

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION

IN RE: CITY OF NEWPORT WATER :
DIVISION APPLICATION TO : DOCKET NO. 4355
CHANGE RATE SCHEDULES :
(RATE DESIGN) :

REPORT AND ORDER

I. Background

In Docket No. 2985 which was filed in 1999, the Public Utilities Commission (“Commission”) ordered the City of Newport, Water Division (“Newport Water”) to prepare a Cost of Service Study. In its Order in Docket No. 3818, the Commission noted that Newport Water had not yet completed such a study. Therefore, the Commission directed Newport Water to file the results of its Cost of Service Study by September 1, 2009. In Docket No. 4128, this deadline was extended to November 1, 2009.

On November 2, 2009, The City of Newport Utilities Department, Water Division (“Newport Water”) filed an Application to Change Rate Schedules with the Public Utilities Commission (“Commission”). In that filing, Newport Water was seeking to change rates based on a Cost of Service Study it had completed using demand data collected during the summer of 2009. Newport Water was not seeking an increase in its operating revenue. The parties to Docket No. 4128 ultimately entered into a Settlement Agreement whereby Newport Water’s proposed rate design was rejected and the parties agreed to a methodology for collecting demand data and designing the rates. The Commission approved the Settlement on June 17, 2010. Demand data was collected during the summers of 2010 and 2011 pursuant to the Settlement.

On September 7, 2012, Newport Water filed with the Commission an Application to Change Rates in order to implement the results of the demand study into the previously agreed-upon cost of service model. Newport Water was not proposing to increase operating revenues from what was previously approved in Docket No. 4243, Newport Water's most recent General Rate Filing.¹ The Commission suspended the filing on September 26, 2012.² Portsmouth Water and Fire District ("PWFD"), Newport Water's largest wholesale customer, and the United States Navy ("Navy") were granted intervenor status.

II. Summary of Filings

A. Newport Water's Filings

In support of its filing, Newport Water submitted Pre-Filed Direct Testimony, Pre-Filed Rebuttal Testimony, and two sets of Supplemental Rebuttal Testimony of Harold J. Smith, its consultant. In his Direct Testimony, Mr. Smith provided a history of the development of the Cost of Service Model developed in Docket No. 4128 and a summary of the demand study undertaken by Newport Water during the summers of 2010 and 2011. He testified that the 2011 data was in compliance with the Docket No. 4128 Settlement. He also testified that Newport Water continued collecting demand data during the summer of 2012 and if it was in compliance, that data could be used in developing the demand factors.³ Mr. Smith subsequently updated his schedules to reflect the 2012 Demand Study.⁴

¹ Newport Water is currently under a multi-year rate plan for purposes of debt service payments. Because of the timing of this filing and Newport Water's debt service schedule, the rates would increase simultaneously with the new rate design. *See Order No. 21024* (issued 5/1/13) approving the second step revenue increase in the multi-year rate plan for effect on usage on and after May 1, 2013.

² September 26, 2012 Open Meeting Minutes.

³ Newport Water Exhibit 1A (Pre-Filed Testimony of Harold Smith) at 1-14.

⁴ Newport Water Exhibit 2 (Supplemental Pre-Filed Testimony of Harold Smith with Models).

Mr. Smith summarized the allocation of the O&M costs based on the Base/Extra Capacity methodology and asserted that his allocations were consistent with the Docket No. 4128 Settlement.⁵ However, addressing the allocation of capital costs to the appropriate cost categories, Mr. Smith noted that in the area of treatment costs, Newport Water was proposing a departure from the approach used in the Docket No. 4128 Settlement. Rather than using each class' actual historical demands, Newport Water proposed allocating treatment capital costs based on each class' projected demands. According to Mr. Smith, because the new water treatment plant was designed to meet the projected future loads of all Newport Water customers, including PWFD and the Navy, it is more fair to allocate the associated costs based on those projected loads.⁶ Finally, Mr. Smith summarized the methodology he used to allocate the Base/Extra Capacity cost categories to class specific Commodity, Base and Fire Protection Charges and the subsequent calculation of rates and charges.⁷

Despite concerns raised by the parties, as noted below, in its Rebuttal and Supplemental Rebuttal, Newport Water continued to maintain its position regarding the allocation of capital costs. Further, responding to concerns regarding Newport Water's asset listing, Mr. Smith argued that Newport Water had provided the information available and further, that he had appropriately developed an Original Cost Factor for the remaining Transmission and Distribution Pipes. Finally, Mr. Smith explained that while he believed Newport Water should shift the value associated with the Remote Reading Installation Program from Billing to Meters and Services, he disagreed with PWFD's

⁵ Newport Water Exhibit 1A at 15-22.

⁶ *Id.* at 22-24.

⁷ *Id.* at 25-28.

position that the overall fixed asset value should be increased by approximately \$2.4 million for service pipes.⁸

B. PWFD's Filings

Raising certain issues of concern, PWFD submitted the Pre-Filed Testimony, Surrebuttal Testimony and Supplemental Testimony of Christopher P.N. Woodcock, its consultant. In his Pre-Filed Testimony, after agreeing that using the updated 2012 demand data was appropriate, Mr. Woodcock raised the following issues: (1) Newport Water's change to the allocation of capital costs is inappropriate because it only applies to one bond issuance and has the effect of increasing costs for PWFD and the Navy while lowering them for Newport Water; (2) Newport Water's cost of service model contained errors; (3) the inputs in the Water Production Peaking Analysis does not use consistent periods; and (4) Newport Water's asset list is incomplete and therefore calls into question the validity of the allocation of more than 40% of Newport Water's costs.⁹

In his Surrebuttal and Supplemental Surrebuttal Testimony, Mr. Woodcock continued to maintain that it is inappropriate to change the allocation of capital costs and he continued to question the validity of the asset list based on an absence of a valuation for service pipes and the absence of information for Transmission and Distribution pipes prior to 1975.¹⁰ He also continued to express concern that "there is an inconsistency between using costs that are prospective...production and sales data from another period and customer demand data from still another period."¹¹ Mr. Woodcock ultimately proposed the Commission delay implementation of the cost of service study until

⁸ Newport Water Exhibit 3 (Rebuttal Testimony of Harold Smith) and Exhibit 5 (Supplemental Rebuttal Testimony of Harold Smith).

⁹ PWFD Exhibit 1 (Pre-Filed Testimony of Christopher P.N. Woodcock) at 5-9.

¹⁰ PWFD Exhibit 3 (Supplemental Surrebuttal testimony of Christopher P.N. Woodcock) at 2-9.

¹¹ PWFD Exhibit 2 (Surrebuttal Testimony of Christopher P.N. Woodcock) at 3.

Newport Water updated its asset list. In the alternative, Mr. Woodcock suggested the Commission use an asset listing that included some value for the service pipes based on the value listed in Newport Water's 2005 Annual Report.¹²

C. Navy's Filings

The Navy submitted the Direct Testimony and Surrebuttal Testimony of Brian C. Collins, its consultant. In his Direct Testimony, Mr. Collins recommended removing the usage associated with the Navy's hydrant flushing program from the determination of the Navy's max demand and recommended the Commission reject Newport Water's change to the allocation of capital costs.¹³ With regard to the calculation of the parties' demand factors, Mr. Collins noted that Newport Water utilized the Navy's usage of 1,213,663 on September 25, 2012 as its maximum day usage. He argued that it is inappropriate to use the day when the Navy flushed its hydrants because it is not indicative of the Navy's cost of service during the peak demand period. He stated that he was under the impression that the Navy had notified Newport Water of its intention to flush the system prior to the flushing and that Newport Water should have advised them to wait until the demand study was completed. He testified that the Navy would be willing to coordinate with Newport Water in the future to conduct its flushing operations outside of the peak period. The impact of his recommendation would be to reduce the Navy's 2012 maximum day demand factor from 1.97 to 1.26 and to lower the Navy's annual cost of service by \$40,628.¹⁴ Next, similar to Mr. Woodcock, Mr. Collins argued that it was inappropriate

¹² PWFD Exhibit 2 (Surrebuttal Testimony of Christopher P.N. Woodcock) and Exhibit 3 (Supplemental Surrebuttal Testimony of Christopher P.N. Woodcock) at 5-6.

¹³ Navy Exhibit 1 (Direct Testimony of Brian C. Collins) at 2, 11.

¹⁴ *Id.* at 3-9.

for Newport Water to depart from the agreed allocation of capital costs in the cost of service study.¹⁵

In his Surrebuttal Testimony, Mr. Collins continued to advocate against Newport Water's proposed allocation of treatment capital costs based on forecasted demands of each class. According to Mr. Collins, "all classes should be allocated the costs of any excess capacity, and pay for this excess capacity in Newport Water's rates." According to Mr. Collins, this will be achieved by utilizing each class's historical base and maximum day usage characteristics. Utilizing forecasted demands, according to Mr. Collins, would create inappropriate interclass subsidies.¹⁶ Additionally, Mr. Collins reiterated his prior Pre-Filed Testimony as it related to the Demand Study, specifically that (1) hydrant flushing is a customer controlled behavior that is not indicative of normal usage during the peak period; (2) the Navy will commit to conduct future flushing outside of the peak period; and (3) because of this commitment, the Navy will pay more than its cost of service if the rates are set based on the date of the 2012 flushing.¹⁷

D. Division's Filings

The Division of Public Utilities and Carriers ("Division") submitted the Direct Testimony, Surrebuttal Testimony and Supplemental Surrebuttal Testimony of Jerome D. Mierzwa, its consultant. In his Direct Testimony, Mr. Mierzwa disagreed with Newport's proposed allocation of treatment capital costs and provided corrections to Mr. Smith's schedules to correct cell references, to use the customer account data that had been

¹⁵ *Id.* at 9-11.

¹⁶ Navy Exhibit 2 (Surrebuttal Testimony of Brian C. Collins) at 3-4.

¹⁷ *Id.* at 5-6.

approved in Docket No. 4243, and to modify certain line items to reflect an average of FY 2008 – FY 2010.¹⁸

In his Surrebuttal Testimony, Mr. Mierzwa noted that in his Rebuttal Testimony, in response to Mr. Woodcock’s Direct Testimony, Mr. Smith had proposed determining the production demand factors used in the cost of service study based on an average of the FY 2011 and FY 2012 production volumes. Mr. Mierzwa agreed with this approach.¹⁹ However, Mr. Mierzwa still did not agree with Newport Water’s proposed change to the allocation of capital costs. He recommended that any such change be deferred for future review to better coincide with the in-service date of the Water Treatment Plant projects.²⁰

In his Supplemental Surrebuttal Testimony, Mr. Mierzwa addressed the dispute over the asset listing, that Newport Water “has not adequately demonstrated that it has reflected the appropriate level of services investment in its asset valuation” nor has PWFD “demonstrated that no portion of the \$2.42 million in service investment is already included in Newport’s asset valuation.”²¹ Therefore, Mr. Mierzwa recommended a compromise: “[t]he Division recommends that Newport [Water’s] asset valuation, adjusted to reflect 50 percent of PWFD’s proposed adjustment to service pipe investment and actual post-1976 T&D investment be used to set rates in this proceeding.”²²

III. Settlement

On March 28, 2013, Newport Water submitted a Settlement Agreement (“Settlement”) between itself, the Division, PWFD and (“Settling Parties”) for

¹⁸ Division Exhibit 1 (Pre-Filed Testimony of Jerome Mierzwa) at 6-9.

¹⁹ Division Exhibit 2 (Surrebuttal Testimony of Jerome Mierzwa) at 3-4.

²⁰ *Id.* at 4-6.

²¹ Division Exhibit 3 (Supplemental Surrebuttal Testimony of Jerome Mierzwa) at 3.

²² *Id.* at 6.

Commission review and approval.²³ The Navy did not sign on to the Settlement due to a dispute regarding the appropriate Max Day for the purposes of calculating the Navy's 2012 demand factors. The Settlement recognized the revenue requirement approved by the Commission in Order No. 21024 and the Schedules attached to the Settlement reflected that revenue requirement.²⁴ The Settling Parties agreed to use the Legal and Administrative expenses from the Docket No. 4243 Settlement Agreement in the Settlement before the Commission in the instant docket.²⁵

Addressing the fixed asset value in dispute, the Settlement incorporated a fixed asset value that was the result of a compromise and was intended for use only in this docket. According to the Settlement, the Settling Parties continued to disagree on: (1) the value of Transmission and Distribution ("T&D") pipes installed between 1976 and 2006, and (2) the value for meters and services. The Settling Parties agreed to use the original asset values for T&D pipes installed between 1976 and 2006 that Newport Water provided as part of its response to PWF's Data Request 1-7 and also reached a compromise on the value for meters and services.²⁶ The Settling Parties agreed that this agreement was only for this case and that they could maintain or support different values in the next docket. "The [Settling] Parties neither agree[d], acknowledge[d] nor assert[ed] that the fixed asset values used in this docket are accurate, but they [did] agree that they represent a fair and reasonable compromise given the information available in this docket."²⁷ Newport Water agreed to include an updated schedule of fixed asset values in its next general rate filing. The Settling Parties agreed to cooperate prior to the

²³ A copy of the Settlement is marked as Exhibit A and attached hereto.

²⁴ Settlement at 3.

²⁵ *Id.* at 4.

²⁶ *Id.* at 3-4.

²⁷ *Id.* at 4.

next general rate filing to attempt to reach agreement on the schedule of fixed asset values.²⁸

Addressing the allocation of capital costs associated with water treatment, noting that Newport Water’s initial proposal to use projected demand of each customer class rather than historical actual demands was a departure from the cost allocation model approved by the Commission in Docket No. 4128, Newport Water withdrew its request for this case, but reserved the right to request such an allocation in a future rate filing. “Specifically, Newport reserve[d] the right to request an allocation of treatment capital costs based on the projected demands of its customer classes when it begins paying principal and interest on the \$53,100,000 Rhode Island Clean Water Finance Agency loan to finance the design and construction of a new Lawton Valley Water Treatment Plant and improvements to the Station One Water Treatment Facility. Portsmouth also expressly reserve[d] the right to maintain that the allocation of treatment capital costs should continue to be based on the historical consumption of the parties.”²⁹

The Settling Parties agreed to incorporate the Navy’s maximum usage day (“Max Day”) of 1,213,663 gallons of water on September 25, 2012 for the purpose of calculating the Navy’s 2012 demand factors. However, the Settlement set forth the Navy’s position that its Max Day for calculating its 2012 demand factors should be 777,210 gallons, consumed on August 7, 2012. The Settling Parties agreed to abide by the Commission’s determination of the issue.³⁰

²⁸ *Id.*

²⁹ *Id.* at 5.

³⁰ *Id.* at 5-6.

IV. Hearing

Following notice, a public hearing was held at the Commission's offices, 89 Jefferson Boulevard, Warwick, Rhode Island, on April 2, 2013, to assess the propriety of the Settlement. The following appearances were entered:

FOR NEWPORT WATER:	Joseph Keough, Jr., Esq.
FOR NAVY:	Elen Evans, Esq.
FOR PWFD:	Gerald J. Petros, Esq.
FOR DIVISION:	Karen Lyons, Esq. Special Assistant Attorney General
FOR COMMISSION:	Cynthia G. Wilson-Frias, Esq. Senior Legal Counsel

The Settling Parties presented Messers. Smith, Woodcock and Mierzwa in support of the Settlement. On cross-examination, Mr. Smith did not agree that PWFD's flushing of its system was not included in the 2012 demand study. He stated that any flushing that PWFD conducted would have been used in the demand study. Mr. Woodcock noted that Newport Water had daily reads from PWFD for the entire twelve-month period and that its peak demand was in July. Mr. Smith confirmed that the max day used for PWFD was their max day for the entire year. Mr. Smith argued that for purposes of determining a max day, it should not matter when flushing occurs because if the flushing caused a max consumption day, then that is, in reality, the Navy's maximum consumption day and accordingly, it should be included in the calculation.³¹ He stated that if PWFD's

³¹ Tr. 4/2/13 at 10-22, 28.

“flushing occurred in October, then I would assume that their flushing did not cause their peak because their peak did not occur in October.”³²

Mr. Woodcock argued that utilizing the Navy’s maximum consumption day of September 25, 2012 treats the Navy the same way as it treats PWFD and to exclude the day would be unfair. He testified that if PWFD’s flushing had caused its max day, it would have been included. Therefore, according to Mr. Woodcock, “if you removed the maximum day for one of them, in your example, the Navy, they would not have been treated similarly.”³³ Mr. Woodcock later stated that flushing does not necessarily cause a maximum day. In PWFD’s case, its flushing was performed outside of the June through September timeframe, was recorded as part of the daily reads, and did not cause their max day which was in July.³⁴

Recollecting that the Navy had signed onto the Settlement in Docket No. 4128, setting forth the terms of the Demand Study, Mr. Smith agreed that the Navy was given actual notice that the Demand Study would occur through September in 2011 and Mr. Smith further advised that the Navy was on notice that the Demand Study would continue during the same period in 2012. He stated that despite the fact that Newport was able to take daily reads from most Navy meters through electronic technology, it only did so during the Demand Study period. Therefore, Mr. Smith stated that Newport could have had a greater max day than appeared during the Demand Study period.³⁵

Quantifying the monetary difference between the positions, the impact of using the max day in the two year average as proposed by the Settling Parties is an increase on

³² *Id.* at 29.

³³ *Id.* at 22.

³⁴ *Id.* at 57. It appears that PWFD did not conduct flushing of its entire system on one day, but over the course of six days. *Id.* at 21.

³⁵ *Id.* at 31, 33-34.

residential customers' quarterly bills of \$19.87 as opposed to \$20.32 under the Navy's proposal. The impact on PWFD's average monthly bill under the Settlement is \$44,147 or a 36.9 percent increase versus \$44,907 or a 37.5 percent increase under the Navy's proposal. The impact of the Settlement on the Navy using a 20 million gallon level of consumption would be a monthly increase of \$29,131 or 36.8 percent versus an increase of \$21,145 or 26.7 percent under the Navy's proposal.³⁶

Mr. Woodcock and Mr. Mierzwa testified that the common practice in the case of water is to use non-coincident peaks as agreed in Docket No. 4128. They explained that unlike electricity where coincident peaks are very important, because water can be stored, a customer can be provided peaking service outside of the system peak. Mr. Mierzwa elaborated that "Newport [Water] has to meet the peak demands and there are mains in place to meet the Navy's peak demands and those pipes were installed to serve the Navy to meet their peak demands regardless of when it occurs, so just because it's not coincident, those pipes still have to be there."³⁷ Mr. Woodcock maintained that it should be irrelevant whether the flushing caused the max day because the pipes, pumps, and storage tanks had to be able to deliver that large quantity of water at that point in time.³⁸

Turning to the continuing disagreement regarding the asset listing, Mr. Woodcock confirmed that for the pre-1976 Transmission and Distribution pipes, PWFD had accepted the valuation based on a formula set forth in the Handy-Whitman Index. Mr. Mierzwa confirmed that the Division had also accepted these values.³⁹ With regard to the

³⁶ *Id.* at 37-38. The 2011 max day was 630,462 gallons where flushing did not occur during the Demand Study whereas the 2012 max day was 1,213,663 gallons. *Id.* at 40, 72.

³⁷ *Id.* at 47.

³⁸ *Id.* at 56. The parties agreed that unlike flushing, a water main break, excluded from the demand study, was out of the control of the Navy. *Id.* at 12-13. The parties agreed that flushing is a normal activity within the control of the Navy. *Id.* at 12-13, 80, 96.

³⁹ *Id.* at 48. See Newport Water Exhibit 5 (Supplemental Rebuttal Testimony) at 10.

value of the service pipes, Mr. Mierzwa noted that the issue represented half of two percent of the costs included in the cost of service study and therefore, he had characterized the issue as fairly minor. Mr. Woodcock disagreed that the issue was a minor one, and contended that the impact could be as high as four percent of the costs. However, based on the information available to the parties, Mr. Woodcock agreed that using half of the values as stated by Newport Water and PWFDD was a reasonable compromise for this case.⁴⁰ With regard to the requirement that Newport Water provide an updated schedule of fixed assets with its next general rate filing, the witnesses for the Settling Parties believed that they could meet productively to attempt to reach agreement before that filing. Mr. Smith noted that he had already been in contact with Newport Water staff to start the process.⁴¹

The Navy presented Mr. Collins for cross-examination. Mr. Collins calculated the impact of the max day used in the Settlement cost of service model to have a \$72,000 impact on the Navy. He further testified that utilization of a two-year average for unaccounted for water versus a three-year average would have an additional \$25,000 impact.⁴² He maintained that removing the day flushing from the demand study would be consistent with the fact that Newport Water, for which daily data was collected during the same time frame, conducted its flushing outside of the Demand Study period.⁴³ Mr. Collins agreed that it appeared the Navy chose to conduct its flushing a few days after it believed the Demand Study would be completed for 2012.⁴⁴ He also agreed that it was

⁴⁰ *Id.* at 48-51.

⁴¹ *Id.* at 51-52.

⁴² *Id.* at 65-68.

⁴³ *Id.* at 73-74.

⁴⁴ *Id.* at 78-79. Mr. Collins agreed that after the first year of the Demand Study (2010), “the literal reading of” the Docket No. 4128 Settlement stated that the daily reads would continue through September. *Id.* at 98.

the Navy's sole choice to conduct flushing on September 25, 2012.⁴⁵ He was unable to specifically quantify the number of gallons used for flushing on that date versus what would have been that day's usage absent the flushing.⁴⁶ Finally, Mr. Collins conceded that while it was the Navy's contention that the flushing caused the max day demand, there was a possibility that the max day could have occurred at some other point in time and still not be captured by the Demand Study.⁴⁷

V. Commission Findings

On April 23, 2013, at an Open Meeting, after consideration of the Settlement and evidence presented, the Commission unanimously approved the Settlement finding it reasonable to utilize the Navy's max day demand which occurred on September 25, 2012. The Commission also finds that where the information contained in the cost of service model is based on two-year averages, it is reasonable and consistent to use a two-year average for unaccounted for water.

Setting rates based on an accurate cost of service study has been a consistent goal of this Commission.⁴⁸ As the Commission noted in its Order in Docket No. 4128, "its research has shown that it does not appear Newport Water has ever conducted a cost of service study that has been accepted by the Commission."⁴⁹ Therefore, this is an important case for the ratepayers of Newport Water who can now have confidence that

⁴⁵ *Id.* at 78, 80.

⁴⁶ *Id.* at 91-92.

⁴⁷ *Id.* at 100.

⁴⁸ *See Order No. 17820*, In re Pascoag Utility District General Rate Filing (issued May 5, 2004) at 21, The Commission, in transitioning rates toward their cost of service, stated that "the Commission's goal all along has been to match the cost of service to the user of the service...[and] that philosophically, the Commission should be moving toward bringing the rates close to the cost of service." *See also Order No. 18364* In re: Block Island Power Company General Rate Filing), at 18, quoting Order No. 17820. *See also Order No. 17344*, In re: Providence Water General Rate Filing (issued January 23, 2003) at 24, stating, "In Commission *Order No. 16552* (moving hydrant rate classes closer to their respective cost of service) *See generally, Order No. 20782* In re: United Water General Rate Filing (issued August 1, 2012) (accepting the rate design proposal which transitioned rates closer to their actual cost of service).

⁴⁹ *Order No. 20181* (issued 10/25/10).

the rates they are paying are fair compared to the rates paid by other classes of customers. While there is still some question regarding the value of service pipes, the parties made significant progress in moving Newport Water toward accurate cost based rates and should continue to make more progress in the next General Rate Filing as the asset list becomes more accurate. As Mr. Mierzwa stated in his Supplemental Surrebuttal Testimony, “[t]he rates resulting from adoption of the Division’s recommendations in this proceeding will clearly be closer to cost based rates than Newport [Water’s] current rates which have no cost of service study basis.”⁵⁰

With regard to the results of the Demand Study and associated daily meter reads, the Demand Study was an integral part of this cost of service filing. A review of the Order in Docket No. 4128 shows that just prior to Settlement, “[d]espite the fact that [during that proceeding,] Mr. Smith made most of the parties’ proposed adjustments to his allocation model, the demand study remained a primary source of disagreement between the parties.”⁵¹ The Settlement that was ultimately approved by the Commission in Docket No. 4128 was very specific in its terms.⁵² At the hearing in Docket No. 4128, Mr. Smith explained that the use of daily meter reads is fairly unusual, but that he expects that with advancing technology, the expectation in the future will be for more frequent reads. He indicated that the results should produce more accurate cost allocations than in the past.⁵³

The results of the 2012 daily read data used in the cost of service model captured a higher max day usage for the Navy than past reads during the Demand Study months.

⁵⁰ Division Exhibit 3 at 6.

⁵¹ *Order No 20181*, at 3, *citing*, PWFD Exhibit 3 at 2, 12-16; Navy Exhibit 2 at 2-5; Division Exhibit 2 at 4.

⁵² *Order No. 20181*, at 3-7.

⁵³ *Order No.20181*, at 10, n.28, *citing*, Docket No. 4128, Tr. 6/8/10 at 94-95.

This is apparently because the Navy chose to conduct its system-wide flushing on a single day in September 2012 when Newport Water was still conducting daily reads of the Navy's meters. The Navy argues that this activity, which is indisputably a normal part of operations for a water utility and which was undertaken voluntarily by the Navy on September 25, 2012, should be excluded from the consumption data used to determine the Navy's max day. The Navy's witness characterized the flushing date as an outlier and the Navy committed to flush outside of the June through September time period in the future.

Newport Water and PWFD argued that the cause of the max day consumption does not matter because the system needs to be sized to accommodate that consumption and further, because it was the Navy's voluntary act, it should be recognized for purposes of the cost of service study. After a review of the Record, the Commission can find no reason why the Navy's consumption on September 25, 2012 should not be used as its max day consumption. The Navy was aware that daily reads were being performed and had the opportunity, as it had done in the past, to avoid undertaking its system flushing during that time. Newport Water argued that it was fortuitous that the Navy took this action or otherwise, the Navy's rates would have been artificially low because the true max day demand would not have been captured.

The Commission believes that in hindsight, where the Navy's practice of flushing its entire system in one day causes a max day consumption, the Docket 4128 Settlement was crafted in such a way that it allowed the Navy to avoid having its flushing (and by definition, its max day consumption) excluded from the Demand Study. However, in 2012, the Navy chose not to take advantage of that opportunity, most likely due to some

oversight. This does not negate the fact that the Navy had its max day consumption on September 25, 2012. With that said, this is not the last time the Commission will be reviewing Newport Water's cost of service and rate design. In fact, in this case, the Settling Parties agreed that Newport Water is not precluded from seeking an alternative allocation methodology of capital costs in the future. Likewise, the Navy is not precluded from seeking a Commission review of its consumption. PWFD has historically provided Newport Water with its consumption and Newport Water used this information in its cost allocation study. The Commission finds that this would be reasonable for the Navy as well. Therefore, the Commission orders Newport Water to continue taking daily reads of the Navy's meters for inclusion in its next General Rate Filing. The Commission understands that most, if not all, of the Navy's meters are now equipped with technology such that Newport Water does not have to manually read the Navy's meters. To the extent that not all meters are equipped with the automated metering technology to take daily reads, the Navy should cooperate with Newport Water to provide daily reads to Newport Water on those meters.

Furthermore, the Record reflects the fact that PWFD and Newport Water conduct their flushing programs over multiple days in the spring or fall. Therefore, particularly in the case of PWFD, the Record clearly reflected that PWFD's flushing of its system does not result in max day consumption. Newport Water should work with the Navy so that the Navy can develop a flushing schedule that will hopefully avoid this issue in the future.

It is generally not for the Commission to set result oriented rates, but cost of service based rates.⁵⁴ Unless the cost of service study results in a rate change that would be inequitable for a certain class of customers, the Commission attempts to set rates true to their cost.⁵⁵ In this case, the Commission finds that the cost of service model and demand study resulted in rates set reasonably close to their cost of service for all parties and that the concerns raised by the Navy were largely the result of their own actions.

According, it is hereby

(21104) ORDERED

1. City of Newport, Utilities Department, Water Division's Application to Change Rate Schedules filed on September 7, 2012 is hereby denied and dismissed.
2. The Settlement Agreement filed on March 28, 2013 is hereby approved.
3. The Navy's maximum usage day of 1,213,663 gallons of water on September 25, 2012 shall be used for the purposes of calculating the Navy's 2012 demand factors in this filing.
4. City of Newport, Utilities Department, Water Division shall continue to obtain daily reads of the Navy's meters so that the City of Newport, Utilities Department, Water Division will have this information for inclusion in its next General Rate Filing.

⁵⁴ Mr. Smith explained, "it was agreed that we would use two years' worth of production and demand data from 2011 and 2012 for all production and demand data in the model...so it wasn't just unaccounted for water that was changed." *Id.* at 16.

⁵⁵ See *Order No. 20181* (citations omitted).


5. City of Newport, Utilities Department, Water Division should cooperate with the Navy such that the Navy can develop an appropriate flushing schedule that may not result in its maximum day usage.
6. City of Newport, Utilities Department, Water Division Tariffs filed on April 25, 2013 are hereby approved as filed for effect on usage on and after May 1, 2013.
7. City of Newport, Utilities Department, Water Division shall comply with all other findings and instructions as contained in this Report and Order and with all terms of the Settlement Agreement incorporated herein.

EFFECTIVE AT WARWICK, RHODE ISLAND PURSUANT TO OPEN MEETING DECISIONS ON APRIL 23, 2013 AND APRIL 30, 2013. WRITTEN ORDER ISSUED JULY 16, 2013.

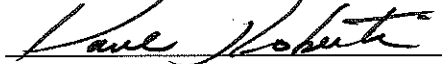
PUBLIC UTILITIES COMMISSION



*Elia Germani, Chairman



Mary E. Bray, Commissioner



Paul J. Roberti, Commissioner

*Chairman Germani concurs with the decision but is unavailable for signature.

NOTICE OF RIGHT OF APPEAL PURSUANT TO R.I.G.L. SECTION 39-5-1, ANY PERSON AGGRIEVED BY A DECISION OR ORDER OF THE COMMISSION MAY, WITHIN SEVEN DAYS (7) DAYS FROM THE DATE OF THE ORDER, PETITION THE SUPREME COURT FOR A WRIT OF CERTIORARI TO REVIEW THE LEGALITY AND REASONABLENESS OF THE DECISION OR ORDER.

APPENDIX A

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

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

DOCKET NO.: 4355

SETTLEMENT AGREEMENT

I. INTRODUCTION

The City of Newport, Utilities Department, Water Division (hereinafter "Newport Water" or "Newport"), the Division of Public Utilities and Carriers (hereinafter "Division"), and the Portsmouth Water and Fire District (hereinafter "Portsmouth") (collectively, the "Parties") have reached an agreement regarding Newport Water's Application To Change Rates filed on September 7, 2012. The Parties jointly request approval of this Settlement Agreement by the State of Rhode Island Public Utilities Commission (hereinafter "Commission").

II. RECITALS

1. On September 7, 2012, Newport Water filed an Application To Change Rates ("Application") pursuant to R.I.G.L § 39-3-11 and Part II of the Commission's Rules of Practice and Procedure.
2. In its Application, Newport Water sought to change the existing rates it charges each of its customer classes through a Cost of Service Study ("COS") filed with the Commission.
3. Newport filed the direct, rebuttal and supplemental rebuttal testimony and schedules from Harold J. Smith of Raftelis Financial Consulting.

4. Portsmouth filed a Motion to Intervene in this Docket on September 26, 2012.
Newport did not object.
5. Portsmouth submitted direct, surrebuttal and supplemental testimony from Christopher P.N. Woodcock of Woodcock & Associates, Inc.
6. Portsmouth issued data requests, and Newport responded to those requests.
7. The Department of the Navy (the "Navy") moved to intervene in this Docket on September 20, 2012. Newport did not object.
8. The Navy submitted direct and surrebuttal testimony from Brian C. Collins of Brubaker & Associates, Inc., as well as a position statement regarding the supplemental testimony of Mr. Woodcock.
9. The Navy issued data requests, and Newport responded to those requests.
10. The Division conducted an investigation of Newport's requested rate change through data requests and with the assistance of its staff and an outside expert consultant, Jerome D. Mierzwa of Exeter Associates, Inc., who filed direct and surrebuttal testimony.
11. Although Newport did not request an increase in operating revenues, the proposed rates in the Application were based on Phase Two of the multi-year increase granted by the Commission in Docket 4243.
12. R.I.G.L. § 39-15.1-4 and the Docket 4243 Settlement Agreement required Newport Water to submit a compliance filing with the Commission before Phase Two of its multi-year increase took effect.
13. Newport submitted its compliance filing in Docket 4243 on December 28, 2012.

14. The Commission reviewed Newport's compliance filing, and on March 28, 2013 approved the compliance filing and ordered that Newport could increase its revenues by \$2,145,647.
15. The Parties engaged in settlement discussions after the submission of written testimony in this Docket.
16. The Parties gave due consideration to the testimony, exhibits, schedules, data requests, data responses, settlement discussions, and other documentation included in the Parties' filings in this Docket and agreed to a comprehensive settlement that resolves all issues relating to the Application.
17. The Parties agree that this Settlement Agreement is a just and reasonable resolution of the issues in this Docket and jointly request its approval by the Commission.

III. TERMS OF SETTLEMENT

18. The Parties agree that the Joint Settlement Schedules A-1 through A-4, B-1 through B-11, and D-1 through D-7, attached as Exhibit 1, accurately reflect the Parties' Settlement Agreement in this Docket.
19. Joint Settlement Schedules A-2 and A-3 identify the impact on the rates and charges for Newport's customers.
20. The rates set forth in Joint Settlement Schedules A-2 and A-3 include and incorporate the Phase Two revenue increase requested by Newport in its Docket 4243 compliance filing and approved by the Commission on March 28, 2013.
21. The Joint Settlement Schedules incorporate a fixed asset value that is the result of a compromise and is intended for use only in this Docket. Specifically, the Parties

disagree regarding (1) the value of Transmission and Distribution ("T&D") pipes installed between 1976 and 2006, and (2) the value for meters and services. The Parties agreed to use the original asset values for T&D pipes installed between 1976 and 2006 that Newport provided as part of its response to Portsmouth's data request no. 1-7, and also reached a compromise on the value for meters and services.

22. The Parties agree that these fixed asset values will not carry any precedential value in future dockets, and they reserve their right in the next docket to maintain or support different values. The Parties neither agree, acknowledge nor assert that the fixed asset values used in this docket are accurate, but they do agree that they represent a fair and reasonable compromise given the information available in this docket.
23. Newport agrees to provide an updated schedule of fixed asset values with its next general rate filing. The Parties will try to determine and agree on the schedule of fixed asset values before or when Newport makes its next filing.
24. The Settlement Schedules incorporate a compromise between the Parties regarding the Legal and Administrative expenses used to calculate rates.
25. The Parties agree to use the Legal and Administrative expenses from the settlement agreement in Docket 4243 as part of this Settlement Agreement.
26. The Settlement Schedules incorporate a compromise between the Parties regarding the allocation of capital costs associated with water treatment.
27. Newport sought to allocate treatment capital costs based on the projected demand of each customer class rather than historical actual demands.

28. This proposed allocation of treatment capital costs differed from the cost allocation model developed by Newport, the Division and Portsmouth in Docket 4128, and which the Parties attached to the Docket 4128 Settlement Agreement as Exhibit B.
29. In this Docket, Newport withdraws its request to allocate treatment capital costs based on the projected demands of its customer classes.
30. Newport's withdrawal of its request to allocate treatment capital costs based on the projected demands of its customer classes sets no precedent and is without prejudice to Newport requesting this allocation in a future rate filing. Specifically, Newport reserves the right to request an allocation of treatment capital costs based on the projected demands of its customer classes when it begins paying principal and interest on the \$53,100,000 Rhode Island Clean Water Finance Agency loan to finance the design and construction of a new Lawton Valley Water Treatment Plant and improvements to the Station One Water Treatment Facility. Portsmouth also expressly reserves the right to maintain that the allocation of treatment capital costs should continue to be based on the historical consumption of the Parties.
31. The Joint Settlement Schedules incorporate the Navy's maximum usage day (Max Day) of 1,213,663 gallons of water on September 25, 2012 as set forth in Newport's original filing in this Docket for the purposes of calculating the Navy's 2012 demand factors, and the Parties believe this is the appropriate Max Day for the Navy.
32. The Navy contends that the rates in this Docket should be based on the assumption that the Navy's Max Day for the purposes of calculating the Navy's 2012 demand

factors should be 777,210 gallons, which is the amount the Navy consumed on August 7, 2012.

33. As the Navy is not a party to this Settlement Agreement, the Commission will have to determine the Navy's appropriate Max Day and the Parties to this Settlement Agreement will abide by the Commission's decision.

IV. EFFECT OF SETTLEMENT

34. This Settlement Agreement is a negotiated agreement. The Parties conducted discussions that produced this Settlement Agreement with the explicit understanding that all offers of settlement and discussions relating thereto are, and shall be, privileged; shall be without prejudice to the position of any party or participant presenting such offer or participating in any such discussion; and are not to be used in any manner in connection with these or any other proceedings.
35. The agreement by any party to the terms of this Settlement Agreement shall not be construed as an agreement as to any matter of fact or law beyond the terms thereof. By entering into this Settlement Agreement, matters or issues other than those explicitly identified in this agreement have not been settled upon or conceded by any party to this Settlement Agreement, and nothing in this agreement shall preclude any party from taking any position in any future proceeding regarding such unsettled matters.
36. This Settlement Agreement is the product of negotiation and compromise. The making of this Settlement Agreement establishes no principal or precedent. This

Settlement Agreement shall not be deemed to foreclose any party from making any contention in any future proceeding or investigation.

37. In the event that the Commission rejects this Settlement Agreement, or modifies this Settlement Agreement or any provision therein, this Settlement Agreement shall be deemed withdrawn and shall be null and void in all respects.

IN WITNESS WHEREOF, the Parties agree that this Settlement Agreement is reasonable, in the public interest and in accordance with law and regulatory policy, and have caused this agreement to be executed by their respective representatives, each being authorized to do so.

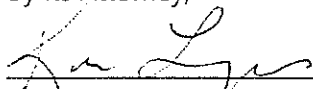
CITY OF NEWPORT,
UTILITIES DEPARTMENT,
WATER DIVISION
By its Attorney,



Joseph A. Keough, Jr. #4925
KEOUGH & SWEENEY, LTD.
100 Armistice Boulevard
Pawtucket, RI 02860
Tel: (401)-724-3600

Date: _____

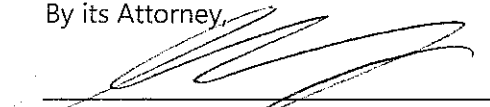
DIVISION OF PUBLIC UTILITIES
AND CARRIERS,
By its Attorney,



Karen Lyons, #6797
Special Assistant Attorney General
150 South Main Street
Providence, RI 02903
Tel: 401-274-4400, ext. 2218

Date: 4/2/13

PORTSMOUTH WATER AND FIRE DISTRICT
By its Attorney,



Gerald J. Petros, # 2931
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1500 Fleet Center
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Tel: 401-274-2000

Date: 4/2/13

Newport Water Cost of Service Model

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	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 Settlement A
 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	\$ 7.9310	\$ 7.94	-58%	\$10,481	
3/4		\$ 18.75	8.0387	8.04	-57%	6,175	
1		\$ 18.75	8.9540	8.96	-52%	17,741	
1.5		\$ 18.75	11.2921	11.30	-40%	24,137	
2		\$ 18.75	13.5238	13.53	-28%	34,907	
3		\$ 18.75	25.6321	25.64	37%	15,384	
4		\$ 18.75	28.8647	28.87	54%	4,157	
5		\$ 18.75	33.1749	33.18	77%	398	
6		\$ 18.75	36.4075	36.41	94%	8,738	
8		\$ 18.75	45.0277	45.03	140%	540	
10		\$ 18.75	60.6520	60.66	224%	728	
Quarterly							
5/8		\$ 18.75	\$ 11.4629	\$ 11.47	-39%	488,851	
3/4		\$ 18.75	11.7862	11.79	-37%	113,844	
1		\$ 18.75	14.5322	14.54	-22%	22,741	
1.5		\$ 18.75	21.5462	21.55	15%	16,033	
2		\$ 18.75	28.2414	28.25	51%	6,667	
3		\$ 18.75	64.5664	64.57	244%	4,391	
4		\$ 18.75	74.2642	74.27	296%	891	
5		\$ 18.75	87.1946	87.20	365%	0	
6		\$ 18.75	96.8924	96.90	417%	1,550	
8		\$ 18.75	122.7532	122.76	555%	0	
10		\$ 18.75	169.6259	169.63	805%	0	
						\$ 778,355	
Volume Charge (per 1,000 gallons)							
Retail							
Residential		\$ 6.43	\$ 8.2348	\$ 8.24	28%	5,189,305	
Non-Residential		\$ 6.43	\$ 9.1847	\$ 9.19	43%	4,479,721	
						\$ 9,669,026	
Wholesale							
Navy		\$ 3.9540	\$ 5.4115	\$ 5.4115	37%	975,662	
Portsmouth Water & Fire District		\$ 3.152	\$ 4.3135	\$ 4.3135	37%	1,739,772	
						\$ 2,715,434	
Fire Protection							
Public (per hydrant)							
		\$ 1,065.00	\$ 752.64	\$ 752.65	-29%	\$ 779,745	
Private (by Connection Size) (2)							
	Connection Size	Existing Charge Differential					
	<2		\$21.00	\$ 22.42	\$ 22.43	7%	
	2	6.19	\$88.00	\$ 93.97	\$ 93.97	7%	376
	4	38.32	\$541.00	\$ 326.53	\$ 326.54	-40%	19,919
	6	111.31	\$1,083.00	\$ 762.73	\$ 762.74	-30%	186,871
	8	237.21	\$2,478.00	\$ 1,515.09	\$ 1,515.09	-39%	93,936
	10	426.58	\$4,091.00	\$ 2,646.79	\$ 2,646.79	-35%	-
	12	689.04	\$6,568.00	\$ 4,215.28	\$ 4,215.28	-36%	8,431
						\$ 309,532	
Total Projected Rate Revenues						\$ 14,252,093	

(1) From HJS Schedule B-2 Settlement A, 'Allocation of Costs to Water Rate Classes'.
 (2) From HJS Schedule D-2 Settlement A, '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	\$16.18	-\$9.00	-35.7%	\$16.28	-\$8.90	-35.3%	\$17.20	-\$7.98	-31.7%	\$19.54	-\$5.64	-22.4%	\$21.77	-\$3.41	-13.5%	\$33.88	\$8.70	34.6%
	2,000	\$31.61	\$24.42	-\$7.19	-22.7%	\$24.52	-\$7.09	-22.4%	\$25.44	-\$6.17	-19.5%	\$27.78	-\$3.83	-12.1%	\$30.01	-\$1.60	-5.1%	\$42.12	\$10.51	33.2%
	4,000	\$44.47	\$40.90	-\$3.57	-8.0%	\$41.00	-\$3.47	-7.8%	\$41.92	-\$2.55	-5.7%	\$44.26	-\$0.21	-0.5%	\$46.49	\$2.02	4.5%	\$58.60	\$14.13	31.8%
	5,000	\$50.90	\$49.14	-\$1.76	-3.5%	\$49.24	-\$1.66	-3.3%	\$50.16	-\$0.74	-1.5%	\$52.50	\$1.60	3.1%	\$54.73	\$3.83	7.5%	\$66.84	\$15.94	31.3%
	7,500	\$66.98	\$69.74	\$2.77	4.1%	\$69.84	\$2.87	4.3%	\$70.76	\$3.79	5.7%	\$73.10	\$6.13	9.1%	\$75.33	\$8.36	12.5%	\$87.44	\$20.47	30.6%
	10,000	\$83.05	\$90.34	\$7.29	8.8%	\$90.44	\$7.39	8.9%	\$91.36	\$8.31	10.0%	\$93.70	\$10.65	12.8%	\$95.93	\$12.88	15.5%	\$108.04	\$24.99	30.1%
	15,000	\$115.20	\$131.54	\$16.34	14.2%	\$131.64	\$16.44	14.3%	\$132.56	\$17.36	15.1%	\$134.90	\$19.70	17.1%	\$137.13	\$21.93	19.0%	\$149.24	\$34.04	29.5%
	20,000	\$147.35	\$172.74	\$25.39	17.2%	\$172.84	\$25.49	17.3%	\$173.76	\$26.41	17.9%	\$176.10	\$28.75	19.5%	\$178.33	\$30.98	21.0%	\$190.44	\$43.09	29.2%
	25,000	\$179.50	\$213.94	\$34.44	19.2%	\$214.04	\$34.54	19.2%	\$214.96	\$35.46	19.8%	\$217.30	\$37.80	21.1%	\$219.53	\$40.03	22.3%	\$231.64	\$52.14	29.0%
	30,000	\$211.65	\$255.14	\$43.49	20.5%	\$255.24	\$43.59	20.6%	\$256.16	\$44.51	21.0%	\$258.50	\$46.85	22.1%	\$260.73	\$49.08	23.2%	\$272.84	\$61.19	28.9%
Residential(Quarterly)																				
	1,000	\$25.18	\$19.71	-\$5.47	-21.7%	\$20.03	-\$5.15	-20.5%	\$22.78	-\$2.40	-9.5%	\$29.79	\$4.61	18.3%	\$36.49	\$11.31	44.9%	\$72.81	\$47.63	189.2%
	2,000	\$31.61	\$27.95	-\$3.66	-11.6%	\$28.27	-\$3.34	-10.6%	\$31.02	-\$0.59	-1.9%	\$38.03	\$6.42	20.3%	\$44.73	\$13.12	41.5%	\$81.05	\$49.44	156.4%
	3,000	\$38.04	\$36.19	-\$1.85	-4.9%	\$36.51	-\$1.53	-4.0%	\$39.26	\$1.22	3.2%	\$46.27	\$8.23	21.6%	\$52.97	\$14.93	39.2%	\$89.29	\$51.25	134.7%
	4,000	\$44.47	\$44.43	-\$0.04	-0.1%	\$44.75	\$0.28	0.6%	\$47.50	\$3.03	6.8%	\$54.51	\$10.04	22.6%	\$61.21	\$16.74	37.6%	\$97.53	\$53.06	119.3%
	8,500	\$73.41	\$81.51	\$8.11	11.0%	\$81.83	\$8.43	11.5%	\$84.58	\$11.18	15.2%	\$91.59	\$18.19	24.8%	\$98.29	\$24.89	33.9%	\$134.61	\$61.21	83.4%
	15,000	\$115.20	\$135.07	\$19.87	17.2%	\$135.39	\$20.19	17.5%	\$138.14	\$22.94	19.9%	\$145.15	\$29.95	26.0%	\$151.85	\$36.65	31.8%	\$188.17	\$72.97	63.3%
	60,000	\$404.55	\$505.87	\$101.32	25.0%	\$506.19	\$101.64	25.1%	\$508.94	\$104.39	25.8%	\$515.95	\$111.40	27.5%	\$522.65	\$118.10	29.2%	\$558.97	\$154.42	38.2%
	80,000	\$533.15	\$670.67	\$137.52	25.8%	\$670.99	\$137.84	25.9%	\$673.74	\$140.59	26.4%	\$680.75	\$147.60	27.7%	\$687.45	\$154.30	28.9%	\$723.77	\$190.62	35.8%
	100,000	\$661.75	\$835.47	\$173.72	26.3%	\$835.79	\$174.04	26.3%	\$838.54	\$176.79	26.7%	\$845.55	\$183.80	27.8%	\$852.25	\$190.50	28.8%	\$888.57	\$226.82	34.3%
	120,000	\$790.35	\$1,000.27	\$209.92	26.6%	\$1,000.59	\$210.24	26.6%	\$1,003.34	\$212.99	26.9%	\$1,010.35	\$220.00	27.8%	\$1,017.05	\$226.70	28.7%	\$1,053.37	\$263.02	33.3%
Commercial (Monthly)																				
	2,000	\$31.61	\$26.32	-\$5.29	-16.7%	\$26.42	-\$5.19	-16.4%	\$27.34	-\$4.27	-13.5%	\$29.68	-\$1.93	-6.1%	\$31.91	\$0.30	0.9%	\$44.02	\$12.41	39.3%
	5,000	\$50.90	\$53.89	\$2.99	5.9%	\$53.99	\$3.09	6.1%	\$54.91	\$4.01	7.9%	\$57.25	\$6.35	12.5%	\$59.48	\$8.58	16.9%	\$71.59	\$20.69	40.6%
	10,000	\$83.05	\$99.84	\$16.79	20.2%	\$99.94	\$16.89	20.3%	\$100.86	\$17.81	21.4%	\$103.20	\$20.15	24.3%	\$105.43	\$22.38	26.9%	\$117.54	\$34.49	41.5%
	25,000	\$179.50	\$237.69	\$58.19	32.4%	\$237.79	\$58.29	32.5%	\$238.71	\$59.21	33.0%	\$241.05	\$61.55	34.3%	\$243.28	\$63.78	35.5%	\$255.39	\$75.89	42.3%
	30,000	\$211.65	\$283.64	\$71.99	34.0%	\$283.74	\$72.09	34.1%	\$284.66	\$73.01	34.5%	\$287.00	\$75.35	35.6%	\$289.23	\$77.58	36.7%	\$301.34	\$89.69	42.4%
	40,000	\$275.95	\$375.54	\$99.59	36.1%	\$375.64	\$99.69	36.1%	\$376.56	\$100.61	36.5%	\$378.90	\$102.95	37.3%	\$381.13	\$105.18	38.1%	\$393.24	\$117.29	42.5%
	50,000	\$340.25	\$467.44	\$127.19	37.4%	\$467.54	\$127.29	37.4%	\$468.46	\$128.21	37.7%	\$470.80	\$130.55	38.4%	\$473.03	\$132.78	39.0%	\$485.14	\$144.89	42.6%
	75,000	\$501.00	\$697.19	\$196.19	39.2%	\$697.29	\$196.29	39.2%	\$698.21	\$197.21	39.4%	\$700.55	\$199.55	39.8%	\$702.78	\$201.78	40.3%	\$714.89	\$213.89	42.7%
	100,000	\$661.75	\$926.94	\$265.19	40.1%	\$927.04	\$265.29	40.1%	\$927.96	\$266.21	40.2%	\$930.30	\$268.55	40.6%	\$932.53	\$270.78	40.9%	\$944.64	\$282.89	42.7%
Customer Class Commercial with 6" Fire Connection(Monthly Account)																				
Base Charge and Commodity Charges	120,000	\$996.60	\$1,198.08	\$201.48	20.2%	\$1,199.28	\$202.68	20.3%	\$1,210.32	\$213.72	21.4%	\$1,238.40	\$241.80	24.3%	\$1,265.16	\$268.56	26.9%	\$1,410.48	\$413.88	41.5%
Fire Protection Charge		\$1,083.00	\$762.74	-\$320.26	-29.6%	\$762.74	-\$320.26	-29.6%	\$762.74	-\$320.26	-29.6%	\$762.74	-\$320.26	-29.6%	\$762.74	-\$320.26	-29.6%	\$762.74	-\$320.26	-29.6%
Total Annual Charges		\$2,079.60	\$1,960.82	-\$118.78	-5.7%	\$1,962.02	-\$117.58	-5.7%	\$1,973.06	-\$106.54	-5.1%	\$2,001.14	-\$78.46	-3.8%	\$2,027.90	-\$51.70	-2.5%	\$2,173.22	\$93.62	4.5%

Newport Water
 Cost Of Service Analysis
 HJS Schedule A-3 Settlement A
 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	\$43,164	\$11,625	36.9%
	20,000,000	\$63,059	\$86,299	\$23,240	36.9%
Avg. Monthly Bill	38,000,000	\$119,795	\$163,942	\$44,147	36.9%
	40,000,000	\$126,099	\$172,569	\$46,470	36.9%
	75,000,000	\$236,419	\$323,541	\$87,123	36.9%
	100,000,000	\$315,219	\$431,379	\$116,160	36.9%
	150,000,000	\$472,819	\$647,054	\$174,235	36.9%
Navy (Monthly)					
	10,000,000	\$39,559	\$54,115	\$14,556	36.8%
	20,000,000	\$79,099	\$108,230	\$29,131	36.8%
Avg. Monthly Bill (All Meters)	38,000,000	\$150,252	\$205,637	\$55,385	36.9%
	50,000,000	\$197,719	\$270,575	\$72,856	36.8%
	75,000,000	\$296,569	\$405,863	\$109,294	36.9%
	100,000,000	\$395,419	\$541,150	\$145,731	36.9%

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

	Rate Year Revenue	
	Existing Rates	Proposed Rates
REVENUES		
Water Rates		
Base Charge (Billing Charge)	\$ 1,213,500	\$ 778,355
Volume Charge		
Residential	4,049,421	5,189,305
Commercial	3,134,342	4,479,721
Navy	712,883	975,662
Portsmouth Water & Fire District	1,271,302	1,739,772
Fire Protection		
Public	1,103,340	779,745
Private	465,460	309,532
Total Rate Revenues	\$ 11,950,248	\$ 14,252,093
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	\$ 12,602,777	\$ 14,904,622
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	\$ 12,685,277	\$ 14,987,122
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)	\$ (2,295,570)	\$ 6,274

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	66%	22%	4%	3%	4%	1%	1%	100%
OPEB Contribution	-	Total Non-Admin Costs Before Offsets	66%	22%	4%	3%	4%	1%	1%	100%
City Counsel	4,649	Total Non-Admin Costs Before Offsets	66%	22%	4%	3%	4%	1%	1%	100%
Citizens Survey	-	Total Non-Admin Costs Before Offsets	66%	22%	4%	3%	4%	1%	1%	100%
City Clerk	3,381	Total Non-Admin Costs Before Offsets	66%	22%	4%	3%	4%	1%	1%	100%
City Manager	54,131	Total Non-Admin Costs Before Offsets	66%	22%	4%	3%	4%	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	66%	22%	4%	3%	4%	1%	1%	100%
Finance Adimistrative 80%	19,822	Total Non-Admin Costs Before Offsets	66%	22%	4%	3%	4%	1%	1%	100%
Finance Adimistrative 5%	7,020	Total Non-Admin Costs Before Offsets	66%	22%	4%	3%	4%	1%	1%	100%
Purchasing	18,314	Total Non-Admin Costs Before Offsets	66%	22%	4%	3%	4%	1%	1%	100%
Assessment	5,973	Capital Costs	62%	27%	5%	1%	3%	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	66%	22%	4%	3%	4%	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	66%	22%	4%	3%	4%	1%	1%	100%
Facilities Maintenance	13,266	Total Non-Admin Costs Before Offsets	66%	22%	4%	3%	4%	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 Settlement A
 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 Settlement A
 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	1,347,747	100% Base	100%	0%	0%	0%	0%	0%	0%	100%
	Treatment Station 1	1,553,792	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
	Treatment Lawton Valley	491,073	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
	Treatment Both Plants	632,177	Maximum Day Demand Patterns	60%	40%	0%	0%	0%	0%	0%	100%
	T&D Pumping	62,612	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
	T&D	1,789,030	Maximum Hour Demand Patterns	50%	33%	18%	0%	0%	0%	0%	100%
	Fire	31,433	100% Fire	0%	0%	0%	0%	0%	0%	100%	100%
	Meters	63,445	100% Meters	0%	0%	0%	100%	0%	0%	0%	100%
	Services	63,445	100 % Services	0%	0%	0%	0%	0%	100%	0%	100%
	Billing	200,263	100% Billing	0%	0%	0%	0%	100%	0%	0%	100%
Total Capital Costs excluding Treatment		6,235,016									
Revenue Allowance		254,733	100% base	100%							100%
Total Costs before Offsets		14,980,847									
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		\$ 14,245,818									

	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	2,874	938	175	117	163	54	27	4,349
OPEB Contribution	-	-	-	-	-	-	-	-
City Counsel	3,073	1,003	187	125	174	58	29	4,649
Citizens Survey	-	-	-	-	-	-	-	-
City Clerk	2,235	730	136	91	127	42	21	3,381
City Manager	35,779	11,681	2,174	1,455	2,028	670	342	54,131
Human Resources	17,737	7,478	1,136	1,694	1,551	494	31	30,121
City Solicitor	13,523	4,415	822	550	767	253	129	20,459
Finance Adimistrative 80%	13,102	4,278	796	533	743	245	125	19,822
Finance Adimistrative 5%	4,640	1,515	282	189	263	87	44	7,020
Purchasing	12,105	3,952	736	492	686	227	116	18,314
Assessment	3,723	1,596	311	61	192	61	30	5,973
Collections	-	-	-	-	46,979	-	-	46,979
Accounting 5%	7,059	2,305	429	287	400	132	67	10,679
Accounting	41,525	17,506	2,660	3,965	3,632	1,156	72	70,516
Public Safety	-	-	-	-	-	-	-	-
Facilities Maintenance	8,768	2,863	533	357	497	164	84	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	698,074	223,839	38,498	52,414	100,267	17,960	8,571	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								

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

Docket No. 4355

	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 Settlement A
 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	1,347,747	-	-	-	-	-	-	1,347,747
Treatment Station 1	938,200	615,592	-	-	-	-	-	1,553,792
Treatment Lawton Valley	296,516	194,557	-	-	-	-	-	491,073
Treatment Both Plants	381,717	250,460	-	-	-	-	-	632,177
T&D Pumping	31,168	20,451	10,993	-	-	-	-	62,612
T&D	890,572	584,341	314,117	-	-	-	-	1,789,030
Fire	-	-	-	-	-	-	31,433	31,433
Meters	-	-	-	63,445	-	-	-	63,445
Services	-	-	-	-	-	63,445	-	63,445
Billing	-	-	-	-	200,263	-	-	200,263
Total Capital Costs excluding Treatment	3,885,920	1,665,400	325,110	63,445	200,263	63,445	31,433	6,235,016
	62%	27%	5%	1%	3%	1%	1%	100%
Revenue Allowance	254,733	-	-	-	-	-	-	254,733
Total Costs before Offsets	8,361,582	2,729,945	508,121	340,025	474,012	156,616	79,933	12,650,233
	66%	22%	4%	3%	4%	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	\$ 8,164,648	\$ 2,676,303	\$ 498,899	\$ 105,907	\$ 240,037	\$ 151,921	\$ 77,489	\$ 11,915,204

	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%	39%	11%	0%	0%	100%
Base Excluding PWFD & 50% Navy			53%	41%	6%	0%	0%	100%
Water Quality Protection Fees			56%	44%	0%	0%	0%	100%
Total Base to Class			43%	33%	8%	15%	0%	100%
Max Day	<i>Estimated customer peaking factors</i>		28%	33%	5%	15%	19%	100%
Base Excluding PWFD			32%	39%	6%	0%	23%	100%
Max Day Excluding PWFD & 50% Navy			34%	40%	3%	0%	23%	100%
Total Max Day to Class			30%	35%	5%	10%	21%	100%
Max Hour	<i>Estimated customer peaking factors</i>		17%	24%	4%	8%	47%	100%
Base Excluding PWFD			18%	26%	4%	0%	52%	100%
Max Hour Excluding PWFD & 50% Navy			19%	27%	2%	0%	53%	100%
Total Max Hour to Class			19%	27%	2%	0%	53%	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>		0%	0%	0%	0%		0%
Treatment Plant Max. Day	<i>Assured Capacity</i>		0%	0%	0%	0%		0%

ALLOCATION RESULTS		Commodity Charges						
		Rate Year	Base Charge	Retail		Navy	Portsmouth	Fire
Residential	Commercial							
Base								
Base excluding T&D&WQPF & Pumping	6,920,978		2,846,330	2,203,123	622,472	1,249,052		6,920,978
Transmission & Distribution	1,382,518		734,066	568,184	80,268	-		1,382,518
Pumping	58,086		29,149	22,562	6,375	-		58,086
Water Quality Protection Fees	(22,500)		(12,683)	(9,817)	-	-		(22,500)
Revenue Offsets	(174,434)		(75,300)	(58,284)	(14,793)	(26,057)		(174,434)
Administrative Charges	1,421,112		613,469	474,838	120,519	212,285		1,421,112
Max Day								
Max Day Except T&D & Pumping	1,784,705		494,209	587,788	96,218	261,835	344,655	1,784,705
Transmission & Distribution	907,127		303,988	361,549	29,592	-	211,998	907,127
Pumping	38,113		12,369	14,711	2,408	-	8,626	38,113
Revenue Offsets	(53,642)		(15,927)	(18,943)	(2,519)	(5,145)	(11,107)	(53,642)
Administrative Charges	498,180		147,918	175,926	23,398	47,782	103,156	498,180
Max Hour								
Max Hr. Except T&D & Pumping	-		-	-	-	-	-	-
Transmission & Distribution	487,633		91,142	130,684	9,476	-	256,330	487,633
Pumping	20,488		3,756	5,386	781	-	10,564	20,488
Revenue Offsets	(9,222)		(1,722)	(2,470)	(186)	-	(4,844)	(9,222)
Administrative Charges	81,824		15,282	21,912	1,652	-	42,979	81,824
Metering		340,025						340,025
Revenue Offsets	(234,118)	(234,118)						(234,118)
Administrative Charges	117,285	117,285						117,285
Services		156,616						156,616
Revenue Offsets	(4,695)	(4,695)						(4,695)
Administrative Charges	37,843	37,843						37,843
Billing		474,012						474,012
Revenue Offsets	(233,975)	(233,975)						(233,975)
Administrative Charges	161,267	161,267						161,267
Fire							79,933	79,933
Revenue Offsets	(2,444)						(2,444)	(2,444)
Administrative Charges	13,104						13,104	13,104
Treatment Plant Capital Costs								
Treatment Plant Avg. Day								
Treatment Plant Max. Day								
Total To Recover through Rates	\$ 14,245,818	\$ 814,259	\$ 5,186,047	\$ 4,477,151	\$ 975,659	\$ 1,739,752	\$ 1,052,950	\$ 14,245,818

COST OF SERVICE PER UNIT

Description of Billing Units	Metering						Total
	(1)	(2)	(2)	(2)	(2)	(3)	
Percentage of Dollars Allocated	1.6%	36.4%	31.4%	6.8%	12.2%	6.8%	100.0%
Allocated Cost	\$ 223,192	\$ 5,186,047	\$ 4,477,151	\$ 975,659	\$ 1,739,752	\$ 962,358	\$ 14,245,818
Divided by: Number of Units	207,132	629,770	487,456	180,294	403,332	161,036	
Unit Cost of Service	\$1.0775	\$8.23	\$9.18	\$5.41	\$4.31	\$5.98	
	<i>per equiv meters x 12 months</i>	<i>per 1000 gallons</i>	<i>per 1000 gallons</i>	<i>per 1000 gallons</i>	<i>per 1000 gallons</i>	<i>Equivalent connections</i>	

Description of Billing Units	Billing		Services		Hydrants	
	No. of bills per year	Equivalent Connections	No. of Hydrants			
Percentage of Dollars Allocated	2.8%	1.3%	0.6%			
Allocated Cost	\$ 401,303	\$ 189,764	\$ 90,593			
Divided by: Number of Units	65,094	275,639	1,036			
Unit Cost of Service	\$6.1650	\$0.6885	\$87.4447			
	<i>per bill</i>	<i>per equiv</i>	<i>per Hydrant</i>			

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

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule B-3 Settlement A
 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	62%	27%	5%	1%	3%	1%	1%	0%
Total Non-Admin Costs before Offsets	<i>Certain Legal and Administrative</i>	B-1	66%	22%	4%	3%	4%	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 Settlement A
 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	\$	1,553,792	\$ 938,200	\$ 615,592
Treatment Lawton Valley		491,073	\$ 296,516	\$ 194,557
Treatment Both Plants		632,177	\$ 381,717	\$ 250,460
	\$	2,677,042	\$ 1,616,433	\$ 1,060,609
				\$ 2,677,042

	Residential	Non-Residential	Navy	PWFD	Fire	Treatment Plant Capacity
Capacity Reserved for Avg. Day Demand (MGD) ¹	3.05	2.36	0.95	1.64	N/A	8
% of Avg. Day Treatment Capacity	38.1%	29.5%	11.9%	20.5%	N/A	100%
Capacity Reserved for Max. Day Demand (MGD) ¹	5.18	4.98	1.395	3.00	1.44	16
% of Max. Day Treatment Capacity	32.39%	31.14%	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 Settlement A
 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 \$	24,864,792				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 \$	1,838,794							50%	50%		100%
T&D PUMPING \$	907,332					100%					100%
BILLING \$	2,902,066									100%	100%
FIRE \$	455,504						100%				100%
WORK IN PROGRESS \$	-		50%	50%							100%
Total \$	90,276,464										
LABORATORY \$	80,000	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
LAND AND ROW \$	3,594,491	22%	25%	8%	10%	29%	1%	1%	1%	3%	100%
\$	3,674,491										
Total Fixed Assets \$	93,950,955										

	Supply	Treatment Station 1	Treatment Lawton Valley	Treatment Both Plants	T&D	T&D Pump	Fire	Meters	Services	Billing	Total	
TRANSMISSION/DISTRIBUTION \$	24,864,792	-	-	-	24,864,792	-	-	-	-	-	24,864,792	
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 \$	1,838,794	-	-	-	-	-	-	919,397	919,397	-	1,838,794	
T&D PUMPING \$	907,332	-	-	-	-	907,332	-	-	-	-	907,332	
BILLING \$	2,902,066	-	-	-	-	-	-	-	-	2,902,066	2,902,066	
FIRE \$	455,504	-	-	-	-	-	455,504	-	-	-	455,504	
WORK IN PROGRESS \$	-	-	-	-	-	-	-	-	-	-	-	
Total \$	90,276,464	19,453,649	22,516,441	7,116,282	9,161,055	25,925,340	907,332	455,504	919,397	919,397	2,902,066	90,276,464
		22%	25%	8%	10%	29%	1%	1%	1%	1%	3%	
LABORATORY \$	80,000	80,000	-	-	-	-	-	-	-	-	-	80,000
LAND AND ROW \$	3,594,491	774,576	896,525	283,345	364,761	1,032,256	36,127	18,137	36,607	36,607	115,550	3,594,491
\$	3,674,491	854,576	896,525	283,345	364,761	1,032,256	36,127	18,137	36,607	36,607	115,550	3,674,491
		23%	24%	8%	10%	28%	1%	0%	1%	1%	3%	
Total Allocated	\$ 20,308,225	\$ 23,412,966	\$ 7,399,627	\$ 9,525,816	\$ 26,957,596	\$ 943,459	\$ 473,640	\$ 956,004	\$ 956,004	\$ 3,017,616	\$ 93,950,955	
% of Total Asset Value		22%	25%	8%	10%	29%	1%	1%	1%	3%		

Newport Water Division
 Cost Of Service Analysis
 HJS Schedule B-5 Settlement A
 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	22%	25%	8%	10%	29%	1%	1%	1%	1%	3%	100%
Debt Service	\$ 3,735,016	22%	25%	8%	10%	29%	1%	1%	1%	1%	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	\$ 540,394	\$ 623,010	\$ 196,901	\$ 253,478	\$ 717,332	\$ 25,105	\$ 12,603	\$ 25,439	\$ 25,439	\$ 80,298	\$ 2,500,000
Debt Service	\$ 3,735,016	\$ 807,353	\$ 930,781	\$ 294,172	\$ 378,698	\$ 1,071,698	\$ 37,507	\$ 18,830	\$ 38,006	\$ 38,006	\$ 119,965	\$ 3,735,016
	\$ 6,235,016	\$ 1,347,747	\$ 1,553,792	\$ 491,073	\$ 632,177	\$ 1,789,030	\$ 62,612	\$ 31,433	\$ 63,445	\$ 63,445	\$ 200,263	\$ 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	Avg. FY 11-12
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	629,770
Non-Residential	580,798	583,184	663,766	573,711	493,539	456,486	505,014	519,521	457,376	502,475	472,437	477,429	487,456
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	180,294
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	403,332
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	1,700,852
		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	1.98	1.19
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	2.76	1.37
							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
Non-Residential	2.26	3.39
Navy	1.73	2.31
Portsmouth	1.99	2.65
Fire (5)	1.98	2.76
Estimated Systemwide Peaks	1.98	2.76

(5) Fire peaking behavior is estimated using a separate methodology demonstrated in HJS Schedule B-11 Settlement A, 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	629,770	1,725	793	2,518	41.13%	53%	50%	54.2%
Non-Residential	487,456	1,335	614	1,949	31.83%	41%	39%	41.9%
Navy	180,294	494	57	551	8.99%	6%	11%	3.9%
Portsmouth	403,332	1,105	-	1,105	18.05%	0%	0%	
Fire					N/A	N/A	N/A	
Total, w Fire Prot.	1,700,852	4,660	24%	6,123	100%	100%	100%	
<i>Production</i>	2,234,855	6,123	23.89%					

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	4,583	2,065	27.7%	27.7%	33.5%	32.5%	2.43	6,119	1,536	16.9%	18.7%	18.3%
Non-Residential	2.26	4,405	2,456	32.9%	32.9%	39.9%	38.6%	3.39	6,607	2,202	24.2%	26.8%	26.3%
Navy	1.73	953	402	5.4%	5.4%	3.3%	6.3%	2.31	1,272	319	3.5%	1.9%	3.8%
Portsmouth	1.99	2,199	1,094	14.7%	14.7%	0.0%	0.0%	2.65	2,928	729	8.0%	0.0%	0.0%
Fire		1,440	1,440	19.3%	19.3%	23.4%	22.6%		5,760	4,320	47.4%	52.6%	51.6%
Total, w Fire Prot.		13,580	7,457	100.0%	100.0%	100.0%	100.0%		22,687	9,107	100.0%	100.0%	100.0%
Total, without Fire Protection		12,140	6,017						16,927	4,787			

(2) *(demand is in thousands of gallons)*

(1) From HJS Schedule D-4 Settlement A. 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 Settlement A, Fire Protection Demand Analysis'.

EACH RATE CLASS' SHARE OF SYSTEM PEAKS

Rate Class	Average Demand	Daily Peaks	Hourly Peaks
Retail			
Residential	41%	28%	17%
Non-Residential	32%	33%	24%
Navy	9%	5%	4%
Portsmouth	18%	15%	8%
Fire	N/A	19%	47%
	100%	100%	100%

Percentages are from HJS Schedule B-9 Settlement A, '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 Settlement A, Fire Protection Demand Analysis'.
 and from HJS Schedule B-9 Settlement A, '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 Settlement A
 Water Accounts, by Size and Class

Connection Size	Meter Factors	NON-RESIDENTIAL				RESIDENTIAL				WHOLESALE (Monthly)			
		Meter Read Frequency		Equivalent Meters		Meter Read Frequency		Equivalent Meters		Navy		Portsmouth	
		Monthly	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 Settlement A
 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 Settlement A
 Production Summary

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

MAX DAY PRODUCTION AVAILABLE FOR SALE

	Station #1			Lawton Valley			Combined		
	Max Day Production			Max Day Production			Max Day Production		
Date	In Gallons	in 1000's	Date	In Gallons	in 1000's	Date	In Gallons	in 1000's	
FY 07 JULY 2006 - JUNE 2007	8/2/2006	5,114,940	5,115	8/14/2006	5,958,100	5,958	6/28/2007	10,165,100	10,165
		includes booster to LV at 1,256,000 Gallons							
FY 08 JULY 2007 - JUNE 2008	8/25/2007	6,179,670	6,180	6/10/2008	6,805,400	6,805	8/4/2007	10,723,620	10,724
		includes booster to LV at 2,251,000 Gallons							
FY 09 JULY 2008 - JUNE 2009	7/20/2008	4,341,000	4,341	7/18/2008	7,845,700	7,846	7/18/2008	12,100,100	12,100
		includes booster to LV at 324,000 Gallons							
FY 10 JULY 2009 - JUNE 2010	10/10/2009	4,664,000	4,664	8/27/2009	6,168,500	6,169	8/23/2010	9,800,400	9,800
FY 11 JULY 2010 - JUNE 2011	7/4/2011	5,729,355	5,729	8/3/2011	5,654,800	5,655	7/23/2011	10,162,555	10,163
FY 12 JULY 2011 - JUNE 2012	7/6/2012	4,624,292	4,624	7/7/2012	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 Settlement A
 Demand Summary

Fiscal Year Annual Demand	FY 2009	FY 2010	FY 2011	FY 2012
Residential	690,544	644,285	640,966	618,574
Non-Residential	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 Settlement A
 Development of Pumping Costs

Pumping Labor and Benefits

Station One		Lawton Valley	
Labor hours per day pumping	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 Settlement A
 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												
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

% increase in DS Alolowance 135%

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 Settlement A
 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 Settlement A
 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.