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January 10, 2013

Ms. Luly Massaro, Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

Re: *City of Newport, Utilities Department, Water Division*
Docket 4355

Dear Ms. Massaro:

Enclosed please find an original and nine (9) copies of the following documents:

1. Rebuttal Testimony and Schedules of Harold J. Smith filed on behalf of the City of Newport, Utilities Department, Water Division.

Please be advised that an electronic copy of these documents has been sent to the service list.

Thank you for your attention to this matter.

Sincerely,



Joseph A. Keough Jr.

JAK/kf
Enclosure

**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**

BEFORE THE

RHODE ISLAND PUBLIC UTILITIES COMMISSION

Docket No. 4355

JANUARY 10, 2013



1 **I. INTRODUCTION**

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

3 A. My name is Harold J. Smith and my business address is 1031 South Caldwell
4 Street, Suite 100, Charlotte, North Carolina 28203.

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 the Division of Public Utilities and Carriers (“Division”), the
13 Portsmouth Water and Fire District (“Portsmouth” or “PWFD”) and the United
14 States Department of the Navy (“Navy”).

15

16 **Q. Did you review the direct testimony submitted by the Division, Portsmouth
17 and the Navy in this docket?**

18 A. Yes. I reviewed the testimony submitted by Mr. Mierzwa on behalf of the
19 Division, Mr. Woodcock on behalf of Portsmouth and Mr. Collins on behalf of the
20 Navy.

21

22 **Q: How would you like to address the issues presented in the testimony prepared
23 by these witnesses?**

24 A. Several issues were addressed by more than one of the other witnesses, and I
25 will address these issues first. I will then address issues raised by each witness
26 that were not addressed in the testimony of the other witnesses. I will conclude

1 by addressing some issues that were not raised by the witnesses for the other
2 parties.

3

4 **II. COMMON ISSUES**

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

7 A. The three issues addressed by more than one witness are as follows:

8

9 1. Corrections to the COS model - Both Mr. Mierzwa and Mr. Woodcock
10 identified minor errors in the Excel model used to calculate rates.

11

12 2. Demand Data – Mr. Mierzwa and Mr. Woodcock also made recommendations
13 regarding the production and demand data used in developing the allocation
14 factors.

15

16 3. Allocation of Treatment Capital - All three witnesses addressed the manner in
17 which Newport proposes to allocate the costs associated with the construction
18 of the new Lawton Valley Treatment Plant and the upgrades to the Station One
19 Treatment Plant (“Treatment Plant Projects”).

20

21 **COS Model Corrections**

22 **Q. What is your position with respect to the rate model corrections recommended**
23 **by Mr. Mierzwa and Mr. Woodcock?**

24 A. I agree that the corrections need to be made and the attached schedules reflect
25 these changes.

26

27

1 **Q. Please describe the changes you made.**

2 A. As pointed out by Mr. Mierzwa and Mr. Woodcock, an incorrect cell reference on
3 HJS Schedule B-2 in my original testimony resulted in an incorrect allocation of
4 pumping costs allocated to the Base cost category. The correction of this cell
5 reference results in a slight reduction in the allocation of Base costs to
6 Portsmouth.

7

8 Mr. Mierzwa and Mr. Woodcock also point out that the “Estimated Systemwide
9 Peaks” shown on HJS Schedule B-8 are not correct. I replaced the values in these
10 cells with the appropriate formulas, and the values shown on the attached
11 version of HJS Schedule B-8 are correct. These cells are not used in the
12 calculation of rates and the corrections do not impact the proposed rates.

13

14 **Demand Data**

15 **Q. Please describe the issue with demand and production data raised by Mr.
16 Mierzwa and Mr. Woodcock.**

17 A. Mr. Mierzwa and Mr. Woodcock both note inconsistencies between data sources
18 and timeframes for the data used to develop allocation factors. Specifically, Mr.
19 Mierzwa suggests that all values in the column labeled “Production Peaks” in HJS
20 Schedule B-7 should be based on the average of the corresponding values for FY
21 2008 through FY2010. Mr. Woodcock suggests that these values should be
22 based on the average of the corresponding values for FY 2010 through FY 2012.

23

24 **Q. Do you have an opinion regarding these values?**

25 A. I agree with both Mr. Mierzwa and Mr. Woodcock that the values in my original
26 analysis need revision, but I believe that all values in the Production Peaks
27 column of this schedule should be based on the average of the corresponding

1 values for FY 2011 and FY 2012 since the class specific peaking factors developed
2 in HJS Schedule B-8 are based on data from FY 2011 and FY2012.

3

4 **Allocation of Treatment Capital**

5 **Q. Please describe the issues that Mr. Mierzwa, Mr. Woodcock and Mr. Collins raised**
6 **regarding the allocation of treatment capital costs.**

7 A. All three witnesses disagree with Newport's allocation of capital costs associated
8 with the Treatment Plant Projects because it deviates from the allocation in the
9 Excel Spreadsheet attached to the Docket 4128 Settlement Agreement.

10

11 **Q. Do you continue to maintain that the Commission should adopt the allocation**
12 **in your original testimony?**

13 A. Yes. The allocation Newport proposes is necessary to set fair and equitable rates for
14 its customers. Newport is simply asking that the Navy and Portsmouth pay for the
15 capacity they claimed they needed when Newport was in the planning stages for
16 the Treatment Plant Projects. Newport sized the capacity of the Treatment Plant
17 Projects according to the stated needs of the Navy and Portsmouth, yet now they
18 don't want to pay for this capacity. The allocation sought by the Navy and
19 Portsmouth is inequitable and unfairly shifts the risk of paying for the Treatment
20 Plant Projects.

21

22 **Q. Please explain how Newport determined the treatment capacity required by its**
23 **customers.**

24 A. When Newport began the process of planning for the construction of the Treatment
25 Plant Projects, it had to determine the required capacity to meet current and future
26 demands of its retail and wholesale customers. Newport took several steps to

1 determine its treatment capacity requirements, which included gathering data
2 from, and meeting with, the Navy and Portsmouth.

3

4 In fact, on February 19, 2009, representatives from Newport Water and CDM
5 (Newport's advisor for the Treatment Plant Projects) met with representatives from
6 the Navy and Portsmouth to discuss their anticipated future demands. The Navy
7 and Portsmouth anticipated average day demands of 0.95 million gallons per day
8 (MGD) and 1.64 MGD, respectively. The respective projected peak day demands
9 provided by the Navy and Portsmouth were 1.395 MGD and 3.0 MGD. Newport also
10 performed a demand study that examined the projected average and peak day
11 demands of its retail customers.

12

13 Newport then combined the information the Navy and Portsmouth provided with
14 the results of the demand study, and determined it would need a peak treatment
15 capacity of 16 MGD. Therefore, the Treatment Plant Projects were designed to
16 provide 16 MGD of peak capacity.

17

18 **Q. Is Newport proposing to allocate the cost of the Treatment Plant Projects based**
19 **on the projected peak demands provided by the Navy and Portsmouth?**

20 A. Yes.

21

22 **Q, Can you explain how?**

23 A. Newport's capital costs consist of two components: (1) contributions to the Capital
24 Spending restricted account for cash funded capital projects: and, (2) debt service
25 on loans to fund capital projects. These costs must first be assigned to functional
26 categories to properly assign them to Base/Extra Capacity cost categories. The
27 capital costs are assigned to functions based on the makeup of the fixed assets that

1 currently comprise the system. This process involved assigning each of Newport
2 Water's fixed assets to the appropriate functional category. This resulted in a
3 breakdown of fixed assets by functional categories as shown on RFC Schedule B-5
4 Rebuttal. For example, assets associated with Newport's raw water reservoirs are
5 assigned to Source of Supply and water mains and pumps stations are assigned to
6 Transmission & Distribution. The assets in each functional category and their
7 corresponding value are then assigned to categories corresponding with Newport
8 Water's accounts. This allows for the development of factors used to allocate
9 capital costs to Newport's cost accounts.

10
11 **Q. How is the value of the existing assets determined?**

12 A . For the purposes of rate setting we are using the original cost of the existing assets
13 as their value.

14
15 **Q. What is the next step after assigning assets and their values to Newport's**
16 **functional accounts?**

17 A. The next step is to determine the percentage of the total value of the assets
18 assigned to each account. The percentage of asset values assigned to each account
19 is the percentage used to allocate capital expenses to that account. For instance, as
20 shown on HJS Schedule B-5 Rebuttal, we assigned system assets with a value of
21 \$20,356,847 to the Supply account. These asset values are 23% of the total system
22 asset value. The assets assigned to Transmission & Distribution account have a
23 value of \$23,469,243, or 26% of the total asset value. These percentages are the
24 factors used to allocate capital expenses to each of Newport's cost accounts so they
25 can then be allocated to Base/Extra Capacity categories.

1 As shown on page 2 of HJS Schedule B-5, 23% of the current capital costs or
2 \$1,432,261, is allocated to the Supply function. Similarly, \$2,844,940, or 46% of the
3 capital expenses is allocated to the three treatment accounts.

4
5 Once capital costs are allocated to the functional accounts, they must be assigned
6 to Base/Extra Capacity cost categories. As shown on HJS Schedule B-1 Rebuttal
7 (pages 16 and 22 of 44), most of the capital costs assigned to each account are
8 allocated to Base/Extra Capacity categories in the same way as the O&M costs for
9 the same account. The lone exception is the treatment capital costs.

10
11 **Q. How are treatment capital costs assigned to Base/Extra Capacity categories?**

12 A. Treatment capital costs are *not* assigned to Base/Extra Capacity categories, but are
13 instead assigned directly to customer classes and the wholesale customers based
14 on the proportionate share of treatment capacity reserved for each as shown on
15 HJS Schedule B-2 Rebuttal. As I discussed earlier, the Treatment Plant Projects were
16 designed to provide the capacity required to meet the anticipated demands of
17 Newport's retail customers and the expressed demands of the Navy and
18 Portsmouth. The determination of the appropriate allocation factors for each
19 customer and customer class is shown on the bottom of HJS Schedule B-4 Rebuttal.

20
21 **Q. Doesn't the allocation formula in the Docket 4128 Settlement Agreement spread
22 sheet ensure that the Navy and Portsmouth will pay their share of the costs
23 associated with the treatment capacity they requested?**

24 A. No. The Navy and Portsmouth will only pay for the capacity they requested if they
25 use it. If their actual demands are less than the capacity they requested, as is the
26 case today, then the Navy and Portsmouth will only pay for a portion of the capacity

1 they identified. In other words, the Navy and Portsmouth will benefit from having
2 the full capacity they requested, yet only pay for the actual capacity they use.

3

4 **Q. Why should the Navy and Portsmouth pay for more capacity than they currently**
5 **use?**

6 A. Because Newport incurred costs to provide the capacity the Navy and Portsmouth
7 requested. Newport will continue to incur these costs through debt service
8 payments even if the Navy and Portsmouth do not use the capacity Newport
9 constructed for them. If the Navy and Portsmouth do not pay for the capacity they
10 requested, then Newport's retail customers assume the risk and burden of paying
11 for this capacity, which they do not use.

12

13 **Q. Please explain how Newport, and its retail customers, will assume the risk and**
14 **burden of paying for unused capacity.**

15 A. Newport is obligated to make principal and interest payments totaling
16 approximately \$117 million over the next 20 years for the Treatment Plant Projects,
17 which includes capacity to serve all of Newport's customers including its wholesale
18 customers. When one considers that approximately 27% of the peak capacity of
19 the Treatment Plant Projects is attributable to the Navy and Portsmouth, it can be
20 argued that Newport is incurring over \$31 million in costs on behalf of the Navy and
21 Portsmouth with no guarantee of reimbursement for the capacity they requested.

22

23 **Q. What is Mr. Woodcock's position with respect to the approach you propose?**

24 A. It appears that Mr. Woodcock's resistance to my proposed methodology results
25 from a misinterpretation of the proposed approach. On page 7 of his direct
26 testimony Mr. Woodcock misinterprets the proposed allocation as "...a different

1 allocation based on intended proceeds for a single bond issue for the new
2 treatment facility.”

3

4 **Q. How is Mr. Woodcock’s interpretation of your proposal incorrect?**

5 A. Because my proposed approach is *not* based on the proceeds for a single bond
6 issue. As discussed above, my proposed methodology is used to allocate *all* of the
7 capital costs assigned to the treatment function based on reserved capacity, not
8 just the debt service associated with one bond issue. So instead of being based on
9 the proceeds of one bond issue, it is based on the costs associated with
10 guaranteeing sufficient treatment capacity to meet Portsmouth’s expressed
11 anticipated demands. Newport is not selectively applying an improper allocation
12 method. Newport did not selectively pick a single bond issue and then base its
13 entire capital cost allocation on the intended proceeds of that single bond issue.
14 Newport allocated its capital costs consistent with the methodology I described
15 above. Newport simply took *one piece* of its capital costs – treatment plant capital
16 costs – and allocated it based on the capacity requested by the Navy and
17 Portsmouth.

18

19 **Q. What is Mr. Collins’ position with respect to the approach you propose?**

20 A. Mr. Collins maintains that the treatment capital costs should be allocated based on
21 historical class consumptions because this approach “...will ensure that each class
22 pays for the water treatment plant capital costs based on how each class actually
23 utilizes the asset.”

24

25 **Q. Why do you disagree with Mr. Collin’s suggested approach?**

26 A. Because while Mr. Collin’s approach might recognize the way each wholesale
27 customer utilizes the system, it fails to recognize costs incurred to provide the

1 capacity requested by the Navy and Portsmouth. This means the wholesale
2 customers benefit by knowing Newport has the capacity to meet their peak
3 demands, but they are not required to pay for this capacity until they actually use it.
4 This would be fine if Newport did not incur any costs to construct and maintain this
5 capacity until the wholesale customers needed it, but this is not the case. Newport
6 is obligated to pay millions each year to repay debt it incurred to fund the
7 Treatment Plant Projects that provide the Navy and Portsmouth with the capacity
8 they requested. If the Navy and Portsmouth do not pay for their share of the
9 treatment capacity they requested and benefit from, then the cost of providing that
10 capacity must be borne by the retail customers despite the fact they do not need
11 that capacity.

12
13 **Q. What is Mr. Mierzwa's position with respect to the approach you propose?**

14 A. Mr. Mierzwa suggests that any potential changes in the allocation of treatment
15 capital costs be deferred until the new and upgraded treatment plants are in
16 service.

17
18 **Q. Do you agree with Mr. Mierzwa's suggestion?**

19 A. No, I am reluctant to delay the change in allocating treatment costs, because
20 Newport is already incurring significant debt service expenses for the Treatment
21 Plant Projects, and as shown on HJS Schedule D-6 Rebuttal, these expenses will
22 increase significantly over the next two years. Failure to modify the cost allocation
23 approach immediately will result in Newport's retail customers improperly
24 subsidizing the cost of capacity being constructed to serve wholesale customers.

25
26 **Q. Are there any other issues raised by multiple witnesses?**

27 A. No

1 **III. INDIVIDUAL ISSUES**

2 **PORTSMOUTH**

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

4 A. Yes, Mr. Woodcock addressed three issues the other witnesses did not address: (1)
5 Discrepancies in the asset listing used as the basis for the functionalization of
6 capital costs; (2) the drop in maximum day production at the Lawton Valley
7 treatment plant; and, (3) the rounding used on HJS Schedule D-8.

8

9 ***Asset List***

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

11 A. Mr. Woodcock notes that the asset list did not include any water mains installed
12 before 1975, but does include other assets put into service before 1975. Based on
13 this observation, he concludes that the asset listing must be incomplete.

14

15 **Q. Is his conclusion correct?**

16 A. After reviewing additional records kept by Newport Water, it appears that some
17 water mains installed prior to 1975 were not included on the asset listing used in
18 the COS analysis. While the asset listing used for the COS analysis does comply with
19 governmental accounting standards, it does not include some fully depreciated
20 assets that have no book value. However, since functionalization of capital costs is
21 based on the original cost of all assets currently in place in Newport's system, the
22 asset list should be updated.

23

24 **Q. Have you updated the asset list?**

25 A. Not at this time, but I am currently working with Newport's staff to update the list.
26 We anticipate that this information can be completed before the deadline for the

1 Division's and Interveners' surrebuttal testimony, and Newport will provide it as a
2 supplement to its PWFD Data Request 2 response.

3

4 ***Lawton Valley Production***

5 **Q. Please explain Mr. Woodcock's issue with the change in maximum hour**
6 **production at Lawton Valley.**

7 A. Mr. Woodcock notes that the maximum hour production at Lawton Valley drops
8 from 8.0 MGD in FY 2009 to exactly 6.0 MGD in FY 2010 and seems to question the
9 validity of this data.

10

11 **Q. Is there a reason for this drop over the course of a single year?**

12 A. Yes. The drop in the maximum hour production is because Newport was able to
13 meet its peak hour demands in FY 2010 (and later) with peak hourly production of
14 6.0 MGD at Lawton Valley. The fact that the peak hour production dropped from
15 exactly 8.0 MGD to exactly 6.0 MGD is explained by the way peak hour production
16 at Lawton Valley is determined.

17

18 **Q. How is peak hour production determined at Lawton Valley?**

19 A. Peak hour production at Lawton Valley is determined by monitoring pump usage
20 and run time. Lawton Valley has three finished water pumps, a 2 MGD pump, a 4
21 MGD pump and a 6 MGD pump. Beginning in FY 2010, Newport met peak demands
22 by only using the 6 MGD pump and therefore peak hourly demand is considered to
23 be 6 MGD. In previous years, both the 6 MGD and 2 MGD were operated at the
24 same time and therefore peak hour demand was considered to be 8 MGD.

25

26

27

1 ***Rounding***

2 **Q. Please discuss Mr. Woodcock's issue with rounding on HJS Schedule D-8.**

3 A. Mr. Woodcock suggests rounding the customer class demand factors on HJS
4 Schedule D-8 to two decimal places.

5

6 **Q. Do you agree with his suggestion?**

7 A. I do, and as far as I can tell, these values have been rounded to two decimal places
8 in all versions of the COS model that have been submitted thus far.

9

10 **Q. Did Mr. Woodcock raise any other issues?**

11 A. No

12

13 **THE DIVISION**

14 **Q. Are there any issues raised only by Mr. Mierzwa?**

15 A. Yes, on page 9 of his testimony, Mr. Mierzwa suggests that the customer account
16 data used in Docket 4243 be used in this filing.

17

18 **Q. Do you agree with this suggestion?**

19 A. No. I do not. I would agree with this suggestion if we were going to use demand and
20 production data from Docket 4243, but as I suggested earlier, I believe it is
21 appropriate to utilize demand and production data from FY 2011 and FY2012.
22 Therefore, I think it is appropriate to use the customer account data from the same
23 period.

24

25 **Q. Did Mr. Mierzwa raise any other issues?**

26 A. No.

27

1 **NAVY**

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

3 A. Yes, Mr. Collins suggests that Newport remove the Navy's usage for hydrant
4 flushing from the demand study. Mr. Collins notes that the 2012 demand data used
5 to determine class peaking factors for each customer class indicates that the Navy's
6 Max Day occurred on September 25, 2012 when the Navy demanded 1,213,663
7 gallons of water. He goes on to make several other points including:

- 8 • the Navy's demand on September 25, 2012 was impacted by the Navy's
9 flushing program;
- 10 • that a cell in the electronic versions of the COS model highlights the Navy's
11 max demand on a day other than September 25, 2012;
- 12 • that Newport was aware of the Navy's flushing program;
- 13 • that utilities should utilize their assets efficiently; and
- 14 • the Navy's Max Day occurred after September 15, 2012.

15
16 **Q. Do you agree with Mr. Collins' recommendation?**

17 A. I do not. The Navy's Max Day in 2012 occurred on September 25, and that is the
18 Max Day value that should be used for rate setting purposes. The purpose of the
19 demand study was to determine each customer's or customer class' demand
20 characteristics to calculate rates reflecting these characteristics. The purpose of
21 collecting daily demand data from a sample of Newport's residential and non-
22 residential customers was to gain an understanding of class demand
23 characteristics that could not be ascertained through billing data. Daily demand
24 data for the Navy was collected for the same purpose.

25
26 The parties chose the original sample period of June through September 15,
27 2010 in the Docket 4128 Settlement Agreement based on the belief that the

1 peak demand period for each customer class would occur in July and August due
2 to irrigation and the influx of seasonal visitors (see Docket 4128 Order, p. 9). The
3 Settlement Agreement also provided for a waiver of data collection in 2011 if the
4 parties unanimously agreed. If not, then additional data would be collected
5 between “June 2011 and September 2011.” There was no deadline excluding
6 data after September 15 as suggested by the Navy.

7

8 Furthermore, the Settlement Agreement did not mention gathering data from
9 June through September 2012. Newport included this data because the 2010
10 data did not comply with the Docket 4128 Settlement Agreement criteria, and
11 Newport wanted to use two years of valid data for the demand study. Once
12 again, there was no prohibition against using data gathered between September
13 15 and 30, 2012.

14

15 During 2011 and 2012 Newport extended the sampling period to the end of
16 September so data could be gathered during one of Newport’s largest events –
17 the annual boat show. The fact that the Navy’s Max Day occurred on September
18 25, does not negate the fact that the Navy demanded 1,213,663 gallons of water
19 that day; that Newport had to have the capacity in place to meet that demand;
20 and, had to operate its system to deliver that that volume of water.

21

22 **Q. Should the fact that much of the water used by the Navy on its Max Day was**
23 **for the purpose of flushing be taken into consideration during the rate setting**
24 **process?**

25 A. No. Newport must meet all of its customers’ peak demands, regardless of the
26 purpose for which the water is used. As Mr. Collins points out in his testimony,
27 flushing is a necessary and typical activity that should be performed on a regular

1 basis to maintain water quality. As such, to the extent that flushing drives a
2 customer's peak demands, it is appropriate to base that customer's rates on
3 demand that includes flushing.
4

5 **Q. Is there any importance to the fact that there was a hidden cell in your original**
6 **COS model that highlighted the Navy's maximum day as August 7, 2012?**

7 A. No. That cell was highlighted when I updated the spreadsheet at the beginning
8 of September to include daily data collected through the end of August. At that
9 time, I highlighted the cells corresponding to the day each customer or class had
10 its highest demand. I did this to verify that the MAX function utilized in column
11 DU of the spreadsheet was functioning properly and the value for the true Max
12 Day was being returned. Having verified that the MAX function was indeed
13 returning the value corresponding to the Max Day, I did not change the
14 highlighting when I updated the spreadsheet to include the data collected in
15 September. It should also be noted that nowhere in the daily demand study
16 spreadsheet do I indicate that the highlighted cells in the hidden columns
17 correspond to the Max Day for each class.
18

19 **Q. Should Newport be responsible for making sure that the Navy's flushing**
20 **program does not result in peak daily demand?**

21 A. No, the Navy is responsible for operating its system in a way that ensures it can
22 meet the demands of the base personnel and other activities. It is solely
23 responsible for maintaining its system and to the extent that flushing is a
24 component of the maintenance program, the Navy is responsible for
25 determining when and where flushing should occur.
26
27

1 **Q. Did Mr. Collins raise any other issues?**

2 A. No.

3

4 **IV. ISSUES NOT RAISED BY OTHER PARTIES**

5 **Q. Are there any issues that you would like to address that were not addressed by**
6 **the other witnesses?**

7 A. Yes, the rates proposed in my original and supplemental testimony were based
8 in part on the premise that Newport would be borrowing an additional \$26.9
9 million from the Rhode Island Clean Water Finance Agency in June 2013. The
10 proceeds of this borrowing were intended to fund all but approximately \$5
11 million of the cost of the Treatment Plant Projects. However, since the filing of
12 my supplemental testimony, Newport decided it will be more efficient and less
13 costly to borrow the entire remaining amount needed to complete the
14 Treatment Plant Projects. Therefore, Newport now plans to borrow \$31 million
15 in June of 2013. As a result of the increase in the borrowing amount, Newport's
16 anticipated debt service expenses increased and therefore the amount proposed
17 for annual contributions to the debt service restricted account increased from
18 \$3,576,079 to \$3,735,016, an increase of \$158,937.

19

20 **Q. Have you prepared schedules that reflect the changes you made to the COS**
21 **model in response to the testimony of other witnesses and to address the**
22 **increased borrowing amount?**

23 A. Yes, attached is a revised set of COS model schedules that reflect the changes
24 addressed in my testimony. To summarize, these changes include:

- 1 • Correction of the cell reference error on HJS Schedule B-2 that resulted in
2 an improper allocation of Base costs associated with pumping to
3 customer classes.
- 4 • Correction of the formula used to calculate Estimated Systemwide Peaks
5 on HJS Schedule B-8.
- 6 • HJS Schedule B-7 has been revised such that the values in the Production
7 Peaks column are calculated based on the average of the corresponding
8 values for FY 2011 and FY2012.
- 9 • HJS Schedule D-6 has been revised to reflect the increase in anticipated
10 debt service expense resulting from the decision to borrow \$31 million
11 instead of \$26.9 million.

12
13 **Q. Please summarize the impact of the above listed changes to the rate model.**

14 A. As shown on HJS Schedule A-2 Rebuttal, all of the proposed rates and charges are
15 slightly higher than those proposed in my supplemental direct testimony. The
16 primary driver of this increase in proposed rates and charges is the additional debt
17 service expense resulting from the increase in proposed borrowing for the
18 Treatment Plant Projects.

19
20 **V. CONCLUSION**

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

23 A. Yes I do. The revised model incorporates changes suggested by the witnesses for
24 the Division, Portsmouth and the Navy as well as the increase in debt service
25 expense resulting from the increase in proposed borrowing. The resulting rates

1 and charges reflect the current and anticipated demands of each customer or
2 customer class and should serve to keep Newport on sound financial footing.

3

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

5 **A: Yes it does.**

CERTIFICATION

I hereby certify that on January 8, 2013, 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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Newport Water Cost of Service Model

Index of Model Schedules

Summary Schedules

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

COS Model Schedules

HJS Schedule B-1 Rebuttal	Base Extra Capacity Cost Allocations
HJS Schedule B-2 Rebuttal	Allocation of Costs to Water Rate Classes
HJS Schedule B-3 Rebuttal	Cost Allocation Bases
HJS Schedule B-4 Rebuttal	Allocation Analyses
HJS Schedule B-5 Rebuttal	Capital Functionalization
HJS Schedule B-6 Rebuttal	Water Demand History
HJS Schedule B-7 Rebuttal	Water Production Peaking Analysis
HJS Schedule B-8 Rebuttal	Billed Demand Peaking Analysis: Determination of Customer Class Peaking Factors
HJS Schedule B-9 Rebuttal	System Demands Imposed by Each Customer Class' Peaking Behavior
HJS Schedule B-10 Rebuttal	Summary of Peak Load Distributions (by Rate Class and Base/Extra-Capacity Categories)
HJS Schedule B-11 Rebuttal	Fire Protection Demand Analysis

Supporting Data

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

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

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

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

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

	Rate Year Approved in Docket 4243	Test Year FY 2013 Approved in Docket 4243	Adjustments To Test Year	Proposed Rate Year
CAPITAL COSTS				
Contribution to Capital Spending Acct.	\$ 2,500,000	\$ 2,500,000		\$ 2,500,000
Contribution to Debt Service Acct.	\$1,589,369	\$5,861,869	(\$2,126,853)	\$3,735,016
Total Capital Costs	\$ 4,089,369	\$ 8,361,869	\$ (2,126,853)	\$ 6,235,016
Operating Revenue Allowance	\$ 254,733	\$ 254,733		\$ 254,733
Total Costs before Offsets	\$ 12,835,200	\$17,107,700	\$ (2,126,853)	\$ 14,980,847
OFFSETS				
Nonrate Revenues				
Sundry charges	\$ 104,000	\$ 104,000		\$ 104,000
WPC cost share on customer service	296,856	296,856		296,856
Middletown cost share on customer service	143,506	143,506		143,506
Rental of Property	108,167	108,167		108,167
Water Penalty	47,500	47,500		47,500
Miscellaneous	8,600	8,600		8,600
Investment Interest Income	3,900	3,900		3,900
Water Quality Protection Fees	22,500	22,500		22,500
Total Nonrate Revenues	\$ 735,029	\$ 735,029	\$ -	\$ 735,029
Net Costs to Be Recovered through Rates	\$ 12,100,171	\$16,372,671	\$ (2,126,853)	\$ 14,245,818

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

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

(1)

		Docket 4243					
		Rates	Cost of Service	Proposed Rates	% Change	Projected Revenues	
Base Charge (per bill)							
Monthly							
5/8	\$	18.75	\$ 7.8168	\$ 7.82	-58%	\$10,322	
3/4	\$	18.75	7.9053	7.91	-58%	6,075	
1	\$	18.75	8.6367	8.64	-54%	17,107	
1.5	\$	18.75	10.4910	10.50	-44%	22,428	
2	\$	18.75	12.2880	12.29	-34%	31,708	
3	\$	18.75	22.1181	22.12	18%	13,272	
4	\$	18.75	24.7739	24.78	32%	3,568	
5	\$	18.75	28.3150	28.32	51%	340	
6	\$	18.75	30.9709	30.98	65%	7,435	
8	\$	18.75	38.0531	38.06	103%	457	
10	\$	18.75	50.8897	50.89	171%	611	
Quarterly							
5/8	\$	18.75	\$ 10.6705	\$ 10.68	-43%	455,182	
3/4	\$	18.75	10.9361	10.94	-42%	105,637	
1	\$	18.75	13.1302	13.14	-30%	20,551	
1.5	\$	18.75	18.6932	18.70	0%	13,913	
2	\$	18.75	24.0843	24.09	28%	5,685	
3	\$	18.75	53.5744	53.58	186%	3,643	
4	\$	18.75	61.5419	61.55	228%	739	
5	\$	18.75	72.1653	72.17	285%	0	
6	\$	18.75	80.1328	80.14	327%	1,282	
8	\$	18.75	101.3796	101.38	441%	0	
10	\$	18.75	139.8893	139.89	646%	0	
						\$ 719,955	
Volume Charge (per 1,000 gallons)							
Retail							
Residential	\$	6.43	\$ 8.2288	\$ 8.23	28%	5,185,986	
Non-Residential	\$	6.43	\$ 9.0535	\$ 9.06	41%	4,526,802	
						\$ 9,712,788	
Wholesale							
Navy	\$	3.9540	\$ 5.8062	\$ 5.8063	47%	1,039,159	
Portsmouth Water & Fire District	\$	3.152	\$ 4.3420	\$ 4.3421	38%	1,860,672	
						\$ 2,899,832	
Fire Protection							
Public (per hydrant)							
	\$	1,065.00	\$ 637.61	\$ 637.62	-40%	\$ 660,574	
Private (by Connection Size) (2)							
	Connection Size	Existing Charge Differential					
	<2		\$21.00	\$ 18.43	\$ 18.44	-12%	
	2	6.19	\$88.00	\$ 77.25	\$ 77.25	-12%	309
	4	38.32	\$541.00	\$ 269.48	\$ 269.48	-50%	16,438
	6	111.31	\$1,083.00	\$ 633.69	\$ 633.70	-41%	155,257
	8	237.21	\$2,478.00	\$ 1,261.89	\$ 1,261.90	-49%	78,238
	10	426.58	\$4,091.00	\$ 2,206.84	\$ 2,206.84	-46%	-
	12	689.04	\$6,568.00	\$ 3,516.49	\$ 3,516.49	-46%	7,033
						\$ 257,275	
Total Projected Rate Revenues						\$ 14,250,424	

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

Customer Class	All Meter	Proposed			Proposed			Proposed			Proposed			Proposed			Proposed			
		5/8 Inch Meter			3/4 Inch Meter			1 Inch Meter			1.5 Inch Meter			2 Inch Meter			3 Inch Meter			
Monthly Consumption (gallons)	Bill at Current Rates	Bill at Proposed Rates	Dollar Change	Percent Change	Bill at Proposed Rates	Dollar Change	Percent Change	Bill at Proposed Rates	Dollar Change	Percent Change	Bill at Proposed Rates	Dollar Change	Percent Change	Bill at Proposed Rates	Dollar Change	Percent Change	Bill at Proposed Rates	Dollar Change	Percent Change	
Residential (Monthly)	1,000	\$25.18	\$16.05	-\$9.13	-36.3%	\$16.14	-\$9.04	-35.9%	\$16.87	-\$8.31	-33.0%	\$18.73	-\$6.45	-25.6%	\$20.52	-\$4.66	-18.5%	\$30.35	\$5.17	20.5%
	2,000	\$31.61	\$24.28	-\$7.33	-23.2%	\$24.37	-\$7.24	-22.9%	\$25.10	-\$6.51	-20.6%	\$26.96	-\$4.65	-14.7%	\$28.75	-\$2.86	-9.0%	\$38.58	\$6.97	22.0%
	4,000	\$44.47	\$40.74	-\$3.73	-8.4%	\$40.83	-\$3.64	-8.2%	\$41.56	-\$2.91	-6.5%	\$43.42	-\$1.05	-2.4%	\$45.21	\$0.74	1.7%	\$55.04	\$10.57	23.8%
	5,000	\$50.90	\$48.97	-\$1.93	-3.8%	\$49.06	-\$1.84	-3.6%	\$49.79	-\$1.11	-2.2%	\$51.65	\$0.75	1.5%	\$53.44	\$2.54	5.0%	\$63.27	\$12.37	24.3%
	7,500	\$66.98	\$69.55	\$2.57	3.8%	\$69.64	\$2.66	4.0%	\$70.37	\$3.39	5.1%	\$72.23	\$5.25	7.8%	\$74.02	\$7.04	10.5%	\$83.85	\$16.87	25.2%
	10,000	\$83.05	\$90.12	\$7.07	8.5%	\$90.21	\$7.16	8.6%	\$90.94	\$7.89	9.5%	\$92.80	\$9.75	11.7%	\$94.59	\$11.54	13.9%	\$104.42	\$21.37	25.7%
	15,000	\$115.20	\$131.27	\$16.07	13.9%	\$131.36	\$16.16	14.0%	\$132.09	\$16.89	14.7%	\$133.95	\$18.75	16.3%	\$135.74	\$20.54	17.8%	\$145.57	\$30.37	26.4%
	20,000	\$147.35	\$172.42	\$25.07	17.0%	\$172.51	\$25.16	17.1%	\$173.24	\$25.89	17.6%	\$175.10	\$27.75	18.8%	\$176.89	\$29.54	20.0%	\$186.72	\$39.37	26.7%
	25,000	\$179.50	\$213.57	\$34.07	19.0%	\$213.66	\$34.16	19.0%	\$214.39	\$34.89	19.4%	\$216.25	\$36.75	20.5%	\$218.04	\$38.54	21.5%	\$227.87	\$48.37	26.9%
	30,000	\$211.65	\$254.72	\$43.07	20.3%	\$254.81	\$43.16	20.4%	\$255.54	\$43.89	20.7%	\$257.40	\$45.75	21.6%	\$259.19	\$47.54	22.5%	\$269.02	\$57.37	27.1%
Residential(Quarterly)	1,000	\$25.18	\$18.91	-\$6.27	-24.9%	\$19.17	-\$6.01	-23.9%	\$21.37	-\$3.81	-15.1%	\$26.93	\$1.75	6.9%	\$32.32	\$7.14	28.4%	\$61.81	\$36.63	145.5%
	2,000	\$31.61	\$27.14	-\$4.47	-14.1%	\$27.40	-\$4.21	-13.3%	\$29.60	-\$2.01	-6.4%	\$35.16	\$3.55	11.2%	\$40.55	\$8.94	28.3%	\$70.04	\$38.43	121.6%
	3,000	\$38.04	\$35.37	-\$2.67	-7.0%	\$35.63	-\$2.41	-6.3%	\$37.83	-\$0.21	-0.6%	\$43.39	\$5.35	14.1%	\$48.78	\$10.74	28.2%	\$78.27	\$40.23	105.8%
	4,000	\$44.47	\$43.60	-\$0.87	-2.0%	\$43.86	-\$0.61	-1.4%	\$46.06	\$1.59	3.6%	\$51.62	\$7.15	16.1%	\$57.01	\$12.54	28.2%	\$86.50	\$42.03	94.5%
	5,000	\$50.90	\$51.83	\$0.93	1.8%	\$52.09	\$1.19	2.3%	\$54.29	\$3.39	6.7%	\$59.85	\$8.95	17.6%	\$65.24	\$14.34	28.2%	\$94.73	\$43.83	86.1%
	15,000	\$115.20	\$134.13	\$18.93	16.4%	\$134.39	\$19.19	16.7%	\$136.59	\$21.39	18.6%	\$142.15	\$26.95	23.4%	\$147.54	\$32.34	28.1%	\$177.03	\$61.83	53.7%
	60,000	\$404.55	\$504.48	\$99.93	24.7%	\$504.74	\$100.19	24.8%	\$506.94	\$102.39	25.3%	\$512.50	\$107.95	26.7%	\$517.89	\$113.34	28.0%	\$547.38	\$142.83	35.3%
	80,000	\$533.15	\$669.08	\$135.93	25.5%	\$669.34	\$136.19	25.5%	\$671.54	\$138.39	26.0%	\$677.10	\$143.95	27.0%	\$682.49	\$149.34	28.0%	\$711.98	\$178.83	33.5%
	100,000	\$661.75	\$833.68	\$171.93	26.0%	\$833.94	\$172.19	26.0%	\$836.14	\$174.39	26.4%	\$841.70	\$179.95	27.2%	\$847.09	\$185.34	28.0%	\$876.58	\$214.83	32.5%
	120,000	\$790.35	\$998.28	\$207.93	26.3%	\$998.54	\$208.19	26.3%	\$1,000.74	\$210.39	26.6%	\$1,006.30	\$215.95	27.3%	\$1,011.69	\$221.34	28.0%	\$1,041.18	\$250.83	31.7%
Commercial (Monthly)	2,000	\$31.61	\$25.94	-\$5.67	-17.9%	\$26.03	-\$5.58	-17.7%	\$26.76	-\$4.85	-15.3%	\$28.62	-\$2.99	-9.5%	\$30.41	-\$1.20	-3.8%	\$40.24	\$8.63	27.3%
	5,000	\$50.90	\$53.12	\$2.22	4.4%	\$53.21	\$2.31	4.5%	\$53.94	\$3.04	6.0%	\$55.80	\$4.90	9.6%	\$57.59	\$6.69	13.1%	\$67.42	\$16.52	32.5%
	10,000	\$83.05	\$98.42	\$15.37	18.5%	\$98.51	\$15.46	18.6%	\$99.24	\$16.19	19.5%	\$101.10	\$18.05	21.7%	\$102.89	\$19.84	23.9%	\$112.72	\$29.67	35.7%
	25,000	\$179.50	\$234.32	\$54.82	30.5%	\$234.41	\$54.91	30.6%	\$235.14	\$55.64	31.0%	\$237.00	\$57.50	32.0%	\$238.79	\$59.29	33.0%	\$248.62	\$69.12	38.5%
	30,000	\$211.65	\$279.62	\$67.97	32.1%	\$279.71	\$68.06	32.2%	\$280.44	\$68.79	32.5%	\$282.30	\$70.65	33.4%	\$284.09	\$72.44	34.2%	\$293.92	\$82.27	38.9%
	40,000	\$275.95	\$370.22	\$94.27	34.2%	\$370.31	\$94.36	34.2%	\$371.04	\$95.09	34.5%	\$372.90	\$96.95	35.1%	\$374.69	\$98.74	35.8%	\$384.52	\$108.57	39.3%
	50,000	\$340.25	\$460.82	\$120.57	35.4%	\$460.91	\$120.66	35.5%	\$461.64	\$121.39	35.7%	\$463.50	\$123.25	36.2%	\$465.29	\$125.04	36.7%	\$475.12	\$134.87	39.6%
	75,000	\$501.00	\$687.32	\$186.32	37.2%	\$687.41	\$186.41	37.2%	\$688.14	\$187.14	37.4%	\$690.00	\$189.00	37.7%	\$691.79	\$190.79	38.1%	\$701.62	\$200.62	40.0%
	100,000	\$661.75	\$913.82	\$252.07	38.1%	\$913.91	\$252.16	38.1%	\$914.64	\$252.89	38.2%	\$916.50	\$254.75	38.5%	\$918.29	\$256.54	38.8%	\$928.12	\$266.37	40.3%
Customer Class Commercial with 6" Fire Connection(Monthly Account)	120,000	\$996.60	\$1,181.04	\$184.44	18.5%	\$1,182.12	\$185.52	18.6%	\$1,190.88	\$194.28	19.5%	\$1,213.20	\$216.60	21.7%	\$1,234.68	\$238.08	23.9%	\$1,352.64	\$356.04	35.7%
Base Charge and Commodity Charges		\$1,083.00	\$633.70	-\$449.30	-41.5%	\$633.70	-\$449.30	-41.5%	\$633.70	-\$449.30	-41.5%	\$633.70	-\$449.30	-41.5%	\$633.70	-\$449.30	-41.5%	\$633.70	-\$449.30	-41.5%
Fire Protection Charge		\$2,079.60	\$1,814.74	-\$264.86	-12.7%	\$1,815.82	-\$263.78	-12.7%	\$1,824.58	-\$255.02	-12.3%	\$1,846.90	-\$232.70	-11.2%	\$1,868.38	-\$211.22	-10.2%	\$1,986.34	-\$93.26	-4.5%

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

Customer Class	Monthly Consumption (gallons)	Bill at Current Rates	Proposed		
			Bill at Proposed Rates	Dollar Change	Percent Change
Portsmouth (Monthly)					
	10,000,000	\$31,539	\$43,446	\$11,907	37.8%
	20,000,000	\$63,059	\$86,867	\$23,808	37.8%
Avg. Monthly Bill	38,000,000	\$119,795	\$165,025	\$45,230	37.8%
	40,000,000	\$126,099	\$173,709	\$47,610	37.8%
	75,000,000	\$236,419	\$325,682	\$89,264	37.8%
	100,000,000	\$315,219	\$434,235	\$119,016	37.8%
	150,000,000	\$472,819	\$651,340	\$178,521	37.8%
Navy (Monthly)					
	10,000,000	\$39,559	\$58,370	\$18,811	47.6%
	20,000,000	\$79,099	\$116,433	\$37,334	47.2%
Avg. Monthly Bill (All Meters)	38,000,000	\$150,252	\$220,946	\$70,694	47.1%
	50,000,000	\$197,719	\$290,622	\$92,903	47.0%
	75,000,000	\$296,569	\$435,779	\$139,210	46.9%
	100,000,000	\$395,419	\$580,937	\$185,518	46.9%

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

	Rate Year Revenue	
	Existing Rates	Proposed Rates
REVENUES		
Water Rates		
Base Charge (Billing Charge)	\$ 1,213,500	\$ 719,955
Volume Charge		
Residential	4,051,749	5,185,986
Commercial	3,212,730	4,526,802
Navy	707,651	1,039,159
Portsmouth Water & Fire District	1,350,692	1,860,672
Fire Protection		
Public	1,103,340	660,574
Private	465,460	257,275
Total Rate Revenues	\$ 12,105,122	\$ 14,250,424
Other Operating Revenues		
Sundry charges	\$ 104,000	104,000
WPC cost share on customer service	\$ 296,856	296,856
Middletown cost share on customer service	\$ 143,506	143,506
Rental of Property	\$ 108,167	108,167
Total Other Operating Revenues	\$ 652,529	652,529
Total Operating Revenues	\$ 12,757,651	\$ 14,902,953
Add: Non-Operating Revenues		
Water Penalty	47,500	47,500
Miscellaneous	8,600	8,600
Investment Interest Income	3,900	3,900
Water Quality Protection Fees	22,500	22,500
Total Non Operating Revenues	\$ 82,500	\$ 82,500
Total Revenues	\$ 12,840,151	\$ 14,985,453
COSTS		
Departmental O&M	\$ (8,491,098)	(8,491,098)
Capital Costs		
Contribution to Capital Spending Acct.	(2,500,000)	(2,500,000)
Contribution to Debt Service Acct.	(3,735,016)	(3,735,016)
Total Capital Costs	\$ (6,235,016)	(6,235,016)
Operating Revenue Allowance	(254,733)	(254,733)
Total Costs	\$ (14,980,847)	\$ (14,980,847)
Revenue Surplus (Deficit)	\$ (2,140,696)	\$ 4,606

Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated	
Operation & Maintenance Costs										
Administration										
Salaries, Wages, & Benefits										
Salaries & Wages	\$ 273,889	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
AFSCME retro	\$ -	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
NEA retro	\$ -	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
AFSCME benefits on retro pay	\$ -	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
NEA benefits on retro pay	\$ -	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Standby Salaries	\$ 12,500	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Accrued Benefits Buyout	\$ 175,000	Non-Administrative Wages & Salaries	59%	25%	4%	6%	5%	2%	0%	100%
Employee Benefits	\$ 128,202	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Retiree Insurance Coverage	\$ 514,000	Non-Administrative Wages & Salaries	59%	25%	4%	6%	5%	2%	0%	100%
Workers Compensation	\$ 85,000	Non-Administrative Wages & Salaries	59%	25%	4%	6%	5%	2%	0%	100%
Annual Leave Buyback	\$ 2,400	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Subtotal	1,190,991									

	Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
All Other Administrative Costs										
Advertisement	9,000	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Membership Dues & Subscriptions	2,500	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Conferences & Training	4,000	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Tuition Reimbursement	2,000	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Consultant Fees	233,033	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Postage	1,000	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Fire & Liability Insurance	76,468	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Telephone & Communication	5,500	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Water	1,942	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Electricity	5,805	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Natural Gas	7,252	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Property Taxes	226,774	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Legal & Administrative	-									
Audit Fees	4,349	Total Non-Admin Costs Before Offsets	69%	16%	5%	3%	5%	1%	1%	100%
OPEB Contribution	-	Total Non-Admin Costs Before Offsets	69%	16%	5%	3%	5%	1%	1%	100%
City Counsel	4,649	Total Non-Admin Costs Before Offsets	69%	16%	5%	3%	5%	1%	1%	100%
Citizens Survey	-	Total Non-Admin Costs Before Offsets	69%	16%	5%	3%	5%	1%	1%	100%
City Clerk	3,381	Total Non-Admin Costs Before Offsets	69%	16%	5%	3%	5%	1%	1%	100%
City Manager	54,131	Total Non-Admin Costs Before Offsets	69%	16%	5%	3%	5%	1%	1%	100%
Human Resources	30,121	Non-Administrative Wages & Salaries	59%	25%	4%	6%	5%	2%	0%	100%
City Solicitor	20,459	Total Non-Admin Costs Before Offsets	69%	16%	5%	3%	5%	1%	1%	100%
Finance Adimistrative 80%	19,822	Total Non-Admin Costs Before Offsets	69%	16%	5%	3%	5%	1%	1%	100%
Finance Adimistrative 5%	7,020	Total Non-Admin Costs Before Offsets	69%	16%	5%	3%	5%	1%	1%	100%
Purchasing	18,314	Total Non-Admin Costs Before Offsets	69%	16%	5%	3%	5%	1%	1%	100%
Assessment	5,973	Capital Costs	67%	16%	9%	1%	6%	1%	1%	100%
Collections	46,979	100% Billing	0%	0%	0%	0%	100%	0%	0%	100%
Accounting 5%	10,679	Total Non-Admin Costs Before Offsets	69%	16%	5%	3%	5%	1%	1%	100%
Accounting	70,516	Non-Administrative Wages & Salaries	59%	25%	4%	6%	5%	2%	0%	100%
Public Safety	-	Total Non-Admin Costs Before Offsets	69%	16%	5%	3%	5%	1%	1%	100%
Facilities Maintenance	13,266	Total Non-Admin Costs Before Offsets	69%	16%	5%	3%	5%	1%	1%	100%
Data Processing	143,888	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Mileage Allowance	2,000	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Gasoline & Vehicle Allowance	7,508	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Repairs & Maintenance	1,200	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Regulatory Expense	10,000	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Regulatory Assessment	48,096	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Office Supplies	20,000	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Self Insurance	10,000	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Unemployment Claims	12,000	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
Subtotal	1,139,623									

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

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

Docket No. 4355

	Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
Station One (Excludes pumping and chemicals)										
Salaries & Wages	\$ 446,983	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Overtime	\$ 60,021	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Holiday Pay	\$ 17,045	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Employee Benefits	\$ 278,523	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Annual Leave Buyback	\$ 5,000	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Conferences & Training	\$ 4,500	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Fire & Liability Insurance	\$ 12,687	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Electricity	\$ 252,674	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Natural Gas	\$ 24,250	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Rental of Equipment	\$ 600	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Sewer Charge	\$ 293,020	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Gas/Vehicle Maintenance	\$ 7,583	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Repairs & Maintenance	\$ 25,000	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Operating Supplies	\$ 25,210	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Uniforms & protective Gear	\$ 1,062	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Station One Pumping	\$ 22,428	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Station One Chemicals	\$ 354,210	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Subtotal	\$ 1,830,796									
Lawton Valley (Excludes pumping and chemicals)										
Salaries & Wages	\$459,704	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Overtime	\$37,657	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Holiday Pay	\$16,760	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Employee Benefits	\$287,143	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Annual Leave Buyback	\$3,966	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Conferences & Training	\$3,000	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Fire & Liability Insurance	\$18,614	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Electricity	\$132,551	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Natural Gas	\$29,909	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Rental of Equipment	\$500	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Sewer Charge	\$360,640	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Gas/Vehicle Maintenance	\$7,882	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Repairs & Maintenance	\$34,048	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Operating Supplies	\$18,475	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Uniforms & protective Gear	\$1,542	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
Lawton Valley Pumping	\$31,646	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Lawton Valley Chemicals	\$169,977	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Subtotal	1,614,015									

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

Docket No. 4355

	Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
Laboratory										
Salaries & Wages	\$ 104,358	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Employee Benefits	\$ 64,208	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Annual Leave Buyback	\$ 2,750	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Repairs & Maintenance	\$ 1,700	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Regulatory Assessment	\$ 32,000	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Laboratory Supplies	\$ 18,684	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
Subtotal	\$ 223,700									
Transmission and Distribution										
Salaries & Wages	\$ 418,161	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Overtime	\$ 52,364	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Temp Salaries	\$ 10,000	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Injury Pay	\$ -	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Employee Benefits	\$ 251,514	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Annual Leave Buyback	\$ 10,943	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Conferences & Training	\$ 4,000	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Contract Services	\$ 12,430	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Fire & Liability Insurance	\$ 18,748	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Electricity	\$ 18,762	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Heavy Equipment Rental	\$ 8,260	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Gas/Vehicle Maintenance	\$ 110,305	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Repairs & Maintenance	\$ 26,000	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Main Maintenance	\$ 35,000	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Hydrant Maintenance	\$ 35,000	100% Fire	0%	0%	0%	0%	0%	0%	100%	100%
Service Maintenance	\$ 30,000	100% Services	0%	0%	0%	0%	0%	100%	0%	100%
Operating Supplies	\$ 10,000	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Uniforms & protective Gear	\$ 1,761	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
Subtotal	\$ 1,053,248									
Fire Protection	13,500	100% Fire	0%	0%	0%	0%	0%	0%	100%	100%
Total O&M Costs	8,491,098									

		Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
CAPITAL COSTS		Rate Year	Allocation Notes	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total % Allocated
	Water Supply	1,432,261	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
	Treatment Station 1	1,651,242									
	Treatment Lawton Valley	521,872									
	Treatment Both Plants	671,826									
	T&D Pumping	66,539									
	T&D	1,606,540									
	Fire	25,776									
	Meters	23,069									
	Services	23,069									
	Billing	212,823									
	Total Capital Costs excluding Treatment	3,390,076									
	Revenue Allowance	254,733	100% base	100%							100%
	Total Costs before Offsets	12,135,907									
OFFSETS											
Nonrate Revenues											
	Sundry charges	104,000	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	WPC cost share on customer service	296,856	50/50 Split between Metering and Billing	0%	0%	0%	50%	50%	0%	0%	100%
	Middletown cost share on customer service	143,506	50/50 Split between Metering and Billing	0%	0%	0%	50%	50%	0%	0%	100%
	Rental of Property	108,167	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Water Penalty	47,500	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Miscellaneous	8,600	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Investment Interest Income	3,900	Non Admin less electricity & chemicals	64%	20%	3%	5%	5%	2%	1%	100%
	Water Quality Protection Fees	22,500	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
	Total Nonrate Revenues	735,029									
	Net Costs To Recover Through Rates	\$ 11,400,878									

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Operation & Maintenance Costs								
Administration								
Salaries, Wages, & Benefits								
Salaries & Wages	175,537	53,981	9,280	14,025	13,881	4,725	2,459	273,889
AFSCME retro	-	-	-	-	-	-	-	-
NEA retro	-	-	-	-	-	-	-	-
AFSCME benefits on retro pay	-	-	-	-	-	-	-	-
NEA benefits on retro pay	-	-	-	-	-	-	-	-
Standby Salaries	8,011	2,464	424	640	634	216	112	12,500
Accrued Benefits Buyout	103,052	43,446	6,601	9,839	9,014	2,869	178	175,000
Employee Benefits	82,166	25,268	4,344	6,565	6,498	2,211	1,151	128,202
Retiree Insurance Coverage	302,679	127,607	19,389	28,900	26,474	8,427	523	514,000
Workers Compensation	50,054	21,102	3,206	4,779	4,378	1,394	87	85,000
Annual Leave Buyback	1,538	473	81	123	122	41	22	2,400
Subtotal	723,037	274,341	43,326	64,871	61,000	19,883	4,532	1,190,991

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
All Other Administrative Costs								
Advertisement	5,768	1,774	305	461	456	155	81	9,000
Membership Dues & Subscriptions	1,602	493	85	128	127	43	22	2,500
Conferences & Training	2,564	788	136	205	203	69	36	4,000
Tuition Reimbursement	1,282	394	68	102	101	34	18	2,000
Consultant Fees	149,353	45,929	7,896	11,933	11,811	4,020	2,092	233,033
Postage	641	197	34	51	51	17	9	1,000
Fire & Liability Insurance	49,009	15,071	2,591	3,916	3,876	1,319	687	76,468
Telephone & Communication	3,525	1,084	186	282	279	95	49	5,500
Water	1,245	383	66	99	98	33	17	1,942
Electricity	3,720	1,144	197	297	294	100	52	5,805
Natural Gas	4,648	1,429	246	371	368	125	65	7,252
Property Taxes	145,341	44,695	7,684	11,612	11,493	3,912	2,036	226,774
Legal & Administrative								
Audit Fees	2,990	714	211	133	216	52	33	4,349
OPEB Contribution	-	-	-	-	-	-	-	-
City Counsel	3,196	764	226	142	231	55	35	4,649
Citizens Survey	-	-	-	-	-	-	-	-
City Clerk	2,324	555	164	103	168	40	26	3,381
City Manager	37,213	8,894	2,632	1,654	2,686	642	410	54,131
Human Resources	17,737	7,478	1,136	1,694	1,551	494	31	30,121
City Solicitor	14,065	3,361	995	625	1,015	243	155	20,459
Finance Adimistrative 80%	13,627	3,257	964	606	984	235	150	19,822
Finance Adimistrative 5%	4,826	1,153	341	215	348	83	53	7,020
Purchasing	12,590	3,009	890	560	909	217	139	18,314
Assessment	3,991	963	518	41	375	41	45	5,973
Collections	-	-	-	-	46,979	-	-	46,979
Accounting 5%	7,341	1,755	519	326	530	127	81	10,679
Accounting	41,525	17,506	2,660	3,965	3,632	1,156	72	70,516
Public Safety	-	-	-	-	-	-	-	-
Facilities Maintenance	9,120	2,180	645	405	658	157	100	13,266
Data Processing	92,219	28,359	4,875	7,368	7,293	2,482	1,292	143,888
Mileage Allowance	1,282	394	68	102	101	34	18	2,000
Gasoline & Vehicle Allowance	4,812	1,480	254	384	381	130	67	7,508
Repairs & Maintenance	769	237	41	61	61	21	11	1,200
Regulatory Expense	6,409	1,971	339	512	507	172	90	10,000
Regulatory Assessment	30,825	9,479	1,630	2,463	2,438	830	432	48,096
Office Supplies	12,818	3,942	678	1,024	1,014	345	180	20,000
Self Insurance	6,409	1,971	339	512	507	172	90	10,000
Unemployment Claims	7,691	2,365	407	614	608	207	108	12,000
Subtotal	702,475	215,169	40,024	52,968	102,346	17,858	8,783	1,139,623

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

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

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

Docket No. 4355

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated		
Laboratory										
Salaries & Wages	104,358	-	-	-	-	-	-	104,358		
Employee Benefits	64,208	-	-	-	-	-	-	64,208		
Annual Leave Buyback	2,750	-	-	-	-	-	-	2,750		
Repairs & Maintenance	1,700	-	-	-	-	-	-	1,700		
Regulatory Assessment	32,000	-	-	-	-	-	-	32,000		
Laboratory Supplies	18,684	-	-	-	-	-	-	18,684		
Subtotal										
Transmission and Distribution										
Salaries & Wages	208,159	136,582	73,420	-	-	-	-	418,161		
Overtime	26,067	17,103	9,194	-	-	-	-	52,364		
Temp Salaries	4,978	3,266	1,756	-	-	-	-	10,000		
Injury Pay	-	-	-	-	-	-	-	-		
Employee Benefits	125,203	82,151	44,161	-	-	-	-	251,514		
Annual Leave Buyback	5,447	3,574	1,921	-	-	-	-	10,943		
Conferences & Training	1,991	1,306	702	-	-	-	-	4,000		
Contract Services	6,188	4,060	2,182	-	-	-	-	12,430		
Fire & Liability Insurance	9,333	6,124	3,292	-	-	-	-	18,748		
Electricity	9,340	6,128	3,294	-	-	-	-	18,762		
Heavy Equipment Rental	4,112	2,698	1,450	-	-	-	-	8,260		
Gas/Vehicle Maintenance	54,909	36,028	19,367	-	-	-	-	110,305		
Repairs & Maintenance	12,943	8,492	4,565	-	-	-	-	26,000		
Main Maintenance	17,423	11,432	6,145	-	-	-	-	35,000		
Hydrant Maintenance	-	-	-	-	-	-	35,000	35,000		
Service Maintenance	-	-	-	-	-	30,000	-	30,000		
Operating Supplies	4,978	3,266	1,756	-	-	-	-	10,000		
Uniforms & protective Gear	877	575	309	-	-	-	-	1,761		
Subtotal										
Fire Protection	-	-	-	-	-	-	13,500	13,500		
Total O&M Costs		Non-Administrative O&M	4,220,929	1,064,545	183,010	276,580	273,749	93,171	48,500	6,160,484

		Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
CAPITAL COSTS		Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Water Supply		1,432,261	-	-	-	-	-	-	1,432,261
Treatment Station 1									
Treatment Lawton Valley									
Treatment Both Plants									
Allocated Based on Reserved Capacity									
T&D Pumping		33,123	21,733	11,683	-	-	-	-	66,539
T&D		799,729	524,735	282,075	-	-	-	-	1,606,540
Fire		-	-	-	-	-	-	25,776	25,776
Meters		-	-	-	23,069	-	-	-	23,069
Services		-	-	-	-	-	23,069	-	23,069
Billing		-	-	-	-	212,823	-	-	212,823
Total Capital Costs excluding Treatment		2,265,113	546,469	293,758	23,069	212,823	23,069	25,776	3,390,076
		67%	16%	9%	1%	6%	1%	1%	100%
Revenue Allowance		254,733	-	-	-	-	-	-	254,733
Total Costs before Offsets	Total Non-Admin Costs	6,740,775	1,611,013	476,769	299,649	486,572	116,240	74,276	9,805,293
		69%	16%	5%	3%	5%	1%	1%	100%
OFFSETS									
Nonrate Revenues									
Sundry charges		66,654	20,498	3,524	5,325	5,271	1,794	934	104,000
WPC cost share on customer service		-	-	-	148,428	148,428	-	-	296,856
Middletown cost share on customer service		-	-	-	71,753	71,753	-	-	143,506
Rental of Property		69,325	21,319	3,665	5,539	5,482	1,866	971	108,167
Water Penalty		30,443	9,362	1,609	2,432	2,407	819	427	47,500
Miscellaneous		5,512	1,695	291	440	436	148	77	8,600
Investment Interest Income		2,500	769	132	200	198	67	35	3,900
Water Quality Protection Fees		22,500	-	-	-	-	-	-	22,500
Total Nonrate Revenues		196,934	53,642	9,222	234,118	233,975	4,695	2,444	735,029
Net Costs To Recover Through Rates		\$ 6,543,841	\$ 1,557,372	\$ 467,547	\$ 65,531	\$ 252,597	\$ 111,545	\$ 71,832	\$ 9,070,264

	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Non-Admin O&M Costs	\$ 4,220,929	\$ 1,064,545	\$ 183,010	\$ 276,580	\$ 273,749	\$ 93,171	\$ 48,500	\$ 6,160,484
Less: Chemicals								\$ -
Station One	\$ (354,210)							\$ (354,210)
Lawton Valley	\$ (169,977)							\$ (169,977)
Source Supply	\$ (72,735)							\$ (72,735)
Electricity								\$ -
Source Supply	\$ (162,297)							\$ (162,297)
Station One	\$ -	\$ -						\$ -
Lawton Valley	\$ -	\$ -						\$ -
Costs Adjusted	\$ 3,461,710	\$ 1,064,545	\$ 183,010	\$ 276,580	\$ 273,749	\$ 93,171	\$ 48,500	\$ 5,401,265
	64%	20%	3%	5%	5%	2%	1%	100%
	Base	Max Day	Max Hour	Metering	Billing	Services	Fire	Total \$ Allocated
Non-Administrative Labor								
Administration	185,087	56,918	9,785	14,788	14,637	4,982	2,593	288,789
Customer Service	0	0	0	128,413	116,547	36,776	0	281,735
Source of Supply - Island	297,800	0	0	0	0	0	0	297,800
Source of Supply - Mainland	32,881	0	0	0	0	0	0	32,881
Station One	319,446	209,602	0	0	0	0	0	529,049
Lawton Valley	312,828	205,259	0	0	0	0	0	518,087
Laboratory	107,108	0	0	0	0	0	0	107,108
Transmission/Distribution	244,651	160,526	86,292	0	0	0	0	491,468
Total	1,499,801	632,305	96,077	143,200	131,183	41,757	2,593	2,546,917
Percent	59%	25%	4%	6%	5%	2%	0%	100%

ALLOCATION PERCENTAGES		Commodity Charges						
		Base Charge	Retail		Navy	Portsmouth	Fire	Total % Allocated
Allocation Basis	Residential		Non-Residential					
Base	<i>Average annual demand</i>		41%	32%	9%	18%	0%	100%
Base Excluding PWFD			50%	40%	10%	0%	0%	100%
Base Excluding PWFD & 50% Navy			53%	42%	6%	0%	0%	100%
Water Quality Protection Fees			56%	44%	0%	0%	0%	100%
Total Base to Class			43%	34%	8%	15%	0%	100%
Max Day	<i>Estimated customer peaking factors</i>		28%	34%	5%	15%	18%	100%
Base Excluding PWFD			33%	40%	6%	0%	22%	100%
Max Day Excluding PWFD & 50% Navy			34%	41%	3%	0%	22%	100%
Total Max Day to Class			31%	38%	4%	7%	21%	100%
Max Hour	<i>Estimated customer peaking factors</i>		17%	25%	3%	8%	46%	100%
Base Excluding PWFD			19%	28%	4%	0%	50%	100%
Max Hour Excluding PWFD & 50% Navy			19%	28%	2%	0%	51%	100%
Total Max Hour to Class			19%	28%	2%	0%	51%	100%
Metering	<i>Direct Assignment</i>	100%						100%
Billing	<i>Direct Assignment</i>	100%						100%
Services	<i>Direct Assignment</i>	100%						100%
Fire	<i>Direct Assignment</i>						100%	100%
Treatment Plant Avg. Day	<i>Assured Capacity</i>		38%	30%	12%	21%		100%
Treatment Plant Max. Day	<i>Assured Capacity</i>		32%	32%	9%	19%	9%	100%

ALLOCATION RESULTS		Commodity Charges						
		Rate Year	Base Charge	Retail		Navy	Portsmouth	Fire
Residential	Commercial							
Base								
Base excluding T&D&WQPF & Pumping	5,389,059		2,201,466	1,745,596	462,981	979,016		5,389,059
Transmission & Distribution	1,291,675		680,518	539,599	71,558	-		1,291,675
Pumping	60,041		29,972	23,766	6,303	-		60,041
Water Quality Protection Fees	(22,500)		(12,549)	(9,951)	-	-		(22,500)
Revenue Offsets	(174,434)		(75,354)	(59,750)	(13,996)	(25,334)		(174,434)
Administrative Charges	1,425,513		615,809	488,290	114,375	207,039		1,425,513
Max Day								
Max Day Except T&D & Pumping	724,097		200,626	245,014	37,639	107,374	133,444	724,097
Transmission & Distribution	847,521		284,385	347,304	26,676	-	189,156	847,521
Pumping	39,395		12,816	15,651	2,404	-	8,524	39,395
Revenue Offsets	(53,642)		(16,576)	(20,244)	(2,222)	(3,575)	(11,025)	(53,642)
Administrative Charges	489,510		151,266	184,733	20,273	32,626	100,613	489,510
Max Hour								
Max Hr. Except T&D & Pumping	-		-	-	-	-	-	-
Transmission & Distribution	455,592		86,349	127,700	8,638	-	232,904	455,592
Pumping	21,177		3,939	5,825	788	-	10,625	21,177
Revenue Offsets	(9,222)		(1,746)	(2,583)	(182)	-	(4,710)	(9,222)
Administrative Charges	83,350		15,785	23,343	1,648	-	42,575	83,350
Metering	299,649	299,649	-	-	-	-	-	299,649
Revenue Offsets	(234,118)	(234,118)						(234,118)
Administrative Charges	117,839	117,839						117,839
Services	116,240	116,240						116,240
Revenue Offsets	(4,695)	(4,695)						(4,695)
Administrative Charges	37,740	37,740						37,740
Billing	486,572	486,572						486,572
Revenue Offsets	(233,975)	(233,975)						(233,975)
Administrative Charges	163,347	163,347						163,347
Fire	74,276						74,276	74,276
Revenue Offsets	(2,444)						(2,444)	(2,444)
Administrative Charges	13,315						13,315	13,315
Treatment Plant Capital Costs								
Treatment Plant Avg. Day	1,717,812		647,919	513,751	203,990	352,151		1,717,812
Treatment Plant Max. Day	1,127,128		360,579	355,499	98,271	211,336	101,441	1,127,128
Total To Recover through Rates	\$ 14,245,818	\$ 748,599	\$ 5,185,203	\$ 4,523,544	\$ 1,039,145	\$ 1,860,633	\$ 888,693	\$ 14,245,818

COST OF SERVICE PER UNIT

Description of Billing Units	Metering						Total
	(1)	(2)	(2)	(2)	(2)	(3)	
Percentage of Dollars Allocated	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	
Allocated Cost	\$ 183,370	\$ 5,185,203	\$ 4,523,544	\$ 1,039,145	\$ 1,860,633	\$ 803,546	\$ 14,245,818
Divided by: Number of Units	207,132	630,132	499,647	178,971	428,519	161,036	
Unit Cost of Service	\$0.8853	\$8.23	\$9.05	\$5.81	\$4.34	\$4.99	
	<i>per equiv per month</i>	<i>per 1000 gallons</i>	<i>per 1000 gallons</i>	<i>per 1000 gallons</i>	<i>per 1000 gallons</i>	<i>Equivalent connections</i>	

Description of Billing Units	Billing		Services		Hydrants	
	No. of bills per year	Equivalent Connections	No. of bills per year	Equivalent Connections	No. of Hydrants	Equivalent Connections
Percentage of Dollars Allocated	2.9%	1.0%	0.6%			
Allocated Cost	\$ 415,943	\$ 149,286	\$ 85,147			
Divided by: Number of Units	65,094	275,639	1,036			
Unit Cost of Service	\$6.3899	\$0.5416	\$82.1882			
	<i>per bill</i>	<i>per equiv</i>	<i>per Hydrant</i>			

(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'.

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

Allocation Basis	Used to allocate the following cost categories	Source Schedule	Base	Max Day	Max Hour	Metering	Billing	Services	Direct Fire Protection	Total % Allocated
Average Day Demand Patterns	<i>Supply, Laboratory</i>	N/A	100%							100%
Maximum Day Demand Patterns	<i>Treatment</i>	B-1	60%	40%	0%					100%
Maximum Hour Demand Patterns	<i>Pumping, Transmission/Distribution, Storage</i>	B-1	50%	33%	18%					100%
Fire Protection	<i>Public/Private Fire Protection Costs</i>	D-2							100%	100%
Non Admin less electricity & chemicals	<i>Administration Salaries, Wages, & Benefits</i>	B-1	64%	20%	3%	5%	5%	2%	1%	100%
Customer Service Salaries and Wages	<i>Customer Service Salaries, Wages, & Benefits</i>	B-4	0%	0%	0%	46%	41%	13%	0%	100%
Non-Administrative Wages & Salaries	<i>Administrative Labor Related</i>	B-1	59%	25%	4%	6%	5%	2%	0%	100%
Capital Costs	<i>Certain Legal and Administrative</i>	B-1	67%	16%	9%	1%	6%	1%	1%	0%
Total Non-Admin Costs before Offsets	<i>Certain Legal and Administrative</i>	B-1	69%	16%	5%	3%	5%	1%	1%	100%
Other Costs	<i>Administration Non-Salary Costs</i>	B-1	64%	20%	3%	5%	5%	2%	1%	100%
Treatment Plant Capital										

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

Administration 15-500-2200

Salaries by Staff Position

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

Resulting % Allocation of Administration Salaries, Wages, & Benefits

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

Customer Service 15-500-2209

Salaries by Staff Position

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

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

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

Treatment Plant Capital

	Base (Avg. Day)	Max Day	Total
Treatment Station 1	\$ 1,651,242	\$ 997,042	\$ 654,200
Treatment Lawton Valley	\$ 521,872	\$ 315,113	\$ 206,759
Treatment Both Plants	\$ 671,826	\$ 405,657	\$ 266,168
	\$ 2,844,940	\$ 1,717,812	\$ 1,127,128
			\$ 2,844,940

	Residential	Non-Residential	Navy	PWFD	Fire	Treatment Plant Capacity
Capacity Reserved for Avg. Day Demand (MGD) ¹	3.02	2.39	0.95	1.64	N/A	8
% of Avg. Day Treatment Capacity	37.7%	29.9%	11.9%	20.5%	N/A	100%
Capacity Reserved for Max. Day Demand (MGD) ¹	5.12	5.05	1.395	3.00	1.44	16
% of Max. Day Treatment Capacity	31.99%	31.54%	8.72%	18.75%	9.00%	100%

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

Newport Water Division
 Cost Of Service Analysis
 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 \$	20,846,331				100%						100%
LAWTON VALLEY \$	7,116,282		100%								100%
STATION 1 \$	22,516,441	100%									100%
TREATMENT BOTH \$	9,161,055			100%							100%
STORAGE \$	1,060,548				100%						100%
SOURCE OF SUPPLY \$	19,453,649	100%									100%
METERS/SERVICES \$	629,135							50%	50%		100%
T&D PUMPING \$	907,332					100%					100%
BILLING \$	2,902,066									100%	100%
FIRE \$	351,481						100%				100%
WORK IN PROGRESS \$	-	50%	50%								100%
Total \$	84,944,321										
LABORATORY \$	80,000	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
LAND AND ROW \$	3,594,491	23%	27%	8%	11%	26%	1%	0%	0%	3%	100%
\$	3,674,491										
Total Fixed Assets \$	88,618,812										

	Supply	Treatment Station 1	Treatment Lawton Valley	Treatment Both Plants	T&D	T&D Pump	Fire	Meters	Services	Billing	Total
TRANSMISSION/DISTRIBUTION \$	20,846,331	-	-	-	20,846,331	-	-	-	-	-	20,846,331
LAWTON VALLEY \$	7,116,282	-	7,116,282	-	-	-	-	-	-	-	7,116,282
STATION 1 \$	22,516,441	22,516,441	-	-	-	-	-	-	-	-	22,516,441
TREATMENT BOTH \$	9,161,055	-	-	9,161,055	-	-	-	-	-	-	9,161,055
STORAGE \$	1,060,548	-	-	-	1,060,548	-	-	-	-	-	1,060,548
SOURCE OF SUPPLY \$	19,453,649	19,453,649	-	-	-	-	-	-	-	-	19,453,649
METERS/SERVICES \$	629,135	-	-	-	-	-	-	314,568	314,568	-	629,135
T&D PUMPING \$	907,332	-	-	-	-	907,332	-	-	-	-	907,332
BILLING \$	2,902,066	-	-	-	-	-	-	-	-	2,902,066	2,902,066
FIRE \$	351,481	-	-	-	-	-	351,481	-	-	-	351,481
WORK IN PROGRESS \$	-	-	-	-	-	-	-	-	-	-	-
Total \$	84,944,321	19,453,649	22,516,441	7,116,282	21,906,879	907,332	351,481	314,568	314,568	2,902,066	84,944,321
		23%	27%	8%	11%	26%	1%	0%	0%	3%	
LABORATORY \$	80,000	80,000	-	-	-	-	-	-	-	-	80,000
LAND AND ROW \$	3,594,491	823,198	952,802	301,132	387,658	927,008	38,395	14,873	13,311	122,803	3,594,491
\$	3,674,491	903,198	952,802	301,132	387,658	927,008	38,395	14,873	13,311	122,803	3,674,491
		25%	26%	8%	11%	25%	1%	0%	0%	3%	
Total Allocated	\$ 20,356,847	\$ 23,469,243	\$ 7,417,413	\$ 9,548,713	\$ 22,833,887	\$ 945,727	\$ 366,354	\$ 327,879	\$ 327,879	\$ 3,024,870	\$ 88,618,812
% of Total Asset Value	23%	26%	8%	11%	26%	1%	0%	0%	0%	3%	

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

Functionalization of Capital Costs

		Supply	Treatment Station 1	Treatment Lawton Valley	Treatment Both Plants	T&D	T&D Pump	Fire	Meters	Services	Billing	
Capital Spending Restricted Account	\$ 2,500,000	23%	26%	8%	11%	26%	1%	0%	0%	0%	3%	100%
Debt Service	\$ 3,735,016	23%	26%	8%	11%	26%	1%	0%	0%	0%	3%	100%
	\$ 6,235,016											

		Supply	Treatment Station 1	Treatment Lawton Valley	Treatment Both Plants	T&D	T&D Pump	Fire	Meters	Services	Billing	Total
Capital Spending Restricted Account	\$ 2,500,000	\$ 574,281	\$ 662,084	\$ 209,251	\$ 269,376	\$ 644,160	\$ 26,680	\$ 10,335	\$ 9,250	\$ 9,250	\$ 85,334	\$ 2,500,000
Debt Service	\$ 3,735,016	\$ 857,980	\$ 989,158	\$ 312,622	\$ 402,450	\$ 962,380	\$ 39,860	\$ 15,441	\$ 13,819	\$ 13,819	\$ 127,489	\$ 3,735,016
	\$ 6,235,016	\$ 1,432,261	\$ 1,651,242	\$ 521,872	\$ 671,826	\$ 1,606,540	\$ 66,539	\$ 25,776	\$ 23,069	\$ 23,069	\$ 212,823	\$ 6,235,016

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	Annual Demand in 1000s Gallons										Baseline	Rate Year	
	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	3-Year Average	Docket 4243
Annual Demand by Class													
Residential	773,872	780,666	736,577	716,037	749,409	734,137	780,264	690,544	644,285	640,966	618,574	634,608	630,132
Commercial	580,798	583,184	663,766	573,711	493,539	456,486	505,014	519,521	457,376	502,475	472,437	477,429	499,647
Navy	307,051	348,222	511,299	417,869	373,306	278,441	247,728	225,392	173,790	137,731	222,858	178,126	178,971
Portsmouth	455,142	451,723	422,944	429,465	463,253	445,232	473,338	444,777	412,324	398,827	407,837	406,329	428,519
Total (in 1000's Gallons)	2,116,863	2,163,795	2,334,586	2,137,082	2,079,508	1,914,297	2,006,344	1,880,234	1,687,775	1,679,999	1,721,705	1,696,493	1,737,269
		2.2%	7.9%	-8.5%	-2.7%	-7.9%	4.8%	-6.3%	-10.2%	-0.5%	2.5%		

	Combined Station #1 and LV WTP Production Volumes in 1,000 gals						Peaking Comparison		
	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Production Peaks	System Peaks Estimated from Daily Demand Data	System Diversity Ratio (1)
Annual Production	2,456,363	2,524,784	2,437,440	2,440,630	2,304,024	2,165,686	2,234,855		
Average Day Production	6,730	6,917	6,678	6,687	6,312	5,933	6,123		
Maximum Month Production	256,796	269,819	280,875	254,088	268,468	256,324	262,396		
Maximum Day Production	10,165	10,724	12,100	9,800	10,163	10,118	10,140		
Max Day Date	6/28/2007	8/4/2007	7/18/2008	8/23/2010	7/23/2011	7/7/2012			
Maximum Day Peaking Factor	1.51	1.55	1.81	1.47	1.61	1.71	1.66	1.99	1.20
Max-Day to Avg. Day/Max-Month Ratio	1.19	1.23	1.34	1.20	1.17	1.22	1.20		
Maximum Hour	13,800	15,200	13,250	10,700	12,100	12,500	12,300.00		
Maximum Hour Peaking Factor	2.05	2.20	1.98	1.60	1.92	2.11	2.01	2.77	1.38
							Coincident Excluding Fire Protection	Noncoincident	

(1) Calculated according to AWWA M-1 Guidelines

Estimation of Each Customer Class' Peaking Factors

Customer Class	Max Day Demand	Max Hour Demand
	Factor From Daily Read Demand Study	Factor From Daily Read Demand Study
Residential	1.82	2.43
Commercial	2.26	3.39
Navy	1.73	2.31
Portsmouth	1.99	2.65
Fire (5)	1.99	2.77
Estimated Systemwide Peaks	1.99	2.77

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

Customer Class	Rate Year Demand (1,000 gallons)							Allocation of UAW for Demand Analysis
	Annual Demand	Average Daily Demand	Lost Water Adjustment	Adjusted Average Daily Demand	% Average Demand by Class	% Average Demand Ex PWFD & 50% Navy	% Average Demand Ex PWFD	
Residential	630,132	1,726	914	2,640	40.85%	53%	50%	53.7%
Commercial	499,647	1,369	724	2,093	32.39%	42%	40%	42.5%
Navy	178,971	490	65	555	8.59%	6%	10%	3.8%
Portsmouth	428,519	1,174	-	1,174	18.17%	0%	0%	
Fire					N/A	N/A	N/A	
Total, w Fire Prot.	1,737,269	4,760	26%	6,462	100%	100%	100%	
			(1)					
Production	2,358,811	6,462	26.35%					

Customer Class	Max Day Calculations				% of Daily Peaks			Max Hour Calculations			% of Hourly Peaks		
	Max Day Peaking Factor	Demand x Peaking Factor (3)	Incremental Peak Demand	% of Daily Peaks	With Full PWFD & Navy	Without PWFD & 50% Navy	Without PWFD	Max Hour Peaking Factor	Demand x Peaking Factor (3)	Incremental Peak Demand	With Full PWFD & Navy	Without PWFD & 50% Navy	Without PWFD
Residential	1.82	4,805	2,165	27.7%	27.7%	33.6%	32.5%	2.43	6,407	1,602	17.1%	19.0%	18.6%
Commercial	2.26	4,737	2,644	33.8%	33.8%	41.0%	39.7%	3.39	7,106	2,369	25.2%	28.0%	27.5%
Navy	1.73	961	406	5.2%	5.2%	3.1%	6.1%	2.31	1,282	320	3.4%	1.9%	3.7%
Portsmouth	1.99	2,333	1,159	14.8%	14.8%	0.0%	0.0%	2.65	3,110	778	8.3%	0.0%	0.0%
Fire	(2)	1,440	1,440	18.4%	18.4%	22.3%	21.6%		5,760	4,320	46.0%	51.1%	50.2%
Total, w Fire Prot.		14,276	7,814	100.0%	100.0%	100.0%	100.0%		23,665	9,388	100.0%	100.0%	100.0%
Total, without Fire Protection		12,836	6,374						17,905	5,068			

(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

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

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

BASE/EXTRA-CAPACITY DISTRIBUTION OF SYSTEM PEAKS

	Incremental Demand	% Distribution for Max Day	% Distribution for Max Hour
Base	6,123	60.4%	49.8%
Extra Capacity			
Max Day	4,017	39.6%	32.7%
Max Hour	2,160		17.6%
Fire Protection			
Max Day	-	0.0%	0.0%
Max Hour	-		0.0%
Total%		100.0%	100.0%
Total 1000's Gallons		10,140	12,300

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

FIRE PROTECTION ASSUMPTIONS

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

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

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

Billed Monthly
 Billed Quarterly
 Billed Annually

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

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

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

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

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

General Water Service

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

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

	Station #1			Lawton Valley			Combined	
	In Gallons	in 1000's		In Gallons	in 1000's		In Gallons	in 1000's
FY 07 JULY 2006 - JUNE 2007	1,176,356,210	1,176,356	Max. Month June	1,280,006,852	1,280,007	August	2,456,363,062	2,456,363
	116,724,700	116,725		140,288,300	140,288		256,795,580	256,796
FY 08 JULY 2007 - JUNE 2008	1,268,356,660	1,268,357	Max. Month August	1,256,427,700	1,256,428	July	2,524,784,360	2,524,784
	141,803,530	141,804		144,557,900	144,558		269,819,450	269,819
FY 09 JULY 2008 - JUNE 2009	1,152,697,400	1,152,697	Max. Month March	1,284,742,500	1,284,743	July	2,437,439,900	2,437,440
	110,288,000	110,288		177,163,200	177,163		280,874,500	280,875
FY 10 JULY 2009 - JUNE 2010	1,333,422,150	1,333,422	Max. Month October	1,107,207,665	1,107,208	August 2009	2,440,629,815	2,440,630
	121,112,610	121,113		139,731,200	139,731		254,088,090	254,088
FY 11 JULY 2010 - JUNE 2011	1,242,460,000	1,242,460	Max. Month July	1,061,564,200	1,061,564	August 2010	2,304,024,200	2,304,024
	136,103,000	136,103		133,325,700	133,326		268,467,600	268,468
FY 12 JULY 2011 - JUNE 2012	981,876,000	981,876	Max. Month July	1,183,810,000	1,183,810	July	2,165,685,750	2,165,686
	110,561,700	110,562		145,762,000	145,762		256,323,700	256,324

MAX DAY PRODUCTION AVAILABLE FOR SALE

	Station #1		Date	Lawton Valley		Date	Combined	
	In Gallons	in 1000's		In Gallons	in 1000's		In Gallons	in 1000's
FY 07 JULY 2006 - JUNE 2007	5,114,940	5,115	8/2/2006	5,958,100	5,958	8/14/2006	10,165,100	10,165
	includes booster to LV at 1,256,000 Gallons							
FY 08 JULY 2007 - JUNE 2008	6,179,670	6,180	8/25/2007	6,805,400	6,805	6/10/2008	10,723,620	10,724
	includes booster to LV at 2,251,000 Gallons							
FY 09 JULY 2008 - JUNE 2009	4,341,000	4,341	7/20/2008	7,845,700	7,846	7/18/2008	12,100,100	12,100
	includes booster to LV at 324,000 Gallons							
FY 10 JULY 2009 - JUNE 2010	4,664,000	4,664	10/10/2009	6,168,500	6,169	8/27/2009	9,800,400	9,800
FY 11 JULY 2010 - JUNE 2011	5,729,355	5,729	7/4/2011	5,654,800	5,655	8/3/2011	10,162,555	10,163
FY 12 JULY 2011 - JUNE 2012	4,624,292	4,624	7/6/2012	5,869,900	5,870	7/7/2012	10,118,190	10,118

PEAK HOURLY FLOW

	Date	Station #1		Date	Lawton Valley	
FY 07 JULY 2006 - JUNE 2007	7/6/2006	5.8	MGD	7/1/2006	8.0	MGD
FY 08 JULY 2007 - JUNE 2008	8/26/2007	7.2	MGD	6/18/2008	8.0	MGD
FY 09 JULY 2008 - JUNE 2009	7/18/2008	5.25	MGD	7/18/2008	8.0	MGD
FY 10 JULY 2009 - JUNE 2010	9/2/2009	4.70	MGD	9/2/2009	6.0	MGD
FY 11 JULY 2010 - JUNE 2011	10/15/2010	6.10	MGD	10/15/2010	6.0	MGD
FY 12 JULY 2011 - JUNE 2012	7/5/2011	6.50	MGD	7/7/2011	6.0	MGD

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

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

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

Pumping Labor and Benefits

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

Pumping Repairs and Supplies

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

Pumping Electricity

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

Total Pumping Costs

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

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

FY 2012												
July	August	September	October	November	December	January	February	March	April	May	June	
Debt Service Account												
Beginning Cash Balance	\$ 1,989,949	\$ 1,989,964	\$ 2,325,118	\$ 1,789,176	\$ 1,952,744	\$ 1,555,935	\$ 1,688,396	\$ 1,820,952	\$ 1,953,399	\$ 1,795,553	\$ 1,928,001	\$ 2,042,962
Additions												
From Rates		\$335,137	\$167,569	\$167,569	\$167,569	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447
Interest Income	15	17	18	14	15	14	108	-	-	-	-	-
Total Additions	\$ 15	\$ 335,154	\$ 167,587	\$ 167,583	\$ 167,584	\$ 132,461	\$ 132,556	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447
Deductions												
Existing Debt Service			703,529	4,015	564,393			-	290,293		17,486	400
Proposed Debt Service												
Total Deductions	\$ -	\$ -	\$ 703,529	\$ 4,015	\$ 564,393	\$ -	\$ -	\$ -	\$ 290,293	\$ -	\$ 17,486	\$ 400
Ending Cash Balance	\$ 1,989,964	\$ 2,325,118	\$ 1,789,176	\$ 1,952,744	\$ 1,555,935	\$ 1,688,396	\$ 1,820,952	\$ 1,953,399	\$ 1,795,553	\$ 1,928,001	\$ 2,042,962	\$ 2,175,010

Annual Contribution From Rates
\$1,764,974

Annual Debt Service Payments
\$ 1,580,115

FY 2013												
July	August	September	October	November	December	January	February	March	April	May	June	
Debt Service Account												
% increase in DS Alolowance	135%											
Beginning Cash Balance	\$ 2,175,010	\$ 2,307,457	\$ 2,439,904	\$ 1,334,238	\$ 1,466,685	\$ 1,599,133	\$ 1,731,580	\$ 1,864,027	\$ 1,996,475	\$ 1,426,606	\$ 1,737,857	\$ 2,049,109
Additions												
From Rates	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$132,447	\$311,251	\$311,251	\$311,251
Interest Income	-	-	-	-	-	-	-	-	-	-	-	-
Total Additions	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 132,447	\$ 311,251	\$ 311,251	\$ 311,251
Deductions												
Existing Debt Service			1,238,114					702,316				
Proposed Debt Service												
Total Deductions	\$ -	\$ -	\$ 1,238,114	\$ -	\$ -	\$ -	\$ -	\$ 702,316	\$ -	\$ -	\$ -	\$ -
Ending Cash Balance	\$ 2,307,457	\$ 2,439,904	\$ 1,334,238	\$ 1,466,685	\$ 1,599,133	\$ 1,731,580	\$ 1,864,027	\$ 1,996,475	\$ 1,426,606	\$ 1,737,857	\$ 2,049,109	\$ 2,360,360

Annual Contribution From Rates
\$2,125,780

Annual Debt Service
\$ 1,940,430

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

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

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

Annual Contribution From Rates
\$3,735,016

Annual Debt Service
\$ 3,545,793

FY 2015												
	July	August	September	October	November	December	January	February	March	April	May	June
% increase in DS Alolowance	110%											
Debt Service Account												
Beginning Cash Balance	\$ 2,549,583	\$ 3,203,226	\$ 3,856,871	\$ 17,644	\$ 671,286	\$ 1,324,929	\$ 1,978,570	\$ 2,632,306	\$ 3,285,949	\$ 2,227,319	\$ 2,880,962	\$ 3,534,605
Additions												
From Rates	\$653,628	\$653,628	\$653,628	\$653,628	\$653,628	\$653,628	\$653,628	\$653,628	\$653,628	\$653,628	\$653,628	\$653,628
Interest Income	15	17	18	14	15	14	108	15	15	15	15	15
Total Additions	\$ 653,643	\$ 653,645	\$ 653,646	\$ 653,642	\$ 653,643	\$ 653,641	\$ 653,736	\$ 653,643	\$ 653,643	\$ 653,643	\$ 653,643	\$ 653,643
Deductions												
Existing Debt Service												
Proposed Debt Service (\$31 M Loan)												
Total Deductions	\$ -	\$ -	\$ 4,492,873	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,712,273	\$ -	\$ -	\$ -
Ending Cash Balance	\$ 3,203,226	\$ 3,856,871	\$ 17,644	\$ 671,286	\$ 1,324,929	\$ 1,978,570	\$ 2,632,306	\$ 3,285,949	\$ 2,227,319	\$ 2,880,962	\$ 3,534,605	\$ 4,188,248

Annual Contribution From Rates
\$7,843,534

Annual Debt Service
\$ 6,205,146

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

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

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

Summer 2011

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

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

2 - Class maximum day from daily read data

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

Maximum Hour Demand Factor Calculation

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

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

3- MH/MD Ratio Assumptions:

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

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

Summer 2012

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

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

2 - Class maximum day from daily read data

Max Day Diversity Factor Calculation

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

Maximum Hour Demand Factor Calculation

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

Max Hour Diversity Factor Calculation

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

3- MH/MD Ratio Assumptions:

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