RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4128

CITY OF NEWPORT WATER DIVISION

PREFILED TESTIMONY OF

CHRISTOPHER P.N. WOODCOCK

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Q: Please state your name and business address.

A: My name is Christopher P.N. Woodcock and my business address is 18 Increase Ward Drive, Northborough, Massachusetts 01532.

Q: By whom are you employed and in what capacity?

A: I am the President of Woodcock & Associates, Inc., a consulting firm specializing in water and wastewater rate and financial studies.

Q: What is your role in this proceeding?

A: I have been retained by the Portsmouth Water & Fire District (PWFD) to review Newport Water's cost of service study filed in Docket 4128. I had been involved in a similar capacity in Newport's last six rate filings.

Prior Experience

Q: Please describe your qualifications and experience.

A: I have undergraduate degrees in Economics and in Civil Engineering from Tufts University in Medford, Massachusetts. After graduating in 1974, I was employed by the environmental consulting firm of Camp, Dresser, and McKee Inc. (CDM). For approximately 18 months I worked in the firm's environmental engineering group performing such tasks as designing water distribution and transmission pipes, sewer collection and interception systems, pumping facilities and portions of a wastewater treatment facility. From approximately January 1976, I worked in the firm's management and financial consulting services group, gaining increasing responsibility. At the time of my resignation, I was a corporate Vice President and appointed the leader of the group overseeing all rate and financial studies. In my career, I have worked on close to 400 water and wastewater rate and financial stud-

ies, primarily in the United States, but also for government agencies overseas. I have also worked on a number of engineering and financial feasibility studies in support of revenue bond issues, I have helped draft and review revenue bond indentures, and I worked on several valuation studies, capital improvement financing analyses, and management audits of public works agencies. In addition to my professional experience I have also held elected and appointed positions on municipal boards overseeing public works functions.

Q: Have you previously testified before state regulatory commissions or courts on rate related matters?

A: Yes, I have provided testimony on rate related matters before utility commissions in Rhode Island, Maine, Connecticut, New York, New Hampshire, Texas, and Alberta, Canada. I have also been retained as an expert witness on utility rate related matters in proceedings in state courts in Arkansas, Florida, Massachusetts, Michigan, New Jersey, Maryland, Ohio, Pennsylvania, and Virginia as well as the Federal Court in Michigan. I have been selected to several arbitration panels related to disputes over water rates and charges, I have provided testimony on rate related matters to the Michigan and Massachusetts legislatures, and I have provided testimony at administrative hearings on a number of occasions.

Q: Do you belong to any professional organizations or committees?

A: Yes, I am a member of the Water Environment Federation, the Rhode Island Water Works Association, the Massachusetts Water Works Association, the New England Water Works Association, and the American Water Works Association. For the Water Environment Federation, I was a member of the committee that prepared their manual on Wastewater Rates and Financing. For the New England Water Association, I am past chairman and a current member of the Financial Management Committee. In my capacity as President of the New England Water Works Association I also sit on the Executive Committee and the Board of Directors as

well as chairing and sitting on a number of other administrative committees. For the American Water Works Association, I am past chairman of the Financial Management Committee and the Rates and Charges Committee that has prepared the manuals on Revenue Requirements, Water Rates, Alternative Rate Structures, and Water Rates and Related Charges. I have been reappointed to and am currently a member of the Rates & Charges Committee.

Background

Q: How long have you been involved with cost of service issues involving Newport?

A: I first became involved in 1979 while working for my former employer, Camp Dresser & McKee, Inc. (CDM). CDM was engaged by the City of Newport to conduct a water rate study and a management audit. In 1981 I completed a second rate study for Newport Water. In reviewing the orders in those two dockets, it is interesting to note that issues related to a billing analysis and the maximum day and hour demands from various customer classes were large issues in the rate design. In the 1981 Report and Order (Docket No 1581), the Commission noted that Newport's rate design was based on a 1975 rate study (Docket 1188). See Exhibit A at 13.

While there have certainly been minor changes in Newport's rate structure over the past three decades, I believe that the Commission last approved a full cost of service for Newport Water in Docket 1188 in 1975 – more than 34 years ago. This is relevant because it underscores that, for many years, the parties have been trying to get a valid cost of service study from Newport Water. The prior dockets are also instructive because issues like maximum day and maximum hour demands and water use were as relevant then as they are now.

Q: What happened with the cost of service study in Docket 2029 (filed in September 1991)?

A: The Navy attempted to develop a model from the available information, but was not able to. The Division's cost of service expert, Mr. Thomas Catlin, recommended that Newport file a cost of service study in its next rate filing. It is noteworthy that, in making his recommendation, Mr. Catlin opined that Newport should not allocate any of the retail distribution system to the Navy or PWFD. See Exhibit B.

The Navy was represented in Docket 2029 by Mr. Ernest Harwig. Mr. Harwig concurred that the Navy did not use the retail distribution system and should not be assigned any of the costs of that system. Mr. Harwig prepared a cost of service study that was based on the American Water Works Association (AWWA) "base extra-capacity" method. That study was also rejected. Notably, as recorded in the Commission's Report and Order, Newport criticized Mr. Harwig's study "for using estimated data on maximum day and hour requirements instead of more exacting information."

The Commission observed that "the issue of Commission authority over rate design has continually manifested itself in Newport's rate filings." It noted that the (then) current rate design was ten years old (the one I had developed in 1981), and must be revised[1]. The Commission agreed with concerns raised by the Division and Newport regarding the validity of the demand data used by the Navy. The Commission ordered Newport to file a cost of service study with its next rate case or within three years. This was nearly 20 years ago.

As a direct result of issues associated with Newport's cost of service filing in Docket 2029, the Commission opened a docket (Docket 2049) to review generic cost of

[1] Note that some of the rate design changes in 1981 were approved, although the Commission did NOT approve the overall cost of service study.

service methodologies. A Task Force was formed in late 1992 and submitted its report to the Commission in March of 1993. The Commission subsequently adopted the recommendations of the Task Force on June 21, 1993, essentially accepting the methods outlined in the AWWA Manuals. Interestingly, the 14 person Task Force included two representatives from Newport and Mr. Walter Edge, the City's rate consultant at that time.

It has been close to two decades since the Newport rate filing in docket 2029 that necessitated the opening of a generic docket on cost of service. It has been more than three decades since the Commission ordered Newport to file a cost of service study with its next rate filing. It has been closer to four decades since the last cost of service study filed by Newport (1975) was accepted by the Commission.

Unfortunately, Newport's filing in this docket does not meet the requirements set forth by the Commission nearly 20 years ago. The primary deficiency is the estimated maximum day and hour data. Newport repeats the same mistake that it criticized Mr. Harwig and the Navy for making 20 years ago in their cost of service study.

Q: Why are these past studies and PUC Orders relevant to this docket?

A: The Commission has made clear that it expects Newport to finally produce a proper cost of service study. Several of the issues raised by Newport's current filing, however, were extensively considered by the Commission in previous dockets. The past studies and Commission orders thus are essential to fully and finally resolving these issues so that a proper study can be completed on which the Commission can base Newport's water rates and charges.

- The issue of maximum day and maximum hour demands by customer class has been a significant and highly-contentious issue in Newport water rate filings. This issue dates back to 1981 when my use of estimates was criticized

and then again to 1991 (Docket 2029) when Newport criticized Mr. Harwig for proposing estimates for maximum day and hour factors. That criticism is the reason the parties called for the demand study that was stipulated in Docket 3578.

- Newport has once again tried to use the AWWA M1 Manual to estimate customer demands. This is not the first time Newport tried to force its tri-annual and quarterly billing data into a method calling for *monthly billing records*. In Docket 2985 Newport used its tri-annual billing data and tried to average four months into equal monthly billings. That is not dissimilar to what Newport has done in RFC Sch 4 – where it took tri-annual or quarterly billings[2] and tried to treat them as monthly billings to derive class demands. The Commission rejected this approach in Docket 2985 stating "we direct Newport to immediately start accumulating the necessary data, such as average day use and maximum-day use by rate class, …." The Commission went on, "We encourage Newport Water to work with the Division and other interested parties on an ongoing basis to reach consensus on the type of data, acceptability of data, and sufficiency of data to be assembled."

Considering the past Commission orders, this study should not take short-cuts. A fair degree of precision should be expected from Newport, especially when the data is readily available.

Q: Are there other areas where you think short cuts may have been taken?

A: Yes. The lack of detailed line item allocations in the filing should not be acceptable. In the studies that have been proposed for the past 30 years we have generally examined the allocation of individual operating cost line items, not simply the allocation of combined major categories such as Supply, Treatment, General Administra-

[2] Where one out of 4 are just estimates

tion, and Transmission & Distribution. The details are provided in RFC Sch. A-1; they are known and should have been used.

Q: Do you have other concerns about the filing?

A: Because the requirement to submit a cost of service study is 30 years old, Newport's filing should not ignore cost of service results or substitute Newport's policy concerns or revisions based on perceived customer impacts. The failure to provide a cost based service charge is just such an omission. In its response to Div 1-9, Newport says it did not provide a customer charge based on meter size, in part, based on a concern that it "could cause significant bill impact differentials between customers". Newport apparently decided to "minimize differential bill impacts" and not include these cost based charges in its filing. In response to PWFD 2-3, Newport seems to concede that base charges that differ by meter size "would be cost of service based"; but again made its own determination to ignore the directive for a full cost of service study because it might lead to some "customer confusion".

Newport was not asked to decide what cost of service items they wanted to file and which ones they thought they should ignore; Newport was ordered (on many occasions) to submit a full cost of service study. After three decades, Newport owes at least this much to the Commission and the parties.

Q: In looking at this current submission, are there terms of prior agreements that the Commission should take note of?

A: Yes, in addition to the provisions of past dockets I have already noted, I believe there are several recent actions that are noteworthy:

- The settlement approved in Docket 3578 (2004) stated:

> The parties agree that Newport's cost allocation study in this Docket does not seek to charge Portsmouth with transmission, distribution or peak costs associated with supply or treatment. However, should Newport seek to charge Portsmouth with such charges in future rate cases, Newport shall be

required to submit a demand study with any cost allocation study. The requirements of the demand study shall be established by the experts for the four parties in this Docket. These requirements of the required demand study as agreed to by the parties are incorporated herein and attached hereto as Exhibit 2.

- An excerpt of the settlement approved in Docket 3578, including Exhibit 2, is attached to this testimony. See Exhibit C. It clearly lays out what the parties agreed would be included in the demand study.
- Newport did NOT submit a demand study as required by the settlement in Docket 3578 that conformed with the requirements in Exhibit 2 to that settlement. In response to PWFD 1-5, Newport states that the demand study is incorporated in schedules attached to and explained in Mr. Smith's testimony. His testimony (pages 8-13) certainly discusses the daily read data that was the basis for the demand study, but no such study was ever presented. While a VERY brief summary was provided in the spreadsheet model, this was not included in the original filing.

Summary

Q: Will you summarize your findings and conclusions?

A: The current docket only involves the cost of service study that the Commission ordered Newport to complete. As noted earlier, this requirement has been in place for quite some time. I believe that the model submitted by Newport has a number of deficiencies that must be corrected before the Commission approves a cost of service model. The major issues I have found include:

1. The demand study that all the parties were to agree on was not submitted. The substitute method used by Newport (a) was not agreed upon by the parties, and (b) does not follow the methodology outlined in the AWWA Manual (see response to PWFD 1-14). It is not correct and falls far short of

the requirements established for Newport by the Commission over the past few decades.[3]

2. In determining system wide use (RFC D-3), Newport used the volumes delivered to storage not the volumes delivered for retail sales and distribution. As shown on PWFD 1-6, the actual volumes delivered to the system were significantly less than those used in the cost of service study submitted by Newport.
3. Newport used the wrong number of days to determine the maximum day to maximum month ratios in RFC B-7 for FY 2008 and FY 2009, thereby understating these ratios.
4. Rather than using the maximum amounts in various calculations, Newport used multi-year averages in many cases, thereby understating the true peak amounts (e.g. RFC B-8).[4]
5. Without explanation, Newport reduced the PWFD and Navy water use with the allocations of unaccounted for water (RFC B-9). The unaccounted for water should simply be added to the retail accounts, not used to reduce actual sales.
6. In determining the share of maximum hour costs by class, Newport used gallons per day for most classes but gallons per hour for fire protection, thus grossly understating the share of costs attributable to fire protection.
7. Newport did not allocate the detailed line item costs. In taking this short cut, the precision of the cost of service study is compromised.

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[3] The period used by Newport (2007-2009) was a period of unusual weather. The Commission is well aware of the reductions in water use that have been experienced by water utilities throughout the State. Basing a study on such an unusual water use period will clearly skew the results.

[4] Newport claims to have calculated non-coincident demand factors (see PWFD 1-3). Non-coincident demand factors are the highest factors for each class and the sum of these by definition must be at least equal to or greater than the coincident, system wide demand factors. To demonstrate that the basis used for Newport's maximum day and maximum hour demand factors are incorrect, one can compare the sum of each class' maximum day or maximum hour gallons to the system wide maximum day and hour. This calculation shows that Newport's demand factors result in lower volumes than the actual system volumes. This is impossible and clear evidence of the fallacies involved in Newport's derivation of demand factors.

8. The basis for the cost allocations is incorrect (Newport used non-coincident class data vs. coincident system data).
9. Pumping costs are not split out as requested in the prior docket. Some of the pumping stations are used for retail purposes only and should not be allocated to the PWFD. Newport simply made an estimate of some pumping costs and allocated them exactly the same as treatment cost; this was a useless exercise and did not address the fact that most pumping facilities are not used by PWFD.
10. In reviewing the past cost of service studies since 1979 I have not seen one such study where the costs associated with treatment were assigned based on anything other than average usage or as base costs[5]. This is the first such study where any party has assigned a portion of the treatment costs as related to peak demands. The revision in this study to assign treatment costs to peak use is significant and not explained in any of the filings except one sentence in Mr. Smith's direct testimony (page 20, lines 5-6). With such a significant departure after 30 years, some further explanation would seem in order.
11. Newport did not give any credit to the administrative costs associated with T&D or with pumping when removing these from the allocations to Portsmouth.
12. The allocations to fire protection are incorrect, essentially allocating cost to public fire protection twice.
13. The private fire protection charges do not include any costs associated with service pipes.
14. There is no cost based customer or base charge.

[5] I did not look at all such allocation studies, but of those I did review, I found none that allocated treatment to anything other than base or allocated the costs based on average or overall use.

Q: In light of the deficiencies you have enumerated, should the Commission accept Newport's cost of service study?

A: No. As I discussed, after three decades, the Commission and Newport's ratepayers deserve far better. Not only does this submission contain numerous deficiencies on its face, it still does not address or provide the basic information that the Commission has been requesting through three decades of rate design dockets.

Having said that, I don't believe it would be productive to require Newport to revise its submission. Rather, the Commission should examine the testimony and exhibits of the other parties to see if an appropriate framework for cost of service study can be gleaned from the submissions in this docket. I have tried to redo a cost of service study for Newport Water based on the information and data I have available. Mr. Mierzwa and Mr. Harwig may also submit such studies of their own. The Commission should use one or more of these submissions to develop a cost of service framework for Newport to use in the future.

It is likely, however, that we will not be able to derive appropriate demand factors for different customer classes as the Commission has required. At this point, I would suggest that the Commission order Newport to continue the individual daily meter readings (they were provided $75,000 for this in a prior docket) in the hope that the parties can derive some better demand factors. We know that daily data is available for PWFD (it was provided to Newport). There are relatively few Navy meters that need to be monitored for this information. With a normal (weather) summer, it may be possible to get data for Newport's retail customers that can be used in the model that comes out of this docket. After three decades it would be a shame to have made no progress.

Demand Study

Q: In response to PWFD 1-5, Newport claims that the demand study results are incorporated in the schedules attached to Mr. Smith's testimony. Do you agree?

A: I do not. Starting on page 7 of his prefiled testimony, Mr. Smith discusses the demand study. Using Mr. Smith's own words, "A demand study involves the collection and analysis of customer demand data such that one is able to draw conclusions about the way in which specific customer classes demand service." He goes on to say the demand study was based on "customer billing data and on daily demand data collected during the daily read program ..."

It is clear from RFC Schedule B-8 that Newport's filing in this docket only used customer billing data[6]. The only information regarding the daily demand data study is on the spreadsheet that was supplied after the filing (RFC Sch D-8); there was no information on the daily demand data included in the actual filing. The information on RFC Sch D-8 is but a ***brief*** summary of results.

Q: Have you since been provided with the daily demand study?

A: Yes, this was provided in the response to PWFD 1-8. I have reviewed this data. The results are surprising in that the residential demand factors are so low compared to the non-residential factors. I have not made any conclusion as to the reason for this difference, but it is possible that the unusual weather during this study period may have had an impact. It also seems likely from an analysis of the individual accounts that there is some very odd information (discussed later in my testimony) that skewed the results towards a low residential ratio and high commercial ratio. Unlike Mr. Smith, I do not believe that the tri-annual and quarterly billing data corroborates this finding.

[6] While ratios of maximum day in a week from the daily demand study were used, they were essentially useless for the analysis that was performed.

Q: Mr. Mason has provided testimony regarding problems that Newport had with the meters used for the demand study. Were you aware of these problems before seeing Mr. Mason's testimony?

A: No, Mr. Mason's testimony is the first I heard of this problem.

Q: Do you believe this issue should have been disclosed earlier?

A: Yes I do. Newport became aware of this issue in April of 2009 according to Mr. Mason's testimony (page 3)[7]. The letters and discussions among the parties culminating in the fall of 2008 and early winter of 2009, make it clear that there were significant issues with the first group of accounts that Newport installed meters for in 2006. PWFD believed that the first installations in 2006 were not at all representative of the retail customer base, and that a truly representative sample needed to be considered. A method for choosing that sample was agreed to by the parties as identified in Mr. Smith's August 4, 2008 letter.

I have reviewed Newport's response to PWFD 1-13 that shows the accounts that were removed and accounts that were added to the daily demand sample. Based on my review so far, I believe that the replacement accounts compromised the validity of the sample, and skewed the results, rendering them relatively meaningless.

A review of the attachment to the response to PWFD 1-13(b) shows that most of the substitute commercial accounts were all at the same or next door addresses[8]; this isn't true of those that were replaced. The replacement sample doesn't appear to be very random. The commercial accounts that were not used (at the top of

[7] Newport's consultant, Mr. Smith, was not even apprised of this issue with the meter installations and the substitutes until the preparation of Mr. Mason's testimony.

PWFD 1-13(b) have various size meters from 5/8" to 3". The replacement accounts, with three exceptions are all 5/8" meters. The initial commercial accounts had annual consumption (average of FY 2008 and FY 2009) of 16,695,970, while the replacements only had average annual consumption of 1,962,034 – about 10% of the initial sample. One of the dropped commercial accounts that was replaced (3" meter at 49 Americas Cup Ave) apparently includes a restaurant, hotel and marina – just the type of account that is representative of summer tourism and boating that we had all agreed was needed.

An analysis of the response to PWFD 1-13(c) also shows some odd information. While the initial (but not used) residential accounts showed a 30% drop in overall water use from FY 2008 to FY 2009 (228,000 in FY08 to 159,060 in FY09), the replacement accounts showed a doubling of use. One of these accounts (124 Harrison Ave) may be in error as the FY 2009 volume is substantially more than the prior year and not at all consistent with the daily demand data for that account. This brings into question the validity of all the analysis however *if* this one account is so very wrong. If the account use has an extra zero, the consumption by the replacement accounts is about half of the prior year, again demonstrating that the FY 2009 data that formed the basis for the demand study was for a truly unusual year.

As the parties discussed from the initial failed installation in 2006, the sample for the demand study is critical to derive useful, meaningful, and representative data. That is the goal of the demand study. Newport's failure to notify the parties of the failed meters and subsequent replacements is unfortunate. It is even more unfortunate that the replacements seemed to have undermined the validity of the sample.

[8] In fact the Connell Highway, Bellevue Avenue and Casino Terrace accounts (20 of the 31) are all in about the same block.

Q: Do you believe the daily demand study produced valid data that can be used?

A: No I do not. In addition to the sample issues that I described above, I believe there are further problems.

As the Commission may recall, the summer of 2009 was wet and overcast. A review of the response to Navy Data Request 1-5 shows that July 2009 (the month with the maximum residential demand) had rainfall of 11.12 inches, compared to prior July rainfall of 4.1, 2.5, and 3.9 inches. Further, the rainfall in May and June of 2009 was also unusually high. The maximum day for residential accounts in the daily demand study was on Monday, July 6, 2009. Based on weather data from Kingston RI (nearest I could find), it was also unusual for last summer in that there was little rain in the days leading up to July 6, 2009; however the maximum temperatures were 80 or below for the three previous days and only reached 83 as a high on July 6. Cool days following a vacation weekend do not typically result in high water demands, yet this was the peak day of the period analyzed.

I found it surprising that six of the residential accounts used no water on July 6 (the residential peak day) and three of the residential sample used no water the entire month of June and three used no water all of July.

We had expected that demands by Marinas in Newport would tend to provide information on demands by the numerous visitors that bring boats into Newport Harbor. Only one Marina shows up among the commercial accounts that were ultimately used by Newport and that Marina used virtually no water for the entire summer.

For the commercial accounts, the maximum day reported in RFC Sch D-8 was 160,816. Two accounts listed as the Marriott Long Wharf, a major hotel, used no water the first two weeks in May and one only used water (albeit significant amounts) two days in all of May, only one day in all of June, two days in July, two

days in all of August and no days in September. Nearly 2/3 of the commercial maximum day (100,000 out of 160,816) was all used by one account (Marriot Long Wharf). As mentioned above, that account used no water for 12 days before this day and used none the next 10 days. The total commercial demands for at least a week before and a week after never reached even 50% of this peak day. It truly looks suspicious.

If that one odd account for the Marriott is eliminated from the sample, the ratio of the maximum day to average day demand for commercial accounts is cut nearly in half from 2.28 (RFC Sch D-8) to 1.45. If the one residential account with reported huge use is eliminated from the analysis, the residential ratio goes up from 1.67 to 1.82[9]. This is extremely significant and points up the issues with a proper sample. It also goes a long way in explaining Newport's very unusual conclusion that non-residential accounts have higher maximum to average ratios than do residential accounts.

It is unfortunate that we were unable to get daily demand data during a normal summer, but that is beyond our control. Getting a proper representative sample is something that can be controlled and it was not. I concur with Mr. Smith that this data is interesting and of some use in looking at variations within days of the week. I do not agree that it is evidence that Newport's residential customers have lower demand factors than the non-residential customers in Newport; in fact the opposite appears true.

[9] The revised residential ratio is higher than the revised commercial – a result that would be expected.

Q: In the absence of a usable daily demand study, isn't the study based on Newport's customer billing data sufficient? Doesn't that comply with the agreement included in Exhibit 2 of the settlement in Docket 3578?

A: No. It is neither sufficient nor does it comply with settlement in Docket 3578. Newport has suggested otherwise, i.e. that a demand study based on its billing data is sufficient. The correspondence between the parties from August 4, 2008 through January 12, 2009 make it clear that the intent and expectation of the parties is that the daily demand data – not billing information – would form the basis of the demand study. In a letter from PWFD's counsel to Newport's counsel dated October 24, 2008, it was made very clear that the use of the billing data and the AWWA M1 method was not an acceptable substitute for the daily demand data.

Moreover, the billing information that formed the basis for the "demand study" in Newport's submission is deficient.

- The Commission rejected the use of the tri-annual billing data as a basis for rate design in Docket 2985 stating "we direct Newport to immediately start accumulating the necessary data, such as average day use and maximum-day use by rate class, …." The Commission went on, "We encourage Newport Water to work with the Division and other interested parties on an ongoing basis to reach consensus on the type of data, acceptability of data, and sufficiency of data to be assembled."
- In its response to PWFD 1-14, Newport agrees that the AWWA M1 Manual states that "(t)he customer billing records necessary to complete the analysis are the **monthly** billed consumption records…" (emphasis added), and Newport acknowledges that:
  - there are no monthly records for the majority of Newport's customers,
  - Newport did not even start billing quarterly until October 2007 and that the FY 2007 data used in his analysis includes data from accounts only billed three times per year, and

- "if monthly data is not used the results will 'likely be less accurate'"

- RFC Sch D-4 presents "maximum month" data for various customer classes. This information is the basis for the maximum day and maximum hour calculations that follow on RFC B-8. Because the basis for the maximum month data on RFC Sch D-4 was not included in the rate filing, one must turn to the spreadsheet model that was requested by the parties to see just where this "maximum monthly" data came from. Essentially, Newport simply listed the volumes of billings each month by customer class and picked out the highest month of billings each year. This is not the highest month of use by that class; rather it is the highest volumes billed. In any particular month it may only include a quarter of the total customers in a class (in FY 2007 when they were still recording tri-annual billing) and only a third of the customers in other years. It is incorrect to suggest that any of the billing values represent the highest monthly use by the entire class. This is made clear in looking at the response to PWFD 1-10:
  - First Newport admits that the basis for the maximum month analysis is simply the billing data.
  - The billing data shows that the peak residential month is October or November each year. We know from the treatment plant records that this is simply not true. The billing records show June to be one of the lowest months each year – this is absurd; yet this is the data upon which Newport has based its "demand study".
- In response to PWFD 1-11, Newport admits that the billing data upon which its demand study is based provides results that are inconsistent with maximum production months.
- In response to PWFD 1-12, which requested that Newport explain how the July 2006 monthly commercial demand can be greater than the total July 2006 demand for monthly and tertiary accounts, and why the monthly commercial demands are some 90-95% of the total in some months yet, less than 2/3 in others, Newport stated that the monthly data was incorrect and

should be ignored. This response raises the question of why Newport deemed the monthly billing data – but not the combined data – to be incorrect. Presumably, it all came from the same billing database.

- For Newport's quarterly billings, only three actual meter readings are taken each year (PWFD 1-14(d)). As a result at least one-quarter of all the billed amounts are estimates. Because one-quarter is always estimated, the next quarter is not necessarily an actual quarter's use either – it is off by the amount the prior quarter's estimate was incorrect. As a result, only half the billed amounts are based on actual readings.

Q: You indicated that Newport's use of the billing records is not correct, that the maximum month should have been based on actual monthly use. Please explain the difference between the maximum monthly *billings* and maximum monthly *use*.

A: This can perhaps be best illustrated with a simplified example. Assume there are three customers in the residential class and Customer A is billed for use in Feb-Apr., May-Jul, Aug-Oct, and Nov-Jan. Customer B is billed for use in Mar-May, Jun-Aug, Sep-Nov, and Dec-Feb. Customer C is billed for use in Apr-Jun, Jul-Sep, Oct-Dec, and Jan-Mar. The table below presents their highest quarterly billings.

	May	Jun	Jul	Aug	Sep	Total Billing
A	**10**	**11**	**12**	xxx	xxx	July: 33
B	xxx	**7**	**8**	**6**	xxx	Aug: 21
C	xxx	xxx	**20**	**18**	**10**	**Sept: 48**
Total Use	10	18	**40**	24	10	

Using this information, RFC Sch D-4 would take the maximum month for this class to be the September billing of 48 -- the billing period with the highest use by any

customer in this class. The actual highest month use was in July, with a maximum month of 40 when we look at each individual in the class; however, Newport would not know this as they do not have monthly billing information. The method used by Newport simply took the use in the highest billing quarter and called that the maximum month. In reality it was the highest quarter of billings.

This problem was made even worse in FY 2007 when Newport was using tri-annual billing. It continued into FY 2008 (October 2007).

Q: Is there any way to use the billing records from Newport to determine customer class demand factors?

A: As indicated in the AWWA Manual, monthly billing and usage information are necessary. Because Newport does not have this information, the Commission and other parties had called for the demand study based on daily use data.

In the interest of trying to find some meaningful solution I have calculated some class demand factors using the billing information provided by Newport in its filing. I do NOT recommend or suggest that the Commission use this in place of the daily demand data study that Newport agreed to undertake. However, in the absence of that study, it is the best we can do with information or data we have.

To help follow what I have done to correct the Newport cost of service model, I have used the same basic schedules and numbering (relabeling them "CW Sch" rather than "RFC Sch"). Where errors or miscalculations were found, I have made corrections and highlighted the changes.

Using the "Demand Data Extracts from Detailed Data Base" on the un-numbered spreadsheet schedule provided by Newport, I have summed the quarterly readings to get a full quarter's reading from all accounts within each class. For example, I

added the billings for April, May and June, then May, June and July, etc. to get the billed quarterly use for all customers. I then divided this by three to get the average monthly use. This is of course an average of three months use and dampens the variations from month to month. It is clearly not a true maximum month; yet it is the best I can do with the data Newport has provided. It at least captures the use of all customers in the class, not just those that happened to get a bill in a given month.

I then recreated RFC D-4 to show my revised calculation of a "maximum month" each year for the retail customer classes. Again, this is not how the AWWA Manual suggests deriving this information and the averaging of three months' data dampens any real peaks. It is not recommended for the long term use by the Commission as cost based.

Q: What did you do for the Navy and PWFD?

A: Because the Navy and PWFD are billed monthly, I used the data provided by Newport with one exception. For PWFD I dismissed the July 2008 peak month use (FY 2009). In providing the monthly data to Newport, PWFD explained that the July 2008 use was atypical because PWFD was using water to refill its storage tank after repair, that this was an unusual condition that would not be repeated, and that we understood it was agreed by the parties that this unusual use would not form the basis for any peak demand calculations.

Q: What have you done next for the retail accounts?

A: I was able to redo RFC Sch D-4 using the surrogate for monthly data. This maximum "monthly" demand data from my revised Sch D-4 is then used on my revised Sch B-8. I took the average use in the maximum month (quarter) and divided that by the average day use for each class. This provided a demand factor. I next determined the system wide maximum day within the maximum month. This was in

2009. I did not use an average like Newport, as the AWWA method uses the maximum amounts, not averages.

Next I applied an adjustment factor. Newport had calculated a factor for the maximum day in the week to the average day in the week; this is in line with the AWWA Manual. I did not use this factor for several reasons. First I believe the use of quarterly billing data severely dampens out peak summer demands, particularly when only one billing cycle includes the peak months of May, June and July; the other cycles include lower use months such as April or the end of August. Second, as explained earlier, I don't believe the daily demand data is from a particularly representative period and has issues with the validity of the sample.

Q: The preceding testimony related to the demand data for various customer classes, not the overall system demands. Did you also have to revise the system wide maximum day values based on Newport's data responses?

A: Yes I did. As indicated in the response to PWFD 1-6, the system production data Newport used was based on deliveries into storage reservoirs at Lawton Valley – not deliveries into the system. The net additions or withdrawals from storage need to be factored in to derive the true amount of water delivered into the system for delivery to customers. Unfortunately, we were only given information for the maximum day at Lawton Valley, and not for the system as a whole. As shown on RFC Sch D-3 the system wide maximum days were different from the maximum days at Lawton Valley. This data is used on RFC Sch B-7 to derive the system wide peaking data.

I have revised RFC Sch D-3 by reducing the system (combined) maximum day demand by 550,000 gallons each year. This is the approximate amount delivered into the 4 million gallon storage facility each year at Lawton Valley based on the response to PWFD 1-6. If Newport has more accurate data for each of those system

wide (combined) days for water delivered to (or withdrawn from) storage, these values should be revised. The maximum month production vales on RFC D-3 should also be revised to reflect the volumes delivered to the system, net of amounts to or from the 4 mg storage reservoir.

Q: Do you believe the ratios or demand factors derived on your revised Sch B-8 are correct?

A: No I do not, but they are better than what Newport has provided. When possible, they are derived following the guidelines outlined in the AWWA Manual. I also believe they are more representative of what we typically will see for maximum day and maximum hour ratios from other studies. I do believe they are more correct than the values derived by Newport.

System-wide use/Unaccounted For Water

Q: You indicated earlier that you also did not agree with Newport's proposed method of assigning unaccounted for water. Can you discuss this?

A: First let me say that I am in 100% agreement with Newport that PWFD should not be assigned any of the unaccounted for water. As discussed by Mr. McGlinn and in Newport's response to PWFD 2-4, PWFD receives water directly from Newport's four million gallon reservoir at Lawton Valley. While two other connections are available (see Div 1-15), they are emergency connections only and not used or utilized by PWFD. The connection at the two million gallon tank is "kept closed"; it has been used only once in 20 years. Contrary to Newport's assertion in its response to data requests, PWFD used the other connection (Mitchell's Lane) on only one occasion. Even if they were used, these other two connections involve minimal portions of the transmission system and any unaccounted for water in these pipes would be so small it would be irrelevant.

Newport also did not assign any unaccounted for water to the Navy. We have not analyzed the portions of the system that are used by the Navy connections and have simply accepted Newport's suggestion.

While I do not disagree with who the unaccounted for water is assigned to, I do disagree with how it was assigned. RFC Sch B-9 increases the retail use and decreases the Navy and PWFD use for unaccounted for water. Neither the Navy's nor PWFD's use should be reduced. Instead, the retail use should simply be increased by the volume of unaccounted for water to equal the total volume of water that is delivered to or provided for each customer class. For example, a larger volume of water is provided for the retail class than is actually metered; some is lost through the distribution system and service pipe leaks. The volume provided for PWFD is the same as that which is metered and sold.

I have revised Sch B-9 to present the allocation of unaccounted for water to the retail classes. If it is determined that the Navy is responsible for any unaccounted for water, this schedule can be easily revised to update the model.

Q: Does your revised Schedule B-9 provide more information?

A: Yes. As with the original RFC Sch B-9 it also presents the percentage of average or base flows, maximum day and maximum hour for each rate class. Because this is based on the corrected demand factors for each class, the resultant allocations of average, maximum day, and maximum hour volumes differ from those submitted by Newport.

I have also made a significant correction to the percentage associated with fire protection.

Q: Please discuss this correction to the fire protection demands.

A: In determining the percentage of demands that are the responsibility of each class, it is important to compare apples to apples. For example, it would not be proper to use gallons for one class and cubic feet for another. In this case, the units of measurement are all a *rate of flow* (e.g. gallons per day, cubic feet per second, etc.). For the retail residential and commercial, Navy and PWFD, Newport used gallons per day as the maximum hour unit of demand. For fire protection, Newport used gallons per hour. Thus, Newport has compared retail and wholesale use in a 24-hour period to the fire demands in just one hour. That is not proper. The proper comparison is the relative rates of use by each class, and the demands for every customer should be presented using the same units. Using gals/day for some and gals/hr is incorrect. The obvious flaw in Newport's analysis can be seen by looking at the relative percentages of costs assigned to fire protection: 21.6% of the maximum day costs but only 2.9% of the maximum hour costs.

I have corrected Sch B-9 using consistent units of measurement for all classes. While I have expressed this in gallons per day I could just as easily have used gallons per hour or cubic feet per second. What is important is that the units all be the same for each class.

Q: Did you make any other adjustments to RFC Sch B-9?

A: Yes. In determining the maximum hour increment, Newport used the difference between the maximum hour demand and the average demand. As presented in the AWWA M1 Manual[10], the maximum hour increment should be the difference between the maximum hour demands and the maximum day demands – it is the extra capacity over and above the maximum day.

[10] Table 8-1 of the fifth edition. This table also demonstrates that the fire demands should be in the same units as all other classes.

All these corrections, along with the revised demand factors I discussed earlier result in significant changes to the amounts that should be allocated to the various customer classes. While the average demands show little change, there are major changes in the share of costs between classes.

Detailed Allocation/ Misc Revenues

Q: In your summary, you discuss a detailed or line item allocation of costs. Can you elaborate on your discussion?

A: In all previous studies, Newport submitted a cost allocation analysis that considered the individual line items (e.g. labor, chemicals) within major cost categories (e.g. administration, treatment). To present an accurate allocation of Newport's costs, I believe that such a line item allocation is essential. While many or most items within a category can be allocated on the same basis, this is not always true.

Q: Can you give an example?

A: Yes. For the Treatment category Newport has allocated the entire function to base and maximum day functions. Contrary to Newport's claims in response to PWFD 1-1, chemical costs and power costs tend to vary with the total volume of water produced (a base cost) and do not vary with maximum demands. Chemicals are applied based on the total volume of water treated – the cost of chemicals does not change based on the peak water demands, only on the total quantity used. The AWWA M1 Manual specifically breaks these costs out because of these differences. Similarly, under Transmission & Distribution, costs are broken out between mains, storage, meters and services, and hydrants because they should be allocated differently.

Newport has this detailed breakdown of costs and even presents it as RFC Sch A-1. There is no reason not to use this detail. While there is some detail provided for

customer service and administration, in general Newport has taken a short cut to the cost allocation that forms the basis for the entire cost of service study. As I suggested earlier, after three decades I believe we are all deserving of a reasonable level of precision in this study.

Q: Have you done such an allocation?

A: Yes I have. I have presented it on my revised Sch A-1. While my allocation sets forth different results than those presented by Newport, I believe the differences are explained by the greater level of detail in my allocation.

Q: What other changes have you made that caused the different results?

A: There are several.

- Newport has split costs between base, maximum day and maximum hour using the non-coincident, class demands calculated and presented on RFC B-10. This is an incorrect application of the base extra-capacity method. As presented in the AWWA M1 Manual, it is the overall *coincident system* demands that should be used to allocate costs to functions. These are subsequently distributed to customer classes based on the non-coincident demands of each class. As an example of how these can differ, RFC B-10 shows the base component of the combined base and maximum day costs to be 44.7%. Based on the average of three years of system wide data, the base component should be 58.7%. A similar calculation for the maximum hour costs results in more changes.
- Newport has twice allocated costs to fire protection. First, on RFC B-1, it allocated a portion of many of the maximum day and peak hour costs directly to fire protection based on the portion of fire demands to total demands . Second, on RFC B-2, it allocated a portion of the maximum day and peak hour costs to fire protection. While loading these costs onto the City serves

to lower what's left to assign to customers such as PWFD, it is not correct and results in fire protection charges that are too high.

- While we know there are costs associated with operating and maintaining hydrants, services and meters, none of the T&D costs are assigned to these functions (except for the mistaken doubling up of allocations to fire). The costs of hydrants, services and meters should be clearly assigned to develop cost based rates. For purposes of this filing I have assigned 25% of most T&D costs to meters and services and 10% to public fire hydrants (a direct allocation to fire)[11]. In response to PWFD 1-2, Newport says that it does not have "an accurate determination of T&D costs specifically associated with services." While Newport may not have an "accurate determination" I believe we can all agree there are some costs. I don't agree with its suggestion that because we don't have an accurate estimate it is better to allocate none.
- Some administrative costs should be assigned based on the allocation of labor, others based on the allocation of the costs that can be directly assigned. I have done that.
- In prior dockets, the parties have spent considerable time and effort to determine an appropriate allocation of legal and administrative charges from the City. We have that detail and should use it to allocate this cost; it is in excess of $300,000. Newport would simply lump it in with all other costs. Newport allocates just 5% to billing, for example, even though we know from prior dockets that billing and collections represents a much higher percentage of City Services. The Collections Department alone accounts for over $47,000 – or 16% - of the $301,391 in City Services. Newport's suggestion that billing and collections represents only 5% of City Services is

[11] For Kent County Water about 7% of the TD costs are directly related to hydrants and about 30% with meters and services. For Pawtucket about 80% of T&D was service and meter related and 7% directly related to hydrants. Newport's last filing with complete asset information (Docket 3457) showed that 18% of the net assets as of 6/30/1998 were meters and services and 2% were hydrants. The City's IFR Program shows considerable expense associated with new hydrant replacements.

simply not credible. Based on my analysis I believe that 21% of the Legal & Admin costs (City Services) should be assigned to Billing rather than the simple 5% suggested by Newport.

- I have also allocated the revenue offsets or miscellaneous revenues separately. These are revenues that are used to offset the amounts needed to be raised through PUC approved rates and charges. In this docket they amount to nearly $750,000 – not a trivial amount. With the exception of the customer service reimbursements, Newport has proposed allocating the remaining $335,000 based solely on the assignment of all other costs. This is appropriate for some general revenues, but items like Property Rental Income ($81,000) and Water Quality Protection Fees ($25,700) can be directly assigned. Because the Water Quality Protection Fees are simply an add-on based on use, they should be assigned as a base cost. I believe the income from rental property should also be assigned as a base offset.
- As I discussed earlier, every (attempt at a) cost of service study for Newport over the past three decades has assigned treatment costs as a base only cost. In this instance, Newport has proposed a significant change -- to assign a portion of treatment to maximum day. With the exception of electric, sewer and chemical costs, I have left the allocation this way. In many systems, the treatment facilities are designed and run to provide for maximum day demands. In the case of Lawton Valley, the water is pumped at a somewhat constant rate to a 4 million gallon reservoir. That reservoir serves to meet the variations in demand. I believe that Newport needs to provide some further explanation as to why the Commission should change the allocations for treatment at this time, especially at Lawton Valley.

Q: After allocating the costs to the functional components of base, maximum day, maximum hour, metering, billing and fire, the resultant amounts are as-

signed to customer classes. Do you agree with the manner in which Newport has done this?

A: No I do not. This is presented on RFC Sch B-2. Clearly this assignment depends on both the allocated costs and on the demands by each class. I have already commented on the shortfalls of both these.

In RFC Sch B-2 Newport has assigned costs based on the share of each class of various cost functions. They do not assign PWFD any of the retail transmission and distribution costs, which are broken out separately. However, Newport has failed to remove any of the administrative overhead associated with the transmission and distribution functions. Recall that Newport allocated the bulk of administrative costs based on the allocation of the other functions. Implicit in their allocation is the assumption that administrative overhead applies to all other functions. Considering that the Administrative costs represent more than 25% of all O&M costs, the failure to remove a portion of the administration that goes with transmission and distribution is a significant omission.

In response to PWFD 1-18, Newport admits that (a) both the Deputy Director-Engineering and Director of Utilities have at least indirect oversight of T&D employees, (b) that some of the City Service and Data Processing functions (part of Administrative costs) are applicable to some T&D functions, services, or employees, and (c) the administrative staff does provide oversight to various T&D functions. In light of this I believe it is appropriate to assign a portion of the administration costs to T&D and remove that portion of Administrative costs associated with T&D from the allocation to PWFD.

Q: Have you also made an adjustment for pumping costs?

A: Yes I have. While the report and order for Docket 4025 has not been released, it was clear in that docket that PWFD wanted Newport to report pumping costs sepa-

rate from treatment and T&D costs and that Newport agreed that it would do all it could to meet that requirement. PWFD had made this an issue because part of Newport's pumping infrastructure is only associated with the provision of retail service and pumping to different pressure zones within the retail system. Mr. McGlinn's testimony addresses this further. Through data requests we have tried to get this information. At the time this testimony was prepared we had yet to get the breakdown between retail/distribution pumping and pumping that was associated with the treatment process. In the absence of that information, I have used the total pumping costs provided by Newport and the allocation (as revised by me with the correct system based allocators) to various functions. I remove these and associated overhead from the amounts allocable to PWFD. I will revise this calculation if Newport provides a better breakdown.

Because we do not have asset data for the retail pumping facilities, I have not been able to make an adjustment to any capital costs for the pumping facilities. If Newport can provide this data, such an adjustment should be made.

Fire Protection

Q: You have mentioned several issues with Newport's determination of fire protection charges. Will you elaborate on these?

A: There are several issues that resulted in a proposed allocation to fire protection that is overstated.

- Perhaps the biggest issue is that Newport has assigned costs to fire protection two times, essentially doubling the amounts that are applicable. First, Newport has determined the fire protection portion of maximum day and maximum hour demands and directly assigned costs to fire protection(see RFC Sch B-1 and B-3). Next they have taken the remaining maximum day and maximum hour costs and again assigned more of these

costs to fire protection (see RFC Sch B-2). The effect of this is to assign costs to fire protection twice.

- In assigning a share of the maximum hour costs to fire protection (RFC Sch B-2), the fire protection shares (3% with PWFD and 4% without PWFD) were calculated incorrectly. These percentages are derived on RFC Sch B-9. This is the schedule where Newport used different units for fire protection than the other classes. If the percentages are calculated using the same units for all customers, the fire share is significantly greater.
- In determining the breakdown between public and private fire protection, Newport failed to consider the costs of public hydrants separately. The public fire hydrant costs are assigned to the private fire service customers. The hydrant costs should be removed to determine the portion of fire charges associated with demands (assigned to both public and private fire service) and the portion associated with public fire hydrants (assigned only to public fire protection.
- In determining the private fire service charges, Newport has not assigned any costs associated with the service connections between the main and the property. Based on Div 1-1, the private fire services have a connection similar to domestic services, only larger. They are not metered. Including the cost of these service lines in the private fire protection charges is common in Rhode Island and is a cost that should be reflected in the cost of service study. As discussed later, in determining the costs of meters and services and the associated rates, I have included the cost of service lines in the proposed private fire service charges.

Base or Customer Charge

Q: Newport has proposed a base charge that is the same for all meter sizes. Is this a cost based charge?

A: No it is not. One need only look at RFC Sch B-1 and B-2 to see that Newport has allocated costs to billing and to metering. While the billing component of the proposed base charge should be the same for all bills, the metering portion is not. Larger meters and services cost more to install, maintain, and test. Because this is a cost difference, it should be reflected in a cost of service study. It is interesting that RFC Sch B-2 was set up to treat these two components differently and apparently Newport made such a determination (see PWFD 2-3); yet this feature was not used for the required cost of service study.

The response to Div 1-9 indicates that Newport did consider a base charge that varied by meter size. This was rejected for two apparent reasons: (1) they had no reliable historic cost for installing meters and would therefore have trouble determining a meter equivalency ratio and (2) the impact of such a charge was apparently not to Newport's liking.

As acknowledged in the response to Div 1-9, Newport could easily have used the meter equivalency ratios developed for other RI water utilities; these have been approved for use by the Commission. Further, Newport provided some very good meter cost data in response to Div 1-8. In developing the service charges I have proposed, I found that this data provided results that were not too dissimilar from the ratios used by other RI utilities. I believe they are suitable, and certainly better than nothing.

Newport's second reason for not providing a service charge that varies by size has nothing to do with cost of service study. In response to PWFD 2-3, Newport indicates that a service charge that varies by meter size would be cost of service based. Newport was ordered to provide a cost of service study, however, not to

make arbitrary adjustments because of an unfavorable outcome or the possibility of customer confusion.

Q: Have you developed a base or service charge that varies by meter size?

A: Yes I have. While this has no impact on PWFD, it should be part of the cost of service analysis.

I have gone through the typical analysis that the Commission has seen before[12] to develop a service charge for Newport. While there is some missing data related to the investments and operating costs that would enable me to split costs between meters and services, I believe this is close to cost based. I have split the combined costs equally between meters and services.

For meter equivalents I have used the data provided in the response to Div 1-8. As I indicated earlier, I found these equivalency ratios to be similar to those developed and used by other RI water utilities.

Also as I discussed earlier under the private fire service charges, I have added a component to the private fire service charges to reflect the cost of the service lines to those services.

Q: You indicated that PWFD should not pay a base or service charge. Why is that?

A: PWFD owns, installed and tests its own meter. Newport water has no costs associated with this meter. Further, there is no service line to maintain, repair or replace. At the most, the only amount that should be charged is the billing charge portion of the base charge.

[12] This was done in recent filings by Pawtucket Water and Kent County Water Authority.

Q: Have you prepared an exhibit that presents your proposed cost of service model?

A: Yes I have. It is attached to my testimony. I would be glad to provide it in electronic version to any and all parties. For the most part I have tried to use or follow the same schedules submitted by Newport's. Many of the schedules changed substantially. Where I have made changes to Newport's schedules I have tried to highlight the revised areas.

Q: In looking at the summary of rates you have developed, are the rates for PWFD higher than those developed by Newport?

A: Yes they are. As we have stated through numerous dockets, it is not PWFD's intent to simply get the lowest rate possible. PWFD is interested in seeing a proper and correct cost of service study that assigns costs to those responsible for causing the costs. We have understood all along that the results may not be favorable to PWFD. A full cost of service study may indeed show that PWFD's rates should be slightly higher than they are now.

Q: In light of your analysis and testimony, do you have a recommendation for the Commission regarding the cost of service study and new rates?

A: Yes I do. I believe the Commission should not order or allow any change in rates at this time, with the possible exception of revising the fixed service or base charge. The current base charge that is the same for all customers is far out of date.

I believe that the daily demand data that we have from last summer's study is of little value. It was not submitted with the filing (except in limited summary form). Further, the evidence in this docket shows that there were problems with the meters and installations and the summer of 2009 period was extremely unusual. Basing new rates on such atypical circumstances would be inappropriate.

I believe the Commission should establish a basis for the cost of service study and cost allocations. I believe that the model I have submitted can be used as a good starting point. It takes many of the elements from Newport's submission and corrects obvious errors and flaws. Having said that, I suspect that refinements that may be suggested by the other parties (including Newport in rebuttal) will be helpful in developing proper cost of service model. The missing element, appropriate demand data for customer classes, can hopefully be developed over the next few summers if (1) we have more normal or typical weather and (2) a proper sample of customers is used. As time goes on I expect Newport can add to this data and provide better refinements. Future refinements would include:

- appropriate customer class demand data
- accounting for distribution pumping costs
- accounting for meter and service assets and operating costs to refine the service charges

We have waited many decades for this model. I believe there is an opportunity to agree on an acceptable framework for the model now. With better data, I expect that cost based rates can be implemented by Newport in the future.

Q: Does this conclude your direct testimony?

A: Yes.

Newport Water Division
Cost Of Service Analysis
CW Sch A-1
Revenue Requirements

	Rate Year Docket 4025	Allocation Basis	Base %	Base $	Maximum Day %	Maximum Day $	Maximum Hour %	Maximum Hour $	Meters & Services %	Meters & Services $	Billing %	Billing $	Fire Protection %	Fire Protection $
O&M COSTS														
Administration														
Salaries & Wages	$ 265,000	O	54%	$ 142,441	20%	$ 54,302	3%	$ 8,784	13%	$ 35,642	7%	$ 18,133	2%	$ 5,698
AFSCME retro	-	O	54%	$ -	20%	$ -	3%	$ -	13%	$ -	7%	$ -	2%	$ -
NEA retro	-	O	54%	$ -	20%	$ -	3%	$ -	13%	$ -	7%	$ -	2%	$ -
AFSCME benefits on retro pay	-	O	54%	$ -	20%	$ -	3%	$ -	13%	$ -	7%	$ -	2%	$ -
NEA benefits on retro pay	-	O	54%	$ -	20%	$ -	3%	$ -	13%	$ -	7%	$ -	2%	$ -
Standby Salaries	12,500	O	54%	$ 6,719	20%	$ 2,561	3%	$ 414	13%	$ 1,681	7%	$ 855	2%	$ 269
Accrued Benefits Buyout	175,000	L	51%	$ 89,225	23%	$ 40,158	3%	$ 5,593	14%	$ 24,341	7%	$ 12,095	2%	$ 3,588
Employee Benefits	96,500	L	51%	$ 49,201	23%	$ 22,144	3%	$ 3,084	14%	$ 13,422	7%	$ 6,670	2%	$ 1,979
Retiree Insurance Coverage	347,200	L	51%	$ 177,022	23%	$ 79,673	3%	$ 11,097	14%	$ 48,292	7%	$ 23,997	2%	$ 7,119
Workers Compensation	114,000	L	51%	$ 58,124	23%	$ 26,160	3%	$ 3,644	14%	$ 15,856	7%	$ 7,879	2%	$ 2,337
Annual Leave Buyback	2,400	L	51%	$ 1,224	23%	$ 551	3%	$ 77	14%	$ 334	7%	$ 166	2%	$ 49
Advertisement	9,000	O	54%	$ 4,838	20%	$ 1,844	3%	$ 298	13%	$ 1,210	7%	$ 616	2%	$ 194
Membership Dues & Subscriptions	2,500	L	51%	$ 1,275	23%	$ 574	3%	$ 80	14%	$ 348	7%	$ 173	2%	$ 51
Conferences & Training	2,500	L	51%	$ 1,275	23%	$ 574	3%	$ 80	14%	$ 348	7%	$ 173	2%	$ 51
Tuition Reimbursement	2,000	L	51%	$ 1,020	23%	$ 459	3%	$ 64	14%	$ 278	7%	$ 138	2%	$ 41
Consultant Fees	201,500	O	54%	$ 108,309	20%	$ 41,290	3%	$ 6,679	13%	$ 27,101	7%	$ 13,788	2%	$ 4,333
Postage	1,000	O	54%	$ 538	20%	$ 205	3%	$ 33	13%	$ 134	7%	$ 68	2%	$ 22
Fire & Liability Insurance	86,000	O	54%	$ 46,226	20%	$ 17,623	3%	$ 2,851	13%	$ 11,567	7%	$ 5,885	2%	$ 1,849
Telephone & Communication	8,300	O	54%	$ 4,461	20%	$ 1,701	3%	$ 275	13%	$ 1,116	7%	$ 568	2%	$ 178
Water	1,050	O	54%	$ 564	20%	$ 215	3%	$ 35	13%	$ 141	7%	$ 72	2%	$ 23
Electricity	8,000	O	54%	$ 4,300	20%	$ 1,639	3%	$ 265	13%	$ 1,076	7%	$ 547	2%	$ 172
Natural Gas	8,000	O	54%	$ 4,300	20%	$ 1,639	3%	$ 265	13%	$ 1,076	7%	$ 547	2%	$ 172
Property Taxes	229,000	O	54%	$ 123,091	20%	$ 46,926	3%	$ 7,591	13%	$ 30,800	7%	$ 15,669	2%	$ 4,924
Legal & Administrative	301,400	L-A	48%	$ 143,699	18%	$ 54,052	3%	$ 9,662	9%	$ 27,753	21%	$ 61,941	1%	$ 4,293
Data Processing	137,000	O	54%	$ 73,640	20%	$ 28,073	3%	$ 4,541	13%	$ 18,426	7%	$ 9,374	2%	$ 2,946
Mileage Allowance	2,000	O	54%	$ 1,075	20%	$ 410	3%	$ 66	13%	$ 269	7%	$ 137	2%	$ 43
Gasoline & Vehicle Allowance	8,481	O	54%	$ 4,559	20%	$ 1,738	3%	$ 281	13%	$ 1,141	7%	$ 580	2%	$ 182
Repairs & Maintenance	1,200	O	54%	$ 645	20%	$ 246	3%	$ 40	13%	$ 161	7%	$ 82	2%	$ 26
Regulatory Expense	10,000	O	54%	$ 5,375	20%	$ 2,049	3%	$ 331	13%	$ 1,345	7%	$ 684	2%	$ 215
Regulatory Assessment	46,770	O	54%	$ 25,140	20%	$ 9,584	3%	$ 1,550	13%	$ 6,290	7%	$ 3,200	2%	$ 1,006
Office Supplies	30,000	O	54%	$ 16,125	20%	$ 6,147	3%	$ 994	13%	$ 4,035	7%	$ 2,053	2%	$ 645
Self Insurance	10,000	O	54%	$ 5,375	20%	$ 2,049	3%	$ 331	13%	$ 1,345	7%	$ 684	2%	$ 215
Unemployment Claims	12,000	L	51%	$ 6,118	23%	$ 2,754	3%	$ 384	14%	$ 1,669	7%	$ 829	2%	$ 246
Subtotal:	**$ 2,130,301**			**$ 1,105,904**		**$ 447,340**		**$ 69,390**		**$ 277,198**		**$ 187,605**		**$ 42,865**

PWFD Exhibit

Newport Water Division
Cost Of Service Analysis
CW Sch A-1
Revenue Requirements

	Rate Year Docket 4025	Allocation Basis	Base %	Base $	Maximum Day %	Maximum Day $	Maximum Hour %	Maximum Hour $	Meters & Services %	Meters & Services $	Billing %	Billing $	Fire Protection %	Fire Protection $
Customer Service														
Salaries & Wages	$ 326,100	L-C	0%	$ -	0%	$ -	0%	$ -	56%	$ 183,128	44%	$ 142,972	0%	$ -
Overtime	21,218	L-C	0%	$ -	0%	$ -	0%	$ -	56%	$ 11,915	44%	$ 9,303	0%	$ -
Temp Salaries	22,800	L-C	0%	$ -	0%	$ -	0%	$ -	56%	$ 12,804	44%	$ 9,996	0%	$ -
Injury Pay	-	L-C	0%	$ -	0%	$ -	0%	$ -	56%	$ -	44%	$ -	0%	$ -
Employee Benefits	175,200	L-C	0%	$ -	0%	$ -	0%	$ -	56%	$ 98,387	44%	$ 76,813	0%	$ -
Annual Leave Buyback	4,950	L-C	0%	$ -	0%	$ -	0%	$ -	56%	$ 2,780	44%	$ 2,170	0%	$ -
Copying & binding	1,000	B	0%	$ -	0%	$ -	0%	$ -	0%	$ -	100%	$ 1,000	0%	$ -
Conferences & Training	5,000	B	0%	$ -	0%	$ -	0%	$ -	0%	$ -	100%	$ 5,000	0%	$ -
Support Services	21,000	B	0%	$ -	0%	$ -	0%	$ -	0%	$ -	100%	$ 21,000	0%	$ -
Postage	34,300	B	0%	$ -	0%	$ -	0%	$ -	0%	$ -	100%	$ 34,300	0%	$ -
Gasoline & Vehicle Allowance	27,852	L-C	0%	$ -	0%	$ -	0%	$ -	56%	$ 15,641	44%	$ 12,211	0%	$ -
Repairs & Maintenance	41,500	M	0%	$ -	0%	$ -	0%	$ -	100%	$ 41,500	0%	$ -	0%	$ -
Meter Maintenance	11,000	M	0%	$ -	0%	$ -	0%	$ -	100%	$ 11,000	0%	$ -	0%	$ -
Operating Supplies	9,000	M	0%	$ -	0%	$ -	0%	$ -	100%	$ 9,000	0%	$ -	0%	$ -
Uniforms & protective Gear	1,000	M	0%	$ -	0%	$ -	0%	$ -	100%	$ 1,000	0%	$ -	0%	$ -
Customer Service Supplies	15,000	B	0%	$ -	0%	$ -	0%	$ -	0%	$ -	100%	$ 15,000	0%	$ -
Subtotal:	**$ 716,920**			**$ -**		**$ -**		**$ -**		**$ 387,155**		**$ 329,765**		**$ -**
Source of Supply - Island														
Salaries & Wages	$ 216,900	A	100%	$ 216,900	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Overtime	28,200	A	100%	$ 28,200	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Temp Salaries	10,000	A	100%	$ 10,000	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Injury Pay	-	A	100%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Employee Benefits	111,296	A	100%	$ 111,296	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Annual Leave Buyback	6,300	A	100%	$ 6,300	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Electricity	34,100	A	100%	$ 34,100	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Gas/Vehicle Maintenance	48,300	A	100%	$ 48,300	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Repairs & Maintenance	8,300	A	100%	$ 8,300	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Reservoir Maintenance	25,000	A	100%	$ 25,000	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Operating Supplies	3,750	A	100%	$ 3,750	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Uniforms & protective Gear	750	A	100%	$ 750	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Chemicals	54,000	A	100%	$ 54,000	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Subtotal:	**$ 546,896**			**$ 546,896**		**$ -**		**$ -**		**$ -**		**$ -**		**$ -**
Source of Supply - Mainland														
Overtime	$ 4,500	A	100%	$ 4,500	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Temp Salaries	15,300	A	100%	$ 15,300	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Permanent Part time	13,000	A	100%	$ 13,000	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Employee Benefits	2,600	A	100%	$ 2,600	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Electricity	92,600	A	100%	$ 92,600	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Repairs & Maintenance	8,800	A	100%	$ 8,800	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Reservoir Maintenance	6,000	A	100%	$ 6,000	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Operating Supplies	500	A	100%	$ 500	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Subtotal:	**$ 143,300**			**$ 143,300**		**$ -**		**$ -**		**$ -**		**$ -**		**$ -**

PWFD Exhibit

Newport Water Division
Cost Of Service Analysis
CW Sch A-1
Revenue Requirements

	Rate Year Docket 4025	Allocation Basis	Base %	Base $	Maximum Day %	Maximum Day $	Maximum Hour %	Maximum Hour $	Meters & Services %	Meters & Services $	Billing %	Billing $	Fire Protection %	Fire Protection $
Station One														
Salaries & Wages	$ 441,500	D	59%	$ 258,972	41%	$ 182,528	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Overtime	58,100	D	59%	$ 34,080	41%	$ 24,020	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Holiday Pay	19,100	D	59%	$ 11,204	41%	$ 7,896	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Employee Benefits	237,000	D	59%	$ 139,018	41%	$ 97,982	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Annual Leave Buyback	4,950	D	59%	$ 2,904	41%	$ 2,046	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Conferences & Training	5,500	D	59%	$ 3,226	41%	$ 2,274	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Fire & Liability Insurance	12,700	D	59%	$ 7,450	41%	$ 5,251	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Electricity	247,500	A	100%	$ 247,500	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Natural Gas	23,300	D	59%	$ 13,667	41%	$ 9,633	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Rental of Equipment	1,000	D	59%	$ 587	41%	$ 413	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Sewer Charge	184,000	A	100%	$ 184,000	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Gas/Vehicle Maintenance	8,100	D	59%	$ 4,751	41%	$ 3,349	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Repairs & Maintenance	35,000	D	59%	$ 20,530	41%	$ 14,470	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Operating Supplies	27,800	D	59%	$ 16,307	41%	$ 11,493	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Uniforms & protective Gear	1,350	D	59%	$ 792	41%	$ 558	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Chemicals	399,000	A	100%	$ 399,000	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Subtotal:	**$ 1,705,900**			**$ 1,343,985**		**$ 361,915**		**$ -**		**$ -**		**$ -**		**$ -**
Lawton Valley														
Salaries & Wages	$ 500,100	D	59%	$ 293,345	41%	$ 206,755	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Overtime	42,400	D	59%	$ 24,871	41%	$ 17,529	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Holiday Pay	20,000	D	59%	$ 11,731	41%	$ 8,269	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Employee Benefits	275,500	D	59%	$ 161,601	41%	$ 113,899	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Annual Leave Buyback	3,850	D	59%	$ 2,258	41%	$ 1,592	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Conferences & Training	3,500	D	59%	$ 2,053	41%	$ 1,447	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Fire & Liability Insurance	13,600	D	59%	$ 7,977	41%	$ 5,623	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Electricity	180,600	A	100%	$ 180,600	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Natural Gas	28,900	D	59%	$ 16,952	41%	$ 11,948	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Rental of Equipment	500	D	59%	$ 293	41%	$ 207	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Sewer Charge	242,000	A	100%	$ 242,000	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Gas/Vehicle Maintenance	8,400	D	59%	$ 4,927	41%	$ 3,473	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Repairs & Maintenance	43,400	D	59%	$ 25,457	41%	$ 17,943	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Operating Supplies	22,000	D	59%	$ 12,905	41%	$ 9,095	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Uniforms & protective Gear	1,000	D	59%	$ 587	41%	$ 413	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Chemicals	216,000	A	100%	$ 216,000	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Subtotal:	**$ 1,601,750**			**$ 1,203,557**		**$ 398,193**		**$ -**		**$ -**		**$ -**		**$ -**
Laboratory														
Salaries & Wages	$ 127,700	A	100%	$ 127,700	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Employee Benefits	62,400	A	100%	$ 62,400	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Annual Leave Buyback	2,750	A	100%	$ 2,750	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Repairs & Maintenance	1,000	A	100%	$ 1,000	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Regulatory Assessment	36,500	A	100%	$ 36,500	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Laboratory Supplies	18,500	A	100%	$ 18,500	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Subtotal:	**$ 248,850**			**$ 248,850**		**$ -**		**$ -**		**$ -**		**$ -**		**$ -**

Newport Water Division
Cost Of Service Analysis
CW Sch A-1
Revenue Requirements

	Rate Year Docket 4025	Allocation Basis	Base %	Base $	Maximum Day %	Maximum Day $	Maximum Hour %	Maximum Hour $	Meters & Services %	Meters & Services $	Billing %	Billing $	Fire Protection %	Fire Protection $
Transmission & Distribution														
Salaries & Wages	$ 416,200	T	29%	$ 120,581	20%	$ 84,988	16%	$ 64,961	25%	$ 104,050	0%	$ -	10%	$ 41,620
Overtime	52,000	T	29%	$ 15,065	20%	$ 10,618	16%	$ 8,116	25%	$ 13,000	0%	$ -	10%	$ 5,200
Temp Salaries	10,000	T	29%	$ 2,897	20%	$ 2,042	16%	$ 1,561	25%	$ 2,500	0%	$ -	10%	$ 1,000
Injury Pay	-	T	29%	$ -	20%	$ -	16%	$ -	25%	$ -	0%	$ -	10%	$ -
Employee Benefits	224,996	T	29%	$ 65,186	20%	$ 45,944	16%	$ 35,118	25%	$ 56,249	0%	$ -	10%	$ 22,500
Annual Leave Buyback	5,900	T	29%	$ 1,709	20%	$ 1,205	16%	$ 921	25%	$ 1,475	0%	$ -	10%	$ 590
Conferences & Training	4,000	T	29%	$ 1,159	20%	$ 817	16%	$ 624	25%	$ 1,000	0%	$ -	10%	$ 400
Contract Services	12,500	T	29%	$ 3,621	20%	$ 2,552	16%	$ 1,951	25%	$ 3,125	0%	$ -	10%	$ 1,250
Fire & Liability Insurance	2,400	T	29%	$ 695	20%	$ 490	16%	$ 375	25%	$ 600	0%	$ -	10%	$ 240
Electricity	19,600	T	29%	$ 5,678	20%	$ 4,002	16%	$ 3,059	25%	$ 4,900	0%	$ -	10%	$ 1,960
Heavy Equipment Rental	8,900	T	29%	$ 2,578	20%	$ 1,817	16%	$ 1,389	25%	$ 2,225	0%	$ -	10%	$ 890
Gas/Vehicle Maintenance	99,400	T	29%	$ 28,798	20%	$ 20,297	16%	$ 15,514	25%	$ 24,850	0%	$ -	10%	$ 9,940
Repairs & Maintenance	32,000	T	29%	$ 9,271	20%	$ 6,534	16%	$ 4,995	25%	$ 8,000	0%	$ -	10%	$ 3,200
Main Maintenance	84,800	H	45%	$ 37,797	31%	$ 26,640	24%	$ 20,363	0%	$ -	0%	$ -	0%	$ -
Service Maintenance	33,500	M	0%	$ -	0%	$ -	0%	$ -	100%	$ 33,500	0%	$ -	0%	$ -
Operating Supplies	11,000	T	29%	$ 3,187	20%	$ 2,246	16%	$ 1,717	25%	$ 2,750	0%	$ -	10%	$ 1,100
Uniforms & protective Gear	1,500	T	29%	$ 435	20%	$ 306	16%	$ 234	25%	$ 375	0%	$ -	10%	$ 150
Subtotal:	**$ 1,018,696**			**$ 298,659**		**$ 210,501**		**$ 160,898**		**$ 258,599**		**$ -**		**$ 90,040**
Fire Protection														
Repair & Maintenance - Equipment	$ 14,500	F	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -	100%	$ 14,500
Subtotal:	**$ 14,500**			**$ -**		**$ -**		**$ -**		**$ -**		**$ -**		**$ 14,500**
TOTAL O&M	**$ 8,127,113**	O	60%	**$ 4,891,151**	17%	**$ 1,417,949**	3%	**$ 230,288**	11%	**$ 922,952**	6%	**$ 517,369**	2%	**$ 147,405**

Newport Water Division
Cost Of Service Analysis
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	Rate Year Docket 4025	Allocation Basis	Base %	Base $	Maximum Day %	Maximum Day $	Maximum Hour %	Maximum Hour $	Meters & Services %	Meters & Services $	Billing %	Billing $	Fire Protection %	Fire Protection $
CAPITAL COSTS														
Contribution to Capital Spending Acct	$ 1,146,918	C	60%	$ 687,645	27%	$ 308,546	7%	$ 83,085	4%	$ 47,795	1%	$ 11,649	1%	$ 8,199
Existing Debt Service														
Revenue Bonds	$ 910,552	C	60%	$ 545,930	27%	$ 244,958	7%	$ 65,962	4%	$ 37,945	1%	$ 9,248	1%	$ 6,509
SRF Loans	$ 413,954	C	60%	$ 248,190	27%	$ 111,363	7%	$ 29,987	4%	$ 17,251	1%	$ 4,204	1%	$ 2,959
New Debt Service		C	60%	$ -	27%	$ -	7%	$ -	4%	$ -	1%	$ -	1%	$ -
Revenue Bonds	$ -	C	60%	$ -	27%	$ -	7%	$ -	4%	$ -	1%	$ -	1%	$ -
SRF Loans	$ 686,317	C	60%	$ 411,488	27%	$ 184,634	7%	$ 49,718	4%	$ 28,601	1%	$ 6,971	1%	$ 4,906
Total Debt Service	2,010,823			1,205,607		540,954		145,667		83,796		20,423		14,375
	-			-		-		-		-		-		-
Total Capital Costs	**$ 3,157,741**			**$ 1,893,252**		**$ 849,500**		**$ 228,752**		**$ 131,591**		**$ 32,072**		**$ 22,574**
Contribution to Repayment to City Account														
Operating Revenue Allowance	$ 243,813	Z	60%	$ 146,579	20%	$ 48,989	4%	$ 9,918	9%	$ 22,784	5%	$ 11,871	2%	$ 3,672
Total Costs before Offsets	**$ 11,528,667**	Z	60%	**$ 6,930,982**	20%	**$ 2,316,437**	4%	**$ 468,957**	9%	**$ 1,077,327**	5%	**$ 561,312**	2%	**$ 173,651**
OFFSETS														
Nonrate Revenues														
Sundry charges	$ 140,016	Z	60%	$ 84,177	20%	$ 28,133	4%	$ 5,696	9%	$ 13,084	5%	$ 6,817	2%	$ 2,109
WPC cost share on customer service	269,842	L-C	0%	$ -	0%	$ -	0%	$ -	56%	$ 151,535	44%	$ 118,306	0%	$ -
Middletown cost share on customer s	134,819	L-C	0%	$ -	0%	$ -	0%	$ -	56%	$ 75,710	44%	$ 59,108	0%	$ -
Rental of Property	81,000	A	100%	$ 81,000	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Water Penalty	42,320	Z	60%	$ 25,442	20%	$ 8,503	4%	$ 1,721	9%	$ 3,955	5%	$ 2,060	2%	$ 637
Miscellaneous	7,515	Z	60%	$ 4,518	20%	$ 1,510	4%	$ 306	9%	$ 702	5%	$ 366	2%	$ 113
Investment Interest Income	39,191	Z	60%	$ 23,562	20%	$ 7,875	4%	$ 1,594	9%	$ 3,662	5%	$ 1,908	2%	$ 590
Water Quality Protection Fees	25,676	A	100%	$ 25,676	0%	$ -	0%	$ -	0%	$ -	0%	$ -	0%	$ -
Total Nonrate Revenues	**$ 740,378**			**$ 244,375**		**$ 46,021**		**$ 9,317**		**$ 248,649**		**$ 188,566**		**$ 3,450**
Net Costs to Be Recovered through Rate	**$ 10,788,289**			**$ 6,686,608**		**$ 2,270,416**		**$ 459,641**		**$ 828,678**		**$ 372,745**		**$ 170,201**

Rate Year costs are those approved in Docket No. 4025.

Newport Water Division
Cost Of Service Analysis
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Revenue Requirements

	Rate Year Docket 4025	Allocation Basis	Base %	Base $	Maximum Day %	Maximum Day $	Maximum Hour %	Maximum Hour $	Meters & Services %	Meters & Services $	Billing %	Billing $	Fire Protection %	Fire Protection $
Portions related to:														
Transmission & Distribution														
Operating				$ 298,659		$ 210,501		$ 160,898		$ 258,599		$ -		$ 90,040
Capital			20%	$ 370,783	31%	$ 261,336	87%	$ 199,753	0%	$ -	0%	$ -	0%	$ -
Total				$ 669,442		$ 471,836		$ 360,651		$ 258,599		$ -		$ 90,040
Admin related to T&D														
T&D as % of Non-Admin O&M			8%		22%		100%		40%		0%		86%	
T&D Admin Costs				$ 87,257		$ 97,017		$ 69,390		$ 111,007		$ -		$ 36,919
Poprtions related to Pumping														
Station 1 Pumping	$ 12,323	H	45%	$ 5,493	31%	$ 3,871	24%	$ 2,959	0%	$ -	0%	$ -	0%	$ -
Lawton Valley Pumping	$ 31,689	H	45%	$ 14,125	31%	$ 9,955	24%	$ 7,609	0%	$ -	0%	$ -	0%	$ -
				$ 19,617		$ 13,827		$ 10,568		$ -		$ -		$ -
Pumping Admin														
Pumping as % of Non-Admon O&M			1%		1%		7%		0%		0%		0%	
Pumping Admin Costs				$ 5,731		$ 6,372		$ 4,558		$ -		$ -		$ -
TOTAL PUMPING COSTS				$ 25,349		$ 20,199		$ 15,126		$ -		$ -		$ -

ALLOCATION SYMBOLS

	ALLOCATION SYMBOL	BASE	MAX. DAY	MAX HOUR	METER SERVICE	BILLING	DIRECT FIRE	
100.00%	A	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	Supply, Power & Chemicals
100.00%	B	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	Billing
100.00%	C	59.96%	26.90%	7.24%	4.17%	1.02%	0.71%	Capital Costs
100.00%	D	58.66%	41.34%	0.00%	0.00%	0.00%	0.00%	Max Day Demand
100.00%	F	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	Fire Service
100.00%	H	44.57%	31.42%	24.01%	0.00%	0.00%	0.00%	Max Hour Demand
100.00%	L	50.99%	22.95%	3.20%	13.91%	6.91%	2.05%	Labor
100.00%	L-A	47.68%	17.93%	3.21%	9.21%	20.55%	1.42%	Legal & Admin Costs
100.00%	L-C	0.00%	0.00%	0.00%	56.16%	43.84%	0.00%	Labor-Customer Service
100.00%	M	0.00%	0.00%	0.00%	100.0%	0.00%	0.00%	Meters and Services
100.00%	O	53.75%	20.49%	3.31%	13.45%	6.84%	2.15%	O&M Less Chem, Power, Tax, City
100.00%	S	0.00%	50.00%	50.00%	0.0%	0.00%	0.00%	Storage
100.00%	T	28.97%	20.42%	15.61%	25.00%	0.00%	10.00%	T&D Operating
100.00%	Z	60.12%	20.09%	4.07%	9.34%	4.87%	1.51%	All Costs

Symbol D	MGD	%
Avg Day	6.775	58.66%
Max Day Inc	4.775	41.34%
Total Max Day	11.550	100.00%

Symbol H	MGD	%
Avg Day	6.775	44.57%
Max Day Inc	4.775	31.42%
Peak Hour Inc	3.650	24.01%
Total Peak Hour	15.200	100.00%

	FY 07	FY 08	FY 09	Avg or Max
Avg Day mgd)	6.730	6.917	6.678	6.775
Max Day (mgd)	9.615	10.174	11.550	11.550
Max Hour (mgd)	13.800	15.200	13.250	15.200

Symbol L

ALLOCATIONS TO:

Salary & Wages	BASE	MAX. DAY	MAX HOUR	METER SERVICE	BILLING	DIRECT FIRE
Administration	$ 142,441	$ 54,302	$ 8,784	$ 35,642	$ 18,133	$ 5,698
Customer Service	$ -	$ -	$ -	$ 207,848	$ 162,270	$ -
SOS - Island	$ 255,100	$ -	$ -	$ -	$ -	$ -
SOS - Mainland	$ 32,800	$ -	$ -	$ -	$ -	$ -
Station One	$ 304,255	$ 214,445	$ -	$ -	$ -	$ -
Lawton Valley	$ 329,947	$ 232,553	$ -	$ -	$ -	$ -
Laboratory	$ 127,700	$ -	$ -	$ -	$ -	$ -
Trans & Distr	$ 138,544	$ 97,648	$ 74,638	$ 119,550	$ -	$ 47,820
Total S&W	$ 1,330,787	$ 598,949	$ 83,422	$ 363,039	$ 180,403	$ 53,518
Percent	51.0%	22.9%	3.2%	13.9%	6.9%	2.1%

From RFC Schedule B-4

Symbol C

Functional Break Down of Existing Fixed Assets - From RFC B-5

			BASE	MAX. DAY	PEAK HOUR	METERING	BILLING	DIRECT FIRE
TRANS/DISTRI	$ 18,817,129	H	$ 8,387,197	$ 5,911,468	$ 4,518,463	$ -	$ -	$ -
LAWTON VALLEY	$ 5,351,452	D	$ 3,139,012	$ 2,212,440	$ -	$ -	$ -	$ -
STATION 1	$ 22,516,441	D	$ 13,207,514	$ 9,308,926	$ -	$ -	$ -	$ -
TREATMENT BOTH	$ 2,726,208	D	$ 1,599,117	$ 1,127,091	$ -	$ -	$ -	$ -
STORAGE	$ 1,311,908	S	$ -	$ 655,954	$ 655,954	$ -	$ -	$ -
SOURCE OF SUPPLY	$ 16,492,953	A	$ 16,492,953	$ -	$ -	$ -	$ -	$ -
METERS	$ 2,976,622	M	$ -	$ -	$ -	$ 2,976,622	$ -	$ -
BILLING	$ 725,466	B	$ -	$ -	$ -	$ -	$ 725,466	$ -
FIRE	$ 510,621	F	$ -	$ -	$ -	$ -	$ -	$ 510,621
Total	$ 71,428,801		$ 42,825,795	$ 19,215,880	$ 5,174,417	$ 2,976,622	$ 725,466	$ 510,621
		C	60.0%	26.9%	7.2%	4.2%	1.0%	0.7%
T&D % of each =			20%	31%	87%	0%	0%	0%

Symbol L-A - Legal & Administrative Costs

			BASE	MAX. DAY	PEAK HOUR	METERING	BILLING	DIRECT FIRE
Audit Fees	$ 5,245	Z	$ 3,153	$ 1,054	$ 213	$ 490	$ 255	$ 79
OPEB Contribution	$ -	Z	$ -	$ -	$ -	$ -	$ -	$ -
City Council	$ 4,408	Z	$ 2,650	$ 886	$ 179	$ 412	$ 215	$ 66
Citizen Survey	$ -	Z	$ -	$ -	$ -	$ -	$ -	$ -
City Clerk	$ 3,197	Z	$ 1,922	$ 642	$ 130	$ 299	$ 156	$ 48
City Manager	$ 55,212	Z	$ 33,193	$ 11,094	$ 2,246	$ 5,159	$ 2,688	$ 832
Human Resources	$ 30,521	L	$ 15,561	$ 7,004	$ 975	$ 4,245	$ 2,110	$ 626
City Solicitor	$ 19,093	Z	$ 11,479	$ 3,836	$ 777	$ 1,784	$ 930	$ 288
Finance Admin 80%	$ 19,753	Z	$ 11,876	$ 3,969	$ 804	$ 1,846	$ 962	$ 298
Finance Admin 5%	$ 6,918	Z	$ 4,159	$ 1,390	$ 281	$ 646	$ 337	$ 104
Purchasing	$ 16,763	Z	$ 10,078	$ 3,368	$ 682	$ 1,566	$ 816	$ 252
Assessment	$ 5,673	C	$ 3,401	$ 1,526	$ 411	$ 236	$ 58	$ 41
Collections	$ 47,865	B	$ -	$ -	$ -	$ -	$ 47,865	$ -
Accounting - 5%	$ 9,749	Z	$ 5,861	$ 1,959	$ 397	$ 911	$ 475	$ 147
Accounting	$ 64,888	L	$ 33,083	$ 14,890	$ 2,074	$ 9,025	$ 4,485	$ 1,330
Public Safety	$ -	Z	$ -	$ -	$ -	$ -	$ -	$ -
Facilities Maintenanc	$ 12,106	Z	$ 7,278	$ 2,432	$ 492	$ 1,131	$ 589	$ 182
	$ 301,391		$ 143,695	$ 54,050	$ 9,661	$ 27,752	$ 61,939	$ 4,293
		L-A	48%	18%	3%	9%	21%	1%

Symbol T - Used for Transmision & Distribution expenses

Some costs assigned directly to hydrants and service pipes. The balance assigned based on Symbol H.

Symbol O

Used to allocate admin. costs, based on all other directly allocable O&M excluding Power, Chemicals, Property Taxes & City Services

	TOTAL	BASE	MAX. DAY	PEAK HOUR	METERING	BILLING	DIRECT FIRE
Total O&M Costs	$8,127,113	$ 4,891,151	$ 1,417,949	$ 230,288	$ 922,952	$ 517,369	$ 147,405
Less Chemicals	$ (615,000)	$ (615,000)					
Less Power	$ (554,800)	$ (554,800)					
Less City Services	$ (209,400)	$ (94,248)	$ (35,200)	$ (6,612)	$ (15,379)	$ (55,646)	$ (2,315)
Less Property Taxes	$ (229,000)	$ (123,091)	$ (46,926)	$ (7,591)	$ (30,800)	$ (15,669)	$ (4,924)
Net O&M	$6,518,913	$ 3,504,012	$ 1,335,823	$ 216,085	$ 876,773	$ 446,054	$ 140,166
Percent ("O")		53.8%	20.5%	3.3%	13.4%	6.8%	2.2%

Newport Water Division
Cost Of Service Analysis
CW Sch B-2
Allocation of Costs to Water Rate Classes

ALLOCATION PERCENTAGES

Cost Category	Allocation Basis	Base Charge	Commodity Charges: Retail Residential	Commodity Charges: Retail Commercial & Governmental	Commodity Charges: Navy	Commodity Charges: Portsmouth	Fire	Total % Allocated
Base	*Average annual demand*		43.1%	27.8%	11.1%	18.0%		100.0%
Base Excluding PWFD			52.5%	34.0%	13.5%	0.0%		
Max Day	*Estimated customer peaking factors*		47.8%	24.7%	4.9%	11.0%	11.6%	100.0%
Max Day Excluding PWFD			53.7%	27.8%	5.5%	0.0%	13.0%	100.0%
Max Hour	*Estimated customer peaking factors*		38.8%	10.0%	4.5%	8.9%	37.7%	100.0%
Max Hour Excluding PWFD			42.6%	11.0%	4.9%	0.0%	41.4%	100.0%
Metering	*Direct Assignment*	100.0%						100.0%
Billing	*Direct Assignment*	100.0%						100.0%
Fire	*Direct Assignment*						100.0%	100.0%

ALLOCATION RESULTS

Cost Category	Docket 4025 Rate Year
Base	
Base excluding T&D, Admin & Pumping	$ 5,904,560
Pumping (incl Admin)	$ 25,349
T&D to Base	$ 669,442
Admin T&D *	$ 87,257
Max Day	
Max Day Except T&D Admin & Pump	1,681,364
Pumping (incl Admin)	20,199
Transmission & Distribution	471,836
Admin T&D *	97,017
Max Hour	
Max Hr. Except T&D Admin & Pumping	14,473
Pumping (incl Admin)	15,126
Transmission & Distribution	360,651
Admin T&D *	69,390
Metering	828,678
Billing	372,745
Fire	170,201
Total To Recover through Rates	**$ 10,788,289**

Base Charge	Commodity Charges: Retail Residential	Commodity Charges: Retail Commercial	Commodity Charges: Navy	Commodity Charges: Portsmouth	Fire	Total $ Allocated
	$ 2,543,277	$ 1,643,891	$ 654,764	$ 1,062,628		5,904,560
	$ 13,315	$ 8,606	$ 3,428	$ -		25,349
	$ 351,632	$ 227,283	$ 90,527	$ -		669,442
	$ 45,833	$ 29,625	$ 11,800	$ -		87,257
	803,330	415,397	82,727	184,605	195,306	1,681,364
	10,841	5,606	1,116	-	2,636	20,199
	253,241	130,949	26,079	-	61,568	471,836
	52,070	26,925	5,362	-	12,659	97,017
-	5,617	1,452	651	1,291	5,462	14,473
-	6,445	1,666	747	-	6,268	15,126
-	153,673	39,732	17,803	-	149,443	360,651
	29,567	7,644	3,425	-	28,753	69,390
828,678	-	-	-	-	-	828,678
372,745	-	-	-	-	-	372,745
-	-	-	-	-	170,201	170,201
$ 1,201,424	**$ 4,268,839**	**$ 2,538,777**	**$ 898,429**	**$ 1,248,524**	**$ 632,296**	**$ 10,788,289**

* See CW Sch A-1 for T&D and Admin derivations.

COST OF SERVICE PER UNIT

	(1)	(2)	(2)	(2)	(2)	(3)	
Description of Billing Units	# of accounts x 12 months	1000's of gallons annually	1000's of gallons annually	1000's of gallons annually	1000's of gallons annually	Equivalent Connections	Total
Percentage of Dollars Allocatec	11.1%	39.6%	23.5%	8.3%	11.6%	5.9%	100.0%
Allocated Cost	$ 828,678	$ 4,268,839	$ 2,538,777	$ 898,429	$ 1,248,524	$ 462,096	$ 10,245,343
Divided by: Number of Units	176,484	753,416	486,983	278,289	451,640	156,856	
Unit Cost of Service	**$4.70** *per account per month*	**$5.67** *per 1000 gallons*	**$5.21** *per 1000 gallons*	**$3.23** *per 1000 gallons*	**$2.76** *per 1000 gallons*	**$2.95** *Equivalent connections*	

	No. of bills per year			
Description of Billing Units			*Hydrants*	
Percentage of Dollars Allocatec	1.6%			
Allocated Cost	$ 372,745		$ *170,201*	$ 10,788,289
Divided by: Number of Units	65,364		*999*	
Unit Cost of Service	**$5.70** *per bill*		$ *170* *per hydrant*	
	(1)			

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

Newport Water Division
Cost Of Service Analysis
CW Sch B-2A
Service Charge Calculations

Docket No. 4128

DETERMINATION OF PROPOSED SERVICE CHARGES

BILLING CHARGE

BILLING ALLOC.		$ 372,745		
----------	=	---------- =	$ 5.70	PER BILLING
NUMBER OF BILLINGS		65,364		

METERING PORTION

METER ALLOC.*		$ 414,339		
----------	=	---------- =	$ 23.96	/ EQ. METER/YR
NO. EQUIV. METERS		17,290		

SERVICE LINE PORTION

SERVICE ALLOC.*		$ 414,339		
----------	=	---------- =	$ 14.43	/ EQ. METER/YR
NO. OF EQUIV. METER & PRIV FIRE EQUIV		28,720		

* In the absence of a breakdown of service vs. meter costs, it was assumed that 50% of the total costs should go to each.

TOTAL SERVICE CHARGES

	QUARTERLY ACCOUNTS				MONTHLY ACCOUNTS			
METER SIZE (IN)	BILLING CHARGE	METER CHARGE	SERVICE CHARGE	TOTAL CHARGE	BILLING CHARGE	METER CHARGE	SERVICE CHARGE	TOTAL CHARGE
5/8	$ 5.70	$ 5.99	$ 3.61	$ 15.30	$ 5.70	$ 2.00	$ 1.20	$ 8.90
3/4	$ 5.70	$ 7.01	$ 4.22	$ 16.93	$ 5.70	$ 2.34	$ 1.41	$ 9.45
1	$ 5.70	$ 8.39	$ 5.05	$ 19.14	$ 5.70	$ 2.80	$ 1.68	$ 10.18
2	$ 5.70	$ 12.28	$ 7.39	$ 25.38	$ 5.70	$ 4.09	$ 2.46	$ 12.26
2	$ 5.70	$ 15.34	$ 9.23	$ 30.27	$ 5.70	$ 5.11	$ 3.08	$ 13.89
3	$ 5.70	$ 32.65	$ 19.66	$ 58.01	$ 5.70	$ 10.88	$ 6.55	$ 23.14
4	$ 5.70	$ 45.89	$ 27.63	$ 79.22	$ 5.70	$ 15.30	$ 9.21	$ 30.21
5	$ 5.70	$ 122.04	$ 73.47	$ 201.21	$ 5.70	$ 40.68	$ 24.49	$ 70.87
6	$ 5.70	$ 122.04	$ 73.47	$ 201.21	$ 5.70	$ 40.68	$ 24.49	$ 70.87
8	$ 5.70	$ 198.37	$ 119.42	$ 323.48	$ 5.70	$ 66.12	$ 39.81	$ 111.63
10	$ 5.70	$ 198.37	$ 119.42	$ 323.48	$ 5.70	$ 66.12	$ 39.81	$ 111.63

PWFD Exhibit

Newport Water Division
Cost Of Service Analysis
CW Schedule B-6
Water Demand History

Docket No. 4128

	Annual Demand in 1000s Gallons										Baseline 3-Year Average	Rate Year Docket 4025
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		
Annual Demand by Class												
Residential	682,937	698,765	773,872	780,666	736,577	716,037	749,409	734,137	780,264	690,544	734,982	**753,416**
Commercial	724,094	640,379	580,798	583,184	663,766	573,711	493,539	456,486	505,014	519,521	493,674	**486,983**
Navy	466,167	450,247	307,051	348,222	511,299	417,869	373,306	278,441	247,728	225,392	250,520	**278,289**
Portsmouth	438,179	442,582	455,142	451,723	422,944	429,465	463,253	445,232	473,338	444,777	454,449	**451,640**
Total (in 1000's Gallons)	2,311,377	2,231,973	2,116,863	2,163,795	2,334,586	2,137,082	2,079,508	1,914,297	2,006,344	1,880,234	1,933,625	**1,970,329**
		-3.4%	*-5.2%*	*2.2%*	*7.9%*	*-8.5%*	*-2.7%*	*-7.9%*	*4.8%*	*-6.3%*		

PWFD Exhibit

CW Schedule B-7

Docket No. 4128

Water Production Peaking Analysis

	Combined Station #1 and LV WTP *Production Volumes in 1,000 gals*			Peaking Comparison		
	FY 2007	FY 2008	FY 2009	3 Year Average Production Peaks	System Peaks Estimated from Monthly Data	System Diversity Ratio (1)
Annual Production	2,456,363	2,524,784	2,437,440	2,472,862		
Average Day Production	6,730	6,917	6,678	6,775		
Maximum Month Production	256,796	269,819	280,875	269,163		
Maximum Day Production	9,615	10,174	11,550	10,446		
Max Day Date	*6/28/2007*	*8/4/2007*	*7/18/2008*			
Maximum Day Peaking Factor	1.43	1.47	1.73	**1.54**	**3.30**	2.14
Max-Day Max-Month Ratio	1.12	1.17	1.27	**1.20**		
Maximum Hour	13,800	15,200	13,250			
Maximum Hour Peaking Factor	2.05	2.20	1.98	**2.08**	**5.06**	2.44
				Coincident	Noncoincident	
				Excluding Fire Protection		

(1) Calculated according to AWWA M-1 Guidelines

Newport Water Division
Cost Of Service Analysis
CW Schedule B-8
Billed Demand Peaking Analysis: Determination of Customer Class Peaking Factors

Docket No. 4128

	Max Month Water Demand (1000's gallons)			
Customer Class	**2007**	**2008**	**2009**	Average Max Month (1,000 gals.)
Residential	72,218	87,114	66,876	75,402
Commercial	48,377	61,727	58,898	56,334
Navy	29,771	30,475	24,640	28,295
Portsmouth	51,270	58,023	51,143	53,479
Fire (5)				
Estimated Systemwide Peaks				

	% Residential Demand	% NonResidential Demand	
Navy	*50%*	*50%*	Used in Max Day and Max Hour calculations
Portsmouth	*60%*	*40%*	Used in Max Hour calculations only.

PWFD Revised Demand Factors

	Maximum Day Factors					Max Hour Factors		
	Max Month/Avg Day in yr	System MaxD/MaxM Ratio (2008)	Weekly Usage Adjust. *	Calculated Max Day Factor	Max Day Deamnd	Estimated MH/MD Factor	Calculated Max Hour Factor	Max Hour Demand
Res	1.31	1.27	1.80	**3.0**	6,041	1.66	**5.0**	10,068
Comm	1.44	1.27	1.40	**2.6**	3,517	1.30	**3.4**	4,599
Navy	1.45	1.27	1.00	**1.8**	1,235	1.48	**2.7**	1,853
Portsmouth	based on actual data			**2.1**	2,620	1.52	**3.2**	3,984
				Calculated	13,413			20,504
				Actual	11,550			15,200
Non-coincident Max Capacity Factor					1.94			2.96
Coincident Max Capacity Factor					1.47			2.20
System Diversity Check					1.32			1.35

* Includes estimated adjustment for quarterly data used to derive maximum month.

Reality Check of RFC Calcs	Calculated	Actual	
Max Day	10,629	11,550	Note calculated non-coincident value is less than the actual!
Max Hour	13,350	15,200	Note calculated non-coincident value is less than the actual!

Newport Water Division
Cost Of Service Analysis
CW Schedule B-9
System Demands Imposed by Each Customer Class' Peaking Behavior

Docket No. 4128

PWFD Rate Year Demands By Class

Customer Class	Average Day Sales by Class	Unacctd Gals	Adjusted Average Daily Demand	% Avg Day By Class	% Average Demand by Class excl. PWFD
Residential	2,064	897	2,962	43.1%	53%
Commercial	1,334	580	1,914	27.8%	34%
Navy	762		762	11.1%	14%
Portsmouth	1,237		1,237	18.0%	
Fire			-		
Total, w Fire Prot.		1,477	6,876	100%	100%

Customer Class		Max Day Peaking Factor	Max Day Calculations: Demand x Peaking Factor (3)	Max Day Calculations: Incremental Peak Demand	Max Day Calculations: % of Daily Peaks	% of Daily Peaks: With Portsmouth	% of Daily Peaks: Without Portsmouth	Max Hour Peaking Factor	Max Hour Calculations: Demand x Peaking Factor (3)	Max Hour Calculations: Incremental Peak Demand	% of Hourly Peaks: With Portsmouth	% of Hourly Peaks: Without Portsmouth
Residential		3.0	8,885	5,923	**47.8%**	**47.8%**	**53.7%**	5.0	14,808	5,923	**38.8%**	**42.6%**
Commercial		2.6	4,977	3,063	**24.7%**	**24.7%**	**27.8%**	3.4	6,508	1,531	**10.0%**	**11.0%**
Navy		1.8	1,372	610	**4.9%**	**4.9%**	**5.5%**	2.7	2,059	686	**4.5%**	**4.9%**
Portsmouth		2.1	2,598	1,361	**11.0%**	**11.0%**		3.2	3,960	1,361	**8.9%**	
Fire	(2)		1,440	1,440	**11.6%**	**11.6%**	**13.0%**		5,760	5,760	**37.7%**	**41.4%**
Total, w Fire Prot.			19,272	12,397	100.0%	100.0%	100.0%		33,094	15,262	100.0%	100.0%
Total, without Fire Protection			**17,832**	**10,957**					**27,334**	**9,502**		

(demand is in thousands of gallons)

Newport Water Division
Cost Of Service Analysis
CW Schedule B-10
Summary of Peak Load Distributions (by Rate Class and Base/Extra-Capacity Categories)

Docket No. 4128

EACH RATE CLASS' SHARE OF SYSTEM PEAKS

Rate Class	Average Demand	Daily Peaks	Hourly Peaks
Retail			
Residential	43%	48%	39%
Commercial	28%	25%	10%
Navy	11%	5%	4%
Portsmouth	18%	11%	9%
Fire	N/A	12%	38%
	100%	**100%**	**100%**

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

PWFD Exhibit

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
CW Sch - UnNumbered from RFC Spreadsheet
Demand Data Extracts from Detailed Database

	2006						2007			2008	
	7	8	9	10	11	12	10	11	12	10	11
Estimated Monthly Demand in Gallons											
Residential	73,625,127	43,178,928	65,580,629	71,487,897	79,585,648	45,090,625	103,114,562	80,878,534	52,679,904	83,629,781	66,549,269
Commercial	35,406,980	42,852,293	51,545,225	50,733,727	40,048,273	41,371,497	58,932,771	59,562,758	30,899,158	61,978,328	51,543,830
Navy	29,771,074	27,636,057	27,736,568	28,983,497	27,778,390	27,924,738	18,055,677	19,020,505	17,635,488	17,629,310	17,949,709
Portsmouth	36,980,000	41,930,000	51,270,000	38,476,885	36,348,260	29,860,000	40,384,573	30,235,898	30,210,899	37,770,085	30,558,189
Grand Total	175,783,181	155,597,278	196,132,422	189,682,006	183,760,571	144,246,860	220,487,583	189,697,695	131,425,449	201,007,504	166,600,997

June demand includes portions of demand metered in July and August

Year	2006						2007			2008	
Month	7	8	9	10	11	12	10	11	12	10	11
					FY 2007					FY 2009	
Estimated Monthly Demand in 1000's Gallons											
Residential	Retail	73,625	43,179	65,581	71,488	79,586	45,091	103,115	80,879	52,680	83,630	66,549
Commercial	Retail	35,407	42,852	51,545	50,734	40,048	41,371	58,933	59,563	30,899	61,978	51,544
Navy	Wholesale	29,771	27,636	27,737	28,983	27,778	27,925	18,056	19,021	17,635	17,629	17,950
Portsmouth	Wholesale	36,980	41,930	51,270	38,477	36,348	29,860	40,385	30,236	30,211	37,770	30,558
		175,783	155,597	196,132	189,682	183,761	144,247	220,488	189,698	131,425	201,008	166,601

Note: Maximum billings used by Newport are highlighted in YELLOW

Adjusted for staggered Quart Bills										
Residential			60,795	60,082	72,218	65,388	75,109	87,114	78,891	65,178	66,876
Commercial			43,268	48,377	47,442	44,051	59,330	61,727	49,798	58,898	56,071
Navy											
Portsmouth											

NOTE Only highest months each FY presented

PWFD Exhibit

Newport Water Division
Cost Of Service Analysis
CW Sch X-1
Demand Summary

	FY 2006	FY 2007	FY 2008	FY 2009
Fiscal Year Annual Demand				
Residential	718,022	734,137	780,264	690,544
Commercial (includes governmental)	505,804	456,486	505,014	519,521
Navy	373,306	278,441	247,728	225,392
Portsmouth	453,618	445,232	473,338	444,777
Total 1000's Gallons	**2,050,751**	**1,914,297**	**2,006,344**	**1,880,234**
		-6.7%	*4.8%*	*-6.3%*

	(1000's of gallons)	FY 2007	FY 2008	FY 2009	
Max Month Demand					
Residential		72,218	87,114	66,876	Adjusted to use avg of 3 months billing
Commercial		48,377	61,727	58,898	
Navy		29,771	30,475	24,640	
Portsmouth		51,270	58,023	51,143	
NonCoincident Max Month		**201,636**	**237,338**	**201,557**	
Coincident Max Month		**196,132**	**221,941**	**201,008**	
Production Volume, Max Month		**256,796**	**269,819**	**280,875**	

Unaccounted for Water Analysis

	FY 2007	FY 2008	FY 2009	Average
Billed Consumption (1,000 gals.)	1,914,297	2,006,344	1,880,234	1,933,625
Total Water Produced (1,000 gals.)	2,456,363	2,524,784	2,437,440	2,472,862
Unaccounted for Water (1,000 gals.)	542,066	518,440	557,206	539,237
Percent Unaccounted for Water	22%	21%	23%	22%

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

		Station #1			Lawton Valley			Combined	
		In Gallons	in 1000's		In Gallons	in 1000's		In Gallons	in 1000's
FY 07 JULY 2006 - JUNE 2007		1,176,356,210	1,176,356		1,280,006,852	1,280,007		2,456,363,062	2,456,363
	Max. Month June	116,724,700	116,725	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

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	**5,531,600**	5,532	6/28/2007	**9,615,100**	9,615
		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	**6,205,300**	6,205	8/4/2007	**10,173,620**	10,174
		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	**7,265,700**	7,266	7/18/2008	**11,550,100**	11,550
		includes booster to LV at 324,000 Gallons							

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

PWFD Exhibit

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

Connection Size		Retail Accounts			Wholesale		Meter Equiv Factor (Div 1-8)	Meter Equivs
		Commercial	Government	Residential	Navy	Portsmouth		
5/8		656		10,221			1.0	10,877
3/4		231		2,243	1		1.2	2,896
1		186		381			1.4	794
1.5		164		167			2.1	679
2		210		104			2.6	804
3		73		28			5.5	550
4	(1)	14		2		-	7.7	123
5		2	-	-			20.4	41
6		12	-	1	8		20.4	428
8				2			33.1	66
10					1		33.1	33
Total	**14,707**	**1,548**	-	**13,149**	**10**	-		17,290

							Total Bills
Billed Monthly	**817**	707	0	100	10	0	9,804
Billed Quarterly	**13,890**	841	-	13,049			55,560
							65,364

Newport Water Division
Cost Of Service Analysis
CW Sch D-2
Fire Protection Accounts

			Docket 4025		
	Connection Size	Existing Differential	Number of Connections	Equivalent Connections (2)	
Public Hydrants					
Newport	6	111.31	583	64,894	
Middletown	6	111.31	408	45,414	% of Equiv
Portsmouth	6	111.31	8	890	Connections
Subtotal: Public Hydrants			**999**	**111,199**	**71%**

						Meter Equiv Factor (1 size more	
Private Fire Connections							Meter Equivs
	2	6.19	1	6		5.5	5
	4	38.32	57	2,184		20.4	1,161
	6	111.31	246	27,382		33.1	8,145
	8	237.21	62	14,707		33.1	2,053
	10	426.58	0	-	% of Equiv	33.1	-
	12	689.04	2	1,378	Connections	33.1	66
Subtotal: Private Fire Connections			**368**	**45,658**	**29%**		11,431
Total Public and Private Fire Connections			**1,367**	**156,856**	**100%**		

PRIVATE FIRE CHARGES

SIZE	Demand	Service	Total/Year
2	$ 18.24	$ 78.63	$ 96.86
4	$ 112.89	$ 293.87	$ 406.76
6	$ 327.92	$ 477.67	$ 805.58
8	$ 698.82	$ 477.67	$ 1,176.48
10	$ 1,256.69	$ 477.67	$ 1,734.36
12	$ 2,029.90	$ 477.67	$ 2,507.56

(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.

Newport Water
Cost Of Service Analysis
RFC Schedule A-2
Proposed Rates and Charges

	Docket 4025 Rates	Cost of Service	Proposed Rates	% Change	Projected Revenues
Base Charge (per bill)					
Monthly					
5/8	$ 15.31	$ 8.9019	**$ 8.90**	*-41.9%*	
3/4	$ 15.31	$ 9.4457	**$ 9.45**	*-38.3%*	
1	$ 15.31	$ 10.1816	**$ 10.18**	*-33.5%*	
2	$ 15.31	$ 12.2611	**$ 12.26**	*-19.9%*	
2	$ 15.31	$ 13.8927	**$ 13.89**	*-9.3%*	
3	$ 15.31	$ 23.1385	**$ 23.14**	*51.1%*	
4	$ 15.31	$ 30.2089	**$ 30.21**	*97.3%*	
5	$ 15.31	$ 70.8713	**$ 70.87**	*362.9%*	
6	$ 15.31	$ 70.8713	**$ 70.87**	*362.9%*	
8	$ 15.31	$ 111.6298	**$ 111.63**	*629.1%*	
10	$ 15.31	$ 111.6298	**$ 111.63**	*629.1%*	
Quarterly					
5/8	$ 15.31	$ 15.3004	**$ 15.30**	*-0.1%*	
3/4	$ 15.31	$ 16.9320	**$ 16.93**	*10.6%*	
1	$ 15.31	$ 19.1395	**$ 19.14**	*25.0%*	
2	$ 15.31	$ 25.3780	**$ 25.38**	*65.8%*	
2	$ 15.31	$ 30.2729	**$ 30.27**	*97.7%*	
3	$ 15.31	$ 58.0104	**$ 58.01**	*278.9%*	
4	$ 15.31	$ 79.2214	**$ 79.22**	*417.4%*	
5	$ 15.31	$ 201.2088	**$ 201.21**	*1214.2%*	
6	$ 15.31	$ 201.2088	**$ 201.21**	*1214.2%*	
8	$ 15.31	$ 323.4842	**$ 323.48**	*2012.9%*	
10	$ 15.31	$ 323.4842	**$ 323.48**	*2012.9%*	
					$ 1,036,518
Volume Charge (per 1,000 gallons)					
Retail					
Residential	$ 5.25	$ 5.6660	**$ 5.67**	*8.0%*	4,271,869
Commercial	$ 5.25	$ 5.2133	**$ 5.21**	*-0.8%*	2,537,184
					$ 6,809,053
Wholesale					
Navy	$ 3.2280	$ 3.2284	**$ 3.2284**	*0.0%*	898,428
Portsmouth Water & Fire District	$ 2.573	$ 2.764	**$ 2.764**	*7.4%*	1,248,333
					$ 2,146,761
Fire Protection					
Public (per hydrant)	$ 869.00	$ 498.29	**$ 498.29**	*-42.7%*	$ 497,792
Private (by Connection Size) (2)					
Connection Size / Existing Charge Differential					
2 / 6.19	$72.00	$ 96.86	**$ 96.86**	*34.5%*	97
4 / 38.32	$442.00	$ 406.76	**$ 406.76**	*-8.0%*	23,185
6 / 111.31	$884.00	$ 805.58	**$ 805.58**	*-8.9%*	198,173
8 / 237.21	$2,023.00	$ 1,176.48	**$ 1,176.48**	*-41.8%*	72,942
10 / 426.58	$3,340.00	$ 1,734.36	**$ 1,734.36**	*-48.1%*	-
12 / 689.04	$5,362.00	$ 2,507.56	**$ 2,507.56**	*-53.2%*	5,015
					$ 294,397
				Total Projected Rate Revenues	**$ 10,789,536**
				Required Revenues	**$ 10,788,289**
				Difference	**$ 1,247**

(1) From CW Sch B-2, 'Allocation of Costs to Water Rate Classes'.
(2) From CW Sch B-2A

Newport Water
Cost Of Service Analysis
CW Sch A-3
Bill Impacts
Page 1 of 2

Customer Class	Monthly Consumption (gallons)	Bill at Current Rates	Proposed		
			Bill at Proposed Rates	$ Change	% Change
Residential (Monthly)					
	1,000	$20.56	$14.57	-$5.99	-29.1%
	2,000	$25.81	$20.24	-$5.57	-21.6%
	4,000	$36.31	$31.58	-$4.73	-13.0%
Avg. Monthly Bill	5,000	$41.56	$37.25	-$4.31	-10.4%
	7,500	$54.69	$51.43	-$3.26	-6.0%
	10,000	$67.81	$65.60	-$2.21	-3.3%
	15,000	$94.06	$93.95	-$0.11	-0.1%
	20,000	$120.31	$122.30	$1.99	1.7%
	25,000	$146.56	$150.65	$4.09	2.8%
	30,000	$172.81	$179.00	$6.19	3.6%
Residential(Quarterly)					
	4,000	$36.31	$37.98	$1.67	4.6%
	8,000	$57.31	$60.66	$3.35	5.8%
Avg. Quarterly Bill	15,000	$94.06	$100.35	$6.29	6.7%
	20,000	$120.31	$128.70	$8.39	7.0%
	30,000	$172.81	$185.40	$12.59	7.3%
	40,000	$225.31	$242.10	$16.79	7.5%
	60,000	$330.31	$355.50	$25.19	7.6%
	80,000	$435.31	$468.90	$33.59	7.7%
	100,000	$540.31	$582.30	$41.99	7.8%
	120,000	$645.31	$695.70	$50.39	7.8%

Customer Class	Monthly Consumption (gallons)	Bill at Current Rates	Proposed		
			Bill at Proposed Rates	$ Change	% Change
Commercial (Monthly 1" meter)					
	2,000	$25.81	$20.60	-$5.21	-20.2%
	5,000	$41.56	$36.23	-$5.33	-12.8%
Avg. Monthly Bill	15,000	$94.06	$88.33	-$5.73	-6.1%
	20,000	$120.31	$114.38	-$5.93	-4.9%
	30,000	$172.81	$166.48	-$6.33	-3.7%
	40,000	$225.31	$218.58	-$6.73	-3.0%
	50,000	$277.81	$270.68	-$7.13	-2.6%
	75,000	$409.06	$400.93	-$8.13	-2.0%
	100,000	$540.31	$531.18	-$9.13	-1.7%

Customer Class	Annual Consumption (gallons)	Annual Bill at Current Rates	Proposed		
			Annual Bill at Proposed Rates	$ Change	% Change
Commercial with 6" Fire Connection(Monthly Account 2" meter)					
Base Charge and Commodity Charges	180,000	$1,128.72	$1,104.48	-$24.24	-2.1%
Fire Protection Charge		$884.00	$805.58	-$78.42	-8.9%
Total Annual Charges		$2,012.72	$1,910.06	-$102.66	-5.1%

PWFD Exhibit

Newport Water
Cost Of Service Analysis
CW Sch A-3
Bill Impacts
Page 2 of 2

Customer Class	Monthly Consumption (gallons)	Bill at Current Rates	Proposed		
			Bill at Proposed Rates	$ Change	% Change
Portsmouth (Monthly)					
(no meter charge - own meter)	10,000,000	$25,730.00	$27,640.00	$1,910.00	7.4%
	20,000,000	$51,460.00	$55,280.00	$3,820.00	7.4%
Avg. Monthly Bill	38,000,000	$97,774.00	$105,032.00	$7,258.00	7.4%
	40,000,000	$102,920.00	$110,560.00	$7,640.00	7.4%
	75,000,000	$192,975.00	$207,300.00	$14,325.00	7.4%
	100,000,000	$257,300.00	$276,400.00	$19,100.00	7.4%
	150,000,000	$385,950.00	$414,600.00	$28,650.00	7.4%
Navy (Monthly)					
	10,000,000	$32,280.00	$32,284.00	$4.00	0.0%
Avg. Monthly Bill (All Meters)	20,000,000	$64,560.00	$64,568.00	$8.00	0.0%
(no meter charge reflected)	38,000,000	$122,664.00	$122,679.20	$15.20	0.0%
	50,000,000	$161,400.00	$161,420.00	$20.00	0.0%
	75,000,000	$242,100.00	$242,130.00	$30.00	0.0%
	100,000,000	$322,800.00	$322,840.00	$40.00	0.0%

EXHIBIT A

Order 10623 - Newport Water Department: Rate Filing

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION

IN RE:

TARIFF FILED BY THE
NEWPORT WATER DEPARTMENT
ON MAY 18, 1981.

DOCKET NO. 1581

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Requirements with Adjustment Schedules (a) thru (e)

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION

IN RE:

TARIFF FILED BY THE
NEWPORT WATER DEPARTMENT
ON MAY 18, 1981.

DOCKET NO. 1581

REPORT AND ORDER

I. TRAVEL

On May 18, 1981, the Newport Water Department ("Newport") filed an application with the Rhode Island Public Utilities Commission ("the Commission") seeking an increase in revenue of $599,468 or approximately 31.15% over existing revenues.[* The initial filing provided for a general rate increase of $592,291 but testimony adduced at the hearings (Ex. N-3) increased the amount to $599,468.] The increase would be derived by increasing "Government revenue" (i.e. revenue from sales to the United States Government under an agreement dated April 23, 1942 as amended - Ex. N-5) by $77,265, and revenue from all other customers by $522,203. Newport established compliance with R.I. General Laws, 1956, Section 39-3-12 by filing required information with the Towns of Middletown, Portsmouth and the United States Navy.

Pursuant to Section 39-3-11, R.I. General Laws, 1956, the Commission, by Order No. (10449), on June 10, 1981, suspended the operation of these rates for a period of five months, and by Order No. (10564), on November 15, 1981, further suspended the effective date thereof until February 16, 1982. Following public notice duly advertised in the Providence Journal and Newport Daily News, and sent to counsel for the Portsmouth Water and Fire Districts, the Rhode Island Consumer's Council and the Attorney General's office, hearings were held at the offices of the Commission on December 10 and 11, 1981 and on January 6, 7, 18, 19, 20, 21 and 22, 1982. A public hearing was also held at Newport City Hall on February 2, 1982 to permit interested members of the public residing in the area to respond.

Timely petitions to intervene were filed by the Portsmouth Water and Fire District and Goat Island Realty Corp. Subsequently, other similar petitions were filed by Tourism & Development Corp., Newport Shipyard, Inc., The Viking Hotel Corporation and Newport Hospital. Counsel for the latter were permitted to intervene on the basis of not calling any additional witnesses.

APPEARANCES

Newport Water Department

Thomas W. Kelly, City Solicitor
Robert J. Rahill, Esquire

Division of Public Utilities and Common Carriers and

the Attorney General

John R. McDermott, Special
Assistant Attorney General

Faith LaSalle, Special Assistant
Attorney General

Portsmouth Water and Fire District

Kenneth R. Tremblay, Esquire

Goat Island Realty Corp. and the Viking Hotel Corporation

Michael B. Forte, Esquire

Tourism & Development Corp. Newport Shipyard, Inc.

Laurent L. Rousseau, Esquire

Newport Hospital

Edward J. Corcoran and
Jeffrey J. Teitz, Esquire

Public Utilities Commission

Melvin L. Zurier, Esquire

The Commission assumed jurisdiction pursuant to Section 39-1-2, R.I. General Laws, 1956 which includes within the definition of a "public utility", "a public water works which sells water inside and outside the territorial limits of such City of Town".

Since 1973, Newport has on several occasions received rate increases as follows:

DOCKET	DATE	AMOUNT ALLOWED
1124	8/9/73	$ 181,253
1158	7/1/74	188,000
1188	5/75	188,000(interim)
1188	2/76	43,000(additional)
1480	1/27/81	169,062
		$ 769,315

This represents an increase of approximately 66.5% during the last eight and one-half years.

II. SUMMARY OF EVIDENCE

Newport presented as its witnesses Christopher P. N. Woodcock, consultant in financial and management matters with the firm of Camp, Dresser & McKee, David M. Krugman, accountant for the City of Newport and the Water Department, Papken V. Janjigian, Newport Director of Engineering and Acting Director of the Newport Water Department, Gary R. Esposito, Newport Finance Director and John E. Conners, Jr., Newport City Manager.

Mr. Woodcock testified that, based on his company's study and on information supplied by the Water Department, an overall rate increase in calendar year 1982 revenues of $598,864 or 31.1% was required. (Ex. N-2, p. 3). He also presented a proposed rate structure, based on his allocation of the cost of service to certain rate elements. (Ex. N-2, Schedule 4, Table 4). This proposed structure provided for a flat billing or service charge of $6.67 per bill, abolished the present minimum charge, and reduced the present four rate blocks to three blocks. His proposed rates included an attrition allowance of approximately 1%. (See Ex. N-2, Schedule 4, Supporting Table 3). They eliminated the distinction between hydrant and sprinkler service for private fire protection charges. (Ex. N-2, p. 3).

The result yielded proposed rates for non-government sales which provided, in addition to the billing charge of $6.67, rates of $1.30 per thousand gallons for the first 25,000 gallons; $1.11 per thousand gallons for the next 225,000 gallons and $.93 per thousand gallons for all water in excess of 250,000 gallons. (See Ex. N-2, Schedule 4).

Mr. Woodcock's rate structure was based on information developed by Newport witness Krugman who testified that an overall revenue requirement of $2,524,116 was needed. (Ex. N-3, Schedule 2, p. 6). This was derived by starting with fiscal year 1980 audited financial statements (which he used as a test year) and adjusting these by "the known and measurable changes since the completion of the test year" (which he characterized as "pro forma expenses", Ex. N-3). He then added an attrition allowance of 5% per year over two years for those expenses not known and measurable. This latter amount totaled $27,309 or about 1% of pro forma expenses. (Ex. N-3, Schedule 2, p. 6 of 6).

Mr. Krugman testified that rates charged the United States Government were controlled by a contract between the City of Newport and the United States Government entered into on April 23, 1942. This agreement, which originally was due to terminate on April 22, 1982, had been extended until April 22, 1986 by an extension agreement dated July 2, 1975. (Ex. N-5).

Mr. Esposito also testified concerning the 1980-1981 audited annual report. (Ex. N-6). He further testified concerning the contract with the United States Government as creating "contractual restraints". (Under the April 23, 1942 agreement, any increase in rates charged non-government users are aggregated, and the Government in turn will pay the increase attributable to the aggregate of water furnished to the United States Government, in the same proportion as non-government users. (Ex. N-5, p. 7-8).)

Mr. Janjigian, who became Acting Director of the Water Department on August 1, 1981, testified concerning the operations of the system. His testimony concerned the Capital Improvement Program of Newport (Ex. P-8), the status of compliance with the Order of the Commission in Docket No. 1480, and also concerning a recent study by Malcolm Pirnie, Inc. which indicated a 29% leakage problem throughout the system. (Tr. 1/21/82, p. 30 and Ex. P-1). He further testified concerning the use of the Nonquit reservoir in Tiverton, which is a backup station, costing more to operate and which is the last source called upon by the Newport water system in a period of shortage. (Ibid., p. 12-14).

Mr. Janjigian testified that the quality of Newport water is continuously monitored by City bacteriologists as well as the State Health Department (Ibid., pp. 60-61) and that complaints received related more to taste than quality (Ibid., pp. 62). He noted that the City had instituted an ozonation treatment as a substitute for initial chlorination, but that post chlorination is still utilized. (Ibid., p. 69).

Mr. Conners was called at the Commission's request to testify concerning the state of compliance by Newport with the Commission's Order in Docket No. 1480. He noted that he had become City Manager on March 23, 1981, but had only become aware of the Commission's Order as such on January 21, 1982, though he had learned of some of the requirements in the budget process in 1981. (Tr. 1/22/82, pp. 28-29). He noted his intention to review with the City Engineer and Director of Finance the performing of certain safety installations and repairs mandated in Docket No. 1480 and further said he would seek appropriate action, if necessary, on an emergency basis. (Tr. 1/22/82, p. 43). He also noted the City's intent to commence work on a leak detection study during the City's next fiscal year. (P. 45-46).

Mr. Conners advised that the City Council has received a recommendation for legislation to authorize bonding authority in the present session of the Rhode Island General Assembly so as to carry out the Capital Improvement Program. (At the hearing on February 2, 1982, Mr. Janjigian reported further on the status of compliance with the Commission's Order in Docket No. 1480. The Commission directed that there be weekly reporting on the status of compliance with the repairs to the chlorination system.)

The Division of Public Utilities and Common Carriers ("the Division") presented as its expert witness John F. Guastella, a consultant specializing in water and sewer utilities and formerly Director of the Water Division of the New York Public Service Commission. Mr. Guastella, who had also acted as consultant for the Division in Docket No. 1480 in 1980 and 1981, reviewed the testimony, exhibits and data filed by Newport, examined other books, records and reports of the department, of consultants, relevant contracts and further conducted discussions with present and former employees and officials of Newport.

Mr. Guastella gave us his opinion that current Newport rates were not adequate to cover cost of service and that fire protection rates in particular were disproportionately low in relation to total revenues (Div. Ex. 1, p. 5). He concluded that in Newport's filing, it had understated revenues by $46,973 by not fully estimating customer service revenue ($10,000) and by failing to annualize the rate increase in Docket No. 1480, effective January 27, 1981, to the extent of $36,973 (See Div. Ex. 1, Ex. No. D-1, Schedule 1). Mr. Guastella also made certain adjustments to operating costs set forth by Newport, and concluded that the Company's expenses had been overstated by $95,324. (Ibid., Schedule 2, p. 5 of 5). His resulting recommended increase totaled $457,171 over his pro forma revenue, or approximately 23.2%.

Mr. Guastella further testified under cross-examination with reference to rate design. His conclusion was that an increase in the higher use or "tail block" rates was probably warranted; however, billing information was lacking in order to perform "a study the way it should be done". (Tr. 1/22/82, p. 20). His ultimate conclusion was

"There's justification in increasing the tail block, but there is also justification for waiting and holding the existing rates, structure, anyway, until more information can be obtained." (Tr. 1/22/81, p. 22)

Intervenors called as their witness on the subject of rate design Professor Richard S. Bower of the Amos Tuck School of Business Administration and a former member of the New York Public Service

Commission. He criticized Newport's proposed rate structure as unfair in that it did not consider appropriate load factors (i.e. the ratio of system peak to average day use) in making its allocation of expenses to rate elements (Ex. P-7, p. 11). He further criticized Newport's rates as not being based on an appropriate billing analysis (Ibid., p. 4) and indicated, by illustrative comparison, how the impact on certain use customers would vary arbitrarily. (Ex. P-7, Tables RSB #1, ff.).

Intervenors' witness on the subject of cost of service was David A. Rooney, Certified Public Accountant, whose firm acts as auditor for Portsmouth Water and Fire District. He took issue with a number of conclusions of witness Krugman's report. His conclusions were tabulated in the Intervenor's briefs (pp. 23-24 of Brief of Portsmouth Water and Fire District; p. 25 of Brief of Goat Island Realty, Inc. and Viking Hotel Corporation).

Following submission of the briefs, Newport's counsel filed a "Motion to Strike" the materials set out on the aforesaid and other pages of the briefs, as well as sections of the brief of Intervenors' Tourism & Development Corporation and Newport Ship Yard, Inc. The Commission has reviewed the record and finds that the briefs constitute a tabular presentation of evidence admitted at the hearings. The arguments presented in the briefs, in themselves, do not constitute evidence and are not regarded as such. Hence, Newport's "Motion to Strike" is denied.

III. THE REVENUE REQUIREMENT

All Intervenors accepted as a starting point the revenue adjustments of Mr. Guastella so as to indicate pro forma revenue at existing rates of $1,971,621 -- $46,973 over that indicated by Newport. Where Mr. Guastella proposed adjustments to operating expenses of $95,324, however, Tourism & Development and New York Ship Yard's brief urged adjustments of $169,033, Portsmouth Water and Fire District adjustments of $354,979 and Goat Island Realty Corp. and Viking Hotel Corporation adjustments of $354,979, as well as a $64,000 increase in pro forma revenues. The following is a table setting forth the position of the parties with respect to the revenue requirement:

A. REVENUE ADJUSTMENTS

Newport projected pro forma revenues, based on existing rates, of $1,924,648. (Ex. N-3, Schedule 3). Mr. Guastella offered two adjustments to these:

(1) Customer Service Revenues

The first adjustment was in the amount of $10,000 and related to customer service revenues. Having reviewed Newport's pro forma figures, made early in 1981, Mr. Guastella adjusted these in the light of Newport's actual experience at the end of fiscal 1981 -- which revenues were substantially higher. (See Tr. 1/18/82, p. 23; Div. Ex. 1, Ex. No. D-1, Schedule 1). We note that elsewhere, Mr. Guastella made a positive adjustment of $2,825 in cost of service for customer service expense in Distribution Maintenance (Ibid., Schedule 3, p. 2). We agree with Mr. Guastella's conclusion and approve this adjustment.

(2) Annualizing Revenues from Rate Increase in Docket No. 1480

Mr. Guastella's second adjustment added $10,326 to revenue from Government sales and $26,647 to revenue from non-government sales for a total of $36,973. His purpose was to reflect the full impact

of the $169,062 rate increase granted by the Commission in Docket No. 1480, effective January 27, 1981.

His conclusion may be cross-checked by reference to Ex. N-3, Schedule 3, p. 1 where the combination of "Government charges" and "non-government water sales" ($245,793 and $1,413,316, respectively, or a total of $1,659,109) during the test year may be compared with the same figures for the pro forma year ($258,817 and $1,520,934 or a total of $1,779,751). Revenues from these sources comprised about 92% of all Newport's revenues.

The difference between Newport's test year and pro forma year revenues from these sources was $120,642 ($1,779,751 pro forma less $1,659,109 test year).

We know the effect of Docket No. 1480 would yield an increase of $169,062 over the test year, or $48,420 more than the $120,642 difference indicated by Newport's pro forma figures. 92% of this $48, 420 exceeds the $36,973 adjustment made by Mr. Guastella. We therefore find his $36,973 adjustment to be reasonable and so approve it.

(3) U.S. Government Contracts

Rates paid by the United States Government for Newport's water service are fixed by an agreement entered into in 1942 that was originally due to expire in April 1982, and was subsequently extended in 1975 through 1986. Intervenors Goat Island Realty Corp. and the Viking Hotel Corporation, in their brief, argue that the 1975 extension of the 1942 agreement between Newport and the United States Government should not be given effect for rate making purposes. They argue that the extension agreement was invalid for failure to comply with chapter 39-3 of the R.I. General Laws since there was no showing such agreement had been approved by the Commission. They project that if the contract were not given effect, Newport could expect as much as $64,000 in additional revenues, reducing the increase needed to only $133,516 by Newport's own figures.

Intervenors suggest that Newport must demonstrate by record evidence that the 1975 contract (i.e., the extension agreement) was approved by the Commission and the rates are reasonable. We take administrative notice that the existing 1975 extension agreement (which is part of Ex. N-5) was part of the record in Docket No. 1480. As such it constituted part of our basis for approving an across-the-board increase in that proceeding. We have noted elsewhere in this Order that, as our Supreme Court has noted, a presumption of validity attaches to prior actions setting rates. See U.S. of America v. Public Utilities Commission, 393 A.2d, 1092, 1095(1978); Secretary of Defense v. Public Utilities Commission, 437 A.2d, 1342, 1344(1981). We therefore are satisfied that in absence of evidence to the contrary (and no such evidence has been produced by Intervenors), the prior rates for Government users, incorporating by reference as they do the 1942 agreement and the 1975 extension, are reasonable.

Exhibit N-5, on its face, discloses that under the 1942 agreement, the Government agreed to construct a dam, reservoirs, a filtration plant and pumping station at Lawton Valley to supply Government facilities (p. 1-2). The City agreed to maintain the facility and to furnish water (p. 3) at rates therein set forth (p. 5). The agreement provided initially that title would vest in the City in 1982 and that increases in cost to the Government would be "in proportion to increases and charges to other consumers of water served by ("Newport")". (pp. 7-8). The 1975 extension continued this arrangement for an additional four years, based on an upward rate adjustment.

We agree with Intervenors that future negotiations with the United States Government (or indeed any

user, wherein a special rate is set) must be the subject of approval by the Commission under Article 39 of the Rhode Island General Laws before any rates may be changed. Section 39-2-2 proscribes price discrimination. Section 39-3-11 sets forth the sole method by which rates may be changed, following hearing and investigation by the Commission.

B. OPERATING EXPENSE ADJUSTMENTS

Newport utilized in its Ex. N-3 a method of presenting expenses on the basis of rate elements so that the cost of various items appeared throughout its schedules by function. For example, salary expense is found under a number of categories (e.g. Administration, Capital Improvements, Customer Accounts, etc. - see Schedules 1 and 2).

Mr. Guastella adopted Newport's approach for purposes of his adjustments. Mr. Rooney, in Exhibit P-13, rearranged these categories, considering all salaries together rather than spreading them throughout. The differences between the conclusions of Newport, Mr. Guastella and Mr. Rooney are found in Table II following, and we shall deal with them in the order herein noted:

(1) Salaries

We note from Exhibit P-13 (introduced without objection) that in Schedule A, all test year salaries aggregate $648,114. Mr. Guastella made two negative adjustments (with which the Commission agrees), namely allocating 50% of the salaries of the Director and Accountant positions to non-utility work ($25,467) and allocating 35% of the salaries of a billing clerk and two collection clerks to the Sewer Department ($11,026). (See Div. Ex. 1, Ex. No. D-1, Schedule 3).

Mr. Guastella pointed out that his 50% estimate with respect to the Director and Accountant was based on his discussions with the individuals involved "and their agreement with that estimate of 50% as to how much time and responsibility they would devote to water operations". (Tr. 1/18/82, p. 14). Similarly, the record supports Mr. Guastella's allocation concerning salaries of billing clerks for sewer department collections, as shown by Mr. Krugman's testimony on their functions. (Tr. 1/7/82, p. 102-106).

By deducting the foregoing salaries, we arrive at the amount of $611,651 for adjusted test year salary expense. Salary expense increased by 8.5% as of June 30, 1981, raising the adjusted salary expense to $663,641 as of June 30, 1981. A similar adjustment must be made for the increase applying to the fiscal year ending June 30, 1982. Further, following the pattern we have adopted in recent cases, e.g. Bristol & Warren Gas Co. Docket No. 1563; Providence Water Supply Board, Docket No. 1513; Narragansett Electric Company, Docket No. 1499, we are prepared to carry forward the effect of estimated increases through the period of one year following the effective date of our Order, or approximately March 1, 1983.

By (1) extending salary increases to March 1, 1983 at the 8.5% annual level; (2) adding thereto the approximately 30% cost of employee insurance and fringe benefits (other than worker's compensation) including, as we take administrative notice, a projected increase in Federal Insurance Compensation taxes; and (3) adding thereto the agreed pro forma cost of worker's compensation insurance ($23,316) plus an allowance, calculated at an 8.5% annual rate for the eight month period from June 30, 1982 to March 1, 1983 (.0567% or $1,322), we arrive at an overall amount of $1,013,778 for salaries, employee insurance and worker's compensation insurance, as shown on the

following table:

(2) "Various Expense Accounts"

Mr. Guastella, in Div. Ex. 1, Ex. No. D-1, Schedule 3, p. 2 of 4, made adjustments, both positive and negative, resulting in an overall reduction of $9,899. The larger sums were on account of fire and liability insurance ($4,156), pumping repair and maintenance equipment ($9,092) and maintenance at Station One ($1,583). These adjustments were based on an examination of actual 1981 expenditures as well as 1982 budget figures. Newport neither cross-examined Mr. Guastella on these items nor presented rebuttal testimony. The Intervenors accepted the adjustments of Mr. Guastella. Under the circumstances, the Commission will adopt them in this order.

(3) Interest on General Debt

In Division Ex. 1, Ex. No. D-1, Schedule 3, p. 4, Mr. Guastella adjusted the accounts of General Debt and the Water Resources Board's loan to reflect the reduction of the principal through calendar year 1982 to be consistent with his period ending calendar year 1982 for the effectiveness of the rates. Intervenors concurred in this adjustment. The result reduced interest expense by $5,400 (or $900 per month for the six month period from June 30, 1982 to December 31, 1982). We believe the adjustment is correct, and further extend this through March 1, 1983 so as to be consistent with our previous salary adjustment. Accordingly, we shall increase the adjustment by an additional $1,800 for the months of January and February 1983, making a total of $7,200.

(4) Interest on City Advance

Mr. Guastella made an additional adjustment (with which Intervenors agree), reducing interest expense due the City on its advance to the Board by $11,257. This adjustment reflected the actual interest rate of 8.7% paid by the City rather than a hypothetical amount. (Div. Ex. 1, Ex. No. D-1, Schedule 3, p. 4). We approve the adjustment.

5. Electricity - Lawton Valley and Station One

Newport determined its pro forma electricity costs for pumping on the basis of "actual test year usage at the current rate". (Ex. N-3, Schedule 1, p. 4 of 6 and footnote 18 on Supporting Table 1, p. 1). Thus, pro forma costs at Station One and Lawton Valley were $115,099 and $77,765, respectively for a total of $192,864 -- an increase of $69,049 over the test year. When adjusted for attrition (Ex. N-3, Schedule 2, p. 4 of 6), the amount increased $202,507. Mr. Guastella indicated his acceptance of this amount based on overall electrical costs of the system (Tr. 1/18/82, pp. 30-32).

Mr. Rooney's testimony was that one should consider instead the unaudited actual expenses for this electricity for the year ending June 30, 1981. These amounts were $89,675 and $56,047, respectively, or a total of $145,722. (See Ex. P-13, Schedule D).

The Commission believes that the proper method of arriving at a determination of electricity costs would be to determine the average usage over a period of time and apply to that average usage current electrical rates. To that end, the record was supplemented by stipulation (Commission Ex. 6). The Commission determination of appropriate costs is $186,717 as shown on the following table:

6. Electricity at Nonquit

Nonquit reservoir is a backup reservoir located at Tiverton and serving the Newport system "when demands are high and in order to meet the capabilities of the system. It is ... also the most expensive to operate." (Testimony of Mr. Guastella, Tr. 1/18/82, p. 33).

Newport's determination of electricity costs at Nonquit was determined in the same manner as for Station One and Lawton Valley, as set forth in Section 5 above. Its final "attrition costs" used for determining rates (Ex. N-3, Schedule 2, p. 4) was $72,874 as compared to test year cost of $9,660 (Ex. N-3, Schedule 1, p. and actual unaudited costs for year ending June 30, 1981 of $105,029. (See Ex. P-13, Schedule D).

Intervenors urged averaging the actual expenses for electricity at Nonquit for the five year period from July 1, 1976 to June 30, 1981, arriving at a figure of $34,581. (Tr. 1/22/82, p. 90). Mr. Rooney acknowledged, however, that he did not know what the electrical rate structure was during this period (Ibid.).

The Commission believes that the approach used with respect to Lawton Valley and Station One above should also be applied to Nonquit. We therefore have taken historic consumption figures, to the extent available, (Commission Ex. 6) and have applied current rates to arrive at an amount of $56,980 as shown on the following table:

7. Capital Improvements

Newport ascertained its costs for capital improvements by utilizing test year expenses plus only one adjustment (other than for salaries) for mains. This adjustment was based on actual expense incurred as of March 12, 1981 (See Ex. N-3, Schedule 1, p. 2 and footnote (12) on Schedule 1, Supporting Table 1). The amount, adjusted for attrition, was $131,352. Deducting salaries and employee insurance, the amount used by Newport and accepted by Mr. Guastella was $104,994. (See Ex. 3, Schedule 2, p. 2 of 6).

Intervenors urged that a more appropriate figure would be unaudited actual fiscal year 1981 expenses of $80,731. (Tr. 1/22/82, p. 117).

We believe that the better approach would be to average the actual fiscal year 1981 and fiscal year 1980 expenses to determine a more representative amount. In fiscal year 1980 (the test year), the amount was $99,572, i.e. $125,185 less salaries and employees insurance coverage as shown on Ex. N-3, Schedule 1, p. 2. Averaging this $99,572 with fiscal year 1981 expenses of $80,731, we arrive at the sum of $90,151 which we approve. (Since test year expenses were higher than during the pro forma year, we do not believe an attrition amount for this category is appropriate.)

8. Regulatory Expense

Newport's amount for regulatory expense was $23,279. (Ex. N-3, Schedule 2, p. 1). Mr. Guastella adjusted this upward to $26,967 so as to reflect the estimated cost of the current rate case expenses plus the actual amount for fiscal year 1981. (Div. Ex. 1, Ex. No. D-1, Schedule 3, p. 3). Intervenors'

briefs acknowledged Mr. Guastella's figures as appropriate and the Commission approves this upward adjustment.

9. Consultant Fees

Newport's Ex. 3, Schedule 2, p. 1 of 6, listed as an attrition amount "consultant fees" of $3,000. Mr. Krugman testified that the fee had been paid to a Mr. Ward for engineering services during the pro forma year on a contractual basis. He also indicated Mr. Ward had terminated as f July 1, 1981 but that the City Engineering Department was now performing these services. Mr. Guastella's study accepted the amount as reasonable and made no adjustment (Div. Ex. 1, Ex. No. D-1). While Intervenors argue that the amount should be disregarded, there was no evidence to indicate that the value of services currently being performed by the City varies materially. The Commission will not disapprove the $3,000 amount.

10. Chemicals

Newport's attrition amounts for chemicals at Station One and Lawton Valley are $56,113 and $36,013, respectively, or a total of $92,126. (Ex. N-3, Schedule 2, p. 5). Mr. Guastella did not adjust this amount. Intervenors urged that we utilize the unaudited actual 1981 amounts of $36,094 and $47,389, respectively, or a total of $83,483. (See Ex. N-6, p. 26).

As with electricity, the Commission believes a more appropriate method for chemicals would be to average the actual expenses for fiscal years 1980 and 1981. Doing so, we arrive at the amount of $85,611 which we adopt. Again, because of the higher expense during the test year than in the pro forma year, we provide no attrition allowance. We note, however, that while it is not inconceivable the cost of chemicals may increase, an offsetting factor is that use of the ozone plant at Station One should reduce the need for some chlorination, as Mr. Janjigian testified.

11. Electricity - Ozone

Newport operates an additional plant with which it had been having difficulties. Mr. Janjigian testified that "as of a few weeks ago only, it has been running on a 24 hour basis". (Tr. 1/21/82, p. 62).

Test year expenses for electricity for operating the ozone plant, according to Ex. N-3, Schedule 1, p. 5, were zero. Newport adjusted this amount upward by $50,000 during the test year (Ibid., footnote (19)), explaining that this figure was "based on actual cost incurred since being put on-line". (Ex. N-3, Schedule 1, Supporting Table 1, p. 1). It then adjusted this figure upward to an attrition amount of $52,500. (Ibid., Schedule 2, p. 5).

Mr. Guastella did not contest this amount. As noted earlier, his conclusion was that electricity costs for the system as a whole should be considered (Tr. 1/22/82, p. 30), and that "I didn't think power costs were the place to come in with an estimate that may be low". (Ibid., p. 35).

Mr. Rooney furnished testimony that actual expenses for electricity for ozone, based on unaudited actual June 30, 1981 figures, was $21,955. (See Ex. P-13, Schedule D). Intervenors argued in their brief that "although this figure is probably substantially less than what the actual costs for operating the ozone will be, it was not a utility plant in service in the test year or fiscal year 1981."

The Commission accepts Newport's testimony that as of January 1982, the ozone system has been operating on a 24 hour basis and repairs are completely finished. (See testimony of Mr. Krugman, Tr.

1/7/82, p. 108; testimony of Mr. Janjigian, Tr. 2/2/82, p. 38) (The testimony of Mr. Rooney as to actual fiscal year 1981 cost did not include the 24 hour operation.)

In view of Intervenors' candid acknowledgment that the fiscal year 1981 cost "is probably substantially less" and the existence of some record evidence as to the increased operation of the ozone plant, we will accept $50,000 as a reasonable estimate of the annual operating costs during the effective period of our order. In Newport's next filing, however, we direct that Newport document any request for expense for the ozone plant with evidence as to actual metered consumption and costs. We further direct Newport to furnish the Division at least quarterly with reports showing actual consumption and costs for operation of the ozone plant.

The $50,000 amount herein provided for ozone is based in part on Mr. Guastella's conclusion that overall electric costs are not an area wherein estimated costs should be low. In Docket No. 1480, we accepted as the cost of a study Mr. Guastella's "high side estimate" of $50,000, recognizing "that this may further build in a cushion for increases and expenses beyond that acknowledged." (Report and Order, Docket No. 1480, p. 14).

In a recent order relating to a municipally owned water utility, we have accepted as reasonable allowances for fluctuations in revenue and operating expenses equivalent to 1.5% of cost of service. See Pawtucket Water Supply Board, Docket No. 1583. If our allowance for ozone electricity is an estimate on the high side, we are cognizant that Newport has not requested such a separate allowance for fluctuations in revenue and operating expense.

12. Other Debt Service

All parties concurred with Newport's figure of $313,370.

13. "All Other Expenses"

The Commission, in making its computation of the proper revenue requirement, has prepared its own Table VII appearing hereafter and entitled "COMMISSION COMPUTATION OF REVENUE REQUIREMENT". The Commission's methodology in preparing this table is to follow our consistent policy of beginning with test year figures and then adjusting these to reach pro forma amounts.

This was the approach originally used by Newport which then reached a subsequent figure, adjusting for attrition, called "attrition amount". Mr. Guastella's figures sometimes used the "attrition amount" and sometimes used test year amounts in making his adjustments. Mr. Rooney's figures, as listed in the context of Table II, started with test year figures in some cases, and with Mr. Guastella's figures in others.

After recognizing the specific adjustments above, but by reference to our Table VII, hereafter, we arrive at a corresponding amount for "all other expenses" of $281,091. This is derived by subtracting the total of our specific adjusted expense amounts for items 1 to 12 above ($2,063,677) from total adjusted test year expense of $2,352,768 as shown on our Table VII.

We reject the argument of all intervenors that no attrition amount should be provided. If our figure for "all other expenses" is somewhat higher than Newport's, it results from our extending the attrition period through March 1, 1983.

14. Natural Gas for Pumping

Intervenor Tourism & Development and Newport Shipyard, Inc. in their brief, while accepting Newport's and Mr. Guastella's expense figures as a starting point, recommended reducing these by $46,400 for overestimated electrical and natural gas usage. Since we have already otherwise dealt with the appropriate amounts for these categories (in effect recognizing some of this overestimate in paragraphs 5 and 6 above), we reject this adjustment.

Conclusion as to Revenue Requirement

In Table VI, we restate Table II, for comparison purposes, showing the results of our adjustments. Table VII represents our own computation of the revenue requirement, following our regular method.

IV. Rate Design

A substantial issue in the proceedings was the matter of rate design. The current Newport rate structure was approved by the Commission in Docket No. 1188. In the most recent application for rate relief (Docket No. 1480), the increase approved was implemented on an "across-the-board" basis.

The current rate structure provides for a minimum charge for the first 2,500 gallons per month, whether or not consumed. It then proceeds through three additional rate blocks, charging a lesser amount incrementally as consumption increases. (Ex. N-3, Schedule 4).

The Board proposed to change this system by eliminating the so-called minimum allowance as well as the first rate block. Instead, it proposed to institute a service or billing charge (with no minimum water allowance) so as to recover the expense of meter reading, billing, customer accounting, etc. (Ex. N-2, Direct testimony of Mr. Woodcock, p. 2). It then would add to each customer's billing charge a "commodity charge" based on the cost of producing and distributing the water itself. Thus each customer's bill would have two amounts -- (1) a uniform service charge, and (2) a charge for the actual water consumer.

The proposed service charge is $6.67 per billing, based on 37,020 billings (Ex. N-2, Schedule 1, Supporting Table 6; Schedule 3, Supporting Table 4 and Schedule 4, Supporting Table 2, page 2 of 2). This amount is derived by allocating all pro forma charges for "customer accounts" ($186,013) and 13% of pro forma charges for Administration and allocating these to the billing charge. (See Ex. N-2, Schedule 2, Supporting Tables 1 and 6).

The Commission favors the concept indicated in this method because it not only encourages conservation[* The Board noted that as a recipient of waste water grants from the United States Environmental Protection Agency, it was required to investigate conservation measures, including water pricing policies. (Ex. N-2, p. 3). We commend the Board's concern in this vital area.] but also attempts to assign a fair part of the rate to the function covered. We have followed this approach in recent cases involving municipally owned utilities. (See Providence Water Supply Board, Docket No. 1513; Pawtucket Water Supply Board, Docket No. 1582). While we may disagree with the amount of cost of service urged by the Company, as earlier referred to in our Order, we agree that the method of allocation for purposes of determining billing charges (i.e. 100% of "customer accounts" and 13% of "administration expense") is appropriate and we direct that this approach (if not these exact figures) be

followed in any future filing.

The Board also proposed eliminating the present distinction between hydrant and sprinkler service charges for fire protection, substituting a charge based on relative demand potential as measured by service size. (Ex. N-2, Testimony of Mr. Woodcock, p. 3; Tr. 12/10/81, p. 14). His recommendation per se was not a matter of dispute. However, in view of the position we are taking on matters of allocation of costs hereafter discussed, we defer action on this specific recommendation at this time.

The principal area of contention among the parties related to allocation of costs to certain rate elements so as to determine what the commodity charge should be. This involves an identification of expenses and an assignment of these to certain categories of use. The Board's expert, Mr. Woodcock, proposed five major elements - (1) "Base", (2) "Intermediate", (3) "Domestic", (4) "Billing Charge" and (5) "Fire Protection". Based on cost of service information furnished by the Board (Ex. N-3), Mr. Woodcock allocated the indicated expenses to these elements. (See Tr. 12/10/81, p. 24). Mr. Woodcock also determined government rates by estimating usage in various blocks based on certain incomplete records of the Board for calendar year 1980 (Tr. 12/10/81, p. 16, 18-22). He noted that under the contract between the United States Government and the City (Ex. N-5), rates for water furnished the Government may only be increased as "a percentage of what they currently are at any one time" (Tr. 12/10/81, p. 15).

Mr. Woodcock defined the several elements for rate making purposes as follows: (Tr. 12/10/81, pp. 27-33)

(1) "Base" -

"Those expenses associated with producing and selling water that are independent of peak usages" (which he in turn defined as "maximum day consumption, peak-hour consumption, instantaneous usages as rates that exceed the average for..the month..or the year"..."the costs associated with the base element are related to the costs to provide all water, independent of the usage. As such these costs should be recovered from all users at a minimum. There should be no charge less than that.") (Tr. 12/10/81, p. 27, 33).

(2) "Intermediate" -

"Expenses..necessary to meet the peak demands...some of the peak demands are the fire protection...".

(3) "Domestic" -

"Expenses that are primarily related to meters and service pipes...".

(b) "Billing Charge"

"Expenses associated with preparing the bill, sending the bills, computer time, reading meters."

(5) "Fire Protection"

"Expenses that are associated with providing both capacity and water to meet the public and private fire protection needs of the community." (Tr. 12/10/81, pp. 27-29).

The result, using Newport cost of service figures, was to arrive at a base rate per 1,000 gallons

monthly of $.92; an intermediate rate of $1.10 and a domestic block rate of $1.29. (Tr. 12/10/81, p. 33; Ex. N-2, Schedule 3, Table 3).

Thus, all users pay the base rate at a minimum. The intermediate rate consists of the base rate and a charge for peak usage. The domestic rate is a combination of both, plus costs associated with meters and services. Once a customer has consumed a certain quantity of water, he has paid for domestic use; the next quantity would be for intermediate use while the quantity thereafter would be at base rates for general use.

Mr. Woodcock took into account the City's attrition factor, adding one cent per 1,000 gallons per month to each of the blocks to arrive at his proposed non-government commodity monthly rates of $1.30 per thousand gallons for the first 25,000 gallons per month; $1.11 per thousand gallons for the next 225,000 gallons per month, and $.93 per thousand gallons for consumption over 250,000 gallons per month, and made corresponding calculations for Government rates. (Tr. 12/10/81; p. 37, ff; Ex. N-2, Schedule 4).

Mr. Woodcock also described his proposed rates for fire protection service, based on assigning a certain amount of system capacity to meet maximum fire demand (48%) and non-fire demand (52%). (Tr. 12/10/81, p. 48). The resulting fire protection rate was in turn broken down into private and public fire protection amounts, with costs allocated in the latter between hydrants and inch-foot charges. (Ex. N-2, Schedule 3, Tables 5-8)

Mr. Woodcock testified that by comparing the existing rates with his proposed rates, by far the largest impact would fall on the larger user. The following table indicates his testimony in this regard: (See Tr. 12/10/81, pp. 94, ff.).

	Present Rate Per MGF/Mo.	Present Cost	Proposed Rate Per MGF/Mo.	Proposed Cost	Percentage Change
0-25,000	1.175	79.375	1.30	32.5[*]	+ 10.5%
25,000-250,000	.90	202.50	1.11	249.75[*]	+ 23.3%
Over 250,000	.64			.93[*]	+ 45.3%

[* Plus service charge]

As an illustration, using the comparative rates, a customer using 4,000 gallons per month during a four month period through a 5/8 inch meter would have a 36% decrease, while a customer using an 8 inch meter and 5 million gallons per month would show an increase of 44%. Thus it is not without surprise that the intervenors chose to question the proposed rate design as "discriminatory". As Mr. Woodcock acknowledged, most of Portsmouth's Fire and Water District

"purchases are at the lower or cheaper rate block. As I understand their concern, that block has increased more than the other blocks relative to them. Therefore the charge to Portsmouth, if these rates were accepted by this Commission, would go up more than the 31% overall. I have heard them say 44, 45%, I am not certain where that number came from but I know it is more --"

MR ZURIER.
This is because relatively the base block
has increased more greatly than say the
intermediate block?

THE WITNESS.
That is correct.

MR. ZURIER.
The more that is allocated to base would impact greater on Portsmouth and other users?

THE WITNESS.
Any large-volume users, yes, primarily in that last block."

The intervenors presented Dr. Richard S. Bower, Professor of Finance and Managerial Economics at Amos Tuck School of Business Administration at Dartmouth College and a former Commissioner of the New York Public Service Commission. His testimony (Ex. P-7) emphasized the Board's filing as unfair and "a change in the wrong direction" (Ibid., p. 3). By using an illustrative comparison, he showed variations of the new rates so that the impact on certain types of customers might range from -56% to +43.8% (Ex. p. 7, Table RSB #1). He noted the necessity of a billing analysis "to assess the impact of the change in rate structure on individual customers even if the new rate structure were found to be fair." (Ibid., p. 4).

In discussing the criteria for apportioning costs, he questioned whether the proposed rate structure was related to cost of service. He said that Newport had not developed cost relationships and usage patterns systematically. By using an illustrative cost of service study (Ex. P- 7, Table RSB #2), but using a different assumption (i.e. that production facilities planning and operating costs and debt service costs are influenced by peak requirements), he arrived at a significantly different distribution of cost between "base" and "intermediate" (Ex. P- 7, pp. 9-10 and Table RSB #3).

He also indicated a proposed change in the billing charges, by using different assumptions concerning capital costs of meters and interest earned on cash flow. (Ibid., p. 10). He concluded, using his own assumptions, that the base commodity cost should be $.69 per thousand gallons as compared with the $.93 per thousand gallons change suggested by Mr. Woodcock. Correspondingly, the domestic and intermediate block user's charges would be increased. He justified this on the basis that cost of service of a class of customers falls as load factor (i.e. the ratio of system peak to average day use) improves. (Ex. N-7, p. 11). He noted that

"Because cost varies with load factor, load factor information on customers is prerequisite to a test of fairness of a proposed rate structure.

Dr. Bower presented an exhibit showing how, assuming a better load factor for larger users, the costs in the lower blocks (sometimes called "tail blocks") would decline. (See Ex. P- 7, Table RSB #3, p. 2). He noted that his comparisons were:

"... illustrative because without actual load factor information for Newport Water customers, a true comparison cannot be made and a real test of the fairness of the proposed rate structure is not possible." (Ibid., pp. 10-13)

The Division's witness, John F. Guastella, former Chief of the Water Department of the New York Public Service Commission, while emphasizing the need for a reduced revenue requirement, as we have seen, was somewhat more tentative on the issue of rate design. He took no issue generally with

the rate design originally offered by the Board (except with respect to fire protection charges which he characterized as disproportionately high). However, in his prefiled testimony (Div. Ex. 1, 11) he noted:

"I also recommend that Newport be directed by the Commission to maintain sufficiently detailed billing data so that it would be capable of submitting at the time of its next rate filing a complete billing analysis for a 12 month period".

In commenting on this during his testimony, he noted

"The process of estimating consumption by the Department was reasonable to the extent that it had information with which to make the estimate. However, it did not have the billing analysis so that we could break down between the various classes of customers with various size meters within the classes of consumption, and then tie that -- excuse me, apply the rates to the respective consumption and charges and compare those dollars of revenue so computed with the revenues as booked on its financial statement. I think that should be done for the next case and I think they should also have that information available to the extent that such information would be necessary with which to perform a more detailed cost allocation rate design study, particularly for the general service customers." (Tr. 1/18/82, p. 62).

Mr. Guastella indicated that the choice facing the Commission now was either a pro rata across-the-board increase or an increase consistent with the studies made by the Department (and the review and studies Mr. Guastella made with respect to fire protection and then adjusting for the general service rates).

The following excerpt from Mr. Guastella's testimony summarized his view in this respect:

"(Mr. Guastella) - "Well, we're faced with three situations. One is the existing rates and applying an increase on a percentage basis across-the-board to those rates. We also have available cost allocation and rate design studies which do basically two things. They develop fire protection rates and also general service rates with all the categories within the general service rates. I believe, however, if they had a billing analysis, the third thing they would have would be able to refine the general service rate portion even further. The choice we have now is only out of the first two, either a pro rata across-the-board increase or an increase concistent with the studies that were made by the Department, and the review and studies I made with respect to the fire and then adjusting for the general service rates. I think although a more detailed analysis could be made if some of the billing analysis data were available, the best option is the -- to base the rates on the studies as were made as opposed to an across-the-board increase; but I think that information in any further rate design for the future is necessary. If a further rate design for the future is to be made, you need that billing information.

Q. Let me see if I understand what you're telling me, that we have three choices, you said. The first was an across-the-board increase?

A. We really have two choices. There are three categories. The two choices are the first two. The third you don't have a choice on because there is no billing analysis so there is no study with which to use the billing analysis.

Q. And that billing analysis in your opinion would be required in order to reallocate between, taking the fire aside, between the different classes of customers?

A. It may not necessarily be required to reallocate, but it would be necessary to change the rate structure in accordance with whatever cost allocation you do develop, and it would also provide some other data which may be helpful in determining allocation factors." (Tr. 1/18/82, pp. 63-64), (emphasis supplied).

Mr. Guastella subsequently concluded, after Dr. Bower testified, that in his opinion, the Commission could reasonably conclude that an across-the-board increase (rather than an adoption of the rate structure proposed by Newport) would be appropriate in view of the imminent filing by the City and the potential availability of new billing data for this filing (Tr. 1/22/82, p. 25). He noted:

"What we cannot determine, because there is no billing analysis, is how much would be recovered from each of the classes of customers with a given change in rate design..." (Tr. 1/22/82, pp. 10-11).

He further noted, with reference to determining load factors for various classes and the allocation of costs to customer classes

"Neither the Woodcock study nor the Bower study has done that, because there is no such billing analysis, which is why I did not do a separate study myself for general service." (Tr. 1/22/82, p. 12).

It is clear from the testimony that the billing analysis recommended by Mr. Guastella is a significant, if not (as Dr. Bower indicated) an indispensable requirement in changing rate structure. Section 39-3-12, General Laws of Rhode Island, 1956 (1977 Reenactment) provides

"At any such hearing involving any proposed increase in any rate, toll or charge, the burden of proof to show that such increase is necessary in order to obtain a reasonable compensation for the service rendered shall be upon the public utility..."

Our Supreme Court has specifically interpreted this section not only to apply to the need for an increase but also to show that "the proposed rate design does not unfairly discriminate among its customer classes." United States of America v. Public Utilities Commission, 393 A.2d 1092 (1978).

Even though, as Mr. Guastella indicates, there is some indication that at present, tail block rates (and fire protection charges) may be disproportionately low under existing rates, we do not believe, on the state of the present record, that Newport has met its burden of proof on this issue. The present rates carry with them a presumption of nondiscrimination, in view of the prior across-the-board increase in Docket No. 1480. (See United States of America v. Public Utilities Commission, Supra, at p. 1095; Secretary of Defense v. Public Utilities Commission, 437 A.2d 1342, 1344, (1981).

We note that Newport intends shortly to file again for rate relief (Tr. 1/21/82, p. 33; Ex. P-8, p. 56). Even Mr. Woodcock acknowledged that the City at time of his study had no records to show how usage was broken down into blocks as to Government usage, requiring him to make estimates, and that records were similarly unavailable to show non-government consumption in each rate block. (Tr.12/10/81, pp. 18-19, 22). He did note that in the future, he believed he could consider alternate rate blocks based on usage because the City

"Will have a year's worth of data on their computer of individual consumptions that I could use on a program that our firm has to find out how much consumption would be in any blocks you choose, that type of information which is not available at the time the study was done." (Tr. 12/11/81, p. 23-24).

In view of the availability of the data and the imminence of Newport's next filing, we will not in this

proceeding direct a change in rate structure. While we are not directing an elaborate cost of service study for the next filing, we will require a billing analysis to show the impact of proposed rates on users by class so that the Commission may more intelligently arrive at any conclusions concerning rate design. We agree with Mr. Guastella that if such information is not available when the initial filing is made, it can be introduced as part of the second step with respect to compliance with any Order the Commission may make relating to a further revenue increase. (See Tr. 1/22/82, pp. 21-22.)

V. MISMATCH OF PRO FORMA REVENUE AND EXPENSE

Intervenor Portsmouth Water and Fire District argues that while pro forma expenses utilized by Newport correspond to the fiscal year ending June 30, 1981, the pro forma figures for consumption used by Newport are for the calendar year 1980. Portsmouth claims this mismatch is a basis for indicating that Newport has not met its burden of proof for the proposed rates.

The Commission agrees that it would have been preferable to use both consumption and expense for the same period. And further, the Commission (as did Mr. Guastella in his testimony - Tr. 1/18/82, pp. 59-60) has difficulty in determining just what the pro forma period is. However, merely to state that there is a mismatch does not establish in what way there is an adverse effect on the Commission's ability to fix rates. We agree with Mr. Guastella that (as we have adjusted same) Newport has arrived at a reasonable estimate of expenses for the period involved. In view of our determination to have the increase across the board, we do not find Newport has failed in its burden of proof to establish the revenue requirement previously indicated.

VI. NON COMPLIANCE WITH THE COMMISSION'S ORDER IN DOCKET NO. 1480

During the hearings in 1980 in Docket No. 1480, Newport presented testimony of Mr. Robert Cutone, an engineer associated with its consulting firm of Camp, Dresser & McKee, that there was a potentially hazardous condition at Plant No. 1 and Lawton Valley requiring immediate measures in handling chlorine and providing ventilating and other safety equipment. Further, it was noted that prompt repairs of the severe crack in the coagulation basin influent channel at Lawton Valley, as well as replacement of wooden decking there, were required "on a health and safety basis" (Report and Order, Docket No. 1480, p. 14).

The Commission in that Docket allowed $46,000 in the revenue requirement for these repairs. We noted we were doing so, even though useful lives of these improvements range upwards of fifteen years (Ibid., p. 15). We specifically observed:

"...there should be no basis for not performing these capital repairs and (the Commission) so directs. The Commission directs that (Newport) report on the status of its compliance with these directives on or before April 1, 1981." (See Order (10259) dated October 7, 1980)

Not withstanding the Commission's very specific language, Mr. Janjigian testified that he became acting director of the Water Dept. on August 1, 1981 (Tr. 1/21/82, p. 37), that he was not personally familiar prior to January 21, 1982 with regard to the requirements for doing some emergency work at the plants (Ibid., p. 35) and that the only knowledge he had was that a hood for the laboratory at Plant No. 1 had been ordered (Ibid., p. 37). He testified that no action had been taken at either Lawton Valley or Plant No. 1 with regard to the chlorine problem (Ibid., p. 37), nor had either the wood decking or the crack in the coagulation basin channel been repaired (Ibid., p. 39). He further indicated no awareness of the reporting requirement set out in Docket 1480 (Ibid., p. 28).

He further acknowledged the existence of a problem mentioned in the Malcolm Pirnie Report (Ex. P-1) indicating a leakage factor of some 29% of production, notwithstanding the industrial average of 10 to 15% (Tr. 1/21/81, p. 30).

At the hearing on January 22, 1982, the Commission heard from John E. Conners, Newport City Manager. Mr. Conners stated he had assumed his duties on March 23, 1981, and that while he became aware during the budget process there were certain things that needed to be done, he had not become aware of the Commission's order until January 21, 1982. He pointed out that a status letter had been sent to the Commission by Mr. Kent, former director of the Department, on March 31, 1981 (Comm. Ex. 3). He submitted a new status report letter to the Commission dated January 22, 1982 (Comm. Ex. 4).

In his testimony he set out a specific course of conduct he was pursuing to implement each phase of our order in Docket No. 1480 (Tr. 1/22/82, pp. 32-36), and noted his intent to seek Navy assistance in connection with the leak detection program but indicated such program would be implemented, with or without Navy help (Ibid., p. 35, 45-46).

At the public hearing at Newport City Hall on February 2, 1982, Mr. Janjigian reported that the chlorine room at Station 1 had been isolated by a cement concrete block wall (Tr. 2/2/82, p. 33); that bids had been sought for chlorine detectors in each plant (Ibid., p. 34); that discussions were ongoing for similar isolation of the chlorine units at Lawton Valley (Ibid., p. 34) and that contractors were being lined up for performance of the repairs at Lawton Valley as well as repair of the crack there, and that he had been authorized to make the necessary purchases on a direct purchase basis, without competitive bidding (Ibid., p. 35). The Commission asked that Newport report weekly to the Division on the status of implementation of each of the matters referred to in Docket No. 1480.

In Bristol County Water Co. v. Public Utilities Commission, 117 R.I. 89 at p, 106 (1976) our Supreme Court noted:

"We cannot accept the Company's view that the quality of service provided by it presently or during the test year should not have a bearing on the amount the customers will have to pay for those services in the immediate future. Our view in this regard is heavily influenced by the clear statutory directive to this and other utility companies 'to furnish safe, reasonable and adequate services and facilities.' G.L. 1956 (1969 Reenactment, Section 39-2-1, as amended."

We are gratified to note that, notwithstanding the apparent disregard of our Order in Docket No. 1480 (obviously resulting from a change in personnel both at the level of director of the Water Department and City Manager) Newport is moving swiftly to accomplish the necessary compliance. For that reason, we will not resort to witholding requested rate relief due to deficiency in quality of service.

VII. FINDINGS

The Commission, having carefully considered and weighed the evidence, testimony and exhibits in the record, hereby makes the following findings:

1. The additional annual revenues in the amount of $592,291 proposed by Newport through application of rate schedules filed with the Commission on May 18, 1981 is excessive and therefore unjust and unreasonable.

2. The annual revenue presently received by Newport from application of existing rate schedules in

insufficient to insure continued and adequate service.

3. Newport is entitled to revise its existing rates and charges on an across-the-board basis in a manner which will produce additional revenue of $378,147.

Accordingly, it is

(10623) ORDERED:

1. That the tariff filing made by Newport on May 18, 1981, designed in a manner to provide the approximate amount of $592,291 is hereby rejected, denied and dismissed.

2. That Newport proceed forthwith to complete immediate compliance with the provisions of Order (10259) for correction of the chlorine system at Station One and Lawton Valley, installation of ventilating equipment at Station One and repairs to the influent channel at Lawton Valley, and that pending such completion, no later than the effective date of the compliance hearing required by this order in paragraph 4 hereafter, Newport shall furnish weekly reports to the Division on the status of such implementation.

3. That Newport shall perform a billing analysis, based on the best and most recent information available to it, to indicate the classification of customers by consumption and rate block.

4. That Newport file with the Commission within 30 days of this Order a new tariff designed in a manner to provide additional annual revenue on an across-the-board basis in the amount of $378,147.

DATED AND EFFECTIVE AT PROVIDENCE, RHODE ISLAND THIS SIXTEENTH DAY OF FEBRUARY, 1982.

PUBLIC UTILITIES COMMISSION

Edward F. Burke, Chairman

Eleanor L. Miller, Commissioner

Andrew L. Niven, Commissioner

EXHIBIT B

Order 13947 - Newport Water Dept. Rate Change

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION

IN RE:
NEWPORT WATER DEPARTMENT
PROPOSED CHANGES IN RATE SCHEDULES

DOCKET NO. 2029

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STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION

IN RE: NEWPORT WATER DEPARTMENT
PROPOSED CHANGES IN RATE SCHEDULES
DOCKET NO. 2029

REPORT AND ORDER

INTRODUCTION

On September 30, 1991 the Newport Water Department ("Newport" or "NWD") filed an application with the Public Utilities Commission ("Commission") seeking a general increase in its existing rate schedules. Newport's rate filing was offered for a November 1, 1991 effective date and was designed

to generate total revenue in the amount of $8,388,058. This request, if granted, would increase Newport's present revenue requirement by $2,588,360 or approximately 46 percent.

The instant rate case filing represents NWD's sixth such filing in the last twelve years. The following table provides a brief history:

Docket No.	Filing Date	Amount Requested	Amount Allowed
1480	1/9/80	$ 499,369	$ 169,000
1581	5/18/81	592,391	378,147
1735 12/13/83	853,899	625,305	
1848	2/26/86	751,651	540,426
1978	7/31/90	2,250,819	1,458,727
2029	9/30/91	2,588,360	

The Commission suspended Newport's proposed rate increase for a period of five months beginning from November 1, 1991. This suspension was ordered pursuant to Rhode Island General Laws, Section 39-3-11 (Order No. 13774).

There were several requests by third parties to intervene in this proceeding. All motions to intervene were granted by the Commission. The United States Department of the Navy ("the Navy") moved to intervene on October 11, 1991; additionally the Conservation Law Foundation of New England, Inc., and the Audubon Society of Rhode Island (collectively the "CLF") jointly moved to intervene on November 27, 1991. These motions were subsequently granted by the Commission at open meetings held on October 29 and December 19, 1991, respectively.

There were five public hearings conducted in this docket. Four of the hearings were held at the Commission's offices at 100 Orange Street in Providence. These hearings were conducted on February 24 and 25, April 23 and May 22, 1992. There was also a public night hearing conducted in Newport's service territory on February 10, 1992 at the Newport City Hall, at which seventeen of Newport's ratepayers offered comment, infra. Additionally, public comments were received by six individuals during the February 24, 1992 hearing conducted in Providence, infra.

During the various hearings conducted in this docket the following counsel entered appearances:

FOR THE NEWPORT WATER DEPARTMENT

Robert Rahill, Sr., Esq.

FOR THE DIVISION OF PUBLIC UTILITIES AND CARRIERS ("DIVISION")

Thomas Palumbo, Esq.,
Special Assistant Attorney General

FOR THE CLF:

Peter Shelley, Esq.

FOR THE NAVY:

Anthony M. Dowdle, Esq.

FOR THE COMMISSION:

John Spirito, Jr., Esq.

Each of the parties in this proceeding filed direct cases in support of their respective initial positions. During the administrative process, however, two of the parties reached a collective agreement relative to an appropriate revenue requirement for Newport. This agreement was reduced to a written "Agreement and Settlement" which was filed with the Commission on May 8, 1992, infra. The remainder of this Report and Order contains an outline of the parties' initial positions; their rebuttal positions; the stipulation in summary form and attached in its entirety; and the Commission's findings and decisions thereon.

PROPOSED RATE INCREASE

i. Newport's Direct Case

Newport proffered the prefiled direct testimony of the following individuals in its direct case:

1. Roy B. Anderson, P.E. Utilities Director, employed by the City of Newport

2. Robert W. Ekstrom, CPA Accountant, employed by the City of Newport

3. Walter E. Edge, Jr., CPA Accountant/Consultant Parmelee, Bacon & Edge One Worthington Road Cranston, Rhode Island

Mr. Roy Anderson began his testimony by explaining that the two-step rate structure approved by the Commission for Newport in dockets 1848 and 1978 is also used in the proposed rate request. He did note two changes, however, one in the revision of the service charge and one in the introduction of a water assessment charge.

The water assessment charge was described by the witness as a means of reserving monies for future expansion of Newport's facilities. Mr. Anderson related that the charge will be collected from all those newly connecting into the system. He reasoned that the fee is based on the fact that increased use of Newport's facilities hastens the day when existing facilities will be overtaxed thus requiring the development of additional capacity (Newport Exh. 1, p. 6).

Mr. Anderson further testified that Newport has been working with the CLF to evaluate and make recommendations relative to conservation and rate structure issues. He related that Newport and the CLF are particularly interested in supply and demand side options with an eye toward least cost planning for the NWD's future. Mr. Anderson explained that although this project is underway it will not benefit this rate filing. He did relate, however, that the recommendations generated from this cooperative effort will be used as a basis to factor into future rate filings (Id., p. 7). Also connected with Newport's conservation efforts, Mr. Anderson testified that the NWD is also surveying 20 percent of its system each year to find leaks. According to the witness, this program has been very successful.

Mr. Anderson went on to discuss Newport's policy of insuring that each class of customer pays a water rate that provides sufficient revenues to cover the cost of service to that class. There were five

user classes identified:

i. small users (less than 14,000 gals./mo.),

ii. large users (greater than 14.000 gals./mo.),

iii. public fire protection users,

iv. private fire protection users, and

v. bulk sale users.

Mr. Anderson testified that the present rate design is consistent with the NWD's rate policies.

The next topic addressed involved the NWD's needs for the additional revenues. Mr. Anderson described the proposed Sakonnet River pipeline crossing as the primary reason for the rate increase proposal. He related that two-thirds of the rate increase is associated with this project (2-24-92, T. 46). This pipeline, planned since 1984, is designed to convey water to Newport's water system from supplies owned and maintained by Newport in Tiverton and Little Compton. Mr. Anderson testified that 50 percent of Newport's current supply is coming from these areas via a twenty inch pipeline below the Sakonnet River. This existing pipeline was constructed by the Navy in 1942. According to the witness the new pipeline will take eighteen months to complete and provide back up for the existing pipeline while at the same time satisfy current and future demands for water, particularly during peak demands. The new project would further include an inspection and rehabilitation of the existing pipe. Mr. Anderson noted that this Sakonnet River crossing project, which includes a new pumping station, was approved at a local referendum on November 7, 1989 and is supported by several local and statewide groups (Id., p. 9). He related that for purposes of this filing, an estimate of $14.7 million is being projected for the construction cost connected to the project. Mr. Anderson explained that the projected cost is based on the bond approval for $15.2 million minus $500,000 already expended for engineering design work. Actual bids for the project were expected by March, 1992. Newport believed that the final construction cost would be close to this amount. *[1 The actual bid came in at $9,685,000 as reported by Newport on February 25, 1992 (T. 162).]*

Mr. Anderson also provided the Commission with a description of the contractual relationships Newport maintains with the Navy and the Portsmouth Water and Fire District ("PWFD" or "Portsmouth"). As it relates to the Navy, the NWD and the Navy are operating under a continuation of a contract which was in existence during the last rate filing. This contract provides for a four-block rate structure and minimum charges for each meter size. Rates under this contract are designed to be modified to be consistent with Commission ordered rate changes for Newport's retail customers. Based on consumption figures for the test year ending June 30, 1991, this contract generates $736,057 for the NWD. (Id., p. 12).

Newport and Portsmouth are currently operating under a contract which expires December 31, 1995. Revenues realized from this contract in the test year were $215,513 (Id., p. 13). Mr. Anderson described the PWFD as Newport's second largest customer. He also differentiated Portsmouth from other large users based on the fact that it owns and maintains its own distribution system and further that the contract establishes minimum annual and daily take provisions. Because of these characteristics, Newport has determined that its costs for serving Portsmouth are less than its costs for serving its retail customers. Mr. Anderson did explain, however, that because of the Sakonnet River pipeline project in the instant rate filing, a project which will substantially benefit Portsmouth,

Newport will be seeking a comparable rate increase on Portsmouth's wholesale rates. Lastly, pursuant to Rhode Island General Laws, Section 39-3-12.1, Mr. Anderson provided the Commission with supplementary rate filing data on the NWD's physical plant, maintenance policies, treatment chemicals and capital projects. The details of these specific information filings were contained in five attachments to Mr. Anderson's prefiled testimony (Id., pp. 15-17).

Mr. Robert Ekstrom identified himself as the Deputy Finance Director for the city of Newport. He described the NWD as a separate and distinct financial entity within the city of Newport. Mr. Ekstrom testified that the NWD is responsible for generating sufficient revenues to meet its own operating and capital needs.

Mr. Ekstrom indicated that it was he who prepared the test year data used to create the rate year cost of service. He explained that he chose the recently completed fiscal year ending June 30, 1991 as the test year. According to this witness, Newport developed its rate year cost of service by using a test year which coincided with its fiscal year. This allowed the NWD to use audited data. Moreover, Mr. Ekstrom stated that because the test year incorporates the same calendar as Newport's projected rate year (ending June 30, 1993), it was easier to prepare known and measurable adjustments (Newport Exh. 2, p. 4).

Predicated on Newport's test year figures, Mr. Ekstrom related that the NWD's total cost of service exceeded revenues by $5,435,702 for the year ending June 30, 1991 (Id., p. 5). He noted that $4,750,000 of this amount was paid for with bond and debt proceeds. He attributed most of this deficit to the completion of Newport's new treatment plant and modifications to the Lawton Valley Treatment Plant. The witness also testified that the rate relief obtained in February 1991 through the NWD's last rate filing (Docket No. 1978) provided immediate relief but only sufficient relief through June, 1992.

Mr. Ekstrom next testified relative to the normalizing adjustment he made to the test year in order to use it as a true base from which to project rate year costs of service. He cited three major events which happened during the test year which had to be addressed in the normalization process. These events were identified as: the securing of $3 million in additional financing to complete the NWD's treatment plants; the new treatment plant opened in March, 1991; and the coming on line of rate relief in February, 1991. Mr. Ekstrom provided the Commission with the details behind each of these normalizing adjustments (Id., pp. 7-11).

Mr. Ekstrom also testified to the other adjustments contained in Newport's rate filing. These included adjustments for test year, capital improvements, personal service costs, regulatory expense, chemical treatments and electricity (Id., pp. 12-15). Mr. Ekstrom explained that after performing these adjustments, the test year cost of service is decreased by $3,971,058. He stated that this leaves a normalized cost of service base of $6,216,321 which is carried over to the pro-forma year. Lastly, Mr. Ekstrom testified that when compared to normalized test year revenues of $5,576,305, the NWD realized a test year net revenue deficiency of $640,016 (Id., p. 15).

The final area discussed by Mr. Ekstrom involved his efforts to assist Mr. Edge in projecting rate year personnel services and fringe benefit costs. He testified that personnel services and fringe benefit costs account for nearly one-fourth of the NWD's total rate year cost of service of $8,249,634 ($2,047,484). In support of these costs, Mr. Ekstrom provided the Commission with a detailed description of the factors which comprise these expenses. Several schedules were also proffered as additional supporting evidence (Id., pp. 16-24).

Mr. Walter Edge's testimony was presented by Newport to principally cover its rate year cost of

service, revenue requirement and operating revenue allowance.

Mr. Edge prefaced his testimony by stating that despite the fact that Newport was granted rate relief only last year, the instant filing is "needed to avoid significant revenue and cash shortfalls" (Newport Exh. 3, p. 5). He explained that several factors necessitate the proposed rate increase, but the most significant reason is the debt service costs related to the Sakonnet River pipeline project.

Mr. Edge testified that the Sakonnet River pipeline project debt service expense was anticipated by the NWD in the last rate case (Docket No. 1978). In fact, Mr. Edge alluded to his testimony in the last rate case wherein he stated that the NWD would have to file another rate case "almost immediately after this increase is granted" to pay for the financing associated with the referendum vote to construct the new pipeline (Id., p. 5). Mr. Edge related that consistent with that earlier prediction the NWD has filed the instant rate case and is seeking a $2,588,360 or 45.74 percent revenue increase.

According to the witness, the NWD is proposing to apply the aforementioned rate increase on an across-the-board basis with one exception. Specifically, Mr. Edge explained that all rates except the customer charge will be increased by 47.3 percent. Customer charges would increase by 24.7 percent.

Mr. Edge's rate year testimony was divided into a discussion on pro-forma revenues and expense accounts. In his rate year revenue analysis, Mr. Edge identified eight revenue sources:

1. metered usage,

2. customer charge,

3. penalties,

4. fire protection,

5. service charges,

6. service installations,

7. water quality protection, and

8. investment income.

Mr. Edge related that metered usage is the largest revenue source and is comprised of both retail and wholesale consumption. To arrive at pro-forma revenues for this source, Mr. Edge used actual 1991 consumption data and made certain normalized adjustments. The resulting rate year meter usage revenue is $4,686,349 (Id., p. 8). When the above remaining much less substantial revenue sources are added, the total rate year revenue at current rates was calculated as $5,799,698 (Id., p. 12).

Mr. Edge next offered a breakdown of how he calculated expenses in the rate year. He explained that the majority of expense accounts fall into two major classifications: Personnel Services and Fringe Benefits; and those accounts which increase each year due to inflation. Both Mr. Edge and Mr. Ekstrom provided schedules reflecting these increases. Other expense categories were also reflected in Mr. Edge's testimony. These included: Contractual Services; Materials; Utilities; Equipment Costs; General and Administrative; and Capital Improvements. Costs to be incurred in these categories were quantified in several schedules attached to Mr. Edge's testimony. When tallied the resulting rate year

total expenditures was identified as $8,255,766. To this amount, Mr. Edge maintained that the Commission should allow the NWD to continue collecting an additional 1.5 percent allowance on gross revenues for unforeseen expenses in the rate year. He noted that the Commission has approved this allowance in the last two NWD rate cases (Dockets 1848 and 1978). This allowance would, if approved, result in a total cost-of-service amount of $8,388,058 for Newport (NWD Exh. 3a, Schedule A).

Moving to the topic of rate design, Mr. Edge related that two issues must be addressed in the instant docket. These issues involve Newport's proposed customer charge and water assessment charge.

Mr. Edge testified that the NWD has proposed to increase its customer charge by 24.7 percent in relation to its proposed across-the-board increase of 47.3 percent for all other tariffs. The rational for this decision was explained as an attempt to avoid a cross-subsidization from occurring. Mr. Edge related that because this docket and docket no. 1978 were both needed for very large capital projects that have no impact on the costs related to the customer charge, the NWD decided to review its customer charge costs in this filing. Predicated on that review, it was determined that if customer charges were increased by the same percentage amount as other tariffs, customer charge revenues would exceed costs. From this analysis a 24.73 percent increase was found appropriate according to Mr. Edge (NWD Exh. 3, p. 21-22).

Mr. Edge also offered testimony in support of Newport's water assessment charge. He related that Newport reviewed the rate schedule of many water utilities in the State and found that they included a charge for new services which is over and above the cost to connect the new customer. Mr. Edge called this extra charge a "tie-in" or "impact fee" (Id., p. 22). He also indicated that the fee is designed to provide the utility with a cash reserve to offset future water development costs (Id.). Mr. Edge opined that the proposed water assessment charge is appropriate for the following reason:

"The new customer receives the full benefit of the utility plant in service at the time they are connected, yet they did not pay the cost of the plant in previous years, nor will they pay the past cost of that plant in the future. However, they will receive the same benefit from that plant that every other customer receives. In addition, the new customer increases the overall demand on the system which brings the entire system closer to needing additional capacity." (Id., p. 23).

Mr. Edge further testified that his review of the other water utilities who charge impact fees shows that the fee ranges between $400 and $1100 per new connection. Newport has decided to split the difference and propose an impact fee of $750 per new dwelling unit connection (Id., p. 24). He also proposed a fee of $.50 per square foot for commercial buildings. Mr. Edge explained that this new rate will generate a cash reserve for the future and has no impact on the rate year revenue requested in the instant filing.

As a final comment, Mr. Edge informed the Commission during the February 25th hearing that Newport had just received the final bid on the Sakonnet River pipeline project. He related that the bid came in at $9,685,000, which according to the witness, was much lower than expected (2-25-92, T. 162).

ii. THE DIVISION'S DIRECT CASE

The Division proffered the prefiled direct testimony of the following individuals in its direct case:

1. Mr. Leo H. Fox, CPA Accountant/Consultant 174 Armistice Boulevard Pawtucket, Rhode Island

2. Mr. Thomas S. Catlin Consulting Economist Exeter Associates, Inc. 10801 Lockwood Drive Silver Spring, Maryland

3. Mr. John A. Milano Water Engineering Specialist Division of Public Utilities and Carriers 100 Orange Street Providence, Rhode Island

Mr. Leo Fox testified that he was retained by the Division to review the NWD filing now before the Commission. Mr. Fox related that based on his review of Newport's prefiled testimony, analysis of the financial records and discussions with NWD officials, he can not agree with the proposed increase sought by the NWD. He instead recommended an increase of $1,521,162 or 26.87 percent over current rates (Division Exh. 1, p. 3).

Mr. Fox related that he reviewed Newport's revenue estimates for the test year and rate year as provided through Mr. Edge's testimony and schedules. He concluded that both revenue estimates appeared reasonable. Mr. Fox did, however, propose several adjustments to Newport's operating expenditures.

This witness explained that he analyzed all significant cost categories and reviewed the supporting data of certain minor categories provided by Newport in response to data requests and on detailed trial balances. Predicated on this analysis, Mr. Fox related that the following adjustments would be appropriate:

1. Holiday Pay	-	($ 3,356)
2. Temporary Employees	-	($ 27,059)
3. Contractual Services	-	($ 6,549)
4. Chemicals	-	($113,829)
5. Granular Activated Carbon	-	($ 91,087)
6. Materials and Supplies	-	($ 31,856)
7. Utilities	-	($130,919)
8. Equipment Costs	-	($ 45,124)
9. General and Administration	-	($ 20,945)
10. Debt Principal Cost	-	($185,000)
11. Interest Expense	-	($240,500)

Mr. Fox also testified in opposition to Newport's proposed 1.5 percent contingency reserve. He maintained that the NWD "has no need for more cash than will be generated by current operations and the interest they will earn on the Sakonnet project bonds pending payments to contractors" (Id., p. 21). Mr. Fox concluded that any operating subsidy to Newport ought to be based upon a lead lag study. Consequently, he proposed a further adjustment of ($125,821) to Newport's cost-of-service. Total adjustments proposed by Mr. Fox equal ($1,067,535) (Division Exh. 2, Schedule LHF-1). *[2 Mr. Fox supported each of his proposed adjustments with testimony and schedules.]*

Mr. Thomas Catlin provided the Commission with an overview of cost of service methodologies. He also recommended and detailed the development of a water utility cost of service study which he suggests Newport use in its next rate filing.

Mr. Catlin testified that a utility experiences different costs in providing service to different customer classes due to differences in class usage and service characteristics. He asserted that the rates charged by a utility should reflect these differences in the cost of providing service (Division Exh. 4, p. 4).

Because the NWD has failed to perform a cost-of-service study in support of its present rate increase request, Mr. Catlin stated that one should be performed by Newport as part of its next rate case.

Toward this end, Mr. Catlin testified that Newport should submit with its next rate filing a class cost-of-service study. Additionally, he opined that this study generally reflect the base-extra capacity method as described in the American Water Works Association ("AWWA") Water Rates manual. Mr. Catlin explained that under the base-extra capacity method, investment and costs are first classified into four primary functional cost categories: base or average capacity, extra capacity, customer, and direct fire protection. He indicated that customer costs are further divided between meter and service related and account or bill related costs. Pursuant to this method, once investments and costs are classified to these functional categories, they are then allocated to customer classes, according to Mr. Catlin. He noted further that when this is accomplished, base costs are allocated according to average water use, and extra capacity costs are allocated on the basis of the excess of peak demands over average demands (Id., p. 5). He added that meter and service related customer costs would be allocated on the basis of relative meter and service investment; and account related customer costs would be allocated in proportion to the number of customers or the number of bills (Id.).

Mr. Catlin next testified that for Newport to begin the process of developing a cost-of-service study utilizing the base-extra capacity method, it must determine its net utility investment by cost component. When this is done the operation and maintenance expenses by cost component should be similarly developed. Mr. Catlin explained that after this is accomplished, the investment and expenses in each category should be classified into the functional components of base or average capacity, extra capacity, customer and direct fire protection. According to the witness, after the functionalization of investment, and operation and maintenance expenses, costs would be allocated to Newport's various customer classes.

In closing, Mr. Catlin related that the costs associated with each cost function are allocated to customer classes based on each class' contribution to the cost causative factor for that cost function (Id., p. 10). He did note however, that there are special concerns which should be considered in allocating costs to customer classes. An example would be, not allocating the costs associated with Newport's local distribution system to Newport's wholesale and contract customers. Mr. Catlin reasoned that because the Navy and the PWFD have their own distribution systems, this allocation would be improper (Id., p. 11).

Mr. John Milano focused his testimony on the issue of whether there are less costly alternatives to the Sakonnet River Project as proposed by Newport. As a prelude to his conclusions, Mr. Milano related that he examined both the population and projected demand assumptions shown in a 1990 engineering report relied upon by the NWD in its determination that the proposed pipeline is needed. *[3 The report was prepared by Metcalf & Eddy in May, 1990 and is entitled "The Report on Water Supply Management Study for City of Newport, Rhode Island Water Department" (Newport Exh. 11).]* Mr. Milano testified that he compared the report findings with actual 1990 values for population, consumption and demand. He explained that he used 1990 census data to assist in the population comparison. Mr. Milano reached the following findings:

1. That for the year 2020 the report projects a total service territory population of 76,236. Mr. Milano stated that census data shows a total population of 73,803; and

2. The report predicts growth in water demand from 1988 through 2020 at 41.55 percent. Mr. Milano calculated actual growth in consumption between the years 1982 and 1991 at 12.7 percent.

On the issue of need for the Sakonnet Project, Mr. Milano related that the report states the existing system has adequate supply to meet the average day demand up to the year 2020. It does not, however, explain whether increased supply facilities will be necessary. In addressing this project, Mr. Milano maintained that the underwater portion of the Sakonnet Project along with the Nonquit Pump Station and connecting Pipeline is necessary for system redundancy. He did question however, the need for the replacement of the existing 20 inch cast iron pipe between the west side of the Sakonnet River and St. Mary's Pond (Id., p. 6). He queried whether this pipe segment could be cleaned and lined instead. Mr. Milano contended that Newport ought to reassess this portion of the project in view of the current economic climate, the possible inaccuracy of its prior population and demand projections, and the effects State mandated water conservation may have on projected demand (Id., p. 7).

iii. THE NAVY'S DIRECT CASE

The Navy proffered the prefiled direct testimony of Mr. Ernest Harwig in its direct case. Mr. Harwig introduced himself as a public utility regulation consultant with the consulting firm of Drazen-Brubaker & Associates, Inc., 12312 Olive Boulevard, St. Louis, Missouri. Mr. Harwig related that his testimony addresses class cost of service, revenue allocation and rate design issues.

Mr. Harwig began his testimony by stating that the Navy is Newport's largest water customer. He related that the Navy's annual water bill at present rates is $881,803. He added that at the proposed rates this amount would increase 47.19 percent to $1,297,896. Mr. Harwig testified that the NWD is basing its proposed Navy water rate increase on its interpretation of a 1959 contract, which governs the terms, conditions, and rates for water service between the NWD and the Navy. According to this witness, the NWD construes the terms of the contract as providing for a "pass-through" of rate increases granted by the Commission (Navy Exh. 1, p. 2). This is why Newport is proposing to raise Navy rates by the same percentage as it's proposing for its retail customers, approximately 47 percent, according to the witness. Mr. Harwig testified that this interpretation is fallacious. He offered the following contract excerpt in support of his position:

". . .If during the term of this contract the regulatory authority having jurisdiction shall approve, after filing in the authorized manner, rates, terms, or conditions of service, which are other than those stipulated herein for like classes of service, the Contractor agrees to continue to furnish service as stipulated herein and the Government agrees to accept such service under the rates, terms, and conditions of service so approved."

Mr. Harwig underscored the words "like classes of service" to support his contention that the Navy should not be treated as an ordinary retail customer for purposes of rate relief. Instead, he asserted that the Navy must be treated with like customers for ratemaking purposes. According to Mr. Harwig, Newport may only exact rates from the Navy that are equal to the rates charged the Portsmouth Water and Fire District. He considers the PWFD as the Navy's only like customer. Mr. Harwig offered a comparison of the two water customers. He related that both are wholesale customers because both purchase water in bulk at relatively few locations and then subsequently distribute that water to their own customers. He related that the Navy consumes approximately 23 percent of all water sold by Newport. The PWFD consumes about 10 percent of Newport's total output. He testified further that the remainder of Newport's output is dedicated to retail water customers and fire protection (Id., p. 4).

Mr. Harwig also distinguished the Navy from Newport's large retail customers. He explained that the Navy consumes water at a more even rate of use during the year than do retail customers. He also noted that the Navy takes water service primarily from 12-inch and 24-inch connections to Newport's bulk transmission system. He emphasized that the Navy does not utilize the extensive grid of smaller

distribution mains through which Newport provides retail service. Mr. Harwig reasoned that the investment and operating expenses associated with these mains are not required to provide service to the Navy.

Mr. Harwig testified that despite the fact that the Navy and the PWFD are Newport's only two wholesale customers, the rates between the two, for like services, are much different. He indicated that if the proposed rate increase were to go into effect, the Navy would be paying nearly twice as much for water as the PWFD (Id., pp. 5-6). He also maintained that this rate differential can not be justified on a cost of service basis.

Mr. Harwig proffered the Commission a fully-allocated cost of service study to show the relative cost of providing water to the Navy, the PWFD and Newport's retail water customers. For comparison purposes, he based the cost-of-service study on the NWD's requested level of revenues. He also noted that the study utilizes the base-extra capacity method (previously described and recommended in Mr. Catlin's testimony). Predicated on the study, Mr. Harwig testified that at proposed rates, the NWD is undercollecting $185,391 from the PWFD and overcollecting $97,786 from the Navy (Id., pp. 7-8). This disparity is derived from a comparison of unit cost of service between the Navy and the PWFD, $2.26 and $2.52, respectively. Because of the study's findings, Mr. Harwig contends that the Commission should approve a per unit water rate for the Navy that is no greater than that established for the PWFD in this proceeding. (Id., pp. 8-9). Mr. Harwig alternatively contended that in the event the Commission orders an across-the-board rate increase for the Navy, the overall percent increase ought to apply and not the percent increase associated with Newport's commodity charges.

Lastly, Mr. Harwig testified that Newport is planning a study to evaluate and make recommendations relative to conservation and rate structure issues. Mr. Harwig related that in conducting such a study, it is important to assure that demand-side expenditures be subject to the same standards of prudence and used or useful criteria as are supply-side expenditures. He also suggested that demand-side costs be recovered in the same way that other utility expenditures are recovered (Id., pp. 10-12).

iv. NEWPORT'S REBUTTAL CASE

Newport recalled Messrs. Roy B. Anderson and Robert W. Ekstrom to testify as rebuttal witnesses. Each witness filed prefiled rebuttal testimony in conformance with the schedule established in this docket.

Mr. Roy Anderson's rebuttal testimony focused on concerns relative to the Navy/Newport relationship and the Sakonnet River pipeline crossing project.

Mr. Anderson testified that the NWD has always treated the Navy as falling into the higher of the two rate classes established by the Commission (14,000 or more gallons per year vs. less than 14,000 gallons per year). He related that the Navy was unable to persuade the Commission to create a new rate class for the Navy in Docket No. 1848. He noted that the Navy never appealed that Commission decision. Mr. Anderson maintained that under the current rate structure there is no provision to treat the Navy as a unique customer. Despite this, Mr. Anderson admits that the NWD has made efforts to mitigate rate increases for the Navy. However, Mr. Anderson rejects the Navy's contention that it is PWFD-like customer (Newport Exh. 12). The witness added that "if the Navy has a problem with the rates they should seek to renegotiate the contract" (Id., p. 5).

Mr. Anderson also reiterated his support for the Sakonnet River pipeline project. He related that the project is necessary in order to provide protection through redundancy. He also explained that the

design life of the existing pipe has been reached and consequently, Newport's consulting engineer believes the pipe must be replaced. Lastly, as for the existing 20" aboveground segment of pipe, Mr. Anderson opined that it ought to be replaced, as proposed, despite the Division's concerns. He explained that if the 20" pipe is rehabilitated and connected to the new 24" pipe (which runs under the river), flow capacities will be adversely affected (Id., pp. 7-9).

Mr. Robert Ekstrom was recalled to rebut Mr. Fox's adjustments, to update certain rate year costs of service based on data acquired after the rate filing, and to sponsor and offer data responses to Division queries generated after initial hearings in this docket.

Mr. Ekstrom testified in opposition to most of Mr. Fox's adjustments. Out of Mr. Fox's total proposed adjustments of $1,067,535, Mr. Ekstrom indicated that he could concur with $648,854 of them (Newport Exh. 14, p. 31). As for the balance, the witness proffered detailed testimony in opposition to Mr. Fox's assumptions and conclusions.

Mr. Ekstrom next offered revised figures for six cost categories predicated on actual data which became available only after the rate case was filed. Each of these revisions was detailed in his prefiled rebuttal testimony (Id., pp. 32-46).

In closing, Mr. Ekstrom provided the Commission with written answers to data requests made by the parties during Mr. Ekstrom's direct testimony. The responses were placed on the record as part of the witness' rebuttal testimony (Id., pp. 47-48).

v. THE DIVISION'S SURREBUTTAL CASE

The Division recalled Messrs. Leo H. Fox and John A. Milano to testify as surrebuttal witnesses. Each witness filed prefiled surrebuttal testimony in conformance with the schedule established in this docket.

Mr. Leo Fox was recalled to address the rebuttal testimony of Mr. Ekstrom. He offered a detailed response to most of the adjustment comments espoused in Mr. Ekstrom's rebuttal testimony. In sum, Mr. Fox remained resolute on his initial position of allowing only a 26.86 percent revenue increase for Newport (Division Exh. 17).

Mr. John Milano was recalled to address Newport's water demand projections. Specifically, Mr. Milano took exception to a statement made by Mr. Anderson that sewer charges have no effect on water demands. Mr. Milano opined that there "will be a continuing effect of sewer charges on water demands" (Division Exh. 16, p. 1). He illustrated his conclusion with data obtained from the Narragansett Bay Water Quality District Commission, relative to the effects of sewer charges on water consumption in Providence, North Providence and Johnson. The data showed a reduction in water usage as sewer charges increased (Id., pp. 1-2). By virtue of this information, Mr. Milano contends that conservation would affect projected water demands. He also stated that he does not feel Newport included the potential of conservation in its water demand projections.

During his surrebuttal testimony, Mr. Milano changed his earlier recommendation regarding the Sakonnet River pipeline project. He related that in his prefiled direct testimony he had taken a position in opposition to the above-ground portion of the proposed Sakonnet pipeline. The cost of this project was of paramount concern, according to the witness. Now, however, based on newly acquired engineering and economic data, Mr. Milano stated that it appears that this facet of the project will only represent 10 percent of the total cost. Mr. Milano conjectured that delaying this segment of the project

may result in a higher individual bid cost in the future. He, therefore, recommended that the pipeline be built as proposed (Id., p. 4).

vi. THE NAVY'S SURREBUTTAL CASE

The Navy recalled Mr. Ernest Harwig to testify as a surrebuttal witness. Mr. Harwig filed prefiled surrebuttal testimony in conformance with the schedule established in this docket.

Mr. Harwig was recalled to address statements made by Mr. Roy Anderson in his rebuttal testimony. He also explained some proposed modifications to the cost of service study presented by the Navy in his earlier testimony.

Mr. Harwig testified that many of the statements made by Mr. Anderson in his rebuttal testimony were misleading. Mr. Harwig made references to the Navy's position in Docket No. 1848 in particular. After offering the Navy's rendition of post-Docket No. 1848 events between the Navy and Newport, Mr. Harwig took exception to Mr. Anderson's statement that only two classes of customers may exist for ratemaking purposes. Mr. Harwig related that the Navy and the NWD have had a special water purchase relationship for fifty years. He noted that "the Navy has never paid for water service under the retail tariff" used by Newport (Navy Exh. 4, p. 6). Mr. Harwig reasoned that the tariff is not properly applicable to the Navy on cost of service grounds (Id.). Mr. Harwig related that the NWD accepts this premise as evidenced by its commission of a cost of service study after Docket No. 1848 in order to support "a reasonable bulk rate in its dealings with the Navy" (Id.).

Mr. Harwig next addressed the matter of the Navy's decision not to appeal the Commission's decision in Docket No. 1848. He testified that this decision not to appeal was based on the Navy's position that it would continue to adhere to the 1959 contract's terms and conditions, as amended, and not on agreeing to purchase water under Newport's retail rates.

STIPULATED AGREEMENTS

Newport filed its rebuttal case and the Division filed its surrebuttal case on March 20 and April 3, 1992, respectively. A hearing on these filings was conducted by the Commission on April 23, 1992. On the day of the April 23rd hearing, the Division and the NWD jointly sponsored a "Partial Settlement Agreement" (Joint Exh. 1). This agreement was jointly filed by the two parties to convey to the Commission that they had reached a settlement relative to three previously disputed issues. Under this agreement, Newport eliminated its proposed impact fee from its rate filing request; the billing charge increase would be capped at $11.00; and that payment in lieu of property taxes amount be set at $150,000.

Subsequently, on May 22, 1992, the Division and Newport jointly filed a final "Settlement Agreement", which incorporated their earlier partial settlement agreement, and offered a resolution to all other outstanding disputed matters (Joint Exh. 3). This settlement agreement has been attached to this report and order as "Appendix 1" and shall be incorporated by reference. In summary form, the stipulation offered the following agreements between the NWD and the Division:

1. That a revenue requirement of $7,333,817 be approved. This represents an increase of $1,698,065 or 30.1 percent.

2. That the billing charge increase be limited to $11.00 and that other tariffs be increased on an across-the-board basis;

3. That the increase go into effect on July 1, 1992;

4. That funds for capital improvements, and debt principal and interest be restricted;

5. A mutually agreed to debt service schedule for Newport's 1993, 1994 and 1995 fiscal years; and

6. A mutually agreed to set of revenue and expenditure schedules.

This stipulation was also provided to the Navy and the CLF for comment. Neither the Navy nor the CLF took exception to any provision of the aforementioned Division/Newport agreements (5/22/92 T. 22 and 76; and Navy "Opening Brief", p. 2).

PUBLIC COMMENTS

On February 10, 1992 the Commission traveled to the Council Chambers at Newport City Hall for the purpose of eliciting public comment from the NWD's ratepayers regarding the instant rate request. Further, on February 24, 1992 the Commission, while conducting its first hearing on the propriety of the rate filing, allowed additional public testimony in this docket. Both hearings were publicly noticed. The tenor of public opinion was recorded as follows:

-- that the proposed increase far exceeds increases in salaries and retirement benefits;

-- that consumption should be the sole basis for billing and that minimum billing charges are unfair when no water has been consumed;

-- that conservation only leads to increased commodity charges;

-- that a desalinization plant ought to be considered in lieu of a new pipeline under the Sakonnet River;

-- that the revenue bond rates associated with the Sakonnet Pipeline project appear excessive;

-- that the NWD should not be given funds for a contingency reserve;

-- that Newport should not make payments to itself in the form of "payments in lieu of taxes", or alternatively, property taxes within the City of Newport ought to be decreased commensurately;

-- that Newport's proposed impact fee is inappropriate as it will discourage new business in Newport's service territory;

-- that rehabilitating the existing distribution system ought to be considered before building a new Sakonnet River pipeline;

-- that both sewer rates and water rates are too high;

-- that albeit the infrastructure of the NWD requires upgrading, a 46 percent increase seems excessive;

-- that Newport residents are currently overburdened with taxes;

-- that a detailed cost of service study ought to be performed before any rate increases are approved;

-- that the Sakonnet Pipeline expense ought to be borne to a greater extent by Middletown and Portsmouth residents;

-- that the NWD ought to start practicing good management and stop "its reckless spending";

-- that any more rate increases will adversely impact existing businesses in Newport's service territory;

-- that there have been too many rate increases in recent years; and

-- that the rates are excessive in view of the poor tasting water being provided by the NWD (2-10-92, T. 6-60; and 2-24-92; T. 4-43).

COMMISSION FINDINGS

The Commission has carefully examined the record in this case. Fundamentally, this case consists of two issues. The first issue relates to Newport's rate year revenue requirements. The parties have reached a consensus on this question. The remaining issue involves rate design and the cost of providing water service to the Navy.

i. REVENUE REQUIREMENTS ISSUE

The Division and Newport have offered for Commission consideration, a recommendation which would establish new rate year revenues for the NWD. This revenue requirement was agreed to after the two parties settled and reconciled their respective positions on Newport's cost of service. The recommendation is for total revenues of $7,333,817. This amount represents an increase of $1,698,065 or 30.1 percent over current revenues. Neither the Navy nor the CLF disagreed with this proposal.

The Commission considered the aforementioned recommendation and finds it reasonable and in the best interests of Newport's ratepayers, with one exception. The parties have agreed to include in Newport's cost of service an expense entitled "payment in lieu of taxes." This expense was defended by Mr. Esktrom as evidenced in the following record excerpt:

Q. (Chairman Malachowski:)". . .why should the Water Department be paying taxes to the City of Newport?

A. (Mr. Ekstrom:) "We feel in order to get a true cost of producing water we would have to have all the costs associated with producing water. It seems kind of arbitrary that a treatment plant that happens to be located within the border of Newport is not charged a tax. Initially we were concerned about a cross-subsidization because Newport taxpayers were not getting the benefit of that treatment plant on its roles and thereby were subsidizing the water users. And those are not the same population; because, obviously, Newport taxpayers are people who own property in Newport. However, the Water Department serves a good portion of Aquidneck Island, including Middletown and Portsmouth. We felt that it would be a fairer way to do it accounting-wise and the fairer way to handle it for the taxpayers in the City of Newport and water ratepayers." (5/22/92, T. 30-31).

This expense, despite Newport's argument, is not appropriate in the opinion of this Commission. We can not philosophically or regulatorily accept the notion of the City of Newport taxing its own water

department. The City of Newport does not tax itself on its City Hall and should therefore not tax its own water department.

Furthermore, the addition of a payment in lieu of taxes to the cost of service is an element of expense which this Commission has not previously allowed in rates. We note that the argument cited above has some merit, but we feel that it is outweighed by other considerations.

This Commission has consistently allowed, in rates, an expense to cover payments from municipally-owned water companies to their municipality's general fund for services provided by the municipality. This expense has been historically allowed to prevent any subsidy of services by the parent-municipality (taxpayers) which should be borne by water ratepayers instead. In this filing, the amount allowed the NWD is $100,357, which covers administrative cost and data processing charges due the City of Newport (Newport Exh. 3A, Sch. K). In light of this allowance, the addition of a payment in lieu of taxes to cover general municipal services would in effect overcompensate the City of Newport. This would be tantamount to two "bites of the apple" and inappropriate in the opinion of this Commission.

This Commission closely followed ratepayer sentiment during this docket. We are cognizant that Newport's water rates have significantly increased over the last ten years. We are also aware that sewer rates and property taxes have similarly increased. The Commission must emphasize, however, that these latter two expenses are beyond the purview of this tribunal. Newport's ratepayers/taxpayers ought to raise these concerns with their local government representatives. As for the water rates, we strongly believe that the capital improvements which have resulted from these rate increases are in the best interests of Newport's water ratepayers. Newport has witnessed the construction of a new treatment plant and the replacement of many miles of antiquated pipe. The proposed Sakonnet River pipeline project, approved previously by Newport's voters in 1989, proves to be a state-of-the-art supply conduit that will provide water service for many years to come. This Commission's decision to provide debt service revenues for this project is a response to the public's demand for a modern water system. We sincerely believe that the capital projects approved by this Commission, both in the past and for the future, through this rate increase, are in the best interests of Newport's water customers. Predicated on this finding, the Commission shall approve the jointly recommended revenue requirement of $7,333,817 less the identified payment in lieu of taxes amount of $150,000.

ii. NAVY RATE DESIGN/COST-OF-SERVICE ISSUE

During this case, the Navy has asserted that it ought to be compared with the Portsmouth Water and Fire District for ratemaking purposes, and not Newport's retail water customers. To buttress this contention, the Navy proffered a cost of service study which holds that its rate ought to be lower than Portsmouth's.

Mr. Ernest Harwig was the Navy's witness for rate design. Mr. Harwig developed the aforementioned cost of service study in support of his rate recommendations (Navy Exhs. 1 and 2). As the proceeding evolved, Mr. Harwig amended his study to reflect updated data on the classification of Newport's large transmission mains, the number of meters serving the Navy, and certain transmission costs allocated to Portsmouth. The Navy's cost of service study reached the following conclusions:

i. The study produces a Navy responsibility of approximately $1.18 million, compared to the $1.3 million produced by Newport's originally proposed rates;

ii. The study produces a Portsmouth responsibility of $531,000, compared to approximately $387,000

which would be collected under Newport's originally proposed rates; and

iii. The study shows that the per unit cost to serve the Navy (excluding customer costs) is about $2.24, and the corresponding unit cost to serve Portsmouth is approximately $2.33 (Navy Exh. 4, p. 11).

Mr. Harwig explained that the Navy is seeking the rate that Newport is charging Portsmouth for water. He bases this demand on language that is contained in the water service contract currently in effect between the Navy and Newport. This language, contained in the 1959 contract, as amended, supra, provides that the rate must be based upon "like classes of service". Mr. Harwig maintains that only Newport's wholesale customer -- Portsmouth, is in a class like the Navy. He argues that because of the similarities between the Navy and Portsmouth, which differ greatly from Newport's retail customers, the NWD must treat Portsmouth and the Navy alike for ratemaking purposes (Navy Exhs. 1 and 4). Mr. Harwig submits his cost of service study to support this position.

Both the Division and the NWD took exception to the findings and conclusions in the Navy's cost-of-service study. The NWD faulted the methodology used (base-extra capacity method) as being inconsistent with State policy on setting rates for water companies. Newport also criticized the Navy for using estimated data on maximum day and hour requirements instead of more exacting information. The Division, albeit in favor of the methodology employed, voiced concern with the data used by the Navy to derive its final cost figures. The Division additionally opted to reject the Navy's cost-of-service study due to the fact that it was filed without notice and simultaneously with the Division's direct case in this docket. The Division indicated that this resulted in insufficient time to fully address the study. Both the Division and Newport agreed that the instant rate increase be applied across-the-board. The Division also urges the Commission to require that Newport file a fully allocated class cost-of-service study with its next rate filing or, alternatively, within three years, whichever comes first.

This Commission is mindful that the issue of Commission authority over rate design has continually manifested itself in Newport's rate filings. In this decision we reaffirm our charge to develop an appropriate cost-of-service and the framework to provide rates which recover the revenue requirement fairly.

Predicated on the record before us, we find that the cost of service study provided by the Navy persuasively depicts deficiencies in Newport's existing rate design. We believe that the current rate design, now approximately ten years old, must be revised. However, we do not find the Navy's cost-of-service study is fully adequate to conclude this rate design revision in the context of this docket. We find that the concerns voiced by the Division and Newport relative to the data used in the Navy's study are valid. We further find that the de facto study methodology must be more fully explored before specific application is mandated.

For the above reasons, the Commission shall require that Newport file with its next rate case or within three (3) years, whichever comes first, a fully allocated class cost of service study. This new study will assist the Commission as it considers rate design issues. Moreover, because we are aware that the appropriate type of cost-of-service study is in issue, we shall open, through this report and order, a generic cost-of-service methodology docket for the purpose of exploring this issue. The newly created generic docket shall be designated Docket No. 2049 and will exist to seek out an appropriate cost-of-service methodology that may be applied to all of the Commission's regulated water utilities.

We stated above that we found the Navy's cost-of-service study persuasive. From the record, we take notice that the Navy ought to be recognized as a customer class distinct from the retail class. We

cannot, however, put the Navy in the same class as Portsmouth. There are noticeable differences between Portsmouth and the Navy in the number of delivery points, transmission services provided, and the types of distribution systems used. Further, Portsmouth is defined as a wholesale customer which by statute is only limitedly within the Commission's purview (R.I.G.L. Section 39-3-38). Nevertheless, we do find that the Navy is a bulk customer, with noticeable differences from retail customers, and therefore entitled to some rate relief.

Consequently, for purposes of setting revenue allocations, taking into consideration our recognition of the Navy's cost-of-service study and the cost-of-service study we have ordered herein, we shall order that the revenue requirements be raised by applying only one-half of the overall revenue increase to the Navy (approximately 14 percent). Furthermore, we direct Newport, as we did previously in Docket No. 1848, to compress the Navy's rate design into the two blocks to raise their overall revenue obligations.

iii. STIPULATIONS

The Commission has examined the components of the stipulations identified herein, which have not already been discussed, and find them reasonable and in the best interest of Newport's ratepayers. They shall be adopted in toto.

Accordingly, it is

(13947) ORDERED:

1. That the tariff filing made by Newport on September 30, 1991, is hereby denied and dismissed;

2. Newport is hereby ordered to file with the Commission within thirty (30) days of the effective date of this Report and Order, new rates and charges designed to recover additional annual revenues of $1,548,065 for a total cost-of-service in the amount of $7,183,817 as specified in this order. This represents an increase of 27.5 percent over current rates;

3. That the stipulations filed in this docket by the Division and Newport are hereby approved and adopted by the Commission with the following two exceptions:

i. That the agreed to revenue requirement be reduced by $150,000 in order to excise the "payment in lieu of taxes" expense which has been rejected by the Commission. The new revenues approved in ordered paragraph 2, above, reflects this adjustment.

ii. That the rate increase shall not be applied across-the-board as proposed but rather shall be implemented in accordance with the next ordered paragraph;

4. That the revenue requirement approved through this order, constituting a 27.5 percent increase over current rates, shall be raised and apportioned by applying the following overall percentage revenue increase formula:

i. The Navy rates shall be increased by 13.75 percent;

ii. Rates for retail, government and fire protection customers shall be increased by approximately 32 percent; and

iii. Rates for Portsmouth shall be negotiated, in conformance with wholesale contract provisions, and be reflective of the cost-of-service and revenue requirements approved herein.

5. That Newport is hereby ordered to file with its next rate case or within three (3) years, whichever comes first, a fully allocated class cost of service study. The methodology to be employed by this study shall be ordered by the Commission in the near future in accordance with the Commission's findings in Docket No. 2049; and

6. That the herein approved rate increase shall go into effect on July 1, 1992.

EFFECTIVE AT PROVIDENCE, RHODE ISLAND ON JUNE 4, 1992, PURSUANT TO AN OPEN MEETING DECISION. WRITTEN ORDER ISSUE ON JUNE 19, 1992.

PUBLIC UTILITIES COMMISSION

James J. Malachowski, CHAIRMAN

Lila M. Sapinsely, Commissioner

Paul E. Hanaway, Commissioner

APPENDIX "1"

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION

IN RE:

THE NEWPORT WATER DEPARTMENT
APPLICATION FOR CHANGE IN RATES.

DOCKET NO. 2029

SETTLEMENT AGREEMENT

This offer of settlement ("agreement") is entered into by the Newport Water Department ("Newport") and the Division of Public Utilities and Carriers ("Division") on this 8th day of May, 1992, in order to resolve issues pending between them in the above-captioned proceeding. Newport initiated the proceeding on September 30, 1991 by filing an application requesting an increase in annual revenues of $2,588,360 which would provide total rate year revenues of $8,388,058, an increase of 44.6% in total revenues.

The Division of Public Utilities has retained an expert witness and has conducted a thorough and complete investigation of Newport's proposal. On February 18, 1992, the Division filed testimony recommending that the appropriate amount of rate year revenues should be $7,320,523, an increase of $1,520,826 or 26.2% in total rate year revenues.

In its rebuttal testimony filed on March 23, 1992, Newport lowered its requested revenue increase to $2,045,256. This results in total rate year revenues of $7,674,810. The amended request reflected,

among other revised items, a reduced debt service requirement due to lower than previously anticipated construction costs associated with the Sakonnet River Crossing Project. On April 9, 1992, the Division filed surrebuttal testimony which amended its original filed position to an increase of $1,474,933 for total revenues of $7,104,487.

On March 20, 1992, the Newport Water Department and the Division entered into a stipulation which has been filed with the Public Utilities Commission, labeled the Partial Settlement Agreement (Joint Exhibit 1), which resolved certain issues raised in the filing. These issues pertained to the proposed impact fee, the billing charge, and the payment in lieu of property taxes. That Partial Settlement Agreement is hereby incorporated as part of this Agreement.

The parties to this agreement have engaged in further settlement discussions with respect to Newport's revenue requirements. As a result of these discussions, the undersigned parties have reached a settlement and stipulate as follows:

1. The Newport Water Department shall implement new rates designed to collect annual revenues of $7,333,817 which is an increase of $1,698,065 over the revenues the present rates would provide, as indicated in the accounting schedules attached hereto as Appendix A. The stipulated revenue requirement represents an increase of 30.1% in total revenues.

2. The billing charge increase shall be limited to $11.00 in accordance with the Partial Settlement Agreement. Other tariffs will be increased on an across-the-board basis.

3. The effective date of the rate increase agreed to shall be for consumption on and after July 1, 1992.

4. It is understood that funds received for capital improvements and debt principal and interest should be dedicated and restricted for those purposes. When the Newport Water Department next files for a general rate increase, any positive balance in the accounts will be credited to the benefit of customers. Any negative balance will be assumed to have been funded from current rates, and will not be charged against customers in the filing.

5. The debt service requirements, which comprise a significant amount of Newport's annual cost of service, have been calculated based on the average annual debt service needs for Newport's 1993, 1994, and 1995 fiscal years. A revised debt service schedule is attached hereto as Appendix B.

6. The previously executed Partial Settlement Agreement is incorporated into this agreement and is attached hereto as Appendix C.

7. This settlement agreement is the product of negotiation and compromise. The making of this agreement establishes no principles or precedents. This agreement shall not be deemed to foreclose any party from making any contention in any future proceeding or investigation.

8. The acceptance of this agreement by the Commission shall not in any respect constitute a determination by the Commission as to the merits of any issue in any subsequent rate proceeding.

Respectfully submitted,

CITY OF NEWPORT
WATER DEPARTMENT

By its attorney,

Robert J. Rahill, Esq.
Rahill, Rahill & Hanley

DATED: May 8, 1992

DIVISION OF PUBLIC UTILITIES
AND CARRIERS

By its attorney,

Julio C. Mazzoli Esq.
Special Assistant Attorney General

EXHIBIT C

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION

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

DOCKET NO.: 3578

SETTLEMENT AGREEMENT

The City of Newport, Utilities Department, Water Division (hereinafter "Newport Water" or "Newport"), the Division of Public Utilities and Carriers (hereinafter "Division"), the Portsmouth Water and Fire District (hereinafter "Portsmouth"), and the United States Department of the Navy (hereinafter "Navy") have reached an agreement on Newport Water's rate application filed on November 28, 2003 and jointly request the approval of this Settlement Agreement by the State of Rhode Island Public Utilities Commission (hereinafter the "Commission").

I. RECITALS

1. On November 28, 2003, Newport Water filed a rate application pursuant to R.I.G.L § 39-3-11 and Part II of the Commission's Rules of Practice and Procedure.
2. The application sought to collect additional operating revenue in the amount of $606,662 to support total operating revenue requirements of $8,173,251. The impact of this request would have resulted in an 8.01 % increase in normalized test year revenues for the rate year commencing July 1, 2003 and ending on June 30, 2004.

3. In addition, Newport Water filed a cost allocation study that proposed to change its current declining block rate structure to a flat rate commodity charge based on consumption.
4. In support of its application, Newport filed the direct testimony and schedules of Julia A. Forgue, P.E., Newport's Director of Public Works, Harold J. Smith of Raftelis Financial Consulting, and Newport's City Manager, James C. Smith. Ms. Forgue and Mr. Harold Smith also filed rebuttal testimony.
5. On January 13, 2004, Portsmouth filed a Motion to Intervene in this Docket, and the Navy filed a Motion to Intervene on February 9, 2004. Newport did not object to either motion.
6. Portsmouth submitted direct and surrebuttal testimony from William J. McGlinn, P.E. General Manager and Chief Engineer for Portsmouth, Christopher P.N. Woodcock of Woodcock & Associates, Inc. and Thomas B. Nicholson, P.E. of C&E Engineering Partners, Inc.
7. The Navy submitted direct and surrebuttal testimony of Ernest Harwig of Brubaker & Associates, Inc. and William Monaco, P.E., Drinking Water Manager, Naval Station Newport Environmental Office.
8. In response to Newport's filing, the Division conducted an investigation of the proposed rate request through data requests and with the assistance of its staff and an outside expert consultant, Thomas S. Catlin who filed direct and surrebuttal testimony.

9. On May 21, 2004 a settlement conference was held at the Division of Public Utilities and Carriers. All of the parties to this Docket, through their representatives, participated in this conference.

10. After due consideration of the testimony, exhibits, schedules, data requests, data responses, settlement discussions, and other documentation included in the filings of the parties in this Docket, Newport, the Division, Portsmouth and the Navy have now agreed to a comprehensive settlement which resolves all issues relating to Newport's application.

11. The parties to this Docket believe that this settlement, as a whole, constitutes a just and reasonable resolution of the issues in this proceeding, and jointly request its approval by the Commission.

II. TERMS OF SETTLEMENT

Overview

12. The parties agree that Newport's current rates provide more than sufficient revenues for the agreed upon rate year expenses. Rather than reduce Newport's rates, the parties have agreed that any revenues in excess of the agreed upon operating expenses and other restricted account needs should be added to the restricted capital amount. The settlement will result in Newport increasing its Operation and Maintenance (O&M) expenses by approximately 45% from $3,516,979 set in Docket 2985 to $5,104,396. In addition, Newport's contributions to its restricted accounts for Debt Service and Capital Outlay will decrease by approximately 36% from $4,103,028 set in Docket 2985 to $2,612,155.

13. The parties agree that Newport will begin charging a flat retail commodity rate of $3.38 per thousand gallons. This flat rate will eliminate Newport's current declining block rate structure for retail customers on a revenue neutral basis. In addition, the rate charged to Portsmouth will remain $1.658 per thousand gallons, and the rate charged to the Navy will remain $2.0873 per thousand gallons, in accordance with the tariffs in Docket 2985.

14. Incorporated herein and attached hereto as Exhibit 1 are Schedules TSC-1-17 (revised 5/25/04). Newport agrees with these schedules as presented.

15. In addition to the settlement terms set forth in the attached schedules, specific issues raised by the parties, which are addressed in this settlement, are set forth herein below:

Debt Service and Capital Outlay Restricted Accounts

16. As set forth herein above, the parties agree that Newport's contributions to its restricted Debt Service and Capital Outlay accounts will be reduced. Contributions to the Debt Service account will be reduced from approximately $2,701,874 annually to approximately $1,521,815. Contributions to the Capital Account shall be reduced from approximately $1,401,154 annually to approximately $1,090,340. Despite these reductions Newport will be able to meet its debt service and capital needs. The parties request that the Commission's Report and Order establish that these reduced contributions be made effective at the *beginning* of the rate year – July 1, 2003.

17. A. The amount owed by the Water Department to the City of Newport for loans prior to July 1, 2003 shall be limited to the $2.5 million dollars claimed in this Docket.

The parties agree that Newport Water may repay this $2.5 million dollars advanced by the City of Newport. Repayment shall be made out of the debt service fund at the rate of $500,000 per year for a period of five years. The parties have allocated revenue of $250,000 to be paid into the debt service fund specifically to offset a portion of this repayment to the City. Therefore, if the Commission approves the request to make the change in restricted account funding effective July 1, 2003 as proposed in Paragraph 16, the initial installment of the repayment will take place in the rate year ending June 30, 2004. This repayment shall be without interest. Newport Water further agrees that it will not seek to recover in rates any additional monies that it may borrow from the City of Newport up through and including June 30, 2005. Newport Water agrees that should the City of Newport loan money to Newport Water after June 30, 2005, said loan shall be reflected by appropriate documentation and Newport Water shall have the duty to monitor and track its costs and properly account for how the loan proceeds are applied.

B. In addition, to the extent that the Commission agrees to re-set the required contributions to the Debt Service account and to the Capital Account as requested in Paragraph 16, the parties agree that Newport Water may return to the City money that the City loaned to Newport Water to fund these accounts for the rate year July 1, 2003 to June 30, 2004, but only to the extent that there are funds in these accounts that exceed the new levels agreed to by the parties to this agreement, and provided Newport Water verifies the amounts when this agreement is presented to the Commission.

Private Fire Charges

18. Newport will be allowed to establish two new private fire charges, which will be incorporated into its tariffs. These charges shall be $46.00 per annum for each 2-inch connection, and $11 per annum for any connection smaller than 2 inches. These charges will have no effect on the revenue in this Docket as no such connections presently exist.

Conferences and Training Cost

19. The parties have agreed to Newport's claim for Conferences and Training Costs, as they believe that funding for these expenses is important. However, the parties wish to ensure that Newport spends these funds solely for their intended purpose. Therefore, Newport will provide updates on its Conference and Training Costs in its semi-annual reports.

Commission Reports

20. The parties agree that Newport will provide Portsmouth and the Navy with copies of reports filed with the Commission.

Restricted Accounts

21. In addition to Newport's current restricted accounts – Debt Service, Capital and Chemicals – Newport shall establish a restricted account for the Electricity Expenses agreed to by the parties.

Rate Case Expense

22. The parties have agreed that the rate case expense for this case is $181,624. This includes Newport's costs of $145,565 and the Division's and Commission's costs of $38,059. These costs are to be amortized over a two-year period. The parties agree

that if Newport does not file a further rate case before July 1, 2005, the money included in the annual revenue requirement for rate case expense will be placed into a restricted account after July 1, 2005.

Cost Allocation Study

23. The parties agree that Newport's cost allocation study in this Docket does not seek to charge Portsmouth with transmission, distribution or peak costs associated with supply or treatment. However, should Newport seek to charge Portsmouth with such charges in future rate cases, Newport shall be required to submit a demand study with any cost allocation study. The requirements of the demand study shall be established by the experts for the four parties in this Docket. These requirements of the required demand study as agreed to by the parties are incorporated herein and attached hereto as Exhibit 2.

Water Quality Issues

24. The parties agree to take certain steps to address concerns raised in this Docket regarding water quality issues.

A. Newport, Portsmouth and the Navy agree to participate in a joint study that will examine the most efficient way to address on an island-wide basis the Total Trihalomethanes ("THM") issues facing Newport, Portsmouth and the Navy.

B. The study shall be paid for from the Capital Account, and the cost shall not exceed $125,000.

C. Newport, Portsmouth and the Navy shall cooperate in drafting the Scope of Work (SOW) for the study's Request For Proposal (RFP). The SOW will direct the consultant to investigate and to determine the most efficient treatment method or

methods on a island-wide basis to address the THM concerns, both long-term and short-term, facing the users in Newport, Portsmouth and the areas serviced by the Navy. The consultant will also consider the impact of treatment methods on residual chlorine at the end of the respective distribution systems.

D. Newport, Portsmouth and the Navy agree that they will use their best efforts to complete the SOW within 45 days from the approval of this agreement, and will use their best efforts to complete the study within twelve months from the approval of this agreement.

E. The study shall be performed by an engineering firm agreed to by Newport, Portsmouth and the Navy. Neither CDM, which prepared Newport's Compliance Evaluation Report, nor C&E Engineering Partners, Inc., which testified on behalf of Portsmouth in this Docket, shall be eligible to conduct this study.

F. Newport, Portsmouth, and the Navy will share equal responsibility for coordinating all aspects of the joint THM study, including the SOW, selection of the consultant or engineering firm, and completion of the study. If the parties deadlock on one or more issues concerning the study, they agree that the Division of Public Utilities shall have binding and final authority to resolve the issue after conferring with all three parties.

G. Neither Newport, Portsmouth or the Navy shall be under any obligation to comply with any recommendation made in the study. Each party reserves the right to pursue any course of action suggested by the study, or otherwise.

H. Further, Newport may proceed with the short-term improvements suggested in the 2004 CDM Compliance Evaluation Report.

I. Newport agrees to notify Portsmouth and the Navy of the occurrence of certain events that might affect water quality. Those events are listed on Exhibit 3. The parties agree that informal notification through email or phone calls is both permitted and encouraged.

III. Effect of Settlement

25. This Settlement Agreement is the result of a negotiated settlement. The discussions which have produced this Settlement Agreement have been conducted with the explicit understanding that all offers of settlement and discussion 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 other proceedings.

26. 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.

27. In the event that the Commission rejects this Settlement Agreement, or modifies this agreement or any provision therein, then this 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.

Dated at Warwick, RI this ___ day of _____, 2004.

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

DIVISION OF PUBLIC UTILITIES
AND CARRIERS,
By its Attorney,

_____

Leo J. Wold, # 3613
Special Assistant Attorney General
150 South Main Street
Providence, RI 02903
Tel: 401-274-4400, ext. 2218

PORTSMOUTH WATER AND FIRE DISTRICT
By its Attorney,

_____

Gerald J. Petros, # 2931
Hinckley, Allen & Snyder, LLP
1500 Fleet Center
Providence, RI 02903
Tel: 401-274-2000

UNITED STATES
DEPARTMENT OF THE NAVY
By its Attorney,

_____

Audrey Van Dyke, #
Counsel For the Secretary of the Navy
Litigation Headquarters
1314 Harwood Street, Suite 412
Washington Navy Yard, DC 20374
Tel: 202-685-1931

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Exhibit 1

Docket No. 3578
Schedule TSC-1
Revised 5/25/2004

CITY OF NEWPORT--WATER DIVISION

Summary of Revenues and Expenses at
Present and Proposed Rates
Rate Year Ended June 30, 2004

	Revised Rate Year Amount Per Newport	Updated Division Adjustments	Rate Year at Present Rates	Allowable Revenue Increase	Rate Year at Proposed Rates
Revenue					
Customer Charge	$ 556,555	$ -	$ 556,555		$ 556,555
Retail Consumption	4,693,428	(56,503)	4,636,925		4,636,925
Wholesale/Bulk Sales	1,553,875	55,235	1,609,110		1,609,110
Fire Protection	765,610	-	765,610		765,610
Miscellaneous	246,100	18,000	264,100		264,100
Total Revenue	$ 7,815,568	$ 16,732	$ 7,832,300	$ -	$ 7,832,300
Expenses					
Water Administration	1,154,298	(9,590)	1,144,708	-	1,144,708
Customer Accounts	477,945	953	478,898	-	478,898
Source of Supply-Island	398,015	(21,152)	376,863	-	376,863
Source of Supply-Mainland	79,500	18,850	98,350	-	98,350
Treatment & Pumping-Newport Plant	1,188,960	(37,694)	1,151,266	-	1,151,266
Treatment & Pumping-Lawton Valley	959,855	(86,916)	872,939	-	872,939
Water Laboratory	199,347	(310)	199,037	-	199,037
Transmission & Distribution Maintenance	771,613	(3,278)	768,335	-	768,335
Fire Protection	14,000	-	14,000	-	14,000
Subtotal	$ 5,243,533	$ (139,137)	$ 5,104,396	$ -	$ 5,104,396
Payment to City General Fund-Net	250,000	$ -	250,000	-	250,000
Debt Service	1,271,815		1,271,815	-	1,271,815
Capital Outlays	941,667	148,673	1,090,340	-	1,090,340
Total Expenses	$ 7,707,015	$ 9,536	$ 7,716,551	$ -	$ 7,716,551
Operating Reserve	115,605	143	115,748	-	115,748
Total Cost of Service	$ 7,822,620	$ 9,680	$ 7,832,300	$ -	$ 7,832,300
Revenue Surplus/(Deficiency)	($7,052)	$7,052	$0	$ -	$0

Docket No. 3578
Schedule TSC-2
Revised 5/25/2004

CITY OF NEWPORT--WATER DIVISION

Summary of Division Adjustments to
Rate Year Revenues and Expenses at Present Rates
Rate Year Ending December 31, 2004

Description	Amount	Source
Fire Service Revenue	$ -	Schedule TSC-3
Miscellaneous Charges	18,000	Schedule TSC-4
Water Sales Revenue	(1,268)	Schdule TSC-17
Total Revenue Adjustments	$ 16,732	
Benefits Expense	(48,903)	Schedule TSC-5
Rate Case Expense	(9,188)	Schedule TSC-6
Regulatory Reporting Expense	-	Schedule TSC-7
Electricity	(50,646)	Schedule TSC-8
Chemical Costs	(30,400)	Schedule TSC-9
Sewer Charges	-	Schedule TSC10
Conferences & Training Expense	-	Schedule TSC-11
Telephone & Communications	-	Schedule TSC-12
Costs to be Charged to Restricted Fund	-	Schedule TSC-13
Payment to City	-	Schedule TSC-15
Capital Outlay Restricted Funding	148,673	Schedule TSC-1
Operating Reserve	143	See Note (1)
Total Expense Adjustments	$ 9,680	
Total Adjustment to Revenue Deficiency	(7,052)	

Note:
(1) Based on 1.5% of total expenses as reflected on Schedule TSC-1.

Docket No. 3578
Schedule TSC-3
Revised 5/14/2004

CITY OF NEWPORT--WATER DIVISION

Adjustment to Fire Service Revenues to Reflect
Increase in Numbers of Services and Hydrants
Rate Year Ending June 30, 2004

	Number (1)	Current Rate	Annual Revenue
Private Fire Services			
5/8-Inch	-	$ -	$ -
2-Inch	-	-	-
4-Inch	43	285	12,255
6-Inch	229	570	130,530
8-Inch	58	1,305	75,690
10-Inch	1	2,155	2,155
12-Inch	1	3,460	3,460
Total	332		$ 224,090
Public Fire Hydrants	967	560	541,520
Total Fire Service Revenue			$ 765,610
Amount Per Newport (2)			765,610
Adjustment to Revenue			$ -

Notes:

(1) Number of Private Fire Services as of December 31, 2003 and number of Public Fire Hydrants as of January 2004 per response to DIV 3-14.

(3) Reflects rebuttal claim per Revised Schedule RFC 6.

Docket No. 3578
Schedule TSC-4
Revised 5/14/2004

CITY OF NEWPORT--WATER DIVISION

Adjuistment to Miscellaneous Revenue
Rate Year Ending June 30, 2004

Investment Interest Income		
Estimate Based on Actuals through 12/31/03 (1)	$	38,000
Amount per Filing (2)		20,000
Increase	$	18,000
Customer Services Revenue		
Estimated Revenue (2)	$	85,000
Amount per Filing (3)		85,000
Increase	$	-
Total Increase in Miscellaneous Revenue	$	18,000

Notes:

(1) Reflects $19,002 of interest income through 12/31/03 per response to DIV 2-3.

(2) Per Schedule RFC-2.

(3) Reflects rebuttal claim per Revised Schedule RFC 1-A.

Docket No. 3578
Schedule TSC-5
Revised 5/14/2004

CITY OF NEWPORT--WATER DIVISION

Adjustment to Budgeted Benefits Expense
To Reflect Actual Costs Incurred
Rate Year Ending June 30, 2004

	Benefits Expense per Filing (1)	Annualized Based on Actuals (2)	Adjustment
Administration	$ 46,475	$ 46,886	$ 411
Administration-Retiree	153,758	152,972	(786)
Administration-Workers' Compensation	36,400	36,400	-
Customer Service	108,472	109,425	953
Supply-Island	87,681	70,289	(17,392)
Supply-Mainland	2,000	-	(2,000)
Treatment-Newport	160,228	153,071	(7,157)
Treatment-Lawton Valley	159,353	137,011	(22,342)
Laboratory	37,739	37,429	(310)
Transmission & Distribution	145,099	144,819	(280)
Total Amount	$ 937,205	$ 888,302	$ (48,903)

Notes:
(1) Per Schedule RFC 1-A.

(2) Per schedule included under Tab 11 accompanying rebuttal testimony of Julia Forge.

Docket No. 3578
Schedule TSC-6
Revised 5/25/2004

CITY OF NEWPORT--WATER DIVISION

Adjustment to Rate Case Expense
Rate Year Ending June 30, 2004

	Total
Adjusted Rate Case Costs (1)	$ 181,624
Amortization Period	2 Years
Annual Expense Allowance per Division (1)	$ 90,812
Annual Expense per Newport (2)	$ 100,000
Adjustment to Expense	$ (9,188)

Notes:
(1) Updated to include $143,565 for Newport and $38,059 for the Division.

(2) Reflects rebuttal claim per Revised Schedule RFC 1-A.

Docket No. 3578
Schedule TSC-7
Revised 5/14/2004

CITY OF NEWPORT--WATER DIVISION

Adjustment to Regulatory Reporting Expense
Rate Year Ending June 30, 2004

	Amount
Regulatory Reporting Costs per books	
Consumer Confidence Report (1)	$ 5,370
Turbidity Notice (2)	9,839
TOC Notice (2)	6,772
Total Test Year Expense	$ 21,981
Normalization and Rate Year Adjustments (3)	
Postage	(12,494)
Support Services	(2,857)
Regulatory Reporting	20,000
Total Adjustments	$ 4,649
Adjusted Expense included in Rate Year per Rebuttal	$ 26,630
Required Annual Amount	26,630
Adjustment to Rate Year Expense	$ -

Notes:

(1) Per response to DIV 1-18.

(2) Per response to DIV 3-7.

(3) Reflects rebuttal claim per Revised Schedule RFC 1-A. Amount for postage reflects decrease in expense in Customer Accounts net of increase in Administration for line item 238.

Docket No. 3578
Schedule TSC-8
Revised 5/25/2004

CITY OF NEWPORT--WATER DIVISION

Adjustment to Budgeted Electricity Expense
To Reflect Actual Expense
Rate Year Ending June 30, 2004

	Budgeted Expense per Filing (1)	Annual Based on Last 24 Months (2)	Adjustment
Administration	$ 3,600	$ 3,573	$ (27)
Supply-Island	10,300	6,540	(3,760)
Supply-Mainland (3)	23,000	43,850	20,850
Treatment-Newport	186,100	176,552	(9,548)
Treatment-Lawton Valley	142,000	86,837	(55,163)
Transmission & Distribution	14,000	11,002	(2,998)
Total Amount	$ 379,000	$ 328,354	$ (50,646)

Notes:

(1) Per Newport Water Schedule 1 included with rebuttal of Harold Smith.

(2) Per responses to DIV 1-20 and 5-4. Amounts based on costs for 24 months ended March 2004. Excludes one time charge of $1,572 in February 2004 related to change out to energy efficient light fixtures.

(3) Includes $8,000 contingency for dry weather pumping.

Docket No. 3578
Schedule TSC-9
Revised 5/14/2004

CITY OF NEWPORT--WATER DIVISION

Analysis of Average Annual Chemical Costs
at the Newport and Lawton Valley Water Treatment Plants
Rate Year Ended June 30, 2004

Chemical	FY 2002 Usage in Pounds (1)	FY 2003 Usage in Pounds (2)	TME 4/04 Usage in Pounds (3)	Maximum Annual Usage (4)	Current Cost Per Pound (5)	Annual Cost (6)
Newport Water Treatment Plant						
Alum	311,999	328,912	366,849	366,849	$ 0.1079	39,574
Lime	184,043	166,541	199,264	199,264	0.0644	12,833
Chlorine	56,750	51,880	50,840	56,750	0.2450	13,904
Flouride	15,291	13,843	19,825	19,825	0.3000	5,948
Sodium Chlorite	77,556	93,334	77,849	93,334	0.5270	49,187
Polymer	1,000	1,300	1,250	1,300	4.8700	6,331
Subtotal						$ 127,776
Granular Activated Carbon						45,830
Annual Cost Based on Maximum Usage						$ 173,606
Amount per Newport Filing (2)						$ 194,595
Adjustment to Chemicals Expense						$ (20,989)
Lawton Valley Water Treatment Plant						
Alum	476,483	498,285	374,083	498,285	$ 0.1079	53,752
Lime	233,900	235,000	185,450	235,000	0.0785	18,445
Chlorine	39,640	37,027	32,534	39,640	0.2450	9,712
Flouride	15,526	12,766	16,119	16,119	0.3000	4,836
Sodium Chlorite	95,103	80,219	67,141	95,103	0.5270	50,119
Annual Cost Based on Maximum Usage						$ 136,864
Allowance for Additional Needs from Compliance Evaluation Study						20,000
Adjusted Annual Costs						$ 156,864
Amount per Newport Filing (2)						$ 166,275
Adjustment to Chemicals Expense						$ (9,411)

Notes:
(1) All quantities and prices are per the response to DIV 5-6.

(2) Reflects rebuttal claim per Revised Schedule RFC 1-A.

Docket No. 3578
Schedule TSC-10
Revised 5/14/2004

CITY OF NEWPORT--WATER DIVISION

Adjustment to Newport Sewer Charges
Rate Year Ending June 30, 2004

	Total
Lawton Valley Sewer Charges per Filing (1)	$ -
Rate Year Amount per Division (2)	-
Adjustment to Expense	$ -

Notes:
(1) Reflects rebuttal claim per Revised Schedule RFC 1-A.

(2) Recognizes that Lawton Valley is not anticipated to begin discharging waste to Newport sewer system before December 2005.

Docket No. 3578
Schedule TSC-11
Revised 5/14/2004

CITY OF NEWPORT--WATER DIVISION

Adjustment to Reflect Average
Conferences & Training Expense
Rate Year Ending June 30, 2004

		Amount per Filing (1)	Amount per Amount per Division	Adjustment
Administration		$ 2,000	$ 2,000	$ -
Treatment-Newport		2,500	2,500	-
Treatment-Lawton Valley		3,500	3,500	-
Transmission & Distribution	#	4,000	4,000	-
Total Amount		$ 12,000	$ 12,000	$ -

Notes:
(1) Per Schedule RFC 1-A.

Docket No. 3578
Schedule TSC-12
Revised 5/14/2004

CITY OF NEWPORT--WATER DIVISION

Adjustment to Telephone & Communications Expense
Rate Year Ending June 30, 2004

Telephone & Communications Expense per Filing (1)	$	10,200
Annualized Expense based on Current Services (2)	$	10,200
Adjustment to Rate Year Cost of Service	$	-

Notes:
(1) Reflects rebuttal claim per Revised Schedule RFC 1-A.

(2) Reflects acceptance of revised claim.

Docket No. 3578
Schedule TSC-13
Revised 5/14/2004

CITY OF NEWPORT--WATER DIVISION

Adjustment to O&M Expense to Remove Capital Items
Rate Year Ending June 30, 2004

Description	Amount
Depth Surveys (1)	$ 50,000
Vulnerability Assessment (2)	85,000
Reservoir Road Tank Repairs (3)	40,000
Total to be Paid from Restricted Fund	$ 175,000
Amount Removed from O&M by Newport (4)	$ 175,000
Adjustment to Rate Year O&M Expense	$ -

Notes:

(1) Per response to DIV 1-15.

(2) Per response to DIV 1-17.

(3) Per response to DIV 1-27.

(4) Reflects rebuttal claim per Revised Schedule RFC 1-A.

Docket No. 3578
Schedule TSC-14
Revised 5/14/2004

CITY OF NEWPORT--WATER DIVISION

Analysis of Revenues and
Restricted Account Funding for FY 2001-FY 2003 (3)
Rate Year Ending June 30, 2004

	FY 2001	FY2002	FY 2003
Billed Revenue Per Books (1)	$ 7,644,448	$ 6,928,286	$ 7,464,619
Change in Customer Acounts Receivable (1)	96,649	(69,951)	286,211
Audited Revenue	$ 8,316,871	$ 7,079,648	$ 7,805,427
Authorized Revenue In Docket No. 2985	$ 7,658,108	$ 7,658,108	$ 7,658,108
Percent of Authorized Revenues Collected	108.60%	92.45%	101.92%
Restricted Funding Requirement (2)	$ 4,395,214	$ 4,395,214	$ 4,395,214
Amount Available Based on Percent Collected	4,773,298	4,063,219	4,479,765
Difference Between Requirement and Available	$ 378,084	$ (331,995)	$ 84,551
Total Difference FY 2001-FY2003			$ 130,639

Notes:

(1) Per schedule included under Tab 8 accompanying rebuttal testimony of Julia Forge.

(2) Based on following amounts from Docket No. 2985:

Chemicals	$ 292,186
Debt Service	2,701,874
Capital Outlays	1,401,154
Total	$ 4,395,214

(3) Schedule has been updated to be consistent with Newport rebuttal regarding revenues and shows revenue shortfalls were not cause of need for City to advance funds.

Docket No. 3578
Schedule TSC-15
Revised 5/14/2004

CITY OF NEWPORT--WATER DIVISION

Adjustment to Eliminate Repayment to City
Rate Year Ending June 30, 2004

	Total
Repayment Included as Current Expense (1)	$ 250,000
Rate Year Amount per Division	250,000
Adjustment to Expense	$ -

Note:
(1) Per Schedule RFC 12.

(2) Reflects acceptance of Water Division claim based on rebuttal testimony.

Docket No. 3578
Schedule TSC-16
Revised 5/25/2004

CITY OF NEWPORT--WATER DIVISION

Analysis of Restricted Account Balances for FY 2004-FY 2008
Based on Proposed Funding and Current Cost Estimates
Rate Year Ending June 30, 2004

	Fiscal Year Ending June 30				
	2004	**2005**	**2006**	**2007**	**2008**
Debt Service Account					
Beginning Cash Balance	$ 1,975,973	$ 1,304,416	$ 1,069,033	$ 604,611	$ 191,577
Additions					
Debt Service Funding Contribution	$ 1,521,815	$ 1,521,815	$ 1,521,815	$ 1,521,815	$ 1,521,815
Interest Income	30,141	32,804	23,734	16,736	7,962
Total Additions	$ 1,551,956	$ 1,554,619	$ 1,545,549	$ 1,538,551	$ 1,529,777
Deductions					
Existing Debt Service	1,723,513	1,290,002	1,232,054	1,173,667	1,114,840
SRF Loan Principal	-	-	133,093	133,093	133,093
SRF Loan Interest	-	-	144,825	144,825	144,825
Return Excess Contributions FY 2001-2003	500,000	500,000	500,000	500,000	500,000
Total Deductions	2,223,513	1,790,002	2,009,972	1,951,585	1,892,758
Ending Cash Balance	$ 1,304,416	$ 1,069,033	$ 604,611	$ 191,577	$ (171,403)
Capital Spending Account					
Beginning Cash Balance	$ 2,473,692	$ 1,465,780	$ 730,101	$ 392,400	$ 597,965
Additions					
Capital Outlays Funding Contribution	$ 1,090,340	$ 1,090,340	$ 1,090,340	$ 1,090,340	$ 1,090,340
Interest income	41,333	39,395	21,959	11,225	9,904
Total Additions	$ 1,131,673	$ 1,129,735	$ 1,112,299	$ 1,101,565	$ 1,100,244
Deductions					
Captital Outlays per Newport Filing	1,964,586	1,865,414	1,450,000	896,000	896,000
Capital Items Removed from O&M	175,000	-	-	-	-
Total Deductions	2,139,586	1,865,414	1,450,000	896,000	896,000
Ending Cash Balance	$ 1,465,780	$ 730,101	$ 392,400	$ 597,965	$ 802,209

Docket No. 3578
Schedule TSC-17
Revised 5/25/2004

CITY OF NEWPORT--WATER DIVISION

Adjustment to Sales Volumes
and Revenues at Present Rates
Rate Year Ending December 31, 2004

	Sales Volumes (1000 gallons)	Adjustment to Revenue
Portsmouth		
FY 2000	438,179	
FY 2001	442,582	
FY 2002	455,142	
FY 2003	451,723	
Average Volume	446,907	
System Compound Growth Rate	1.0068	
Adjusted Rate Year Volume	449,945	
Current Wholesale Rate	$ 1.658	
Adjusted Revenue	$ 746,010	
Revenue per Newport Rebuttal	695,494	
Adjustment to Revenue at Present Rates		$ 50,516
U.S. Navy		
Rate Year Volume per Newport	413,501	
Current Rate to Navy	$ 2.0873	
Adjusted Revenue	863,101	
Revenue per Newport Rebuttal	858,381	
Adjustment to Revenue at Present Rates		$ 4,720
Retail Sales		
Projected Rate Year Volumes	1,370,476	
Volumes Utilized for Revenue at Present Rates	1,387,176	
Ratio of Rate Year to Present Rate Volumes	98.80%	
Revenue at Present Rates per Newport Filing	$ 4,693,428	
Corrected Revenue based on Rate year Volumes	$ 4,636,925	
Adjustment to Revenue at Present Rates		$ (56,503)
Total Adjustment to Revenue at Present Rates		$ (1,268)

Exhibit 2
Newport Water Demand Study

Purpose

The Water Demand Study is intended to satisfy the requirements imposed by the RI PUC in Docket 2985. The purpose of the water demand study will be to gather data with respect to the water demand characteristics of the different customer classes that are served by Newport Water to better allocate the costs associated with meeting peak demand to the customers responsible for the peaks.

Methodology

Once it has been determined that the Demand Study is necessary, Newport Water will propose a methodology to each of the parties in this docket for review and comment. It is expected that it may be necessary to gather data on a daily basis from the meters used to measure consumption by each of Newport's wholesale customers and from statistically representative samples of each of Newport's retail customer classes. :

Retail – Newport may gather daily demand data from a statistically representative sample of customers from each of its retail customer classes or may determine the peak demands of the retail class through some other agreed upon method. This data can be gathered either by using remote meter reading capabilities or by direct daily reading of meters without remote read capabilities. It is anticipated that these data collection efforts would focus on those periods of the year or years in which peak demands are expected to occur and therefore would not necessarily continue during the course of an entire year(s).

Portsmouth – Newport may utilize daily demand data for Portsmouth that is collected by Portsmouth's SCADA system.

Navy – It is anticipated that daily demand data for the Navy can be gathered by reading the meters used to serve the Navy on a daily basis during the portion of the year(s) in which peak demands are expected to occur.

The maximum cost for the study should be limited to $75,000 unless it can be demonstrated that a study of that magnitude will not yield the necessary information.