distribution/Collection Operator							
	Distribution/Collection Operator							
	Laborer							
	Benefits for OT, Temp & Annual leave Buyback							
	Adjustment for vacancies							
	Total		\$ 134,334	\$ 185,081	\$ (9,431)	#####	\$ 164,187	\$ 175,650

Newport Water Division  
 Budget for Rate Filing  
 FY 2016  
 HJS Schedule D-11 Rebuttal  
 Expense Detail - Source of Supply - Island  
 15-500-2212

50175 Annual Leave Buyback	4 employees	\$	6,300	\$	3,783	\$	17	\$	6,300	\$	6,300	\$	3,800	
50306 Contribution to Electricity Restricted Account														
St Mary's & Paradise Pumping Stations	2yr Avg													
Annual KWH Usage	350,295													
total cost	\$	49,880	\$	42,109	\$	38,527	\$	11,353	\$	42,108	\$	42,108	\$	49,880
50271 Gas/Vehicle Maintenance														
		\$	5,389											
	vehicles		11											
total	\$	59,279	\$	58,648	\$	63,620	\$	(4,341)	\$	64,648	\$	64,648	\$	59,279
50275 Repairs & Maintenance														
Misc Pump & minor repairs														
Aluminum boat & boat engine supplies														
Trimmers, blowers, chain saw, supplies, repairs & replace														
Aeration system misc supplies R & R														
Pump Station service agreement														
total	\$	10,000	\$	7,425	\$	11,633	\$	(1,633)	\$	4,717	\$	5,000	\$	10,000
50277 Reservoir Maintenance														
Tree Removal														
Dam repairs (gravel, riprap, gabions, etc.)														
sign installation & Maintenance														
dam inspections														
Fence, gates, doors lock, windows repair & maintenance														
total	\$	16,000	\$	16,000	\$	16,236	\$	(236)	\$	16,000	\$	15,000	\$	16,000

Newport Water Division  
 Budget for Rate Filing  
 FY 2016  
 HJS Schedule D-11 Rebuttal  
 Expense Detail - Source of Supply - Island  
 15-500-2212

## 50311 Operating Supplies

machine & tool lubricant  
 grease guns  
 Brush cutter/mower  
 parts for trackless  
 small mower replacement  
 coppering bags  
 other  
 replacement blades/brush cutting  
 Total

\$ 7,750 \$ 2,802 \$ 4,698 \$ 7,750 \$ 7,250 **\$ 7,500**

## 50320 Uniforms &amp; protective Gear

Eye,ear & hand protection  
 Tyvek protective suits  
 N95 respirator

\$ 1,510 \$ 700 \$ 935 \$ 575 \$ 700 \$ 1,200 **\$ 1,510**

## 50335 Chemicals

(CuSO4)  
 usage in lbs  
 cost/lb (in fy 20160)  
 total copper sulfate  
 total cost

40,000  
 \$ 1.6700  
 \$ 66,800  
 \$ 66,800 \$ 72,735 \$ 72,671 \$ (5,871) \$ 72,735 \$ 70,980 **\$ 66,800**

**total**

**\$ 643,800 \$ 752,735 \$ 6,814 ##### \$ 717,526 \$ 759,549**

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Newport Water Division  
 Budget for Rate Filing  
 FY 2016  
 HJS Schedule D-13 Rebuttal  
 Expense Detail - Station One  
 15-500-2222

Account	Description	Comments	Docket 4243	Actual FY 2015 Test Year	Change from Test year to Proposed	Budget 2015	Budget FY 2016	Proposed FY 2017 Rate Year
50001	Salaries & Wages							
		Water Quality Production Supv (50% SO8D						
		Assistant WQP Supervisor (50%) SO6D						
		Water Plant Foreman Operator(50%)						
	Acting Foreman	Water Plant Operator - Grade 3 UT4F						
		Water Plant Operator - Grade 3 UT4F						
		Water Plant Operator - Grade 3 UT4B						
		Water Plant Operator - Grade 3 UT4F						
		Water Plant Operator - Grade 3 UT4C						
		Water Plant Operator - Grade 3 UT4D						
		Water Plant Operator - Grade 3 UT3B						
		Water Plant Operator - Grade 2 UT2A						
		Water Plant Operator - Grade 1 UT2						
	AFCSMEContract adj to Shift Diff to \$.70 from \$.36	\$3,536						
	Total		\$ 451,191	\$ 519,694	\$ 31,887	\$ 519,056	\$ 491,984	\$ 551,581
					Rebuttal Adjustment for Vacancies			\$ (40,506)
					Rebuttal Amount			\$ 511,075
50002	Overtime							
		average hourly rate =\$22.75 ot rate =\$34.125						
	2012 - \$101k	hours		2,500				
	2013 - \$42k	rate( w FICA)		41.18				
	2014 - \$72k	total	\$ 102,940	\$ 60,021	\$ 110,009	\$ (7,069)	\$ 60,021	\$ 102,940
	2015 - \$ 110k							
50003	Holiday Pay							
		Operators		9.0				
		Holidays		12				
		Hours/Holiday		8				
		Average Pay Rate	\$ 25.50					
		Total	\$ 22,032	\$ 17,045	\$ 18,936	\$ 3,096	\$ 18,935	\$ 17,045
50045	Lead Plant Operator Stipend							
		3 staff \$80 per week 52 weeks	\$ 12,480	\$ 6,627	\$ 5,853	\$ 36,492	\$ 12,480	\$ 12,480

Newport Water Division  
 Budget for Rate Filing  
 FY 2016  
 HJS Schedule D-13 Rebuttal  
 Expense Detail - Station One  
 15-500-2222

## 50100 Employee Benefits

Water Quality Production Supv (50% SO8D  
 Assistant WQP Supervisor (50%) SO6D  
 Water Plant Foreman Operator(50%)  
 Water Plant Operator - Grade 3 UT4F  
 Water Plant Operator - Grade 3 UT4F  
 Water Plant Operator - Grade 3 UT4B  
 Water Plant Operator - Grade 3 UT4F  
 Water Plant Operator - Grade 3 UT4C  
 Water Plant Operator - Grade 3 UT4D  
 Water Plant Operator - Grade 2 UT3B  
 Water Plant Operator - Grade 1 UT2A  
 Benefits for OT, Annual leave Buyback, Holidays

Total	\$	280,498	\$	296,163	\$	(12,650)	\$	283,712	\$	266,079	\$	283,513
												\$ (18,597)
												\$ 264,916

50175 Annual Leave Buyback	3 employees	\$	5,000	\$	11,785	\$	215	\$	5,000	\$	5,000	\$	12,000
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## 50212 Conferences &amp; Training

RIDOH Required Certifications for 10 employees	\$	2,200
Supv/Plant Prod - RIWWA	\$	150
Supv/Plant Prod - NEWWA	\$	550
Conferences & Training	\$	600
Training, travel	\$	1,000

total	\$	4,500	\$	4,500	\$	1,049	\$	3,451	\$	4,500	\$	4,500	\$	4,500
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## 50239 Fire &amp; Liability Insurance

RI Interlocal see workpaper	\$	35,000	\$	12,687	\$	60,531	\$	(25,531)	\$	12,687	\$	40,000	\$	35,000
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50306 Contribution to Electricity Restricted Account  
100 Bliss Mine Rd

2 yr average		
Annual KWH Usage	1,736,107	
total cost	\$	232,928
	\$	266,329
	\$	207,037
	\$	5,447
	\$	252,674
	\$	252,674
	\$	212,484

## 50307 Natural Gas

4 yr average		
Total Cost	\$	33,690
		24250
	\$	43,410
	\$	-
	\$	24,250
	\$	24,250
	\$	43,410

## 50260 Rental of Equipment

Dumpster Rentals	\$	850
chemical cylinders	\$	150
total	\$	1,000
		600
	\$	922
	\$	78
	\$	600
	\$	715
	\$	1,000

50305 Sewer Charge

Gallons

[illegible][illegible]

Variable frequency Drives	\$	3,000
Gas Boilers & Hot water Heater	\$	5,600
Backup Gnerators-annual service	\$	1,500
transfer switches	\$	600
SCADA Maintenance & repair	\$	10,628
Analyzeer service	\$	9,625
Building Systems & AC service contact	\$	18,036
DAF Compressors	\$	4,100
Fire Panel Maintenance	\$	480
Reservoir Rd Storage Inspection	\$	4,060
MCC Breaker Panel Inspection	\$	2,067
Rebuild/Repack Raw water Pumppps 1 & 2	\$	6,336
DAF Pump Repair	\$	575
Fire Extinguisher Service	\$	180

**Table 1** Demographic characteristics of study population

Newport Water Division  
 Budget for Rate Filing  
 FY 2016  
 HJS Schedule D-13 Rebuttal  
 Expense Detail - Station One  
 15-500-2222  
 50311 Operating Supplies

Valves	\$	4,350
Piping	\$	500
Tools	\$	500
Mechanical Seals & Packing	\$	500
Analytical Analyzer Reagents	\$	2,728
Analyzer probe Salt bridges, Cell Solution, Grit Filters	\$	669
Fluoride Feeder Filter Pack	\$	364
Roll towels, bathroom tissue	\$	211
\$ 17,161	\$	475
Chemical Transfer Pumps	\$	2,050
GLO2 Generator Maintenance Kit & Filters	\$	924
HVAC Filters	\$	196
Generator Fuel	\$	2,814
Misc.	\$	880

Total	\$	17,161	\$	27,800	\$	18,895	\$	(1,734)	\$	25,210	\$	24,157	\$	17,161
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50336 Pumping Cost			\$	-	\$	-	\$	22,428
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50320 Uniforms & protective Gear

Overboots	\$	320
Rain Gear	\$	224
Misc. Gloves, Eye pprotection	\$	361
Coveralls	\$	306
Respirator Work Lights	\$	99
Work Lights	\$	116

	\$	1,426	\$	1,062	\$	1,027	\$	399	\$	1,062	\$	2,000	\$	1,426
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Newport Water Division  
Budget for Rate Filing  
FY 2016  
HJS Schedule D-13 Rebuttal  
Expense Detail - Station One  
15-500-2222  
50335 Chemicals

PACI Quantity		73,000																		
Unit Cost Per Gal	\$	1.4500																		
PACI Total Cost	\$	105,850																		
Hypochlorite Wquantity		28,000																		
Unit Cost	\$	0.6435																		
Chlorine Total Cost	\$	18,018																		
Flouride quantity		6,000																		
Unit cost	\$	0.5000																		
Flouride Total Cost	\$	3,000																		
Sodium chlorite quantity		109,500																		
Unit Cost	\$	0.5890																		
Sodium chlorite total Cost	\$	64,496																		
32% HCl Quantity		8,700																		
Unit Cost Per Gal	\$	1.1823																		
Sodium chlorite total Cost	\$	10,286																		
Polymer Quantity		440																		
Unit Cost	\$	11.2727																		
Polymer Total Cost	\$	4,960																		
Sodium Hydroxide quantity		37,500																		
Unit Cost	\$	0.6536																		
Sodium Hydroxide total cost	\$	24,510																		
GAC Filters (816) Quantity		1,640																		
Unit Cost Per CF	\$	29.8800																		
GAC Total Cost	\$	49,003																		
GAC AWT (400) Quantity		40,596																		
Unit Cost Per Vessel	\$	2.0000																		
GAC Total Cost	\$	81,192																		
HCl Scrubber Media (Chlorosorb)																				
HCl Scrubber Media Total Cost	\$	5,000																		
total	\$	366,315	\$	354,210	\$	350,158	\$	16,157	\$	447,189	\$	509,742	\$	366,315						

total	\$ 1,830,796	\$1,774,284	\$ 163,174	\$2,030,196	\$1,909,007	\$1,878,355
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Newport Water Division  
 Budget for Rate Filing  
 FY 2016  
 HJS Schedule D-14 Rebuttal  
 Expense Detail - Lawton Valley  
 15-500-2223

Account	Description	Comments	Docket 4243	Actual FY 2015 Test Year	Change from Test year to Proposed	Budget 2015	Budget FY 2016	Proposed FY 2017 Rate Year
50001	Salaries & Wages							
		Water Quality Production Supv (50% SO8D						
		Assistant WQP Supervisor (50% SO6D						
		Water Plant Foreman Operator(50%)						
	Acting Foreman	Water Plant Operator - 3 UT4G						
		Water Plant Operator - 3 UT4F						
		Water Plant Operator - 3 UT4F						
		Water Plant Operator - 3 UT4D						
		Water Plant Operator - 3 UT4C						
		Water Plant Operator - 3 UT2D						
		Water Plant Operator - 3 UT2A						
		Water Plant Operator - 3 UT2A						
	AFCSMEContract adj to Shift Diff to \$.70 from \$.36 \$4,243							
	Total		\$ 461,718	\$ 449,625	\$ 48,916	\$ 444,886	\$ 538,135	\$ 498,541
50002	Overtime							
	2012 - \$82k	2,500 hours						
	2013 \$75k	\$ 39.56 rate w FICA						
	2014 - 84k	\$ 98,903 total	\$ 37,657	\$ 98,692	\$ 211	\$ 37,657	\$ 37,657	\$ 98,903
	2015 - \$99k							
50003	Holiday Pay							
	Operators	9						
	Holidays	12						
	Hours/Holiday	8						
	Average Pay Rate	\$51k per year	\$ 24.50					\$ -
	Total		\$ 19,992	\$ 16,760	\$ 15,904	\$ 4,088	\$ 16,760	\$ 19,992
50045	Lead Plant Operator Stipend							
	3 staff \$80 per week 52 weeks	\$ 12,480		\$ 7,830	\$ 4,650	\$ 10,000	\$ 12,480	\$ 12,480

Newport Water Division  
 Budget for Rate Filing  
 FY 2016  
 HJS Schedule D-14 Rebuttal  
 Expense Detail - Lawton Valley  
 15-500-2223

## 50100 Employee Benefits

Water Quality Production Supv (50%SO8D  
 Assistant WQP Supervisor (50%SO6D  
 Water Plant Foreman Operator(50%)  
 Water Plant Operator - 3 UT4G  
 Water Plant Operator - 3 UT4F  
 Water Plant Operator - 3 UT4F  
 Water Plant Operator - 3 UT4D  
 Water Plant Operator - 3 UT4C  
 Water Plant Operator - 3 UT2D  
 Water Plant Operator - 3 UT2A  
 Water Plant Operator - 3 UT2A  
 Benefits for OT, Holidays, & Annual leave)

Total	\$	288,210	\$	273,138	\$	4,864	\$	253,693	\$	322,872	\$	278,002
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50175 Annual Leave Buyback	3 empl	\$	7,500	\$	3,966	\$	7,368	\$	32	\$	3,966	\$	3,966	\$	7,400
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## 50212 Conferences &amp; Training

RIDOH Required Certifications for 9 employees	\$	1,980
Supv/Plant Prod - RIWWA	\$	150
Supv/Plant Prod - NEWWA	\$	550
Conferences & Training	\$	540
Training, travel	\$	900

total	\$	4,120	3000	\$	850	\$	3,270	\$	3,000	\$	3,000	\$	4,120
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## 50239 Fire &amp; Liability Insurance

RI Interlocal	\$	54,000	\$	18,614	\$	93,577	\$	(39,577)	\$	18,614	\$	62,000	\$	54,000
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## 50306 Contribution to Electricity Restricted Account

Lawton Valley Treatment plant & pumping station	1 yr average													
Annual KWH Usage	1,260,960													
total cost	\$	271,075	\$	158,340	\$	310,343	\$	64,748	\$	132,551	\$	132,551	\$	375,091

## 50307 Natural Gas

Total Cost	4 yr average	\$	20,808	\$	29,909	\$	34,663	\$	-	\$	29,909	\$	29,909	\$	34,663
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Newport Water Division  
Budget for Rate Filing  
FY 2016  
HJS Schedule D-14 Rebuttal  
Expense Detail - Lawton Valley  
15-500-2223

## 50260 Rental of Equipment

Dumpster Rentals	\$	850
chemical cylinders	\$	150
total	\$	1,000 \$ 500 \$ 722 \$ 278 \$ 500 \$ 715 \$ 1,000

## 50305 Sewer Charge

[illegible]

## 50271 Gas/Vehicle Maintenance

[illegible]

## 50275 Repairs &amp; Maintenance

[illegible]

Newport Water Division  
Budget for Rate Filing  
FY 2016  
HJS Schedule D-14 Rebuttal  
Expense Detail - Lawton Valley  
15-500-2223  
50311 Operating Supplies

Valves	\$	500
Piping	\$	500
Tools	\$	500
Mechanical Seals & Packing	\$	500
Analytical Analyzer Reagents	\$	2,728
Analyzer probe Salt bridges, Cell Solution, Grit Filters	\$	669
Fluoride Feeder Filter Pack	\$	364
Roll towels, bathroom tissue	\$	211
Cleaning Supplies	\$	475
Chemical Transfer Pumps	\$	2,050
GLO2 Generator Maintenance Kit & Filters	\$	924
HVAC Filters	\$	196
Generator Fuel	\$	2,814
Misc.	\$	880
Total	\$	13,311

[illegible]

50336	Pumping Cost	\$	-	\$ 31,646
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Newport Water Division  
Budget for Rate Filing  
FY 2016  
HJS Schedule D-14 Rebuttal  
Expense Detail - Lawton Valley  
15-500-2223  
50335 Chemicals

[illegible]

Newport Water Division  
 Budget for Rate Filing  
 FY 2016  
 HJS Schedule D-15 Rebuttal  
 Expense Detail - Laboratory  
 15-500-2235

Account	Description	Docket 4243	Actual FY 2015 Test Year	Change from Test year to Proposed	Bud get 2015	Budget FY 2016	Proposed FY 2017 Rate Year
50001	Salaries & Wages						
	Laboratory Supervisor Microbiologist	G2 Step 3					
	Total	\$ 104,358	\$ 114,425	\$ 6,754	###	\$ 116,878	\$ 121,179
50100	Employee Benefits						
	Laboratory Supervisor Microbiologist						
	Benefits on Annual leave buyback						
	Total	\$ 64,208	\$ 54,984	\$ 3,724	###	\$ 58,993	\$ 58,708
50175	Annual Leave Buyback	1 employee	\$ 2,750	\$ 1,560	\$ (60)	###	\$ 1,000
50275	Repairs & Maintenance						
	Cleaning, Recalculation & Certification of balances, fume hood, thermometers, etc.	\$ 1,200					
	Misc repairs to Equipment	\$ 500					
	Total	\$ 1,700	\$ 256	\$ 1,444	###	\$ 1,700	\$ 1,700
50281	Regulatory Assessment						
	IDEXX/BACTERIA	\$ 5,400					
	ESS LAB TTHM / HASS	\$ 4,160					
	RIAL TOC	\$ 8,640					
	RIAL LEAD / COPPER	\$ 700					
	RIAL COPPER	\$ 435					
	RIAL SODIUM	\$ 280					
	ERA QC PT	\$ 1,507					
	LAB LICENSE	\$ 440					
	RIDOH	\$ 12,262					
	EUROFINS (Chlorites)	\$ 1,800					
	Northeast	\$ 4,200					
	EUROFINS (Cryptosporidium)	\$ 7,200					
	Total	\$ 47,024	\$ 32,000	\$ 47,696	\$ (672)	###	\$ 32,000
50339	Laboratory Supplies						
	Buffers, reagents, Standards, gases & misc	\$ 9,242					
	Kimwipes, Gloves, Pipets, Glassware, Thermometers	\$ 2,800					
	Hach Turbidimeters	\$ 2,200					
	Hach Reagents	\$ 12,464					
	UV 254 Meter	\$ 2,510					
	Beau Hopkins Capital Controls Titrator	\$ 4,836					
	Swift Microscope, Counting Chamber and slides	\$ 1,575					
	total	\$ 35,627	\$ 18,684	\$ 16,924	\$ 18,703	###	\$ 18,684
	total	\$ 223,700	\$ 235,845	\$ 29,893	###	\$ 229,255	\$ 265,738

Newport Water Division  
Budget for Rate Filing  
FY 2016  
HJS Schedule D-16 Rebuttal  
Expense Detail - Distribution  
15-500-2241

Account	Description	Comments		2017	Docket 4243	Actual FY 2015 Test Year	Change from Test year to Proposed	Budget 2015	Budget FY 2016	Proposed FY 2017 Rate Year	
50001	Salaries & Wages										
		Supervisor Water Dist/Coll 50%									
		Distribution/Collection Foreman									
		Distribution/Collection Mechanic									
		Distribution/Collection Mechanic	vacant								
		Heavy Equipment Operator									
		Distribution/Collection Operator									
		Distribution/Collection Operator									
		Distribution/Collection Operator									
		Parts/Inventory Contol Tech									
		Engineering Technician									
		Engineering Technician									
		Total		\$	418,161	\$	437,907	\$	114,926	\$ 379,181 \$ 493,592	\$ 552,833
										Rebuttal Adjustment for Vacancies	\$ (37,614)
										Rebuttal Amount	\$ 515,219
50002	Overtime										
	hours			1,520							1,520
	rate	\$		34.45							\$ 34.45
	total	\$		52,364	\$	52,364	\$	48,703	\$	3,661 \$ 52,364 \$ 50,000	\$ 52,364
50004	Temp Salaries	2 staff 19 weeks \$16/hr 40 hrs wk w/Fica	\$	26,180	\$	10,000	\$	18,106	\$	8,074 \$ 10,000 \$ 10,000	\$ 26,180
50056	Injury Pay				\$	-					\$ -
50100	Employee Benefits										
		Supervisor Water Dist/Coll 50%									
		Distribution/Collection Mechanic	UT4E								
		Heavy Equipment Operator	UT4C								
		Distribution/Collection Mechanic	UT4D								
		Distribution/Collection Foreman	UT5E								
		Parts/InventORY Contol Tech	UC2E								
		Distribution/Collection Operator	UT3C								
		Engineering Technician	UT5G								
		Distribution/Collection Operator	UT3C								
		Distribution/Collection Operator	UT3B								
		Benefits for OT, Injury & Annual leave Buyback & AFSCME retro									
		Total		\$	251,514	\$	259,991	\$	70,083	\$ 252,931 \$ 281,556	\$ 330,074
											Rebuttal Adjustment for Vacancies \$ (17,768)
											Rebuttal Amount \$ 312,306



Newport Water Division  
 Budget for Rate Filing  
 FY 2016  
 HJS Schedule D-16 Rebuttal  
 Expense Detail - Distribution  
 15-500-2241

50175 Annual Leave Buyback			\$	10,943	\$	7,484	\$	16	\$	10,943	\$	10,704	\$	7,500
6 employees														
50212 Conferences & Training														
Continuing Education Units	\$	3,200												
Supervisor Water Dist/ Collect	\$	670												
Travel	\$	130												
Total	\$	4,000	\$	4,000	\$	1,776	\$	2,224	\$	4,000	\$	4,000	\$	4,000
50225 Contract Services														
Welding Services (Swabbing) as required	\$	11,000												
WeatherData Network	\$	120												
Infowater	\$	3,750												
Dig safe Contract (609.15*12)	\$	6,655												
total	\$	21,525	\$	12,430	\$	10,524	\$	11,001	\$	12,430	\$	12,430	\$	21,525
50239 Fire & Liability Insurance														
See workpaper	\$	12,000	\$	18,748	\$	20,061	\$	(8,061)	\$	18,748	\$	13,300	\$	12,000
Contribution to Electricity Restricted Account														
50306 Forest Ave, Goulart Lane, Reservoir Rd														
2 year average														
Annual KWH Usage		132,739												
total cost	\$	20,607	\$	18,762	\$	34,641	\$	(14,034)	\$	18,762	\$	18,762	\$	20,607
50260 Heavy Equipment Rental														
Excavator, 10 wheel Dump Truck, light tower, etc.	\$	8,260												
Total	\$	8,260	\$	8,260	\$	10,706	\$	(2,446)	\$	8,260	\$	8,260	\$	8,260
					\$	-								
50271 Gas/Vehicle Maintenance														
	\$	5,389												
vehicles	\$	13												
	\$	-											\$	-
total	\$	70,057	\$	110,305	\$	93,222	\$	(23,165)	\$	121,591	\$	121,591	\$	70,057
50275 Repairs & Maintenance														
Overhead Door Repair & Maintenance	\$	5,000												
Fire Alarm Panel, Fire ExtinguisherServ & Repair	\$	1,200												
Misc. snow removal equipment & supplies	\$	2,300												
Travel Vacuum repairs and/or replacement	\$	2,500												
Raw materials roof	\$	15,000												
total	\$	26,000	\$	26,000	\$	28,521	\$	(2,521)	\$	26,000	\$	25,761	\$	26,000

Newport Water Division  
Budget for Rate Filing  
FY 2016  
HJS Schedule D-16 Rebuttal  
Expense Detail - Distribution  
15-500-2241  
50276 Main Maintenance

[illegible]

## 50296 Service Maintenance

[illegible]

## 50311 Operating Supplies

[illegible]

## 50320 Uniforms &amp; protective Gear

Tyvek protective Suits									
N 95 respirator									
Safety Vests									
Hi Viz Jackets									
Gloves, safety glasses, respirator, etc.									
Total	\$	4,000	\$	1,761	\$	1,725	\$	2,275	\$ 1,761 \$ 2,000 \$ 4,000

total	\$	1,053,248	\$	1,100,967	\$	163,633	#####	\$	1,171,956	\$	1,209,218
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Docket No. 4595

Newport Water Division  
 Budget for Rate Filing  
 FY 2016  
 HJS Schedule D-17 Rebuttal  
 Expense Detail - Fire Protection  
 15-500-2245

Account	Description	Docket 4355	Rate Year	Docket 4243	Actual FY 2015 Test Year	Change from Test year to Proposed	Budget FY 2016	Proposed FY 2017 Rate Year
50275	Repair & Maintenance - Equipment							
	Permits	\$ 200	\$ 500					
	Hydrant parts	\$ 5,000	\$ 5,000					
	Hydrant Paint	\$ 1,000	\$ 1,800					
	Misc.	\$ 600	\$ 600					
	Welding of hydrant base	\$ 200						
	Police Details	\$ -	\$ 1,760					
	Hydrant and/or Hydrant inserts	\$ 6,500	\$ 14,140		\$ 11,585			
	<b>total</b>	<b>\$ 13,500</b>	<b>\$ 23,800</b>	<b>\$ 13,500</b>	<b>\$ 11,585</b>	<b>\$ 12,215</b>	<b>\$ 32,500</b>	<b>\$ 23,800</b>