

RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 3945

PAWTUCKET WATER SUPPLY BOARD

PREFILED REBUTTAL TESTIMONY OF

CHRISTOPHER P.N. WOODCOCK

AUGUST 14, 2008

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Q: Are you the same Christopher Woodcock that prefiled testimony on behalf of the Pawtucket Water Supply Board?

A: Yes I am.

Q: Have you had an opportunity to review the testimony filed on behalf of the Division of Public Utilities and Carriers and Cumberland?

A: I have.

Q: Do you have any general comments on the positions taken by the Division's witnesses?

A: The Division has sponsored two witnesses in this Docket: Ms. Andrea Crane and Mr. Jerome Mierzwa.

I'll start with Mr. Mierzwa's testimony. Mr. Mierzwa suggested two revisions to the cost allocation; I agree with one of his suggested changes and disagree with another. I will discuss these in more detail later.

Ms. Crane has recommended an increase that is significantly less than what we proposed. In total Ms. Crane has recommended 15 revisions to the revenue requirements claimed by PWSB. We agree with some of these recommendations and disagree with others. As in Docket 3674, there are two items (water sales and operating revenue allowance) we find to be particularly critical to Pawtucket as well as other regulated water utilities in the State.

1 **Q: Can you summarize the areas of agreement and disagreement on revenue require-**
2 **ments?**

3 A: Yes. These are summarized below, referring to Ms. Crane's schedules and noting the PWSB
4 witness who will address the matter:

- 5 • ACC-2 Residential Revenue – Agree to adjustment
- 6 • ACC-3 Customer Growth Adjustment – Disagree (Woodcock)
- 7 • ACC- 4 Commercial Revenue (Cycle 7) – Disagree (Bebyn)
- 8 • ACC-5 Wholesale Sales – Agree to adjustment
- 9 • ACC-6 Private Fire Services – Agree to adjustment
- 10 • ACC-7 Incremental Power Expense – Agree in concept but not amount (Woodcock)
- 11 • ACC-8 Miscellaneous Non-Operating Revenue – Disagree (Benson)
- 12 • ACC-9 State Surcharge Revenue -- Agree in concept but not amount
13 (Woodcock/Bebyn)
- 14 • ACC-10 Salaries & Wages – Disagree (Benson)
- 15 • ACC-11 Payroll Tax Expense -- Agree in concept but not amount (Benson)
- 16 • ACC-12 Pension Contributions – Disagree (Benson)
- 17 • ACC – 13 Police Details – Disagree (DeCelles)
- 18 • ACC – 14 General Liability Insurance – Disagree (Benson)
- 19 • ACC – 15 Property Taxes – Agree to adjustment plus additional reduction (Benson)
- 20 • ACC – 16 Operating Revenue Allowance – Disagree (Woodcock)

21 In summary, of the 15 adjustments that have been recommended by the Division, we agree
22 with 3, we agree with and further reduced another (property taxes), we agree with 3 in con-
23 cept but not to the amount , and we disagree with 8.

24

25 I will also address the issue of unaccounted for water. Although Mr. Mierzwa did not dispute
26 my position on this issue, the Commission posed several questions in their data requests on
27 this topic.

1 **Cost Allocations**

2 **Q: The Division has recommended a refinement to your allocation of T&D Salaries &**
3 **Wages for Police Details. Do you agree with that change?**

4 A: This recommendation is based on my response to Division 4-2. While I do agree with
5 this adjustment to the cost allocations I do want to note that the question in Div 4-2 was of a
6 general nature and not necessarily specific to Pawtucket. I also note that in my response that
7 if work on service pipes is in a road or highway that it "may involve entry of construction
8 equipment into a travelled way." I would further note PWSB has been having some issues
9 with police details in Central Falls and PWSB believes that police details may not be neces-
10 sary for all work related to service pipes. That being said, I do agree with the proposed revi-
11 sion to the allocation of T&D Salaries & Wages for Police Details.

12

13 **Q: Mr. Mierzwa has also suggested that the proposed decrease to public fire protection**
14 **charges should be adjusted. Do you agree with that recommendation?**

15 A: I do not agree with this recommendation. First, Mr. Mierzwa asserts that the decrease is
16 too drastic. I disagree. The allocations we all agree on indicate that the municipalities that
17 pay this charge would be overcharged under the current rates and the Division's proposed
18 "half-way" solution. The Commission has traditionally held that municipalities should pay
19 the allocated costs related to fire service. I also do not understand why Mr. Mierzwa has
20 suggested that "granting the full decrease at this time could result in a significant increase in
21 future PWSB proceedings." With the recent actions of the State Legislature, water utilities in
22 the State of Rhode Island were recently faced with the prospect of eliminating public fire
23 service charge all together. The Legislature may pass this same prohibition in future years.
24 With this possibility, I think the full reduction at this time is appropriate. I do not see what
25 future costs or programs would reverse this and cause a future increase.

1 **Revenue Requirement Adjustments Conceptually Agreed To**

2 **Q: You indicated that there are three adjustments that you agree with in concept, but do**
3 **not agree with the numbers. Can you elaborate on that?**

4 A: There are three of these adjustments:

5 ACC- 7 – Incremental Power Expenses

6 ACC-9 – State Surcharge Revenues

7 ACC-11 – Payroll Tax Expense

8 Each of these adjustments is based on adjusting one or more other items. If sales change,
9 the incremental power costs can change as can the revenues from the state surcharge. If total
10 payroll costs change then the payroll taxes will change. We agree in concept with these ad-
11 justments, *IF* the underlying revenues or costs change. Because we disagree with the Divi-
12 sion's recommendations on several of the underlying costs, we disagree with the amount of
13 the adjustments they have proposed.

14

15 For example, we agree that if payroll costs are reduced, that the associated taxes should be
16 reduced. We have agreed to a reduction in payroll costs as outlined in Mr. Benson's rebuttal
17 testimony, but do not agree with the amount the Division has recommended. As result, we
18 have adjusted the payroll taxes down to match the reduced payroll costs, but we have re-
19 duced them in proportion to the corrected amounts presented in Mr. Benson's rebuttal testi-
20 mony and exhibits.

21 **Disputed Adjustments to Revenue Requirements**

22 **Customer Growth Adjustment (ACC -3)**

23 **Q: This leaves the 8 adjustments recommended by Ms. Crane that PWSB disagrees with.**
24 **Can you discuss the basis for your disagreement with the two items that you wish to**
25 **address?**

26 A: Yes. The first item I will address is ACC-3 – the so called "Customer Growth Adjust-
27 ment". Ms. Crane has recommended an \$80,890 adjustment that also impacts the power
28 costs, surcharge revenues and operating revenues. This is an adjustment that Ms. Crane

commonly suggests, and once again she seems to have has ignored that history does not support this adjustment. The table below is repeated exactly from my rebuttal testimony in Docket 3674. It shows the number of accounts and per customer water use for the small size meter class from 1997 through 2004.

	<u>1997</u>	<u>2000</u>	<u>2002</u>	<u>2004</u>
5/8	20,781	20,932	21,076	21,251
3/4	209	236	239	243
1	<u>483</u>	<u>481</u>	<u>480</u>	<u>485</u>
total accts	21,473	21,649	21,795	21,979
sales (ccf)	3,837,774	3,392,896	3,156,077	3,068,335
ccf/acct	178.7	156.7	144.8	139.6

In Docket no. 3674 I testified that:

- From 1997 to 2000 there was an increase of 176 customers. Sales didn't grow – they dropped by 12%.
- From 2000 to 2002 there was an increase of 146 customers. Sales did not increase as the Division would suggest would happen – in fact, they decreased nearly 8%.
- From 2002 to 2004 there was an increase of 184 customers. Again, sales did not increase – they also dropped by another 3.6%.

As in Docket 3674, the evidence in this case clearly and consistently demonstrates that the increase in numbers of customers does not result in an increase in the water sales and revenues.

Q: Have you updated the table you presented in the last case with more recent data?

A: Yes I have. The table below adds data from the test year – FY 2007. As in the past I have included all the small meter (5/8" – 1") accounts to be sure it is compatible with the prior data.

	<u>1997</u>	<u>2000</u>	<u>2002</u>	<u>2004</u>	<u>2007</u>
5/8	20,781	20,932	21,076	21,251	21,454
3/4	209	236	239	243	255
1	<u>483</u>	<u>481</u>	<u>480</u>	<u>485</u>	<u>491</u>
total accts	21,473	21,649	21,795	21,979	22,200
sales (ccf)	3,837,774	3,392,896	3,156,077	3,068,335	2,884,356
ccf/acct	178.7	156.7	144.8	139.6	129.9

As this table shows, the use per account is still continuing to drop. Perhaps more importantly, the total sales have continued to drop. The reality is contrary to what the Division continues to recommend to the Commission.

Ms. Crane has used simplified assumptions that don't apply. A simple averaging of historic use is incorrect when sales are dropping, or in this case, when sales per customer are dropping.

Using Ms. Crane's logic of taking simple mathematical averages, for the period from 1997 – 2007 I calculate an average annual drop in use per account of 3.1% per year. Based on the use of simple averages, the use per account for the small meter class in the rate year will be about 126.83 ccf/account. That is a drop of about 3.1 ccf/account. If I apply that to the number of rate year accounts and the use the current rate of \$2.903 as she has done in ACC-3, I get a **reduction** in sales and a **reduction** in revenues of about \$200,000 – NOT the \$80,890 **increase** that Ms. Crane gets.

The Division has recommended this growth adjustment in docket after docket. The Division has been wrong in every case – the increase in sales that they recommend has not come to fruition. As a result, the water utilities in Rhode Island have suffered reduced sales revenues from those that have been found to be reasonable by the Commission. I urge the Commission to reject this flawed analysis that the Division continues to put forth. It has been proven to be incorrect over and over.

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Q: Didn't Ms. Crane term the use per customer analysis you provided in Docket 3674 as "sketchy"?

A: Yes she did (Docket 3674 Tr. Page 164, line 13)

Q: Why did Ms. Crane think it was "sketchy"?

A: In response to Mr. Keough's question she said

6 Q. What was sketchy about it?
7 A. Well, it wasn't -- it wasn't clear to me
8 whether it was purely residential or whether it
9 was residential and commercial, since all your
10 customer data up to that point you had lumped
11 your small commercial customer meter counts with
12 your residential. There wasn't any supporting
13 documentation for that data and I don't think the
14 time period was that extensive.
15 Usually when you're looking at
16 consumption data you'd like to get something like
17 a ten-year history of consumption data in order
18 to look at trends over time.

Q: Does the data you provided include both residential and non-residential customers with 5/8" through 1" meters?

A: Yes it does. Ms. Crane may not recall that when the PWSB rate classes were established by meter size rather than residential, commercial, industrial, it was because customers with similar size water meters were deemed to be a better classification of customers with similar water use patterns (Docket No. 3378). Further, of the 22,200 accounts with 5/8", 3/4" and 1" meters, the vast majority of use and customers (nearly 97%) is residential. To suggest that this comparison is "sketchy" because it includes a few non-residential accounts with similar water use patterns is disingenuous. Lastly, Ms. Crane claims that the comparison should be over a longer period like 10 years. The updated analysis I have provided includes the period 1997 – 2007.

1 **Q: For this docket, did Ms. Crane perform any analysis of the usage per customer in prior**
2 **years?**

3 A:No she did not. We specifically asked if she had done any analysis of “usage per cus-
4 tomer” for prior years in PWSB data request 1-4(b) and again in PWSB date request 2-1.
5 Her response was simply a reference to her testimony in Docket 3497 in 2003. In that
6 docket she showed use per residential account for nine years (1994 – 2002)¹. On average,
7 for that nine year period she found the use per account was 156.5 ccf. If she had looked
8 back at the data she had developed in docket 3497 she would see that the use per account is
9 clearly dropping. She would also see that despite the growth in customers, sales have not
10 gone up, they have gone down, and that the 2008 sales are the lowest since 10 years earlier.
11 Ms. Crane’s own testimony from 2003 demonstrates the fallacy of her customer growth ad-
12 justment.

13
14 **Q: Are you recommending that the Commission use the reduced sales for the small meter**
15 **class that you have calculated?**

16 A:No. While the mathematics show that such a position is reasonable, we are not changing
17 our position on the sales for residential customers nor are we recommending a change in use
18 for the small meter class. We are instead asking the Commission to reject the Division’s so
19 called “Customer Growth Adjustment” because it is just plain wrong. We are also asking
20 the Commission to take into account the historical evidence that demonstrates a continuing
21 trend of reduced water sales when it considers the question of a proper and fair operating re-
22 serve allowance.

23
24 **Operating Revenue Allowance (ACC-16)**

25 **Q: What do you see as the biggest issues between Pawtucket’s and the Division’s positions.**

26 A:In my mind, the Division’s recommendations on sales and the operating revenue allow-
27 ance will assure that Pawtucket will NOT be able to recover the revenues allowed by the

1 Commission in the rate year. I understand that many of these issues have been presented to
2 the Commission and discussed in other Dockets. However, I continue to believe that the
3 question of giving regulated municipal water utilities a realistic opportunity to realize the
4 revenues they are allowed is critical to Pawtucket as well as the other water utilities in
5 Rhode Island.

6
7 In docket after docket, the Division continues to claim that sales projections should be based
8 on averages and growth in sales due to new customers. However, in docket after docket, the
9 Division's position and analysis has proven to be faulty. There can be no doubt that water
10 sales are tending to drop in Rhode Island; the Commission has seen this in case after case.

11
12 On page 17 (lines 25-27) of my prefiled testimony, I provided a simple chart that demon-
13 strates the fallacy of assuming a four year average will provide a good approximation of
14 sales when there is a history of sales falling. This was totally ignored by the Division. I also
15 presented (page 18 of my prefiled testimony) a chart that shows the history of dropping wa-
16 ter sales. Again, the Division has chosen to ignore this evidence.

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18
19 **Q: Why are you linking the discussion of water sales and the operating revenue allow-**
20 **ance?**

21 A: I believe the two should be considered together. I realize there are unknowns with operating
22 expenses, but I believe the bigger unknown is with sales and the resulting revenues. To the
23 extent that sales are over-estimated for the rate year and there is an insufficient provision for
24 the operating revenue allowance, the utility can not realize the allowed revenues. The past
25 practice of reducing the operating revenue allowance and accepting the Division's high sales
26 estimates provides no margin for error. I believe the Commission should provide more real-

¹ As noted in testimony in Docket 3378 in 2001, the PWSB's water use records for prior years were suspect, particularly in regards to customer classifications.

1 istic sales estimates and provide a more realistic operating revenue allowance that is based
2 on some analysis and not just past practice.

3

4 **Q. Are there any other factors that cause hardship to utilities such as Pawtucket?**

5 A: Yes, the regulated municipal water utilities in Rhode Island also must take into account the
6 lag from the time when new rates are approved and the increased revenues are collected.

7 This lag in collections already assures that the revenues allowed will not be collected even if
8 the Division's sales estimates are correct. As an example, with a ten percent increase in rev-
9 enues, this revenue lag results in collections that are about 0.8% short of the allowed reve-
10 nues.

11

12 Because only half of PWSB's costs are operation and maintenance, providing a 1.5% operat-
13 ing revenue allowance on just operating costs is roughly equal to a 0.8% allowance on total
14 revenues. This full amount can be taken up by just the lag in collections; in effect, the grant-
15 ing of a 1.5% operating revenue allowance on O&M only covers the lag in implementation
16 and provides no funds for unexpected expenses or reductions in sales. In this case, the in-
17 crease is greater than 10% and the shortfall caused by the lag is more than the 0.8% allow-
18 ance.

19

20 **Q: Do you have any further testimony on the proposed operating revenue allowance?**

21 A: As I stated previously, I do not believe the 1.5% allowance on just operating expenses is suf-
22 ficient. We have asked for a 5% allowance on total expenses to provide Pawtucket with a
23 chance to earn the revenues allowed by the Commission and take care of unforeseen ex-
24 penses.

25

26 The Division's prefiled direct testimony is rather silent on all this. Instead of directly ad-
27 dressing these issues, the Division suggests that a 1.5% allowance be provided on only oper-
28 ating costs -- in effect a 0.8% allowance on total revenues. The Division's position is based

1 solely on past decisions in Pawtucket's rate filings and the claim that the O&M Reserve re-
2 quired by Pawtucket's bonds can make up for cash flow issues.
3

4 **Q: Regarding Commission precedence on this matter, has the Commission always allowed**
5 **a 1.5% operating revenue allowance on operating costs alone?**

6 A: No, the Commission's position has understandably varied over the years depending on cir-
7 cumstances faced by different utilities. In the past, the Commission provided the 1.5% oper-
8 ating allowance on total revenues. The Commission's position then shifted and it began
9 providing the allowance on operating costs only. Furthermore, different utilities currently
10 have different operating revenue allowances. For instance, Newport Water has an operating
11 revenue allowance that is equal to 1.5% of total expenses, and Providence has a 3% operat-
12 ing revenue allowance. I spent several pages in my prefiled direct testimony dealing with
13 this issue and how the Commission's position appears to have migrated in recent cases and
14 among different utilities. Yet, Ms. Crane appears to have ignored these recent changes,
15 choosing to dwell primarily on the Commission's ruling in the PWSB's last rate filing. This
16 issue is critical to Rhode Island's water utilities. In fact, the Commission itself discussed the
17 opening of a generic docket to study this specific issue. Remarkably, Ms. Crane has sug-
18 gested that an operating reserve may not be needed at all rather than the addressing the re-
19 cent developments addressed in my direct testimony.
20

21 **Q: Does Ms. Crane believe that any Operating Revenue Allowance is necessary?**

22 A: On page 30, line 16 of her prefiled testimony, Ms. Crane says, "... I believe that an Op-
23 erating Reserve Allowance is unnecessary, given the Operating Reserve Fund of almost \$2.7
24 million that has been funded by rate payers ..." Nevertheless, she goes on to agree to mini-
25 mal funding because the Commission has permitted the Operating Revenue Allowance in
26 past cases.
27
28
29

1 **Q. What is your reaction to this testimony?**

2 A. Quite frankly, I am very surprised. I thought this issue had been addressed in Docket
3 3674, and that it had been conclusively established that the O&M Reserve Fund – which
4 Ms. Crane refers to as the Operating Reserve Fund – is not a substitute for an Operating
5 Revenue Allowance. The O&M Reserve Fund was established in conjunction with the
6 PWSB's borrowings with the Rhode Island Clean Water Finance Agency. The fund provides
7 security to bondholders and it improves Pawtucket's credit rating, which in turn lowers bor-
8 rowing costs.

9
10 Nevertheless, Ms. Crane's testimony in this Docket is almost identical to her prefiled testi-
11 mony in Docket 3674 where she testified on page 30 of her direct testimony that:

12 “In the event of revenue shortfalls or unanticipated expense increases, the Operating
13 Reserve Fund can be used, although the Operating Reserve would subsequently need
14 to be replenished. By December 31, 2005, the Operating Reserve is projected to have
15 a balance of \$2.2 million... While I believe that an additional Operating Income Al-
16 lowance is unnecessary, given the Operating Reserve of \$2.2 million that has already
17 been funded by ratepayers I recognize that the Commission recently rejected a similar
18 argument that I made in the Kent County Water Authority base rate case, Docket No.
19 3660.”

20
21 In her Docket 3674 surrebuttal testimony she said:

22 “In addition, the PWSB does have the \$2.2 million O&M Reserve available, the pur-
23 pose of which is to meet shortfalls that may occur from time to time.” (Crane Surrebut-
24 tal, Docket 3674, p. 14)

25
26 At the live hearings in Docket 3674, the PWSB's financial advisor Ms. Maureen Gurghigian
27 from First Southwest provided testimony to clear this matter up. After hearing Ms.
28 Gurghigian's live testimony, Ms. Crane testified:

29 “Well, I heard Miss Gurghigian ... testify today about the operating -- the O&M re-
30 serve fund and the fact that in her opinion that fund should not be used to cover operat-
31 ing and maintenance costs on an ongoing basis, and I just kind of want to clarify that
32 that's our position, too. I mean, no where are we recommending that that fund that's re-
33 quired under the bond indenture be used routinely to cover shortfalls or unforeseen in-
34 creases in expense.” (Tr. v.II, p. 157)

1
2 In Docket 3674, Ms. Crane seemed to acknowledge that the bond required O&M Reserve
3 Fund is no substitute for the Operating Revenue Allowance, yet she is now returning testi-
4 mony that is nearly identical to that which she offered in Docket 3674 suggesting that the
5 Operating Revenue Allowance is unnecessary but for the Commission's allowance of it in
6 past cases.
7

8 **Q: The Division has noted that the O&M Reserve Fund has approximately \$2.7 million;**
9 **what relevance does this have to the issue of the Operating Revenue Allowance?**

10 A: Just as in the last PWSB docket, it has no relevance at all and only seems to have been
11 brought up to suggest that Pawtucket will have sufficient funds available and does need the
12 increased operating revenue allowance. This matter was brought up by Ms. Crane in her re-
13 sponse to PWSB data request 1-1 in docket 3674. While Ms. Crane admittedly has no ex-
14 pertise in the requirements of the O&M Reserve Fund, and appeared to be fully aware that it
15 is not a substitute for the operating revenue allowance, she has again brought it up in this
16 docket. This required O&M Reserve Fund is irrelevant to the issue; discussing the balance
17 in this fund only detracts from the real issues at hand.
18

19 **Q: To be clear – can the 25% O&M Reserve Fund required by the Trust Indenture be**
20 **used as a substitute for the Operating Revenue Allowance?**

21 A: No it can not. As I pointed out in my original prefiled testimony I have worked on a number
22 of engineering and financial feasibility studies related to municipal revenue bonds. I drafted
23 much of the Kent County Water Authority's bond indenture which has served as a model for
24 Rhode Island's other water utility bond indentures. I worked closely with Pawtucket's bond
25 counsel in reviewing much of their bond indenture. I have discussed this specific matter
26 with bond counsel to be very clear, and I sent her my draft testimony to be sure that she con-
27 curred with what I was saying. In addition, I perform annual reviews for a number of Rhode
28 Island water utilities to ensure that specified terms of the indentures are being met, and I
29 have prepared financial feasibility certificates for a number of recent water revenue bond is-

1 sues in Rhode Island. I believe I am well aware of the terms and conditions of the trust in-
2 dentures in general and of the Pawtucket Water Supply Board's indenture in particular.

3
4 The Operation and Maintenance Reserve Fund established under the General Bond Resolu-
5 tion is **NOT** a substitute for the Operating Revenue Allowance. The O&M Reserve Fund
6 can be used for specific purposes only: (1) to make principal and/or interest payments if
7 there are insufficient amounts available in the debt service fund, debt service reserve fund,
8 renewal and replacement reserve fund or the renewal and replacement account or (2) to
9 make payments for operation and maintenance if the amounts in the operation and mainte-
10 nance fund is insufficient. Unlike the 1.5% operating revenue allowance, the O&M Reserve
11 Fund can not be used for other purposes such as payments towards IFR costs if revenues are
12 insufficient or to the O&M or R&R reserve funds. The O&M Reserve Fund is also quite
13 different in that this fund or account may not simply be used up if revenues are insufficient –
14 the fund must be repaid. It is only to be used for a short term cash flow. At the end of each
15 fiscal year, the O&M Reserve Fund must have an amount on deposit equal to 25% of Paw-
16 tucket Water's operating budget. While money can be withdrawn and used in an emergency,
17 it *must* be paid back in the fiscal year. With the 1.5% operating revenue allowance, a short-
18 fall in sales and revenues can be covered by that allowance for the year and no repayment is
19 needed. That is not the case with the O&M Reserve Fund established in the General Bond
20 Resolution (bond indenture).

21
22 **Q: How should the Commission consider the O&M Reserve Fund vis-à-vis the Operating**
23 **Revenue Allowance?**

24 A: It really should not be considered at all when discussing the Operating Revenue Allowance.
25 The O&M Reserve Fund should be viewed as an account that is only used in an extreme case
26 or emergency. It should not be viewed as something that is used if sales of water drop, gas
27 prices rise, or benefit expenses go up more than expected. I believe that the operating reve-
28 nue allowance established by the Commission was intended to fill this purpose. I also be-
29 lieve that to do what was intended, that the allowed percentage should be based on the full

1 revenues as it initially was and that the allowed percentage needs to be adjusted up to reflect
2 today's conditions.

3

4 **Q: You have discussed the uncertainties associated with future water revenues and ex-**
5 **penses and why the Commission should provide for more realistic water sales estimates**
6 **and an operating revenue allowance on total revenues. Does Pawtucket need both of**
7 **these and a 5% operating revenue allowance?**

8 A: I recognize that this may seem to be asking a lot, but I believe it is necessary. In the case of
9 water sales and revenues, clearly they are decreasing over time and historic data about rain-
10 fall or other factors do not change this pattern. While there may be a year when water use
11 goes up over a previous year, there is a clear trend of dropping water sales. We are simply
12 asking the Commission to take note of the downward trend in water use. By accepting the
13 PWSB's position, the Commission will help assure that Pawtucket Water can get the reve-
14 nues allowed. However, because of the downward trend in sales, it is still unlikely. That is
15 where the operating revenue allowance comes in.

16

17 In this docket we have discussed how the actual collection of allowed revenue increases lags
18 the implementation date – there is a built in shortfall. The allowance should be based on the
19 total revenues the way it was formerly applied by the Commission.

20

21 I also recognize that there has been considerable discussion about the proper level for the
22 operating reserve fund. The choice of 5% was not an arbitrary one. As shown on CPNW
23 Sch. 2.1, the sales variations over the four year period from FY 2004 to FY 2007 have
24 shown an average drop of just under 5%; the same as the six year average from FY 2002 –
25 FY 2007. Over the seven year period presented, the drop on sales (and thus drop in reve-
26 nues) has exceeded 5% in 3 of the 7 years. Over the past six years the sales and revenue
27 drops have been more than 5% half the time. While the historic data shows a clear trend in
28 dropping sales we have proposed sales that are actually higher than the test year sales. If re-
29 cent history is an indication of future trends, the PWSB needs at least a 5% operating reve-

1 nue allowance to provide a cushion against dropping sales. A lower allowance is not consis-
2 tent with the historic drop in sales and revenues.
3

4 **Allocation of Unaccounted For Water**

5 **Q: Did Mr. Mierzwa address your proposed allocation of unaccounted for water in his di-**
6 **rect testimony?**

7 A:No he did not; however, the Commission had posed a number of data requests to the par-
8 ties on this subject subsequent to my prefiled direct testimony. In general the questions re-
9 late to (1) my proposed use of miles of pipe rather than inch-miles of pipe to assign unac-
10 counted for water, (2) my proposal that service connections (the pipes that go from the main
11 to the customer's meter) be included in the calculations, and (3) my proposal to recognize
12 water used for fire fighting as a retail use.
13

14 **Q: Do you know when the Commission began to use inch-miles of pipe to assign unac-**
15 **counted for water use?**

16 A:Yes I do. I believe a little history is appropriate to help put this issue in context. For the
17 past 15 years, water utilities in Rhode Island that are subject to Commission's jurisdiction
18 have used the so called "inch-mile" method to recognize that much of the unaccounted for
19 water use in systems is a retail use and should not be assigned to wholesale customers.
20

21 The inch-mile method of allocating unaccounted for water between wholesale and retail ac-
22 counts was developed in RI PUC Docket 2048 over 15 years ago. In that docket I suggested
23 in my direct testimony (on behalf of a wholesale intervener) that unaccounted for water
24 should be considered in allocating costs. In surrebuttal filings both the Division (Mr.
25 Mierzwa, the Division's expert in this case) and I suggested that unaccounted for water be
26 split between retail and wholesale customers using "relative inch-miles of pipe." There was
27 no research or analysis that formed the basis for considering the diameter of pipe in this cal-
28 culation; it is not a method that is generally accepted in the industry as best I can tell. While

1 the method I proposed 15 years ago recognized a difference between retail and wholesale re-
2 sponsibility for unaccounted for water, it was not correct.

3
4 The method I am proposing in this docket is the accepted industry standard world-wide.
5 The leakage in pipes is a function of the length of pipe and NOT the size.

6
7 **Q: Is consideration of the service pipes a generally accepted method as well?**

8 A: Yes it is. Perhaps if I had given it more thought 15 years ago I would have included the
9 service pipes in the calculations. In any case, it is widely acknowledged and accepted indus-
10 try practice to recognize that service pipes leak and should be considered as I have proposed
11 in this docket.

12
13 **Q: Why have you also included water used for fire fighting? Don't both retail and whole-
14 sale customers use water for fire fighting?**

15 A: Yes they do. The difference is that the water used by wholesale customers first passes
16 through the wholesale master meter(s) and is recorded as part of the sales to the wholesale
17 customer. The water used for fire fighting in retail system is not metered and recorded, yet it
18 is clearly just a retail use.

19
20 **Summary**

21 **Q: Have you prepared updated schedules?**

22 A: Yes I have. As indicated in my rebuttal testimony and that of others, we have made a num-
23 ber of revisions to the rate year expenses. In addition, the Division recommended a cost al-
24 location change that we agree with. These are reflected on the attached schedules.

25
26 **Q: Does this conclude your rebuttal testimony?**

27 A: It does.

TEST YEAR & RATE YEAR EXPENSES

	Test Year	Summary of	Rate Year	<----- Adjustments Detail ----->		
Expense Item	FY 2007	Adjustments	CY 2009	Labor & Related Items	Other Adjustments	Supporting Schedule
ADMINISTRATION						
Salaries & Wages - (601)	\$489,948	\$227,935	\$717,883	\$227,935	\$0	R. Benson
Salaries & Wages - Payroll Taxes	\$35,743	\$16,339	\$52,082	\$16,339	\$0	R. Benson
Employee Pensions & Benefits (604)	\$335,304	\$84,015	\$419,319	\$84,015	\$0	R. Benson
Materials and Supplies (Account 620)	\$51,644	\$4,394	\$56,038	\$0	\$4,394	Sch. 1.1 (i)
Contractual Services - Legal (Account 633)	\$68,726	\$5,847	\$74,573	\$0	\$5,847	Sch. 1.1 (i)
Contractual Services - Mgt. Fees (634) City Chg	\$179,410	\$15,264	\$194,673	\$0	\$15,264	Sch. 1.1 (i)
Contractual Services - Other (Account 635)	\$75,625	\$6,434	\$82,060	\$0	\$6,434	Sch. 1.1 (i)
Rental of Equipment (Account 642)	\$4,938	\$420	\$5,358	\$0	\$420	Sch. 1.1 (i)
Transportation Expenses (Account 650)	\$4,626	\$394	\$5,019	\$0	\$394	Sch. 1.1 (i)
Insurance - General Liability (Account 657)	\$141,453	\$41,173	\$182,626	\$0	\$41,173	See RB-16
Insurance - Worker's Compensation (658)	\$59,588	\$5,070	\$64,658	\$0	\$5,070	Sch. 1.1 (i)
Insurance - Other (Account 659)	\$2,140	\$182	\$2,322	\$0	\$182	Sch. 1.1 (i)
Regulatory Com Expense - Other (667)	\$41,364	\$13,480	\$54,844	\$0	\$13,480	Sch. 1.1
Reg Com Exp - Amort of Rate Case Exp (666)	\$83,433	\$16,567	\$100,000	\$0	\$16,567	Sch. 1.1
Miscellaneous Expense (Account 675)	\$64,184	\$5,461	\$69,644	\$0	\$5,461	Sch. 1.1 (i)
Other -pba fees	\$0	\$0	\$0	\$0	\$0	Sch. 1.1 (i)
Education Training	\$4,726	\$402	\$5,129	\$0	\$402	Sch. 1.1 (i)
Maint of Misc Plant	\$34,196	\$2,909	\$37,105	\$0	\$2,909	Sch. 1.1 (i)
Other Utilities	\$45,204	\$7,882	\$53,086	\$0	\$7,882	Sch. 1.1 (u)
Printing	\$18,143	\$1,544	\$19,687	\$0	\$1,544	Sch. 1.1 (i)
Postage	\$151	\$13	\$164	\$0	\$13	Sch. 1.1 (i)
Subtotal - Admin	\$1,740,547	\$455,723	\$2,196,270	\$328,289	\$127,434	
CUSTOMER SERVICE						
Salary & Wages - Cust Ser	\$151,981	\$41,313	\$193,294	\$41,313	\$0	R. Benson
Salary & Wages - Meter	\$389,648	\$52,808	\$442,456	\$52,808	\$0	R. Benson
Salary & Wages Payroll Tx(CS)	\$11,688	\$2,920	\$14,608	\$2,920	\$0	R. Benson
Salary & Wages Payroll Tx (Meters)	\$29,775	\$3,579	\$33,355	\$3,579	\$0	R. Benson
Empl Pensions & Benefits (Cust Ser)	\$45,415	\$38,688	\$84,104	\$38,688	\$0	R. Benson
Empl Pensions & Benefits (Meters)	\$141,699	\$69,239	\$210,938	\$69,239	\$0	R. Benson
Matls & Supp (Cust Serv)	\$2,067	\$176	\$2,243	\$0	\$176	Sch. 1.1 (i)
Matls & Supp (Meters)	\$8,808	\$749	\$9,557	\$0	\$749	Sch. 1.1 (i)
Contractual Services - Other - [Cust. Svc.] (Account 63)	\$14,841	\$1,263	\$16,103	\$0	\$1,263	Sch. 1.1 (i)
Transportation Expenses - [Cust svc.] (Account 650)	\$3,746	\$319	\$4,065	\$0	\$319	Sch. 1.1 (i)
Transportation Expenses - [Meter] (Account 650)	\$7,184	\$611	\$7,795	\$0	\$611	Sch. 1.1 (i)
Bad Debt Expense (Account 670)	\$0	\$0	\$0	\$0	\$0	Sch. 1.1 (i)
Miscellaneous Expense - [Cust. Svc.] (Account 675)	\$491	\$42	\$533	\$0	\$42	Sch. 1.1 (i)
Miscellaneous Expense - [Meter] (Account 675)	\$136	\$12	\$148	\$0	\$12	Sch. 1.1 (i)
Education Training - [Cust. Svc.]	\$230	\$20	\$250	\$0	\$20	Sch. 1.1 (i)
Education Training - [Meter]	\$1,513	\$129	\$1,641	\$0	\$129	Sch. 1.1 (i)
Repairs & Maintenance - general	\$893	\$76	\$969	\$0	\$76	Sch. 1.1 (i)
Repairs & Maintenance - meters	\$2,531	\$0	\$2,531	\$0	\$215	Sch. 1.1 (i)
Other Utilities - [Cust. Svc.]	\$2,522	\$0	\$2,522	\$0	\$440	Sch. 1.1 (u)
Other Utilities - [Meter]	\$3,837	\$0	\$3,837	\$0	\$669	Sch. 1.1 (u)
Printing - [Cust. Svc.]	\$15,651	\$0	\$15,651	\$0	\$1,332	Sch. 1.1 (i)
Printing - [Meter]	\$357	\$0	\$357	\$0	\$30	Sch. 1.1 (i)
Postage--[Cust. Svc.]	\$33,478	\$0	\$33,478	\$0	\$2,848	Sch. 1.1 (i)
Subtotal - Customer Accts	\$868,492	\$211,943	\$1,080,435	\$208,547	\$8,930	

TEST YEAR & RATE YEAR EXPENSES

				<----- Adjustments Detail ----->			
	Test Year	Summary of	Rate Year		Other	Supporting	
<u>Expense Item</u>	<u>FY 2007</u>	<u>Adjustments</u>	<u>CY 2009</u>	<u>Labor Increase</u>	<u>Adjustments</u>	<u>Schedule</u>	
<u>SOURCE OF SUPPLY</u>							
Salaries & Wages - (601)	\$156,667	-\$26,025	\$130,642	-\$26,025	\$0	R. Benson	
Salaries & Wages - Payroll Taxes	\$11,789	-\$1,898	\$9,891	-\$1,898	\$0	R. Benson	
Employee Pensions & Benefits (604)	\$46,779	\$4,531	\$51,310	\$4,531	\$0	R. Benson	
Purchased Power (Account 615)	\$18,947	\$12,844	\$31,791	\$0	\$12,844	Sch. 1.1	
Materials and Supplies (Account 620)	\$2,501	\$213	\$2,714	\$0	\$213	Sch. 1.1 (i)	
Transportation Expenses (Account 650)	\$8,592	\$731	\$9,323	\$0	\$731	Sch. 1.1 (i)	
Miscellaneous Expense (Account 675)	\$104	\$9	\$112	\$0	\$9	Sch. 1.1 (i)	
Security Service	\$65,571	\$5,579	\$71,149	\$0	\$5,579	Sch. 1.1 (i)	
Education Training	\$245	\$21	\$266	\$0	\$21	Sch. 1.1 (i)	
Maint of Misc Plant	\$62,073	\$5,281	\$67,354	\$0	\$5,281	Sch. 1.1 (i)	
Other Utilities	\$2,053	\$358	\$2,411	\$0	\$358	Sch. 1.1 (u)	
Subtotal - Supply	\$375,321	\$1,643	\$376,964	-\$23,392	\$25,035		
<u>PURIFICATION</u>							
DBO O&M Contract	\$1,236,302	\$458,942	\$1,695,244	\$0	\$458,942	Sch. 1.1	
Purchased Power (Account 615)	\$557,025	\$377,600	\$934,625	\$0	\$377,600	Sch. 1.1	
Other Utilities	\$0	\$0	\$0	\$0	\$0		
Subtotal - Purification	\$1,793,326	\$836,542	\$2,629,868	\$0	\$836,542		

TEST YEAR & RATE YEAR EXPENSES

	Test Year	Summary of	Rate Year	<----- Adjustments Detail ----->		
Expense Item	FY 2007	Adjustments	CY 2009	Labor Increase	Other Adjustments	Supporting Schedule
TRANSMISSION & DISTRIBUTION						
Salaries & Wages - (601)	\$794,555	\$190,466	\$985,021	\$190,466	\$0	R. Benson
Salaries & Wages -[Engineering] (601)	\$417,411	\$18,919	\$436,329	\$18,919	\$0	R. Benson
Salaries & Wages - Payroll Taxes -	\$61,534	\$12,889	\$74,423	\$12,889	\$0	R. Benson
Salaries & Wages - Payroll Taxes - [Engineering]	\$30,845	\$2,275	\$33,121	\$2,275	\$0	R. Benson
Salaries & Wages - Police Details	\$71,364	\$8,666	\$80,030	\$0	\$8,666	Sch. 1.1
Employee Pensions & Benefits - (604)	\$289,173	\$120,089	\$409,262	\$120,089	\$0	R. Benson
Employee Pensions & Benefits - [Engineering] (604)	\$110,609	\$26,059	\$136,668	\$26,059	\$0	R. Benson
Materials and Supplies - (Account 620)	\$35,466	\$3,017	\$38,483	\$0	\$3,017	Sch. 1.1 (i)
Materials and Supplies - [Engineering] (Account 620)	\$23,000	\$1,957	\$24,956	\$0	\$1,957	Sch. 1.1 (i)
Rental of Equipment (Account 642)	\$1,200	\$102	\$1,302	\$0	\$102	Sch. 1.1 (i)
Rental of Equipment - [Engineering] (Account 642)	\$2,497	\$212	\$2,709	\$0	\$212	Sch. 1.1 (i)
Transportation Expenses - (Account 650)	\$44,984	\$3,827	\$48,811	\$0	\$3,827	Sch. 1.1 (i)
Transportation Expenses - [Engineering](Account 650)	\$10,242	\$871	\$11,114	\$0	\$871	Sch. 1.1 (i)
Miscellaneous Expense - (Account 675)	\$3,534	\$301	\$3,834	\$0	\$301	Sch. 1.1 (i)
Miscellaneous Expense - [Engineering] (Account 675)	\$0	\$0	\$0	\$0	\$0	Sch. 1.1 (i)
Education Training	\$4,676	\$398	\$5,074	\$0	\$398	Sch. 1.1 (i)
Education Training - [Engineering]	\$3,549	\$302	\$3,851	\$0	\$302	Sch. 1.1 (i)
Repairs & Maintenance - general	\$4,575	\$389	\$4,964	\$0	\$389	Sch. 1.1 (i)
Repairs & Maintenance - T&D	\$11,515	\$980	\$12,494	\$0	\$980	Sch. 1.1 (i)
Repairs & Maintenance - fire services	\$0	\$0	\$0	\$0	\$0	Sch. 1.1 (i)
Repairs & Maintenance - services	\$100	\$9	\$109	\$0	\$9	Sch. 1.1 (i)
Repairs & Maintenance - Hydrants	-\$1,344	\$1,344	\$0	\$0	\$1,344	One Time
Road surface restoration	\$0	\$0	\$0	\$0	\$0	Sch. 1.1 (i)
Repairs & Maintenance - general	\$517	\$44	\$561	\$0	\$44	Sch. 1.1 (i)
Other Utilities	\$30,184	\$5,263	\$35,447	\$0	\$5,263	Sch. 1.1 (u)
Other Utilities - [Engineering]	\$7,070	\$1,233	\$8,303	\$0	\$1,233	Sch. 1.1 (u)
Printing	\$0	\$0	\$0	\$0	\$0	Sch. 1.1 (i)
Postage--[Engineering]	\$0	\$0	\$0	\$0	\$0	Sch. 1.1 (i)
Subtotal - T&D	\$1,957,256	\$399,612	\$2,356,868	\$370,697	\$28,915	

TEST YEAR & RATE YEAR EXPENSES

	Test Year	Summary of	Rate Year	<----- Adjustments Detail ----->		
<u>Expense Item</u>	<u>FY 2007</u>	<u>Adjustments</u>	<u>CY 2009</u>	<u>Labor Increase</u>	<u>Other Adjustments</u>	<u>Supporting Schedule</u>
<u>CAPITAL EXPENSE</u>						
Property Taxes						
Source of Supply	\$297,576	\$408,622	\$706,198	\$0	\$0	R. Benson Testimony
Treatment-Pumping	\$4,499	-\$4,499	\$0	\$0	\$0	R. Benson Testimony
Treatment-Purification	\$131,289	-\$129,983	\$1,306	\$0	\$0	R. Benson Testimony
Trans & Distrib	\$409,257	-\$327,294	\$81,963	\$0	\$0	R. Benson Testimony
Rental Property	\$1,584	\$6,416	\$8,000	\$0	\$0	R. Benson Testimony
Restrict. Bond Principal & Interest	\$5,736,014	\$952,530	\$6,688,543	\$0	\$952,530	Sch. 1.1
Leases	\$150,962	-\$1,181	\$149,781	\$0	-\$1,181	Sch. 1.1
IFR	\$3,100,000	\$0	\$3,100,000	\$0	\$0	Sch. 1.1
CF Franchise Fee	\$86,416	-\$86,416	\$0	\$0	-\$86,416	Sch. 1.1
Calgon Royalties Fund	\$73,000	-\$73,000	\$0	\$0	-\$73,000	Sch. 1.1
CF System Fund	\$255,202	-\$255,202	\$0	\$0	-\$255,202	included T&D
Trustee Fees	\$308,657	\$61,250	\$369,907	\$0	\$61,250	Sch. 1.1
O&M Reserve Deposit	\$31,480	-\$31,480	\$0	\$0	-\$31,480	Sch. 1.1
Subtotal - Capital	\$10,585,934	\$519,764	\$11,105,698	\$0	\$566,502	
TOTAL EXPENSES	\$17,320,876	\$2,425,226	\$19,746,102	\$884,141	\$1,593,357	
PLUS: Operating Revenue Allowance	\$255,202	\$655,931	\$911,133			
LESS: Service Instal Revenue	-\$208,054	\$0	-\$208,054			see DGB-1
LESS: State Surcharge Revenue	-\$57,071	\$0	-\$57,071			see DGB-8
LESS: Penalties	-\$67,936	\$0	-\$67,936			see DGB-1
LESS: Cumberland Tax Reduction		-\$200,000	-\$200,000		-\$200,000	Per Agreement
LESS: Non-Operating Rental	-\$17,530	\$0	-\$17,530			see DGB-1
LESS: Interest Income	-\$10,365	\$0	-\$10,365			see DGB-1
LESS: Misc Non-Operating	-\$6,990	-\$2,957	-\$9,947			see RB-R-1
LESS: Available Funds for Debt	\$0	-\$952,529	-\$952,529		-\$952,529	Sch 1.1
REQUIRED FROM RATES	\$17,208,131	\$1,925,671	\$19,133,802	\$884,141	\$440,828	

DETAILS OF ADJUSTMENTS TO TEST YEAR EXPENSES

Capital Requirements

Property Taxes

See testimony and Exhibits or R. Benson

Debt Service

Projected Debt is as follows:

		<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
<i>Existing Revenue Bonds</i>				
	Principal	\$800,000	\$3,075,000	\$3,140,000
	Sinking Fund	\$3,000	-\$1,000	\$2,000
	Interest	<u>\$3,296,620</u>	<u>\$3,349,437</u>	<u>\$3,296,758</u>
	Total	\$4,099,620	\$6,423,437	\$6,438,758
<i>Projected Revenue Bonds</i>				
	Principal		\$0	\$0
	Interest		<u>\$0</u>	<u>\$0</u>
	Total	\$0	\$0	\$0
<i>Existing General Obligation Bonds</i>				
	Principal	\$217,010	\$200,404	\$208,667
	Interest	<u>\$58,122</u>	<u>\$49,614</u>	<u>\$41,119</u>
	Total	\$275,132	\$250,018	\$249,786
<i>Total All Bonds</i>				
		\$4,374,752	\$6,673,455	\$6,688,543
	For Rate Year Use			\$6,688,543

Available Funds to Offset Debt

See testimony of Robert Benson. PWSB proposes to maintain the same net allowance for debt granted in Docket # 3674 of **\$ 5,736,014**

The difference between the prior allowance and the actual debt (see above) will be funded from available funds in the Debt Stabilization fund.

This difference is set as a revenue offset equal to \$952,529

Trustee Fees

		<u>Estim RY</u>
Bank of New York	Trustees Fees 4 @ \$2,500	\$ 10,000
US Bank	Admin Fess	\$ 3,250
Partridge, Hahn & Snow	Legal Fees - Annual Disclosure filing	\$ 1,500
Amtec	Annual Arbitrage Services	\$ 600
	Subtotal	\$15,350
	RI CWFA Fees	\$ 354,557
	Total Trustee Fees	\$ 369,907

Capital Leases

	<u>CY 2008</u>	<u>CY 2009</u>	<u>CY 2010</u>
Principal	<u>\$134,430</u>	<u>\$139,364</u>	<u>\$144,478</u>
Interest	<u>\$15,351</u>	<u>\$10,417</u>	<u>\$5,302</u>
Total	\$149,781	\$149,781	\$149,781
For Rate Year Use			\$149,781

IFR - PAYGO Rate Year
\$3,100,000

O&M Reserve Requirement

Rate Year O&M =	\$9,437,871 (Operating Costs plus Property Taxes)
Required Level (25%)	\$2,359,468
Balance 12/30/07	<u>\$2,604,299</u>
Monthly Additions	<u>\$141,480</u> (includes \$110,000 int. income plus \$2,623.33/month)
Estimated Balance 12/30/08	\$4,443,538
Rate Year Addition =	\$0

DETAILS OF ADJUSTMENTS TO TEST YEAR EXPENSES**Operating Costs****DBO Contract**

	<u>New WTP</u>
Annual Contract 2/08-2/09	\$1,640,770 current estimate from contractor
Annual Contract 2/09 - 2/10	\$1,695,244 increased by estimated annual increase CPI
Increase Over Test Year =	\$458,942

Inflation Adjustments

Certain items (with an "i" notation) were increased from test year amounts by an inflation rate of 3.32% per year or 8.51% for 2.5 years.

Fuel costs (with "u" notation) were increased for inflation by twice this rate or 17.44% for 2.5 years.

Police Details

FY 07 was not representative as it included many older (catch-up) jobs. To develop rate year we used actual costs through January 2008.

	<u>Pawtucket</u>	<u>Central Falls *</u>	<u>Cumberland</u>	<u>Total FY 08</u>
7 months - Jan. 31 2008	\$ 17,197	\$ 11,286	\$ 4,682	
Annual Amount (7/07 - 6/08)	\$ 29,500	\$ 38,700	\$ 8,000	\$ 76,200
Estimated Rate Year (1 1/2 year inflation)				\$ 80,030

* see testimony of R. Benson - doubled for extra requirements for police details from Town of Central Falls

Power Costs

<u>Source of Supply</u>	Test Year	Adjustment **	Rate Year
Delivery *	\$ 6,916	\$ -	\$ 6,916
Supply *	\$ 12,031	\$ 12,031	\$ 24,063
Total	\$ 18,947	\$ 12,031	\$ 30,978
<u>Purification</u>			
Delivery *	\$ 203,314	\$ -	\$ 203,314
Supply *	\$ 353,711	\$ 353,711	\$ 707,422
Total	\$ 557,025	\$ 353,711	\$ 910,736

* based on 6 months analysis of billings, 36.5% = delivery charges and 63.5% = supply charges

** Based on discussions with League of Cities & Towns regarding future energy prices, supply costs expected to double in next contract.

Plus Increased sales: Retail (ccf) =	143,041		
Wholesale (ccf) =	-19,533		
Total	123,508		
Cost per ccf (ACC-7) \$	0.20	<u>Treatment</u>	<u>Supply</u>
Incremental increase \$	24,702	\$ 23,889	\$ 813

Central Falls Franchise Fee & System Fund

The Central Falls System has been purchased so the Franchise Fee Fund is no longer needed

Costs for the Central Falls System have been included with the Transmission & Distribution operating expenses

Calgon Royalties Fund

This fund is no longer needed; no funding is proposed.

Regulatory Expenses**1. Rate Case Estimated Rate Year**

Rate Case Costs (estim)	\$200,000
Spread over 2 yrs	\$100,000
Other	\$0
Total Rate Year	\$100,000
Test Year	\$83,433
Adjustment	\$16,567

2. PUC Fee - Admin

FY 2008 Fee	\$52,222
Increase (1.5 yr inflation)	\$2,622
Total Rate Year	\$54,844
Test Year	\$41,364
Adjustment	\$13,480

Insurance - General Liability

See testimony of R. Benson --RB-R-4 \$ 41,173 increase over test year to \$182,626

Operating Revenue Allowance

See testimony of C. Woodcock. An operating reserve allowance of 5.0% on total revenues is requested in this case. As shown on Schedule 2, the average annual reduction in sales has been approximately 5% per year over the past four years.

UNITS OF SERVICE

METERS

<u>Meter Size</u>	<u>Test Year</u>		<u>Rate Year</u>		<u>Total</u>	<u>Equiv Factor</u>	<u># of Equivs</u>
	<u>Quarterly</u>	<u>Monthly</u>	<u>Quarterly</u>	<u>Monthly *</u>			
5/8	21,445	9	21,362	92	21,454	1.00	21,454
3/4	251	4	210	45	255	1.39	353
1	480	11	353	138	491	2.00	982
1 1/2	231	6	121	116	237	4.07	965
2	377	30	114	293	407	5.29	2,151
3	28	14	22	20	42	6.00	252
4	12	6	9	9	18	14.00	252
6	0	5	0	5	5	21.00	105
8	0	0	0	0	0	30.00	0
Totals	22,824	85	22,191	718	22,909		26,515

* Reflects conversion of accounts projected to be converted to monthly billing.

PUBLIC FIRE HYDRANTS

	<u>Test Year</u>	<u>Adjustments</u>	<u>Rate Year</u>
Pawtucket	1,518	0	1,518
Central Falls	203	0	203
Valley Falls	197	0	197
Totals	1,918	0	1,918

PRIVATE FIRE SERVICE

<u>Size</u>	<u>Test Year</u>	<u>Adjustments</u>	<u>Rate Year</u>	<u>Equiv Factor *</u>	<u># of Equivs</u>
2	25	1	26	4.07	106
4	42	7	49	6.00	294
6	371	21	392	14.00	5,488
8	91	-1	90	21.00	1,890
10	4	0	4	21.00	84
12	2	0	2	21.00	42
Total	535	28	563		7,904

* one size down to equate to meter equivalent

UNITS OF SERVICE

METERED WATER USE (ccf/year)

<u>Class</u>	<u>Test Year * Adjustments *</u>		<u>Rate Year</u>
Small (5/8 - 1")	2,884,356	117,228	3,001,584
Medium (1.5 - 2" & By pass)	641,275	19,987	661,262
Large (3" and up)	342,742	5,826	348,568
Total	3,868,373	143,041	4,011,414

Wholesale			
Cumberland	723,207	-19,533	703,674
Seekonk	0	0	0
Total	723,207	-19,533	703,674

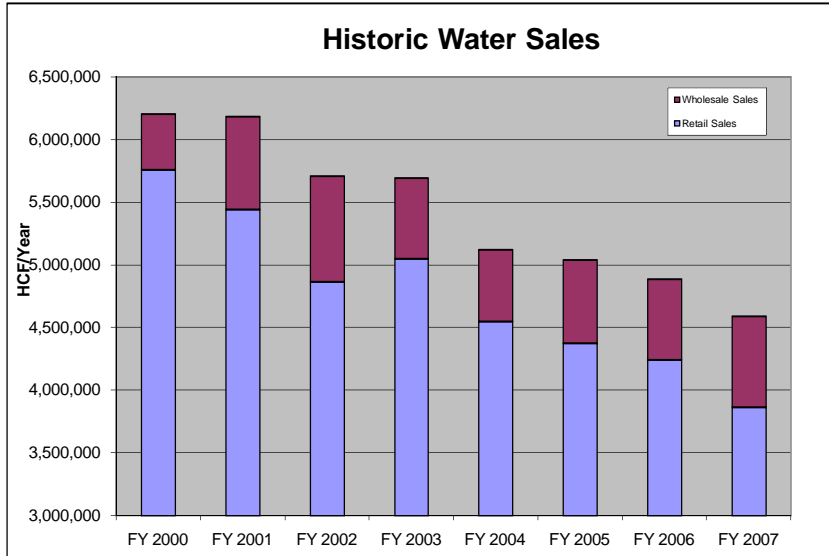
For Adjustments see Rebuttal testimony and schedules of D. Bebyn (DGB-3A Rebuttal) and testimony of C. Woodcock
For wholesale see ACC-5

Miles of Mains

<u>Size</u>	<u>Miles</u>	<u>Inch-Miles</u>	
Service Pipes	108.47		
2	1.24	2.5	
4	1.47	5.9	
6	109.16	655.0	
8	80.83	646.6	
10	1.78	17.8	
12	47.77	573.2	80.9%
16	4.24	67.8	
20	9.13	182.6	
24	6.06	145.4	
30	0.10	3.0	
36	0.35	12.6	
48	0.04	1.9	
54	0.65	35.1	19.1%
Totals	371.29	2,350	

Variations in Historic Water Sales (hcf/year)

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>4 Yr. Avg</u>
Retail Sales	5,758,813	5,443,371	4,864,720	5,050,315	4,551,901	4,375,630	4,245,199	3,868,373	4,260,276
Wholesale Sales	443,892	741,077	845,377	645,992	569,609	666,953	644,728	723,207	651,124
Total	6,202,705	6,184,448	5,710,097	5,588,203	5,087,083	5,053,049	4,889,927	4,591,580	4,911,400
Change		-0.3%	-7.7%	-2.1%	-9.0%	-0.7%	-3.2%	-6.1%	-4.7%
<u>Percent Variation from 4 Year Average</u>									
Retail Sales			14.2%	18.5%	6.8%	2.7%	-0.4%	-9.2%	-4.8%
Wholesale Sales			29.8%	-0.8%	-12.5%	2.4%	-1.0%	11.1%	
Total Sales			16.3%	13.8%	3.6%	2.9%	-0.4%	-6.5%	



UNITS OF SERVICE - DEMAND FACTORS

	<u>BASE</u>		<u>MAXIMUM DAY</u>			<u>PEAK HOUR</u>			Equivalent Meters & Services	<u>Bills</u>
	<u>Annual Use</u> <u>cct/year</u>	<u>Average Day</u> <u>cct/day</u>	<u>Demand</u> <u>Factor</u>	<u>Maximum Day</u> <u>cct/day</u>	<u>Extra Capacity</u> <u>cct/day</u>	<u>Demand</u> <u>Factor</u>	<u>Maximum Hou</u> <u>cct/day</u>	<u>Extra Capacity</u> <u>cct/day</u>		
<u>Inside - Retail</u>										
Small (5/8 - 1")	3,001,584	8,224	2.50	20,559	12,335	3.50	28,782	8,224	22,789	91,000
Medium (1.5 - 2" & By p	661,262	1,812	2.00	3,623	1,812	3.00	5,435	1,812	3,116	5,848
Large (3" and up)	348,568	955	1.80	1,719	764	2.50	2,387	668	609	532
Fire Protection	6,000 gal/min for 6 hours per Docket	3193		2,888	2,888		481	481		563
<u>Wholesale</u>										
Cumberland	703,674	1,928	2.50	4,820	2,892	3.50	6,748	1,928		
Seekonk	0	0	2.50	0	0	3.50	0	0		
Totals	4,715,088	12,918		33,608	20,690		43,834	13,113	26,515	97,943

Unaccounted For Water (thousand gallons/yr)

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Average</u>	<u>cct/yr</u>
Plant Production	4,452,629	4,427,640	4,156,939	3,962,147	4,249,839	5,296,620
Less: Retail Sales	3,405,059	3,273,199	3,175,630	2,893,744	3,186,908	3,868,373
Wholesale Sales	426,097	498,916	482,290	540,996	487,075	723,207
Semi-Annual Flush	59,918	102,737	43,435	52,512	64,651	70,199
Estimated Fire	22,263	22,138	20,785	19,811	21,249	26,483
Estim. Construction	0	20,913	0	0	5,228	0
Unaccounted Water	539,292	509,737	434,800	455,084	484,728	608,358

ALLOCATION OF RATE YEAR EXPENSES TO COST COMPONENTS

EXPENSE ITEM	PRO FORMA EXPENSE	ALLOC. SYMBOL (1)	BASE	MAX. DAY	PEAK HOUR	METERING	BILLING	DIRECT FIRE
ADMINISTRATION								
Salaries & Wages - (601)	\$717,883	L-M	\$656,592	\$21,472	\$7,171	\$0	\$0	\$32,648
Salaries & Wages - Payroll Taxes	\$52,082	L-M	\$47,635	\$1,558	\$520	\$0	\$0	\$2,369
Employee Pensions & Benefits (604)	\$419,319	L-M	\$383,518	\$12,542	\$4,189	\$0	\$0	\$19,070
Materials and Supplies (Account 620)	\$56,038	E-M	\$47,386	\$6,898	\$326	\$0	\$0	\$1,427
Contractual Services - Legal (Account 630)	\$74,573	E-M	\$63,060	\$9,180	\$434	\$0	\$0	\$1,899
Contractual Services - Mgt. Fees (634)	\$194,673	E-M	\$164,619	\$23,963	\$1,133	\$0	\$0	\$4,957
Contractual Services - Other (Account 635)	\$82,060	E-M	\$69,391	\$10,101	\$478	\$0	\$0	\$2,090
Rental of Equipment (Account 642)	\$5,358	E-M	\$4,531	\$660	\$31	\$0	\$0	\$136
Transportation Expenses (Account 650)	\$5,019	E-M	\$4,244	\$618	\$29	\$0	\$0	\$128
Insurance - General Liability (Account 651)	\$182,626	E-M	\$154,432	\$22,480	\$1,063	\$0	\$0	\$4,651
Insurance - Worker's Compensation (652)	\$64,658	L-M	\$59,138	\$1,934	\$646	\$0	\$0	\$2,941
Insurance - Other (Account 659)	\$2,322	E-M	\$1,964	\$286	\$14	\$0	\$0	\$59
Regulatory Com Expense - Other (667)	\$54,844	E-M	\$46,377	\$6,751	\$319	\$0	\$0	\$1,397
Reg Com Exp - Amort of Rate Case Ex	\$100,000	E-M	\$84,562	\$12,309	\$582	\$0	\$0	\$2,546
Miscellaneous Expense (Account 675)	\$69,644	E-M	\$58,893	\$8,573	\$406	\$0	\$0	\$1,773
Other -pba fees	\$0	E-M	\$0	\$0	\$0	\$0	\$0	\$0
Education Training	\$5,129	E-M	\$4,337	\$631	\$30	\$0	\$0	\$131
Maint of Misc Plant	\$37,105	E-M	\$31,377	\$4,567	\$216	\$0	\$0	\$945
Other Utilities	\$53,086	E-M	\$44,891	\$6,535	\$309	\$0	\$0	\$1,352
Printing	\$19,687	E-M	\$16,647	\$2,423	\$115	\$0	\$0	\$501
Postage	<u>\$164</u>	E-M	<u>\$139</u>	<u>\$20</u>	<u>\$1</u>	<u>\$0</u>	<u>\$0</u>	<u>\$4</u>
Subtotal - Admin	\$2,196,270		\$1,943,732	\$153,502	\$18,012	\$0	\$0	\$81,023
CUSTOMER SERVICE								
Salary & Wages - Cust Ser	\$193,294	B	\$0	\$0	\$0	\$0	\$193,294	\$0
Salary & Wages - Meter	\$442,456	M	\$0	\$0	\$0	\$304,189	\$138,268	\$0
Salary & Wages Payroll Tx(CS)	\$14,608	B	\$0	\$0	\$0	\$0	\$14,608	\$0
Salary & Wages Payroll Tx (Meters)	\$33,355	M	\$0	\$0	\$0	\$22,931	\$10,423	\$0
Empl Pensions & Benefits (Cust Ser)	\$84,104	B	\$0	\$0	\$0	\$0	\$84,104	\$0
Empl Pensions & Benefits (Meters)	\$210,938	M	\$0	\$0	\$0	\$145,020	\$65,918	\$0
Matls & Supp (Cust Serv)	\$2,243	B	\$0	\$0	\$0	\$0	\$2,243	\$0
Matls & Supp (Meters)	\$9,557	M	\$0	\$0	\$0	\$6,571	\$2,987	\$0
Contractual Services - Other - [Cust. Svc.]	\$16,103	B	\$0	\$0	\$0	\$0	\$16,103	\$0
Transportation Expenses - [Cust svc.]	\$4,065	B	\$0	\$0	\$0	\$0	\$4,065	\$0
Transportation Expenses - [Meter] (Acc)	\$7,795	M	\$0	\$0	\$0	\$5,359	\$2,436	\$0
Bad Debt Expense (Account 670)	\$0	B	\$0	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense - [Cust. Svc.]	\$533	B	\$0	\$0	\$0	\$0	\$533	\$0
Miscellaneous Expense - [Meter] (Acc)	\$148	M	\$0	\$0	\$0	\$101	\$46	\$0
Education Training - [Cust. Svc.]	\$250	B	\$0	\$0	\$0	\$0	\$250	\$0
Education Training - [Meter]	\$1,641	M	\$0	\$0	\$0	\$1,128	\$513	\$0
Repairs & Maintenance - general	\$969	B	\$0	\$0	\$0	\$0	\$969	\$0
Repairs & Maintenance - meters	\$2,531	M	\$0	\$0	\$0	\$1,740	\$791	\$0
Other Utilities - [Cust. Svc.]	\$2,522	B	\$0	\$0	\$0	\$0	\$2,522	\$0
Other Utilities - [Meter]	\$3,837	M	\$0	\$0	\$0	\$2,638	\$1,199	\$0
Printing - [Cust. Svc.]	\$15,651	B	\$0	\$0	\$0	\$0	\$15,651	\$0
Printing - [Meter]	\$357	M	\$0	\$0	\$0	\$245	\$112	\$0
Postage--[Cust. Svc.]	<u>\$33,478</u>	B	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$33,478</u>	<u>\$0</u>
Subtotal - Customer Accts	\$1,080,435		\$0	\$0	\$0	\$489,923	\$590,512	\$0

ALLOCATION OF RATE YEAR EXPENSES TO COST COMPONENTS

<u>EXPENSE ITEM</u>	<u>PRO FORMA</u>	<u>ALLOC.</u>						
	<u>EXPENSE</u>	<u>SYMBOL (1)</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT FIRE</u>
<u>SOURCE OF SUPPLY</u>								
Salaries & Wages - (601)	\$130,642	A	\$130,642	\$0	\$0	\$0	\$0	\$0
Salaries & Wages - Payroll Taxes	\$9,891	A	\$9,891	\$0	\$0	\$0	\$0	\$0
Employee Pensions & Benefits (604)	\$51,310	A	\$51,310	\$0	\$0	\$0	\$0	\$0
Purchased Power (Account 615)	\$31,791	A	\$31,791	\$0	\$0	\$0	\$0	\$0
Materials and Supplies (Account 620)	\$2,714	A	\$2,714	\$0	\$0	\$0	\$0	\$0
Transportation Expenses (Account 650)	\$9,323	A	\$9,323	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense (Account 675)	\$112	A	\$112	\$0	\$0	\$0	\$0	\$0
Security Service	\$71,149	A	\$71,149	\$0	\$0	\$0	\$0	\$0
Education Training	\$266	A	\$266	\$0	\$0	\$0	\$0	\$0
Maint of Misc Plant	\$67,354	A	\$67,354	\$0	\$0	\$0	\$0	\$0
Other Utilities	<u>\$2,411</u>	A	<u>\$2,411</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Subtotal - Supply	\$376,964		\$376,964	\$0	\$0	\$0	\$0	\$0
<u>PURIFICATION</u>								
DBO O&M Contract	\$1,695,244	D	\$1,014,356	\$680,888	\$0	\$0	\$0	\$0
Purchased Power (Account 615)	\$934,625	A	\$934,625	\$0	\$0	\$0	\$0	\$0
Other Utilities	<u>\$0</u>	A	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Subtotal - Purification	\$2,629,868		\$1,948,981	\$680,888	\$0	\$0	\$0	\$0

ALLOCATION OF RATE YEAR EXPENSES TO COST COMPONENTS

<u>EXPENSE ITEM</u>	<u>PRO FORMA</u>	<u>ALLOC.</u>						
	<u>EXPENSE</u>	<u>SYMBOL (1)</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT FIRE</u>
<u>TRANSMISSION & DISTRIBUTION</u>								
Salaries & Wages - (601)	\$985,021	O	\$67,559	\$45,349	\$15,145	\$788,017	\$0	\$68,951
Salaries & Wages -[Engineering] (601)	\$436,329	O	\$29,926	\$20,088	\$6,709	\$349,064	\$0	\$30,543
Salaries & Wages - Payroll Taxes -	\$74,423	O	\$5,104	\$3,426	\$1,144	\$59,539	\$0	\$5,210
Salaries & Wages - Payroll Taxes - [En	\$33,121	O	\$2,272	\$1,525	\$509	\$26,497	\$0	\$2,318
Salaries & Wages - Police Details	\$80,030	O-A	\$69,513	\$3,684	\$1,230	\$0	\$0	\$5,602
Employee Pensions & Benefits - (604)	\$409,262	O	\$28,070	\$18,842	\$6,292	\$327,410	\$0	\$28,648
Employee Pensions & Benefits - [Engir	\$136,668	O	\$9,374	\$6,292	\$2,101	\$109,334	\$0	\$9,567
Materials and Supplies - (Account 620)	\$38,483	O	\$2,639	\$1,772	\$592	\$30,786	\$0	\$2,694
Materials and Supplies - [Engineering]	\$24,956	O	\$1,712	\$1,149	\$384	\$19,965	\$0	\$1,747
Rental of Equipment (Account 642)	\$1,302	O	\$89	\$60	\$20	\$1,042	\$0	\$91
Rental of Equipment - [Engineering] (A	\$2,709	O	\$186	\$125	\$42	\$2,167	\$0	\$190
Transportation Expenses - (Account 65	\$48,811	O	\$3,348	\$2,247	\$750	\$39,049	\$0	\$3,417
Transportation Expenses - [Engineering]	\$11,114	O	\$762	\$512	\$171	\$8,891	\$0	\$778
Miscellaneous Expense - (Account 675	\$3,834	O	\$263	\$177	\$59	\$3,068	\$0	\$268
Miscellaneous Expense - [Engineering]	\$0	O	\$0	\$0	\$0	\$0	\$0	\$0
Education Training	\$5,074	O	\$348	\$234	\$78	\$4,059	\$0	\$355
Education Training - [Engineering]	\$3,851	O	\$264	\$177	\$59	\$3,081	\$0	\$270
Repairs & Maintenance - general	\$4,964	O	\$340	\$229	\$76	\$3,971	\$0	\$347
Repairs & Maintenance - T&D	\$12,494	T	\$6,592	\$4,425	\$1,478	\$0	\$0	\$0
Repairs & Maintenance - fire services	\$0	F	\$0	\$0	\$0	\$0	\$0	\$0
Repairs & Maintenance - services	\$109	S	\$0	\$0	\$0	\$109	\$0	\$0
Repairs & Maintenance - Hydrants	\$0	F	\$0	\$0	\$0	\$0	\$0	\$0
Road surface restoration	\$0	O	\$0	\$0	\$0	\$0	\$0	\$0
Repairs & Maintenance - general	\$561	O	\$39	\$26	\$9	\$449	\$0	\$39
Other Utilities	\$35,447	O	\$2,431	\$1,632	\$545	\$28,358	\$0	\$2,481
Other Utilities - [Engineering]	\$8,303	O	\$569	\$382	\$128	\$6,642	\$0	\$581
Printing	\$0	O	\$0	\$0	\$0	\$0	\$0	\$0
Postage--[Engineering]	\$0	O	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal - T&D	<u>\$2,356,868</u>		<u>\$231,400</u>	<u>\$112,351</u>	<u>\$37,521</u>	<u>\$1,811,497</u>	<u>\$0</u>	<u>\$164,099</u>
TOTAL O&M	\$8,640,404	I	\$4,501,076	\$946,741	\$55,534	\$2,301,420	\$590,512	\$245,122

ALLOCATION OF RATE YEAR EXPENSES TO COST COMPONENTS

<u>EXPENSE ITEM</u>	<u>PRO FORMA</u>	<u>ALLOC.</u>						
	<u>EXPENSE</u>	<u>SYMBOL (1)</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT FIRE</u>
<u>CAPITAL EXPENSE</u>								
Property Taxes								
Source of Supply	\$706,198	A	\$706,198	\$0	\$0	\$0	\$0	\$0
Treatment-Pumping	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
Treatment-Purification	\$1,306	D	\$781	\$525	\$0	\$0	\$0	\$0
Trans & Distrib	\$81,963	T-C	\$37,089	\$24,896	\$8,427	\$7,085	\$3,221	\$1,244
Rental Property	\$8,000	A	\$8,000	\$0	\$0	\$0	\$0	\$0
Restrict. Bond Principal & Interest	\$6,688,543	P-M	\$4,305,456	\$2,006,263	\$326,196	\$0	\$0	\$50,628
Leases	\$149,781	P-M	\$96,415	\$44,927	\$7,305	\$0	\$0	\$1,134
IFR	\$3,100,000	A	\$3,100,000	\$0	\$0	\$0	\$0	\$0
CF Franchise Fee	\$0	A	\$0	\$0	\$0	\$0	\$0	\$0
Calgon Royalties Fund	\$0	A	\$0	\$0	\$0	\$0	\$0	\$0
CF System Fund	\$0	T-C	\$0	\$0	\$0	\$0	\$0	\$0
Trustee Fees	\$369,907	P-M	\$238,111	\$110,955	\$18,040	\$0	\$0	\$2,800
O&M Reserve Deposit	\$0	E	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal - Capital	<u>\$11,105,698</u>		<u>\$8,492,051</u>	<u>\$2,187,566</u>	<u>\$359,969</u>	<u>\$7,085</u>	<u>\$3,221</u>	<u>\$55,806</u>
TOTAL EXPENSES	\$19,746,102		\$12,993,127	\$3,134,307	\$415,502	\$2,308,505	\$593,732	\$300,928
PLUS: Operating Revenue Allowance	\$911,133	I	\$474,640	\$99,834	\$5,856	\$242,685	\$62,270	\$25,848
LESS: Service Instal Revenue	-\$208,054	S	\$0	\$0	\$0	-\$208,054	\$0	\$0
LESS: State Surcharge Revenue	-\$57,071	I	-\$29,730	-\$6,253	-\$367	-\$15,201	-\$3,900	-\$1,619
LESS: Penalties	-\$67,936	I	-\$35,390	-\$7,444	-\$437	-\$18,095	-\$4,643	-\$1,927
LESS: Cumberland Tax Reduction	-\$200,000	O	-\$13,717	-\$9,208	-\$3,075	-\$160,000	\$0	-\$14,000
LESS: Non-Operating Rental	-\$17,530	A	-\$17,530	\$0	\$0	\$0	\$0	\$0
LESS: Interest Income	-\$10,365	I	-\$5,400	-\$1,136	-\$67	-\$2,761	-\$708	-\$294
LESS: Misc Non-Operating	-\$9,947	I	-\$5,182	-\$1,090	-\$64	-\$2,649	-\$680	-\$282
LESS: Available Funds for Debt	<u>-\$952,529</u>	P-M	-\$613,149	-\$285,716	-\$46,454	\$0	\$0	-\$7,210
REQUIRED FROM RATES	\$19,133,802		\$12,747,669	\$2,923,295	\$370,895	\$2,144,430	\$646,070	\$301,443

ALLOCATION OF PLANT IN SERVICE TO COST COMPONENTS

EXPENSE ITEM	NET PLANT & CWIP *	ALLOC. SYMBOL (1)	BASE	MAX. DAY	PEAK HOUR	METERING	BILLING	DIRECT FIRE
<u>SOURCE OF SUPPLY</u>								
Land & Land Rights	\$5,160,444	A	\$5,160,444	\$0	\$0	\$0	\$0	\$0
Structures & Improvements	\$9,766,418	A	\$9,766,418	\$0	\$0	\$0	\$0	\$0
Wells & Springs	\$372,105	A	\$372,105	\$0	\$0	\$0	\$0	\$0
<u>PUMPING</u>								
Land & Land Rights	\$30,133	D	\$18,030	\$12,103	\$0	\$0	\$0	\$0
Structures & Improvements	\$303,873	D	\$181,824	\$122,049	\$0	\$0	\$0	\$0
Electric Pumping Equipment	\$128,396	D	\$76,826	\$51,570	\$0	\$0	\$0	\$0
<u>PURIFICATION</u>								
Land & Land Rights	\$26,046	D	\$15,585	\$10,461	\$0	\$0	\$0	\$0
Structures & Improvements	\$45,754,725	D	\$27,377,526	\$18,377,199	\$0	\$0	\$0	\$0
Water Treatment Equipment	\$0	D	\$0	\$0	\$0	\$0	\$0	\$0
<u>TRANSM & DISTRIBUTION</u>								
Land & Land Rights	\$1,590	H	\$812	\$545	\$232	\$0	\$0	\$0
Distribution Reservoirs	\$2,479,568	H	\$1,266,787	\$850,333	\$362,449	\$0	\$0	\$0
Transmission Mains	\$8,863,784	D	\$5,303,681	\$3,560,103	\$0	\$0	\$0	\$0
Distribution mains	\$37,569,796	H	\$19,194,042	\$12,884,025	\$5,491,729	\$0	\$0	\$0
Services	\$4,879,061	M	\$0	\$0	\$0	\$3,354,354	\$1,524,706	\$0
Meters	\$2,279,970	M	\$0	\$0	\$0	\$1,567,480	\$712,491	\$0
Hydrants	\$864,386	F	\$0	\$0	\$0	\$0	\$0	\$864,386
Other Misc Equip	\$38,423	H	\$19,630	\$13,177	\$5,617	\$0	\$0	\$0
<u>GENERAL</u>								
Structures & Improvements	\$1,268,480	E	\$503,394	\$156,143	\$7,386	\$453,017	\$116,238	\$32,302
Office furniture & equipment	\$283,497	E	\$112,505	\$34,897	\$1,651	\$101,247	\$25,978	\$7,219
Transportation equipment	\$274,079	E	\$108,768	\$33,738	\$1,596	\$97,883	\$25,115	\$6,979
Stores equipment	\$0	E	\$0	\$0	\$0	\$0	\$0	\$0
Tools, shop & garage equipment	\$0	E	\$0	\$0	\$0	\$0	\$0	\$0
Laboratory equipment	\$20,967	A	\$20,967	\$0	\$0	\$0	\$0	\$0
Power equipment	\$11,435	E	\$4,538	\$1,408	\$67	\$4,084	\$1,048	\$291
Communication equipment	\$0	E	\$0	\$0	\$0	\$0	\$0	\$0
Miscellaneous equipment	\$0	E	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL PLANT	\$120,377,178		\$69,503,884	\$36,107,749	\$5,870,726	\$5,578,065	\$2,405,577	\$911,178
PERCENT		P	57.74%	30.00%	4.88%	4.63%	2.00%	0.76%

*Note: Test Year Net Plant plus CWIP

ALLOCATION OF NON-ADMINISTRATIVE LABOR COSTS TO COST COMPONENTS

<u>EXPENSE ITEM</u>	<u>PRO FORMA</u>	<u>ALLOC.</u>						
	<u>AMOUNT</u>	<u>SYMBOL (1)</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT FIRE</u>
<u>CUSTOMER SERVICE</u>								
Salary & Wages - Cust Ser	\$193,294	B	\$0	\$0	\$0	\$0	\$193,294	\$0
Salary & Wages - Meter	\$442,456	M	\$0	\$0	\$0	\$304,189	\$138,268	\$0
<u>SOURCE OF SUPPLY</u>								
Salaries & Wages - (601)	\$130,642	A	\$130,642	\$0	\$0	\$0	\$0	\$0
<u>TRANSMISSION & DISTRIBUTION</u>								
Salaries & Wages - (601)	\$985,021	O	\$67,559	\$45,349	\$15,145	\$788,017	\$0	\$68,951
Salaries & Wages -[Engineering] (601)	<u>\$436,329</u>	O	<u>\$29,926</u>	<u>\$20,088</u>	<u>\$6,709</u>	<u>\$349,064</u>	<u>\$0</u>	<u>\$30,543</u>
TOTALS	\$2,187,742		\$228,127	\$65,437	\$21,854	\$1,441,269	\$331,561	\$99,495
PERCENT		L	10.4%	3.0%	1.0%	65.9%	15.2%	4.5%

ALLOCATION TO FIRE, WHOLESALE & RETAIL SERVICE

<u>UNITS OF SERVICE</u>	<u>TOTAL</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT FIRE</u>
Number		4,715,088	20,690	13,113	26,515	97,943	1,918
Units		cct/yr	cct/day	cct/day	equiv meters	bills	hydrants
Revenue Requirements	\$19,133,802	\$12,747,669	\$2,923,295	\$370,895	\$2,144,430	\$646,070	\$301,443
Allocation to Fire Protection	\$786,790	\$63,738	\$407,995	\$13,613	included in calculation		\$301,443
Allocation to Wholesale *	\$1,879,990	\$1,688,681	\$196,604	-\$5,295			
Net To Retail Metered Rates	\$16,467,023	\$10,995,250	\$2,318,696	\$362,577	\$2,144,430	\$646,070	\$0

* Allocation to wholesale based on:

<u>BASE</u>		
Metered Sales (cct/yr)	4,715,088	
Retail Sales (cct/yr)	4,011,414	
Retail Unacctd For (cct/yr)	<u>629,811</u>	Based on miles of pipe: 100% of distribution/service costs plus 85.1% of transmission plus estim fire
Total Retail (cct/yr)	4,641,225	
Wholesale Sales (cct/yr)	703,674	
Wholesale Unacctd For (cct/yr)	<u>5,030</u>	
Total Wholesale (cct/yr)	<u>708,704</u>	
Grand Total (cct/yr)	5,349,929	
Wholesale Percent of Grand Total	13.2%	
Total Base Allocation	\$12,747,669	
Wholesale Allocation	\$1,688,681	
<u>MAX DAY</u>		
Total Max Day Allocation	\$2,923,295	
Less: Distribution Costs		
94.5% of T&D O&M	-\$106,127	
Admin O&M Share	-\$17,207	16.2%
Distribution Capital Items	<u>-\$1,393,292</u>	63.69% (Less Distribution Mains & Gen'l Items allocated to Max Day)
Total Net of Distribution	\$1,406,669	
Wholesale Max Day %	13.98%	See Sch. 2.2
Wholesale Allocation	\$196,604	
<u>PEAK HOUR</u>		
Total Peak Hour Allocation	\$370,895	
Less: Distribution Costs		
94.5% of T&D O&M	-\$35,442	
Admin O&M Share	-\$11,496	32.4%
Capital Items	<u>-\$359,969</u>	100.00% (All Capital Peak Hour costs = distribution)
Total Net of Distribution	-\$36,012	
Wholesale Peak Hr %	14.70%	See Sch. 2.2
Wholesale Allocation	-\$5,295	

ALLOCATION SYMBOLS

ALLOCATION								
	<u>SYMBOL</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT FIRE</u>	
100.00%	A	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	Supply, IFR, Power & Chemicals
100.00%	B	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	Billing
100.00%	D	59.84%	40.16%	0.00%	0.00%	0.00%	0.00%	Max Day Demand
100.00%	E	39.68%	12.31%	0.58%	35.71%	9.16%	2.55%	O&M less A&G
100.00%	E-M	84.56%	12.31%	0.58%	0.00%	0.00%	2.55%	O&M less A&G - No Meter Alloc
100.00%	F	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	Fire Service
100.00%	H	51.09%	34.29%	14.62%	0.00%	0.00%	0.00%	Max Hour Demand
100.00%	I	52.09%	10.96%	0.64%	26.64%	6.83%	2.84%	Total O&M
100.00%	L	10.43%	2.99%	1.00%	65.88%	15.16%	4.55%	Labor
100.00%	L-M	91.46%	2.99%	1.00%	0.00%	0.00%	4.55%	Labor-No Meter Allocation
100.00%	M	0.00%	0.00%	0.00%	68.8%	31.3%	0.00%	Cust Serv - "Meter"
100.00%	O	6.86%	4.60%	1.54%	80.00%	0.00%	7.00%	O&M Mains, Hydrants & Service
100.00%	O-A	86.86%	4.60%	1.54%	0.00%	0.00%	7.00%	T&D Police Details
100.00%	P	57.74%	30.00%	4.88%	4.63%	2.00%	0.76%	Plant
100.00%	P-M	64.37%	30.00%	4.88%	0.00%	0.00%	0.76%	Plant-No Meter
100.00%	S	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	Services and Meters
100.00%	T	52.76%	35.41%	11.83%	0.00%	0.00%	0.00%	T&D Mains
100.00%	T-C	45.25%	30.37%	10.28%	8.64%	3.93%	1.52%	T&D Capital

<i>Symbol D</i>	<u>MGD</u>	<u>%</u>
Avg Day	12.010	59.84%
Max Day Inc	<u>8.062</u>	<u>40.16%</u>
Total Max Day	20.072	100.00%

<i>Symbol E</i>	<u>TOTAL</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT FIRE</u>
Amount	\$6,444,134	\$2,557,344	\$793,239	\$37,521	\$2,301,420	\$590,512	\$164,099
Percent	E	39.7%	12.3%	0.6%	35.7%	9.2%	2.5%

<i>Symbol H</i>	<u>MGD</u>	<u>%</u>
Avg Day	12.010	51.09%
Max Day Inc	8.062	34.29%
Peak Hour Inc	<u>3.436</u>	<u>14.62%</u>
Total Peak Hour	23.508	100.00%

	<u>FY 01</u>	<u>FY 02</u>	<u>FY 03</u>	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>	<u>Average</u>
Avg Day mgd)	13.389	13.035	11.954	12.229	12.33	10.42	10.714	12.010
Max Day (mgd)	21.085	21.395	17.583	19.087	21.05	20.23		20.072
Max Hour (mgd)	33.28	25.03	18.96	26.09	21	20.5	19.7	23.508
	1.6	1.2	1.1	1.4	1.0	1.0		1.30

Symbol M These accounts include activities associated with meter reading, meter testing, backflow testing, etc.
Costs have been split based on the following personnel associated with these activities:

	<u># Employees</u>	<u>Meter Read</u>	<u>Meters</u>
Meter Reader*	2.5	2.5	
Technician*	4.5		4.5
Backflow	1.0		1.0
Subtotal	8.0	2.5	5.5
Percent		31%	69%
Agent	1.0	0.31	0.69
Supervisor	1.0	0.31	0.69
Total	10.0	3.1	6.9
Percent		31%	69%

* Note: half of one meter reader's time is used as a meter technician.

ALLOCATION SYMBOLS

Symbol O

	<u>% of Time</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT FIRE</u>
Mains	13.00%	6.86%	4.60%	1.54%	0.00%	0.00%	0.00%
Hydrants	7.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.00%
Services	80.00%	0.00%	0.00%	0.00%	80.00%	0.00%	0.00%
Total	100.0%	6.9%	4.6%	1.5%	80.0%	0.0%	7.0%

Note: In docket 3378 allocation of time set at 50% mains, 30% hydrants, 20% services, above based on actual TY and FY06 time records.

	<u>FY06</u>	<u>FY07</u>	<u>Average</u>
Mains	13.00%	13.00%	13.00%
Hydrants	9.00%	5.00%	7.00%
Services	78.00%	82.00%	80.00%
Total	100.0%	100.0%	100.0%

Symbol T

	<u>Plant Amt.</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT FIRE</u>
Transmission	\$8,863,784	\$5,303,681	\$3,560,103	\$0	\$0	\$0	\$0
Distribution	<u>\$37,569,796</u>	<u>\$19,194,042</u>	<u>\$12,884,025</u>	<u>\$5,491,729</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total	\$46,433,580	\$24,497,723	\$16,444,127	\$5,491,729	\$0	\$0	\$0
		52.76%	35.41%	11.83%	0.00%	0.00%	0.00%

Symbol T-C

	<u>Plant Amt.</u>	<u>BASE</u>	<u>MAX. DAY</u>	<u>PEAK HOUR</u>	<u>METERING</u>	<u>BILLING</u>	<u>DIRECT FIRE</u>
Distribution Reservoirs	\$2,479,568	\$1,266,787	\$850,333	\$362,449	\$0	\$0	\$0
Transmission Mains	\$8,863,784	\$5,303,681	\$3,560,103	\$0	\$0	\$0	\$0
Distribution mains	\$37,569,796	\$19,194,042	\$12,884,025	\$5,491,729	\$0	\$0	\$0
Services	\$4,879,061	\$0	\$0	\$0	\$3,354,354	\$1,524,706	\$0
Meters	\$2,279,970	\$0	\$0	\$0	\$1,567,480	\$712,491	\$0
Hydrants	<u>\$864,386</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$864,386</u>
Total	\$56,936,566	\$25,764,511	\$17,294,460	\$5,854,178	\$4,921,834	\$2,237,197	\$864,386
		45.25%	30.37%	10.28%	8.64%	3.93%	1.52%

FIRE SERVICE CHARGES

PUBLIC FIRE SERVICE

Annual Charge/Hydrant = \$315.98

PRIVATE FIRE SERVICE

SERVICE SIZE (inches)	ANNUAL CHARGE
2	\$127.39
4	\$260.97
6	\$659.68
8	\$1,168.47
10	\$1,656.69
12	\$2,333.36

**ALLOCATION OF FIRE SERVICE EXPENSES
TO PUBLIC AND PRIVATE FIRE SERVICE**

	<u>NUMBER</u>	<u>DEMAND FACTOR (1)</u>	<u>NO. OF EQUIVS.</u>	<u>PERCENT OF DEMAND</u>	<u>NON-HYDR. REQUIRED</u>	<u>DIRECT HYDRANT</u>	<u>TOTAL</u>
PUBLIC FIRE SERVICE							
Hydrants	1,918	111.31	213,494.4	75.28%	\$550,415	\$55,634	\$606,049
PRIVATE FIRE SERVICE							
SIZE (IN)							
2	26	6.19	160.9				
4	49	38.32	1,877.6				
6	392	111.31	43,633.9				
8	90	237.21	21,348.6				
10	4	426.58	1,706.3				
12	<u>2</u>	<u>689.04</u>	<u>1,378.1</u>				
TOTAL-PRIV.	563		70,105.5	24.72%	\$180,741	\$0	\$180,741
	=====		=====	=====	=====	=====	=====
GRAND TOTALS	2,481		283,599.8	100.00%	\$731,156	\$55,634	\$786,790
Total Fire Allocation	\$786,790						
Less O&M for T&D Fire	\$2,694						
Hydrant Capital	\$52,940						
Net Non-Hydrant	\$731,156						

(1) Based on size to the 2.63 power.

DETERMINATION OF FIRE SERVICE CHARGES

<u>PUBLIC FIRE PROTECTION</u>		<u>CALCULATED CHARGE</u>
PUBLIC FIRE ALLOCATION (1)	\$606,049	
----- =	----- =	\$315.98 per year
NUMBER OF PUBLIC HYDRANTS	1,918	

PRIVATE FIRE PROTECTION

PRIVATE FIRE ALLOCATION (1,2)	\$180,741	
----- =	----- =	\$2.58 /EQUIV.
NO. OF EQUIV. UNITS	70,105.47	

<u>SIZE (IN)</u>	<u>DEMAND FACTOR</u>	<u>DEMAND CHARGE</u>	<u>SERVICE LINE CHRG</u>	<u>BILLING CHARGE</u>	<u>CALCULATED CHARGE</u>
2	6.19	\$15.96	\$107.14	\$4.29	\$127.39
4	38.32	\$98.79	\$157.89	\$4.29	\$260.97
6	111.31	\$286.97	\$368.42	\$4.29	\$659.68
8	237.21	\$611.55	\$552.63	\$4.29	\$1,168.47
10	426.58	\$1,099.78	\$552.63	\$4.29	\$1,656.69
12	689.04	\$1,776.44	\$552.63	\$4.29	\$2,333.36

(1) Allocation from CPNW Sch 4.1

(2) Private Fire includes allocated service maintenance costs as detailed below:

Service Line Maintenance Cost =	\$905,748	(Half of total "Metering" O&M)
Service Line Debt Costs =	\$0	
Addnl Allocation to Fire Service =	\$207,996	(22.96%)
Cost per Equiv/year =	\$ 26.32	

DETERMINATION OF SERVICE CHARGES**BILLING CHARGE**

CUST. BILLING ALLOC. (2)		\$419,946	
-----	=	-----	= \$4.29 PER BILLING
NUMBER OF BILLINGS		97,943	

METER CHARGE

CUST. METER ALLOC. (1,2)		\$1,549,147	
-----	=	-----	= \$58.43 / EQ. METER/YR
NO. EQUIV. METERS		26,515	

TOTAL SERVICE CHARGES

<u>METER SIZE (IN)</u>	<u>QUARTERLY ACCOUNTS</u>			<u>MONTHLY ACCOUNTS</u>		
	<u>METER CHARGE</u>	<u>BILLING CHARGE</u>	<u>TOTAL CHARGE</u>	<u>METER CHARGE</u>	<u>BILLING CHARGE</u>	<u>TOTAL CHARGE</u>
5/8	\$14.61	\$4.29	\$18.89	\$4.87	\$4.29	\$9.16
3/4	\$20.24	\$4.29	\$24.53	\$6.75	\$4.29	\$11.03
1	\$29.21	\$4.29	\$33.50	\$9.74	\$4.29	\$14.03
1 1/2	\$59.47	\$4.29	\$63.76	\$19.82	\$4.29	\$24.11
2	\$77.21	\$4.29	\$81.49	\$25.74	\$4.29	\$30.02
3	\$87.64	\$4.29	\$91.93	\$29.21	\$4.29	\$33.50
4	\$204.49	\$4.29	\$208.78	\$68.16	\$4.29	\$72.45
6	\$306.74	\$4.29	\$311.03	\$102.25	\$4.29	\$106.53
8	\$438.20	\$4.29	\$442.48	\$146.07	\$4.29	\$150.35

(1) Less allocation of Service Maintenance Costs to Private Fire Service - see CPNW Sch. 4.2,

(2) adjusted further to minimize large increase to service chares by reducing the allocations to

- meter and services by 20.0%
- billing by 35.0%

**ALLOCATION OF GENERAL WATER EXPENSES
TO CUSTOMER CLASSES**

Class Demands

CUSTOMER CLASS	AVERAGE DEMANDS		FACTOR	MAX DAY EXTRA CAPACITY		
	(CCF/DAY)	PERCENT		(CCF/DAY)	XTRA CCF/DAY	PERCENT
<u>Retail</u>						
Small (5/8 - 1")	8,224	63.66%	2.50	20,559	12,335	69.29%
Medium (1.5 - 2" & By pass	1,812	14.02%	2.00	3,623	1,812	10.18%
Large (3" and up)	955	7.39%	1.80	1,719	764	4.29%
<u>Wholesale</u>						
Cumberland	1,928	14.92%	2.50	4,820	2,892	16.24%
Seekonk	0	0.00%	2.50	0	0	0.00%
Total	12,918	100.00%		30,721	17,803	100.00%

CUSTOMER CLASS	AVERAGE DEMANDS		FACTOR	PEAK HOUR EXTRA CAPACITY		
	(CCF/DAY)	PERCENT		(CCF/DAY)	XTRA CCF/DAY	PERCENT
<u>Retail</u>						
Small (5/8 - 1")	8,224	63.66%	3.50	28,782	8,224	65.10%
Medium (1.5 - 2" & By pass	1,812	14.02%	3.00	5,435	1,812	14.34%
Large (3" and up)	955	7.39%	2.50	2,387	668	5.29%
<u>Wholesale</u>						
Cumberland	1,928	14.92%	3.50	6,748	1,928	15.26%
Seekonk	0	0.00%	3.50	0	0	0.00%
Total	12,918	100.00%		43,352	12,632	100.00%

Allocation of Retail Metered Sales Costs to Classes (see Sch 3.3)

CUSTOMER CLASS	BASE COSTS		MAX. DAY XTRA CAPACITY		PEAK HR. XTRA CAPACITY		TOTAL AMOUNT
	PERCENT	AMOUNT*	PERCENT	AMOUNT	PERCENT	AMOUNT	
<u>Retail</u>							
Small (5/8 - 1")	74.83%	\$8,686,307	82.73%	\$1,918,173	76.83%	\$278,563	\$10,883,043
Medium (1.5 - 2" & By pass	16.48%	\$1,913,631	12.15%	\$281,721	16.93%	\$61,369	\$2,256,721
Large (3" and up)	<u>8.69%</u>	<u>\$1,008,724</u>	<u>5.12%</u>	<u>\$118,802</u>	<u>6.25%</u>	<u>\$22,644</u>	<u>\$1,150,170</u>
Total	100.00%	\$11,608,661	100.00%	\$2,318,696	100.00%	\$362,577	\$14,289,934
		81.2%		16.2%		2.5%	

* Includes allocation of service costs -- see CPNW Sch. 5.0

METERED WATER RATES

Small (5/8 - 1")

Total Expense (2)	\$10,883,043	=	

Metered Sales (HCF) (1)	3,001,584	=	\$3.626 per ccf

Medium (1.5 - 2" & By pass)

Total Expense (2)	\$2,256,721	=	

Metered Sales (HCF) (1)	661,262	=	\$3.413 per ccf

Large (3" and up)

Total Expense (2)	\$1,150,170	=	

Metered Sales (HCF) (1)	348,568	=	\$3.300 per ccf

Wholesale

Total Expense (3)	\$1,879,990	=	

Metered Sales (HCF) (1)	703,674	=	\$2.672 per ccf

- (1) See CPNW Sch 2.0
(2) See CPNW Sch 6.0
(3) See CPNW Sch. 3.3

COMPARISON OF CURRENT & PROPOSED RATES

		<u>Current</u>	<u>Proposed</u>	<u>% Change</u>
<u>Metered Rates</u>				
Small (5/8 - 1")		\$2.903	\$3.626	24.9%
Medium (1.5 - 2" & By pass)		\$2.709	\$3.413	26.0%
Large (3" and up)		\$2.544	\$3.300	29.7%
<u>Wholesale</u>		\$2.217	\$2.672	20.5%
<u>Service Charges</u>				
Quarterly	5/8	\$16.89	\$18.89	11.8%
	3/4	\$21.84	\$24.53	12.3%
	1	\$29.72	\$33.50	12.7%
	1 1/2	\$56.29	\$63.76	13.3%
	2	\$71.87	\$81.49	13.4%
	3	\$81.03	\$91.93	13.5%
	4	\$183.66	\$208.78	13.7%
	6	\$273.47	\$311.03	13.7%
Monthly	8	\$388.93	\$442.48	13.8%
	5/8	\$8.34	\$9.16	9.8%
	3/4	\$9.99	\$11.03	10.4%
	1	\$12.61	\$14.03	11.3%
	1 1/2	\$21.47	\$24.11	12.3%
	2	\$26.66	\$30.02	12.6%
	3	\$29.72	\$33.50	12.7%
	4	\$63.93	\$72.45	13.3%
Fire Service (annual)	6	\$93.86	\$106.53	13.5%
	8	\$132.35	\$150.35	13.6%
	Public	\$629.93	\$315.98	-49.8%
	Private			
	2	\$185.92	\$127.39	-31.5%
	4	\$523.75	\$260.97	-50.2%
	6	\$876.95	\$659.68	-24.8%
	8	\$1,386.65	\$1,168.47	-15.7%
	10	\$1,715.05	\$1,656.69	-3.4%
	12	\$2,170.20	\$2,333.36	7.5%

IMPACT OF PROPOSED RATES

(quarterly bills unless otherwise noted)

METER SIZE	QUARTERLY USE - CU FT	CURRENT RATES	<----- PROPOSED ----->		
			NEW BILL	\$ INCREASE	% INCREASE
Metered Service (Quarterly Bills)					
Small					
5/8	2,000	\$74.95	\$91.41	\$16.46	21.96%
5/8	2,500	\$89.47	\$109.54	\$20.08	22.44%
5/8	4,000	\$133.01	\$163.93	\$30.92	23.25%
5/8	5,000	\$162.04	\$200.19	\$38.15	23.54%
5/8	7,500	\$234.62	\$290.84	\$56.23	23.96%
5/8	10,000	\$307.19	\$381.49	\$74.30	24.19%
5/8	15,000	\$452.34	\$562.79	\$110.45	24.42%
5/8	20,000	\$597.49	\$744.09	\$146.60	24.54%
5/8	25,000	\$742.64	\$925.39	\$182.75	24.61%
1	30,000	\$900.62	\$1,121.30	\$220.68	24.50%
1	40,000	\$1,190.92	\$1,483.90	\$292.98	24.60%
1	75,000	\$2,206.97	\$2,753.00	\$546.03	24.74%
Medium					
1 1/2	100,000	\$2,765.29	\$3,476.76	\$711.47	25.73%
1 1/2	200,000	\$5,474.29	\$6,889.76	\$1,415.47	25.86%
2	300,000	\$8,198.87	\$10,320.49	\$2,121.62	25.88%
2	400,000	\$10,907.87	\$13,733.49	\$2,825.62	25.90%
Large					
3	250,000	\$6,441.03	\$8,341.93	\$1,900.90	29.51%
3	500,000	\$12,801.03	\$16,591.93	\$3,790.90	29.61%
4	750,000	\$19,263.66	\$24,958.78	\$5,695.12	29.56%
6	1,000,000	\$25,713.47	\$33,311.03	\$7,597.56	29.55%
6	3,000,000	\$76,593.47	\$99,311.03	\$22,717.56	29.66%
Fire Service (Annual Bill)					
Municipal Fire Service	200 hydrants	\$125,986.00	\$63,196.00	-\$62,790.00	-49.84%
	1400 hydrants	\$881,902.00	\$442,372.00	-\$439,530.00	-49.84%
Private Fire Service	4 Inch Service	\$523.75	\$260.97	-\$262.78	-50.17%
	6 Inch Service	\$876.95	\$659.68	-\$217.27	-24.78%
	8 Inch Service	\$1,386.65	\$1,168.47	-\$218.18	-15.73%

REVENUE RECONCILIATION**Service Charge:**

		<u><----- Current -----></u>		<u><----- Proposed -----></u>	
<u>Quarterly</u>	<u>Number</u>	<u>Rate</u>	<u>Revenue</u>	<u>Rate</u>	<u>Revenue</u>
5/8	21,362	\$16.89	\$1,443,217	\$18.89	\$1,614,113
3/4	210	\$21.84	\$18,346	\$24.53	\$20,605
1	353	\$29.72	\$41,965	\$33.50	\$47,302
1 1/2	121	\$56.29	\$27,244	\$63.76	\$30,860
2	114	\$71.87	\$32,773	\$81.49	\$37,159
3	22	\$81.03	\$7,131	\$91.93	\$8,090
4	9	\$183.66	\$6,612	\$208.78	\$7,516
6	0	\$273.47	\$0	\$311.03	\$0
8	0	\$388.93	\$0	\$442.48	\$0
<u>Monthly</u>					
5/8	92	\$8.34	\$9,207	\$9.16	\$10,113
3/4	45	\$9.99	\$5,395	\$11.03	\$5,956
1	138	\$12.61	\$20,882	\$14.03	\$23,234
1 1/2	116	\$21.47	\$29,886	\$24.11	\$33,561
2	293	\$26.66	\$93,737	\$30.02	\$105,550
3	20	\$29.72	\$7,133	\$33.50	\$8,040
4	9	\$63.93	\$6,904	\$72.45	\$7,825
6	5	\$93.86	\$5,632	\$106.53	\$6,392
8	0	\$132.35	\$0	\$150.35	\$0

Consumption Charge:

Small (5/8 - 1")	3,001,584	\$2.903	\$8,713,598	\$3.626	\$10,883,744
Medium (1.5 - 2" & By p	661,262	\$2.709	\$1,791,359	\$3.413	\$2,256,887
Large (3" and up)	348,568	\$2.544	\$886,757	\$3.300	\$1,150,274
Extra Large	0	\$2.544	\$0	\$3.300	\$0
<u>Wholesale</u>	703,674	\$2.217	\$1,560,045	\$2.672	\$1,880,217

REVENUE RECONCILIATION

		<----- Current ----->		<----- Proposed ----->	
<u>Fire Protection:</u>					
Public Hydrants	1,918	\$629.93	\$1,208,206	\$315.98	\$606,050
Private Fire Protection					
2	26	\$185.92	\$4,834	\$127.39	\$3,312
4	49	\$523.75	\$25,664	\$260.97	\$12,788
6	392	\$876.95	\$343,764	\$659.68	\$258,595
8	90	\$1,386.65	\$124,799	\$1,168.47	\$105,162
10	4	\$1,715.05	\$6,860	\$1,656.69	\$6,627
12	2	\$2,170.20	\$4,340	\$2,333.36	\$4,667
			=====	=====	
Total			\$16,426,288		\$19,134,637
Plus: Misc Revenues			\$1,523,433		\$1,523,433
			=====	=====	
Pro Forma Revenue			\$17,949,722		\$20,658,070
Required Revenue			\$20,657,235		\$20,657,235
Difference			-\$2,707,514		\$835
Increase in Revenues					\$2,708,349
Percent Increase in Total Revenues					15.1%
Percent Increase in Rate Revenues (non-misc)					16.5%

SUMMARY OF COST OF SERVICE

	<u>Test Year</u>	<u>Adjustments</u>	<u>Rate Year</u>
Revenues			
Service Charges	\$1,756,062	\$210,253	\$1,966,315
Metered Rates	\$12,951,759	\$3,219,363	\$16,171,122
Fire Protection	\$1,718,467	-\$721,267	\$997,200
Miscellaneous	<u>\$367,947</u>	<u>\$1,155,486</u>	<u>\$1,523,433</u>
<i>Total Revenue</i>	\$16,794,235	\$3,863,835	\$20,658,070
Expenses			
<u>O&M</u>			
Admin	\$1,740,547	\$455,723	\$2,196,270
Customer Serv	\$868,492	\$211,943	\$1,080,435
Supply	\$375,321	\$1,643	\$376,964
Purification	\$1,793,326	\$836,542	\$2,629,868
Trans & Distrib	<u>\$1,957,256</u>	<u>\$399,612</u>	<u>\$2,356,868</u>
Total O&M	\$6,734,942	\$1,905,462	\$8,640,404
<u>Capital</u>			
Property Taxes	\$844,205	-\$46,738	\$797,467
Bond Principal & Interest	\$5,736,014	\$952,530	\$6,688,543
Leases	\$150,962	-\$1,181	\$149,781
IFR	\$3,100,000		\$3,100,000
CF Franchise Fee	\$86,416		\$0
Calgon Royalties Fund	\$73,000	-\$73,000	\$0
CF System Fund	\$255,202	-\$255,202	\$0
Trustee Fees	\$308,657	\$61,250	\$369,907
O&M Reserve Deposit	<u>\$31,480</u>	<u>-\$31,480</u>	<u>\$0</u>
Total Capital	\$10,585,934	\$606,179	\$11,105,698
<u>Operating Revenue Allowance</u>	<u>\$255,202</u>	<u>\$655,931</u>	<u>\$911,133</u>
<i>Total Expenses</i>	\$17,576,078	\$3,167,572	\$20,657,235